PART 2 - EN-ROUTE (ENR)

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ENR 1 GENERAL RULES AND PROCEDURES

ENR 1.1 General Rules

1 CIVIL

Note: Unless explicitly indicated, the rules in this section apply in both Belgium and Luxembourg.

1.1 Compliance with the Rules of the Air (SERA.2005)

The operation of an aircraft either in flight, on the movement area of an aerodrome or at an operating site shall be in compliance with the general rules as the applicable local provisions described in this section and, in addition, when in flight, either with:

- the visual flight rules (see ENR 1.2);
- the instrument flight rules (see ENR 1.3).

1.2 Responsibilities (SERA.2010)

The pilot-in-command of an aircraft shall, whether manipulating the controls or not, be responsible for the operation of the aircraft in accordance with the rules of the air, except that the pilot-in-command may depart from these rules in circumstances that render such departure absolutely necessary in the interests of safety.

Before beginning a flight, the pilot-in-command of an aircraft shall become familiar with all available information appropriate to the intended operation. Pre-flight action for flights away from the vicinity of an aerodrome, and for all IFR flights, shall include a careful study of available current weather reports and forecasts, taking into consideration fuel requirements and an alternative course of action if the flight cannot be completed as planned.

1.3 Authority of Pilot-in-command of an Aircraft (SERA.2015)

The pilot-in-command of an aircraft shall have final authority as to the disposition of the aircraft while in command.

1.4 Problematic Use of Psychoactive Substances (SERA.2020)

No person whose function is critical to the safety of aviation (safety-sensitive personnel) shall undertake that function while under the influence of any psychoactive substance, by reason of which human performance is impaired. No such person shall engage in any kind of problematic use of substances.

1.5 Protection of Persons and Property

1.5.1 Negligent or Reckless Operation of Aircraft (SERA.3101)

An aircraft shall not be operated in a negligent or reckless manner so as to endanger life or property of others.

1.5.2 Minimum Heights (SERA.3105)

Except when necessary for take-off or landing, or by permission from the CAA, aircraft shall not be flown over the congested areas of cities, towns or settlements or over an open-air assembly of persons, unless at such a height as will permit, in the event of an emergency arising, a landing to be made without undue hazard to persons or property on the surface.

Note: In Belgium, except for helicopters, flights between 2200 and 0459 (2100 and 0359) should be performed at FL50 or above whenever practicable.

1.5.3 Cruising Levels (SERA.3110)

The cruising levels at which a flight or a portion of a flight is to be conducted shall be in terms of:

- flight levels, for flights at or above the lowest usable flight level or, where applicable, above the transition altitude;
- altitudes, for flights below the lowest usable flight level or, where applicable, at or below the transition altitude.

1.5.4 Dropping or Spraying (SERA.3115)

1.5.4.1 General

Nothing shall be dropped or sprayed from an aircraft in flight except under the conditions prescribed by the CAA and as indicated by any relevant information, advice and/or clearance from the appropriate ATS unit.

1.5.4.2 Fuel Dumping

Except in case of emergency, fuel dumping should be carried out over the North Sea at or above FL100.

Other known traffic should be separated from the aircraft dumping fuel by at least 10NM horizontally, but not behind the aircraft dumping fuel. If behind the aircraft dumping fuel within 15MIN flying time or a distance of 50NM, a vertical separation of at least 1000FT above or 3000FT below the aircraft dumping fuel should be maintained.

In case of emergency, fuel dumping shall, whenever possible, not be carried out:

- over the congested area of cities, towns or settlements;
- in holding patterns;
- less than 3000 FT above other aircraft.

1.5.5 Towing (SERA.3120)

1.5.5.1 In Belgium

1.5.5.1.1 General

No aircraft or other object shall be towed by an aircraft except under the conditions prescribed by the CAA and as indicated by any relevant information, advice and/or clearance from the appropriate ATS unit.

1.5.5.1.2 Banner Towing

Banner towing flights are prohibited:

- below 1400FT AGL, except for taking up or throwing off the publicity banners;
- within a radius of 9KM around EBOS ARP, except when authorized by Oostende ATC and under the conditions determined by the CAA;
- along the coast at a distance of less than 500M seaside and less than 1000M landside from the shoreline, except for the area described in the item above;
- within a radius of 20KM around EBBR ARP, except when authorized by the CAA.

Unless permitted otherwise by the CAA, banner towing flights are allowed only between 0900 and 1800 (0800 and 1700) from MON to SAT (HOL excl) and between 1300 and 1700 (1200 and 1600) on SUN and HOL.

The CAA can prohibit any banner towing flight conducted over an open-air assembly of persons.

A banner towing flight conducted over a built-up area of a city or town shall be limited to MAX 45MIN. Over a single location the duration of a towing flight shall not exceed 15MIN. These restrictions apply per day and per advertisement.

Formation banner towing flights shall be performed by maximum three aircraft.

Helicopters conducting banner towing flights shall maintain a speed of 40KT MNM.

Banner towing aircraft shall be equipped with a transponder mode C.

1.5.5.2 In Luxembourg

No aircraft or other object shall be towed by an aircraft except under the conditions prescribed by the CAA and as indicated by any relevant information, advice and/or clearance from the appropriate ATS unit.

1.5.6 Parachute Descents (SERA.3125)

Parachute descents, other than emergency descents, shall only be made after approval of the CAA and as indicated by any relevant information, advice and/or clearance from the appropriate ATS unit.

1.5.7 Aerobatic Flight (SERA.3130)

1.5.7.1 In Belgium

Aerobatic flights shall only be carried out in VMC, at a height of 2000FT AGL MNM (unless a lower level is permitted by the CAA) and as indicated by any relevant information, advice and/or clearance from the appropriate ATS unit.

No aerobatic flight shall be carried out over the congested areas of cities, towns or settlements, industrial buildings, the L.N.G. Terminal of Zeebrugge, nuclear plants or over an open-air assembly of persons, in controlled airspace or in restricted areas, except when authorized by the authority responsible for the area.

Aerobatic flight is prohibited in danger areas, unless they are created exclusively for this purpose.

1.5.7.2 In Luxembourg

Aerobatic flights shall only be carried out in designated airspaces under the conditions prescribed by the CAA and as indicated by any relevant information, advice and/or clearance from the appropriate ATS unit.

1.5.8 Formation flights (SERA.3135)

Aircraft shall not be flown in formation except in VMC and by pre-arrangement among the pilots-in-command of the aircraft taking part in the flight and, for formation flight in controlled airspace, in accordance with the conditions prescribed by the appropriate ATS unit. These conditions will include the following:

- one of the pilots-in-command shall be designated as the flight leader;
- the formation operates as a single aircraft with regard to navigation and position reporting;
- separation between aircraft in the flight shall be the responsibility of the flight leader and the pilots-in-command of the other aircraft in the flight and shall include periods of transition when aircraft are manoeuvring to attain their own separation within the formation and during join-up and breakaway; and
- for State aircraft a maximum lateral, longitudinal and vertical distance between each aircraft and the flight leader in accordance with ICAO Standards. For other than State aircraft a distance not exceeding 0.5NM laterally and longitudinally and 100 FT vertically from the flight leader shall be maintained by each aircraft.

Formation landing or take-off are subject to permission from the CAA.

Note 1: In Belgium, aircraft carrying paying passengers shall not be flown in formation.

Note 2: In Luxembourg, no permission from the CAA is required for formation landing or take-off of lighter-than-air or military aircraft.

1.5.9 Unmanned Free Balloons (SERA.3140)

1.5.9.1 Classification of Unmanned Free Balloons

Unmanned free balloons shall be classified as:

a. *light*: an unmanned free balloon which carries a payload of one or more packages with a combined mass of less than 4KG, unless qualifying as a heavy balloon in accordance with (c)(2),(3) or (4)
b. *medium*: an unmanned free balloon which carries a payload of two or more packages with a combined mass of 4KG or more, but less than 6KG, unless qualifying as a heavy balloon in accordance with (c)(2), (3) or (4)
c. *heavy*: an unmanned free balloon which carries a payload which:
    1. has a combined mass of 6KG or more; or
    2. includes a package of 3KG or more; or
    3. includes a package of 2KG or more with an area density of more than 13G/CM², determined by dividing the total mass in grams of the payload package by the area in square centimetres of its smallest surface; or
    4. uses a rope or other device for suspension of the payload that requires an impact force of 230N or more to separate the suspended payload from the balloon.

1.5.9.2 General Operating Rules

An unmanned free balloon shall not be operated without authorisation from the State from which the launch is made.

An unmanned free balloon, other than a light balloon used exclusively for meteorological purposes and operated in the manner prescribed by the CAA, shall not be operated across the territory of another State without authorisation from the other State concerned. This authorisation shall be obtained prior to the launching of the balloon if there is reasonable expectation, when planning the operation, that the balloon may drift into airspace over the territory of another State. Such authorisation may be obtained for a series of balloon flights or for a particular type of recurring flight, e.g. atmospheric research balloon flights.

An unmanned free balloon shall be operated in accordance with conditions specified by the State of Registry and the State(s) expected to be overflown.

An unmanned free balloon shall not be operated in such a manner that impact of the balloon, or any part thereof, including its payload, with the surface of the earth, creates a hazard to persons or property.

A heavy unmanned free balloon shall not be operated over the high seas without prior coordination with the responsible ATS authority.

1.5.9.3 Operating Limitations and Equipment Requirements

A heavy unmanned free balloon shall not be operated without authorisation from the responsible ATS authority at or through any level below FL600 at which:

- there are clouds or obscuring phenomena of more than four oktas coverage; or
- the horizontal visibility is less than 8KM.

A heavy or medium unmanned free balloon shall not be released in a manner that will cause it to fly lower than 1 000 FT over the congested areas of cities, towns or settlements or an open-air assembly of persons not associated with the operation.

A heavy unmanned free balloon shall not be operated unless:

- it is equipped with at least two payload flight-termination devices or systems, whether automatic or operated by telecommand, that operate independently of each other;
- for polyethylene zero-pressure balloons, at least two methods, systems, devices, or combinations thereof, that function independently of each other are employed for terminating the flight of the balloon envelope;
- the balloon envelope is equipped with either a radar reflective device(s) or radar reflective material that will present an echo to surface radar operating in the 200MHZ to 2700MHZ frequency range, and/or the balloon is equipped with such other devices as will permit continuous tracking by the operator beyond the range of ground-based radar.

A heavy unmanned free balloon shall not be operated under the following conditions:

- in an area where ground-based SSR equipment is in use, unless it is equipped with a secondary surveillance radar transponder, with pressure-altitude reporting capability, which is continuously operating on an assigned code, or which can be turned on when necessary by the tracking station;
- in an area where ground-based ADS-B equipment is in use, unless it is equipped with an ADS-B transmitter, with pressure-altitude reporting capability, which is continuously operating or which can be turned on when necessary by the tracking station.

An unmanned free balloon that is equipped with a trailing antenna that requires a force of more than 230N to break it at any point shall not be operated unless the antenna has coloured pennants or streamers that are attached at not more than 15M intervals.

A heavy unmanned free balloon shall not be operated below FL600 at night or during any other period prescribed by the CAA, unless the balloon and its attachments and payload, whether or not they become separated during the operation, are lighted.

A heavy unmanned free balloon that is equipped with a suspension device (other than a highly conspicuously coloured open parachute) more than 15M long shall not be operated during night below FL600 unless the suspension device is coloured in alternate bands of high conspicuity colours or has coloured pennants attached.

1.5.9.4 Termination

The operator of a heavy unmanned free balloon shall activate the appropriate termination devices required by the operating limitations:

- when it becomes known that weather conditions are less than those prescribed for the operation;
- if a malfunction or any other reason makes further operation hazardous to air traffic or to persons or property on the surface;
- prior to unauthorised entry into the airspace over another State's territory.

1.5.9.5 Flight Notification

1.5.9.5.1 Pre-flight notification

Early notification of the intended flight of an unmanned free balloon in the medium or heavy category shall be made to the appropriate air traffic services unit not less than seven days before the date of the intended flight.

Notification of the intended flight shall include such of the following information as may be required by the appropriate air traffic services unit:

a. balloon flight identification or project code name;
b. balloon classification and description;
c. SSR code, aircraft address or NDB frequency as applicable;
d. operator's name and telephone number;
e. launch site;
f. estimated time of launch (or time of commencement and completion of multiple launches);
g. number of balloons to be launched and the scheduled interval between launches (if multiple launches);
h. expected direction of ascent;
i. cruising level(s) (pressure-altitude);
j. the estimated elapsed time to pass FL600 or to reach cruising level if at or below FL600, together with the estimated location. If the operation consists of continuous launchings, the time to be included shall be the estimated time at which the first and the last in the series will reach the appropriate level (e.g. 122136Z–130330Z);
k. the estimated date and time of termination of the flight and the planned location of the impact/recovery area. In the case of balloons carrying out flights of long duration, as a result of which the date and time of termination of the flight and the location of impact cannot be forecast with accuracy, the term 'long duration' shall be used. If there is to be more than one location of impact/recovery, each location shall be listed together with the appropriate estimated time of impact. If there is to be a series of continuous impacts, the time to be included shall be the estimated time of the first and the last in the series (e.g. 070330Z–072300Z).

Any changes in the pre-launch information shall be forwarded to the ATS unit concerned not less than 6HR before the estimated time of launch, or in the case of solar or cosmic disturbance investigations involving a critical time element, not less than 30MIN before the estimated time of the commencement of the operation.

1.5.9.5.2 Notification of launch

Immediately after a medium or heavy unmanned free balloon is launched the operator shall notify the appropriate air traffic services unit of the following:

a. balloon flight identification;
b. launch site;
c. actual time of launch;
d. estimated time at which FL600 pressure-altitude will be passed, or the estimated time at which the cruising level will be reached if at or below FL600, and the estimated location;
e. any changes to the information previously notified in accordance with items (g) an (h) of § 1.5.9.5.1 above.

1.5.9.5.3 Notification of cancellation

The operator shall notify the appropriate ATS unit immediately it is known that the intended flight of a medium or heavy unmanned free balloon, previously notified in accordance with § 1.5.9.5.1, has been cancelled.

1.5.9.6 Position Recording and Reports

The operator of a heavy unmanned free balloon operating at or below FL600 shall monitor the flight path of the balloon and forward reports of the balloon's position as requested by ATS. Unless air traffic services require reports of the balloon's position at more frequent intervals, the operator shall record the position every 2HR.

The operator of a heavy unmanned free balloon operating above FL600 shall monitor the flight progress of the balloon and forward reports of the balloon's position as requested by ATS. Unless air traffic services require reports of the balloon's position at more frequent intervals, the operator shall record the position every 24HR.

If a position cannot be recorded, the operator shall immediately notify the appropriate ATS unit. This notification shall include the last recorded position. The appropriate air traffic services unit shall be notified immediately when tracking of the balloon is re-established.

One hour before the beginning of planned descent of a heavy unmanned free balloon, the operator shall forward to the appropriate ATS unit the following information regarding the balloon:

a. the current geographical position
b. the current level (FL)
c. the forecast time of penetration of FL600, if applicable
d. the forecast time and location of ground impact

The operator of a heavy or medium unmanned free balloon shall notify the appropriate ATS unit when the operation is ended.

1.5.10 Prohibited Areas and Restricted Areas (SERA.3145)

Aircraft shall not be flown in a prohibited area or in a restricted area, the particulars of which have been duly published, except in accordance with the conditions of the restrictions or by permission of the State over whose territory the areas are established.

1.6 Avoidance of Collisions

1.6.1 General (SERA.3201)

Nothing in these rules shall relieve the pilot-in-command of an aircraft from the responsibility of taking such action, including collision avoidance manoeuvres based on resolution advisories provided by ACAS equipment, as will best avert collision.

1.6.2 Proximity (SERA.3205)

An aircraft shall not be operated in such proximity to other aircraft as to create a collision hazard.

1.6.3 Right-of-way (SERA.3210)

The aircraft that has the right-of-way shall maintain its heading and speed.

An aircraft that is aware that the manoeuvrability of another aircraft is impaired shall give way to that aircraft.

An aircraft that is obliged by the following rules to keep out of the way of another shall avoid passing over, under or in front of the other, unless it passes well clear and takes into account the effect of aircraft wake turbulence.

1.6.3.1 Approaching Head-on

When two aircraft are approaching head-on or approximately so and there is danger of collision, each shall alter its heading to the right.

1.6.3.2 Converging

When two aircraft are converging at approximately the same level, the aircraft that has the other on its right shall give way, except as follows:

- power-driven heavier-than-air aircraft shall give way to airships, gliders and balloons;
- airships shall give way to gliders and balloons;
- gliders shall give way to balloons;
- power-driven aircraft shall give way to aircraft which are seen to be towing other aircraft or objects;
- RPA shall give way to all manned aircraft.

1.6.3.3 Overtaking

An overtaking aircraft is an aircraft that approaches another from the rear on a line forming an angle of less than 70 degrees with the plane of symmetry of the latter, i.e. is in such a position with reference to the other aircraft that at night it should be unable to see either of the aircraft's left (port) or right (starboard) navigation lights.

An aircraft that is being overtaken has the right-of-way and the overtaking aircraft, whether climbing, descending or in horizontal flight, shall keep out of the way of the other aircraft by altering its heading to the right, and no subsequent change in the relative positions of the two aircraft shall absolve the overtaking aircraft from this obligation until it is entirely past and clear.

Note: A sailplane overtaking another sailplane may alter its course to the right or to the left.

1.6.3.4 Landing

An aircraft in flight, or operating on the ground or water, shall give way to aircraft landing or in the final stages of an approach to land.

When two or more heavier-than-air aircraft are approaching an aerodrome for the purpose of landing, aircraft at the higher level shall give way to aircraft at the lower level, but the latter shall not take advantage of this rule to cut in front of another which is in the final stages of an approach to land, or to overtake that aircraft. Nevertheless, power-driven heavier-than-air aircraft shall give way to sailplanes.

An aircraft that is aware that another is compelled to land (emergency landing) shall give way to that aircraft.

1.6.3.5 Taking Off

An aircraft taxiing on the manoeuvring area of an aerodrome shall give way to aircraft taking off or about to take off.

1.6.3.6 Surface Movement of Aircraft

In case of danger of collision between two aircraft taxiing on the movement area of an aerodrome or equivalent part of an operating site, the following shall apply:

- when two aircraft are approaching head on, or approximately so, each shall stop or where practicable alter its course to the right so as to keep well clear
- when two aircraft are on a converging course, the one which has the other on its right shall give way
- an aircraft which is being overtaken by another aircraft shall have the right-of-way and the overtaking aircraft shall keep well clear of the other aircraft

At a controlled aerodrome an aircraft taxiing on the manoeuvring area shall stop and hold at all runway-holding positions unless an explicit clearance to enter or cross the runway has been issued by the aerodrome control tower. An aircraft taxiing on the manoeuvring area shall stop and hold at all lighted stop bars and may proceed further when the lights are switched off.

1.6.4 Lights to be Displayed by Aircraft (SERA.3215)

a. Except as provided by (e), at night all aircraft in flight shall display:
   1. anti-collision lights intended to attract attention to the aircraft; and
   2. except for balloons, navigation lights intended to indicate the relative path of the aircraft to an observer and other lights shall not be displayed if they are likely to be mistaken for these lights.

b. Except as provided by (e), at night:
   1. all aircraft moving on the movement area of an aerodrome shall display navigation lights intended to indicate the relative path of the aircraft to an observer and other lights shall not be displayed if they are likely to be mistaken for these lights;
   2. unless stationary and otherwise adequately illuminated, all aircraft on the movement area of an aerodrome shall display lights intended to indicate the extremities of their structure, as far as practicable;
   3. all aircraft taxiing or being towed on the movement area of an aerodrome shall display lights intended to attract attention to the aircraft;
   4. all aircraft on the movement area of an aerodrome whose engines are running shall display lights which indicate that fact.

c. Except as provided by (e), all aircraft in flight and fitted with anti-collision lights to meet the requirement of (a)(1) shall display such lights also during day.

d. Except as provided by (e), all aircraft:
   1. taxiing or being towed on the movement area of an aerodrome and fitted with anti-collision lights, to meet the requirement of (b)(3); or
   2. on the movement area of an aerodrome and fitted with lights to meet the requirement of (b)(4), shall display such lights also during day.

e. A pilot shall be permitted to switch off or reduce the intensity of any flashing lights fitted to meet the requirement of (a), (b), (c) and (d) if they do or are likely to:
   1. adversely affect the satisfactory performance of duties;
   2. subject an outside observer to harmful dazzle.

1.6.5 Simulated Instrument Flights (SERA.3220)

An aircraft shall not be flown under simulated instrument flight conditions unless fully functioning dual controls are installed in the aircraft and an additional qualified pilot occupies a control seat to act as safety pilot for the person who is flying under simulated instrument conditions. The safety pilot shall have adequate vision forward and to each side of the aircraft, or a competent observer in communication with the safety pilot shall occupy a position in the aircraft from which the observer's field of vision adequately supplements that of the safety pilot.

1.6.6 Operation on and in the Vicinity of Aerodromes (SERA.3225)

An aircraft operated on or in the vicinity of an aerodrome shall:

- observe other aerodrome traffic for the purpose of avoiding collision;
- conform with or avoid the pattern of traffic formed by other aircraft in operation;
- except for balloons, make all turns to the left, when approaching for a landing and after taking off, unless otherwise indicated, or instructed by ATC;
- except for balloons, land and take off into the wind unless safety, the runway configuration, or air traffic considerations determine that a different direction is preferable.

1.6.7 Water operations (SERA.3230)

1.6.7.1 General

When two aircraft or an aircraft and a vessel are approaching one another and there is a risk of collision, the aircraft shall proceed with careful regard to existing circumstances and conditions including the limitations of the respective craft.

1.6.7.1.1 Converging

An aircraft which has another aircraft or a vessel on its right shall give way so as to keep well clear.

1.6.7.1.2 Approaching head-on

An aircraft approaching another aircraft or a vessel head-on, or approximately so, shall alter its heading to the right to keep well clear.

1.6.7.1.3 Overtaking

The aircraft or vessel which is being overtaken has the right of way, and the one overtaking shall alter its heading to keep well clear.

1.6.7.1.4 Landing and taking off

Aircraft landing on or taking off from the water shall, in so far as practicable, keep well clear of all vessels and avoid impeding their navigation.

1.6.7.2 Lights to be Displayed by Aircraft on the Water

At night or during any other period prescribed by the CAA, all aircraft on the water shall display lights as required by the *Convention on the International Regulations for Preventing Collisions at Sea (1972)*, unless it is impractical for them to do so, in which case they shall display lights as closely similar as possible in characteristics and position to those required by the International Regulations.

1.7 SIGNALS (SERA.3301)

Upon observing or receiving any of the signals indicated below, aircraft shall take such action as may be required by the indicated interpretation of the signal.

1.7.1 Distress and Urgency Signals

1.7.1.1 General

Notwithstanding the provisions in § 1.7.1.2 and § 1.7.1.3 below, an aircraft in distress shall use any means at its disposal to attract attention, make known its position and obtain help.

1.7.1.2 Distress Signals

The following signals, used either together or separately, mean that grave and imminent danger threatens, and immediate assistance is requested:

- a signal made by radiotelegraphy or by any other signalling method consisting of the group SOS (. . . — — — . . . in the Morse Code);
- a radiotelephony distress signal consisting of the spoken word MAYDAY;
- a distress message sent via data link which transmits the intent of the word MAYDAY;
- rockets or shells throwing red lights, fired one at a time at short intervals;
- a parachute flare showing a red light;
- setting of the transponder to Mode A Code 7700.

1.7.1.3 Urgency Signals

The following signals, used either together or separately, mean that an aircraft wishes to give notice of difficulties which compel it to land without requiring immediate assistance:

- the repeated switching on and off of the landing lights; or
- the repeated switching on and off of the navigation lights in such manner as to be distinct from flashing navigation lights.

The following signals, used either together or separately, mean that an aircraft has a very urgent message to transmit concerning the safety of a ship, aircraft or other vehicle, or of some person on board or within sight:

- a signal made by radiotelegraphy or by any other signalling method consisting of the group XXX (— . . — — . . — — . . — in the Morse Code);
- a radiotelephony urgency signal consisting of the spoken words PAN, PAN;
- an urgency message sent via data link which transmits the intent of the words PAN, PAN.

1.7.2 Visual Signals used to Warn an Unauthorized Aircraft Flying in or about to Enter a Restricted, Prohibited or Danger Area

When visual signals are used to warn unauthorised aircraft flying in or about to enter a restricted, prohibited or danger area by day and by night, a series of projectiles discharged from the ground at intervals of 10 SEC, each showing, on bursting, red and green lights or stars shall indicate to an unauthorised aircraft that it is flying in or about to enter a restricted, prohibited or danger area, and that the aircraft is to take such remedial action as may be necessary.

1.7.3 Signals for Aerodrome Traffic

1.7.3.1 Lights and Pyrotechnic Signals

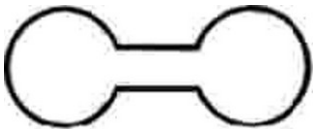
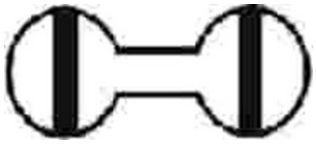
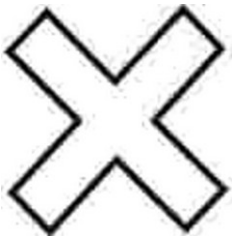
Instructions

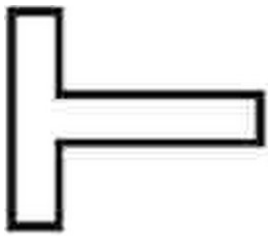
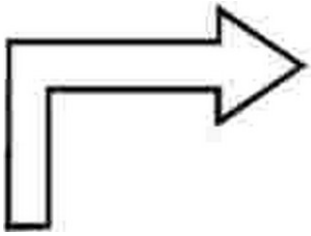
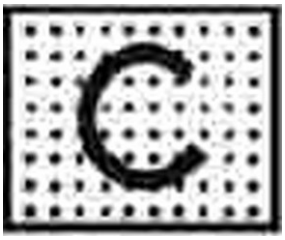
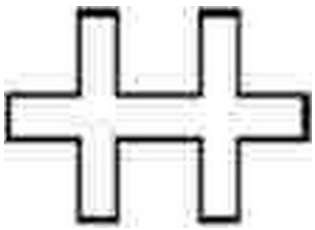
Light		From Aerodrome Control to:	
		Aircraft in flight	Aircraft on the ground
Directed towards aircraft concerned	Steady green	Cleared to land	Cleared for take-off
	Steady red	Give way to other aircraft and continue circling	Stop
	Series of green flashes	Return for landing (*)	Cleared to taxi
	Series of red flashes	Aerodrome unsafe, do not land	Taxi clear of landing area in use
	Series of white flashes	Land at this aerodrome and proceed to apron (*)	Return to starting point on the aerodrome
Red pyrotechnic		Notwithstanding any previous instructions, do not land for the time being	
(*) Clearances to land and to taxi will be given in due course.			

Acknowledgement by an aircraft

	When in flight	When on the ground
During HJ	by rocking the aircraft's wings, except for the base and final legs of the approach	by moving the aircraft's ailerons or rudder
During HN	by flashing on and off twice the aircraft's landing lights or, if not so equipped, by switching on and off twice its navigation lights	

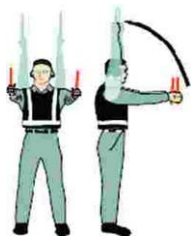
1.7.3.2 Visual Ground Signals

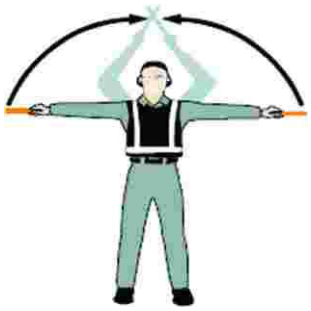
	**1. Prohibition of landing** A horizontal red square panel with yellow diagonals when displayed in a signal area indicates that landings are prohibited and that the prohibition is liable to be prolonged.
	**2. Need for special precautions while approaching or landing** A horizontal red square panel with one yellow diagonal when displayed in a signal area indicates that owing to the bad state of the manoeuvring area, or for any other reason, special precautions must be observed in approaching to land or in landing.
 	**3. Use of runways and taxiways** A horizontal white dumb-bell when displayed in a signal area indicates that aircraft are required to land, take off and taxi on runways and taxiways only. A horizontal white dumb-bell with a black bar placed perpendicular to the shaft across each circular portion of the dumb-bell when displayed in a signal area indicates that aircraft are required to land and take off on runways only, but other manoeuvres need not be confined to runways and taxiways.
	**4. Closed runways or taxiways** Crosses of a single contrasting colour, yellow or white displayed horizontally on runways and taxiways or parts thereof indicate an area unfit for movement of aircraft.

 	**5. Directions for landing or take-off** A horizontal white or orange landing T indicates the direction to be used by aircraft for landing and take-off, which shall be in a direction parallel to the shaft of the T towards the cross arm. When used at night, the landing T shall be either illuminated or outlined in white lights. A set of two digits displayed vertically at or near the aerodrome control tower indicates to aircraft on the manoeuvring area the direction for take-off, expressed in units of 10 degrees to the nearest 10 degrees of the magnetic compass.
	**6. Right-hand circuit** When displayed in a signal area, or horizontally at the end of the runway or strip in use, a right-hand arrow of conspicuous colour indicates that turns are to be made to the right before landing and after take-off.
	**7. ATS reporting office** The letter C displayed vertically in black against a yellow background indicates the location of the ATS reporting office.
	**8. Sailplane flights in operation** A double white cross displayed horizontally in the signal area indicates that the aerodrome is being used by sailplanes and that sailplane flights are being performed.

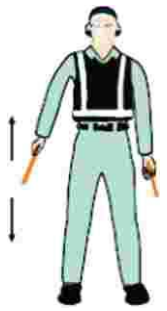
1.7.4 Marshalling Signals

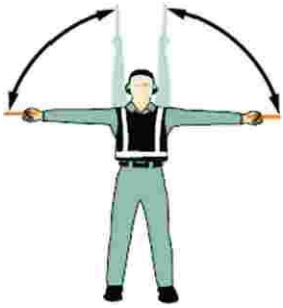
1.7.4.1 From a Signalman/Marshaller to an Aircraft

	**1. Wingwalker/guide (*)** Right hand raised above head level with wand pointing up; left-hand wand moved pointing down toward body. (*) This signal provides an indication by a person positioned at the aircraft wing tip, to the pilot/marshaller/push-back operator, that the aircraft movement on/off a parking position would be unobstructed.
	**2. Identify gate** Fully extended arms raised straight above head with wands pointing up.
	**3. Proceed to next signalman/marshaller or as directed by tower/ ground control** Both arms pointed upward; arms moved and extended outward to sides of body and wands pointed to direction of next signalman/ marshaller or taxi area.
	**4. Straight ahead** Extended arms bended at elbows and wands moved up and down from chest height to head.
	**5(a). Turn left** (from pilot's point of view) With right arm and wand extended at a 90° angle to body, 'come ahead' signal made with left hand. The rate of signal motion indicates the rate of aircraft turn.

	**5(b). Turn right** (from pilot's point of view) With left arm and wand extended at a 90° angle to body, 'come ahead' signal made with right hand. The rate of signal motion indicates the rate of aircraft turn.
	**6(a). Normal stop** Arms fully extended and wands at a 90° angle to sides and slowly moved to above head until wands cross.
	**6(b). Emergency stop** Arms and wands abruptly extended to top of head, crossing wands.
	**7(a). Set brakes** Hand raised just above shoulder height with open palm. After eye contact, hand closed into a fist. "Thumbs up" acknowledgement required by flight crew before marshaller may move.
	**7(b). Release brakes** Hand raised just above shoulder height with hand closed in a fist. After eye contact, palm opened. "Thumbs up" acknowledgement required by flight crew before marshaller may move.

	**8(a). Chocks inserted** Arms and wands fully extended above head, wands moved inward in a 'jabbing' motion until wands touch. Acknowledgement shall be given by flight crew.
	**8(b). Chocks removed** Arms and wands fully extended above head, wands moved outward in a 'jabbing' motion. Chocks will not be removed until authorisation is given by flight crew.
	**9. Start engine(s)** Right arm raised to head level with wand pointing up and circular motion started with hand; at the same time, left arm raised above head level, pointing to engine to be started.
	**10. Cut engines** Arm extended with wand forward of body at shoulder level; hand and wand moved to top of left shoulder and wand drawn to top of right shoulder in a slicing motion across throat.
	**11. Slow down** Extended arms moved downwards in a 'patting' gesture, wands moved up and down from waist to knees.

	**12. Slow down engine(s) on indicated side** With arms down and wands toward ground, either right or left wand waved up and down indicating engine(s) on left or right side respectively should be slowed down.
	**13. Move back** With arms in front of body at waist height, arms rotated in a forward motion.
	**14(a). Turns while backing (for tail to starboard)** Left arm pointed with wand down and right arm brought from overhead vertical position to horizontal forward position, repeating right-arm movement.
	**14(b). Turns while backing (for tail to port)** Right arm pointed with wand down and left arm brought from overhead vertical position to horizontal forward position, repeating left-arm movement.
	**15. Affirmative/all clear (*)** Right arm raised to head level with wand pointing up or hand displayed with ‘thumbs up’; left arm remains at side by knee. (*) This signal is also used us a technical/servicing communication signal.

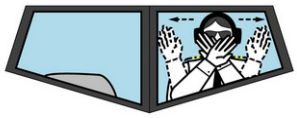
	**16. Hover (*)** Arms fully extended and wands at a 90° angle to sides. (*) For use to hovering helicopters
	**17. Move upwards** (*) Arms and wands fully extended at a 90° angle to sides and, with palms turned up, hands moved upwards. Speed of movement indicates rate of ascent. (*) For use to hovering helicopters
	**18. Move downwards** (from pilot's point of view) **(*)** Arms and wands fully extended at a 90° angle to sides and, with palms turned down, hands moved downwards. Speed of movement indicates rate of descent. (*) For use to hovering helicopters
	**19(a). Move horizontally left** (from pilot's point of view) **(*)** Arm extended horizontally at a 90° angle to right side of body. Other arm moved in same direction in a sweeping motion. (*) For use to hovering helicopters
	**19(b). Move horizontally right (*)** Arms extended horizontally at a 90-degree angle to left side of body. Other arm moved in same direction in a sweeping motion. (*) For use to hovering helicopters

	**20. Land (*)** Arms crossed with wands downwards and in front of body. (*) For use to hovering helicopters
	**21. Hold position/stand by** Arms and wands fully extended downwards at a 45° angle to sides.
	**22. Dispatch aircraft** Standard salute with right hand and/or wand. Eye contact with marshaller shall be maintained until aircraft begins to taxi.
	**23. Do not touch controls (technical/servicing communication signal)** Right arm fully extended above head and fist closed or wand hold in horizontal position; left arm remains at side by knee.

	**24. Connect ground power (technical/servicing communication signal)** Arms fully extended above head; left hand opened horizontally and finger tips of right hand moved into and touched open palm of left hand (forming a 'T'). At night, illuminated wands can also be used to form the 'T' above head.
	**25. Disconnect power (technical/servicing communication signal)** Arms fully extended above head with finger tips of right hand touching open horizontal palm of left hand (forming a 'T'); then right hand moved away from the left. Power will not be disconnected until authorised by flight crew. At night, illuminated wands can also be used to form the 'T' above head.
	**26. Negative (technical/servicing communication signal)** Right arm straight out at 90° from shoulder and wand pointed down to ground or display hand with 'thumbs down'; left hand remains at side by knee.
	**27. Establish communication via interphone (technical/servicing communication signal)** Both arms extended at 90° from body and hands moved to cup both ears.
	**28. Open/close stairs (technical/servicing communication signal) (*)** Right arm at side and left arm raised above head at a 45° angle, right arm moved in a sweeping motion towards top of left shoulder. (*) This signal is intended mainly for aircraft with the set of integral stairs at the front.

1.7.4.2 From the Pilot of an Aircraft to a Signalman/Marshaller

Pilots in the cockpit shall use the following signals with hands plainly visible to the signalman/marshaller, and illuminated as necessary to facilitate observation by the signalman/marshaller:

	**1. Brakes engaged** Raise arm and hand, with fingers extended, horizontally in front of face, then clench fist.
	**2. Brakes released** Raise arm, with fist clenched, horizontally in front of face, then extend fingers.
	**3. Insert chocks** Arms extended, palms outwards, move hands inwards to cross in front of face.
	**4. Remove chocks** Hands crossed in front of face, palms outwards, move arms outwards.
	**5. Ready to start engines** Raise the appropriate numbers of fingers on one hand indicating the number of the engine to be started.

1.7.5 Standard Emergency Hand Signals

	**1. Recommend evacuation** Evacuation recommended based on aircraft rescue and fire-fighting and Incident Commander's assessment of external situation. Arm extended from body, and held horizontal with hand upraised at eye level. Beckoning arm motion angled backward. Non-beckoning arm held against body. Night - same with wands.
	**2. Recommend stop** Recommend evacuation in progress be halted. Stop aircraft movement or other activity in progress. Arms in front of head - Crossed at wrists. Night - same with wands.
	**3. Emergency contained** No outside evidence of dangerous conditions or 'all-clear.' Arms extended outward and down at a 45° angle. Arms moved inward below waistline simultaneously until wrists crossed, then extended outward to starting position. Night - same with wands.
	**4. Fire** Right-hand moved in a 'fanning' motion from shoulder to knee, while at the same time left hand is pointing to area of fire. Night - same with wands.

1.8 Time (SERA.3401)

A time check shall be obtained prior to operating a controlled flight and at such other times during the flight as may be necessary.

Wherever time is utilised in the application of data link communications, it shall be accurate to within 1 second of UTC.

1.9 Requirements for Communications and SSR Transponder (SERA.6005)

1.9.1 Radio Mandatory Zone (RMZ)

VFR flights operating in parts of class E, F or G airspace and IFR flights operating in parts of class F or G airspace designated as a radio mandatory zone (RMZ) shall maintain continuous air-ground voice communication watch and establish two-way communication, as necessary, on the appropriate communication channel, unless in compliance with alternative provisions prescribed for that particular airspace by the ATS authority.

Before entering a radio mandatory zone, an initial call containing the designation of the station being called, call sign, type of aircraft, position, level, the intentions of the flight and other information as prescribed by the appropriate ATS unit, shall be made by pilots on the appropriate communication channel.

1.9.2 Transponder Mandatory Zone (TMZ)

All flights operating in airspace designated as a transponder mandatory zone (TMZ) shall carry and operate SSR transponders capable of operating on Modes A and C or on Mode S, unless in compliance with alternative provisions prescribed for that particular airspace by the ATS authority.

1.10 Air Traffic Control Service

1.10.1 Air Traffic Control Clearances (SERA.8015)

1.10.1.1 Operation subject to clearance

An ATC clearance shall be obtained prior to operating a controlled flight, or a portion of a flight as a controlled flight. Such clearance shall be requested through the submission of a flight plan to an air traffic control unit.

The pilot-in-command of an aircraft shall inform ATC if an ATC clearance is not satisfactory. In such cases, ATC will issue an amended clearance, if practicable.

Whenever an aircraft has requested a clearance involving priority, a report explaining the necessity for such priority shall be submitted, if requested by the appropriate ATC unit.

If, prior to departure, it is anticipated that, depending on fuel endurance and subject to re-clearance in flight, a decision may be taken to proceed to a revised destination aerodrome, the appropriate ATC units shall be so notified by the insertion in the flight plan of information concerning the revised route (where known) and the revised destination.

An aircraft operated on a controlled aerodrome shall not taxi on the manoeuvring area without clearance from the aerodrome control tower and shall comply with any instructions given by that unit.

1.10.1.2 Read-back of clearances and safety-related information

The flight crew shall read back to the air traffic controller safety-related parts of ATC clearances and instructions which are transmitted by voice. The following items shall always be read back:

a. ATC route clearances;
b. clearances and instructions to enter, land on, take off from, hold short of, cross, taxi and backtrack on any runway
c. runway-in-use, altimeter settings, SSR codes, newly assigned communication channels, level instructions, heading and speed instructions;
d. transition levels, whether issued by the controller or contained in ATIS broadcasts.

Other clearances or instructions, including conditional clearances and taxi instructions, shall be read back or acknowledged in a manner to clearly indicate that they have been understood and will be complied with.

Voice read-back of CPDLC messages shall not be required, unless otherwise specified by the responsible ATS authority.

1.10.1.3 Coordination of clearances

When prescribed by the ATS unit, aircraft shall contact a downstream ATC unit, for the purpose of receiving a downstream clearance prior to the transfer of control point. Aircraft shall maintain the necessary two-way communication with the current air traffic control unit whilst obtaining a downstream clearance.

1.10.2 Adherence to Flight Plan (SERA.8020)

1.10.2.1 General

Except as provided for in § 1.10.2.2 and § 1.10.2.4 below, an aircraft shall adhere to the current flight plan or the applicable portion of a current flight plan submitted for a controlled flight unless a request for a change has been made and clearance obtained from the appropriate ATC unit, or unless an emergency situation arises which necessitates immediate action by the aircraft, in which event as soon as circumstances permit, after such emergency authority is exercised, the appropriate ATS unit shall be notified of the action taken and that this action has been taken under emergency authority.

Unless otherwise authorized or directed by the appropriate ATC unit, controlled flights shall, in so far as practicable:

- when on an established ATS route, operate along the defined centre line of that route;
- when on any other route, operate directly between the navigation facilities and/or points defining that route.

Unless otherwise authorised or directed by the appropriate ATC unit, an aircraft operating along an ATS route segment defined by reference to VOR shall change over for its primary navigation guidance from the facility behind the aircraft to that ahead of it at, or as close as operationally feasible to, the changeover point, where established. Deviation from this requirement shall be notified to the appropriate ATS unit.

1.10.2.2 Inadvertent Changes

In the event that a controlled flight inadvertently deviates from its current flight plan, the following action shall be taken:

a. Deviation from track: If the aircraft is off track, action shall be taken forthwith to adjust the heading of the aircraft to regain track as soon as practicable;
b. Variation in true airspeed: If the average true airspeed at cruising level between reporting points varies or is expected to vary by plus or minus 5 per cent of the true airspeed, from that given in the flight plan, the appropriate ATS unit shall be so informed;
c. Change in time estimate: If the time estimate for the next applicable reporting point, FIR boundary or destination aerodrome, whichever comes first, is found to be in error in excess of 2MIN from that notified to ATS, or such other period of time as is prescribed by the appropriate ATS unit or on the basis of ICAO regional air navigation agreements, a revised estimated time shall be notified as soon as possible to the appropriate ATS unit;
d. Additionally, when an ADS-C agreement is in place, the ATS unit shall be informed automatically via data link whenever changes occur beyond the threshold values stipulated by the ADS-C event contract.

1.10.2.3 Intended Changes

Requests for flight plan changes shall include information as indicated hereunder:

a. Change of cruising level: aircraft identification, requested new cruising level and cruising speed at this level, revised time estimates (when applicable) at subsequent FIR boundaries;
b. Change of route:
   - Destination unchanged: aircraft identification, flight rules, description of new route of flight including related flight plan data beginning with the position from which requested change of route is to commence, revised time estimates and any other pertinent information;
   - Destination changed: aircraft identification, flight rules, description of revised route of flight to revised destination aerodrome including related flight plan data beginning with the position from which requested change of route is to commence, revised time estimates, alternate aerodrome(s) and any other pertinent information.

1.10.2.4 Weather Deterioration below the VMC

When it becomes evident that flight in VMC in accordance with its current flight plan will not be practicable, a VFR flight operated as a controlled flight shall either:

a. request an amended clearance enabling the aircraft to continue in VMC to destination or to an alternative aerodrome, or to leave the airspace within which an ATC clearance is required;
b. if no clearance in accordance with (a) can be obtained, continue to operate in VMC and notify the appropriate ATC unit of the action being taken either to leave the airspace concerned or to land at the nearest suitable aerodrome;
c. if operated within a CTR, request authorization to operate as a special VFR flight;
d. request clearance to operate in accordance with the instrument flight rules.

1.10.3 Position Reports (SERA.8025)

Unless exempted by the competent ATS authority or by the appropriate ATS unit under conditions specified by that authority, a controlled flight shall report to the appropriate ATS unit, as soon as possible, the time and level of passing each designated compulsory reporting point, together with any other required information. Position reports shall similarly be made in relation to additional points when requested by the appropriate ATS unit. In the absence of designated reporting points, position reports shall be made at intervals prescribed by the appropriate ATS authority or specified by the appropriate ATS unit.

Controlled flights providing position information to the appropriate ATS unit via data link communications shall only provide voice position reports when requested.

When a controlled flight has been exempted from the requirement to report over compulsory reporting points pilots shall, unless automated position reporting is in effect, resume voice or CPDLC position reporting:

- when so instructed;
- when advised that the ATS surveillance service has been terminated, or;
- when advised that the ATS surveillance identification is lost.

1.10.4 Termination of Control (SERA.8030)

A controlled flight shall, except when landing at a controlled aerodrome, advise the appropriate ATC unit as soon as it ceases to be subject to ATC.

1.10.5 Communications (SERA.8035)

1.10.5.1 General

An aircraft operated as a controlled flight shall maintain continuous air-ground voice communication watch on the appropriate communication channel of, and establish two-way communication as necessary with, the appropriate ATC unit, except as may be prescribed by the relevant ATS authority in respect of aircraft forming part of aerodrome traffic at a controlled aerodrome.

The requirement for an aircraft to maintain an air-ground voice communication watch shall remain in effect when CPDLC has been established.

Note 1: Aircraft with a MTOW of 136000KG or more shall include the word “heavy” immediately after the aircraft call sign at initial contact with ATC.

Note 2: Student pilots should include the word “solo” immediately after the aircraft call sign at initial contact with each ATS unit or Basic Information unit.

1.10.5.2 Communication Failure in VMC

A controlled flight experiencing communication failure in VMC shall:

- set transponder to Code 7600;
- continue to fly in VMC;
- land at the nearest suitable aerodrome;
- report its arrival by the most expeditious means to the appropriate ATS unit.

1.10.5.3 Communication Failure in IMC

A controlled flight experiencing communication failure in IMC, or where it does not appear feasible to continue in accordance with VMC shall:

a. set transponder to Code 7600;
b. maintain for a period of 7 MIN the last assigned speed and level. The period of 7 MIN starts:
   - if operating on a route without compulsory reporting points or if instructions have been received to omit position reports either:
     - at the time the last assigned level is reached, or
     - at the time the transponder is set to Code 7600, whichever is later;
   - if operating on a route with compulsory reporting points and no instruction to omit position reports has been received either:
     - at the time the last assigned level is reached, or
     - at the previously reported pilot estimate for the compulsory reporting point, or
     - at the time of a failed report of position over a compulsory reporting point, whichever is later;
c. thereafter, adjust level and speed in accordance with the filed flight plan;
d. if being radar vectored or proceeding offset according to RNAV without a specified limit, proceed in the most direct manner possible to re-join the current flight plan route, including any changes brought about by subsequent clearances, not later than the next significant point;
e. proceed according to the current flight plan route to the appropriate designated navigation aid serving the destination aerodrome and, when required to ensure compliance with item (f) below, hold over this aid until commencement of descent;
f. commence descent from the navigation aid specified in item (e) at, or as close as possible to, the EAT last received and acknowledged or, if no EAT has been received and acknowledged, at, or as close as possible to, the ETA resulting from the current flight plan;
g. complete a normal instrument approach procedure as specified for the designated navigation aid;
h. land, if possible, within 30 MIN after the ETA specified in item (f) or the last acknowledged EAT, whichever is later.

Note: The pilot who is given the following message "Delay not determined, X ... aircraft holding for weather improvement" shall not consider it as an EAT for the purpose of the radio communication failure procedures. Pilots whose radio fails after they have received this message, but before an EAT is given, shall not attempt to land at their planned aerodrome of destination but should fly at their assigned level to an area in which VMC prevail and where they can approach and land visually at a suitable aerodrome.

1.11 Supplementary Rules

1.11.1 Ultra-Light Motorized Aircraft

1.11.1.1 In Belgium

Flights with ULM shall only take place during HJ, in VMC, with ground or water in sight and with a visibility of minimum 3 KM.

Unless authorised by the appropriate ATS unit, ULM shall not be flown in controlled airspace.

Unless authorised by the CAA, ULM shall not be flown:

- over cities, residential areas, industrial installations or an open-air assembly of people;
- in prohibited, restricted or danger areas.

ULM shall not be used for aerobatic flights.

1.11.1.2 In Luxembourg

Flights with ULM shall only take place during HJ, in VMC and at an altitude of maximum 3500 FT AMSL or 1000 FT AGL, whichever is higher. Except for landing or take-off, no flight shall be performed below 50 M AGL.

Unless authorised by the competent ATS authority, ULM shall not be flown in Luxembourg TMA. In order to obtain such authorisation, the pilot of an ULM shall be holder of an RTF qualification and be able to maintain two-way communications with ATS.

ULM shall not be used for aerobatic flights.

1.11.2 Lighter-than-air Aircraft, Tele-guided Devices, Rockets and Kites

1.11.2.1 In Belgium

The authorisation of the CAA is needed in case of:

- ascents of manned free gas balloons over the congested areas of cities, towns or settlements;
- ascents of airships and captive balloons;
- operation of devices that might cause damage to aircraft in flight such as tele-guided devices, rockets or kites.

Manned free balloons shall not enter controlled airspace unless an ATC clearance has been obtained before ascent and at least 10 MIN before entering the controlled airspace. When entering the controlled airspace, two-way radiocommunications shall be established and maintained with the appropriate control unit.

It is recommended to notify all ascents of manned free balloons to Brussels FIC by phone (+32 (0) 2 206 27 31) or via the Belgocontrol website (www.belgocontrol.be - for registered users only) at least one hour before the estimated time of departure. Following information should be provided:

- identification of the balloon;
- name of the pilot;
- telephone number of the place where the pilot can eventually be contacted until the start of the ascent;
- location of the ascent;
- estimated time (UTC) of the ascent;
- estimated time of the flight, maximum altitude and estimated track.

Note 1: In case of loss of two-way radio communications, manned free balloons shall immediately leave the airspace for which a clearance had been obtained.

Note 2: When notifying the balloon flight via the Internet, a confirmation form will be displayed. The internet balloon notification form cannot be used for flights crossing international borders. In this case an appropriate ICAO flight plan shall be filed.

1.11.2.2 In Luxembourg

Captive balloon and kite ascents above 100 M AGL are subject to authorization from the CAA. These ascents are in any case forbidden in each approach sector of an aerodrome up to 100 M on either side of the extended runway centre line from the runway threshold up to a distance of 2 KM before threshold.

Manned free balloons and airships may be operated under the following conditions:

- the operator and the pilot-in-command is authorised to depart and to land outside of an aerodrome;
- a balloon or an airship shall not be flown between sunset and sunrise unless it is equipped with at least one flashing light visible in all azimuths and in an angle of at least 30 degrees below and 30 degrees above the horizontal line and at a distance of at least 8 KM;
- a balloon overtaking, while climbing, has the right of way over a balloon being overtaken; the latter shall deviate by all appropriate means from the trajectory of the overtaking balloon;
- only water and/or fine sand may be used as ballast. Dropping of ballast or stays may only be done without undue hazard to persons or property on the ground;
- the operator and the pilot-in-command shall comply with the procedures laid down by the constructor in the operational and maintenance manuals.

Note: Manned balloons fixed to the ground, for any reason, are not to be considered as captive balloons.

1.11.3 Flights Requiring Special Handling by ATC

1.11.3.1 In Brussels FIR/UIR below FL 245

Flights conducted in the Brussels FIR/UIR below FL 245 (Luxembourg airspace below the upper limit of Luxembourg TMA excl) that have a specific character, requiring special handling by ATC (such as calibration flights, test flights, check flights, radio relay missions and aerial surveys) must be coordinated at least five working days in advance with the Special Activities Coordination Cell (SPACC) of Belgocontrol, using the form available on the Belgocontrol website (www.belgocontrol.be/services-spacc).

The SPACC will coordinate the requests with the appropriate ATS authorities and formulate a reply that contains the conditions to execute the requested mission.

The reply contains a file number “SAYYYY.NNNN”, where “YYYY” stands for the year and “NNNN” for the file number itself. Only this reference shall be used by the operator in communications with the appropriate ATS service.

The submission of a flight plan for each aircraft is compulsory. Item15 shall clearly indicate the area and/or route and/or place of the mission and item 18 shall include the reference number (e.g. “RMK/PHOTOMISSION SAYYYY.NNNN” or “RMK/RADIO RELAY SAYYYY.NNNN”).

1.11.3.2 In Brussels UIR above FL 245

Flights conducted in the Brussels UIR above FL 245 that have a specific character, requiring special handling by ATC (such as calibration flights, test flights, check flights, etc.) must be coordinated at least 24 HR in advance with Maastricht UAC by filling the web form available from www.eurocontrol.int/articles/customer-services or by sending an email with equivalent content to masuac.testflights@eurocontrol.int to obtain acceptance.

Supplementary contact: Executive Duty Supervisor

TEL: +31 43 366 2022

FAX: +31 43 366 1320

1.11.4 RPAS

1.11.4.1 In Belgium

1.11.4.1.1 Classification of RPA

a. class 1a operations: any RPA activity presenting an increased risk to aviation safety and/or people and property on the ground;

b. class 1b operations: any RPA activity presenting a moderate risk to aviation safety and/or people and property on the ground;
c. class 2 operations: any activity of an RPA, with a maximum take-off weight lower than 5KG, presenting a low risk to aviation safety, persons and property on the ground.

1.11.4.1.2 General Operating Rules and Limitations

a. Are prohibited to RPA:
   - operations on ATS routes;
   - transport of passengers, mail and cargo;
   - dropping of objects or spraying in flight;
   - towing, aerobatic and formation flights.
b. Class 1 and class 2 operations are limited to VLOS flights respectively up to 300 and 150FT AGL in uncontrolled airspace, excluding flights:
   - in prohibited, danger and restricted zones, HTA, LFA, TRA and TSA zones when activated;
   - within a radius of 1.5NM around an aerodrome and 0.5NM around heliports, except prior approval from involved operator.
c. When specific TRA/TSA are created for class 1 operations, RPA flights have to remain out of clouds and in direct view of the remote pilot or the RPA observer; in addition, the horizontal visibility has to be at least equal to 1.5 times the distance between the RPA an the remote pilot or the RPA observer.

2 MILITARY

2.1 Introduction

2.1.1 General Air Traffic

General Air Traffic (GAT): Flights conducted in accordance with the regulations and procedures promulgated by the State Civil Aviation authorities and operating under the control or authority of the civil ATS organization.

2.1.2 Operational Air Traffic

2.1.2.1 General

Operational Air Traffic (OAT): Flights that do not necessarily comply with the provisions stated for GAT and for which rules and procedures have been specified by appropriate authorities. OAT is allowed during Semmerzake ATCC OPS hours only (see GEN 3.3).

Outside OPS hours, Semmerzake ATCC does not provide any ATS (nor ATC nor FIS). Planned military flights outside the OPS hours shall therefore:

- file a GAT FPL (Remark: The MIL TACAN route TG1 cannot be filed GAT); or obtain special permission from COMOPSAIR to file OAT (72 HR in advance, see ENR 1.10, § 2.1);
- and, contact the civil FIC when entering uncontrolled airspace.

Belgian or foreign QRA aircraft flying in the Brussels FIR/UIR outside Semmerzake ATCC OPS hours will be under control of CRC Glons or under control of an aerodrome ATS unit during their mission.

Controlled flights are:

- flights conducted within controlled airspace and receiving a control service,
- flights in TRA and in TSA above 4500 FT AMSL, and
- flights performing an air defence mission (see § 2.16).

Uncontrolled VFR flights are authorised below 4500 FT AMSL, outside controlled airspace (see ENR 1.2, § 2.5).

Within airspace controlled by military authorities, military pilots shall comply with OAT regulations in accordance with ATS airspace classification. In airspace controlled by civil authorities, pilots should comply with GAT regulations. Military pilots shall cross ATS routes and airways under radar control. If no contact can be established with Semmerzake ATCC, the appropriate civil ATS unit shall be contacted for crossing clearance.

All military activity in Belgian airspace above 4500FT AMSL require an airspace reservation (see ENR 5.2, § 1.3, optional for transiting Belgian military aircraft) and a correct FPL (see ENR 1.10). Transits of foreign aircraft require only a correct FPL (see ENR 1.10) but shall adhere to the airspace permeability rules (see ENR 5.2, § 1.2).

Note: If Police flights are unable to comply with the regulations laid down in this AIP, derogation must be obtained from COMOPSAIR Airspace Control OPS via MDC.

2.1.2.2 EUROAT

The Eurocontrol specification for harmonized rules for OAT under Instrument Flight Rules inside controlled airspace of the ECAC area (EUROAT) is applicable within the Brussels FIR/UIR.

The following national exceptions to EUROAT apply:

a. Applicability of ICAO Rules of the Air

"Foreign military flights may be conducted according GAT or OAT rules, depending upon operational requirements of the mission.

b. Flight Plan

Specific regulations related to FPL are laid down in ENR 1.10.

c. Communication

For operational reason, Belgian military aircraft are not required to maintain a continuous listening watch on guard frequency.

The carriage of a serviceable mode S (ELS or EHS) SSR transponder is highly recommended but not yet compulsory for state aircraft flying OAT within the Brussels FIR/UIR including low level VFR flights.

For UAV flights, the Belgian Military Aviation Authority may approve alternative methods of communication that provide an equivalent level of safety.

d. Altimeter setting procedures

Specific regulations related to altimeter setting procedures are laid down in ENR 1.7.

e. Speed limitation

Specific regulations related to Speed limitation are laid down in ENR 1.1, § 2.15.3.

f. Military formation flight

Specific regulations related to military formation flight are laid down in ENR 1.1, § 2.3.2.

g. Supersonic flights

Specific regulations related to supersonic flights are laid down in ENR 1.1, § 2.9.

h. Flight in an Airspace Reservation

Even when declaring MARSA aircraft will receive TRA service. TRA service see GEN 3.3, § 3.2.2.

When flying an air defense mission the pilot shall receive Close Positive or Loose Positive Control (see ENR 1.1, § 2.16.2), therefore MARSA can not be declared.

i. Radio communication failure

Specific regulations related to radio communication failure are laid down in ENR 1.6, § 2.4.

j. Formation lost wingman (lost lead)

National procedures differ from the definition given by EUROAT.

2.2 Compliance with the Rules of the Air

The operation of an aircraft either in flight or on the movement area of an aerodrome shall be in compliance with the general rules and shall, when in flight, be conform the ATS airspace classification (see ENR 1.4) and in addition, either with:

- the Visual Flight Rules (see ENR 1.2)
- the Instrument Flight Rules (see ENR 1.3)

2.3 Separation

2.3.1 Minimum Separation

2.3.1.1 Separation applied by the Pilot-in-Command

When, in accordance with airspace classification, separation is the responsibility of the pilot-in-command, a minimum standard separation shall be maintained.

- Military aircraft shall not be flown closer than 2000 FT horizontally to civil aircraft, military transport aircraft or military light aircraft.
- Military aircraft shall not be flown closer than 1 NM to helicopters.
- It is prohibited to position an aircraft in close formation with a high-winged aircraft without the knowledge of the pilot-in-command of the latter.
- It is prohibited to simulate attacks on training aircraft, aircraft participating to air refuelling operations and on helicopters operating in the HTA.

2.3.1.2 Radar Separation

When, in accordance with airspace classification, separation is the responsibility of the air traffic/defence controller, the regulations laid down in *ICAO Doc 4444*, *ICAO Doc 7030* and *ICAO Doc 9574* apply.

In military CTR and military TMA, horizontal separation can be reduced to:

1. 3 NM when the aircraft are within 40 NM of the Radar antenna, with a 5 sec radar refresh rate minimum (For approach control purpose only).
2. 2.5 NM between succeeding aircraft which are established on the same final approach track within 10 NM of the runway end. A reduced separation of minimum of 2.5 NM may be applied, provided:
    - braking action is reported as good and runway occupancy times are not adversely affected by runway contaminants such as slush, snow or ice;
    - a radar system with an update rate of 5 seconds or less is used and that the aircraft are within 40NM of the Radar antenna;

the aerodrome controller is able to observe visually the runway-in-use and associated exit and entry taxiways;

distance-based wake turbulence separation is respected;

aircraft approach speeds are closely monitored by the controller and when necessary adjusted so as to ensure that separation is not reduced below the minimum.

If the intentions of an aircraft are unknown, the vertical separation, if applied, will be enlarged to 5000FT in order to ensure sufficient time for the controller to react in order to have ICAO standard separation at all times. The horizontal separation to be applied to an aircraft with unknown intentions remains 5NM.

Aircraft with unknown intentions are defined as:

- Aircraft entering or within controlled airspace, a TRA or a TSA without radio contact with the appropriate ATC/AD agency.
- Aircraft entering controlled airspace, a TRA or a TSA without clearance from the appropriate ATC/AD agency.
- Aircraft within controlled airspace, a TRA or a TSA diverging from their last received clearance.
- Aircraft on an ATS route or within a CTA with unclear intentions.

The intentions of an aircraft flying within uncontrolled airspace even without radio contact are not to be considered as unknown.

2.3.1.3 Separation (visual) applied by AD controllers

In the circuit VFR applies and consequently pilots are responsible for the separation. The controller will assist by providing all necessary information about other traffic in the CTR and by issuing clearances and instructions for sequencing. Clearances to land and to take-off are issued respecting the following rules:

1. Take-off: aircraft will only be cleared for take-off when the preceding departing aircraft has crossed the end of the RWY or has commenced a turn and when the preceding landing aircraft has vacated the RWY.
2. Landing: aircraft will only be cleared to land when the preceding departing aircraft has crossed the end of the RWY or has commenced a turn and when the preceding landing aircraft has vacated the RWY.

These rules do not apply to:

- Aircraft in formation.
- Aircraft landing on different RWYs when simultaneous landings are possible.
- Aircraft under operational requirements, incompatible with these rules.

2.3.2 Formation Flights

a. Military Authority Assumes Responsibility for Separation of Aircraft (MARSA)

MARSA acknowledges from the respective formation (mission) leader to the ATCO that the military participants involved in an OAT flight assume responsibility for separation (safety distance) between participating military aircraft, thus relieving the ATCO from his responsibility to ensure prescribed separation minima. The remaining responsibility of the ATCO is to provide prescribed separation between military aircraft engaged in MARSA operations and other non-participating IFR aircraft.

b. Separation

ATC is only allowed to treat a formation as a single speaking unit if all elements are contained within 1NM horizontally and 100FT vertically from the leader (standard formation).

Exceptionally, a controller may increase the separation between the leader and all other elements within the formation to maximum 3NM horizontally and/or 1000FT vertically. (non standard formation)

If a formation is more widely dispersed, the elements of it shall be regarded as separate speaking units. During initial radio contact, the leader shall announce the number of aircraft and the type of formation.

To ensure that the minimum required horizontal radar separation, for each element of a standard formation, is guaranteed with other traffic, an ATCO shall increase the minimum required horizontal radar separation from other traffic with 1NM, in the case that the other traffic is also a standard formation, 2NM will be added.

For non standard formation the minimum required horizontal and/or vertical separation with other traffic shall be increased according to the maximum cleared distance form the lead element.

During radar trail departures and recoveries, a controller may allow the separation between the leader and all other elements of the formation to be higher then 3NM horizontally and/or 1000ft vertically. For this type of departure / recovery, all element of the formation shall squawk Mode 3/A and Mode C.

Radar trail departures and recovery shall only be granted by the controller if minimum radar separation with other traffic can be guaranteed for each element of the formation.

Unless otherwise coordinated, all elements of the formation shall be contained within 1NM horizontally and 100FT vertically from the leader whilst crossing civil controlled airspace (e.g airways) or before being transferred to a non Belgian Air Force ATS unit.

c. Safety distance between two or more formation flights

In the event that an aerial operation requires two or more formation flights to operate below prescribed IFR separation minima between individual formation flights, the formation leaders shall be responsible for sufficient safety distance between their individual formation flights.

This responsibility shall be accepted from the respective formation leaders by stating “MARSA”, relieving the ATCO from his responsibility to maintain prescribed IFR separation minima in regard to the formation flights concerned.

d. Formation break up (split)

Except in an emergency, a formation break up shall only occur after planning, advanced coordination and approval by ATC.

Prior to the planned formation break up, the formation leader shall inform ATC whether to break up the formation flight into single aircraft or elements.

The formation leader shall inform ATC about his intended aircraft/element break up sequence, call signs and position of these aircraft/elements relative to the formation leader's aircraft. Aircraft/elements shall receive separate clearances and transponder codes from ATC.

As soon as the formation break up has been directed by ATC for the respective aircraft/element, this aircraft/element is no longer part of the previous formation flight and shall follow subsequent ATC instructions issued to them.

However, ATC shall only assume responsibility for separation between the aircraft/elements that are conducting the formation break up after prescribed separation minima have been established. Until then, the individual pilot-in command/ element-leader is responsible for maintaining sufficient safety distance.

e. Formation join up

When a formation join up is controlled by an ATCO, he/she shall apply standard separation criteria between individual aircraft wishing to join a formation, until the formation leader accepts responsibility for maintaining sufficient safety distance between the aircraft concerned.

The formation leader, once he is safely able to do so, shall confirm his assumption of responsibility for maintaining sufficient safety distance between his aircraft, the aircraft comprising the formation and the joining aircraft by stating "MARSA"; whereupon ATC shall transfer responsibility for the joining aircraft to the formation leader.

f. Lost wingman (Lost lead) procedures

In any lost wingman situation, an immediate initial safety distance between aircraft is essential for flight safety to avoid a potential mid-air collision. Therefore, each wingman losing sight/contact of the aircraft preceding him or being unable to maintain formation for other reasons shall immediately execute the procedures relevant to his flight position, while transitioning to instrument flying and resuming own navigation.

Note: Irrespective of the nationally prescribed lost wingman procedures, their execution may result in a loss of minimum IFR separation in respect to other air traffic and is an emergency situation for ATC.

Recommendation: in order to immediately alert ATC and allow to safely resolve resulting conflict potentials without undue delay, the following should be executed in addition to the appropriate lost wingman procedure:

- Formation leader squawks emergency and informs the appropriate ATC unit as soon as possible.
- Each pilot-in-command executing a lost wingman procedure squawks as directed by the appropriate ATC unit as soon as practicable.

g. Formation radio failure

A formation flight in which a flight member experiences total radio failure shall comply with the procedures outlined for this case within the standard operating procedures (SOP) of their appropriate national authority.

If the SOP requires deviations from a given clearance, the flight leader or the pilot of aircraft with the serviceable radio shall inform the ATC unit and request a different clearance.

In the event that the total radio failure affects all aircraft of the formation flight, the formation leader shall ensure compliance with basic ICAO radio failure procedures.

In case a formation break up is required for safe approach and landing all aircraft or element-leader of the formation flight shall squawk Mode 3, Code 7600, as soon as the break-up was initiated by the formation leader and continue to ensure compliance with basic ICAO radio failure procedures.

2.4 Airborne and traffic collision avoidance system (ACAS/TCAS)

2.4.1 Single Aircraft

If equipped with ACAS/TCAS, single aircraft shall operate in the traffic alert/resolution advisory (TA/RA) mode outside ARES.

2.4.2 Formation Flight

In a standard military formation, if equipped with ACAS/TCAS, only the lead aircraft shall operate in the TA/RA mode. Nevertheless, the aircraft operating in the TA/RA mode shall also be the one operating the transponder.

In the event that mission requirements would necessitate to not using ACAS/TCAS, the rules of the state in which the flight is taking place shall apply. In the absence of such rules, a deviation from ENR 1.1, § 2.4.1 or ENR 1.1, § 2.4.2 is not permissible, unless prior permission has been obtained from the appropriate national authority.

2.5 Cruising Level

The cruising levels at which a flight or a portion of a flight is to be conducted shall be in terms of:

- Flight levels (FL), for flights above the TA (4500FT)
- Altitudes (ALT), for flights at or below the TA (4500FT)

The Levels at which a flight shall be conducted are specified in the FPL:

- In terms of flight level for that part of the flight which is conducted at or above the transition level.
- In terms of altitude for that part of the flight which is conducted at or below the transition altitude.

The chosen flight levels shall ensure an adequate terrain clearance at all points along the route and shall conform to the traffic requirements and be in accordance with the table of cruising levels.

The information required determining the lowest flight level to ensure terrain clearance may be obtained from the air traffic control centres or from the Belgian Air Component meteorological offices. A chart for converting QNH values to flight levels is shown in ENR 1.7, § 1.3 for this purpose.

The transition altitude for the aerodromes of departure and arrival and for alternate aerodromes located outside the Brussels FIR shall be noted. These transition altitudes may be obtained from the air traffic control services.

Pilots shall keep in mind that rules concerning altimeter setting and transition altitude may differ from one country to another.

The following procedure shall be applied in non controlled airspaces:

- The altimeter setting 1013.2 HPA (29.92 Inches) shall always be used above 4500FT AMSL. At or below this altitude, the regional QNH altimeter setting will be used.
- Non-controlled VFR flights conducted at or below 3000FT AGL are not to maintain a semi-circular cruising altitude.

2.6 Persons on Board

At the first contact with a military ATS unit on an aerodrome the pilot shall report the number of POB. In case of omission the ATS unit will request this information.

2.7 Low Flying Regulations

2.7.1 Applicability

In the Brussels FIR, the low flying regulations specified below are applicable to every OAT flight conducted below 4500FT AMSL and to every OAT flight if descending from controlled airspace and passing the transition level. Security flights under control of a Belgian Air Defence Station are an exception.

2.7.2 Minimum Safety Height

2.7.2.1 General

The minimum safety height is the vertical buffer between the flown altitude and the top of every obstacle in a specified radius along the flight path of an aircraft. The minimum safety height shall be respected in order:

- to reduce the risk of collision with ground obstacles
- to allow manoeuvring away from populated areas in the event of technical aircraft failure
- to reduce noise pollution

All military aircraft shall comply with the rules described in this paragraph, except:

- for take-off and landing
- for SAR operations (real and training mission)
- for a mission ordered by other ministries (e.g. inspection of fishing activities, inspection of the sea pollution, ….)
- if approved by COMOPSAIR
- in the cases specified in § 2.7.2.2.2, § 2.7.2.2.3 (fixed wing aircraft) and § 2.7.2.3.2 (helicopters).

2.7.2.2 Minimum Safety Height for Fixed Wing Aircraft

2.7.2.2.1 General

- VFR day flight:
  1000FT above the highest obstacle within a radius of 600M of the aircraft, except for Belgian light propeller training aircraft for which a minimum altitude of 500FT above the highest obstacle within a radius of 600M of the aircraft must be respected.
- VFR night flight:
  1000FT above the highest obstacle within a radius of 5KM of the aircraft.
- IFR flight:
  1000FT above the highest obstacle within 8KM of the estimated position of the aircraft

2.7.2.2.2 Exceptions: Application of Higher Minima

Over congested areas, towns, industrial sites, nuclear power station, LNG terminals and gatherings of people in the open, aircraft shall maintain a height sufficient to permit an emergency landing without endangering any persons or property on the surface. This height shall not be less than 2000FT (1000FT for twin engine police aircraft) above the highest obstacle within a radius of 600M from the aircraft in VFR, or within a radius of 8KM in IFR.

It is prohibited for military aircraft to fly over Brussels city below FL200, except for landing and take-off at EBBR. It is recommended that jet aircraft should avoid other large cities below FL200.

Over a strip of 5NM either side of the Belgian coastline at least FL100 must be maintained, except for flights to and from the United Kingdom and for aircraft participating in combined Land - Air Component anti-aircraft exercises at Lombardsijde for which the minimum altitude to cross this strip is 2000FT. This rule is not applicable to state aircraft verifying marine and surface water pollution.

2.7.2.2.3 Exceptions: Application of Lower Minima

1. In the LFA Ardennes, Belgian fixed wing aircraft are allowed to operate below 1000FT AGL:
   - Within the lateral limits of the LFA Ardennes, with a minimum of 500FT above the highest obstacle within a radius of 600M of the aircraft, if all of the following conditions are fulfilled:
     - VFR day flight
     - If essential for the training value of the mission
   - In the LFA Ardennes. The minimum safety height to be respected in the LFA Ardennes is 250FT above the highest obstacle within a radius of 600M of the aircraft.
2. Outside the LFA Ardennes, Belgian fixed wing aircraft are only authorised to fly below 1000FT AGL according to a COMOPSAIR tasking (e.g. final portion of a COA IPR fly past) and if all of the following conditions are fulfilled:
   - VFR day flight
   - Minimum 500FT above the highest obstacle within a radius of 600M of the aircraft.
3. In the LFA11, outside the strip mentioned in § 2.7.2.2.2 above, the minimum height for Belgian military aircraft is 250FT above the highest obstacle within a radius of 600M of the aircraft if following conditions are fulfilled:
   - The aircraft must carry a serviceable radar altimeter
   - The horizon must be clearly defined
   - If the radar altimeter is inoperative, the minimum height is 500FT above the highest obstacle within a radius of 600M of the aircraft

   The overflight of ships not participating in the exercise shall be avoided at all times.
4. Fixed wing aircraft are allowed to operate below 1000FT AGL in exercise ranges designated as danger area or restricted zones, according to the applicable publications and procedures (AIP, range orders...).
5. The minimum safety height for Belgian light propeller training aircraft operating in VFR by day is 500FT above the highest obstacle within a radius of 600M of the aircraft.
6. Belgian military training aircraft SF260 are authorised to perform Practice Forced Landings (PFL) within the lateral limits of EBD37, for which the minimum safety height will be 200FT above the highest obstacle within a radius of 600M of the aircraft.
7. 15 W fixed wing aircraft are authorised to fly below 1000FT AGL:
   - Above the lateral limits of the LFA Ardennes by night with NVA/NVG from 500FT above the highest obstacle within a radius of 1NM of the aircraft
   - Along predetermined routes using NVG: minimum altitude of 500FT above the highest obstacle within a radius of 1NM of the aircraft as indicated on the Obstacle sheets per leg, avoiding populated areas
   - Along the 15W navigation routes by daylight in order to update the obstacle clearance sheet on a yearly basis: minimum altitude of 500FT above the highest obstacle within a radius of 600M of the aircraft.

2.7.2.3 Minimum Safety Height for Helicopters

2.7.2.3.1 General

- VFR day flight:
  500FT above the highest obstacle within a radius of 50M of the helicopter.
- VFR night flight:
  500FT above the highest obstacle within a radius of 3KM of the helicopter.
- Night vision aids (allowed exclusively for Belgian helicopters):
  In the HTA at an altitude between GND and 500FT AGL, speed and height shall be adapted in function of the contours and cover of the ground. Along the predetermined routes: 200FT above the highest obstacle within a radius of 3KM of the helicopter.

2.7.2.3.2 Exceptions

In case of emergency or for flight safety reasons, a pilot may derogate from the minimum safety height. If he does so, he shall notify the controlling authority immediately and he shall notify his unit OPS section as soon as possible. Landing outside recognised and prepared landing sites is prohibited except in case of emergency or during SAR operations (see list of landing sites in AD 1.3). Field landing training exercises can only be performed in a reserved and NOTAMed HTA(A) or inside a CTR, danger or restricted areas.

Belgian military helicopters are authorised to operate at or above 300FT AGL along predetermined routes and within CTR.

In all the HTAs and in the LFA 11, a lower minimum safety height is allowed for Belgian helicopters. The helicopters booked in those areas are authorised to fly within the published vertical limits of the specific area. In the HTA Ardennes however, climb-out to 250FT or above is not allowed in order to avoid the LFA Ardennes, unless air safety dictates otherwise.

The overflight of cities by single engine helicopters is prohibited, except along predetermined routes in which case the altitude and speed must be sufficient to permit an emergency landing without endangering any person or property on the ground. Helicopters shall avoid overflying populated areas and industrial sites.

A strip of 5NM on either side of the Belgian coastline is prohibited. This rule does not apply to helicopters to and from EBFN or EBOS, for flights to and from the United Kingdom and for helicopters participating in combined exercises at Lombardsijde (EBR17A) or over the North Sea. In these cases, the minimum altitude to cross the strip of 5NM on either side of the Belgian Coast, is 2000FT.

2.7.3 Low Level Cross-Channel Traffic

Military aircraft may operate at or above 500FT over the sea (Oostende CTR excluded).

Belgian jet pilots, before overflying the Strait of Dover at or above 500FT, shall make an RTF broadcast on FREQ 362.300 MHZ, stating position (in relation to a geographical feature), heading and height. This broadcast will not be acknowledged.

2.7.4 Low Level Abort Procedure

2.7.4.1 Navigation (unsure of position)

The pilot shall climb to the emergency safe altitude (4300FT AMSL) maintaining VMC and shall re-establish position by own means. If the pilot cannot confirm his position, he may request assistance from Belga Information or Brussels FIC outside the ATCC OPS HR (see GEN 3.3).

2.7.4.2 Weather deterioration

The pilot shall alter heading to maintain VMC and weather minima for low-level flight or he may request assistance from Belga Information or Brussels FIC outside the ATCC OPS HR (see GEN 3.3) maintaining VMC if possible. If unable to continue, return to base in VMC, the pilot should abort.

2.7.5 Abort Procedure

The pilot shall climb to the emergency safe altitude (4300FT AMSL) and shall switch the IFF/SIF to EMERG and Mode C when encountering IMC without ATC clearance. The pilot shall call Belga Information or Brussels FIC outside the ATCC OPS HR (see ENR 2.1, § 3).

2.7.6 Emergency

The pilot shall climb as necessary and shall switch the IFF/SIF to EMERG and Mode C. If no contact can be established with Semmerzake ATCC on 278.475MHZ or 129.325MHZ, the pilot shall pass a distress message on 243.000MHZ or 121.500MHZ.

2.8 Night Flight

2.8.1 Definition

Night flights are all flights or parts thereof conducted between 30MIN after SS and 30MIN before SR.

2.8.2 Time Schedule

Complementary to the regulations mentioned in COMOPSAIR Flying Window (ACOT-SPS-OPSDIR-AOCC-201), the following rules are applicable. SAR missions are authorised to fly at night. Except for Belgian transport aircraft, night flights are not authorised from 01 JUL until 31 AUG. Night flights are not authorised between 2300 and 0500 (2200 and 0400). Deviations to the above mentioned rules can be authorised by COMOPSAIR.

2.8.3 Authorised Night Flight

2.8.3.1 Jet Aircraft

Are authorised:

- Flights below 4500FT AMSL within controlled airspace, and
- Flights above 4500FT AMSL, and
- Flights on published BENE routes, and
- Flights on published DARK FALCON routes (see ENR 3.5).

2.8.3.2 Transport Aircraft

Are authorised:

- Flights below 4500FT AMSL within controlled airspace, and
- Flights above 4500FT AMSL are authorised, and
- Exclusively for Belgian propeller transport aircraft, flights along the Navigation Routes 15W Tpt (see ENR 3.5).
- Flights of Belgian propeller transport aircraft involved in paradrop exercises under the following conditions:
  - Minimum level 1000FT AGL,
  - Drop zone is clearly mentioned in the flight plan and
  - Coordination is done by MDC.

2.8.3.3 Helicopters

Are authorised:

- Flights below 4500FT AMSL within controlled airspace; and only for training and real SAR flights in uncontrolled airspace, and
- Flights above 4500FT AMSL, and

- Exclusively for Belgian helicopters, flights using NVG/NVA along NVG Link Routes (see § 2.8.4.2 and ENR 3.5) and flights in HTA 10 and LFA 11 (see ENR 5.2).

2.8.3.4 Other Cases

All night flights not mentioned above, are subject to prior authorisation by COMOPSAIR.

2.8.4 Use of Night Vision Aids (NVA) or Night Vision Goggles (NVG)

2.8.4.1 Fixed Wing Aircraft

Foreign fixed wing aircraft are not allowed to fly with NVA/NVG in the Brussels FIR, unless prior authorization has been obtained from COMOPSAIR.

Training of flights with NVA/NVG shall be performed along a net of predetermined routes as described in ENR 3.5, § 2.2.2. The altitudes mentioned in ENR 3.5, § 2.2.2 are minimum altitudes and should be adhered to at all times. Transport aircraft may fly above the lateral limits of the LFA Ardennes by night with NVA/NVG from 500 FT AGL above the highest obstacle within 1 NM radius.

Reservation of any link route shall be coordinated by MDC based on an IFR FPL submitted to MDC (EBMIZGZF) before 1100 of the same day. The requested route(s) will be described in FPL field 15 (ROUTE). Coordination of several NVA/NVG flights within Brussels FIR shall be the performed by MDC.

When flying with NVA/NVG in uncontrolled airspace, pilots shall listen out on 362.350 MHZ and at every reporting point along their route, transmit the following: Callsign, route followed + direction, reporting point and altitude. NVA/NVG night flying may be performed in control zones, following previous coordination with local air traffic control.

Anticollision lights and position lights shall be switched on, except:

- In formations: only the last element to have all lights on
- Inside mission-allocated TRA/TSA

2.8.4.2 Helicopters

Foreign helicopters are not allowed to fly with NVA/NVG in the Brussels FIR, unless prior authorisation has been obtained from COMOPSAIR.

Training flights with NVA shall be performed in the HTAs, LFA 11 and along a net of predetermined link routes as described in ENR 3.5, § 2.5. The HTA can be activated for helicopter low flying by night with NVA/NVG from GND up to 500 FT AGL. Reservation of a HTA and of a link route shall be coordinated by MDC based on an IFR FPL submitted to MDC (EBMIZGZF) before 1100 (1000) the same day. The requested HTA and the link route will be described in flight plan field 15 (ROUTE). The activation of the reserved HTA will be announced by NOTAM. Coordination and deconfliction of several NVA flights within a HTA shall be the responsibility of the operator. Coordination of several NVA/NVG flights within Brussels FIR shall be the performed by MDC.

When flying with NVA/NVG in uncontrolled airspace, pilots shall listen out on 362.350 MHZ and at every reporting point along their route, transmit the following: Call sign, route followed + direction, reporting point and altitude. NVA/NVG night flying may be performed in control zones, following previous coordination with local air traffic control.

Anti-collision lights and position lights shall be switched on, except:

- Outside CTR: anti-collision lights may be in NVG mode
- Inside CTR: when in short final or take-off below 300 FT AGL
- In formations: only the last element to have all lights on
- In exceptional operational circumstances

2.8.5 Flight Planning

OAT night flights in the Brussels FIR conducted entirely or partially in class G airspace require the submission of an IFR FPL, (also those executed under VFR or with NVA/NVG) before 1100 (1000) the same day, including EBMIZGZF as addressee. OAT night flights in the Brussels FIR/UIR conducted entirely in controlled airspace (class C and D) require the submission of a FPL at least 60 MIN before ETD. The MDC (address EBMIZGZF) shall coordinate night flights conducted in class G airspace and for which an IFR FPL is submitted.

MDC will endeavour to reduce the risk of collisions by deconflicting planned missions based on received IFR FPL by sending all received FPL to the other participating squadrons. This deconfliction process does not take CIV VFR flights into account. The MDC is not providing a separation service to ACFT during the flight.

2.9 Supersonic Flight

Supersonic flights are authorised from MON to FRI between 0700-1100 (0600-1000) and 1200-1700 (1100-1600). They are prohibited on SAT, SUN and HOL, except when especially authorised by COMOPSAIR. However, the number of supersonic flights will be limited to those necessary for maintenance in flight tests of Belgian aircraft and those scheduled in the Belgian training syllabi for pilots. Exceptions can be authorised by the COMOPSAIR Airspace Control Ops.

Supersonic flights must be performed under radar control (SSR compulsory). Only during air defence exercises with CRC Glons, supersonic flights may be performed under loose Positive Control, provided the pilot declares his intention to pass supersonic to the air defence controller. The pilot must receive the clearance before passing supersonic. Nevertheless, the pilot shall cross ATS routes and airways under radar control.

Supersonic flights are prohibited below FL360 and at all levels in the following areas (see ENR 6-INDEX.08):

- Brussels: circle of 8NM radius centred on 505042N 0042147E
- Antwerp: circle of 6NM radius centred on 511230N 0042500E
- Gent: circle of 6NM radius centred on 510245N 0034400E
- Liege: circle of 10NM radius centred on 503800N 0053530E
- The area delimited by two circles of 6NM radius centred on Mons (502700N 0035700E) and Charleroi (502500N 0042700E), connected by their common tangents
- All foreign airspaces, delegated to Belgian ATS

Before any descent, speed will be reduced to M0.98, except that supersonic descent may be maintained till reaching FL500. Pilots will advise the controller when starting and ending a supersonic flight, even when flying accidentally through M1, so that time and track can be logged.

2.10 Aerobatics

Aerobatics shall be performed under the conditions prescribed by the appropriate authority. Aerobatics shall be performed above 4500FT AMSL except in controlled airspace where the controlling authority can grant a deviation from this rule, and in designated temporary or permanent areas (see ENR 5). Visibility must be more than 8KM. It is prohibited to perform aerobatics above towns, congested areas, industrial sites, LNG terminals, nuclear power stations or gatherings of people in the open. All aerobatic manoeuvres are forbidden below FL100 during night flight. Exceptions to these rules can be granted by the Chief of Staff of the Belgian Air Component.

2.11 Air Refuelling

Air refuelling in the Brussels FIR/UIR can be conducted in a TRA or CBA.

2.11.1 Procedure

Tankers and receivers will establish initial radio contact with Semmerzake ATCC for radar vectored join up. Semmerzake ATCC will provide radar vectors to tankers in order to keep the Air-to-Air Refuelling Cell within the defined area. Dissimilar tankers will not use the same block time.

All aircraft shall file an IFR flight plan to the scheduled refuelling area. The flight plan shall include the following entry in Item 18: 'RMK/ IN-flight REFUELLING AREA … (area name as appropriate) APPROVAL REQ'. While in the air refuelling area, the tanker and receivers shall squawk Mode 3 as directed and Mode C. After completion of refuelling operation, en-route to exit point, tactical aircraft shall report to Semmerzake ATCC for hand-off coordination. For aircraft departing towards France, departure clearance requests should be submitted 30MIN in advance.

2.11.2 Scheduling

Air-to-air refuelling operations shall be scheduled from MON to FRI only (HOL excl).

2.12 Parachute Dropping

2.12.1 Planning

2.12.1.1 Standard

Parachute dropping can take place within the limits of the permanently reserved airspaces designated for this activity without prior notification.

2.12.1.2 Non-Standard

For military parachute dropping activities, the airspace reservation request shall be addressed to COMOPSAIR Airspace Control Ops at least 10 working days before the activity.

If the airspace foreseen for the parachute dropping is affecting a civil controlled airspace and/or is taking place above 4500FT AMSL, request shall be addressed to COMOPSAIR Airspace Control Ops at least 3 weeks before the activity.

2.12.2 Minimum Safety Height

- VFR flight:
  When the visibility is less then 8 KM and at night, 500FT above the highest obstacle located within a radius of 8KM around the estimated position of the aircraft.
- IFR flight:
  1000FT above the highest obstacle located within 8 KM around the estimated position of the aircraft.

2.12.3 Weather Minima for Parachute Dropping

2.12.3.1 Cloud base

Drop height + 100FT

2.12.3.2 Visibility

- One aircraft: 2KM
- Formation: 3KM for one drop, 5KM for more drops

Note: Radar beacon drop: 1.5KM, clear of clouds and in sight of the ground, only one aircraft and CARP within dropping zone limits.

2.12.3.3 Wind

- Personnel drops:
  day: ground 20KT - drop height 30KT
  night: ground 10KT - drop height 30KT
- Equipment drops:
  day: ground 20KT - drop height 30KT
  night: ground 20KT - drop height 30KT

2.13 Target Towing

2.13.1 Notification

Target towing flights shall be coordinated with Semmerzake ATCC and be notified to EBSZ NOF at least two working days before the planned date.

2.13.2 Area

Target towing can only be executed in a TRA or CBA under radar control.

2.13.3 Flight Conditions

Target towing must be executed in VMC. If target towing takes place between cloud layers, the vertical distance from clouds must be 3000FT. For the departure, the crosswind component must be less than 15KT. The flight towards the target area can be flown in IMC, under radar control, if the cloud base is at least at 1500FT.

2.14 Fuel Dumping

Except in case of emergency, fuel dumping shall be carried out over the North Sea at 4500FT AMSL or above. In case of emergency, fuel dumping shall, whenever possible, not be carried out over the congested areas of cities, towns or settlements, in holding patterns and less than 2000FT above other aircraft.

If the need to drop external tanks arises and the overall situation allows it (concerning the emergency, weather, fuel etc...), dropping of the tanks will be executed in Helchteren Range.

2.15 Noise Abatement Procedures

Pilots-in-command should always exercise great care to avoid unnecessary noise pollution during the execution of a mission. Noise is a factor that should be considered during the planning phase as well as during the flight itself. As a minimum, the noise abatement procedures specified below shall be respected.

2.15.1 Applicability of Noise Abatement Procedures

Noise abatement procedures are applicable to OAT within the Brussels FIR/UIR, unless flight safety is jeopardised or a waiver has been obtained from COMOPSAIR.

2.15.2 Violation of Noise Abatement Procedures

Every violation against the rules of noise abatement, with or without prior authorisation, shall be logged after the flight in the authorisation book by the pilot-in-command of the concerned flight.

2.15.3 Speed Limitation

Due to military operational and training requirements, the speed limitation below FL100 set at maximum 250KIAS is not applicable to OAT flights. Nevertheless for noise abatement reason, Aircraft are not to be flown below 4500FT at speeds exceeding 450KT GS (420KT planned), except when there is a specific training requirement, for the maximum speed which will be:

- For FBA missions: between IP and target for a maximum of 2MIN and with maximum TAS 520KT (510KT planned).
- For FBS missions: between IP and target for a maximum of 2MIN and with maximum TAS 550KT (540KT planned).
- For Air Defence missions, TAS 550KT only in the final intercept phase (inside 10NM).
- For Alpha-Jet missions: between IP and target for a maximum of 2 minutes and with maximum TAS 480KT.

2.15.4 Use of Standard Routes

Aircrew shall avoid the use of standard routes and shall diversify their everyday training routes away from well used choke points, except when such routes are required by training establishments.

2.15.5 Repetitive Overflight

Unless it is essential to the training aim of the sortie, aircrews are not to make repetitive overflights of targets, IP's, etc. The number of repetitive overflights below 1000FT AGL is limited to a maximum of two.

2.15.6 Use of Afterburner

The use of afterburner is prohibited below FL100 except for take-off, climb out and in case of emergency. Exceptions to this rule may be granted by COMOPSAIR (e.g. to allow demonstration flights and rehearsals).

2.16 Tactical Air Operations

Within the Brussels FIR/UIR and delegated airspace, Tactical Air Operations (defensive, offensive and support to air operations) are permitted within the framework of the following indicated regulations.

2.16.1 Terminology

Although the terms mentioned below may often be used in a wider sense, within § 2.16 the following meanings apply:

Air Control Unit (ACU) for Tactical Air Operations
Air Control Units within the framework of the NATO Control and Reporting (C&R) system are:

- Control and Reporting Centre (CRC/CRP)
- Airborne Early Warning and Control (AEW&C) Aircraft
- Tactical Air Control Systems (TACS)
- Radar Systems of Maritime Units (MU)
- Contingency locations

Air Combat Manoeuvres (ACM)
Training designed to achieve proficiency in element formation manoeuvring and the coordinated application of BFM to achieve a simulated kill or effectively defend against one or more aircraft from a preplanned starting position. ACM can be carried out by a maximum of four aircraft. ACM carried out with dissimilar aircraft is called Dissimilar-ACM (D-ACM).

Air Combat Training (ACT)
Training designed to give aircrews skills in tactics used to gain superiority in air combat. In Dissimilar Air Combat Training (DACT), different types of aircraft are involved.

Air Defence Controller (ADC)
Radar Controller, working within the NATO Control and Reporting (C&R) system, in charge of providing tactical control to Tactical Air Operations in the Brussels FIR/UIR and delegated airspace.

Air Defence Mission
Air defence missions are intercept missions under tactical control of an air defence unit and separated from other traffic by standard ICAO separation minima. Non-Belgian air control units performing intercept missions under tactical control, see § 2.16.6.1.

Air Surveillance And Control System (ASACS)
A network of mobile and airborne radars, associated communications and facilities that provide for the detection, recognition, reporting and control of interception and engagement of airborne vehicle within the detection range.

Area of Responsibility (AoR)
Geographical area in which a military unit is responsible to conduct operations.

Armed Aircraft
An armed aircraft is an aircraft with loaded ammunition (training or live) that can be expended by pilot initiation.

ATM network
The airspace including all civil and military structures (AWY, TMA, CTR, PDR, TSA, TRA, CBA, …).

Autonomous Operations
Air Operations without any type of service and/or control from an ACU. These types of operations are not allowed in Brussels FIR/UIR and delegated airspace.

Basic Fighter Manoeuvring (BFM)
Training designed to give aircrews skills in handling their aircraft within the performance limits and capabilities of that specific aircraft. BFM can be carried out by a maximum of four aircraft. BFM carried out with dissimilar aircraft is called Dissimilar-BFM (D-BFM).

BRA (A/H)
A type of information provided by the Air Defense Controller to aircrew in a format of Bearing, Range, Altitude (and Aspect or Heading).

Break-off rules
The minimum required separation distance between the interceptor and a target of opportunity (see § 2.16.6.3).

Bullseye format
System used to pass information to a ground or airborne ASACS. The information will be related to reference point known

by all exercise participants. The format will be bearing, range, altitude, identification + additional information (number of aircraft, heading).

Composite Air Operations (COMAO)
Operations interrelated and/or limited in both time-scale and space, where units differing in type and/or role are put under the control of a single commander to achieve a common, specific objective.

Defensive Counter Air (DCA)
DCA operations are a basic building block for all air-to-air activity and permit weapon deconfliction in conditions with and without communications. Different types are point defense, area defense and lane defense. The objective is to detect, identify and engage aircraft attempting to penetrate the AoR in accordance with the mission and adhering with the RoE in effect. The next objective is passing the tactical picture to the ASACS unit as required.

Escort Flights (e.g. Presidential Flights)
The employment of AD fighters to directly intercept and protect friendly aircraft.

Fighter Area of Responsibility (FAOR)-operations
Operations within a well defined area, during which an ADC will provide the aircrew with all relevant information concerning the FAOR, the adjacent FAORs and target information to the optimum extent possible. When providing loose or broadcast control (see § 2.16.2) the target information will be given in relation to a defined geographical position (bulls eye).

Judy
AD fighter has radar/visual contact on the correct target and is taking control of the intercept within a close positive control mission.

Link 16 (L16)
Tactical data link for exchange of real time tactical data among military units.

Loaded aircraft
A loaded aircraft is an aircraft of which all or some weapon systems have been provided with ammunitions (training or live). However, safety measures have been taken to preclude use of the armament by pilot initiation.

Manoeuvring categories
The manoeuvring categories used in § 2.16 are applicable to air-to-air training missions and are the following:

- Unlimited:
  No restrictions except national regulations and flight manual, or aircraft limits, normal for air-to-air training.
- Limited:
  A defender, i.e. an aircraft of any type engaged in defensive manoeuvring, may react against an attacker with an extension/separation and/or turn not to exceed 180 degrees after the attacker has passed the defender's 3/9 line, level or climbing below 5000FT AGL. An attacker engaging defenders may turn until the defender terminates the engagement or a simulated kill is achieved or the defender has turned 180 degrees, whichever comes first, post merge.
- Restricted:
  Heading changes up to 60 degrees either side of the initial course and a maximum of 10000FT altitude change.
- Non-manoeuvring:
  Constant heading, airspeed and altitude.

Practice Intercepts (PI's)
An air-to-air mission in which the fighter executes a series of manoeuvres using an ADC, to place the aircraft or flight in a position from which air-to-air ordnance can be employed, a visual identification (VID) can be made, or a visual engagement can be initiated. The manoeuvring category is limited.

PI Patrol (PIPAT)
Training as specified above in which 'Targets of Opportunity' and 'Embellish Targets' are intercepted. Contrary to PI's, these targets may be controlled by different controllers and/or radar stations and air traffic centres.

Practice Intervention flights
Training under control of an ADC to give aircrews skills in the interception and escort of intruders and defectors.

Rules of Engagement (RoE)
Directives issued by higher authority which dictate the conditions under which military units can initiate combat engagement with other forces.

Safety frequency

A safety frequency will be used to order ‘cease jamming’ when safety is endangered. This frequency will be available to all exercise participants.

Security Flights (or Alpha Scrambles)
Military flights (Air Defence Priority Flights) resulting from urgent national or NATO security requirements, which for this reason do not have to comply with ICAO regulations (e.g. standard radar separation minima), normal control procedures and directions. See § 2.16.3 for more details.

Surface Attack Tactics (SAT)
Training designed to give the aircrew skills in the use of air-to-ground targeting and weapon delivery. (e.g. Targeting Pod (TGP), CAS).

Surface Attack Tactics with Air Opposition

SAT in a more complex and realistic scenario with opposition forces (air threat and SAM).

Taboo frequency

This will be determined before the start of the exercise and communicated to all exercise participants. This frequency may not be jammed.

Tactical Intercepts (TIs)

An air-to-air mission in which the fighter executes a series of manoeuvres using an ADC, to place the aircraft or flight in a position from which air-to-air ordnance can be employed, a visual identification (VID) can be made, or a visual engagement can be initiated. The manoeuvring category is unlimited.

Tally

Sighting of target, bandit, bogey, landmark or enemy position; opposite of no joy.

Tango Scramble

A scramble for a directed practice AD mission. This will be executed in accordance with national flying regulations.

Tap the CAP (Combat Air Patrol)

An air-to-air mission to practice visual lookout, spike awareness and engaging an adversary where the exact range, azimuth and altitude is not precisely known. The fighters will perform a visual CAP over the centre point of the area and will remain within 7 NM of that point. The adversary will perform sequential attacks on the fighters with a mix of Beyond Visual Range (BVR) and visual engagements.

Targeted

Group responsibility has been met.

Time Sensitive Targeting (TST)

This operation is used to find and destroy sensitive targets (including mobile targets) using airborne tasked fighters.

Unloaded aircraft

An unloaded aircraft is an aircraft carrying no ammunition (training or live) i.e. training or real ammunitions.

Visual

Sighting of a friendly aircraft/ground position; opposite blind.

2.16.2 Tactical Control of Aircraft

Tactical control of aircraft is based on two aspects, namely the aircraft's mission and the aircraft's safety. Doc AAP-49 defines combinations of terms to cover both aspects; however, some reservations are made by the Belgian Air Component.

Due to airspace classification, the two following combinations of terms for tactical control are not provided in Brussels FIR/ UIR and delegated airspace:

- Close - Advisory Control
- Loose - Advisory Control

2.16.2.1 Terminology

Only the combinations of terms mentioned in the paragraphs hereafter are used inside Brussels FIR/UIR and delegated airspace during missions under control of an ACU:

2.16.2.1.1 Close - Positive Control

A form of aircraft mission control in which the aircraft is continuously controlled for altitude, speed and heading, to a position from which the mission can be accomplished. The controlling unit will advise the aircraft commander of the current tactical picture and will provide further advice if and when available.

The controlling unit is responsible for taking actions for collision avoidance, such as ordering the necessary alterations to heading, speed and altitude to maintain separation criteria.

Belgian Reservation to AAP-49: separation criteria is the radar separation minima in accordance with the airspace classification.

2.16.2.1.2 Loose - Positive Control

A form of aircraft mission control in which the aircraft commander selects his own speed, altitude, heading and the appropriate tactics required to accomplish the assigned task. The controlling unit will advise the aircraft commander of the current tactical picture and will provide further advice if and when available.

The controlling unit is responsible for taking actions for collision avoidance such as ordering the necessary alterations to heading, speed and altitude to maintain separation criteria.

Belgian Reservation to AAP-49: separation criteria are the radar separation minima in accordance with the airspace classification.

2.16.2.1.3 Broadcast Control

A form of aircraft mission control used in the absence of full capability or if the tactical situation precludes close or loose control, in which tactical/target information is passed to enable the aircraft to accomplish the assigned task. The controlling unit, when possible, provides adequate warnings of hazards, but the aircraft commander(s) is (are) responsible for aircraft navigation and collision avoidance. Two-way communications are not a prerequisite for this type of control.

2.16.2.1.4 TRAFFIC AVOIDANCE

Traffic avoidance is the action taken to avoid traffic by means of mandatory instructions and is to be initiated soon enough to ensure the prescribed separation minima (see § 2.16.4.3.1 and § 2.16.4.3.2).
Acknowledgement by aircrew on UHF is mandatory.

2.16.2.1.5 TRAFFIC WARNING

Traffic Warning is the information provided by the Air Defense Controller about factor traffic and can be done in BRA(A/H) format to a specific aircrew or can be done in Bullseye format for awareness to all aircrew.
Acknowledgement by aircrew on UHF is mandatory.
Traffic warning is to be done as follows:

> 15 NM	When no other urgent messages to pass to the aircrew
15 - 10 NM	Mandatory for traffic on collision course + avoiding actions to be initiated if necessary
10 - 5 NM	Mandatory for all factor traffic + avoiding actions to be ordered if necessary

2.16.2.2 Establishment of Mutual Responsibilities

At the start of each mission the air defence controller (ADC) must inform the aircrew about the type of tactical control for that specific mission, this shall be acknowledged by the aircrew. Every following change in tactical control must also be acknowledged by the aircrew.

The combination of terms for tactical control depends on the exercise, status of the ADC-equipment (radar and radio coverage), airspace classification and exercise area.

2.16.2.3 Responsibilities

Notwithstanding the regulations laid down below, the aircraft commander will always be ultimately responsible for the flight safety of the aircraft. Only in case of the necessity to maintain flight safety, an aircraft commander can deviate from directions given by the ADC. The deviation must be stated by the aircraft commander to the ADC as soon as possible. However, the above does not release the ADC from taking any conceivable measure within the range of possibilities to ensure the aircraft's safety.

2.16.2.3.1 Under Close - Positive Control and Loose - Positive Control

The air defence controller is responsible for:

- Giving timely traffic information about all non-participating air traffic to the aircraft under his control which may interfere with the flight path of the mission and, if necessary, giving mandatory instructions to maintain the radar separation minima in accordance with airspace classification.
- Giving mandatory instructions to keep the aircraft under his control within the allocated exercise area (airspace integrity).
- Obtaining clearance for the use of the exercise airspace from the appropriate ATM service.

The aircrew is responsible for:

- Acknowledging and following mandatory instructions: to maintain radar separation minima according to airspace classification and to maintain airspace integrity.
- Calling out 'targeted/sorted' or 'tally' on the frequency when assuming separation versus other participating aircraft during training missions inside TSA or TRA.
- Reporting radar or visual contact with non-participating air traffic.
- Contacting the previous agency if initial contact with the controlling ACU cannot be obtained or contacting Semmerzake ATCC if contact is lost with the controlling ACU (ICF) (VHF 129.325MHZ or UHF 278.475MHZ).
- Flight safety, if the aircrew decides not to comply with the instructions given by the controller.

2.16.2.3.2 Under Broadcast Control

Broadcast control will only be provided within airspace class G. The rules of class G airspace are applicable

2.16.2.4 Standards for Provision of Tactical Control

2.16.2.4.1 Controlled Airspace

For A-scramble and for PI's training, tactical control provided by an ACU is close positive control.

For all other missions than the previous point in a TSA and/or TRA which are categorized as class C airspace, the tactical control service provided by an ACU is loose positive control. For (D) ACT missions, loose positive control will be given using the bullseye format and threat awareness in BRAA/BRAH when able.

2.16.2.4.2 Uncontrolled Airspace (Class G)

In uncontrolled airspace (class G) tactical control provided by an ACU is broadcast control (even for A-scramble).

2.16.3 Security Flights (Alpha Scramble)

2.16.3.1 General

Security flights (or Alpha Scramble) under NATO Command can operate within the Brussels FIR/UIR and delegated airspace if they are identified and under control of an ACU. Security flights (or Alpha Scramble) under National Command can operate within the airspace above the national territory and under control of CRC Glons only. If needed, CRC Glons will immediately inform Brussels ACC and Maastricht UAC through Semmerzake ATCC regarding initial heading, initial altitude and SSR-code (Mode 3A). The nature and importance of a security flight might lead to deviation of the standard radar separation minima or to a request to respective ATC agencies to alter flight path of OAT. Adherence to specific flight rules stated in the AIP might not be possible or operationally desirable in order to achieve the mission. If a security flight is controlled by another ACU than CRC Glons, CRC Glons remains responsible for informing the respective ATC agencies.

2.16.3.2 Termination of Alpha Scramble

Whenever the security flight is cancelled by the appropriate authority, the Alpha Scramble is downgraded to a Tango Scramble and has to adhere again to radar separation minima.

2.16.3.3 Interception and Identification Manoeuvres

See ENR 1.12

2.16.3.4 Responsibilities for Separation

2.16.3.4.1 Under Close - Positive Control

The air defence controller may, for operational reason, choose to deviate from the standard radar separation minimum during the conduct of an A-scramble but he remains responsible for safety of the intercepting aircraft and any other traffic.

However, the pilot-in-command of the intercepting aircraft is taking over the responsibility for separation and collision avoidance in the following cases:

- When calling out 'visual' on any other traffic.
- When approaching closer than 1 NM of the intercepted aircraft (see § 2.16.4.2) and/or calling out 'judy/tally'.

2.16.3.4.2 Under Broadcast Contol

When the Alpha Scramble is performed under broadcast control, the pilot-in-command is responsible for collision avoidance and the ADC will, when possible, provide adequate warning of hazards.

2.16.4 Separation Minima and Break-off Rules for Intercepts

2.16.4.1 Separation Applied by the Pilot-in-Command

When, in accordance with airspace classification, separation is the responsibility of the pilot-in-command, the rule is see and avoid.

However, national operational directives may impose supplementary rules including minimum separation distance (i.e. safety bubble) or altitude blocks.

2.16.4.2 Separation Minima during Alpha Scramble and PI's

The minimum distance for separation with the intercepted aircraft will depend on the mission tasking (reporting aircraft type versus reporting cockpit activity of target aircraft) but the see and avoid principle remains applicable. When completing the interception and closing in on the intercepted aircraft for visual identification (VID), the pilot in command needs to have 'tally' or 'judy'.

Without visual contact on the intercepted aircraft or in IMC, the following separation minima shall be maintained:

- Front and beam intercepts require 1000 FT vertical separation at all times.
- Maintain ≥ 1 NM unless radar lock and 'judy'.
- Maintain ≥ 1500 FT (bubble) unless 'tally'.
- If visual contact is lost within 1500 FT, the intercept is broken off immediately.

2.16.4.3 Radar Separation

2.16.4.3.1 Standard rule for radar separation

Vertical separation 5000 FT or horizontal separation 5 NM

2.16.4.3.2 Reduction of separation

The vertical separation can be reduced after co-ordination between the controllers controlling the two aircraft and when the intentions of the others are known:

- To 1000 FT between aircraft flying below FL 290.
- To 2000 FT between aircraft flying at and/or above FL 290.

2.16.4.3.3 Force QNH

The use of force QNH is mandatory inside a TSA when aircraft are under tactical air control and are using an airspace block with a lower limit below 4500FT AMSL and an upper limit above 4500FT AMSL. (i.e. TSA26A, TSA26B and EBD26). The force QNH is defined as the regional QNH reference. Therefore, the vertical separation in relation to a non-participating aircraft crossing the TSA will be adapted as follows.

The air defence controller will add the verical separation mentioned below to the standard vertical separation indicated in § 2.3.1.2 above.

- 1000FT, if 980HPA ≤ QNH ≤ 1046HPA
- 2000FT, if 947HPA ≤ QNH < 980HPA or 1046HPA < QNH ≤ 1079HPA
- 3000FT, if QNH < 947HPA or QNH > 1079HPA

2.16.5 Airspace Regulations for Tactical Air Operations

The table in this paragraph shows the areas and combinations of areas suitable for tactical air operations in the Brussels FIR/UIR and delegated airspace.The reservation of areas is only possible when the minimum or maximum criteria for the number of aircraft are met. Reservation procedures are in described in ENR 5.2, § 1.3. Reservation of areas like TSA26B, EBD26 and TSA S6 is subject to the prior approval of COMOPSAIR. The request for such areas will include a justification of the operational need to use such portion of airspace.

Exercise area	Minimum number of Aircraft	Maximum number of Aircraft	Controlling Agency	Remarks
TSA24	2	6	CRC Glons	
TSA25A	2	6	CRC Glons, AEW&C	
TSA25A/B	6	6	CRC Glons, AEW&C	For exceptions on maximum number of aircraft and for details on the kind of mission, see text below table
TSA 25A/B + TSA S1 + TSA S4	7	8 in unlimited manoeuvring category, no maximum in other manoeuvring category	CRC Glons	
TSA26A	7	8 in unlimited manoeuvring category, no maximum in other manoeuvring category	CRC Glons, AEW&C	
TSA26A/B	7	8 in unlimited manoeuvring category, no maximum in other manoeuvring category	CRC Glons, AEW&C	After approval of COMOPSAIR
TSA26A/B + EBD26	7	8 in unlimited manoeuvring category, no maximum in other manoeuvring category	CRC Glons, AEW&C	After approval of COMOPSAIR
TSA26A/B + EBD26 + TRAS6	7	8 in unlimited manoeuvring category, no maximum in other manoeuvring category	CRC Glons	After approval of COMOPSAIR
TSA26A/B + EBD26 + EBD32/EBD33	6	8 in unlimited manoeuvring category, no maximum in other manoeuvring category	CRC Glons	For details concerning combined AD and CAS mission after approval of COMOPSAIR (A3), see text below table
TSA N2 (Balen)	2	3	CRC Glons	Only for Belgian users
TSA N3 (Meeuwen)	2	3	CRC Glons	Only for Belgian users
TSA N2 + TSA N3	2	4	CRC Glons	Only for Belgian users
TSA S1 (Namur)	2	3	CRC Glons	See ENR 5.2 for vertical limits
TSA S2 (Beauraing)	2	3	CRC Glons	See ENR 5.2 for vertical limits

Exercise area	Minimum number of Aircraft	Maximum number of Aircraft	Controlling Agency	Remarks
TSA S3 (Givet)	2	3	CRC Glons	See ENR 5.2 for vertical limits
TSA S4 (Charleroi).	2	3	CRC Glons	See ENR 5.2 for vertical limits
TSA S1 + TSA S4	2	4	CRC Glons	First usable FL100
Uncontrolled airspace	-	-	CRC Glons, AEW&C	See ENR 1.2 for vertical limits
Unclassified airspace	-	-	CRC Glons, AEW&C	Above FL660

In TSA 25A/B it is possible to execute a HVAA (High Value Airborne Asset) protection scenario with a maximum of 8 aircraft. The aircraft participating are made up of a maximum of 6 Belgian fighter aircraft, with display of working area, in unlimited manoeuvring category and 2 HVAA aircraft in restricted or non-manoeuvring category. The HVAA will receive an airspace briefing. The flight path of HVAA will be briefed and sent to the different units i.a.w the scenario. Control will only be performed by CRC Glons.

In TSA25A/B it is possible to execute a mission air-to-air (2 vs 1) and a mission TGP training with 4 aircraft. This exercise is for Belgian fighter aircraft only, with display of working area. Two dedicated UHF frequencies and one common VHF will be assigned. Control will only be performed by CRC Glons. During this exercise, a fixed separation line between two missions is used to help the pilot with their visual separation. The fixed separation line has the following coordinates:

- North (501300N 0044500E)
- Bullseye TSA25A/B (500000N 0044500E)
- South (495216N 0044500E)

In TSA26A/B, EBD26, EBD32 and EBD33 combined air defense and CAS missions are possible. This exercise is for Belgian fighter aircraft only. The lateral limits are standard the lateral limits of TSA26, therefore EBD34 and EBD35 are not authorised to be booked for this kind of mission. Deconfliction and communication plan briefing between pilots, controllers and FAC is mandatory before the mission. Deconfliction cannot only be based on L16. For deconfliction, a common VHF frequency shall be used between CAS and the DCA pilots and the respective CAS and DCA controllers or if no common VHF frequency is available because the frequency is in use by the FAC, the three controllers (DCA/CAS/Red Air), located side by side, will deconflict flights amongst each other on their UHF frequency. Control will only be performed by CRC Glons.

2.16.6 Additional Regulations

2.16.6.1 Tactical Control by Other ACU than CRC Glons

2.16.6.1.1 Regulations

All foreign ADC must be familiar with the airspace structure within the Brussels FIR/UIR and delegated airspace. Foreign ACU equipment must be certified by appropriate authorities before receiving clearance to operate in the above mentioned airspace. For these stations all rules mentioned in the AIP apply. Additionally they must adhere to the following:

- Intercepts must be conducted within the framework of the integrated NATO C&R system.
- All standing NATO air defence rules and regulations.
- Operations must be authorised in advance by the master controller of CRC Glons, who also needs to get the approval of the Semmerzake ATCC supervisor before delegating airspace to any external ACU.
- All inadvertent supersonic flights must be reported to the master controller of CRC Glons.

2.16.6.1.2 Tactical Control by AEW&C Aircraft

Tactical control by AEW&C aircraft is limited to:

- E-3A/D/F are allowed to control missions in an active TSA25A/B (with a maximum of 6 aircraft), TSA26A, TSA26B, EBD26 and in uncontrolled airspace below 4500FT AMSL. Other type of AEW&C aircraft need a waiver issued by COMOPSAIR and an airspace briefing before controlling in the Brussels FIR/UIR or delegated airspace.
- The distance between the farthest edge from the E-3 orbit and the farthest edge of TSA South must be within 200NM. Present orbit meeting this condition is NL2.
- All weapons (controlling) activity coordination between CRC Glons FA and AEW&C FA are done using the mandatory CRC Glons WM (weapons manager) frequency.
- Before the start of the mission, all necessary information for the execution (i.e. dimensions & restrictions TSA-airspace, timings, NOTAM, traffic information, pilot's tactics briefing, handover and mission information) will be provided to the AEW&C FA by CRC Glons FA and/or vice versa.
- The CRC Glons FA will assign the control frequency and Mode 3/A to be used for the mission.

- Hand-over from Semmerzake ATCC to AEW&C aircraft has to be approved by and coordinated via CRC Glons. For the coordination between Semmerzake ATCC and CRC Glons, the direct telephone line will be used. For the coordination between CRC Glons and AEW&C aircraft, the E-3A weapons manager frequency will be used. CRC Glons will approve the direct hand-over to all parties before Semmerzake ATCC will transfer the fighter aircraft on the E-3A working frequency. Hand-over from AEW&C aircraft to Semmerzake ATCC is not allowed. They shall pass via CRC Glons, after which CRC Glons will hand the aircraft over to Semmerzake ATCC. At CRC Glons, workload permitting the hand-over between AEW&C aircraft and CRC Glons will be performed by the Fighter Allocator (FA) on the E-3A weapons manager frequency. If the FA workload is not permitting, the hand-over between AEW&C aircraft and CRC Glons will be performed by the air defence controller (ADC) on the E-3A working frequency.
- The AEW&C FA will provide a 10 minutes prenote before recovery and recovery intentions of the aircraft under control to CRC Glons.

2.16.6.2 Intercepts with Armed (Live Ordnance equipped) Aircraft

2.16.6.2.1 General Safety Directives

No live ordnance will be carried on participating aircraft during air-to-air training except in exercises where live ordnance is specifically authorised in an Exercise Operations Order. Live ordnance is defined as 'hot guns' and 'Air-to-Air missiles' that are not mechanically or electrically made safe. When live ordnance is authorised, the procedures laid down in ACE Manual 75-2-1 'Fighting Edge' Air-to-Air Training Rules or more restrictive national regulations apply.

2.16.6.2.2 Northern Region NATO QRA (I) Procedures

The following procedures are to be adhered to by all armed NR NATO QRA (I) aircraft conducting operational or training missions:

- Practice engagements are prohibited in all circumstances.
- An armament safety check is to be carried out at the initial check-in with the controlling ACU and repeated prior to the initiation of each intercept. The armament safety check is to be initiated by the ADC and a verbal response to the check is to be given by the aircrew.
- If this procedure has not been carried out, or the aircrew cannot confirm that weapons are safe, an intercept shall not be initiated.

2.16.6.3 Interceptions of Targets of Opportunity

Targets of opportunity can be intercepted over in the Brussels FIR/UIR and delegated airspace. In principle all military non-training aircraft (OAT) may be intercepted unless a special mission is executed (test-, calibration flights, special transport, AEW flights).

OAT traffic wishing to be intercepted can mention this wish in their flight plan (embellish targets) or to Semmerzake ATCC. The intercept will be coordinated between the ADC and ATC control agencies. Unless clearance is received for close-in, aircrews will maintain radar separation minima. When close-in clearance is received, a minimum horizontal separation distance of 1NM to the target will be maintained. The minimum separation to an AEW aircraft is 3000FT vertically or 3NM horizontally, for loaded /armed aircraft.

Only basic intercepts will be executed on a target of opportunity. Both aircrew and ADC will ensure that guard frequencies are monitored. The intercept must take place outside the civil ATM network. Weather conditions at intercept level must be better or equal to:

- Flight visibility of 8KM
- Vertical distance from clouds 1000FT
- Horizontal distance from clouds 1500FT

Break-off rules are as follows:

- No frontal quadrant attacks are allowed.
- 5NM when no radar contact.
- 3NM when no lock-on.
- 1NM is the minimum distance unless approved by the pilot-in-command of the intercepted aircraft.

2.16.6.4 Intervention to Land during A-Scramble

The following procedure is applicable for intervention to land on a military aerodrome and on a civil aerodrome during a renegade event and is performed only during a security flight (see § 2.16.3). The QRA (I) aircraft shall remain VMC and maintain on the frequency of the Air Defence Controller (ADC) of CRC Glons until a handover from the ADC to the Approach Control has been established through Semmerzake ATCC (during opening hours). At transfer of communications only one fighter will switch to the assigned frequency. The second fighter will maintain on the ADC frequency.

2.16.6.5 Practice Intervention Flights

The following procedures are applicable during practice intervention flights and NATO readiness verification. Crossing of civil and military ATM network will be performed under control of military ATC. However, only one QRA (I) aircraft will be on the ATC frequency while the other aircraft is on a CRC frequency in order to receive tactical orders. Internal communication between the QRA (I) formation is performed on a common VHF frequency. Crossing of civil ATS routes will be coordinated by COMOPSAIR before the exercise and a cleared level block (or Flight Level) will be requested for the benefit of Semmerzake ATCC.

2.16.6.6 Operations under Electronic Warfare (EW) Conditions

Flight operations under EW conditions are only allowed after coordination with the master controller (MC) or fighter allocator (FA) of the CRC Glons, and under the following conditions:

- Flight operations and EW must be according AIRCOM Manual 75-1. Taboo frequencies, which may not be jammed, will be determined before exercise start and communicated to all exercise participants. A safety FREQ will be used to order cease jamming when safety is endangered. This FREQ will be available to all exercise participants.
- In case of radio and/or radar jamming the jamming agency will monitor all safety frequencies and UHF guard. Jamming is not allowed during air-to-air refuelling (AAR), aircraft in distress, operational (non-training) missions and VIP flights.
- In case non-planned meaconing-, intrusion-, jamming- or interference (MIJI) conditions are observed both aircrew and ADC will inform each other immediately, log all necessary information (DTG, type, frequency, direction and duration) and perform all necessary actions to safeguard flight safety. Furthermore, action will be taken in order to localise the source of MIJI and to terminate the MIJI.

2.16.6.7 Use of Chaff and IR Flares

Chaff and IR Flares are not allowed in the Brussels FIR/UIR and delegated airspace, except inside air to ground range where it is specifically authorized or a waiver is granted by COA.

2.16.6.8 Degradation of Radar Equipment

If an ACU experiences a degradation of radar equipment and/or has no radar available due to equipment outages, it must inform the aircrew immediately. The ADC will immediately arrange a hand-over to another ACU or Semmerzake ATCC.

2.16.6.9 Short Term Contigency

The following short term contingencies are applicable for outages foreseen to last a short period of time or as a transitional solution during long outages. Depending on the technical restriction, different procedures will be enforced:

- In case of failure or short term outage of the radar equipment at CRC Glons, the callsign of EFFLUX (CRC GLONS) is backed up by callsign HERO, being personnel of CRC GLONS deployed to Semmerzake ATCC.
- A separate TTY and NOTAM will be issued to warn all Belgian and foreign units that CRC Glons will operate from Semmerzake ATCC. This message will include the restrictions applicable. In case of planned outage, this message will be sent not later than 2 weeks in advance.
- The message will include some restrictions like:
    - number of control points available
    - maximum size of the mission
    - equipment limitations
    - possibility of control by AEW&C aircraft

2.16.6.10 Outside Semmerzake ATCC OPS HR

During their mission, Belgian or foreign QRA aircraft flying in the Brussels FIR/UIR outside the Semmerzake ATCC operational hours will be controlled by CRC Glons or by another ACU.

2.17 Unplanned diversion with Armement

Before landing with armament or practice munitions at any military or civilian airfield, where respective local procedures are not known, the pilot-in-command shall appropriately advise ATC about the circumstances.

After landing the pilot-in-command shall request taxi instructions to the designated safe-for-parking area and avoid taxiing into an area or position that could threaten personnel or equipment.

Before leaving the aircraft the pilot-in-command shall ensure ground crew awareness about the armament on board and their qualification to handle armament.

If necessary, the pilot-in-command shall request assistance from the nearest suitable military installation and ensure appropriate measures be taken to safeguard the aircraft until qualified personnel take over.

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ENR 1.2 Visual Flight Rules

1 CIVIL

Note: Unless explicitly indicated, the rules in this section apply in both Belgium and Luxembourg.

1.1 VMC Visibility and Distance from Clouds Minima (SERA.5001 and SERA.5005a)

Except when operating as a special VFR flight, VFR flights shall be conducted so that the aircraft is flown in conditions of visibility and distance from clouds equal to or greater than those specified in the following table.

Altitude band	Airspace class	Flight visibility	Distance from cloud
At and above FL100	A(1) B C D E F G	8KM	1500M horizontally 1000FT vertically
Below FL100 and above 3000FT AMSL, or above 1000FT above terrain, whichever is the higher	A(1) B C D E F G	5KM	1500M horizontally 1000FT vertically
At and below 3000FT AMSL, or 1000FT above terrain, whichever is the higher.	A(1) B C D E	5KM	1500M horizontally 1000FT vertically
	F G	5KM(2)	Clear of cloud and with the surface in sight

(1) The VMC minima in Class A airspace are included for guidance to pilots and do not imply acceptance of VFR flights in Class A airspace.

(2) Flight visibilities reduced to not less than 1500M are permitted for flights operating:

- at speeds of 140KIAS or less to give adequate opportunity to observe other traffic or any obstacles in time to avoid collision; or
- in circumstances in which the probability of encounters with other traffic would normally be low, e.g. in areas of low volume traffic and for aerial work at low levels.

Helicopters are permitted to operate in less than 1500M but not less than 800M flight visibility, if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision.

Note: for RPAS applicable rules, refer to ENR 1.1, § 1.11.4

1.2 VFR Flights at Aerodromes (SERA.5005b)

Except when a special VFR clearance is obtained from an ATC unit, VFR flights shall not take off or land at an aerodrome within a CTR, or enter the ATZ or aerodrome traffic circuit when the reported meteorological conditions at that aerodrome are below the following minima:

- the ceiling is less than 1500FT; or
- the ground visibility is less than 5KM.

1.3 VFR Flights at Night (SERA.5005c)

VFR flights at night may be authorised under the following conditions:

1. if leaving the vicinity of an aerodrome, a flight plan shall be submitted in accordance with ENR 1.10;
2. flights shall establish and maintain two way radio communication on the appropriate ATS communication channel, when available;
3. the VMC visibility and distance from cloud minima as specified in § 1.1 above shall apply, except that:
   - the ceiling shall not be less than 1500FT;
   - the reduced flight visibility provisions specified in remark (**) of § 1.1 shall not apply;
   - in airspace classes B, C, D, E, F and G at and below 3000FT AMSL or 1000FT AGL, whichever is the higher, the pilot shall maintain continuous sight of the surface;
4. except when necessary for take-off or landing, or except when specifically authorised by the CAA, a VFR flight at night shall be flown at a level that is at least 1000FT above the highest obstacle located within 8KM of the estimated position of the aircraft.

Note 1: In Belgium, VFR flights at night are authorised, except for gliders, DPM, ULM and RPA.

Note 2: In Luxembourg, VFR flights at night may be operated in Luxembourg CTR, Luxembourg TMA (up to FL95) or class G airspace (up to 2000FT AMSL) after approval of the CAA.

1.4 VFR Flight Restrictions

1.4.1 VFR Flights Above FL195 or at Transonic and Supersonic Speeds (SERA.5005d and SERA.5005e)

Unless authorised by the CAA, VFR flights shall not be operated:

a. above FL195;
b. at transonic and supersonic speeds.

Note 1: Authorisation will not be granted for VFR flights to operate above FL285.

Note 2: In Belgium, authorisation for VFR flights above FL195 shall be obtained from the CAA at least five working days in advance and after prior agreement with the responsible ATS authority.

1.4.2 Minimum Heights (SERA.5005f)

Except when necessary for take-off or landing, or except by permission from the CAA, a VFR flight shall not be flown:

- over the congested areas of cities, towns or settlements, or over an open-air assembly of persons at a height less than 1000FT above the highest obstacle within a radius of 600M from the aircraft;
- elsewhere, at a height less than 500FT AGL, or 500FT above the highest obstacle within a radius of 150M from the aircraft.

1.5 VFR Cruising Levels (SERA.5005g)

VFR flights in level cruising flight, operated in uncontrolled airspace above 3000FT AGL, shall be conducted at a cruising level appropriate to the track as specified in the table of cruising levels in ENR 1.7.

VFR flights operated in controlled airspace shall select cruising levels from those to be used by IFR flights as specified in ENR 1.7, unless instructed otherwise by ATC or as indicated in the AIP.

1.6 Air Traffic Control Service (SERA.5005h)

VFR flights shall comply with the provisions of ENR 1.1, § 1.10 when:

- operated within class B, C or D airspace;
- forming part of aerodrome traffic at controlled aerodromes; or
- operated as special VFR flights.

1.7 Change from VFR to IFR (SERA.5005j)

An aircraft operated in accordance with VFR that wishes to change to compliance with IFR shall:

- if a flight plan was submitted, communicate the necessary changes to be effected to its current flight plan; or
- when so required, submit a flight plan to the appropriate ATS unit as soon as practicable and obtain a clearance prior to proceeding IFR when in controlled airspace.

1.8 Special VFR Flights (SERA.5010)

Special VFR flights may be authorised to operate within a CTR, subject to an ATC clearance.

Except when permitted by the CAA for helicopters in special cases such as, but not limited to, police, medical flights, search and rescue operations and fire-fighting flights, the following additional conditions shall be applied:

a. such special VFR flights may be conducted during day only, unless otherwise permitted by the CAA;
b. by the pilot:
    1. clear of cloud and with the surface in sight;
    2. the flight visibility is not less than 1 500M or, for helicopters, not less than 800M;
    3. fly at speed of 140KIAS or less to give adequate opportunity to observe other traffic and any obstacles in time to avoid a collision; and
c. an ATC unit will not issue a special VFR clearance to aircraft to take off or land at and aerodrome within a CTR, or enter the ATZ zone or aerodrome traffic circuit, when the reported meteorological conditions at the aerodrome are below the following minima:
    1. the ground visibility is less than 1 500M or, for helicopters, less than 800M
    2. the ceiling is less than 180M (600FT).

2 MILITARY

2.1 Minima for Visibility and Distance from Clouds

2.1.1 Military Fixed Wing Aircraft

VFR flights shall be conducted in conditions of visibility and distance from clouds equal to or greater than those specified in the following table, except those mentioned in § 2.1.1.1, § 2.1.1.2 and § 2.1.2 hereafter.

Airspace class	C	D	G	
			Above 3000 FT AMSL or above 1000 FT AGL, whichever is higher	At and below 3000 FT AMSL or 1000 FT AGL, whichever is higher
Distance from clouds	1500M horizontally 1000FT vertically	Cloud base ≥ 1500 FT	1500M horizontally 1000FT vertically	Clear of clouds and in sight of the surface
Flight visibility	≥ 5KM	≥ 5KM	Speed > 250KT: ≥ 5KM	
			Speed ≤ 250KT: ≥ 3KM	

2.1.1.1 Special VFR Flights

Within a CTR and on decision of the OC Flying Group, VFR flights by day may be authorised below the established minima when the following weather criteria are met:

Jet aircraft:

- visibility ≥ 3.7KM
- cloud base ≥ 1000FT

Conventional aircraft:

- visibility ≥ 1.5KM
- cloud base ≥ 1000FT

Note 1: VFR flights executed in these conditions (below normal minima) are called special VFR flights.

Note 2: At EBFS, special VFR departure can be authorised with 3/8 cloud base of 700FT, if en-route conditions outside the CTR are suitable for VFR flights.

2.1.1.2 VFR Flights at Night

Within a CTR and on decision of the SOF, VFR flights at night may be authorised at a height which shall not exceed 1500FT AGL when the following weather criteria are met:.

- visibility ≥ 5KM
- cloud base ≥ 1500FT

2.1.2 Military Helicopters

General Visual Meteorological Conditions			
	Day VFR	Night VFR	NVA Flight
Visibility	≥ 800M	≥ 3KM	≥ 3KM
Clouds	Clear of clouds and in sight of the surface	Cloud base ≥ 500FT above the flown altitude	Cloud base ≥ 200FT above the MSA of the flown altitude and in sight of the surface

Note: NVA visibility is the capacity, expressed in KM, to recognize unlighted conspicuous objects and terrain profiles by means of night vision aids. SAR flights on real live and training missions may deviate from these prescribed meteorological conditions in accordance with Belgian 40 Sqn HEL permanent flying orders.

2.2 Minimum safety height

The minimum safety height and the low flying regulation are laid down in ENR 1.1, § 2.7.

2.3 Flight Level

VFR flights above 3000FT AGL shall select a level appropriate to their track as specified in ENR 1.7, § 3, except for:

- security flights
- when otherwise instructed by the appropriate ATS unit.

2.4 Change from VFR to IFR

When changing from VFR to IFR, pilots shall introduce an IFR flight plan by RTF if part of the flight is to be made within controlled airspace. Proceed in IFR, conforming to the IFR cruising levels (see ENR 1.7), if no part of the flight is to be made within a controlled airspace.The flight will pass from VFR to IFR status upon confirmation by ATC.

2.5 Uncontrolled VFR Flights

Uncontrolled VFR flights are provided with FIS and shall report to Belga Information or Brussels FIC when commencing and ending their mission in the Brussels FIR. These VFR flights shall at all times squawk mode 3/A and mode C.

In order to decrease the risk of collision between military aircraft proceeding VFR outside controlled airspace, the traffic shall be flown one-way between the CTRs as published on chart ENR 6-INDEX.08. Pilots are warned that these regulations are only applicable to military aircraft. Consequently, collision hazard still exists with civil aircraft. These regulations do not apply to helicopters flying below 500FT AGL.

Note1: The corridor between Liège CTR and EBD37 (direction Waremme) shall in no case be crossed south-westbound below 1500FT AMSL. When the cloudbase is below this altitude, this corridor will be avoided via the east and south of EBLG.

Note2: The corridor between Antwerpen CTR and Brussels CTR shall be crossed at 1000FT AMSL.

Note3: The corridor between Charleroi CTR and Chièvres CTR shall be crossed at 1500FT AMSL.

ENR 1.3 Instrument Flight Rules

1 CIVIL

Note: Unless explicitly indicated, the rules in this section apply in both Belgium and Luxembourg.

1.1 Rules Applicable to All IFR Flights (SERA.5015)

1.1.1 Aircraft Equipment

Aircraft shall be equipped with suitable instruments and with navigation equipment appropriate to the route to be flown in accordance with the applicable air operations legislation.

1.1.2 Minimum Levels

Except when necessary for take-off or landing, or except when authorized by the CAA, an IFR flight shall be flown at a level that is at least 1000FT above the highest obstacle located within 8KM of the estimated position of the aircraft.

1.1.3 Change from IFR Flight to VFR Flight

An aircraft electing to change the conduct of its flight from compliance with IFR to compliance with VFR shall notify the appropriate ATS unit specifically that the IFR flight is cancelled and communicate thereto the changes to be made to its current flight plan.

When an aircraft operating under IFR is flown in or encounters VMC it shall not cancel its IFR flight unless it is anticipated, and intended, that the flight will be continued for a reasonable period of time in uninterrupted VMC.

Change from IFR flight to VFR flight shall only be acceptable when a message initiated by the pilot in command containing the specific expression 'CANCELLING MY IFR FLIGHT', together with the changes, if any, to be made to the current flight plan, is received by an ATS unit. No invitation to change from IFR flight to VFR flight shall be made by ATS either directly or by inference.

1.2 Rules Applicable to IFR Flights within Controlled Airspace (SERA.5020)

An IFR flight operating in cruising flight in controlled airspace shall be flown at a cruising level, or, if authorised by the ATS unit to employ cruise climb techniques, between two levels or above a level, selected from the table of cruising levels in ENR 1.7, § 3, except that the correlation of levels to track prescribed therein shall not apply whenever otherwise indicated in ATC clearances or specified in the AIP.

1.3 Rules Applicable to IFR flights outside Controlled Airspace (SERA.5025)

1.3.1 Cruising Levels

An IFR flight operating in level cruising flight outside of controlled airspace shall be flown at a cruising level appropriate to its track as specified in the table of cruising levels in ENR 1.7, § 3.

1.3.2 Position Reports

An IFR flight operating outside controlled airspace and required to maintain an air-ground voice communication watch on the appropriate communication channel and establish two-way communication, as necessary, with the ATS unit providing FIS, shall report position, as specified in ENR 1.1, § 1.10.3.

1.4 Supplementary Rules

1.4.1 Flights Within Brussels UTA

1.4.1.1 General

Aircraft shall follow the ATS routes published in ENR 3.3 and remain within 5NM on either side of the routes concerned. Alternate ATS routes may be used on prior request made by the pilot to Brussels ACC or Maastricht UAC, if co-ordination of the different types of traffic allows it.

Cruising levels below FL220 are normally not available for overflying traffic.

1.4.1.2 Reduced Reporting Procedures

Pilots shall apply the following procedures in order to reduce air-ground communications, unless otherwise instructed by ATC:

- the initial call after a frequency change shall only contain aircraft identification and actual level, with the addition of cleared level for climbing or descending aircraft;

- any position report, if required subsequently, shall only contain aircraft identification, position and time;
- level changes shall only be reported on leaving assigned levels;
- pilots shall, in the absence of prior instructions from ATC to change frequency, indicate that the aircraft is going to leave Brussels UIR by reporting: “approaching the UIR boundary” unless crossing the Brussels/Hannover UIR boundary;
- aircraft that are not capable of replying on SSR with 4096 codes on Mode A, nor with automatic pressure-altitude transmission on Mode C, but that have been exceptionally authorized to operate in the Brussels UIR, shall make an abbreviated position report over all “on request” reporting points.

1.4.1.3 Formation Flights

Formation flights along ATS routes are authorized, provided that:

- prior permission has been obtained in accordance with ENR 1.1, § 1.11.3;
- a proper ICAO flight plan has been filed;
- they are performed in accordance with ENR 1.1, § 1.5.8;
- the formation leader squawks the assigned transponder code.

A formation flight will be handled by ATC as a single aircraft with increased radar separation (1NM). When individual control is requested, advisory information will be issued to assist pilots in attaining standard ATC separation. When pilot-reports indicate that standard ATC separation has been established, normal ATC clearances will be issued.

Note 1: Separation responsibility between the aircraft within the formation during the formation flight and during transition to individual flight rests with the pilots concerned, until standard separation has been obtained.

Note 2: Formation join-up and break-away shall only be conducted when authorization has been obtained from ATC.

1.4.2 Flights Above FL660

The lowest usable flight level above FL660 is FL670.

Flights above FL660 should be conducted along the axes of the upper RNAV routes. Aircraft shall join or cross the axes of such routes at one of the reporting points listed in ENR 4.4. The flight plan shall only mention reporting points defining the upper RNAV routes.

Flights bound for Brussels UTA shall request entry clearance 5 MIN before the estimated time of entry, unless such clearance has been previously issued by an adjacent control unit.

2 MILITARY

2.1 Minimum safety height

The minimum safety height and the low flying regulation are laid down in ENR 1.1, § 2.7.

2.2 Flight Level

IFR flights shall select a level appropriate to its track as specified in the ENR 1.7, § 3, except for:

- security flights;
- flights under radar control;
- when otherwise instructed by the appropriate ATS unit.

2.3 Change from IFR Flight to VFR Flight

A pilot encountering VMC during an IFR flight shall continue his flight according to IFR until receiving permission from the appropriate ATS unit to proceed in VFR.

ENR 1.4 ATS Airspace Classification and Description

The airspace within the Brussels FIR/UIR is subdivided into four classifications (C, D, E and G) according to ICAO specifications.

Note 1: If an airspace is not activated at specific times, the classification of the surrounding airspace applies.

Note 2: Where ATS airspaces with a different class of airspace adjoin vertically, flights at a common level shall comply with the requirements of, and will receive the services applicable to, the less restrictive class of airspace (class B is considered less restrictive than class A; class C is considered less restrictive than class B; etc.).

1 AIRSPACE BELOW FL660

1.1 ICAO Airspace Classification (SERA.6001)

The requirements for the flights within each class of airspace are as shown in the following table.

Class	Type of flight	Separation provided	Service provided	Speed limitation(*)	Radio communication capability requirement	Continuous two-way-air-ground voice communication required	Subject to ATC CLR
A	IFR only	all ACFT	ATC service	not applicable	yes	yes	yes
B	IFR	all ACFT	ATC service	not applicable	yes	yes	yes
	VFR	all ACFT	ATC service	not applicable	yes	yes	yes
C	IFR	IFR from IFR IFR from VFR	ATC service	not applicable	yes	yes	yes
	VFR	VFR from IFR	(1) ATC service for separation from IFR; (2) ATC service VFR/VFR traffic information (and traffic avoidance advice on request)	250 KIAS below FL100	yes	yes	yes
D	IFR	IFR from IFR	ATC service including traffic information about VFR flights (and traffic avoidance advice on request)	250 KIAS below FL100	yes	yes	yes
	VFR	NIL	ATC service IFR/VFR and VFR/VFR traffic information (and traffic avoidance advice on request)	250 KIAS below FL100	yes	yes	yes

(*) the CAA may exempt aircraft types that cannot maintain this speed for technical or safety reasons.

(**) Pilots shall maintain continuous air-ground voice communication watch and establish two-way communication, as necessary, when flying in RMZ.

(***) Air-ground voice communications are mandatory for flights participating in the advisory service. Pilots shall maintain continuous air-ground voice communication watch and establish two-way communication, as necessary, when flying in RMZ.

Class	Type of flight	Separation provided	Service provided	Speed limitation(*)	Radio communication capability requirement	Continuous two-way-air-ground voice communication required	Subject to ATC CLR
E	IFR	IFR from IFR	ATC service, as far as practical, traffic information about VFR flights	250 KIAS below FL 100	yes	yes	yes
	VFR	NIL	traffic information as far as practical	250 KIAS below FL 100	no(**)	no(**)	no
F	IFR	IFR from IFR as far as practical	air traffic advisory service, FIS if requested	250 KIAS below FL 100	yes(***)	no(***)	no
	VFR	NIL	FIS if requested	250 KIAS below FL 100	no(**)	no(**)	no
G	IFR	NIL	FIS if requested	250 KIAS below FL 100	yes(**)	no(**)	no
	VFR	NIL	FIS if requested	250 KIAS below FL 100	no(**)	no(**)	no

(*) the CAA may exempt aircraft types that cannot maintain this speed for technical or safety reasons.

(**) Pilots shall maintain continuous air-ground voice communication watch and establish two-way communication, as necessary, when flying in RMZ.

(***) Air-ground voice communications are mandatory for flights participating in the advisory service. Pilots shall maintain continuous air-ground voice communication watch and establish two-way communication, as necessary, when flying in RMZ.

1.2 Operational Air Traffic

Deviations from the ICAO airspace classification valid for OAT are highlighted in bold in the table below.

Class	Type	Separation	Service	Speed limitation	Radio communication	Subject to ATC CLR
C	IFR	IFR from IFR IFR from VFR	ATC service	**not applicable**	continuous two-way	yes
	VFR	VFR from IFR	ATC service for separation from IFR VFR traffic information (and traffic avoidance advice on request)	**not applicable**	continuous two-way	yes
D	IFR	IFR from IFR	ATC service including traffic information about VFR flights (and traffic avoidance advice on request)	**not applicable**	continuous two-way	yes
	VFR	not provided	aerodrome control service	**not applicable**	continuous two-way	yes
G	IFR	not provided	FIS and RIS	**not applicable**	required	no
	VFR	not provided	FIS and RIS	**not applicable**	**required**	no

2 AIRSPACE ABOVE FL 660

The airspace above FL 660 is an unclassified, uncontrolled airspace within which only IFR flights are permitted. Aircraft operating within this airspace are submitted to following conditions:

- submission of a flight plan;
- maintain a listening watch on the appropriate radio frequency, establish two-way communication with the ATS unit providing FIS and report position as specified in ENR 1.1, § 1.10.3;
- carriage of a serviceable transponder.

ENR 1.5 Holding, Approach and Departure Procedures

1 CIVIL

The holding, approach and departure procedures in use are based on those contained in *ICAO Doc 8168*.

1.1 Categories of Aircraft

Aircraft performance has a direct effect on the airspace and visibility needed to perform the various manoeuvres associated with the conduct of instrument approach procedures. The most significant performance factor is aircraft speed. Accordingly, the following five categories of typical aircraft have been established, based on 1.3 times stall speed in the landing configuration at maximum certificated landing mass, to provide a standardized basis for relating aircraft manoeuvrability to specific instrument approach procedures:

- CAT A: less than 91KIAS;
- CAT B: 91KIAS or more, but less than 121KIAS;
- CAT C: 121KIAS or more, but less than 141KIAS;
- CAT D: 141KIAS or more, but less than 166KIAS;
- CAT E: 166KIAS or more, but less than 211KIAS.

As indicated in § 1.3 below, a specified range of handling speeds for each category of aircraft has been assumed for use in calculating airspace and obstacle clearance requirements for each procedure.

The IAC will specify the individual categories of aircraft for which the procedure is approved. Normally, procedures will be designed to provide protected airspace and obstacle clearance for aircraft up to and including CAT D. However, where airspace requirements are critical, procedures may be restricted to lower speed categories. Alternatively, the procedure may specify a maximum IAS for a particular segment without reference to aircraft category. In any case it is essential that pilots comply with the procedures and information depicted on instrument flight charts and the appropriate flight parameters shown in § 1.3 below if the aircraft is to remain in the areas developed for obstacle clearance purposes.

1.2 Obstacle Clearance

Obstacle clearance is a primary safety consideration in the development of instrument approach procedures. The criteria used and the detailed method of calculation is covered in *ICAO Doc 8168, Volume II*. However, from the operational point of view it is stressed that the obstacle clearance applied in the development of each instrument approach procedure is considered to be the minimum required for an acceptable level of safety in operations.

For each individual approach procedure an obstacle clearance altitude/height (OCA/H) is calculated in the development of the procedure and published on the IAC. In the case of precision approach and circling approach procedures, an OCA/H is specified for each category of aircraft listed in § 1.1 above. OCA/H is:

a. in a precision approach procedure, the lowest altitude (OCA) or alternatively the lowest height (OCH) above the elevation of the relevant runway threshold, at which a missed approach must be initiated to ensure compliance with the appropriate obstacle clearance criteria;
b. in a non-precision approach procedure, the lowest altitude (OCA) or alternatively the lowest height (OCH) above aerodrome elevation or the elevation of the relevant runway threshold, if the threshold elevation is more than 7FT below the aerodrome elevation, below which the aircraft cannot descend without infringing the appropriate obstacle clearance criteria;
c. in a visual (circling) procedure, the lowest altitude (OCA) or alternatively the lowest height (OCH) above the aerodrome elevation below which an aircraft cannot descend without infringing the appropriate obstacle clearance criteria.

1.3 Speeds for Procedure Calculations in KIAS

Aircraft CAT	V_{at}	Range of speeds for initial approach	Range of final approach speeds	MAX speeds for visual manoeuvring (circling)	MAX speeds for missed approach	
					intermediate	final
A	< 91	90 / 150 (110*)	70 / 100	100	100	110
B	91 / 120	120 / 180 (140*)	85 / 130	135	130	150
C	121 / 140	160 / 240	115 / 160	180	160	240
D	141 / 165	185 / 250	130 / 185	205	185	265
E	166 / 210	185 / 250	155 / 230	240	230	275

V_{at}: speed at THR based on 1.3 times stall speed in the landing configuration at maximum certificated landing mass.

* maximum speed for reversal and racetrack procedures.

1.4 Naming Convention for Waypoints Used in Instrument Approach Procedures

- IAF is pronounceable letter name code;
- IF is a 5 alphanumeric name code finishing with letter “I” or a pronounceable letter name code (if operational advantage);
- FAF is a 5 alphanumeric name code finishing with letter “F”;
- MAPT is co-located with THR unless otherwise specified.

1.5 Arriving Flights

Controlled flights entering and landing within a TMA will be cleared to a specified holding point and instructed to contact APP at a specified time, level or position. The terms of this clearance shall be adhered to until further instructions are received from APP. If the clearance limit is reached before further instructions have been received, holding procedure shall be carried out at the level last authorized.

Due to the limited airspace available, it is important that the approaches to the holding patterns and the holding procedures be carried out as precisely as possible. Pilots are strongly requested to inform ATC if for any reason the approach and/or holding cannot be performed as required.

Holding Speeds

Levels	Normal conditions	Turbulence conditions
up to FL140 incl	aircraft CAT A/B: 170KIAS aircraft CAT C/D/E: 230KIAS	aircraft CAT A/B: 170KIAS aircraft CAT C/D/E: 280KIAS
between FL140 and FL200 incl	240KIAS	280KIAS or M0.8, whichever is less
between FL200 and FL340 incl	265KIAS	
above FL340	M0.83	M0.83

1.6 Departing Flights

Flights departing from controlled aerodromes will receive initial ATC clearance from the local TWR. The clearance limit will normally be the aerodrome of destination.

Flights departing from non-controlled aerodromes and intending to enter controlled airspace are required to file a flight plan with the nearest ATS unit prior to departure. However, where a non-controlled aerodrome is located outside a CTR and where telephone facilities are not available, flight plans may be filed during flight. In those cases pilots should ensure that the flight plan is filed at least 10MIN before entering controlled airspace and that RTF transmissions are kept to a minimum.

2 MILITARY

The holding, approach and departure procedures in use are designed according criteria contained in the STANAG 3759 - APATC-1(A). Procedures reviewed, changed or developed henceforth are based on the STANAG 3759 - AATCP-1(C). The STANAG 3759 and its allied publication AATCP-1, adopt *ICAO Doc 8168, Volume II* for procedure design. The AATCP-1 is a supplement to PANS-OPS that provides for criteria for specific military needs. Procedures developed according AATCP-1 are annotated “MIPS” (NATO military instrument procedures standardisation). More detailed explanation is available in the BEMIL FLIP (IFR). Belgian military IFR publications are also available through the CENOR website:

URL: www.cenor.org

2.1 Categories of Aircraft

Aircraft performance has a direct effect on the airspace and visibility needed to perform certain manoeuvres, such as circle to land, turning missed approach, final alignment correction to land and descent. The most significant performance factor is aircraft speed. Accordingly, the following five categories of aircraft have been established, based on 1.3 times stall speed

in the landing configuration at maximum gross landing weight. The OPS authority determines the category of minima required and to be used by their aircraft.

- CAT A: less than 91KIAS;
- CAT B: 91KIAS or more, but less than 121KIAS;
- CAT C: 121KIAS or more, but less than 141KIAS;
- CAT D: 141KIAS or more, but less than 166KIAS;
- CAT E: 166KIAS or more.

2.2 Minima for Instrument Approach Procedures

Instrument approach procedure minima published in AD 2 and the BEMIL FLIP (IFR) and established in accordance with the 'NATO Supplement to ICAO Doc 8168 - OPS/611 Volume II for the preparation of instrument approach and departure procedures (AATCP-1)' will be applied at all Belgian military aerodromes.

The published minima for instrument approach procedures are the lowest permitted by AATCP-1 criteria. Pilots have to consult applicable directives of their respective services for aircraft model restrictions. In case of temporary changes to the instrument landing minima, a NOTAM will be published.

2.2.1 Height above Touchdown Zone Elevation (HAT) and Height above Aerodrome (HAA)

The height above touchdown zone elevation and height above aerodrome are published together with the DA and the MDA. The HAT is the height of the DA or MDA above the highest runway elevation in the first 3000FT of the runway, beginning at the threshold and will be published in conjunction with straight-in minima. The HAA is the height of the MDA above the published aerodrome elevation and will be published in conjunction with circling minima.

2.2.2 Decision Altitude (DA) and Minimum Descent Altitude (MDA)

In a precision approach procedure (ILS and PAR), the DA is the lowest altitude, or alternatively the HAT is the lowest height, at which a missed approach must be initiated if the required visual reference has not been established.

In a non-precision approach procedure, the MDA is the lowest altitude, or alternatively the HAT is the lowest height, below which the aircraft cannot descend until the runway environment is in sight and the aircraft is in a position to descend for a normal landing.

In a circling procedure, the MDA is the lowest altitude, or alternatively the HAA is the lowest height, below which the aircraft cannot descend until the runway environment is in sight and the aircraft is in a position to descend for a normal landing.

2.3 Information About The Use of Instrument Procedures Plates

2.3.1 Specifications

The lay out and the information on the MIL IFR procedures plates is according the CENOR specifications. These specifications are agreed amongst the responsible authorities of 6 NATO nations (Norway, Denmark, The Netherlands, Germany, Czech Republic and Belgium) and they are based upon the STANAG 3970.

2.3.2 Publication

The instrument procedure plates and the aerodrome lay out plates of the Belgian MIL aerodromes published in this AIP, the BEMIL FLIP(s) and the CENOR FLIPs are identical.

Due to publication cycles the moment of publication a new or revised procedure plate in the CENOR FLIPs can be different from the MIL AIP and BEMIL FLIP. To assure this situation is not a safety risk the necessary NOTAM will be published in the Belgian M-series as well as in the German U-series.

2.3.3 Landing Minima

See below for the explanation of the landing minima as it is represented in the BEMIL FLIP - IFR (High and Low Instrument Approach and Departure Procedures Belgium).

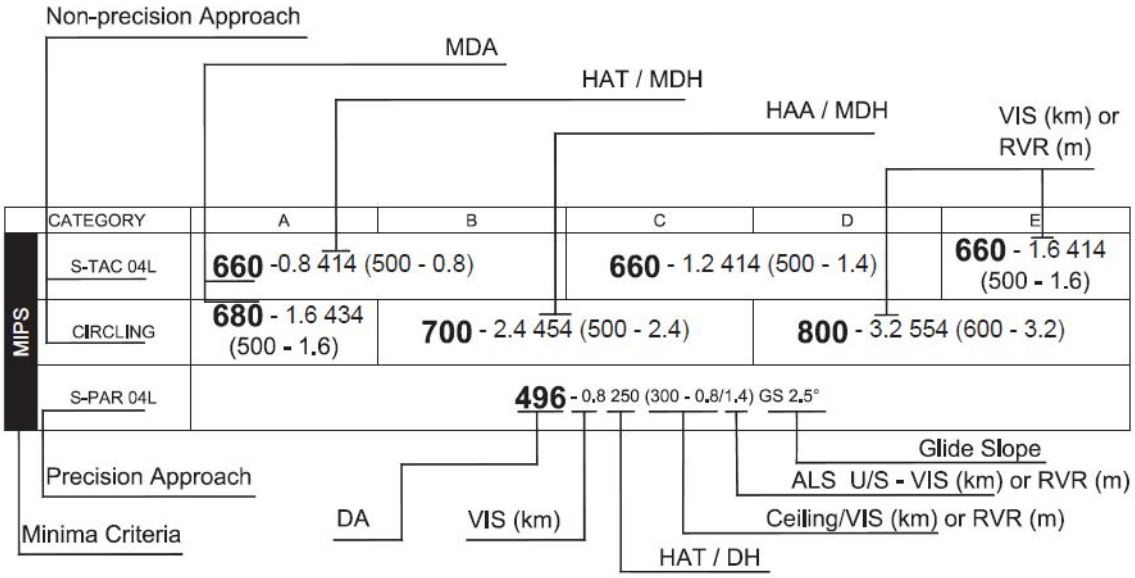
Landing minima are established for six aircraft categories, determined as follow:

CAT	APPROACH SPEED
A	Less than 91KT
B	91KT or more but less than 121
C	121KT or more but less than 141
D	141KT or more but less than 166
E	166KT or more
HPMA	See page IV in BEMIL FLIP - IFR

Note 1: Speeds are based on 1.3 times the stall speed in the landing configuration at maximum gross landing weight.

Note 2: Operational authorities determine the category of minima required and to be used by their aircraft.

Standard portrayal of instrument approach minima for landing is as follows.



- Only “estimated horizontal visual range on ground” is available for Belgian military airfields.
- The VIS value published following the DA or the MDA is the required minimum for the approach.
- Pilots should consult applicable directives of their respective service for aircraft restrictions.

2.3.4 Procedure Design System

See below for the explanation of the procedure design system used in NATO nations that ratified the STANAG 3759 and information on the system used for Belgian civil aerodromes as well as information on the differences to fly these procedures.

2.3.4.1 Identification of Procedure Design Standards Used

Pilots should be aware of the system used for designing the procedure since it may be of influence on the way to fly the procedure.

Therefore one of the following annotations are put on the top left of the procedure plates:

- NATIONAL: Procedure designed according national specific criteria
- MIPS: Procedure designed according NATO military instrument procedures standardization implemented by AATCP-1.
- PANS-OPS: Procedure designed according ICAO Doc. 8168 Vol. II.
- TERPS: Procedure designed according NATO military criteria in APATC-1(A).

2.3.4.2 Identification of Minima Criteria

Criteria used to establish the minima are stated on the left side of the minima table (See § 2.3.3 for illustration):

- MIPS: Minima assigned according NATO military instrument procedures standardization implemented by AATCP-1.
- EU-OPS: Minima assigned according EU-OPS.
- TERPS: Minima assigned according NATO military criteria in APATC-1(A). No longer updated after 22 OCT 2008.
- NATIONAL XXX: Minima assigned according national specific criteria

2.3.4.3 ICAO (PANS-OPS) Procedures

NATO countries that have ratified STANAG 3759 will gradually recalculate their procedures according the AATCP-1 which is the ICAO PANS-OPS standard with some military exceptions and add-ons. These procedures shall be flown according STANAG 7199 and AFPP-1 covering and implementing ICAO Doc 8168 Vol I (PANS-OPS).

Note: The differences between the way of flying IFR procedures according the AFMAN 11-217 and ICAO Doc 8168 Vol I are explained in AFMAN 11-217 Vol I (Ed Oct 2010) chapter 15.

2.3.4.4 High Performance Military Aircraft Procedures

HPMA procedures introduce a new aircraft category (See also page IV in BEMIL FLIP IFR). Procedures designed exclusively for HPMA are annotated 'HPMA' before the procedure identification. The plates for such procedures are made distinctive with a hatch pattern.

ENR 1.6 ATS Surveillance Services and Procedures

1 CIVIL

1.1 Transponder requirement

The carriage and operation of Mode S transponders with basic functionality is mandatory in the Brussels FIR/UIR for all aircraft operating:

- in civil class C airspace;
- in civil class D airspace;
- in class G airspace for VFR flights at night.

The carriage and operation of a serviceable transponder - capable of replying to Mode A and C interrogations - is mandatory in the Brussels FIR/UIR for all aircraft operating in military controlled airspace.

An exemption to these rules may be granted, provided that the request is made before the flight, to the authority having jurisdiction over the airspace concerned.

Note: Pilots are reminded about the importance of having a well-functioning transponder to be switched on in the Belgian part of the Brussels FIR/UIR; ATC is allowed when possible to refuse aircraft without a well-functioning one.

1.2 Standard SSR Operating Procedures

Except when encountering a state of emergency, pilots shall operate transponders and select modes and codes in accordance with ATC instructions. In particular, when entering the Brussels FIR, pilots who have already received specific instructions from ATC concerning the setting of the transponder shall maintain that setting until otherwise instructed.

IFR flights about to enter the Brussels FIR that have not received specific instructions from ATC concerning the setting of the transponder shall operate the transponder on Mode A and C, Code 2000 before entry and maintain that code setting until otherwise instructed.

In order to improve radar detection of non-controlled flights, VFR flights in the Brussels FIR shall select Mode A and C, Code 7000, unless otherwise instructed.

In accordance with *ICAO Doc 8168 (PANS-OPS). Volume I*, Part II, Section 3, chapter 1.3, the flight crew of aircraft equipped with Mode S transponders shall set the aircraft identification in the transponder. This setting shall correspond to the aircraft identification specified in item 7 of the ICAO flight plan, or if no flight plan has been filed, the aircraft registration. in order to be interpreted properly, there must be no spaces between the designator letters and flight number, nor any additional/superfluous zeros preceding the flight number. In case the aircraft identification can be entered manually, entry should be part of the start-up procedures.

Correct setting of aircraft identification is essential for identification and correlation (of radar track with flight plan data). An incorrect setting of the aircraft identification will be reported to the Belgian Civil Aviation Authority.

Note 1: For Mode S transponder ground operation at EBBR, see EBBR AD 2.20, § 1.4.

Note 2: For Mode S transponder ground operation at ELLX, see ELLX AD 2.20, § 1.1.

1.3 Emergency Procedure

If the pilot of an aircraft encountering a state of emergency has previously been directed by ATC to operate the transponder on a specific code, this code setting shall be maintained until otherwise advised.

In all other circumstances, the transponder shall be set to Mode A and C, Code 7700. Notwithstanding the standard procedure (see above), a pilot may select Mode A and C, Code 7700 whenever the nature of the emergency is such that this appears to be the most suitable course of action.

Pilots of aircraft in flight subjected to unlawful interference shall endeavour to set the transponder to Mode A and C, Code 7500 to make the situation known, unless circumstances warrant the use of Code 7700.

Note: Continuous monitoring of responses on Mode A and C, Code 7500 and 7700 is provided.

1.4 Radio Communication Failure Procedure

In the event of an aircraft radio receiver failure, Mode A and C, Code 7600 shall be selected and established procedures followed. Subsequent control of the aircraft will be based on those procedures.

Note: Continuous monitoring of response on Mode A and C, Code 7600 is provided.

1.5 Transponder Failure

1.5.1 Failure Before Intended Departure

If the transponder fails before intended departure and cannot be repaired, pilot shall:

- inform ATS as soon as possible, preferably before the submission of a flight plan;
- plan to proceed, as directly as possible, to the nearest suitable aerodrome where repair can be made;
- insert in item 10 of the ICAO flight plan form under “SSR” the letter “N” for complete unserviceability of the transponder or, in the case of partial failure, the letter corresponding to the remaining transponder capability.

1.5.2 Failure After Departure

If the transponder fails after departure, pilots may expect that ATC units will endeavour to provide services for continuation of the flight to the aerodrome of first intended landing in accordance with the flight plan. After landing, pilots shall make every effort to have the transponder restored to normal operation. If repair cannot be effected, pilots shall comply with the provisions described in § 1.5.1 above.

1.6 System of SSR Code Assignment

1.6.1 In Belgium

Codes will be assigned in accordance with the SSR code allocation list for the ICAO EUR Region, which is based on the Originating Region Code Assignment Method (ORCAM).

Codes protected for international transit, transit codes, which are assigned to overflying or inbound flights, will be retained by ATC.

Code 1000 will be assigned or retained to indicate an eligible (flagged by the IFPS) IFR flight, where the downlinked aircraft identification is validated as matching the aircraft identification entered in the flight plan.

Departing International IFR Flights

0101 - 0117	departing traffic
7101 - 7167	departing traffic
4401 - 4427	departing traffic inbound the United Kingdom, the Netherlands, Ireland, Greenland, Iceland, Canada or the United States, and departing traffic re-entering Belgium.
1000	eligible (flagged by the IFPS) departing traffic

Domestic Flights

4450 - 4457	codes assigned by Brussels ACC/APP
5101 - 5167	codes assigned by Brussels APP
6301 - 6313	codes assigned by Brussels TWR
6314 - 6327	codes assigned by Charleroi TWR/APP
6330 - 6343	codes assigned by Liège TWR/APP
6344 - 6361	codes assigned by Oostende TWR/APP
6362 - 6377	codes assigned by Antwerpen TWR

VFR Flights

0041 - 0057	codes assigned by Brussels INFO

1.6.2 In Luxembourg

Departing International IFR Flights

3501 - 3507	Departing traffic
5650 - 5657	Departing traffic
7170 - 7177	Departing traffic
7570 - 7577	Departing traffic

Flights remaining in Luxembourg TMA below FL165 and solely controlled by Luxembourg APP

4460 - 4464	Codes assigned by Luxembourg APP

VFR Flights

4465 - 4467	Codes assigned by Luxembourg APP/TWR
4470 - 4477	Codes assigned by Luxembourg APP/TWR

2 MILITARY

2.1 General

ATS units and Air Defence Stations use SSR for identification and automatic tracking of aircraft.

The carriage of a serviceable transponder capable of replying to Mode A and C is compulsory for all aircraft operating in all military controlled airspace. An exemption to this rule may be granted, provided that the request is made before the flight to the authority having jurisdiction over the airspace concerned. Aircraft flying OAT within the Brussels FIR/UIR must have a serviceable SSR transponder.

The carriage of a serviceable Mode S (ELS or EHS) SSR transponder is highly recommended but not yet compulsory for State aircraft flying OAT within the Brussels FIR/UIR including low level VFR flights. State aircraft flying GAT within the Brussels FIR/UIR shall comply with the regulation for the carriage and operation of SSR mode S airborne equipment published in the AIP and/or related AIC.

Flights with a wrong Mode S ACID will be instructed by ATC to correct this. Flight limitations may be imposed until the ACID is correct (e.g. not leaving the CTR or TMA).

2.2 SSR Mode

Aircraft flying OAT within the Brussels FIR/UIR shall squawk:

Mode 1	as instructed by the appropriate NATO authority
Mode 2	always activated unless instructed otherwise
Mode 3/A	as instructed by the controlling agency
Mode C	always activated unless instructed otherwise
Mode S	Only mandatory for declared Mode S capable Belgian military aircraft. Mode S ACID must exactly match the ACID as entered in item 7 of the FPL (See ENR 1.10, § 2.3.1.1)

Note: In a formation flight, only one aircraft shall squawk as mentioned above, the other aircraft shall squawk "stand-by".

Note: Mode 4 is forbidden.

2.3 SSR Mode 3 Code Allocation

Belgian Military Aerodromes and Control Centres

1401 - 1477	Semmerzake ATCC (ATC)
2601 - 2627	Cross-border to EH/ED (ATC)
4201 - 4277	Kleine-Brogel (ATC)
4301 - 4377	Florennes (ATC)
4501 - 4557	Beauvechain (ATC)
4560 - 4577	Beauvechain/SF260D (ATC)
4601 - 4677	Beauvechain/HELI (ATC)

Belgian Military Aerodromes and Control Centres

5401 - 5427	Koksijde (ATC)
5430 - 5477	Beauvechain/SF260M (ATC)
6001 - 6077	CRC Glons (ATC and Air Defence)
6401 - 6437	Semmerzake ATCC (ATC)
6440 - 6477	Chievres (ATC)

Special Codes

A1000	conspicuity code applicable to civil city pair aircraft, forbidden for OAT fligths.
A7000 + C	uncontrolled flights, which have not received an instruction concerning the setting of their transponder
A7500	unlawful interference
A7600	radio communication failure
A7700	emergency (unless instructed otherwise by the controlling agency)

2.4 Radio Communication Failure

2.4.1 Receiver Failure

The pilot shall transmit reports at the scheduled times or positions, preceded by “transmitting in the blind due to receiver failure”. These reports should include his intentions and the time of his next intended transmission.

2.4.2 Receiver and Transmitter Failure

2.4.2.1 VFR

- Squawk A7600, and
- Maintain VMC, and
- Land at the nearest suitable aerodrome, and
- Report his arrival by the most expeditious means to the appropriate ATC unit.

2.4.2.2 IFR

- Squawk A7600, and
- Proceed according to flight plan and hold over the last navaid, and
- Commence a descent from this navaid as close as possible to the last acknowledged EAT or the flight plan EAT, and
- Complete the normal instrument approach procedure and land, if possible within 30 MIN of EAT (last acknowledged or flight plan).

If the pilot is established on a published ATS route, he shall maintain the last assigned speed and level for a period of 7 MIN. After this period, he shall adjust to the level in accordance with the flight plan. If the pilot is established on a published ATS route but he was receiving radar vectors or he was proceeding offset, the pilot shall proceed in the most direct manner possible to rejoin the current flight plan route.

If the pilot has been given level clearances for only a part of the route, he shall fly this level to the point specified in the clearance and then the cruising level of the flight plan. Departing aircraft shall fly the level they are cleared to for 3 MIN and then fly the cruising level of their flight plan.

2.4.3 Transmitter (and Receiver) Failure and SSR inoperative

The pilot may or, if transponder is inoperative, shall fly triangles of 1 MIN legs (TAS higher than 300 KT) or 2 MIN legs (TAS equal or less than 300 KT) clockwise if his receiver still works, anti-clockwise if the radio receiver and transmitter are both out of service. He can expect to be intercepted by a shepherd aircraft.

ENR 1.7 Altimeter Setting Procedures

1 GENERAL

The altimeter setting procedures in use generally conform to Part III of *ICAO Doc 8168, Volume I*.

1.1 Transition Altitude

A common transition altitude of 4500FT is applicable in Brussels FIR.

1.2 Transition Layer (MIL only)

The transition layer is the airspace between the transition altitude and the transition level.

To ensure minimum standard radar separation between uncontrolled flights at or below 4500FT and controlled flights above the transition altitude, a transition layer of minimum 1000ft and maximum 1499FT will be taken into account to determine the transition level. Within the transition layer no minimum vertical radar separation with uncontrolled flights is provided.

1.3 Transition Level (MIL only)

The transition level is the lowest flight level available for use above the transition altitude. The following parameters are used to calculate the transition level:

- Transition altitude (TA): 4500FT;
- Transition layer (Tlay): 1000FT;
- Standard QNH: 1013.2HPA;
- FT / HPA: 26.7;
- Transition level (TL);
- Regional QNH (Reg QNH).

TL = [TA + Tlay + ((1013.2 - Reg QNH) x 26.7)] / 100 and rounded up to the first VFR or IFR flight level (whichever comes first). The calculation has to be correct to 0.0001 before rounding up to FL. This formula results in the value of the transition level in relation to the regional QNH taking into account a transition layer of minimum 1000ft and maximum 1499FT. This formula is primarily intended for precise calculations to be used in systems. A quick reference table is published below.

Regional QNH	Transition Level
921 - 938	80
939 - 957	75
958 - 975	70
976 - 994	65
995 - 1013	60
1014 - 1031	55
1032 - 1050	50
1051 - 1069	45
1070	40

Corresponding Flight Level for a specific QNH value							
QNH / ALT	950 - 954.9	955 - 974.9	975 - 989.9	990 - 1009.9	1010 - 1024.9	1025 - 1044.9	1045 - 1055
500	25	20	15	10	5	0	-5
1000	30	25	20	15	10	5	0
1500	35	30	25	20	15	10	5
2000	40	35	30	25	20	15	10
2500	45	40	35	30	25	20	15
3000	50	45	40	35	30	25	20
3500	55	50	45	40	35	30	25
4000	60	55	50	45	40	35	30
4500	65	60	55	50	45	40	35
5000	70	65	60	55	50	45	40
5500	75	70	65	60	55	50	45

Corresponding Flight Level for a specific QNH value							
QNH	**950 - 954.9**	**955 - 974.9**	**975 - 989.9**	**990 - 1009.9**	**1010 - 1024.9**	**1025 - 1044.9**	**1045 - 1055**
ALT							
6000	80	75	70	65	60	55	50
6500	85	80	75	70	65	60	55
7000	90	85	80	75	70	65	60
7500	95	90	85	80	75	70	65
8000	100	95	90	85	80	75	70
8500	105	100	95	90	85	80	75
9000	110	105	100	95	90	85	80
9500	115	110	105	100	95	90	85
10000	120	115	110	105	100	95	90

Note: An aerodrome QNH setting is a setting of which the source is located at or less than 5NM from the landing threshold.

2 PROCEDURES

2.1 Take-off and Climb

A QNH altimeter setting is made available to aircraft in taxi clearance prior to take-off.

Vertical positioning of aircraft during climb is expressed in terms of altitude until reaching the transition altitude above which vertical positioning is expressed in terms of flight level.

2.2 Approach and Landing

2.2.1 General

A QNH altimeter setting and the transition level are made available in approach clearance and in clearance to enter the traffic circuit.

Vertical positioning of aircraft during approach is controlled by reference to flight levels until reaching the transition level below which vertical positioning is controlled by reference to altitude.

When flying outside controlled airspace at or below 4500FT AMSL, the altimeter should be set to the QNH of the aerodrome of destination as soon as entering the controlled airspace associated with it (TMA or CTR as the case may be).

A QFE altimeter setting is only given on request and shall only be used for terrain clearance during final approach. The reference datum of the QFE altimeter setting is either:

a. the threshold elevation:
   - for instrument runways (SRA or NDB approaches), if the threshold elevation is 7FT or more below the aerodrome elevation;
   - for precision approach runways (ILS);

b. the aerodrome elevation.

2.2.2 Missed Approach Procedure for Military Pilots

In the event of a missed approach, pilots shall use the QNH unless otherwise instructed by the control tower. If the missed approach procedure requires a climb above the transition altitude, pilots shall follow the relevant altimeter setting procedures given in § 1.3 above.

Note 1: Military pilots shall comply with the civilian instructions when flying within airspace controlled by civil authorities.

Note 2: An aerodrome QNH setting is a setting of which the source is located at or less than 5NM from the landing threshold.

2.3 En-route

The cruising level at which a flight or a portion of a flight is to be conducted shall be expressed in terms of flight level when operated above the transition altitude.

When flying in a controlled airspace associated with an aerodrome (TMA or CTR) at or below the transition altitude, the aerodrome QNH value given by the relevant control unit shall be used for the altimeter setting.

When flying outside controlled airspace at or below 4500FT AMSL, the altimeter shall be set to the regional QNH given on pilot's request by Brussels FIC, Semmerzake ATCC or by any ATC unit. The regional QNH is the lowest of the QNH values for the following stations: EBAW, EBBE, EBBR, EBCI, EBCV, EBFS, EBBL, EBFN, EBLG, ELLX, EBOS, EBSH and EBSP.

VFR flights conducted at or below 3000FT AGL do not have to maintain a semi-circular cruising level and consequently are not compelled to use any particular altimeter setting. However, they are advised:

- to take into consideration, for terrain and obstacle clearance purpose, either the regional QNH or the QNH value relevant to the area overflown (EBBR, ELLX, EBOS and EBSP) obtainable from Brussels FIC or Semmerzake ATCC;
- to take note that high speed low level military flights, having a flight visibility less than 5KM, are mandatory conducted under IFR and are therefore maintaining semi-circular IFR cruising altitudes based on the regional QNH.

3 TABLE OF CRUISING LEVELS

Magnetic track											
From 000 degrees to 179 degrees						From 180 degrees to 359 degrees					
IFR flights			VFR flights			IFR flights			VFR flights		
FL	ALT		FL	ALT		FL	ALT		FL	ALT	
	M	FT		M	FT		M	FT		M	FT
10	300	1000	-	-	-	20	600	2000	-	-	-
30	900	3000	35	1050	3500	40	1200	4000	45	1350	4500
50	1500	5000	55	1700	5500	60			65		
70			75	2300	7500	80			85		
90			95			100			105		
110			115			120			125		
130			135			140			145		
150			155			160			165		
170			175			180			185		
190						200					
210						220					
230						240					
250						260					
270						280					
290						300					
310						320					
330						340					
350						360					
370						380					
390						400					
410						430					
450						470					
490						510					
etc.						etc.					

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ENR 1.8 Regional Supplementary Procedures

Regional Supplementary Procedures are applied in accordance with *ICAO Doc 7030. Regional Supplementary Procedures*.

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ENR 1.9 Air Traffic Flow Management and Airspace Management

The overall authority for the provision of ATFM services for GAT IFR in Brussels FIR/UIR is delegated to the Eurocontrol Network manager (NM).

1 RESPONSIBILITIES OF THE EUROCONTROL NM

The Eurocontrol NM is responsible for:

- ensuring that traffic flows correspond to the stated capacity of the sectors through which they pass;
- ensuring that, when necessary, ATFM measures are applied in an equitable manner and in such a way as to reduce as far as possible the penalties to aircraft operators.

In order to do this, the Eurocontrol NM applies procedures that:

- are agreed internationally;
- are published in the corresponding Eurocontrol NM documentation;
- have, in the Brussels FIR/UIR, the same status as procedures explicitly published in the AIP.

2 RESPONSIBILITIES OF ATS

ATS provides a Flow Management Position (FMP) in each ACC/UAC to liaise between ATC, local aircraft operators and the Eurocontrol NM.

ATS at aerodromes will ensure that flights adhere to departure slots issued by the ATFM Service. In accordance with the provisions of *ICAO Doc 7030* and the *Airspace Management Handbook*, flights that do not adhere to their slot will be denied start-up clearance. However, ATC shall make all efforts to enable departing flights to comply with the slot and flights shall not be prevented from departing due to small taxiing delays.

The ATC unit delivering start-up and/or take-off clearance will give priority in the departure sequence to traffic with a Eurocontrol NM CTOT.

The FI MDC acts as an interface between the military air bases and the Brussels FMP.

3 ATFM DOCUMENTATION

The general ATFM procedures, which apply throughout the ICAO European Region, are published in:

- *ICAO Doc 7030. Regional Supplementary Procedures*;
- *Airspace Management Handbook* (www.eurocontrol.int/publications/european-route-network-improvement-plan-ernip-part-3-airspace-management-handbook);
- *IFPS User Manual* (www.eurocontrol.int/sites/default/files/content/documents/nm/network-operations/HANDBOOK/ifps-users-manual-current.pdf).

4 CONTACT

4.1 Eurocontrol NM (H24)

Post: Eurocontrol NM
Rue de la Fusée / Raketstraat, 96
1130 Brussels
BELGIUM

AFS: EUCHZMTA

SITA: BRUEA7X

4.2 Brussels ACC Flow Management Position (H24)

Post: Belgocontrol
DGO/ATS/ATFCM/ASM
Building U
Tervuursesteenweg 303
1820 Steenokkerzeel
BELGIUM

TEL: +32 (0) 2 206 27 30 or 31

FAX: +32 (0) 2 206 27 29

AFS: EBBRFMPC

4.3 FI MDC (H24)

Post: Military Detachment for Co-ordination
Belgian Air Component
p/a Belgocontrol (CANAC)
Tervuursesteenweg, 303
1820 Steenokkerzeel
BELGIUM

TEL: +32 (0) 0 752 44 52

TEL: 9 26 23 44 52 (MIL)

FAX: +32 (0) 0 752 42 01

AFS: EBMIZGZF

5 ATFM PROCEDURES

5.1 Information on ATFM Measures

It is the aircraft operator's responsibility to inform himself of any valid ATFM measures.

Information with respect to general ATFM measures (e.g. Standard Routeing Scheme, weekend period, etc) can be obtained from the ARO of the aerodrome of departure or from the Brussels FMP.

Daily published ANM are distributed to those aircraft operators who made a request to Eurocontrol NM, or they can be accessed directly on the NOP portal of Eurocontrol NM (www.public.nm.eurocontrol.int/pubportal/gateway/spec). The ANM are also available at the local ARO and at the Brussels FMP.

MIL GAT flights and OAT/GAT flights departing from Belgian AD and routing abroad are always subject to Air Traffic Flow regulations. General information about this procedure can be obtained from MDC section co-ordination (+32 (0) 2 752 44 52 or 9 26 23 44 52.)

5.2 Flight Plans

For flights subject to ATFM measures, flight plans shall be filed at least 3HR prior to the EOBT, unless a repetitive flight plan exists. Any delay to the EOBT of more than 15MIN and less than 20 HR shall be notified by a delay message (DLA).

Flight plans may be submitted up to a maximum of 120 hours, or five days, in advance of the EOBT of that flight plan.

A flight plan shall only be considered as accepted after an ACK message has been received from the IFPS at the responsible ARO.

Flight plans not accepted by the IFPS will be returned to the ARO or, for military users, the local AIS section submitting them. The aircraft operator should ensure that the ACK message has been received by the responsible ARO or eventually provide additional data to the ARO in order to have his flight plan accepted by the IFPS. Military pilots should ensure that the ACK message has been received by the responsible AIS section or eventually provide additional data to the AIS section in order to have his flight plan accepted by the IFPS.

Note 1: When Standard Routeing Scheme applies, operators shall initially plan a flight via these routes only.

Note 2: When Traffic Orientation Scheme applies, military pilots shall initially plan a flight via these routes only. Compliance with constraints identified in the IFPS Manual related to the (RAD) is compulsory.

5.3 Replacement Flight Plans

If the slot allocated for the planned route results in a considerable delay, the aircraft operator may select an alternative routeing between the same aerodrome of departure and destination and file a new flight plan accordingly. In this case the operator should cancel the initial flight plan (CNL message to be transmitted with priority “DD”) and file a so-called “replacement flight plan with identical call sign” not less than 5MIN after this cancellation message.

The replacement flight plan shall contain the complete new routeing in item 15 and, as the first element in item 18, the indication “RFP /Qn” whereas:

- “RFP” signifies replacement flight plan
- “n” corresponds to the sequence number relating to the replacement flight plan for that particular flight. (e.g. first replacement flight plan: “RFP /Q1”, second replacement flight plan: “RFP /Q2” etc.)

The replacement flight plan shall be filed at least 30MIN before the EOBT.

Note: Operators may only submit flight plans for off-load routes after the availability of such routes has been confirmed either by the Eurocontrol NM or the FMP.

5.4 Slot Allocation

The slot allocated to a flight will be issued as a Slot Allocation Message (SAM) 2HR before the EOBT. The slot is presented as a Calculated Take-Off Time (CTOT). A tolerance of -5MIN to +10MIN of the CTOT is defined as the period during which the flight shall take off.

Aircraft operators or military pilots shall take into account the necessary taxiing time in order to adhere as closely as possible to their CTOT when requesting start-up.

The SAM will be issued directly to the aircraft operator's operational office, if the aircraft operator has previously given such address to the Eurocontrol NM. For the military users, the SAM will be issued directly to the AIS section submitting the flight plan. If no particular address was given to the Eurocontrol NM, the SAM will be sent to the Brussels FMP and the ARO of the aerodrome of departure or, for the military users, the local AIS section of the aerodrome of departure. It is the operator's responsibility to contact the local ARO or the FMP in order to obtain the SAM and to co-ordinate with this ATS unit for the eventual exchange of additional messages to/from the Eurocontrol NM. Military pilots shall contact the local AIS section.

The operator shall, in case an assigned slot cannot be met, immediately inform the Eurocontrol NM either directly or via the ARO or the FMP. Military pilots shall immediately inform the AIS section, which will send the appropriate corrective message to the IFPS.

In case a flight is cancelled, a CNL message shall be transmitted without delay, in order to free the allocated slot for other operators.

5.5 Use of STS Indicators in Flight Plans

5.5.1 In Belgium

The insertion of a STS indicator in field 18 of a flight plan, see ENR 1.10, § 1.5.9, will indicate to all parties that may have to handle the flight that the flight may require special handling.

The STS/ATFMX may only be used if that particular flight has received specific approval from the CAA for processing such requests.

It should be noted that only STS/ATFMX, STS/FFR, STS/HEAD, STS/MEDEVAC and STS/SAR will gain automatic exemption from ATFM measures.

Application for approval of STS/ATFMX in field 18 should normally be made MON to FRI (HOL excl) between 0800 and 1500 (0700 and 1400) to the Airspace Department of the CAA by filling the form available from www.mobilit.belgium.be/fr/transport_aerien/espace_aerien/derogations and sending it to:

TEL: +32 (0) 2 277 43 37 or +32 (0) 2 277 43 01 or +32 (0) 2 277 43 16

FAX: +32 (0) 2 277 42 82

Email: aspa.exemptions@mobilit.fgov.be

Outside the hours notified, application for approval for STS/ATFMX should be made to the Brussels FMP (H24) as follows:

Email: sac@belgocontrol.be

TEL: +32 (0) 2 206 27 22 or +32 (0) 2 206 27 23

FAX: +32 (0) 2 206 27 29

5.5.2 In Luxembourg

5.5.2.1 Principles

The following principles have to be applied:

- The insertion of a STS indicator in field 18 of a flight plan will identify that a flight may require special handling.

It should be noted that:

- Only STS/ATFMX, STS/FFR, STS/HEAD, STS/MEDEVAC and STS/SAR will gain automatic exemption from ATFM measures.
- Using only STS/ALTRV, STS/FLTCK, STS/HAZMAT, STS/HOSP, STS/HUM, STS/MARSA, STS/NONRVSM or STS/STATE does not automatically qualify the flight for exemption from ATFM measures.

The STS/ATFMX, STS/FFR, STS/HEAD, STS/MEDEVAC and STS/SAR may only be used if that particular flight has received specific approval from the CAA.

5.5.2.2 Approval Procedure

All operators who wish to use an ATFM exemption for flights departing ELLX shall request authorisation before the flight, by transmitting the information required in the application form for an ATFM exemption and submitting all the documents justifying their request to the email address:

Email: atfmx@av.etat.lu

The application form can be directly downloaded from the CAA website:

URL: www.dac.public.lu/formulaires/navigation-aerienne/index.html

The request shall be made at least 48 hours before the flight on working days (MON to FRI (HOL excl), 0700-1600 (0600-1500)).

Authorisation is granted after examination of the documents received. The absence of response within 24 hours grants authorisation.

In the event of an emergency (e.g. urgent medical evacuation or organ transport) and when the request cannot be made within the aforementioned time period, the request form dully filled-out and all associated documents shall be transmitted, as soon as possible, to the aforementioned e-mail address and no later than 48 hours after the flight.

For more information please consult the CAA website:

URL: www.dac.public.lu

ENR 1.10 Flight Planning

1 CIVIL

1.1 Requirement to Submit a Flight Plan (SERA.4001)

Information relative to an intended flight or portion of a flight, to be provided to ATS units, shall be in the form of a flight plan. A flight plan shall be submitted prior to operating:

- any flight or portion thereof to be provided with ATC service;
- any flight above FL660;
- any flight at night, if leaving the vicinity of an aerodrome;
- any flight across international borders. VFR flights remaining within the Schengen Area do not need a flight plan as far as the Belgian part of the Brussels FIR is concerned (for requirements applicable in other Schengen States, please consult the relevant AIP).

It is advisable to file a flight plan:

- when flying over sparsely populated areas, where SAR operations would be difficult;
- if the aircraft is not equipped with radio.

A flight plan may be filed for any flight in order to facilitate the provision of SAR services.

Note: A pilot who has submitted a flight plan for a flight departing from a private aerodrome is responsible for the forwarding of the associated messages either by TEL or by radio to the ATS unit to which the flight plan was sent.

1.2 Categories of Flight Plan

A distinction is made between three different categories of flight plan:

- **Full flight plan submitted prior departure**
  A flight plan in line with the formatting requirements of § 1.4 and § 1.5 below, submitted prior departure in accordance with the procedures specified in § 1.3.4 below.
- **Full flight plan submitted during flight (AFIL)**
  A flight plan in line with the formatting requirements of § 1.4 and § 1.5 below, submitted to an ATS unit during flight in accordance with the procedures specified in § 1.3.5 below.
- **Abbreviated flight plan**
  Limited information provided to an ATS unit during flight with the purpose to obtain a clearance for a minor portion of a VFR flight, such as to cross a CTR, to take-off from or land at a controlled aerodrome. This contains as a minimum (additional elements may be required by the ATS unit concerned):
  - call sign;
  - type of aircraft;
  - point of entry;
  - point of exit;
  - level.

1.3 Submission of a Flight Plan

A flight plan form based on the model shown in § 3 below shall be used by operators and ATS units for the purpose of completing flight plans. If the flight plan is transmitted by FAX, a special flight plan model shall be used. This form can be obtained from EBBR or ELLX ARO (see GEN 3.3, § 6).

1.3.1 IFR Flight Plan

Except for RPLs, a full flight plan shall be submitted for IFR flights prior to departure either to the IFPS or to an ARO, or during flight to an appropriate ATS unit.

The IFPS is the responsible unit for accepting IFR/GAT flight plans, for flights conducted within the IFPS Zone. Unless a flight plan has been received and accepted by the IFPS (i.e. an ACK message has been received), the requirement to submit a flight plan for an IFR/GAT flight intending to operate into the IFPS-Zone will not have been satisfied and no ATC clearance will be issued for such a flight.

Aircraft operators shall file their flight plans and associated messages for IFR/GAT flights directly with the IFPS, whenever possible, or they can use the intermediate of a local ARO. The IFPS will send back "Operational Reply Messages" to the message originator (aircraft operator or ARO), indicating the status of processing of his flight plan or associated message:

- an acknowledge message (ACK) will indicate the successful processing of the message;
- a reject message (REJ) indicates that the submitted message could not be processed and that the message originator should file a new corrected message;

- a manual message (MAN) means that the message contains errors and that it will be presented to an IFPS operator for manual processing. A MAN message will be followed either by an ACK message, if the message has been corrected successfully by the IFPS operator, or by a REJ message, if the error(s) could not be solved.

Detailed information on flight plan filing procedures with IFPS is published in the *IFPS Users Manual* (see ENR 1.9, § 3).

1.3.2 VFR Flight Plan

Flight plans shall be submitted for VFR flights as required in § 1.1 above. A full flight plan can be submitted for VFR flights prior to departure to an ARO. A full flight plan or abbreviated flight plan may also be submitted in flight. A full flight plan must be filed if the pilot requires his destination aerodrome to be notified of the flight.

1.3.3 Adherence to Airspace Utilisation Rules and Availability

No flight plans shall be filed via the Brussels FIR/UIR deviating from the State restrictions defined within the Route Availability Document (RAD). This common European reference document contains all airspace utilisation rules and availability for the Brussels FIR/UIR and any reference to them shall be made via:

URL: www.nm.eurocontrol.int/RAD/index.html

1.3.4 Procedures for Submitting Flight Plans Prior to Departure

1.3.4.1 Flight Plans Submitted via AFTN and SITA

1.3.4.1.1 IFR/GAT flights conducted in the IFPS Zone

Such flight plans shall be submitted to the IFPS via:

- AFTN to EUCHZMFP and EUCBZMFP, or
- SITA to BRUEP7X and PAREP7X.

1.3.4.1.2 IFR/GAT flights leaving the IFPS Zone and/or mixed rules flight plans

Message originators able to file the addresses for the portion of their flight outside the IFPS Zone and/or for the VFR portion of their flight should only file to the IFPS via:

- AFTN to EUCHZMFP and EUCBZMFP;
- SITA to BRUEP7X and PAREP7X.

Such message originators shall fill in the non-IFPS addresses or the VFR addresses in AFTN-format below the date/time/originator line - using the re-addressing procedure - as specified in the *IFPS Users Manual*. (see ENR 1.9, § 3).

Message originators not able to file the addresses for the portion of their flight outside the IFPS Zone and/or for the VFR portion of their flight shall file to the ARO via AFTN to EBBRZPZX (departure from Belgium) or ELLXZPZX (departure from Luxembourg).

The ARO will address the IFR or mixed rules flight plan to both IFPS units in accordance with the re-addressing procedure.

Note 1: Aircraft Operators filing via an ARO shall never submit the same flight plan simultaneously to the IFPS.

Note 2: If a REJ message is received from the IFPS, the ARO will transmit this REJ message to the message originator's AFS address for corrective action.

1.3.4.1.3 VFR Flight Plans

VFR flight plans shall be transmitted to the responsible ARO for distribution. This shall be done via AFTN to EBBRZPZX for departures from Belgium, or to ELLXZPZX for departures from Luxembourg.

1.3.4.2 Flight Plans Submitted by FAX, TEL or in Person

Regardless the flight rules, flight plans can be submitted by FAX, TEL or in person at the ARO of EBBR and ELLX. ELLX ARO also accepts flight plans via email. Such flight plans cannot be submitted directly with IFPS.

Note: All flight plan forms sent by FAX should be filled out in capital letters using a black ballpoint.

It is the aircraft operator's responsibility to ensure himself of the correct reception of his FAX flight plan at the appropriate ARO.

Operators of IFR/GAT flights filing their flight plan by FAX, TEL or in person shall indicate a (mobile) telephone number in item 19 under “N/(remarks)” on which they can be contacted in case the originally filed IFR or mixed rules flight plan would be changed by the IFPS (especially when in item 18 “RMK/IFPSRA” has been included) or if there are problems with the flight plan that prevent the processing.

Operators of IFR/GAT flights filing their flight plan by FAX, TEL or in person shall in any case contact the appropriate ARO, (preferably 15 MIN after filling) to obtain confirmation on the acceptance of their flight plan by the IFPS (ACK message received at the ARO).

EBBR ARO can be contacted at:

TEL: +32 (0) 2 206 25 40 or 41

FAX: +32 (0) 2 206 25 39

ELLX ARO can be contacted at:

TEL: +352 47 98 23 01 0

FAX: +352 47 98 23 09 0

Email: ais@airport.etat.lu

1.3.4.3 Flight Plans Submitted via Dedicated Workstations or via the Internet

Flight plans can be submitted to Brussels ARO via dedicated workstations or via the Internet. Dedicated workstations for filing of flight plans are installed at EBAW, EBCI, EBLG and EBOS.

Aircraft Operators intending to use the Internet for the submission of their flight plan, shall exclusively use the electronic flight plan form made available on the Belgocontrol website.

URL: www.belgocontrol.be

It is the aircraft operator's responsibility to ensure himself of the correct reception of his internet flight plan at the Brussels ARO.

Operators of IFR/GAT flights filing their flight plan via either a dedicated workstation or via the Internet shall in any case contact Brussels ARO (preferably 15 MIN after filing) to obtain confirmation on the acceptance of their flight plan by the IFPS (ACK message received at the ARO).

Operators of IFR/GAT flights filing their flight plan either via a dedicated workstation or via the Internet shall leave a (mobile) telephone number at the ARO, where they can be contacted in case the originally filed flight plan would be changed by the IFPS (especially when in Item 18 “RMK/IFPSRA” has been included).

1.3.4.4 Submission Time

A flight plan for a flight to be provided with ATC service shall be submitted at least 30 MIN before the EOBT, furthermore all IFR/GAT flight plans shall be submitted at least 1 HR before the EOBT. See ENR 1.9 for ATFM purposes.

A flight plan shall not be submitted more than 120 HR (5 days) prior to the EOBT.

In the event of a delay of 15 MIN in excess of the EOBT for a controlled flight or a delay of 60 MIN for a non-controlled flight for which a flight plan has been submitted, the flight plan shall be amended or a new flight plan shall be submitted and the old one should be cancelled.

1.3.5 Procedures for Submitting Flight Plans during Flight (AFIL)

A flight plan submitted during flight should normally be transmitted to the ATS unit in charge of the FIR or control area in which the aircraft is flying in, or through which the aircraft wishes to fly.

In case of an AFIL, the ATS unit receiving the flight plan will be responsible for addressing the flight plan message in accordance with the procedures described above.

An AFIL for a flight to be provided with ATC service shall be submitted at a time that will ensure its receipt by the appropriate ATS unit at least 10 MIN before the aircraft is estimated to reach:

- the intended point of entry into a control area;
- the point of crossing an airway.

Note: If the flight plan is submitted for the purpose of obtaining ATC service, the aircraft is required to wait for an ATC clearance prior to proceed under the conditions requiring compliance with ATC procedures.

1.4 Content of a Full Flight Plan (SERA.4005)

A flight plan shall comprise information regarding such of the following items considered relevant by the appropriate ATS unit:

- Aircraft identification;
- Flight rules and type of flight;
- Number and type(s) of aircraft and wake turbulence category;
- Equipment;
- Aerodrome of departure (see note 1);
- EOBT (see note 2);
- Cruising speed(s);
- Cruising level(s);
- Route to be followed;
- Aerodrome of destination and total elapsed time;
- Alternate aerodrome(s);
- Fuel endurance;
- Total number of persons on board;
- Emergency and survival equipment;
- Other information.

Note 1: For an AFIL, the information to be provided in respect of this item will be an indication of the location from which supplementary information concerning the flight may be obtained, if required.

Note 2: For an AFIL, the information to be provided in respect of this item will be the time over the first point of the route to which the flight plan relates.

Note 3: The term "aerodrome" where used in the flight plan is intended to cover also sites other than aerodromes that may be used by certain types of aircraft (e.g. helicopters or balloons).

1.5 Completion of a Full Flight Plan (SERA.4010)

1.5.1 General

A form based of the model shown in § 3 below shall be used for the purpose of completing flight plans. If the flight plan is transmitted by FAX, a special model shall be used. This model can be obtained from EBBR or ELLX ARO.

Whatever the purpose for which it is submitted, a flight plan shall contain information, as applicable, on the items listed in § 1.4 above, up to and including "alternate AD(s)", regarding the whole route or the portion thereof for which the flight plan is submitted. It shall contain in addition, as applicable, information on all other items listed in § 1.4 above, when submitted to facilitate the provision of alerting and SAR services or prior to departure for an IFR flight.

When filling in a flight plan, pilots shall:

- Adhere closely to the prescribed formats and manner of specifying data;
- Commence inserting data in the first space provided. Where excess space is available, leave unused spaces blank;
- Insert all clock times in 4 figures UTC;
- Insert all estimated elapsed times in 4 figures (HR and MIN);
- Complete items 7 to 18 as indicated hereunder;
- Complete also item 19 as indicated hereunder, when so required by the appropriate ATS authority or when otherwise deemed necessary.

Note 1: Item numbers on the form are not consecutive, as they respond to Field Type numbers in ATS messages.

Note 2: The fields preceding item 3 are to be completed by ATS and COM services, unless the responsibility for originating flight plan messages has been delegated

1.5.2 Item 7: Aircraft Identification (MAX 7 characters)

Insert one of the following aircraft identifications, not exceeding 7 alphanumeric characters and without hyphens or symbols:

a. the ICAO designator for the aircraft operating agency followed by the flight identification (e.g. "BEL511", "NGA213"), when in RTF the call sign of the aircraft will consist of the ICAO telephony designator for the operating agency followed by the flight identification (e.g. "BEELINE 511", "NIGERIA 213",...). In this case, the registration marking of the aircraft shall be specified in Item 18, preceded by "REG/";

b. the nationality or common mark and the registration mark of the aircraft (e.g. "EIAKO", "4XBCD", "OOSDE", "N2567GA"), when:
   - in RTF the call sign to be used by the aircraft will consist of this identification alone (e.g. "OOSDE"), or preceded by the ICAO telephony designator for the aircraft operating agency (e.g. "BEELINE OOSDE"). in this case the name of the operator shall be specified in item 18, preceded by "OPR/";
   - the aircraft is not equipped with radio.

Note: Provisions for the use of RTF call signs are contained in chapter 5 of ICAO Annex 10, Volume II. ICAO designators for aircraft operating agencies are contained in ICAO Doc 8585.

1.5.3 Item 8: Flight Rules and Type of Flight (1 or 2 characters)

1.5.3.1 Flight Rules

Insert one of the following letters to denote the category of flight rules with which the pilot intends to comply:

I	if it is intended that the entire flight will be operated under IFR
V	if it is intended that the entire flight will be operated under VFR
Y	if the flight initially will be operated under IFR, followed by one or more subsequent changes of flight rules
Z	if the flight initially will be operated under VFR followed by one or more subsequent changes of flight rules

Note: Specify the point(s) where a change of flight rules is planned in item 15.

1.5.3.2 Type of Flight

Insert one of the following letters to denote the type of flight:

S	scheduled air service
N	non-scheduled air transport operation
G	general aviation
M	military (see note 1)
X	other than any of the categories defined above (see note 2)

Note 1: In addition to MIL operations, operators of customs or police aircraft shall insert the letter "M" in item 8.

Note 2: If "X" is used, the status of the flight shall be indicated in item 18, preceded by the indicator "STS/", or when necessary to denote other reasons for specific handling by ATS, the reason shall be indicated, preceded by the indicator "RMK/".

1.5.4 Item 9: Number and Type of Aircraft and Wake Turbulence Category

1.5.4.1 Number of aircraft (1 or 2 characters)

Insert the number of aircraft, if more than one.

1.5.4.2 Type of aircraft (2 or 4 characters)

Insert the appropriate designator as specified in *ICAO Doc 8643.* If no such designator has been assigned, or in case of formation flights comprising more than one type, insert "ZZZZ" and specify the (numbers and) type(s) of aircraft in item 18, preceded by "TYP/".

1.5.4.3 Wake Turbulence Category (1 character)

Insert an oblique stroke followed by one of the following letters to indicate the wake turbulence category of the aircraft:

H	HEAVY, to indicate an aircraft with a MTOW of 136000KG or more
M	MEDIUM, to indicate an aircraft with a MTOW of less than 136000KG, but more than 7000KG
L	LIGHT, to indicate an aircraft with a MTOW of 7000KG or less

1.5.5 Item 10: Equipment and Capabilities

Capabilities comprise the following elements:

- presence of relevant serviceable equipment on board the aircraft;
- equipment and capabilities commensurate with flight crew qualifications; and
- where applicable, authorization from the appropriate authority.

1.5.5.1 ITEM 10a: Radio Communication, Navigation and Approach Aid Equipment

The letter "N" shall be inserted if no COM/NAV/APCH aid equipment for the route to be flown is carried, or the equipment is unserviceable.

Otherwise, any or more of the following letters shall be inserted:

S	If standard COM/NAV/APCH aid equipment for the route to be flown is carried and serviceable (see note 1 below). If this equipment is required, the inclusion of letter S must be the first one in item 10a.	**J6**	CPDLC FANS 1/A SATCOM (MTSAT)
A	GBAS (landing system)	**J7**	CPDLC FANS 1/A SATCOM (Iridium)
B	LPV (APV with SBAS)	**K**	MLS
C	LORAN C	**L**	ILS
D	DME	**M1**	ATC RTF SATCOM (INMARSAT)
E1	FMC WPR ACARS	**M2**	ATC RTF (MTSAT)
E2	D-FIS ACARS	**M3**	ATC RTF (Iridium)
E3	PDC ACARS	**O**	VOR
F	ADF	**P1-P9**	Reserved for RCP
G	GNSS. If any portion of the flight is planned to be conducted under IFR it refers to GNSS receivers that comply with the requirements of *ICAO Annex 10, Volume I* (see note 2)	**R**	PBN approved (see note 4)
H	HF RTF	**T**	TACAN
I	Inertial navigation	**U**	UHF RTF
J1	CPDLC ATN VDL Mode 2(see note 3)	**V**	VHF RTF
J2	CPDLC FANS 1/A HFDL	**W**	RVSM approved
J3	CPDLC FANS 1/A VDL Mode 4	**X**	MNPS approved
J4	CPDLC FANS 1/A VDL Mode 2	**Y**	VHF with 8.33KHZ channel spacing capability
J5	CPDLC FANS 1/A SATCOM (INMARSAT)	**Z**	Other equipment carried or other capabilities (see note 5)

Note 1: If the letter S is used, standard equipment is considered to be VHF RTF, VOR and ILS, unless another combination is prescribed by the appropriate ATS authority.

Note 2: If the letter G is used, the types of external GNSS augmentation, if any, are specified in Item 18 following the indicator "NAV/" and separated by a space.

Note 3: See RTCA/EUROCAE Interoperability Requirements Standard For ATN Baseline 1 (ATN B1 INTEROP Standard - DO-280B/ED-110B) for data link services, air traffic control clearance and information/air traffic control communications management/air traffic control microphone check.

Note 4: If the letter R is used, the performance based navigation levels that can be met shall be specified in item 18 following the indicator "PBN/". Guidance material on the application of performance based navigation to a specific route segment, route or area is contained in the Performance-Based Navigation Manual (ICAO Doc 9613).

Note 5: If the letter Z is used, the other equipment carried or other capabilities shall be specified in item 18, preceded by "COM/", "NAV/" and/or "DAT/", as appropriate. Exemptions for RNAV, CPDLC and 8.33KHZ are to be indicated by inserting the letter Z in item 10a and then inserting the appropriate descriptors in the following indicators in item 18 ("NAV/RNAVX", "NAV/RNAVINOP","DAT/CPDLCX" or "COM/EXM833").

Note 6: Operators of aircraft approved for P-RNAV, relying solely on VOR/DME for determination of position, shall insert the letter Z in item 10a and the descriptor "NAV/EURPRNAV" in item 18.

Note 7: Information on navigation capability is provided to ATC for clearance and routing purposes.

1.5.5.2 ITEM 10b: Surveillance Equipment and Capabilities

Insert N if no surveillance equipment for the route to be flown is carried or the equipment is unserviceable, or insert one or more of the following descriptors, to a maximum of 20 characters, to describe the serviceable surveillance equipment and/or capabilities on board:

Equipment	Letter	Significance
SSR equipment	**A**	Transponder - Mode A (4 digits - 4096 codes)
	C	Transponder - Mode A (4 digits - 4096 codes) and Mode C
	E	Transponder - Mode S, including aircraft identification, pressure-altitude and extended squitter (ADS-B) capability
	H	Transponder - Mode S, including aircraft identification, pressure-altitude and enhanced surveillance capability (*)
	I	Transponder - Mode S, including aircraft identification, but no pressure-altitude capability
	L	Transponder - Mode S, including aircraft identification, pressure-altitude, extended squitter (ADS-B) and enhanced surveillance capability (*)
	P	Transponder - Mode S, including pressure-altitude, but no aircraft identification capability
	S	Transponder - Mode S, including both pressure-altitude and aircraft identification capability
	X	Transponder - Mode S with neither aircraft identification nor pressure-altitude capability
ADS equipment	**B1**	ADS-B with dedicated 1090MHZ ADS-B "out" capability
	B2	ADS-B with dedicated 1090MHZ ADS-B "out" and "in" capability
	U1	ADS-B "out" capability using UAT
	U2	ADS-B "out" and "in" capability using UAT
	V1	ADS-B "out" capability using VDL Mode 4
	V2	ADS-B "out" and "in" capability using VDL Mode 4
	D1	ADS-C with FANS 1/A capabilities
	G1	ADS-C with ATN capabilities

(*) Enhanced surveillance capability is the ability of the aircraft to down-link aircraft derived data via Mode S transponder.

Note: Additional surveillance applications and capabilities should be listed in Item 18 following the indicator "SUR/".

1.5.6 Item 13: Departure Aerodrome and Time (8 characters)

Insert the ICAO location indicator of the departure aerodrome. If no location indicator has been assigned, insert "ZZZZ" and specify the name and location of the aerodrome in item 18, preceded by "DEP/".

If the aircraft has not taken off from an aerodrome, insert "ZZZZ" and specify the first point of the route or the marker beacon in item 18, preceded by "DEP/".

If the flight plan is received from an aircraft in flight, insert "AFIL" and specify the ICAO location indicator of the ATS unit from which supplementary flight plan data can be obtained in item 18, preceded by "DEP/".

Then, without a space, insert for a flight plan submitted before departure, the EOBT, or, for a flight plan received from an aircraft in flight, the actual or estimated time over the first point of the route to which the flight plan applies.

1.5.7 Item 15: Route

Insert the first cruising speed as in a) and the first cruising level as in b), without a space between them. Then, following the arrow, insert the route description as in c).

1.5.7.1 Cruising Speed (MAX 5 characters)

Insert the TAS for the first or the whole cruising portion of the flight, in terms of:

- kilometers per hour, expressed as “K” followed by 4 figures (e.g. “K0830”);
- knots, expressed as “N” followed by 4 figures (e.g. “N0485”);
- Mach number, when so prescribed by the appropriate ATS authority, to the nearest hundredth of Mach, expressed as “M” followed by 3 figures (e.g. “M082”).

1.5.7.2 Cruising Level (MAX 5 characters)

Insert the planned cruising level for the first or the whole portion of the route to be flown, in terms of:

- Flight level, expressed as “F” followed by 3 figures (e.g. “F085”, “F330”);
- Standard Metric Level in tens of meters, expressed as "S" followed by 4 figures (e.g. “S1130”), when so prescribed by the appropriate ATS authorities;
- Altitude in hundreds of feet, expressed as “A” followed by 3 figures (e.g. “A045”, “A100”);
- Altitude in tens of metres, expressed as “M” followed by 4 figures (e.g. “M0840”);
- for uncontrolled VFR flights, the letters “VFR”.

1.5.7.3 Route (including changes of speed, level and/or flight rules)

1.5.7.3.1 Flights along designated ATS routes or direct routes (DCT)

Insert, if the departure aerodrome is located on or connected to the ATS route or direct route, the significant point at the end of the SID. If the departure aerodrome is not on or connected to the ATS route or direct route, insert the letters “DCT” followed by the point of joining the first ATS route or direct route, followed by the designator of the ATS route or the direct route.

Then, insert each point at which either a change of speed or and/or level is planned to commence, or a change of ATS route or direct route, and/or a change of flight rules is planned. Followed by the designator of the next ATS route segment, even if the same as the previous one, or by “DCT”, if the flight to the next point will be outside a designated route, unless both points are defined by geographical co-ordinates.

When a transition is planned between a lower and upper ATS route and the routes are oriented in the same direction, the point of transition need not be inserted.

If a STAR is prescribed for the aerodrome of destination, the last point of the route shall be the first point of a STAR.

1.5.7.3.2 Flights outside designated ATS routes

Insert points normally not more than 30 MIN flying time or 200 NM apart, including each point at which a change of speed or level, a change of track, or a change of flight rules is planned.

Or, when required by appropriate ATS authorities, define the track of flights operating predominantly in an east-west direction between 70°N and 70°S by reference to significant points formed by the intersections of half or whole degrees of latitude with meridians spaced at intervals of ten degrees of longitude. For flights operating in areas outside those latitudes, the tracks shall be defined by significant points formed by the intersection of parallels of latitude with meridians normally spaced at twenty degrees of longitude. The distance between significant points shall, as far as possible, not exceed one hour flight time. Additional significant points shall be established as deemed necessary.

For flights operating predominantly in a north-south direction, define tracks by reference to significant points formed by the intersection of whole degrees of longitude with specified parallels of latitude which are spaced at five degrees.

Insert “DCT” between successive points unless both points are defined by geographical co-ordinates or by bearing and distance.

1.5.7.3.3 Coding conventions

Use only the following conventions and separate each sub-time by a space:

ATS route (2 to 7 characters)

The coded designator assigned to the route or route segment including, where appropriate, the coded designator assigned to the standard departure or arrival route (e.g. “BCN1”, “B1”, “R14”, “UB10”, “KODAP2A”).

Note: Provisions for the application of route designators are contained in appendix 1 of ICAO Annex 11, whilst guidance material on the application of an RNP type to a specific route segment(s), route(s) or area is contained in ICAO Doc 9613.

Significant point (2 to 11 characters)

The coded designator (2 to 5 characters) assigned to the point (e.g. “LN”, “MAY”, “HADDY”), or if no coded designator has been assigned, one of the following ways:

- Degrees only (7 characters): two figures describing latitude in degrees, followed by “N” (north) or “S” (south), followed by three figures describing longitude in degrees, followed by “E” (east) or “W” (west). Make up the correct number of figures, where necessary, by insertion of zeros (e.g. “46N078W”);
- Degrees and minutes (11 characters): four figures describing latitude in degrees and tens and units of minutes, followed by “N” (north) or “S” (south), followed by five figures describing longitude in degrees and tens and units of

minutes, followed by “E” (east) or “W” (west). Make up the correct number of figures, where necessary, by insertion of zeros (e.g. “4620N07805W”);

- Bearing and distance from a significant point: The identification of the significant point followed by the bearing from the point in the form three figures giving degrees (MAG), then the distance from the point in the form of three figures expressing nautical miles. Make up the correct number of figures, where necessary, by insertion of zeros (e.g. a point 180° MAG at a distance of 40NM from VOR “DUB” should be expressed as “DUB180040”).

Change of speed or level (MAX 21 characters)

The significant point at which a change of speed (5% TAS or M0.01, or more) or a change of level is planned to commence, followed by an oblique stroke and both the cruising speed and the cruising level, without a space between them, even when only one of these quantities will be changed.

Examples:

“LN/N0284A045”	“4602N07805W/N0500F350”
“HADDY/N0420F330”	“DUB180040/N0350M0840”
“MAY/N0305F180”	“46N078W/M082F330”

Change of flight rules (MAX 3 characters)

The significant point at which the change of flight rules is planned, followed by a space and one of the following:

“VFR” - if from IFR to VFR;

“IFR” - if from VFR to IFR.

Examples:

- “LN VFR”
- “LN/N0284A050 IFR”

Cruise climb (MAX 28 characters)

The letter “C” followed by an oblique stroke; then the point at which cruise climb is planned to start, expressed exactly as in 2. above, followed by an oblique stroke; then the speed to be maintained during cruise climb, expressed exactly as in a) above, followed by the two levels defining the layer to be occupied during cruise climb, each level expressed exactly as in b) above, or the level above which cruise climb is planned, followed by the letters “PLUS”, without a space between them.

Examples:

- “C/48N050W/M082F290F350”
- “C/48N050W/M082F290PLUS”
- “C/52N050W/M220F580F620”

En-route special activities (MAX 10 characters)

Flights that are conducted entirely within the IFPS zone and that encounter time delays on their route due to special en-route activities (e.g. training activities, photographic missions or air-to-air refueling), may indicate such time delay by adding a STAY indicator between the entry and the exit point of the area of activity. The STAY indicator shall consist of the letters “STAY”, followed by a sequence number of one digit, an oblique stroke and then four numbers indicating the duration of the time delay in hours and minutes.

Examples:

- “SOG STAY1/0100 DUB”
- “SOG STAY1/0050 SOG”
- “SOG STAY1/0100 DUB DCT WAL STAY2/0030 DCS”

1.5.7.3.4 RVSM airspace

Operators of RVSM approved aircraft and non-RVSM approved state aircraft intending to operate within EUR RVSM airspace shall include the following in item 15:

- the entry point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the RVSM entry point;
- the exit point at the lateral limits of the EUR RVSM airspace and the requested flight level for that portion of the route commencing immediately after the RVSM exit point. When the RVSM exit point is situated in the planned final descent trajectory, the requirement to include a requested flight level is withdrawn. Where appropriate, a co-located STAR may be included after the RVSM exit point.

1.5.8 Item 16: Destination Aerodrome, Total Estimated Elapsed Time and Alternate Destination Aerodrome(s)

1.5.8.1 Destination Aerodrome and Total Estimated Elapsed Time (8 characters)

Insert the ICAO location indicator of the destination aerodrome followed, without a space, by the total estimated elapsed time, or, if no location indicator has been assigned, insert “ZZZZ” followed, without a space, by the total estimated elapsed time, and specify the name and location of the aerodrome in item 18, as indicated below (§ 1.5.9).

Note: For a flight plan received from an aircraft in flight, the total estimated elapsed time is the estimated time from the first point of the route to which the flight plan applies to the termination point of the flight plan.

1.5.8.2 Alternate Destination Aerodrome(s) (4 characters)

Insert the ICAO location indicator(s) of not more than two alternate destination aerodromes, separated by a space, or, if no location indicator has been assigned to the alternate aerodrome, insert “ZZZZ” and specify the name and location of the alternate aerodrome in item 18, as indicated below (§ 1.5.9).

1.5.9 Item 18: Other Information

Operators are warned that the use of indicators not included in the provisions may result in data being rejected, processed incorrectly or lost.

Only indicators described in the provisions may be used, and they must be inserted in the order shown. The indicators defined are as follows, and are listed in the order in which they are to be inserted, if used:

STS/
Reason for special handling by ATS, e.g. a search and rescue mission, as follows:

STS/ALTRV	for a flight operated in accordance with an altitude reservation
STS/ATFMX	for a flight approved for exemption from ATFM measures by the appropriate ATS authority
STS/FFR	for a fire-fighting flight
STS/FLTCK	for a flight to check calibration of navaids
STS/HAZMAT	for a flight carrying hazardous material
STS/HEAD	for a flight with Head of State status
STS/HOSP	for a medical flight declared by medical authorities
STS/HUM	for a flight operating on a humanitarian mission
STS/MARSA	for a flight for which a military entity assumes responsibility for separation of military aircraft
STS/MEDEVAC	for a life critical medical emergency evacuation
STS/NONRVSM	for a non-RVSM capable flight intending to operate in RVSM airspace
STS/SAR	for a flight engaged in a search and rescue mission
STS/STATE	for a flight engaged in military, customs or police services

Note: Other reasons for special handling by ATS shall be denoted under the designator “RMK/”

PBN/
Indication of RNAV and/or RNP capabilities. Include as many of the descriptors below, as apply to the flight, up to a maximum of 8 entries, i.e. a total of not more than 16 characters.

RNAV SPECIFICATIONS		**RNP SPECIFICATIONS**	
A1	RNAV 10 (RNP 10)	**L1**	RNP 4
B1	RNAV 5 all permitted sensors	**O1**	Basic RNP 1 all permitted sensors
B2	RNAV 5 GNSS	**O2**	Basic RNP 1 GNSS
B3	RNAV 5 DME/DME	**O3**	Basic RNP 1 DME/DME
B4	RNAV 5 VOR/DME	**O4**	Basic RNP 1 DME/DME/IRU
B5	RNAV 5 INS or IRS	**S1**	RNP APCH
B6	RNAV 5 LORAN-C	**S2**	RNP APCH with BARO-VNAV
C1	RNAV 2 all permitted sensors	**T1**	RNP AR APCH with RF (special authorization required)
C2	RNAV 2 GNSS	**T2**	RNP AR APCH without RF (special authorization required)
C3	RNAV 2 DME/DME		
C4	RNAV 2 DME/DME/IRU		
D1	RNAV 1 all permitted sensors		
D2	RNAV 1 GNSS		
D3	RNAV 1 DME/DME		
D4	RNAV 1 DME/DME/IRU		

Note 1: Operators of aircraft approved for B-RNAV shall indicate the availability of capabilities relevant to RNAV 5. It is not necessary to insert additional information to indicate the aircraft is approved for B-RNAV.

Note 2: Operators of aircraft approved for P-RNAV, not relying solely on VOR/DME for determination of position, shall indicate the availability of capabilities relevant to RNAV 1. It is not necessary to insert additional information to indicate the aircraft is approved for P-RNAV.

NAV/
Significant data related to navigation equipment, other than specified in “PBN/”, as required by the appropriate ATS authority. Indicate GNSS augmentation under this indicator, with a space between two or more methods of augmentation, e.g. “NAV/GBAS SBAS”. If appropriate, insert “RNAVX” or “RNAVINOP” as described in the *IFPS Users Manual*, or “EURPRNAV” as described in chapter 2 of EUR SUPPS, *ICAO Doc 7030*.

COM/
Indicate communications applications or capabilities not specified in item 10a. If appropriate, insert “EXM833” as described in chapter 2 of EUR SUPPS, *ICAO Doc 7030*.

DAT/
Indicate data applications or capabilities not specified in item 10a. If appropriate, insert “CPDLCX” as described in chapter 2 of EUR SUPPS, *ICAO Doc 7030*.

SUR/
Include surveillance applications or capabilities not specified by item 10b.

DEP/
Name and location of departure aerodrome, if “ZZZZ” is inserted in item 13, or the ICAO location indicator of the location of the ATS unit from which supplementary flight plan data can be obtained, if “AFIL” is inserted in item 13. For aerodromes not listed in the relevant AIP, indicate location in any of the following ways:

- With four figures describing latitude in degrees and tens and units of minutes, followed by “N” (north) or “S” (south), followed by five figures describing longitude in degrees and tens and units of minutes, followed by “E” (east) or “W” (west). Make up the correct number of figures, where necessary, by insertion of zeros, e.g. “4620N07805W” (11characters);
- Bearing and distance from the nearest significant point, as follows: the identification of the significant point followed by the bearing from the point in the form three figures giving degrees (MAG), then the distance from the point in the form of three figures expressing nautical miles. In areas of high latitude where it is determined by the appropriate authority that reference to degrees magnetic is impractical, degrees true may be used. Make up the correct number of figures, where necessary, by insertion of zeros (e.g. a point 180° MAG at a distance of 40 NM from VOR “DUB” should be expressed as “DUB180040”;
- The first point of the route (name or LAT/LONG) or the marker radio beacon, if the aircraft has not taken off from an aerodrome.

DEST/
Name and location of destination aerodrome, if “ZZZZ” is inserted in item 16. For aerodromes not listed in the relevant AIP, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described under “DEP/” above.

DOF/
Date of flight departure in a six figure format (YYMMDD where: YY = year; MM = month; DD = day).

REG/
The nationality or common mark and registration mark of the aircraft, if different from the aircraft identification in item 7.

EET/
Significant points or FIR boundary designators and accumulated estimated elapsed times from take-off to such points or FIR boundaries, when so prescribed on the basis of regional air navigation agreements, or by the appropriate ATS authority (e.g. “EET/CAP0745 XYZ0830”, “EET/EINN0204”).

SEL/
SELCAL code, for aircraft so equipped.

TYP/
Type(s) of aircraft, preceded if necessary without a space by number(s) of aircraft and separated by one space, if “ZZZZ” is inserted in item 9 (e.g. “TYP/2F15 5F5 3B2”).

CODE/
Aircraft address (expressed in the form of an alphanumerical code of six hexadecimal characters) when required by the appropriate ATS authority (e.g. “F00001” is the lowest aircraft address contained in the specific block administered by ICAO).

RVR/
The minimum RVR requirement of the flight, as detailed in the EUR SUPPS, *ICAO Doc 7030*.

DLE/
In case of en route delay or holding, insert the significant point(s) on the route where a delay is planned to occur, followed by the length of delay using four figure time in hours and minutes (hhmm) (e.g. “DLE/MDG0030”).

OPR/
ICAO designator or name of the aircraft operating agency, if different from the aircraft identification in item 7.

ORGN/
The originator’s eight letter AFTN address or other appropriate contact details, in cases where the originator of the flight plan may not be readily identified, as required by the appropriate ATS authority.

Note: In some areas, flight plan reception centres may insert the “ORGN/” identifier and originator’s AFTN address automatically.

PER/
Aircraft performance data, indicated by a single letter as specified in *ICAO Doc 8168, Volume I*, if so prescribed by the appropriate ATS authority.

ALTN/
Name of destination alternate aerodrome(s), if “ZZZZ” is inserted in item 16. For aerodromes not listed in the relevant AIP, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in “DEP/” above.

RALT/
ICAO four letter indicator(s) for en-route alternate(s), as specified in *ICAO Doc 7910*, or name(s) of en-route alternate aerodrome(s), if no indicator is allocated. For aerodromes not listed in the relevant AIP, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in "DEP/" above.

TALT/
ICAO four letter indicator(s) for take-off alternate, as specified in *ICAO Doc 7910*, Location Indicators, or name of take-off alternate aerodrome, if no indicator is allocated. For aerodromes not listed in the relevant AIP, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in "DEP/" above.

RIF/
The route details to the revised destination aerodrome, followed by the ICAO four-letter location indicator of the aerodrome. The revised route is subject to re-clearance in flight (e.g. "RIF/DTA HEC KLAX", "RIF/ESP G94 CLA YPPH").

RMK/
Any other plain language remarks when required by the appropriate ATS authority or deemed necessary.

RFP/
Q followed by a digit to indicate the sequence of the replacement flight plan being submitted, see ENR 1.9, § 5.3.

STAYINFOn/
Indication of the reason for the insertion of a STAY indicator in item 15 (see § 1.5.7 above). Insert "STAYINFO" followed by the sequence number of the STAY indicator, an oblique stroke and an explanation in free text (e.g. "STAYINFO1/ CALIBRATION OF SOG").

1.5.10 Item 19: Supplementary Information

Note: In the paper flight plan form, an indicator is crossed out to denote that it is not available, in the digital flight plan form however, a mark is placed at the emergency and survival equipment that is available.

1.5.10.1 Endurance

After "E/" insert a 4-figure group giving the fuel endurance in HR and MIN.

1.5.10.2 Persons on Board

After "P/" insert the total number of persons (passengers and crew) on board.

insert "TBN" (to be notified) if the total number of persons is not known at the time of filing.

1.5.10.3 Emergency and Survival Equipment

"R/" (RADIO)

- cross out "U" if UHF on FREQ 243.000 MHZ is not available;
- cross out "V" if VHF on FREQ 121.500 MHZ is not available;
- cross out "E" if emergency location beacon-aircraft (ELBA) is not available.

"S/" (SURVIVAL EQUIPMENT)

- cross out "P" if polar survival equipment is not carried;
- cross out "D" if desert survival equipment is not carried;
- cross out "M" if maritime survival equipment is not carried;
- cross out "J" if jungle survival equipment is not carried.

"J/" (JACKETS)

- cross out "J" if life jackets are not carried;
- cross out "L" if life jackets are not equipped with lights;
- cross out "F" if life jackets are not equipped with fluorescein;
- cross out "U" or "V" or both as in "R/" above to indicate radio capability of jackets, if any.

"D/" (DINGHIES)

- (Number): cross out "D" and "C" if no dinghies are carried, or insert number of dinghies carried;
- (Capacity): insert total capacity, in persons, of all dinghies carried;
- (Cover): cross out "C" if dinghies are not covered;
- (Colour): insert colour of dinghies if carried.

"A/" (AIRCRAFT COLOUR AND MARKINGS)

- insert colour of aircraft and significant markings.

"N/" (REMARKS)

- cross out "N" if no remarks, or indicate any other survival equipment carried and any other remarks regarding survival equipment.

"C/" (PILOT)

- insert name of pilot-in-command.

"Filed by": insert the name of the unit, agency or person filing the flight plan.

1.6 Changes to a Flight Plan (SERA.4015)

Except for the provisions described in ENR 1.1, § 1.10.2.2, all changes to a flight plan submitted for an IFR flight and/or a mixed flight rules flight shall be reported as soon as practicable to IFPS (either directly via AFTN or SITA, or through the intermediate of a local ARO).

All changes to VFR flight plans shall be reported as soon as practicable to the responsible ARO or to the appropriate ATS unit.

Note 1: Information submitted prior to departure regarding fuel endurance or total number of persons carried on board, if incorrect at the time of departure, constitutes a significant change to the flight plan and must be reported.

Note 2: Changes to the route of a flight plan affecting the AFS addresses, involve the cancellation of the flight plan and subsequent submission of a new flight plan, except for IFR flights remaining within the IFPS zone.

1.7 Closing a Full Flight Plan (SERA.4020)

A report of arrival shall be made either in person or by radio at the earliest possible moment after landing, to the appropriate ATS unit at the arrival aerodrome, by any flight for which a flight plan has been submitted.

When no ATS unit exists at the arrival aerodrome, the pilot of a flight for which a flight plan has been submitted shall ensure that the arrival report is made immediately after landing to Brussels ARO or to Brussels FIC or, if this is not possible, to any other ATS unit with the request to inform Brussels FIC.

Note: A flight plan and its associated messages submitted for a VFR flight to be conducted wholly within Brussels FIR will not be sent to the destination aerodrome if the latter is a private aerodrome. This flight will nevertheless be provided with alerting service in so far as it is known or believed to be in a state of emergency. As a consequence, the pilot shall ensure that an arrival message is forwarded immediately after landing to the departure aerodrome or, if this is not possible, to Brussels FIC or Brussels ATC with the request to inform the aerodrome. Any failure to meet this obligation may cause unnecessary and expensive SAR operations.

Arrival reports made by the pilots shall contain the following information:

- aircraft identification;
- departure aerodrome;
- destination aerodrome (in case of diversion only);
- arrival aerodrome;
- time of arrival.

1.8 Repetitive Flight Plans (RPL)

1.8.1 General

RPL shall not be used for flights other than IFR flights operated regularly on the same day(s) of consecutive weeks and on at least ten occasions or every day over a period of at least ten consecutive days. The elements of each flight plan shall have a high degree of stability.

RPL shall cover the entire flight from the departure aerodrome to the destination aerodrome. RPL procedures shall be applied only when all ATS authorities concerned with the flights have agreed to accept RPL.

The use by States of RPL for international flight shall be subject to the provision that the affected adjacent States either already use RPL or will use them at the same time. The procedures for use between States shall be the subject of bilateral, multilateral or regional air navigation agreement as appropriate.

Conditions governing submission, notification of changes, or cancellation of RPL shall be the subject of appropriate arrangements between operators and the ATS authority concerned or of regional air navigation agreements.

An RPL shall comprise information regarding such of the following items as are considered relevant by the appropriate ATS authority:

- validity period of the flight plan;
- days of operation;
- aircraft identification;
- aircraft type and wake turbulence category;
- departure aerodrome;
- EOBT;
- cruising speed(s);
- cruising level(s);
- route to be followed;
- destination aerodrome;
- total estimated elapsed time;
- indication of the location where the following information may be obtained immediately upon request:
    - alternate aerodromes;
    - fuel endurance;
    - total number of persons on board;

- emergency equipment;
- other information.

In order to avoid a disproportionate workload on ATS units, RPL will not be accepted for any flight conducted on 25 DEC. On this day, individual flight plans shall be filed for all flights.

1.8.2 Submission of RPL Data

Eurocontrol NM assumes the full responsibility for the reception, processing and distribution of RPL data within the Brussels FIR/UIR.

Operators shall submit RPL data to:

Post: EUROCONTROL NM
FDO / RPL Team
Rue de la Fusée / Raketstraat 96
1130 Brussels
BELGIUM

TEL: +32 (0) 2 729 98 47

FAX: +32 (0) 2 729 90 42

SITA: BRUER7X

Note: For flights conducted partially outside the IFPS Zone and for which an RPL is filed, the RPL data shall additionally be forwarded to the RPL offices of the States concerned outside the IFPS-Zone, using the appropriate form.

Details of the IFPS RPL format and submission notes may be found in the *IFPS Users Manual* (see ENR 1.9, § 3).

2 MILITARY

2.1 Requirement to submit a Flight Plan

Information relative to an intended flight or portion of a flight, to be provided to ATS units, shall be in the form of a flight plan.

Traffic that intends to file an OAT flight plan outside the published OPS HR of Semmerzake ATCC has to obtain prior permission from COMOPSAIR (PPR 72HR). The request shall be sent to the FI MDC, FAX + 32 (0) 2 752 42 01. The permission will only be granted under exceptional circumstances when the ATS provided by a civil agency would not be possible or would not be desirable (e.g. sensitive military flight). If permission has been granted, Semmerzake ATCC will provide ATS only to that traffic for which the permission has been obtained.

Compliance with diplomatic rules as published by the foreign authorities is compulsory.

A flight plan shall be submitted prior to every flight, with exemption of the following flights:

a. any flight remaining within the limits of a local CTR/TMA;
b. a QRA(I) or SAR mission.

2.2 Submission of a Flight Plan

A flight plan form based on the model shown hereafter shall be provided and shall be used by AIS and ATS units for the purpose of completing flight plans.

A flight plan is submitted by the local AIS section using the standard ICAO format. The addressing of the flight plan has to be in accordance with ENR 1.11.

A flight plan submitted during flight should normally be transmitted to the ATS unit in charge of the FIR or control area in which the aircraft is flying in, or through which the aircraft wishes to fly.

In case of an AFIL, the ATS unit receiving the flight plan will be responsible for addressing the flight plan message in accordance with the procedures described above.

An AFIL for a flight to be provided with ATC service shall be submitted at a time which will ensure its receipt by the appropriate ATS unit at least 10MIN before the aircraft is estimated to reach:

- the intended point of entry into a control area;
- the point of crossing an airway.

Note: If the flight plan is submitted for the purpose of obtaining ATC service, the aircraft is required to wait for an ATC clearance prior to proceed under the conditions requiring compliance with ATC procedures.

2.2.1 Delay of Flight Plan Submission

- GAT or mixed OAT/GAT (subject to ATFM measures): at least 3HR before EOBT/ETD;
- Other flights (except night flights): at least 60MIN prior ETD;
- OAT night flights conducted entirely or partially in class G airspace: before 1100 of the same day;
- OAT night flights conducted entirely in controlled airspace (class C and D): at least 60MIN prior ETD;
- Flights to foreign FIR/UIR: according to foreign national regulations.

Note: Reservation of airspace by foreign Mil aircraft: see ENR 5.2, § 1.3

In the event of a delay of 30MIN in excess of the EOBT for a flight for which a flight plan has been submitted, the flight plan shall be amended or a new flight plan should be submitted and the old one should be cancelled. See ENR 1.9, § 5.2 for the specifications in reference to FPL which are subject to ATFM measures.

2.3 Completion of a Flight Plan

See ENR 1.10, § 1.5 for the general instructions concerning completion of a flight plan. The term “aerodrome”’ where used in a flight plan is intended to cover also sites other than aerodromes which may be used by certain types of aircraft, e.g. helicopters and balloons.

2.3.1 Insertion of ATS Data

Complete items 7 to 19 as indicated hereunder. Item numbers on the form are not consecutive, as they respond to Field Type numbers in ATS messages.

If a flight plan for a flight conducted wholly in the EUR Region is filed more than 24HR in advance of the EOBT, it is mandatory to provide the date of the flight. This information will be indicated in the item 18 of the flight plan in the form of a 3-letter indicator (DOF) followed by an oblique stroke and the date of the flight in a 6-figure group format: DOF/YYMMDD (YY = year; MM = month; DD = day). These flight plans shall be processed and transmitted without being held in abeyance.

Note: Air traffic services data systems may impose communications or processing constraints on information in filed flight plans. Possible constraints may, for example, be limits with regard to item length, number of elements in the route item or total flight plan length. Significant constraints are documented in the relevant Aeronautical Information Publication.

2.3.1.1 Item 7: Aircraft Identification (MAX 7 or 13 characters)

Insert one of the following aircraft identifications, not exceeding 7 characters and without hyphens or symbols:

a. the registration marking of the aircraft (e.g. “CH11”, “OOSDE”), when:
   - in RTF the call sign to be used by the aircraft will consist of this identification alone (e.g. “CH11”), or preceded by the ICAO telephony designator for the aircraft operating agency (e.g. “Belgian Air Force CH11”);
   - the aircraft is not equipped with radio;

b. the ICAO designator for the aircraft operating agency followed by the flight identification (e.g.” BAF105”) when in RTF the call sign to be used by the aircraft will consist of the ICAO telephony designator for the operating agency followed by the flight identification (e.g. “Belgian Air Force 105”);

c. The SSR mode A and code may be included. It shall consist of the letter A and it shall be followed by four numerics between the values of 0 and 7 and shall be separated from the aircraft identification by a slash ‘/’. The maximum number of characters, including the ‘/’, shall be 13 (e.g. ABC567C/A4510).

Note1: What is entered at item 7 before the slash “/” (aircraft identifications) shall match exactly what is entered in the Mode S aircraft identification (also known as flight ID) input device in the cockpit. If it does not, then the aircraft will not be correlated with its stored flight plan and delays will ensue.

Note2: No spaces between the designator letters and flight number, nor any zeros preceding the flight number are allowed.

2.3.1.2 Item 8: Flight Rules and Type of Flight (1 or 2 characters)

FLIGHT RULES

Insert one of the following letters to denote the category of flight rules with which the pilot intends to comply:

- I - if it is intended that the entire flight will be operated under the IFR;
- V - if it is intended that the entire flight will be operated under the VFR;
- Y - if the flight initially will be operated under the IFR, followed by one or more subsequent changes of flight rules;
- Z - if the flight initially will be operated under the VFR, followed by one or more subsequent changes of flight rules.

Note: Specify the point(s) where a change of flight rules is planned in item 15.

TYPE OF FLIGHT

Insert one of the following letters to denote the type of flight:

- S - Scheduled air service;
- N - Non-scheduled air transport operation;
- G - General aviation;
- M - Military;
- X - other than any of the categories defined above (see note).

Note: Specify status of a flight following the indicator STS in Item 18, or when necessary to denote other reasons for specific handling by ATS, indicate the reason following the indicator RMK/ in Item 18.

2.3.1.3 Item 9: Number and Type of Aircraft and Wake Turbulence Category

See § 1.5.4.

2.3.1.4 Item 10: Equipment

Capabilities comprise the following elements:

- Presence of relevant serviceable equipment on board the aircraft;
- Equipment and capabilities commensurate with flight crew qualifications;
- Where applicable, authorization from the appropriate authority.

Note: Compliance with constraints identified in the EUROCONTROL Basic CFMU Handbook – IFPS Manual applicable to equipment, capabilities and surveillance is compulsory (e.g. IFPS Manual §48,-49,82).

RADIO COMMUNICATION, NAVIGATION AND APPROACH AID EQUIPMENT AND CAPABILITIES

Insert the letter as follows:

- N - if no COM/NAV/APCH aid equipment for the route to be flown is carried, or the equipment is unserviceable,

or

- S - if standard COM/NAV/APCH aid equipment for the route to be flown is carried and serviceable (see note 2 hereafter).

and/or

Insert one or more of the following letters to indicate the serviceable COM/NAV/APCH aid equipment and capabilities available:

A	GBAS landing system	J7	CPDLC FANS 1/A SATCOM (Iridium)
B	LPV (APV with SBAS)	K	MLS
C	LORAN C	L	ILS
D	DME	M1	ATC RTF SATCOM(INMARSAT)
E1	FMC WPR ACARS	M2	ATC RTF (MTSAT)
E2	D-FIS ACARS	M3	ATC RTF (Iridium)
E3	PDC ACARS	O	VOR
F	ADF	P1-P9	Reserved for RCP
G	GNSS (See Note 3)		
H	HF RTF	R	PBN approved (See Note 5)
I	Inertial Navigation	T	TACAN
J1	CPDLC ATN VDL Mode 2 (See Note 4)	U	UHF RTF
J2	CPDLC FANS 1/A VDL HFDL	V	VHF RTF
J3	CPDLC FANS 1/A VDL Mode 4	W	RVSM approved (See Note 8)
J4	CPDLC FANS 1/A VDL Mode 2	X	MNPS approved
J5	CPDLC FANS 1/A SATCOM (INMARSAT)	Y	VHF with 8.33kHz channel spacing capability (See Note 9)
J6	CPDLC FANS 1/A SATCOM (MTSAT)	Z	Other equipment carried or other capabilities (See Note 6)

Operators of aircraft approved for basic area navigation (B-RNAV / RNAV5) operations shall insert the designator ‘R’ in Item 10a of the flight plan and PBN/ in Item 18 followed by the appropriate capability of that flight.
The PBN descriptors for B-RNAV are: B1, B2, B3, B4, and B5.

Operations of aircraft approved for precision area navigation (P-RNAV) operations shall, in addition to the designator ‘R’ in Item 10a, also insert PBN/ in Item 18 followed by the appropriate capability of that flight.
The PBN descriptors for P-RNAV are: O1, O2, O3, O4, D1, D2, D3, and D4. It is also possible to indicate the P-RNAV capability by inserting’ Z’ in Item 10a and NAV/P-RNAV in Item 18.

Operators of State aircraft not equipped with RNAV shall not insert the designators ‘S’ or ‘R’ in Item 10 of the flight plan. Instead, the letter ‘Z’ shall be inserted in Item 10a and NAV/NONRNAV shall be inserted in Item 18 of the flight plan.

Where a failure or degradation results in the aircraft being unable to meet the B-RNAV functionality and accuracy requirements before departure, the operator of the aircraft shall not insert the designators ‘S’ or ‘R’ in Item 10a of the flight plan. Since such flights require special handling by ATC, the letter ‘Z’ shall be inserted in Item 10a and Item 18 shall contain NAV/RNAVINOP.

Note1: Any alphanumeric characters not indicated above are reserved.

Note2: If the letter 'S' is used, standard equipment is considered to be VHF RTF, VOR and ILS, unless another combination is prescribed by the appropriate ATS authority.

Note3: If the letter 'G' is used, the types of external GNSS augmentation, if any, are specified in Item 18 following the indicator NAV/ and separated by a space.

Note4: See RTCA/EUROCAE Interoperability Requirements Standard For ATN Baseline 1 (ATN B1 INTEROO Standard – DO-280B/ED-110B) for data link services air traffic control clearance and information/air traffic control communications management/air traffic control microphone check.

Note5: If the letter 'R' is used, the performance based navigation levels that can be met shall be specified in Item 18 following the indicator PBN/. Guidance material on the application of performance based navigation to a specific route segment, route or area is contained in the Performance-Based Navigation Manual (Doc 9613).

Note6: If the letter 'Z' is used, specify in Item 18 the other equipment carried or other capabilities, preceded by COM/, NAV/ and/or DAT, as appropriate.

Exemptions for RNAV, CPDLC and 8.33 kHz are to be indicated by inserting the letter 'Z' in Item 10a and then inserting the appropriate descriptors in the following indicators in Item 18:

- *Insert COM/EXM833*
- *Insert NAV/RNAVX or NAV/RNOVINOP as appropriate;*
- *Insert DAT/CPDLCX*

Note7: Information on navigation capability is provided to ATC for clearance and routing purposes.

Note8: RVSM approved aircraft are required to indicate the approval status by inserting the letter 'W', regardless of the requested FL. Formation FLT shall NOT insert 'W', regardless of the RVSM approval status of the individual aircraft. Formation FLT of state aircraft in RVSM airspace shall include STS/NONRVSM in Item 18 of the FPL. Operators of non-RVSM approved state aircraft with a requested FL of 290 or above shall insert STS/NONRVSM in Item 18.

Note9: In addition to the letter 'S' and/or any other letters, as appropriate, the letter 'Y' shall be inserted in Item 10a of the FPL, for aircraft equipped with 8.33kHz channel spacing capable radio equipment. aircraft normally capable of operating above FL195, but planning to fly below these levels, shall include the letter 'Y' as specified above.

If the aircraft is not equipped with 8.33kHz radios but is exempted from the carriage of the 8.33kHz radios, the letter 'Z' shall be inserted in Item 10a instead of 'Y', and COM/EXM833 shall be inserted in the Item 18 of the FPL.

Only those State aircraft that are not equipped with 8.33kHz capable radios but are equipped with UHF, shall be permitted to fly in 8.33kHz airspace where UHF coverage is provided or special procedures are implemented. To indicate such, the letter 'M' shall be inserted in Item 8: Flight Type; both letters 'U' and 'Z' shall be inserted in Item 10a and 'COM/EXM833' shall be inserted in Item 18 of the FPL.

2.3.1.5 Item 10B: Surveillance Equipment

Insert 'N' if no surveillance equipment for the route to be flown is carried or the equipment is unserviceable,

or

Insert one or more of the following descriptors, to a maximum of 20 characters, to describe the serviceable surveillance equipment and/or capabilities on board:

SSR Mode A and C:

- A - Transponder - Mode A (4digits - 4096 codes)
- C - Transponder - Mode A (4digits - 4096 codes) and Mode C

SSR Mode S:

- E - Transponder - Mode S, including aircraft identification, pressure-altitude and extended squitter (ADS-B) capability
- H - Transponder - Mode S, including aircraft identification, pressure-altitude and enhanced surveillance capability
- I - Transponder - Mode S, including aircraft identification, but no pressure-altitude capability
- L - Transponder - Mode S, including aircraft identification, pressure-altitude, extended squitter (ADS-B) and enhanced surveillance capability
- P - Transponder - Mode S, including pressure-altitude, but no aircraft identification capability
- S - Transponder - Mode S, including both pressure altitude and aircraft identification capability
- X - Mode S with neither aircraft identification nor pressure-altitude capability

Note: Enhanced surveillance capability is the ability of the aircraft to down-link aircraft derived data via a Mode S transponder.

ADS-B:

- B1 - ADS-B with dedicated 1090 MHz ADS-B "out" capability
- B2 - ADS-B with dedicated 1090 MHz ADS-B "out" and "in" capability
- U1 - ADS-B "out" capability using UAT
- U2 - ADS-B "out" and "in" capability using UAT
- V1 - ADS-B "out" capability using VDL Mode 4
- V2 - ADS-B "out" and "in" capability using VDL Mode 4

ADS-C:

- D1 - ADS-Cwith FANS 1/A capabilities
- G1 - ADS-C with ATN capabilities

Alphanumeric characters not indicated above are reserved.

Example: ADE3RV/HB2U2V2G1

Note: Additional surveillance application should be listed in Item 18 following the indicator SUR/.

Remarks:

What is entered at Item 7 before the slash '/' (aircraft identifications) match exactly what is entered in the Mode S aircraft Identification (also known as Flight ID) input device in the cockpit. If it does not, then the aircraft will not be correlated with its stored FPL and delays will ensue.

There must be no spaces between the designator letters and flight number, nor any zeros preceding the flight number.

2.3.1.6 Item 13: Departure Aerodrome and Time (8 characters)

See § 1.5.6.

2.3.1.7 Item 15: Route

See § 1.5.7.

When applicable, military users shall insert information concerning the change of type of flight (OAT/GAT). An OAT route section is used to mean any portion of the route of a flight which is conducted outside civil controlled airspace and which is operating in accordance with military air traffic services procedures and which as a result does not require systematic addressing to civilian ATS units.

IFPS uses the indicators "/OAT" and "/GAT" to indicate a change from GAT to OAT or vice versa. The indicator shall be inserted after the appropriate significant point in the route.

Examples:

"N0400F280 ... NTM/OAT TB6 ..."
"N0400F280 ... NTM/N0300F250/OAT TB6 ..."

Note: The significant point must be a published "civil" point.

IFPS always assumes that all flight plans begin GAT, unless it finds a change to GAT indicated later in the route. In this case it is assumed that everything prior to the change was OAT.

Note: Compliance with constraints identified in the EUROCONTROL Basic CFMU Handbook – IFPS Manual applicable to MIL/OAT flights is compulsory (e.g. IFPS Manual §36-42 and 50).

2.3.1.8 Item 16: Destination Aerodrome, Total Estimated Elapsed Time and Alternate Aerodrome(s)

See § 1.5.8.

2.3.1.9 Item 18: Other Information

See § 1.5.9.

Insert "0" (zero) if no other information or any other necessary information in the sequence shown hereunder, in the form of the appropriate indicator selected from those defined hereunder followed by an oblique stroke and the information to be recorded:

STS/ - Reason for special handling by ATS, e.g. a search and rescue mission, as follows:

- ALTRV - a flight operated in accordance with an altitude reservation;
- ATFMX - For a flight approved for exemption from ATFM measures by the appropriate ATS authority;
- FFR - Fire fighting;
- FLTCK - Flight check for calibration of navaids;
- HAZMAT - For a flight carrying hazardous material;
- HEAD - A flight with Head of State status;
- HOSP - For a medical flight declared by medical authorities;
- HUM - For a flight operating on a humanitarian mission;
- MARSA - For a flight for which a military entity assumes responsibility for separation of MIL aircraft;
- MEDEVAC - For a life critical medical emergency evacuation;
- NONRVSM - For a non-RVSM capable flight intending to operate in RVSM airspace;
- SAR - For a flight engaged in a search and rescue mission;
- STATE - For a flight engaged in military, customs or police services.

Other reasons for special handling by ATS shall be denoted under the designator RMK/.

PBN/ indication of RNAV and/or RNP capabilities. Include as many of the descriptors below, as apply to the flight, up to a maximum of 8 entries, i.e. a total of not more than 16 characters.

	RNAV Specifications
A1	RNAV 10 (RNP 10)
B1	RNAV 5 all permitted sensors
B2	RNAV 5 GNSS
B3	RNAV 5 DME/DME
B4	RNAV 5 VOR/DME
B5	RNAV 5 INS or IRS
B6	RNAV LORAN C
C1	RNAV 2 all permitted sensors
C2	RNAV 2 GNSS
C3	RNAV 2 DME/DME
C4	RNAV 2 VOR/DME
D1	RNAV 1 all permitted sensors
D2	RNAV 1 GNSS
D3	RNAV 1 DME/DME
D4	RNAV 1 DME/DME/IRU
	RNP Specifications
L1	RNP 4
O1	Basic RNP 1 all permitted sensors
O2	Basic RNP 1 GNSS
O3	Basic RNP 1 DME/DME
O4	Basic RNP 1 DME/DME/IRU
S1	RNP APCH
S2	RNP APCH with BARO-VNAV
T1	RNP AR APCH with RF (special authorization required)
T2	RNP AR APCH without RF (special authorization required)

Combinations of alphanumeric characters not indicated above are reserved.

If any of the indicators B1, B2, C1, C2, D1, D2, O1 or O2 are filed, then a ‘G’ must be present in Field 10a.

If any of the indicators B1, B3, C1, C3, D1, D3, O1 or O3 are filed, then a ‘D’ must be present in Field 10a.

If either of the indicators B1 or B4 is filed, then either an ‘O’ or ‘S’ must be present and a ‘D’ must also be present in Field 10a.

If any of the indicators B1, B5, C1, C4, D1, D4, O1 or O4 are filed, then an ‘I’ must be present in Field 10a.

If any of the indicators C1, C4, D1, D4, O1 or O4 are filed, then a ‘D’ must be present in Field 10a.

NAV/
Significant data related to navigation equipment, other than specified in PBN/, as required by the appropriate ATS authority. Indicate GNSS augmentation under this indicator, with a space between two or more methods of augmentation, e.g. NAV/ GBAS SBAS.

COM/
Indicate communications applications or capabilities not specified in Field 10a.

Example:
“COM/EXM833”

DAT/
Indicate data applications or capabilities not specified in Field 10a.

Example:
“DAT/CPDLCX”

SUR/
Include surveillance applications or capabilities not specified in Field 10b.

DEP/
Name and location of departure aerodrome, if ZZZZ is inserted in Item 13, or the ATS unit from which supplementary flight plan data can be obtained, if AFIL is inserted in Item 13. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location as follows:

With 4 figures describing latitude in degrees and tens and units of minutes followed by “N” (North) or “S” (South), followed by 5 figures describing longitude in degrees and tens and units of minutes, followed by “E” (East) or “W” (West). Make up the correct number of figures, where necessary, by insertion of zeros, e.g.4620N07805W (11 characters).

Or,
Bearing and distance from the nearest significant point, as follows:

The identification of the significant point followed by the bearing from the point in the form of 3 figures giving degrees magnetic, followed by the distance from the point in the form of 3 figures expressing nautical miles. In areas of high latitude where it is determined by the appropriate authority that reference to degrees magnetic is impractical, degrees true may be used. Make up the correct number of figures, where necessary, by insertion of zeros, e.g. a point of 180° magnetic at a distance of 40 nautical miles from VOR “DUB” should be expressed as DUB180040.

Or,
The first point of the route (name or LAT/LONG) or the marker radio beacon, if the aircraft has not taken off from an aerodrome.

DEST/
Name and location of destination aerodrome, if ZZZZ is inserted in Item 16. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described under DEP/ above.

DOF/
The date of flight departure in a six-figure format (YYMMDD, where YY equals the year, MM equals the month and DD equals the day).

REG/
The nationality or common mark and registration mark of the aircraft, if different from the aircraft identification in Item 7 (50 characters maximum).

EET/
Significant points or FIR boundary designators and accumulated estimated elapsed times from take-off to such points or FIR boundaries, when so prescribed on the basis of regional air navigation agreements, or by the appropriate ATS authority.

Examples:
“EET/CAP0745 XYZ0830”
“EET/EINN0204”

SEL/
SELCAL Code, for aircraft so equipped.

TYP/
Type(s) of aircraft, preceded if necessary without a space by number(s) of aircraft and separated by one space, if ZZZZ is inserted in Item 9.

Example:
“TYP/2F15 5F5 3B2”

CODE/
Aircraft address (expressed in the form of an alphanumerical code of six hexadecimal characters) when required by the appropriate ATS authority.

Example:
“F00001 is the lowest aircraft address contained in the specific block administered by ICAO.”

DLE/
Enroute delay or holding, insert the significant point(s) on the route where a delay is planned to occur, followed by the length of delay using four-figure time in hours and minutes (hhmm).

Example:
“DLE/MDG0030”

OPR/
ICAO designator or name of the aircraft operating agency, if different from the aircraft identification in item 7.

ORGN/
The originator’s 8 letter AFTN address or other appropriate contact details, in cases where the originator of the flight plan may not be readily identified, as required by the appropriate ATS authority.

Note 1: In some areas, flight plan reception centres may insert the ORGN/ identifier and originator’s AFTN address automatically.

Note 2: Check the EUROCONTROL Basic CFMU Handbook – IFPS Manual for further instructions.

PER/
Aircraft performance data, indicated by a single letter (A, B, C, D, E or H) as specified in *the Procedures for Air Navigation Services — Aircraft Operations (PANS-OPS, Doc 8168), Volume I — Flight Procedures*, if so prescribed by the appropriate ATS authority.

ALTN/
Name of destination alternate aerodrome(s), if ZZZZ is inserted in Item 16. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in DEP/ above.

RALT/
ICAO four letter indicator(s) for en-route alternate(s), as specified in *Doc 7910*, Location Indicators, or name(s) of en-route alternate aerodrome(s), if no indicator is allocated. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in DEP/ above.

TALT/
ICAO four letter indicator(s) for take-off alternate, as specified in *Doc 7910*, Location Indicators, or name of take-off alternate aerodrome, if no indicator is allocated. For aerodromes not listed in the relevant Aeronautical Information Publication, indicate location in LAT/LONG or bearing and distance from the nearest significant point, as described in DEP/ above.

RIF/
The route details to the revised destination aerodrome, followed by the ICAO four-letter location indicator of the aerodrome. The revised route is subject to re-clearance in flight.

Examples:
“RIF/DTA HEC KLAX”
“RIF/ESP G94 CLA YPPH”

RMK/
Any other plain-language remarks when required by the appropriate ATS authority or deemed necessary.

Note: RMK/IFPSRA (IFPS reroute accepted) is used where route definition help is sought. Check the EUROCONTROL Basic CFMU Handbook – IFPS Manual for further instructions.

STAYINFOn/
It shall be possible to indicate the reason for the STAY in the item 15 of the flight plan; for this purpose the sub-field heading ‘STAYINFOn’ shall be used, immediately followed by a ‘/’, then free alphanumeric text.

Example:
“Item 15: Route ….WAL STAY1/0100 WAL…. ”
“Item 18: Other Information STAYINFO1/CALIBRATION OF WAL”

2.3.1.10 Item 19: Supplementary Information

See § 1.5.10.

2.3.2 Acceptance of the Flight Plan

Indicate acceptance of the flight plan in the manner prescribed by the appropriate ATS authority.

2.3.3 Insertion of Data

Complete the FPL form.

Complete Item 19 (Supplementary information (not to be transmitted in FPL messages)) only when necessary; in accordance with the provisions in *PANS-ATM, chapter 11, 11.2.1.2,* unless ATS prescribes otherwise.

2.4 Transmission of a Filed Flight Plan

2.4.1 Correction

Unless otherwise prescribed, correct obvious format errors and/or omissions (i.e. oblique strokes) to ensure adherence as specified in § 2.3.

2.4.2 Items to be transmitted

Transmit items as indicated hereunder, unless otherwise prescribed:

1. The items in the shaded lines, above item 3
2. Starting with “<<= (FPL” in item 3:
    - all symbols and data in the unshaded boxes down to “) <<=” at the end of item 18
    - additional alignment functions as necessary to prevent the inclusion of more than 69 characters in any line of items 15 or 18. The alignment function is to be inserted only in lieu of a space so as not to break up a group of data
    - letter shifts and figure shifts (not pre-printed on the form) as necessary
3. The AFTN ending, as described below:
    - End-of-text signal:

a. one letter shift
b. two carriage returns, one line feed

- Page-feed sequence: seven line feeds
- End-of-message signal: four of the letter N

3 ICAO FLIGHT PLAN FORM

FLIGHT PLAN VLIEGPLAN PLAN DE VOL

ADDRESSEE(S) / Geadresseerde(n) / Destinataire(s)

Priority
Prioriteit
Priorité

FF

FILING TIME
Uur van indiening
Heure de dépôt

ORIGINATOR / Verzender / Expéditeur

SPECIFIC IDENTIFICATION OF ADDRESSEE(S) AND / OR ORIGINATOR
Juiste identificatie van de bestemmeling(en) en / of verzender
Identification précise du (des) destinataire(s) et / ou de l'expéditeur

3 MESSAGE TYPE
Berichttype
Type de message

(FPL

7 AIRCRAFT IDENTIFICATION
Identificatie van het luchtvaartuig
Identification de l'aéronef

8 FLIGHT RULES
Vliegregels
Règles de vol

TYPE OF FLIGHT
Aard van de vlucht
Type de vol

9 NUMBER
Aantal
Nombre

TYPE OF AIRCRAFT
Type van luchtvaartuig
Type d'aéronef

WAKE TURBULENCE CATEGORY
Zogturbulentie categorie
Catégorie de turbulence de sillage

10 EQUIPMENT
Uitrusting
Equipement

13 DEPARTURE AERODROME
Vliegveld van vertrek
Aérodrome de départ

TIME
Uur
Heure

15 CRUISING SPEED
Kruissnelheid
Vitesse croisière

LEVEL
Niveau
Niveau

ROUTE
Route
Route

16 DESTINATION AERODROME
Vliegveld van bestemming
Aérodrome de destination

TOTAL EET
Totaal geschat tijdsverloop
Durée totale estimée
HR MIN

ALTN AERODROME
Uitwijkhaven
Aérodrome de dégagement

2ND ALTN AERODROME
Tweede uitwijkhaven
2ème aérodrome de dégagement

18 OTHER INFORMATION
Andere inlichtingen
Renseignements divers

)

SUPPLEMENTARY INFORMATION (NOT TO BE TRANSMITTED IN FPL MESSAGES)
Aanvullende inlichtingen (niet door te seinen in FPL berichten)
Renseignements complémentaires (à ne pas transmettre dans les messages de plan de vol déposé)

19 ENDURANCE
Vliegbereik
Autonomie
HR MIN

E /

PERSONS ON BOARD
Personen aan boord
Personnes à bord

P /

PORTABLE EMERGENCY RADIO
Draagbare noodradio
Radio de secours portatif
UHF VHF ELBA

R / U V E

SURVIVAL EQUIPMENT / Overlevingsuitrusting / Equipement de survie

POLAR Polair Polaire
DESERT Woestijn Désert
MARITIME Maritiem Maritime
JUNGLE Jungle Jungle

S / P D M J

JACKETS / Reddingsvesten / Gilets de sauvetage

LIGHT Verlicht Lampes
FLUORES Fluorescent Fluores
UHF
VHF

J / L F U V

DINGHIES / Vlotten / Canots

NUMBER Aantal Nombre
CAPACITY Capaciteit Capacité
COVER Overdekt Couverture
COLOUR Kleur Couleur

D / C

AIRCRAFT COLOUR AND MARKINGS / Vliegtuigkleur en kentekens / Couleur et marques de l'aéronef

A /

REMARKS / Opmerkingen / Remarques

N /

PILOT-IN-COMMAND / Gezagvoerder / Pilote Commandant de bord

C /)

FILED BY / Ingevuld door / Déposé par

SPACE RESERVED FOR ADDITIONAL REQUIREMENTS
Ruimte voorbehouden voor verdere doeleinden
Espace réservé à des fins supplémentaires

ENR 1.11 Addressing of Flight Plan Messages

Note: In case of mixed flight rules, addresses for IFR and VFR flights shall be added for each IFR and VFR portion of the flight respectively.

1 CIVIL

1.1 Flights departing from Brussels FIR

IFR flights

Departure from CIV AD	Departure of GAT from MIL AD
EUCHZMFP EUCBZMFP	EUCHZMFP EUCBZMFP EBSZZRZX EBMIZGZF

VFR flights

Departure from Belgium	Departure from Luxembourg
EBBRZPZX	ELLXZPZX

1.2 Overflights

IFR flights

EUCHZMFP EUCBZMFP

VFR flights

Add following addresses as required:	
All Flights	EBBUZFZX
Flights entering Antwerpen CTR	EBAWZTZX
Flights entering Brussels TMA (below FL85) or CTR	EBBRZTZX
Flights entering Charleroi TMA or CTR	EBCIZTZX
Flights entering Oostende TMA or CTR and flights along the Belgian coast line	EBOSZTZX
Flights entering Liège TMA or CTR	EBLGZTZX
Flights entering Luxembourg TMA or CTR or uncontrolled Luxembourgish airspace	ELLXZTZX
Flights entering MIL TMA or CTR	EB..ZPZX(1) EBMIZGZF EBSZZRZX
Flights at night	EBMIZGZF

(1) Insert location of relevant CTR or TMA.

1.3 Flights arriving in Brussels FIR

IFR flights

Arrival at CIV AD	Arrival at MIL AD
EUCHZMFP EUCBZMFP	EUCHZMFP EUCBZMFP EBSZZRZX EBMIZGZF EB..ZPZX(1)

(1) Insert location of arrival AD.

VFR flights

Add following addresses as required:	
All Flights	EBBUZFZX
Flights inbound Belgium	EBBRZPZX
Flights inbound Luxembourg (AD not connected to AFTN only)	ELLXZPZX
Flights entering Antwerpen CTR	EBAWZTZX
Flights entering Brussels TMA or CTR	EBBRZTZX
Flights entering Chièvres CTR	ETARYXYX KRCHYXYX
Flights entering Charleroi TMA or CTR	EBCIZTZX
Flights entering Oostende TMA or CTR	EBOSZTZX
Flights entering Liège TMA or CTR	EBLGZTZX
Flights entering Luxembourg TMA or CTR	ELLXZTZX
Flights inbound EBKT	EBKTZTZX EBSZZRZX
Flights inbound EBSP	EBSPZPZX
Flights at night	EBMIZGZF

2 MILITARY

Military Flights

IFR flights	VFR flights
EBMIZGZF EBSZZRZX EBBUZQZX EUCHZMFP + EUCBZMFP *(1)* EBURZQZX *(2)* EDYYYUYX *(3)* EBBRZTZX *(4)* - - - - ZPZX *(5)*	EBMIZGZF EBSZZRZX EBBUZFZX - - - - ZPZX *(5)*

(1) For GAT or mixed OAT/GAT flights.

(2) For flights entirely or partially above FL245.

(3) For OAT flights flying TG1 between BFS and NTM.

(4) For flights to EBBR, EBMB, EBCV and flights through Brussels TMA below FL85.

(5) For flights with a Belgian military aerodrome as destination or alternate.

Remarks:

- OAT is only possible during SEMMERZAKE ATCC operating hours (see GEN 3.3. § 7)
- For mixed flight rules: add addresses for both VFR and IFR.
- For flights through a civil CTR/TMA or to a civil aerodrome: add addresses as mentioned above.
- For flights outside IFPS: add relevant civil addresses in accordance with national civil regulations.
- For flights inside and outside IFPS: add relevant military addresses of ATS and ATCC units concerned in accordance with national military regulations.
- Compliance with Diplomatic rules as published by the foreign authorities is compulsory.

ENR 1.12 Interception of Civil Aircraft

Occasions may arise when, after all other means have been exhausted, it is necessary for military reasons of public safety to intercept an aircraft to:

- identify it;
- lead it away from a particular area;
- force it to land for security reasons at a designed aerodrome.

Adherence to the flight plan and ATC procedures and the maintenance of a listening watch on appropriate ATC frequencies will make the occurrence of an interception highly unlikely for civil aircraft. However, should the occasion arise, the rules laid down in *SERA* apply.

1 INTERCEPTION PROCEDURES (SERA.11015)

Note: The word "interception" in this context does not include intercept and escort service provided, on request, to an aircraft in distress.

The pilot in command of a civil aircraft, when intercepted, shall:

a. immediately follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals in accordance with the specifications in § 2 below;
b. notify, if possible, the appropriate ATS unit;
c. attempt to establish radio-communication with the intercepting aircraft or with the appropriate intercept control unit, by making a general call on the emergency frequency 121.500 MHZ, giving the identity of the intercepted aircraft and the nature of the flight; if no contact has been established and if practicable, repeating this call on the emergency frequency 243.000 MHZ;
d. if equipped with SSR transponder, select Mode A, Code 7700, unless otherwise instructed by the appropriate ATS unit;
e. if equipped with ADS-B or ADS-C, select the appropriate emergency functionality, if available, unless otherwise instructed by the appropriate ATS unit.

If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by visual signals, the intercepted aircraft shall request immediate clarification while continuing to comply with the visual instructions given by the intercepting aircraft.

If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by radio, the intercepted aircraft shall request immediate clarification while continuing to comply with the radio instructions given by the intercepting aircraft.

If radio contact is established during interception but communication in a common language is not possible, attempts shall be made to convey instructions, acknowledgement of instructions and essential information by using the phrases and pronunciations in the following tables and transmitting each phrase twice:

The phrases shown in the table below shall be used by the intercepting aircraft.

Phrase	Pronunciation (1)	Meaning
CALL SIGN	KOL SA-IN	What is your call sign?
FOLLOW	FOL-LO	Follow me
DESCEND	DEE-SEND	Descend for landing
YOU LAND	YOU LAAND	Land at this aerodrome
PROCEED	PRO-SEED	You may proceed
(1) Syllables to be emphasised are underlined.		

The phrases shown in the table below shall be used by the intercepted aircraft.

Phrase	Pronunciation (1)	Meaning
CALL SIGN (call sign) (2)	KOL SA-IN (call sign)	My call sign is (call sign)
WILCO	VILL-KO	Understood. Will comply
CAN NOT	KANN NOTT	Unable to comply
REPEAT	REE-PEET	Repeat your instruction
AM LOST	AM LOSST	Position unknown

Phrase	Pronunciation (1)	Meaning
MAYDAY	MAYDAY	I am in distress
HIJACK (3)	HI-JACK	I have been hijacked
LAND (place name)	LAAND (place name)	I request to land at (place name)
DESCEND	DEE-SEND	I require descent

(1) Syllables to be emphasised are underlined.

(2) The call sign required to be given is that used in RTF communications with ATS units and corresponding to the aircraft identification in the flight plan.

(3) Circumstances may not always permit, nor make desirable, the use of the phrase “HIJACK”.

2 SIGNALS FOR USE IN THE EVENT OF INTERCEPTION

Signals Initiated by Intercepting Aircraft and Responses by Intercepted Aircraft

Series	INTERCEPTING Aircraft Signals	Meaning	INTERCEPTED Aircraft Responds	Meaning
1	DAY or NIGHT. Rocking aircraft and flashing navigational lights at irregular intervals (and landing lights in the case of a helicopter) from a position slightly above and ahead of, and normally to the left of, the intercepted aircraft (or to the right if the intercepted aircraft is a helicopter) and, after acknowledgement, a slow level turn, normally to the left, (or to the right in the case of a helicopter) on the desired heading. *Note 1: MET conditions or terrain may require the intercepting aircraft to reverse the positions and direction of turn.* *Note 2: If the intercepted aircraft is not able to keep pace with the intercepting aircraft, the latter is expected to fly a series of race-track patterns and to rock the aircraft each time it passes the intercepted aircraft.*	You have been intercepted. Follow me.	DAY or NIGHT. Rocking aircraft, flashing navigational lights at irregular intervals and following.	Understood, will comply.
2	DAY or NIGHT. An abrupt break-away manoeuvre from the intercepted aircraft consisting of a climbing turn of 90 degrees or more without crossing the line of flight of the intercepted aircraft.	You may proceed.	DAY or NIGHT. Rocking the aircraft.	Understood. will comply.
3	DAY or NIGHT. Lowering landing gear (if fitted), showing steady landing lights and overflying runway in use or, if the intercepted aircraft is a helicopter, overflying the helicopter landing area. In the case of helicopters, the intercepting helicopter makes a landing approach, coming to hover near to the landing area.	Land at this aerodrome.	DAY or NIGHT. Lowering landing gear, (if fitted), showing steady landing lights and following the intercepting aircraft and, if, after overflying the runway or helicopter landing area, landing is considered safe, proceeding to land.	Understood. will comply.

Signals Initiated by Intercepted Aircraft and Responses by Intercepting Aircraft

Series	INTERCEPTED Aircraft Signals	Meaning	INTERCEPTING Aircraft Responds	Meaning
4	DAY or NIGHT. Raising landing gear (if fitted) and flashing landing lights while passing over runway in use or helicopter landing area at a height exceeding 1000 FT but not exceeding 2000 FT (in the case of a helicopter, at a height exceeding 170 FT but not exceeding 330 FT) above the aerodrome level, and continuing to circle runway in use or helicopter landing area. If unable to flash landing lights, flash any other lights available.	Aerodrome you have designated is inadequate.	DAY or NIGHT. If it is desired that the intercepted aircraft follows the intercepting aircraft to an alternate aerodrome, the intercepting aircraft raises its landing gear (if fitted) and uses the series 1 signals prescribed for intercepting aircraft. If it is decided to release the intercepted aircraft, the intercepting aircraft uses the series 2 signals prescribed for intercepting aircraft.	Understood, follow me. Understood, you may proceed.
5	DAY or NIGHT. Regular switching on and off of all available lights but in such a manner as to be distinct from flashing lights.	Cannot comply.	DAY or NIGHT. Use series 2 signals prescribed for intercepting aircraft (see above).	Understood.
6	DAY or NIGHT. Irregular flashing of all available lights.	In distress.	DAY or NIGHT. Use series 2 signals prescribed for intercepting aircraft (see above).	Understood.

3 MILITARY PROCEDURES

The intercept control unit (CRC Glons or CRC Nieuw Milligen) will advise Semmerzake ATCC of the position of the intercepted aircraft and the intercepting aircraft and of the estimated approach heading of the latter. Semmerzake ATCC will in its turn advise the civil agency controlling the intercepted aircraft.

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ENR 1.13 Unlawful Interference

An aircraft which is being subjected to unlawful interference shall endeavour to set the transponder to Code 7500 and notify the appropriate ATS unit of, any significant circumstances associated therewith and any deviation from the current flight plan necessitated by the circumstances, in order to enable the ATS unit to give priority to the aircraft and to minimise conflict with other aircraft.

If an aircraft is subjected to unlawful interference, the pilot-in-command shall attempt to land as soon as practicable at the nearest suitable aerodrome or at a dedicated aerodrome assigned by the appropriate ATS unit unless considerations aboard the aircraft dictate otherwise.

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ENR 1.14 Air Traffic Incidents

1 DEFINITIONS

1.1 Air Traffic Occurrence

The term air traffic occurrence is used for accidents and all categories of incidents as well as for defects or mal-functioning of an aircraft, its equipment and any element of the Air Navigation System which is used or intended to be used for the purpose or in connection with the operation of an aircraft or with the provision of an ATM service or navigational aid to an aircraft.

1.2 Accident

An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which:

1. A person is fatally or seriously injured as a result of:
   - being in the aircraft, or
   - direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
   - direct exposure to jet blast, except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or
2. The aircraft sustains damage or structural failure which adversely affect the structural strength, performance or flight characteristics of the aircraft, and would normally require major repair or replacement of the affected component except for engine failure or damage, when the damage is limited to the engine, its cowling's or accessories; or for damages limited to propellers, wing tips, antennas, tires, brakes, fairings, small dents or puncture holes in the aircraft skin; or
3. The aircraft is missing or is completely inaccessible.

Note1: For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified as a fatal injury by ICAO.

Note2: An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.

1.3 Incident

A serious occurrence, other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operation.

1.4 Air Traffic Incident

A serious occurrence related to the provision of air traffic services, such as:

a. aircraft proximity;
b. serious difficulty resulting in a hazard to aircraft caused, for example, by:
   1. faulty procedures;
   2. non-compliance with procedures;
   3. failure of ground facilities.

1.5 Aircraft Proximity (AIRPROX)

A situation in which, in the opinion of the pilot or the ATS personnel, the distance between aircraft, as well as their relative positions and speed, have been such that the safety of the aircraft involved may have been compromised.

2 SEVERITY CLASSIFICATIONS OF ACCIDENTS (MIL)

The severity of an accident is to be expressed according to:

1. The level of damage to the aircraft:
   - destroyed;
   - not repairable at unit level;
   - repairable at unit level;
2. The type and number of injuries:
   - deadly;
   - severe;

- light.

In Belgian Defence these three levels are called:

- MISHAP category alpha;
- MISHAP category bravo;
- MISHAP category charlie.

3 SEVERITY DEFINITIONS OF AIR TRAFFIC INCIDENTS

3.1 Serious Incident

ICAO Doc 4444 : AIRPROX - Risk of collision (Eurocontrol ESARR2 category A) = The risk classification of aircraft proximity in which serious risk of collision has existed. Critical near collision between aircraft or between aircraft and obstacle(s). Separations lower than half the separation minima (e.g. 2NM).

ICAO Annex 13 / attachment C:

- Near collision requiring an avoidance manoeuvre to avoid a collision or an unsafe situation or when an avoidance action would have been appropriate;
- Controlled flight into terrain only marginally avoided;
- Aborted take-off on a closed or engaged runway / take-off from a closed or engaged runway with marginal separation from obstacles / landings or attempted landings on a closed or engaged runway / take-off or landing incidents, such as under-shootings, overrunning or running off the runway.

3.2 Major Incident

ICAO Doc 4444: AIRPROX - Safety not assured (Eurocontrol ESARR2 category B) = The risk classification of an aircraft proximity in which the safety of the aircraft may have been compromised:

- Loss of separation (separation higher than half the separation minima, e.g. 4NM);
- Safety margins not respected (higher than half the applicable safety margins);
- A crew avoidance manoeuvre and/or an ATC instruction which allowed to reduce the risk, without eliminating it, as safety margins were still infringed.

3.3 Significant Incident

ICAO Doc 4444: AIRPROX - No risk of collision (Eurocontrol ESARR2 category C) = The risk classification of an aircraft proximity in which no risk of collision has existed:

- After visual contact between two aircraft, no avoidance manoeuvre was seen as necessary or was carried out within safety margins;
- aircraft deviation from ATC clearance (such as flight level, route, heading, runway), unauthorized penetration of airspace, runway incursion with no other traffic in the vicinity (hence, where no avoiding action was necessary).

3.4 Not Determined

ICAO Doc 4444: AIRPROX - Risk not determined (Eurocontrol ESARR2 category D) = The risk classification of an aircraft proximity in which unsufficient information was available to determine the risk involved or inconclusive or conflicting evidence precluded such determination.

3.5 No Safety Effect

Eurocontrol ESARR2: An incident which has no safety significance (category E).

4 USE OF THE AIR TRAFFIC INCIDENT REPORT FORM A/B

4.1 Designation and identification of Air Traffic incidents

Air traffic incidents are designated and identified in reports as follows:

Type	Designation
Air traffic incident	Incident
as point a (*)	AIRPROX
as b1 and b2 (*)	Procedure
as b3 (*)	Facility
(*) defined in § 1.4 above	

4.2 The Air Traffic incident Report Form A

The Air Traffic Incident Report Form A is intended for use:

a. by a pilot for filing a report on an air traffic incident after arrival or for confirming a report made initially by radio during flight. The form, if available on board, may also be of use in providing a pattern for making the initial report in flight;
b. by an ATS or air defence unit for recording an air traffic incident report received by radio, TEL or teleprinter. The form may also be used as the format for the text of a message to be transmitted over the AFS network.

An example of this form is added in § 9 below.

4.3 The Air Traffic Incident Report Form B

The Air Traffic Incident Report Form B is intended for ATS personnel or air defence personnel to report an occurence caused by an aircraft or a vehicle, by your own or another ATS unit, an alleged violation of ATS provisions or clearances, equipment/ATC procedures shortcomings, etc.

An example of this form is added in § 9 below.

5 REPORTING PROCEDURES

5.1 Civil

5.1.1 Pilots procedures involved in incident

The following are the procedures to be followed by a pilot who is or has been involved in an incident:

a. during flight, use the appropriate air/ground frequency for reporting an incident of major significance, particularly if it involves other aircraft, so as to permit the facts to be ascertained immediately;
b. as promptly as possible after landing, and not later than 7 days after the occurrence, submit a completed Air Traffic Incident Report Form A:
    1. for confirming a report of an incident made initially as in a above, or for making the initial report on such an incident if it had not been possible to report it by radio;
    2. for reporting an incident that did not require immediate notification at the time of occurrence.

5.1.2 Initial report by radio

An initial report made by radio should contain the following information:

- aircraft identification;
- type of incident, e.g. aircraft proximity;
- the incident:
    - 1. a) and b) ;
    - 2. a), b), c), d), n) ;
    - 3. a), b), c), i);
    - 4. a), b)

  of the Air Traffic Incident Report Form A;
- miscellaneous; 1. e) of the Air Traffic Incident Report Form A.

5.1.2.1 The confirmatory report

The confirmatory report on an incident of major significance initially reported by radio or the initial report on any other incident should be submitted to the Air Accidents and Incidents Investigation Unit of the Ministry of Communications and Infrastructure or to the ARO of the aerodrome of first landing for submission to the Investigation Unit and the appropriate ATS authorities. The pilot should complete the Air Traffic Incident Report Form A, supplementing the details of the initial reports as necessary. Where there is no ARO, the report may be submitted to another ATS Unit.

5.1.2.1.1 Mandatory reporting addresses

Incidents that occurred in Brussels FIR/UIR or are related to civil aircraft registered in Belgium:

Post: Federal Public Service Mobility and Transport
Air Accidents and Incidents Investigation Unit
Atrium - 6th floor
Rue du Progrès / Vooruitgangstraat 56
1210 Brussels
BELGIUM

TEL: +32 (0) 2 277 44 22 or +32 (0) 2 277 44 33

TEL: +32 (0) 476 76 18 65

FAX: +32 (0) 2 277 45 52 and +32 (0) 2 277 45 53

Email: air-acc-incidents@mobilit.fgov.be and air-por-incidents@mobilit.fgov.be

Note: To make sure that the investigation procedure can start in due time, it is of high importance to inform the Air Accidents and Incidents Investigation Unit as promptly as possible and not later than seven days after the occurrence.

Incidents that occurred in the area of responsibility of Belgocontrol:

Post: Belgocontrol
Directorate General Operations
Tervuursesteenweg, 303
1820 Steenokkerzeel
BELGIUM

TEL: +32 (2) 206 20 40

FAX: +32 (2) 206 22 21

Telex: 24480 revadi b

Incidents that occurred in the area of responsibility of ANA:

Post: Administration de la navigation aérienne
Safety Unit
BP 273
L-2012 Luxembourg
LUXEMBOURG

TEL: +352 47 98 24 00 1

FAX: +352 47 98 24 09 3

Email: safety@airport.etat.lu

Incidents that occurred in BRUSSELS UIR above FL 245:

Post: EUROCONTROL Agency Safety Regulation Unit (ASRU)
Rue de la Fusée / Raketstraat, 96
1130 Brussels
BELGIUM

TEL: +32 (2) 729 90 11

FAX: +32 (2) 729 90 44

Telex: 21173 euroc b

Incidents that occurred in foreign countries and relate to civil aircraft registered in Luxembourg:

Post: Direction de l'Aviation Civile
BP 283
L-2012 Luxembourg
LUXEMBOURG

TEL: +352 24 77 49 00

FAX: +352 46 77 90

Email: info@dac.public.lu

5.2 Military

5.2.1 Pilots procedures involved in incident

The following are the procedures to be followed by a pilot who is or has been involved in an incident:

a. during flight, use the appropriate air/ground frequency for reporting an incident of major significance, particularly if it involves other aircraft, so as to permit the facts to be ascertained immediately. An AIRPROX report shall always be notified immediately by radio;
b. as promptly as possible after landing, submit a completed Air Traffic Incident Report Form A:
    1. for confirming a report of an incident made initially as in a above, or for making the initial report on such an incident if it had not been possible to report it by radio;
    2. for reporting an occurrence which did not require immediate notification at the time of occurrence.

5.2.2 Initial report by radio

An initial report made by radio should contain the following information:

- aircraft identification (own aircraft);
- type of occurrence, e.g. aircraft proximity;
- the incident; 1. a) and b) ; 2. a), b), c), d), n) ; 3. a), b) available details: heading, controlling unit and frequency, c) , i); 4. a), b) of the Air Traffic Incident Report Form A;
- miscellaneous; 1. e) of the Air Traffic Incident Report Form A.

5.2.3 Reporting of Air Traffic Occurrences by ATS of AD Units

ATS personnel or air defence personnel shall proceed as follows regarding an occurrence in which he has been involved. As promptly as possible after an occurrence took place, ATS personnel or air defence personnel shall submit a completed

Air Traffic Occurrence Notification Report in accordance with ATM instruction 12 and the Air Traffic Occurrence Notification Report form.

5.2.3.1 Mandatory reporting addresses

Air Traffic Occurrence Notification Reports concerning air traffic occurrences that happened within the Brussels FIR/UIR or in other FIRs to a flight terminating in the Brussels FIR will be addressed to the relevant ATS unit.

Post: Defence
Air Component
Aviation Safety Directorate/Safety Monitoring Office
Base Charles Roman
1320 Beauvechain
BELGIUM

TEL: +32 (0) 2 44 25457

FAX: +32 (0) 2 44 39355

Email: asd-atm@mil.be

6 PURPOSE OF REPORTING AND HANDLING OF THE FORMS

The purpose of the reporting of air traffic incidents and their investigation is to promote the safety of aircraft and to reduce the risk of mid-air collisions and to reduce the risk of accidents and incidents caused by faulty procedures or non-compliance with procedures, or failure of ground facilities. The sole objective of the safety investigation of an occurrence shall be the prevention of accidents and incidents. It is not the purpose of this activity to apportion blame or liability. Aircrew and Air Traffic Control/Air Defence personnel who are involved in air traffic occurrences, including those who have been reported as being involved, should cooperate in the investigation by providing complete and accurate information. The degree of risk involved, and the severity of the aircraft incidents should be determined in the incident investigation and classified as “serious incident”, “major incident”, “significant incident”, “not determined” or “no safety effect”.

The purpose of the forms is to provide investigatory authorities with as complete information on an air traffic incident as possible and to enable them to report back, with the least possible delay to the pilot or operator concerned, the result of the investigation of the incident and, if appropriate, the remedial action taken for safety improvement. Any information given in order to improve the investigation processes may be used by the receiving party exclusively for safety purposes. Those data may never be used for any other purpose. All the safety related data shall stay confidential.

7 INSTRUCTIONS FOR THE COMPLETION OF THE AIR TRAFFIC INCIDENT REPORT FORM A

The items mentioned below shall be filled in, even if unknown (UNK) or not relevant (N/R).

Item	
A	aircraft identification of the aircraft, the ATS unit or air defence unit filing the report.
B	An AIRPROX report should be filed immediately by radio.
C1	Date/time UTC and position in bearing and distance from a navigation aid or in LAT/LONG.
C2	Information regarding aircraft filing the report, tick as necessary.
C2 c)	E.g. FL 350/1013 HPA or 2500 FT QNH / 1007 HPA or 1200 FT/QFE / 998 HPA.
C3	Information regarding the other aircraft involved.
C4	Passing distance (state units used).
C5	Weather conditions.
C6	Attach additional papers as required. The diagrams may be used to show aircraft's positions.
D1 f)	State name of ATS unit and date/time in UTC.
D1 g)	Date and time in UTC.
D2 d)	Telephone number of pilot, or operating authority, as appropriate, to facilitate enquiries by investigating authority.
E2	Include details of ATS unit such as service provided, RTF frequency, SSR codes assigned and altimeter setting. Use diagram to show the aircraft’s position and attach additional papers as required.

8 INSTRUCTIONS FOR THE COMPLETION OF THE AIR TRAFFIC INCIDENT REPORT FORM B

Use this form to report an occurrence involving an aircraft or vehicle, your own or another ATS unit, an alleged violation of ATS provisions or clearances, equipment and ATC procedures shortcomings.

Fill in this Form as soon as practicable after the occurrence.

Fill in as many boxes (1 to 19) as possible. Fill in relevant information. If not relevant, use *"N/R"*; or if not known, use *"N/K"*.

Box 1: Year (YY), Month (MM), Date (DD), hour (hh), minute (mm) of occurrence.

Box 2: Night: as defined nationally, or by ICAO.

Box 3: State location using LAT / LONG, a place name, AD, BRG / DIST from a navigation aid or significant point, etc . . .

Box 4: Use this box only if aircraft affected or involved. Provides for details regarding up to two aircraft involved. Use box 13 for additional aircraft.

Type:	Use ICAO aircraft designators
ADEP/ADES	Use ICAO location indicators or plain language
Flight level, altitude or height:	Specify flight level (FL), altitude (A), height (H) in feet. If metric, add "m". Insert altimeter setting, if applicable.
Mode C:	If level information from the aircraft is available from other sources (e.g. Mode S, ADS, etc...), specify in box 13.
Relevant route segment:	e.g. SID/STAR/ATS route (specify), aerodrome traffic circuit (specify e.g. downwind), landing, take-off, taxiing, initial climb, etc... Mark flight rules.

Box 5: To assist in retention of relevant RTF and surveillance recordings.

Box 6: Mark the class of ATS airspace (A, B, C, D, E, F, G) within which the occurrence took place.

Box 7: Indicate the type of service provided, e.g. Area/Approach/Aerodrome - Control/Advisory/Information - Procedural/ Radar - etc. Use a combination of these for full description of service provided.

Box 8: Use this box only if aircraft affected or involved, or if near-controlled flight into terrain (CFIT) event, to indicate distance aircraft/aircraft or aircraft/terrain.

Box 9: Specify if automated warning system(s) was/were involved (e.g. conflict alert, ACAS). If applicable, specify type and contents of warning and/or alert.

Box 10: Mark "YES" or "NO", if relevant.

Box 11: Self-explanatory.

Box 12: Mark "YES" or "NO", if weather was considered relevant to the occurrence. Include details in box 13.

Box 13: Use free text to describe the occurrence, include a diagram if necessary. Include causes and factors believed to be relevant to the occurrence. Suggest changes and improvements, if appropriate (you may wish to indicate that the report reflects your subjective recollection of the facts). Include relevant weather information. If necessary, use box 13 of additional forms. Indicate sequential number of pages and total number of pages.

Box 14: Give *your* assessment of workload, taking into account complexity and other factors.

Box 15: Indicate the time period since your last rest break.

Box 16: Self-explanatory.

Box 17: Self-explanatory.

Box 18: Specify your duty position and/or responsibility at the time of the occurrence.

Box 19: Self-explanatory.

9 AIR TRAFFIC INCIDENT REPORT FORM A & B

Air Traffic Incident Report Form

Form A

(For use when submitting and receiving reports on air traffic incidents. In an initial report by radio, shaded items should be included.)

A - AIRCRAFT IDENTIFICATION	B - TYPE OF INCIDENT
	AIRPROX / PROCEDURE / FACILITY * (* Delete as appropriate)

C - THE INCIDENT

1. General

a) Date / time of incident .....UTC

b) Position.....

2. Own aircraft

a) Heading and route

b) True airspeed.....measured in ( ) kt..... ( ) km/h.....

c) Level and altimeter setting.....

d) Aircraft climbing or descending

( ) Level flight ( ) Climbing ( ) Descending

e) Aircraft bank angle

( ) Wings level ( ) Slight bank ( ) Moderate bank
( ) Steep bank ( ) Inverted ( ) Unknown

f) Aircraft direction of bank

( ) Left ( ) Right ( ) Unknown

g) Restrictions to visibility (select as many as required)

( ) Sunglare ( ) Windscreen pillar ( ) Dirty windscreen
( ) Other cockpit structure ( ) None

h) Use of aircraft lighting (select as many as required)

( ) Navigation lights ( ) Strobe lights ( ) Cabin lights
( ) Red anti-collision lights ( ) Landing / taxi lights ( ) Logo (tail fin) lights
( ) Other ( ) None

i) Traffic avoidance advice issued by ATS

( ) Yes, based on radar ( ) Yes, based on visual sighting ( ) Yes, based on other information
( ) No

j) Traffic information issued

( ) Yes, based on radar ( ) Yes, based on visual sighting ( ) Yes, based on other information
( ) No

k) Airborne collision avoidance system - ACAS

( ) Not carried ( ) Type ( ) Traffic advisory issued
( ) Resolution advisory issued ( ) Traffic advisory or resolution advisory not issued

l) Radar identification

( ) No radar available ( ) Radar identification ( ) No radar identification

m) Other aircraft sighted

( ) Yes ( ) No ( ) Wrong aircraft sighted

n) Avoidance action taken

( ) Yes ( ) No

o) Type of flight plan IFR / VFR / None * (* Delete as appropriate)

3. Other aircraft

a) Type and call sign / registration (if known).....

b) If a) above not known, describe below

( ) High wing ( ) Mid wing ( ) Low wing
( ) Rotorcraft
( ) 1 engine ( ) 2 engines ( ) 3 engines
( ) 4 engines ( ) More than 4 engines

Marking, colour or other available details.....

.....

c) Aircraft climbing or descending

( ) Level flight ( ) Climbing ( ) Descending
( ) Unknown

d) Aircraft bank angle

( ) Wings level ( ) Slight bank ( ) Moderate bank
( ) Steep bank ( ) Inverted ( ) Unknown

e) Aircraft direction of bank

( ) Left ( ) Right ( ) Unknown

f) Lights displayed

( ) Navigation lights ( ) Strobe lights ( ) Cabin lights
( ) Red anti-collision lights ( ) Landing / taxi lights ( ) Logo (tail fin) lights
( ) Other ( ) None ( ) Unknown

g) Traffic avoidance advice issued by ATS

( ) Yes, based on radar ( ) Yes, based on visual sighting ( ) Yes, based on other information
( ) No ( ) Unknown

h) Traffic information issued

( ) Yes, based on radar ( ) Yes, based on visual sighting ( ) Yes, based on other information
( ) No ( ) Unknown

i) Avoiding action taken

( ) Yes ( ) No ( ) Unknown

4. Distance

a) Closest horizontal distance.....

b) Closest vertical distance.....

5. Flight weather conditions

a) IMC / VMC *

b) Above / below * clouds / fog / haze or between layers *

c) Distance vertically from cloud.....m / ft * below .....m / ft * above

d) In cloud / rain / snow / sleet / fog / haze *

e) Flying into / out of * sun

f) Flight visibility.....m / km *

(* Delete as appropriate)

6. Any other information considered important by the pilot-in-command

.....

.....

D - MISCELLANEOUS

1. Information regarding reporting aircraft

a) Aircraft registration.....

b) Aircraft type.....

c) Operator.....

d) Aerodrome of departure.....

e) Aerodrome of first landing.....destination.....

f) Reported by radio or other means to.....(name of ATS Unit) at time.....UTC

g) Date / time / place of completion of Form.....

2. Function, address and signature of person submitting report

a) Function.....

b) Address.....

c) Signature.....

d) Telephone number.....

3. Function and signature of person receiving report

a) Function.....

b) Signature.....

E - SUPPLEMENTARY INFORMATION BY ATS UNIT CONCERNED

1. Receipt of report

a) Report received via AFTN / radio / telephone / other (specify) *.....

b) Report received by.....(name of ATS Unit)

(* Delete as appropriate)

2. Details of ATS action

Clearance, incident seen (radar / visually, warning given, result of local enquiry, etc . . .)

.....

.....

.....

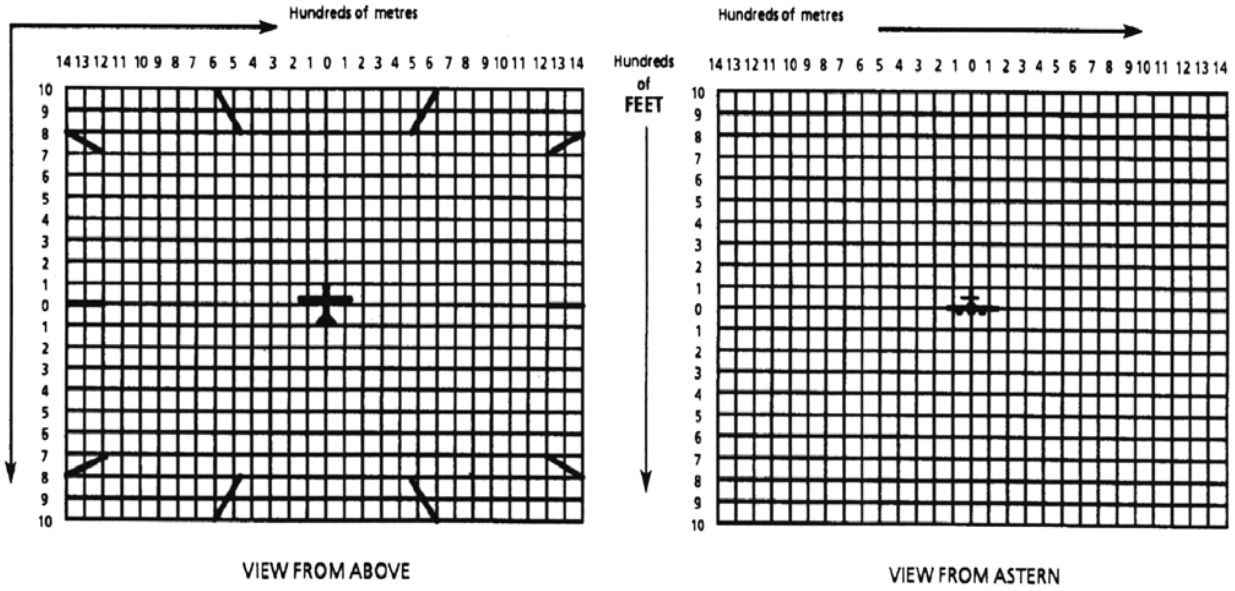
.....

.....

.....

DIAGRAMS OF AIRPROX

Mark passage of other aircraft relative to you, in plan on the left and in elevation on the right, assuming **YOU** are at the centre of each diagram. Include first sighting and passing distance.



National Reference Number	

ATS OCCURRENCE REPORTING FORM

Form B

For ATS personnel to report an occurrence caused by an aircraft or a vehicle, by your own or another ATS Unit, an alleged violation of ATS provisions or clearances, equipment / ATC procedures shortcomings, etc . . .
*Fill in as many Boxes (1 to 19) as possible and relevant. Mark **V** as appropriate ; refer to Guidelines.*

1. Date/Time of occurrence (in UTC) :			**2. Day or Night** :		**3. Geographical location of occurrence** :
YY	MM	DD	Day		
hh	mm		Night		

4. Aircaft involved :

Operator	CS and/or registration	Type	ADEP	ADES	FL, altitude or height	SSR Code	Mode C	Route segment	Flight rules
							Yes ☐ No ☐		IFR ☐ VFR ☐ Spec. ☐
							Yes ☐ No ☐		IFR ☐ VFR ☐ Spec. ☐

5. RTF frequency/communication equipment and surveillance equipment used :	**6. Class of ATS airspace (A, B, C, D, E, F or G)** :	**7. Type of Air Traffic Services** :

8. Estimated vertical distance (ft/m) : **Estimated horizontal distance (NM/km/minutes)** :	**9. Automated Warning Systems** : Ground-based ☐ ☐ Airborne

10. Traffic information given :	Yes	No	**11. Have you reviewed relevant RTF and/or surveillance recordings** ?	Yes	No
	☐	☐		☐	☐

12. Was Weather considered relevant ? *(If yes, include details in Box 13)* Yes ☐ No ☐

13. Description of occurrence with diagram, if necessary ; Causes and factors believed relevant to the occurrence ; Suggested changes and improvements, if appropriate :

Use additional forms as necessary

14. Assessment of workload :	**15. Time since last break** :	**16. Start time of shift**		**17. Name of your ATS Unit and Sector** :
(very) ☐ heavy ☐ medium ☐ light ☐		**in UTC** :	**in local time** :	

18. On duty as :	*FOR OFFICE USE ONLY*
19. Your name, signature and local date :	

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ENR 2 AIR TRAFFIC SERVICES AIRSPACE

ENR 2.1 FIR, UIR, TMA and CTA

Note: Airspace situated outside Brussels FIR/UIR but controlled by Belgian or Luxembourg ATS units is published in ENR 2.2.

1 UPPER AIRSPACE

1.1 Upper Flight Information Region

BRUSSELS UIR

Lateral limits	510521N 0023244E - 510700N 0020000E - 513000N 0020000E - 512223N 0032147E - along the Belgian-Dutch border - 504515N 0060116E - along the Belgian-German border - 500748N 0060816E - along the German-Luxembourg border - 492810N 0062202E - along the French-Luxembourg border - 493247N 0054907E - along the Belgian-French border - 510521N 0023244E.		
Vertical limits	UNL / FL195		
Airspace class	C *(1)*		
Units	Maastricht UAC *(2)*	**Call sign**	Maastricht Radar (En)
		OPR HR	H24
		FREQ	See § 3
	Brussels ACC *(3)*	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See § 3
	Semmerzake ATCC *(4)*	**Call sign**	Belga Radar (En)
		OPR HR	HO
		FREQ	See § 3
Remarks	*(1)* Unclassified above FL660. *(2)* Above FL245 (DLIC, ACM, AMC and ACL AVBL). *(3)* Below FL245. *(4)* for OAT only.		

1.2 Control Areas within Brussels UIR

BRUSSELS UTA

Lateral limits	510521N 0023244E - 510700N 0020000E - 513000N 0020000E - 512223N 0032147E - along the Belgian-Dutch border - 504515N 0060116E - along the Belgian-German border - 500748N 0060816E - along the German-Luxembourg border - 492810N 0062202E - along the French-Luxembourg border - 493247N 0054907E - along the Belgian-French border - 510521N 0023244E.		
Vertical limits	FL660 / FL195		
Airspace class	C *(1) (2)*		
Control units	Maastricht UAC *(3)*	**Call sign**	Maastricht Radar (En)
		OPR HR	H24
		FREQ	See § 3
	Brussels ACC *(4)*	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See § 3
	Semmerzake ATCC *(5)*	**Call sign**	Belga Radar (En)
		OPR HR	HO
		FREQ	See § 3
Remarks	*(1)* The airspace between FL290 and FL410 (incl) forms part of the EUR RVSM airspace. *(2)* The airspace between FL245 and FL660 forms part of the FRA (see ENR 3.5). *(3)* Above FL245. *(4)* Below FL245. *(5)* for OAT only.		

2 LOWER AIRSPACE

2.1 Flight Information Region

BRUSSELS FIR

Lateral limits	510521N 0023244E - 510700N 0020000E - 513000N 0020000E - 512223N 0032147E - along the Belgian-Dutch border - 504515N 0060116E - along the Belgian-German border - 500748N 0060816E - along the German-Luxembourg border - 492810N 0062202E - along the French-Luxembourg border - 493247N 0054907E - along the Belgian-French border - 510521N 0023244E.		
Vertical limits	FL195 / GND		
Airspace class	G *(1) (2)*		
Units	Brussels FIC	**Call sign**	Brussels Information (En)
		OPR HR	H24
		FREQ	See § 3
	Semmerzake ATCC	**Call sign**	Belga Information (En)
		OPR HR	HO
		FREQ	See § 3
Remarks	*(1)* Outside regulated airspace. *(2)* RMZ and TMZ during night.		

2.2 Control Areas within Brussels FIR

AIRWAYS

Lateral limits	The RNAV routes constitute airways where situated within the limits of Brussels LCTA, Charleroi TMA One or Oostende TMA Two. Airway width is 5 NM either side of the axis, except where indicated otherwise (see ENR 3.3).		
Vertical limits	See ENR 3.3		
Airspace class	C *(1)*		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See § 3
Remarks	*(1)* Partially airspace class G on some airways during activation of the Low Flying Areas Golf (see ENR 5.5).		

BRUSSELS CTA EAST ONE

Lateral limits	510251N 0045955E - 510216N 0050508E - 505345N 0045425E - 505500N 0044845E - 510251N 0045955E.		
Vertical limits	FL195 / 2500FT AMSL		
Airspace class	C		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See § 3
	Brussels APP	**Call sign**	Brussels Arrival, Brussels Departure (En)
		OPR HR	H24
		FREQ	See EBBR AD 2.18

BRUSSELS CTA EAST TWO

Lateral limits	505345N 0045425E - 505107N 0050712E - an arc of circle, 40 NM radius, centred on 510954N 0041102E and traced counterclockwise to 510122N 0051316E - 510216N 0050508E - 505345N 0045425E.		
Vertical limits	FL195 / 3500FT AMSL		
Airspace class	C		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See § 3
	Brussels APP	**Call sign**	Brussels Arrival, Brussels Departure (En)
		OPR HR	H24
		FREQ	See EBBR AD 2.18

BRUSSELS CTA EAST THREE

Lateral limits	510122N 0051316E - 510057N 0051655E - 505000N 0053854E - along the Belgian-Dutch border - 504935N 0053857E - 504851N 0053815E - 504501N 0053605E - 505107N 0050712E, an arc of circle, 40 NM radius, centred on 510954N 0041102E and traced counterclockwise to 510122N 0051316E.		
Vertical limits	FL195 / FL55		
Airspace class	C		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See § 3
	Brussels APP	**Call sign**	Brussels Arrival, Brussels Departure (En)
		OPR HR	H24
		FREQ	See EBBR AD 2.18

BRUSSELS CTA EAST FOUR A

Lateral limits	504851N 0053815E - 504611N 0054446E - 504519N 0054824E - 504459N 0055454E - 504508N 0055956E - 504513N 0055956E - along the Belgian-Dutch border - 504515N 0060116E - 504219N 0054902E - 504501N 0053605E - 504851N 0053815E.*(1)*		
Vertical limits	FL95 / FL55 *(2)*		
Airspace class	C		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See § 3
Remarks	*(1)* Partially situated in Amsterdam FIR. *(2)* Lower limit 4500FT AMSL east of Liège TMA One.		

BRUSSELS CTA EAST FOUR B

Lateral limits	504935N 0053857E - along the Belgian-Dutch border - 504515N 0060116E - 504219N 0054902E - 504501N 0053605E - 504851N 0053815E - 504935N 0053857E.		
Vertical limits	FL195 / FL95		
Airspace class	C		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See § 3

BRUSSELS CTA EAST FIVE

Lateral limits	503318N 0055610E - 503754N 0061308E - along the Belgian-German border - 501818N 0061745E - 503318N 0055610E.		
Vertical limits	FL195 / FL105 *(1)*		
Airspace class	C		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See § 3
Remarks	*(1)* Lower limit FL175 when EBR04 is active.		

BRUSSELS CTA EAST SIX

Lateral limits	510605N 0051000E - 511332N 0045955E - 510251N 0045955E - 510122N 0051316E - 510605N 0051000E.		
Vertical limits	FL95 / 4500FT AMSL		
Airspace class	C		
Control units	Brussels APP *(1)(2)*	**Call sign**	Brussels Arrival, Brussels Departure (En)
		OPR HR	H24
		FREQ	See EBBR AD 2.18
	Semmerzake ATCC	**Call sign**	Belga Radar (En)
		OPR HR	HO
		FREQ	See § 3
Remarks	*(1)* Controlled by Brussels APP from 0700 to 0830 (0600 to 0730), from 1630 to 1900 (1530 to 1800) and outside MIL OPR HR. *(2)* Aircraft entering Brussels CTA East Six below FL65 shall contact Brussels Departure, aircraft entering Brussels CTA East Six at or above FL65 shall contact Brussels Arrival.		

BRUSSELS CTA SOUTH ONE

Lateral limits	502920N 0034840E - 503039N 0040151E - 503823N 0042917E - 504048N 0043801E - 503640N 0045629E - 503353N 0050818E - 503053N 0045743E - 502900N 0045106E - 502316N 0045220E - 501842N 0041627E - 502920N 0034840E.		
Vertical limits	FL95 / FL55		
Airspace class	C		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See § 3
	Brussels APP	**Call sign**	Brussels Arrival, Brussels Departure (En)
		OPR HR	H24
		FREQ	See EBBR AD 2.18

BRUSSELS CTA SOUTH THREE*(1)*

Lateral limits	494038N 0051741E - 494105N 0053116E - 494738N 0054729E - along the Belgian-Luxembourg border - 494328N 0054955E - 494032N 0054956E - 493537N 0054356E - 493232N 0054520E - along the Belgian-French border - 494038N 0051741E.		
Vertical limits	FL165 / FL55		
Airspace class	C *(2)*		
Control units	Luxembourg APP	**Call sign**	Luxembourg Approach (En)
		OPR HR	H24
		FREQ	See ELLX AD 2.18
Remarks	*(1)* Delegation of ATS from Brussels ACC to Luxembourg APP. *(2)* Partially airspace class G during activation of Low Flying Area Golf Two South (see ENR 5.5).		

BRUSSELS CTA WEST ONE

Lateral limits	510314N 0032818E - 510520N 0031513E - 511533N 0032155E - 510945N 0034749E - 510314N 0032818E.		
Vertical limits	FL195 / FL55		
Airspace class	C		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See § 3

BRUSSELS CTA WEST TWO

Lateral limits	510520N 0031513E - 511042N 0024029E - 511254N 0020000E - 513000N 0020000E - 512704N 0023246E - 511533N 0032155E - 510520N 0031513E.		
Vertical limits	FL195 / FL95		
Airspace class	C		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See § 3

BRUSSELS LOWER CONTROL AREA

Lateral limits	The FIR boundary. *(1)*		
Vertical limits	FL195 (incl) / 4500FT AMSL		
Airspace class	C *(2)*		
Control units	Brussels ACC *(3)*	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See § 3
	Semmerzake ATCC *(4)*	**Call sign**	Belga Radar (En)
		OPR HR	HO
		FREQ	See § 3
Remarks	*(1)* All AWY, CTA, TMA and CTR excluded. *(2)* Partially airspace class G during activation of the Low Flying Areas Golf (see ENR 5.5). *(3)* Outside MIL OPR HR (Luxembourg airspace H24). *(4)* During MIL OPR HR (except Luxembourg airspace).		

2.3 Terminal Control Areas

BEAUVECHAIN TMA ONE A *(1)*

Lateral limits	503823N 0042917E - 504048N 0043801E - 505345N 0045425E - 510216N 0050508E - 510122N 0051316E - an arc of circle, 40 NM radius, centred on 510954N 0041102E and traced clockwise to 503810N 0044949E - 503640N 0045629E - 503053N 0045743E - 502900N 0045106E - 503018N 0045049E - an arc of circle, 5.5 NM radius, centred on 502932N 0044215E and traced counterclockwise to 503502N 0044248E - 503823N 0042917E.		
Vertical limits	3500FT AMSL / 2500FT AMSL		
Airspace class	C		
Control units	Beauvechain APP	**Call sign**	Beauvechain Approach (En)
		OPR HR	HO *(2)*
		FREQ	See EBBE AD 2.18
Remarks	*(1)* Outside EBBE OPR HR, airspace is not active. As EBBE may be re-activated at any time, pilots are advised to avoid crossing whenever possible. *(2)* Activation can be checked with Semmerzake ATCC or Brussels FIC.		

BEAUVECHAIN TMA ONE B *(1)*

Lateral limits	504048N 0043801E - 505345N 0045425E - 505107N 0050712E - an arc of circle, 40 NM radius, centred on 510954N 0041102E and traced clockwise to 503810N 0044949E -504048N 0043801E.		
Vertical limits	4500FT AMSL / 3500FT AMSL		
Airspace class	C		
Control units	Beauvechain APP	**Call sign**	Beauvechain Approach (En)
		OPR HR	HO *(2)*
		FREQ	See EBBE AD 2.18
Remarks	*(1)* Outside EBBE OPR HR, airspace is not active. As EBBE may be re-activated at any time, pilots are advised to avoid crossing whenever possible. *(2)* Activation can be checked with Semmerzake ATCC or Brussels FIC.		

BEAUVECHAIN TMA TWO

Lateral limits	504111N 0042920E - 505500N 0044845E - 505345N 0045425E - 504048N 0043801E - 503823N 0042917E - 504111N 0042920E.		
Vertical limits	3500FT AMSL / 2500FT AMSL		
Airspace class	C		
Control units	Beauvechain APP	**Call sign**	Beauvechain Approach (En)
		OPR HR	HO *(1)*
		FREQ	See EBBE AD 2.18
	Brussels APP *(2)*	**Call sign**	Brussels Departure (En)
		OPR HR	H24
		FREQ	See EBBR AD 2.18
Remarks	*(1)* Activation can be checked with Semmerzake ATCC or Brussels FIC. *(2)* Outside EBBE OPR HR. As EBBE may be re-activated at any time, pilots are advised to avoid crossing whenever possible.		

BEAUVECHAIN TMA THREE *(1)*

Lateral limits	503053N 0045743E - 503640N 0045629E - 503810N 0044949E - an arc of circle, 40 NM radius, centred on 510954N 0041102E and traced counterclockwise to 510122N 0051316E - 505533N 0051951E - 505530N 0052754E - 505223N 0053408E - 505150N 0052933E - 504817N 0051953E - 503814N 0050408E - 503316N 0050607E - 503053N 0045743E.*(2)*		
Vertical limits	4500FT AMSL / 2500FT AMSL		
Airspace class	C		
Control units	Beauvechain APP	**Call sign**	Beauvechain Approach (En)
		OPR HR	HO *(3)*
		FREQ	See EBBE AD 2.18
Remarks	*(1)* Outside EBBE OPR HR, airspace is not active. As EBBE may be re-activated at any time, pilots are advised to avoid crossing whenever possible. *(2)* EBR05C excl when active. *(3)* Activation can be checked with Semmerzake ATCC or Brussels FIC.		

BEAUVECHAIN TMA FOUR *(1)*

Lateral limits	502900N 0045106E - 503316N 0050607E - 503101N 0050701E - an arc of circle, 6.5 NM radius, centred on 502912N 0051650E and traced counterclockwise to 502451N 0050914E - 502300N 0050943E - 502205N 0050105E - an arc of circle, 8 NM radius, centred on 501521N 0045417E and traced counterclockwise to 502316N 0045220E - 502900N 0045106E.		
Vertical limits	4500FT AMSL / 2500FT AMSL		
Airspace class	C		
Control units	Beauvechain APP	**Call sign**	Beauvechain Approach (En)
		OPR HR	HO *(2)*
		FREQ	See EBBE AD 2.18
Remarks	*(1)* Outside EBBE OPR HR, airspace is not active. As EBBE may be re-activated at any time, pilots are advised to avoid crossing whenever possible. *(2)* Activation can be checked with Semmerzake ATCC or Brussels FIC.		

BRUSSELS TMA ONE

Lateral limits	504036N 0040415E - 503852N 0035231E - 510207N 0040621E - 511005N 0044746E - 510251N 0045955E - 504111N 0042920E - 503823N 0042917E - 503205N 0040655E - an arc of circle, 6 NM radius, centred on 503532N 0035910E and traced counterclockwise to 504036N 0040415E.		
Vertical limits	FL195 / 1500FT AMSL		
Airspace class	C		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See § 3
	Brussels APP *(1)*	**Call sign**	Brussels Arrival, Brussels Departure (En)
		OPR HR	H24
		FREQ	See EBBR AD 2.18
Remarks	*(1)* Aircraft entering Brussels TMA below FL65 shall contact Brussels Departure.		

BRUSSELS TMA TWO

Lateral limits	503059N 0034410E - 504012N 0033609E - 511440N 0040056E - along the Belgian-Dutch border - 512114N 0041431E - 511726N 0042522E - 511807N 0043011E - 511835N 0043325E - 511005N 0044746E - 510207N 0040621E - 503852N 0035231E - 504036N 0040415E, an arc of circle, 6 NM radius, centred on 503532N 0035910E and traced clockwise to 503205N 0040655E - 503039N 0040151E - 502920N 0034840E - 503059N 0034410E.		
Vertical limits	FL195 / 2500FT AMSL		
Airspace class	C		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See § 3
	Brussels APP *(1)*	**Call sign**	Brussels Arrival, Brussels Departure (En)
		OPR HR	H24
		FREQ	See EBBR AD 2.18
Remarks	*(1)* Aircraft entering Brussels TMA below FL65 shall contact Brussels Departure.		

BRUSSELS TMA THREE A

Lateral limits	511440N 0040056E - 504012N 0033609E - 505334N 0032421E - 510314N 0032818E - 511257N 0035731E - along the Belgian-Dutch border - 511440N 0040056E.		
Vertical limits	FL195 / 3500FT AMSL		
Airspace class	C		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See § 3
	Brussels APP *(1)*	**Call sign**	Brussels Arrival, Brussels Departure (En)
		OPR HR	H24
		FREQ	See EBBR AD 2.18
Remarks	*(1)* Aircraft entering Brussels TMA below FL65 shall contact Brussels Departure.		

BRUSSELS TMA THREE B

Lateral limits	512844N 0043011E - 511807N 0043011E - 511726N 0042522E - 512114N 0041431E - along the Belgian-Dutch border - 512844N 0043011E.		
Vertical limits	FL195 / 3500FT AMSL		
Airspace class	C		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See § 3
	Brussels APP *(1)*	**Call sign**	Brussels Arrival, Brussels Departure (En)
		OPR HR	H24
		FREQ	See EBBR AD 2.18
Remarks	*(1)* Aircraft entering Brussels TMA below FL65 shall contact Brussels Departure.		

BRUSSELS TMA FOUR

Lateral limits	511835N 0043325E - 511938N 0044052E - an arc of circle, 26 NM radius, centred on 505408N 0043217E and traced clockwise to 511332N 0045955E - 510251N 0045955E - 511835N 0043325E.		
Vertical limits	FL145 / 2500FT AMSL		
Airspace class	C		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See § 3
	Brussels APP *(1)*	**Call sign**	Brussels Arrival, Brussels Departure (En)
		OPR HR	H24
		FREQ	See EBBR AD 2.18
Remarks	*(1)* Aircraft entering Brussels TMA below FL65 shall contact Brussels Departure.		

BRUSSELS TMA FIVE

Lateral limits	504111N 0042920E - 505500N 0044845E - 505345N 0045425E - 504048N 0043801E - 503823N 0042917E - 504111N 0042920E.		
Vertical limits	FL195 / 3500FT AMSL		
Airspace class	C		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See § 3
	Brussels APP *(1)*	**Call sign**	Brussels Arrival, Brussels Departure (En)
		OPR HR	H24
		FREQ	See EBBR AD 2.18
Remarks	*(1)* Aircraft entering Brussels TMA below FL 65 shall contact Brussels Departure.		

BRUSSELS TMA SEVEN

Lateral limits	511938N 0044052E - 511938N 0050800E - along the Belgian-Dutch border - 511845N 0051000E - 510605N 0051000E - 511332N 0045955E - an arc of circle, 26 NM radius, centred on 505408N 0043217E and traced counterclockwise to 511938N 0044052E.		
Vertical limits	FL95 / FL55		
Airspace class	C *(1)*		
Control units	Brussels APP *(2)(3)*	**Call sign**	Brussels Arrival, Brussels Departure (En)
		OPR HR	H24
		FREQ	See EBBR AD 2.18
	Semmerzake ATCC	**Call sign**	Belga Radar (En)
		OPR HR	HO
		FREQ	See § 3
Remarks	*(1)* Airspace class G between FL55 and FL75 during activation of Low Flying Area Golf Two North (see ENR 5.5). *(2)* Controlled by Brussels APP outside MIL OPR HR. *(3)* Aircraft entering Brussels TMA below FL65 shall contact Brussels Departure.		

BRUSSELS TMA EIGHT *(1)*

Lateral limits	504048N 0043801E - 505345N 0045425E - 505107N 0050712E - an arc of circle, 40 NM radius, centred on 510954N 0041102E and traced clockwise to 503810N 0044949E - 504048N 0043801E.		
Vertical limits	4500FT AMSL / 3500FT AMSL		
Airspace class	C *(2)*		
Control units	Brussels APP	**Call sign**	Brussels Departure (En)
		OPR HR	H24
		FREQ	See EBBR AD 2.18
Remarks	*(1)* Only active outside MIL OPR HR. *(2)* Partially airspace class G during activation of Low Flying Area Golf Four (see ENR 5.5).		

BRUSSELS TMA NINE A

Lateral limits	510634N 0045955E - 511332N 0045955E - 510933N 0050519E - 510634N 0045955E.		
Vertical limits	4500FT AMSL / 3500FT AMSL		
Airspace class	C		
Control units	Brussels APP	**Call sign**	Brussels Departure (En)
		OPR HR	H24
		FREQ	See EBBR AD 2.18

BRUSSELS TMA NINE B *(1)*

Lateral limits	510251N 0045955E - 510634N 0045955E - 510933N 0050519E - 510605N 0051000E - 510122N 0051316E - 510251N 0045955E.		
Vertical limits	4500FT AMSL / 3500FT AMSL		
Airspace class	C		
Control units	Brussels APP	**Call sign**	Brussels Departure (En)
		OPR HR	H24
		FREQ	See EBBR AD 2.18
Remarks	*(1)* Only active outside EBBL OPR HR.		

CHARLEROI TMA ONE

Lateral limits	502920N 0034840E - 503039N 0040151E - 503823N 0042917E - 503502N 0044248E - an arc of circle, 5.5 NM radius, centred on 502932N 0044215E and traced clockwise to 503018N 0045049E - 502316N 0045220E - 501842N 0041627E - 502920N 0034840E. *(1)*		
Vertical limits	FL55 / 2500FT AMSL *(2)*		
Airspace class	C		
Control units	Charleroi APP	**Call sign**	Charleroi Approach (En)
		OPR HR	HS (see EBCI AD 2.3)
		FREQ	See EBCI AD 2.18
	Brussels APP *(3)*	**Call sign**	Brussels Arrival, Brussels Departure (En)
		OPR HR	H24
		FREQ	See EBBR AD 2.18
Remarks	*(1)* AWY M617 and Y50 excl. *(2)* Upper limit 4500FT AMSL when higher than FL55. *(3)* Controlled by Brussels APP outside EBCI ATS OPR HR.		

CHARLEROI TMA TWO A*(1)*

Lateral limits	503345N 0043228E - 503502N 0044248E - an arc of circle, 5.5 NM radius, centred on 502932N 0044215E and traced clockwise to 503122N 0045025E - 502928N 0044201E - an arc of circle, 5.5 NM radius, centred on 502817N 0043335E and traced counterclockwise to 503345N 0043228E.		
Vertical limits	2500FT AMSL / 2000FT AMSL		
Airspace class	C		
Control units	Charleroi APP	**Call sign**	Charleroi Approach (En)
		OPR HR	HS (see EBCI AD 2.3)
		FREQ	See EBCI AD 2.18
Remarks	*(1)* Only active during EBCI ATS OPR HR.		

CHARLEROI TMA TWO B*(1)*

Lateral limits	503823N 0042917E - 503623N 0042912E - 503345N 0043228E - 503502N 0044248E - 503823N 0042917E.		
Vertical limits	2500FT AMSL / 2000FT AMSL		
Airspace class	C		
Control units	Charleroi APP	**Call sign**	Charleroi Approach (En)
		OPR HR	HS (see EBCI AD 2.3)
		FREQ	See EBCI AD 2.18
Remarks	*(1)* Only active during EBCI ATS OPR HR.		

CHARLEROI TMA THREE A

Lateral limits	503823N 0042917E - 504048N 0043801E - 503640N 0045629E - 503053N 0045743E - 502900N 0045106E - 503018N 0045049E - an arc of circle, 5.5 MM radius, centred on 502932N 0044215E and traced counterclockwise to 503502N 0044248E - 503823N 0042917E. *(1)*		
Vertical limits	FL55 / 3500FT AMSL *(2)*		
Airspace class	C		
Control units	Charleroi APP	**Call sign**	Charleroi Approach (En)
		OPR HR	HS (see EBCI AD 2.3)
		FREQ	See EBCI AD 2.18
	Brussels APP *(3)*	**Call sign**	Brussels Arrival, Brussels Departure (En)
		OPR HR	H24
		FREQ	See EBBR AD 2.18
Remarks	*(1)* AWY M617 and M624 excl. *(2)* Upper limit 4500FT AMSL when higher than FL55. *(3)* Controlled by Brussels APP outside EBCI ATS OPR HR.		

CHARLEROI TMA THREE B *(1)*

Lateral limits	502900N 0045106E - 503053N 0045743E - 502407N 0045910E - 502316N 0045220E - 502900N 0045106E.		
Vertical limits	FL55 / 3500FT AMSL *(2)*		
Airspace class	C		
Control units	Charleroi APP	**Call sign**	Charleroi Approach (En)
		OPR HR	HS (see EBCI AD 2.3)
		FREQ	See EBCI AD 2.18
	Brussels APP *(3)*	**Call sign**	Brussels Arrival, Brussels Departure (En)
		OPR HR	H24
		FREQ	See EBBR AD 2.18
Remarks	*(1)* Only active outside MIL OPR HR. *(2)* Upper limit 4500FT AMSL when higher than FL55. *(3)* Controlled by Brussels APP outside EBCI ATS OPR HR.		

FLORENNES TMA *(1)*

Lateral limits	501704N 0041035E - 501842N 0041627E - 502316N 0045220E - an arc of circle, 8 NM radius, centred on 501521N 0045417E and traced clockwise to 500728N 0045635E - 500656N 0045209E - along the Belgian-French border - 500545N 0044211E - 500206N 0040902E - along the Belgian-French border - 501704N 0041035E.		
Vertical limits	4500FT AMSL / 2500FT AMSL *(2)*		
Airspace class	C		
Control units	Florennes APP	**Call sign**	Florennes Approach (En)
		OPR HR	HO *(3)*
		FREQ	See EBFS AD 2.18
Remarks	*(1)* Outside EBFS OPR HR, airspace is not active. As EBFS may be re-activated at any time, pilots are advised to avoid crossing whenever possible. Upon activation, aircraft in Florennes TMA shall comply promptly with instructions from Florennes APP and Brussels FIC. *(2)* Lower limit 3500ft AMSL above Florennes CTR. Upper limit can be raised to FL95 outside Semmerzake ATCC OPR HR (see NOTAM). *(3)* Activation can be checked with Semmerzake ATCC or Brussels FIC. Outside normal EBFS OPR HR a compulsory listening watch with Brussels FIC can be issued (see NOTAM).		

KLEINE-BROGEL TMA ONE *(1)*

Lateral limits	510251N 0045955E - 510634N 0045955E - 511551N 0051647E - along the Belgian-Dutch border - 510805N 0055036E - 510607N 0053455E - 510723N 0053455E - 510557N 0052255E - 510452N 0051951E - 505929N 0051951E - 510057N 0051655E - 510251N 0045955E.		
Vertical limits	4 500FT AMSL / 2500FT AMSL *(2)*		
Airspace class	C		
Control units	Kleine-Brogel APP	**Call sign**	Kleine-Brogel Approach (En)
		OPR HR	HO *(3)*
		FREQ	See EBBL AD 2.18
Remarks	*(1)* Outside EBBL OPR HR, airspace is not active. As EBBL may be re-activated at any time, pilots are advised to avoid crossing whenever possible. Upon activation, aircraft in Kleine-Brogel TMA shall comply promptly with instructions from Kleine Brogel APP and Brussels FIC. *(2)* Upper limit can be raised to FL75 outside Semmerzake ATCC OPR HR (see NOTAM). *(3)* Activation can be checked with Semmerzake ATCC or Brussels FIC. Outside normal EBBL OPR HR a compulsory listening watch with Brussels FIC can be issued (see NOTAM).		

KLEINE-BROGEL TMA TWO (1)

Lateral limits	510805N 0055036E - along the Belgian-Dutch border - 510333N 0054619E - 510157N 0053455E - 505929N 0051951E - 510452N 0051951E - 510557N 0052255E - 510723N 0053455E - 510607N 0053455E - 510805N 0055036E. (2)		
Vertical limits	4500FT AMSL / 2500FT AMSL		
Airspace class	C		
Control units	Kleine-Brogel APP	**Call sign**	Kleine-Brogel Approach (En)
		OPR HR	HO (3)
		FREQ	See EBBL AD 2.18
Remarks	*(1)* Outside EBBL OPR HR, airspace is not active. As EBBL may be re-activated at any time, pilots are advised to avoid crossing whenever possible. Upon activation, aircraft in Kleine-Brogel TMA shall comply promptly with instructions from Kleine-Brogel APP and Brussels FIC. *(2)* EBR05A and EBR05B are excluded when active (activation can be checked with EBBL ATC or Semmerzake ATCC). *(3)* Activation can be checked with Semmerzake ATCC or Brussels FIC. Outside normal EBBL OPR HR a compulsory listening watch with Brussels FIC can be issued (see NOTAM).		

KLEINE-BROGEL TMA THREE (1)

Lateral limits	510333N 0054619E - along the Belgian-Dutch border - 505655N 0054502E - 505528N 0053207E - 505533N 0051951E - 510122N 0051316E - 510057N 0051655E - 505929N 0051951E - 510157N 0053455E - 510333N 0054619E. (2)		
Vertical limits	4500FT AMSL / 2500FT AMSL		
Airspace class	C		
Control units	Kleine-Brogel APP	**Call sign**	Kleine-Brogel Approach (En)
		OPR HR	HO
		FREQ	See EBBL AD 2.18
Remarks	*(1)* Outside EBBL OPR HR, airspace is not active. As EBBL may be re-activated at any time, pilots are advised to avoid crossing whenever possible. Upon activation, aircraft in Kleine-Brogel TMA shall comply promptly with instructions from Kleine Brogel APP and Brussels FIC. *(2)* EBR05C and TRA17 are excluded when active (activation can be checked with EBBL ATC or Semmerzake ATCC).		

LIÈGE TMA ONE (1)

Lateral limits	503101N 0050701E - 503814N 0050408E - 504817N 0051953E - 505150N 0052933E - 505223N 0053408E - 505000N 0053854E - along the Belgian-Dutch border - 504935N 0053857E - 504851N 0053815E - 504611N 0054446E - 504519N 0054824E - 504503N 0055324E - 503917N 0054900E - 502426N 0052347E - an arc of circle, 6.5 NM radius, centred on 502912N 0051650E and traced clockwise to 503101N 0050701E.		
Vertical limits	FL55 / 2500FT AMSL (2)		
Airspace class	C		
Control units	Liège APP	**Call sign**	Liège Approach (En)
		OPR HR	H24
		FREQ	See EBLG AD 2.18
Remarks	*(1)* Partially situated in Amsterdam FIR. *(2)* Upper limit 4500FT AMSL below TRA23 when active.		

LIÈGE TMA TWO (1)

Lateral limits	503802N 0053736E - an arc of circle, 5 NM radius, centred on 504137N 0053205E and traced counterclockwise to 504512N 0052633E - 505119N 0053615E - 505000N 0053854E - along the Belgian-Dutch border - 504935N 0053857E - 504851N 0053815E - 504611N 0054446E - 504519N 0054824E - 504516N 0054926E - 503802N 0053736E.		
Vertical limits	2500FT AMSL / 2000FT AMSL		
Airspace class	C		
Control units	Liège APP	**Call sign**	Liège Approach (En)
		OPR HR	H24
		FREQ	See EBLG AD 2.18
Remarks	*(1)* Partially situated in Amsterdam FIR.		

LIÈGE TMA THREE (1)

Lateral limits	503917N 0054900E - 502426N 0052347E - an arc of circle, 6.5 NM radius, centred on 502912N 0051650E and traced clockwise to 503101N 0050701E - 503814N 0050408E - 504817N 0051953E - 505150N 0052933E - 505223N 0053408E - 505000N 0053854E - along the Belgian-Dutch border - 505247N 0053956E - 505525N 0053956E - 505530N 0052754E - 505107N 0050712E - an arc of circle, 40 NM radius, centred on 510954N 0041102E and traced clockwise to 503810N 0044949E 503640N 0045629E - 502239N 0045928E - an arc of circle, 8 NM radius, centred on 501521N 0045417E and traced clockwise to 501843N 0050539E - an arc of circle, 25 NM radius, centred on 503914N 0052814E and traced counterclockwise to 501418N 0053224E - 502118N 0054222E - 502627N 0053920E - 503917N 0054900E.		
Vertical limits	FL55 / 2500FT AMSL		
Airspace class	C		
Control units	Liège APP	**Call sign**	Liège Approach (En)
		OPR HR	H24
		FREQ	See EBLG AD 2.18
Remarks	*(1)* Active daily 2200-0500 (2100-0400), except during activation of Beauvechain TMA or TRA23. Activation can be checked with Brussels ACC Supervisor (TEL +32 (0) 2 206 27 22) or Brussels ACC on FREQ 125.000 MHZ.		

LIÈGE TMA FOUR (1)

Lateral limits	504503N 0055324E - 504459N 0055454E - 504508N 0055956E - 503042N 0055956E - 502627N 0053920E - 504503N 0055324E.		
Vertical limits	FL55 / 3000FT AMSL		
Airspace class	C		
Control units	Liège APP	**Call sign**	Liège Approach (En)
		OPR HR	H24
		FREQ	See EBLG AD 2.18
Remarks	*(1)* Active daily 2200-0500 (2100-0400), except during activation of Beauvechain TMA or TRA23. Activation can be checked with Brussels ACC Supervisor (TEL +32 (0) 2 206 27 22) or Brussels ACC on FREQ 125.000 MHZ.		

LIÈGE TMA FIVE (1)

Lateral limits	503042N 0055956E - 504513N 0055956E - along the Belgian-Dutch border - 504515N 0060116E - along the Belgian-German border - 503325N 0061027E - 503042N 0055956E. (2)		
Vertical limits	FL55 / 3500FT AMSL		
Airspace class	C		
Control units	Liège APP	**Call sign**	Liège Approach (En)
		OPR HR	H24
		FREQ	See EBLG AD 2.18
Remarks	*(1)* Active daily 2200-0500 (2100-0400), except during activation of Beauvechain TMA or TRA23. Activation can be checked with Brussels ACC Supervisor (TEL +32 (0) 2 206 27 22) or Brussels ACC on FREQ 125.000 MHZ. *(2)* TSA28A excluded.		

LILLE TMA TWO - PART ONE

Lateral limits	504115N 0032525E - 504009N 0032825E - 503146N 0032916E - along the Belgian-French border - 504048N 0031537E - 504115N 0032525E.		
Vertical limits	4500FT AMSL / 1500FT AMSL		
Airspace class	D		
Control units	Lille APP(1)	**Call sign**	
		OPR HR	
		FREQ	
Remarks	*(1)* For details, see *AIP France*.		

LILLE TMA NINE - PART ONE

Lateral limits	505038N 0024816E - 504302N 0025517E - 504148N 0025346E - along the Belgian-French border - 504901N 0023756E - 505038N 0024816E.		
Vertical limits	4500FT AMSL / 2000FT AMSL		
Airspace class	E		
Control units	Lille APP *(1)*	**Call sign**	
		OPR HR	
		FREQ	
Remarks	*(1)* For details, see *AIP France*.		

LUXEMBOURG TMA ONE A

Lateral limits	495152N 0061852E - along the German-Luxembourg border - 494921N 0062812E - 494833N 0063010E - 493808N 0062543E - along the German-Luxembourg border - 492810N 0062202E - along the French-Luxembourg border - 493247N 0054907E - along the Belgian-Luxembourg border - 494738N 0054729E - 494823N 0061000E - 495152N 0061852E.		
Vertical limits	FL165 / 2500FT AMSL		
Airspace class	C/D *(1)*		
Control units	Luxembourg APP	**Call sign**	Luxembourg Approach (En)
		OPR HR	H24
		FREQ	See ELLX AD 2.18
Remarks	*(1)* Airspace class C above FL95.		

LUXEMBOURG TMA ONE B

Lateral limits	500748N 0060816E - along the German-Luxembourg border - 495714N 0061208E - 495608N 0061204E - 495536N 0061319E - along the German-Luxembourg border - 495152N 0061852E - 494823N 0061000E - 494738N 0054729E - along the Belgian-Luxembourg border - 500748N 0060816E.		
Vertical limits	FL145 / 3500FT AMSL		
Airspace class	C/D *(1)*		
Control units	Luxembourg APP	**Call sign**	Luxembourg Approach (En)
		OPR HR	H24
		FREQ	See ELLX AD 2.18
Remarks	*(1)* Airspace class C above FL95.		

LUXEMBOURG TMA FIVE *(1)*

Lateral limits	494328N 0054955E - 494032N 0054956E - 493537N 0054356E - 493232N 0054520E - along the Belgian-French border - 493247N 0054907E - along the Belgian-Luxembourg border - 494328N 0054955E.		
Vertical limits	FL165 / 2500FT AMSL		
Airspace class	C/D *(2)*		
Control units	Luxembourg APP	**Call sign**	Luxembourg Approach (En)
		OPR HR	H24
		FREQ	See ELLX AD 2.18
Remarks	*(1)* Delegation of ATS from Brussels ACC to Luxembourg APP. *(2)* Airspace class C above FL95.		

MAASTRICHT TMA 1 (1)

Lateral limits	Part 1: 504935N 0053857E - 504851N 0053815E - 504724N 0054146E - along the Belgian-Dutch border - 504935N 0053857E. Part 2: 504611N 0054446E - along the Belgian-Dutch border - 504513N 0055956E - 504508N 0055956E - 504459N 0055454E 504519N 0054824E - 504611N 0054446E.		
Vertical limits	FL95 / 1500FT AMSL		
Airspace class	D		
Control units	Maastricht APP (2)	**Call sign**	
		OPR HR	
		FREQ	
	Maastricht TWR (2)	**Call sign**	
		OPR HR	
		FREQ	
Remarks	*(1)* Part of Maastricht TMA 1 within the Brussels FIR. For complete description of Maastricht TMA 1, see *AIP the Netherlands*. *(2)* For details, see *AIP the Netherlands*.		

OOSTENDE TMA ONE (1)

Lateral limits	505900N 0024917E - 510043N 0023905E - 510148N 0021940E - 510618N 0021418E - 510700N 0020000E - 513000N 0020000E - 512223N 0032147E - along the Belgian-Dutch border - 511635N 0032236E - 510500N 0031500E - 510357N 0025825E - 505900N 0024917E. (2)		
Vertical limits	FL55 / 1500FT AMSL		
Airspace class	C		
Control units	Oostende APP	**Call sign**	Oostende Approach (En)
		OPR HR	H24
		FREQ	See EBOS AD 2.18
Remarks	*(1)* Partially situated in France. *(2)* Koksijde CTR excl during EBFN OPR HR.		

OOSTENDE TMA TWO (1)

Lateral limits	505900N 0024917E - 510043N 0023905E - 510148N 0021940E - 510618N 0021418E - 510700N 0020000E - 513000N 0020000E - 512223N 0032147E - along the Belgian-Dutch border - 511635N 0032236E - 510500N 0031500E - 510357N 0025825E - 505900N 0024917E. (2)		
Vertical limits	FL95 / FL55		
Airspace class	C		
Control units	Oostende APP	**Call sign**	Oostende Approach (En)
		OPR HR	H24
		FREQ	See EBOS AD 2.18
Remarks	*(1)* Partially situated in France. *(2)* AWY L607, L179, Y50 and Q70 excl.		

2.4 Control Zones Not Described in AD 2

MAASTRICHT CTR (1)

Lateral limits	504935N 0053857E - 504851N 0053815E - 504724N 0054146E - along the Belgian-Dutch border - 504935N 0053857E.		
Vertical limits	3000FT AMSL / GND		
Airspace class	C		
Control units	Maastricht TWR (2)	**Call sign**	
		OPR HR	
		FREQ	
Remarks	*(1)* Part of Maastricht CTR within the Brussels FIR. For complete description of Maastricht CTR, see *AIP the Netherlands.* *(2)* For details, see *AIP the Netherlands*.		

3 FREQUENCIES OF ATS UNITS

Area Control and Flight Information Units

ATS unit	Call sign	OPR HR	Frequency (MHZ)	Remarks
Brussels ACC (East Low)	Brussels Control	H24	129.575 387.050 (1)	*(1)* UHF
Brussels ACC (East Holding)	Brussels Control	H24	129.575	
Brussels ACC (East High)	Brussels Control	H24	128.450 387.050 (1)	*(1)* UHF
Brussels ACC (Huldenberg)	Brussels Control	H24	128.200	
Brussels ACC (Luxembourg)	Brussels Control	H24	125.000	
Brussels ACC (North Low)	Brussels Control	H24	128.800 387.050 (1)	*(1)* UHF
Brussels ACC (North Holding)	Brussels Control	H24	126.975	
Brussels ACC (West Low)	Brussels Control	H24	131.100 387.050 (1)	*(1)* UHF
Brussels ACC (West Holding)	Brussels Control	H24	125.775	
Brussels ACC (West High)	Brussels Control	H24	127.225 387.050 (1)	*(1)* UHF
Brussels FIC	Brussels Information	H24	126.900 373.500 (1)	*(1)* UHF
Maastricht UAC (Koksy Sector)	Maastricht Radar	H24	132.205 (1) 336.350 (2)	*(1)* 8.33KHZ *(2)* UHF
Maastricht UAC (Koksy High Sector, ABV FL355)	Maastricht Radar	H24	132.755 (1) 336.350 (2)	*(1)* 8.33KHZ *(2)* UHF
Maastricht UAC (Lux Sector)	Maastricht Radar	H24	133.355 (1) 275.600 (2)	*(1)* 8.33KHZ *(2)* UHF
Maastricht UAC (Lux High Sector, ABV FL335)	Maastricht Radar	H24	132.315 (1) 275.600 (2)	*(1)* 8.33 KHZ *(2)* UHF
Maastricht UAC (Nicky Sector)	Maastricht Radar	0400-2359 (0300-2259) *(1)*	135.980 (2) 336.350 (3)	*(1)* Outside OPR HR: Koksy Sector (132.205MHZ) *(2)* 8.33KHZ *(3)* UHF

Area Control and Flight Information Units

ATS unit	Call sign	OPR HR	Frequency (MHZ)	Remarks
Maastricht UAC (Nicky High Sector, ABV FL355)	Maastricht Radar	H24	133.710 *(1)* 336.350 *(2)*	*(1)* 8.33KHZ *(2)* UHF
Maastricht UAC (Olno Sector)	Maastricht Radar	H24	132.855 *(1)* 275.600 *(2)*	*(1)* 8.33KHZ *(2)* UHF
Maastricht UAC (Olno High Sector, ABV FL335)	Maastricht Radar	H24	125.980 *(1)* 275.600 *(2)*	*(1)* 8.33KHZ *(2)* UHF
Semmerzake ATCC *(1)*	Belga Information	HO	129.325 121.500 243.000 *(2)* 278.475 *(2)*	*(1)* Flight information service / Radar information service *(2)* UHF
Semmerzake ATCC *(1)*	Belga Radar	HO	129.325 *(2)* 130.575 *(3)* 240.850 *(4)(5)* 269.175 *(4)(5)* 278.475 *(2)(4)* 291.050 *(4)(5)* 299.900 *(4)(5)* 306.600 *(4)(5)* 315.825 *(4)(5)* 357.825 *(4)(5)* 373.550 *(4)(5)* 374.750 *(4)(5)*	*(1)* Radar control *(2)* Initial contact frequency (ICF) *(3)* Climb and let down EBBE (TRA23) *(4)* UHF *(5)* Sector FREQ, Stand-by FREQ

Note: For details on approach and aerodrome control units, see the AD 2.18 section of the relevant aerodrome.

ENR 2.2 Other Regulated Airspace

1 ATS AIRSPACE

1.1 The Netherlands

Belgium and the Netherlands have arranged, by bilateral agreement, to transfer the responsibility for providing air traffic services to Belgium in the following areas:

EIJSDEN AREA (1)

Lateral limits	504724N 0054146E - 504611N 0054446E - along the Dutch-Belgium border - 504724N 0054146E.		
Vertical limits	FL95 / 2000FT AMSL		
Airspace class	C		
Control units	Brussels ACC (2)	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See ENR 2.1, § 3
	Liège APP (3)	**Call sign**	Liège Approach (En)
		OPR HR	H24
		FREQ	See EBLG AD 2.18
Remarks	*(1)* Area forming part of Brussels CTA East Four and Liège TMA (see ENR 2.1 for full description). *(2)* Above FL55. *(3)* Below FL55.		

KLEINE-BROGEL CTR TWO (1)

Lateral limits	511743N 0053057E - an arc of circle, 5 NM radius, centred at 511421N 0053650E and traced clockwise to 511052N 0054231E - along the Belgian-Dutch border - 511743N 0053057E.(2)		
Vertical limits	3000FT AMSL / GND		
Airspace class	D		
Control units	Kleine-Brogel TWR	**Call sign**	Kleine-Brogel Tower (En)
		OPR HR	HO
		FREQ	See EBBL AD 2.18
Remarks	*(1)* Outside EBBL OPR HR, no entry without permission from Dutch MIL INFO (132.350 MHZ). *(2)* ATZ and AFIZ Budel excluded when active (see AIP the Netherlands).		

L179 AREA

Lateral limits	511521N 0053324E - 511455N 0055708E - 511100N 0055825E - 511100N 0054606E - along the FIR boundary - 511521N 0053324E.		
Vertical limits	FL195 / FL95		
Airspace class	B		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See ENR 2.1, § 3

MAASTRICHT AREA

Lateral limits	511521N 0053324E - 511446N 0060454E - along the Dutch-German border - 504516N 0060114E - along the Dutch-Belgian border - 511521N 0053324E.
Vertical limits	FL245 / FL195
Airspace class	C

MAASTRICHT AREA

Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See ENR 2.1, § 3
	Semmerzake ATCC *(1)*	**Call sign**	Belga Radar (En)
		OPR HR	HO
		FREQ	See ENR 2.1, § 3
Remarks	*(1)* During activation of TRA NB, a corridor between the northern limit of the Maastricht Area and a line from 510131N 0054635E to 510654N 0060336E is attributed to Semmerzake ATCC.		

Part of MAASTRICHT TMA 2

Lateral limits	511100N 0054604E - 511100N 0055000E - 511100N 0055825E - 510515N 0060018E - along the Dutch-German border - 505518N 0060331E - 505140N 0060441E - along the Dutch-German border - 504515N 0060116E - along the Dutch-Belgian border - 511100N 0054606E.		
Vertical limits	FL195 / FL95 *(1)*		
Airspace class	B		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See ENR 2.1, § 3

SASKI A AREA

Lateral limits	513814N 0023000E - 512536N 0032403E - 511610N 0040650E - along the FIR boundary - 512719N 0023000E - 513814N 0023000E.		
Vertical limits	FL245 / FL55		
Airspace class	A (up to FL195) C (above FL195)		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See ENR 2.1, § 3

ZEELAND AREA

Lateral limits	512645N 0030752E - 512314N 0032241E - 511436N 0040157E - along the FIR boundary - 512356N 0030600E - 512645N 0030752E.		
Vertical limits	FL55 / 3500FT AMSL		
Airspace class	E		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See ENR 2.1, § 3

1.2 Germany

Belgium and Germany have arranged, by bilateral agreement, to transfer the responsibility for providing air traffic services to Belgium in the following areas:

MASKIRCHEN B AREA

Lateral limits	510515N 0060018E - 505518N 0060331E - along the Dutch-German border - 510515N 0060018E.		
Vertical limits	FL195 / FL95		
Airspace class	E (up to FL100) C (above FL100)		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See ENR 2.1, § 3

VAALS B AREA

Lateral limits	505047N 0060427E - 504516N 0060114E - along the Dutch-German border - 505047N 0060427E.		
Vertical limits	FL195 / FL95		
Airspace class	E (up to FL100) C (above FL100)		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See ENR 2.1. § 3

Luxembourg and Germany have arranged, by bilateral agreement, to transfer the responsibility for providing air traffic services to Luxembourg in the following areas:

LUXEMBOURG TMA TWO A

Lateral limits	500748N 0060816E - 500748N 0061252E - 500149N 0061228E - 495714N 0061208E - along the German-Luxembourg border - 500748N 0060816E.		
Vertical limits	FL145 / 2500FT AGL		
Airspace class	C/E *(1)*		
Control units	Luxembourg APP	**Call sign**	Luxembourg Approach (En)
		OPR HR	H24
		FREQ	See ELLX AD 2.18
Remarks	*(1)* Airspace class C at and above FL100.		

LUXEMBOURG TMA TWO B

Lateral limits	495536N 0061319E - 495228N 0062026E - 495152N 0061852E - along the German-Luxembourg border - 495536N 0061319E.		
Vertical limits	FL145 / 1000FT AGL		
Airspace class	C/E *(1)*		
Control units	Luxembourg APP	**Call sign**	Luxembourg Approach (En)
		OPR HR	H24
		FREQ	See ELLX AD 2.18
Remarks	*(1)* Airspace class C at and above FL100.		

LUXEMBOURG TMA TWO C

Lateral limits	500149N 0061228E - 495107N 0063220E - 495032N 0063325E - 494708N 0063341E - 494833N 0063010E - 495228N 0062026E - 495608N 0061204E - 500149N 0061228E.		
Vertical limits	FL95 / 5500FT AMSL		
Airspace class	E		
Control units	Luxembourg APP	**Call sign**	Luxembourg Approach (En)
		OPR HR	H24
		FREQ	See ELLX AD 2.18

LUXEMBOURG TMA TWO D

Lateral limits	495228N 0062026E - 494921N 0062812E - along the German-Luxembourg border - 495152N 0061852E - 495228N 0062026E.		
Vertical limits	FL165 / 1000FT AGL		
Airspace class	C/E *(1)*		
Control units	Luxembourg APP	**Call sign**	Luxembourg Approach (En)
		OPR HR	H24
		FREQ	See ELLX AD 2.18
Remarks	*(1)* Airspace class C at and above FL100.		

LUXEMBOURG TMA TWO E

Lateral limits	494833N 0063010E - 494708N 0063341E - 494600N 0063347E - 493834N 0063423E - 492340N 0063534E - 493808N 0062543E - 494833N 0063010E.		
Vertical limits	FL95 / 1000FT AGL *(1)*		
Airspace class	E		
Control units	Luxembourg APP	**Call sign**	Luxembourg Approach (En)
		OPR HR	H24
		FREQ	See ELLX AD 2.18
Remarks	*(1)* Lower limit partially 2500FT AGL (see *AIP Germany* for further details).		

LUXEMBOURG TMA TWO F

Lateral limits	493808N 0062543E - 492340N 0063534E - 492340N 0063308E - along the German-French border - 492810N 0062202E - along the German-Luxembourg border - 493808N 0062543E.		
Vertical limits	FL165 / 1000FT AGL *(1)*		
Airspace class	C/E *(2)*		
Control units	Luxembourg APP	**Call sign**	Luxembourg Approach (En)
		OPR HR	H24
		FREQ	See ELLX AD 2.18
Remarks	*(1)* Lower limit partially 2500FT AGL (see *AIP Germany* for further details). *(2)* Airspace class C at and above FL100.		

1.3 France

Luxembourg and France have arranged, by bilateral agreement, to transfer the responsibility for providing air traffic services to Luxembourg in the following areas:

LUXEMBOURG TMA THREE

Lateral limits	492717N 0062854E - 492705N 0061501E - 492652N 0060232E - along the French-Luxembourg border - along the French-German border - 492717N 0062854E.		
Vertical limits	FL165 / 2500FT AMSL *(1)*		
Airspace class	D		
Control units	Luxembourg APP	**Call sign**	Luxembourg Approach (En)
		OPR HR	H24
		FREQ	See ELLX AD 2.18
Remarks	*(1)* FL 165 / 4500FT AMSL when LF-R45 N3 active.		

LUXEMBOURG TMA FOUR

Lateral limits	493233N 0054523E - along the French-Belgian border - along the French-Luxembourg border - 492652N 0060232E - 492706N 0055423E - 492708N 0055000E - 492709N 0054907E - 492710N 0054736E - 493233N 0054523E.		
Vertical limits	FL165 / 2500FT AMSL *(1)*		
Airspace class	D		
Control units	Luxembourg APP	**Call sign**	Luxembourg Approach (En)
		OPR HR	H24
		FREQ	See ELLX AD 2.18
Remarks	*(1)* FL 165 / 4500FT AMSL when LF-R45 N3 active.		

Belgium and France have arranged, by bilateral agreement, to transfer the responsibility for providing air traffic services to Belgium in the following areas:

PART OF KOKSIJDE CTR *(1)*

Lateral limits	510130N 0023426E - 510227N 0022840E - an arc of circle, 5 NM radius, centred at 510717N 0023045E - and traced clockwise to - 510534N 0022358E - along the FIR boundary - 510130N 0023426E.*(2)*		
Vertical limits	FL55 / GND		
Airspace class	D		
Control units	Koksijde APP	**Call sign**	Koksijde Approach (En)
		OPR HR	HO
		FREQ	See EBFN AD 2.18
Control units	Oostende APP *(3)*	**Call sign**	Oostende Approach (En)
		OPR HR	H24
		FREQ	See EBOS AD 2.18
Remarks	*(1)* For full description of Koksijde CTR, see EBFN AD 2.17. *(2)* The area overhead LFAK is excluded between GND and 800FT(510131N 0023419E - along the Belgian-French border - 510330N 0023344E - 510213N 0023003E - 510131N 0023419E). *(3)* Outside Koksijde APP OPR HR, the responsibility for providing ATS between 1500FT AMSL and FL55 is transferred to Oostende APP (airspace class C).		

PART OF OOSTENDE TMA *(1)*

Lateral limits	510057N 0023417E - 510148N 0021940E - 510608N 0021430E - along the FIR boundary - 510057N 0023417E.		
Vertical limits	FL65 / 1500FT AMSL		
Airspace class	C		
Control units	Oostende APP	**Call sign**	Oostende Approach (En)
		OPR HR	H24
		FREQ	See EBOS AD 2.18
Remarks	*(1)* For full description of Oostende TMA, see ENR 2.1.		

(U)L607 AREA

Lateral limits	510055N 0023429E - 510337N 0014427E - along the FIR boundary - 510055N 0023429E.		
Vertical limits	FL245 / FL65		
Airspace class	C		
Control units	Brussels ACC	**Call sign**	Brussels Control (En)
		OPR HR	H24
		FREQ	See ENR 2.1, § 3

Belgium and France have arranged, by bilateral agreement, to make available the following areas to Belgium for military use:

EBR18A - FLORENNES *(1)*

Lateral limits	500629N 0044421E - 500208N 0045007E - along the Belgian-French border - 500629N 0044421E.
Vertical limits	FL 195 / 3500FT AMSL
Type of restriction / nature of hazard	Climb-out sector for jet aircraft.
Remarks	*(1)* For details, see *AIP France*

EBR18B - FLORENNES (1)

Lateral limits	495850N 0040845E - an arc of circle, 25 NM radius, centred on 501437N 0043839E and traced clockwise to 501258N 0040000E - 501329N 0041041E - along the Belgian-French border - 495850N 0040845E.
Vertical limits	FL 195 / FL 50
Type of restriction / nature of hazard	Climb-out sector for jet aircraft and let-down procedure space for jet aircraft.
Remarks	*(1)* For details, see *AIP France*

EBR24A - KOKSIJDE (1)

Lateral limits	510225N 0022850E - 510130N 0023426E - along the Belgian-French border - 504852N 0023845E - 504322N 0023628E - an arc of circle, 22 NM radius, centered on position 510525N 0023910E and traced clockwise to 504957N 0021415E - 505813N 0022356E - 510225N 0022850E.
Vertical limits	FL 105 / 1500 FT AMSL (2)
Type of restriction / nature of hazard	Let-down procedure space for jet aircraft.
Remarks	*(1)* For details, see *AIP France* *(2)* Lower limit: 1500 ft AMSL from lateral limits of Koksijde CTR to 16 NM from the ARP, then a slope of 10°30' to the extreme limit of this sector. Upper limit: FL 55 below AWY L607; 1500 ft AMSL below Oostende TMA One.

LFCBA16B - CROSS BORDER AREA 16 BRAVO (1)

Lateral limits	494112N 0051434E - 494030N 0051133E - 494040N 0045055E - 494920N 0041830E - 495835N 0040853E - along the Belgian-French border - 494112N 0051434E.
Vertical limits	UNL / FL 65
Type of restriction / nature of hazard	Climb-out sector for jet aircraft and let-down procedure space for jet aircraft.
Remarks	*(1)* For details, see *AIP France*

2 TRANSPONDER MANDATORY ZONES

TMZ BRUSSELS FIR

Lateral limits	Brussels FIR
Vertical limits	FL195 / GND
Time of Activity	HN

TMZ LUXEMBOURG ONE

Lateral limits	494801N 0063129E - 494708N 0063341E - 493212N 0063453E - 492837N 0062541E - along the German-French and German-Luxembourg border - 494801N 0063129E.
Vertical limits	FL65 / 3500FT AMSL
Time of Activity	For details, see *AIP Germany*.

TMZ LUXEMBOURG TWO

Lateral limits	495521N 0061310E - 495719N 0062051E - 495032N 0063325E - 494708N 0063341E - 494801N 0063129E - along the German-Luxembourg border - 495521N 0061310E.
Vertical limits	FL65 / 5500FT AMSL
Time of Activity	For details, see *AIP Germany*.

3 RADIO MANDATORY ZONES

RMZ BRUSSELS FIR

Lateral limits	Brussels FIR
Vertical limits	FL195 / GND
Time of Activity	HN

RMZ KORTRIJK

Lateral limits	See EBKT AD 2.17
Vertical limits	
Time of Activity	

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ENR 3 ATS ROUTES

ENR 3.1 Lower ATS Routes

NIL

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ENR 3.2 Upper ATS Routes

NIL

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ENR 3.3 Area Navigation (RNAV) Routes

1 REMARKS ON RNAV ROUTES

1.1 Flight Level Restrictions for Flights through the Brussels UIR

Due to the complexity of traffic handling at the Brussels UIR boundaries FL250 is not available as cruising level in the Brussels UIR.

On request of the French Administration, flights through the Brussels UIR from EHEH, EHRD, EDDL, EDDK and EDDF to LFPG and LFPO shall only be flightplanned below FL245.

FL330 is the maximum plannable cruising level within the Brussels UIR for traffic originating from EDDF, ETOU, ETAR, EDGG FIR and ELLX with destination London TMA and vice versa.

1.2 Traffic Originating from the London FIR/UIR

Traffic originating from the London FIR/UIR intending to overfly or land in the Brussels FIR/UIR is not permitted via REDFA above FL245.

Traffic originating from the London FIR/UIR with destination in the Paris TMA is not permitted to enter the Brussels UIR above FL245.

1.3 Conditional Routes

Conditional Routes (CDR) are non-permanent ATS routes. They are designed to complement the permanent ATS route network and to allow flights to be planned on ATS routes, or portions thereof, that are not always available.

CDR are divided into three different categories according to their foreseen availability, their flight planning potential and the anticipated level of activity of the associated AMC-Manageable Area(s).

- **Category One (CDR 1) - Permanently plannable CDR during the times published in the AIP**
  CDR 1 will be flight planned the same way as permanent ATS routes during the times published in the AIP. In the event of a short notice unavailability of a CDR 1, re-routeing around an associated AMC-Manageable Area will be made on ATC instructions.
- **Category Two (CDR 2) - Non-permanently plannable CDR**
  Flights may only be planned on CDR 2 in accordance with conditions published daily in the EAUP/EUUP. Details of the availability, conditions and use of CDRs 2 will be published in the EAUP/EUUP.
- **Category Three (CDR 3) - Non-plannable CDR**
  CDR 3 are usable on ATC instructions only and are not published in the AIP. Flights cannot be planned in advance on CDR 3.

1.3.1 CDR Availability

1.3.1.1 General

Except when otherwise specified, ATS routes published as conditional routes shall be considered as CDR 1 during the following periods:

	JAN, FEB, NOV, DEC	JUN, JUL, AUG	MAR, APR, MAY, SEP, OCT
FRI - MON	1700 - 0730	1600 - 0600	1700 - 0700 (1600 - 0600)
MON - TUE	2100 - 0730	1600 - 0600	2300 - 0700 (2200 - 0600)
TUE - WED	2100 - 0700	1600 - 0600	2300 - 0700 (2200 - 0600)
WED - THU	1700 - 0700	1600 - 0600	1700 - 0700 (1600 - 0600)
THU - FRI	1700 - 0700	1600 - 0600	1700 - 0700 (1600 - 0600)

Outside these periods, these ATS routes shall be considered as CDR 2.

Due to military requirements, ATS routes published as CDR 1 can be closed for civil use. Such closure will be announced by NOTAM.

On the days indicated below all ATS routes published as conditional route shall be considered as CDR 1 H24.

New Year's Day	01 JAN
Easter Monday	-
King’s birthday	15 APR
Labour Day	01 MAY
Ascension Day	-

Day after Ascension Day	-
Whit Monday	-
National Commemoration Day Belgium	21 JUL
Assumption Day	15 AUG
All Saints Day	01 NOV
All Souls Day	02 NOV
Armistice Day	11 NOV
King's Day	15 NOV
Christmas Day	25 DEC
Boxing Day	26 DEC
Holiday period	27 DEC to 31 DEC (both included)

1.3.1.2 Early access to weekend/conditional routes

In order to improve ATC capacity management - while allowing aircraft operators flight planning flexibility during particular Fridays - an early access to weekend/conditional routes has been implemented.

The Fridays and routes concerned within the Brussels UIR are listed in a yearly dedicated SUP.

Aircraft operators are invited to refer to the corresponding national publications and the daily EAUP/EUUP on the Eurocontrol Network Operations Portal (NOP) for detailed procedures and to flight plan accordingly.

2 LOWER AIRSPACE

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
L179 {B-RNAV}	*(1)* H24 *(2)* Conditional route, for availability see above (§ 1.3.1)					
△ SASKI	513253N 0023000E					*(6)*
	110/291	34.2NM	FL195 / FL55	Odd *(1)*	Even *(1)*	{class C} *(3) (4)*
△ Costa DVOR/DME (COA)	512053N 0032119E					
	109/290	20.5NM	FL195 / FL55	Odd *(1)*	Even *(1)*	{class C} *(3) (4)*
△ HELEN	511407N 0035211E					
	110/290	12.6NM	FL195 / FL55	Odd *(1)*	Even *(1)*	{class C} *(3) (4)*
△ Nicky DVOR/DME (NIK)	510954N 0041102E					
	086/267	24.7NM	FL195 / 4500FT AMSL	Odd *(2)*	Even *(2)*	{class C}
△ SONDI	511126N 0045018E					
	087/267	6.1NM	FL195 / 4500FT AMSL	Odd *(2)*	Even *(2)*	{class C}
△ ELSIK	511142N 0045955E					
	087/267	22.6NM	FL195 / 4500FT AMSL	Odd *(2)*	Even *(2)*	{class C} *(5)*
△ SORAT Brussels FIR / Amsterdam FIR	511257N 0053548E					*(7)*

Route remarks:

Control unit: Brussels ACC.

Cruising levels below FL90 are normally not available for traffic crossing Brussels TMA.

Segment remarks:

(3) Forward: Belgian traffic FL 110 MAX.
(4) Airspace class A in Amsterdam FIR.
(5) Lower limit FL 55 during activation of Low Flying Area Golf One and lower limit FL 75 during activation of Low Flying Area Golf Two North (see ENR 5.5).

Point remarks:

(6) For continuation see *AIP United Kingdom*.
(7) For continuation see *AIP the Netherlands*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP Type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	 ↑	Controlling unit {Airspace class} Remarks
L607 {B-RNAV}	*(1)* H24					
△ KONAN London FIR / Brussels FIR	510751N 0020000E					
	095/275	24.7NM	FL195 / FL65	Odd *(1)*	Even *(1)*	{class C} *(2)*
△ Koksy VORTAC (KOK)	510541N 0023906E					
	103/284	32.9NM	FL195 / FL55	Odd *(1)*	Even *(1)*	{class C} *(2)*
△ Mackel NDB (MAK)	505752N 0032947E					
	104/284	4.7NM	FL195 / 4500FT AMSL	Odd *(1)*	Even *(1)*	{class C}
△ GOLEX	505643N 0033657E					
	104/284	16.1NM	FL195 / 4500FT AMSL	Odd *(1)*	Even *(1)*	{class C}
△ DENOX	505246N 0040140E					
	105/285	29.4NM	FL195 / 4500FT AMSL	Odd *(1)*	Even *(1)*	{class C}
△ GILOM	504507N 0044627E					
	105/286	37.1NM	FL195 / 4500FT AMSL	Odd *(1)*	Even *(1)*	{class C} *(3)*
△ Olno DVOR/DME (LNO)	503509N 0054237E					
	137/317	23.6NM	FL195 / FL65	Odd *(1)*		{class C} *(4)*
△ ARCKY	501757N 0060756E					
	099/279	6.1NM	FL195 / FL65	Odd *(1)*		{class C} *(4)*
△ SUXIM Langen FIR / Brussels FIR	501658N 0061719E					*(5)*

Route remarks:

Control unit: Brussels ACC.

East of Brussels TMA until intersection of M170 and N852, airway width is from 16NM to 18NM.

Cruising levels below FL 90 are normally not available for traffic crossing Brussels TMA.

Segment remarks:

(2) Forward: Unless otherwise instructed by Brussels ACC, Belgian traffic to EBAW or along L179 shall proceed direct from KOK to NIK.
(3) Lower limit FL 55 between 40 DME NIK and LNO.
(4) Between FL 65 and FL 105: CDR 1 - H24. TEMPO closed on ATC instructions due to MIL requirements (alternate route: LNO-GESLO-LULAT). Lower limit FL 75 during activation of Low Flying Area Golf Two South (see ENR 5.5).

Point remarks:

(5) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
L610 {B-RNAV}	*(1)* CDR1: H24. TEMPO closed on ATC instructions due to MIL requirements (alternate route: L179).					
△ Nicky DVOR/DME (NIK)	510954N 0041102E					
	282/102	20.3NM	FL195 / FL105	Even *(1)*		{class C}
△ DENUT	511410N 0033927E					
	282/102	9.7NM	FL195 / FL105	Even *(1)*		{class C}
△ LUMEN	511610N 0032424E					
	282/101	25.2NM	FL195 / FL105	Even *(1)*		{class C}
△ BULAM	512109N 0024501E					
	281/101	18.7NM	FL195 / FL105	Even *(1)*		{class C}
△ DIBLI	512443N 0021545E					
	281/101	10.0NM	FL195 / FL105	Even *(1)*		{class C}
△ RAPIX Brussels FIR / London FIR	512635N 0020000E					*(2)*

Route remarks:

Control unit: Brussels ACC.

Point remarks:

(2) For continuation see *AIP United Kingdom*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
L745 {B-RNAV}	*(1)* H24					
△ Brussels FIR / Amsterdam FIR	512215N 0032201E					*(2)*
	198/018	1.4 NM	FL195 / FL55		Even *(1)*	{class C}
△ Costa DVOR/DME (COA)	512053N 0032119E					

Route remarks:

Control unit: Brussels ACC.

Point remarks:

(2) For continuation see *AIP the Netherlands*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
M150 {B-RNAV}	*(1)* CDR1: H24.					
△ Diekirch DVOR/DME/NDB (DIK)	495141N 0060747E					
	118/298	17.1 NM	FL 195 / FL 75	Odd *(1)*		{class C} *(2)*
△ PITES Brussels FIR / Langen FIR	494343N 0063110E					*(3)*

Route remarks:

Control units: Brussels ACC (above FL 165); Luxembourg APP (up to FL 145).
FL 150 and FL 160 not available.

Segment remarks:

(2) Airspace class D at and below FL 95 within Luxembourg TMA.

Point remarks:

(3) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
M170 {B-RNAV}	*(1)* H24					
△ Olno DVOR/DME (LNO)	503509N 0054237E					
	068/248	17.6 NM	FL 195 / 4500 FT AMSL	Odd *(1)*	Even *(1)*	{class C} *(2)*
△ PODAT Brussels FIR / Langen FIR	504145N 0060811E					*(3)*

Route remarks:

Control unit: Brussels ACC.

Segment remarks:

(2) Lower limit FL 55 during activation of Low Flying Area Golf One (see ENR 5.5).

Point remarks:

(3) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
M617 {B-RNAV}	*(1)* H24					
△ Maastricht VOR/DME (MAS)	505819N 0055738E					*(3)*
	245/065	11.7NM	FL 195 / FL 95	Even *(1)*		{class B}
△ Amsterdam FIR/ Brussels FIR	505322N 0054051E					
	245/065	7.3NM	FL 195 / FL 95	Even *(1)*		{class C}
△ ERIGO	505017N 0053022E					
	264/084	17.6NM	FL 195 / FL 95	Even *(1)*		{class C}
△ SOGRI	504823N 0050243E					
	258/077	15.7NM	FL 195 / FL 95	Even *(1)*		{class C}
△ Huldenberg DVOR/DME (HUL)	504458N 0043830E					
	251/071	32.6NM	FL 195 / FL 95	Even *(1)*		{class C}
△ Chièvres DVOR (CIV)	503426N 0034958E					
	232/052	9.7NM	FL 195 / 4500FT AMSL	Odd *(1)*	Even *(1)*	{class C} *(2)*
△ ROBAL Brussels FIR / Paris FIR	502824N 0033800E					*(4)*

Route remarks:

Control unit: Brussels ACC.

Cruising levels below FL 90 are normally not available for traffic crossing Brussels TMA.

Segment remarks:

(2) Lower limit FL 55 during activation of Low Flying Area Golf One (see ENR 5.5).

Point remarks:

(3) For continuation see *AIP the Netherlands*.
(4) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	 ↑	Controlling unit {Airspace class} Remarks
M624 {B-RNAV}	*(1)* H24 *(2)* Conditional route, for availability see above (§ 1.3.1).					
△ Amsterdam FIR / Brussels FIR	511722N 0040909E					*(4)*
	171/351	7.6 NM	FL 195 / 4500 FT AMSL		Even *(1)*	{class C}
△ Nicky DVOR/DME (NIK)	510954N 0041102E					
	140/320	20.7 NM	FL 195 / 4500 FT AMSL	Odd *(1)*	Even *(1)*	{class C}
△ Brussels DVOR/DME (BUB)	505408N 0043217E					
	135/315	12.7 NM	FL 195 / 4500 FT AMSL	Odd *(1)*	Even *(1)*	{class C}
△ GILOM	504507N 0044627E					
	135/315	7.6 NM	FL 195 / 4500 FT AMSL	Odd *(1)*	Even *(1)*	{class C}
△ REMBA	503944N 0045451E					
	135/316	49.1 NM	FL 195 / FL 145	Odd *(2)*	Even *(2)*	{class C}
△ RITAX	500440N 0054825E					
	136/316	9.6 NM	FL 195 / FL 145	Odd *(2)*	Even *(2)*	{class C} *(3)*
△ DEMUL	495747N 0055843E					
	136/316	8.5 NM	FL 195 / FL 145	Odd *(2)*	Even *(2)*	{class C} *(3)*
△ Diekirch DVOR/DME/NDB (DIK)	495141N 0060747E					

Route remarks:

Control unit: Brussels ACC.
Cruising levels below FL 90 are normally not available for traffic crossing Brussels TMA.

Segment remarks:

(3) Airspace class D at and below FL 95 within Luxembourg TMA.

Point remarks:

(4) For continuation see *AIP the Netherlands*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
N852 {B-RNAV}	*(1)* H24					
△ Olno DVOR/DME (LNO)	503509N 0054237E					
	160/340	32.5NM	FL195 / 4500FT AMSL	Odd *(1)*	Even *(1)*	{class C} *(2) (3)*
△ GESLO	500445N 0060018E					
	160/340	7.2NM	FL195 / 4500FT AMSL	Odd *(1)*	Even *(1)*	{class C} *(2)*
△ GOPAS	495759N 0060411E					
	160/340	6.7NM	FL195 / 4500FT AMSL	Odd *(1)*	Even *(1)*	{class C} *(2)*
△ Diekirch DVOR/DME/NDB (DIK)	495141N 0060747E					
	156/336	14.7NM	FL195 / 4500FT AMSL	Odd *(1)*	Even *(1)*	{class C} *(2)*
△ LIMGO	493814N 0061654E					
	156/336	7.5NM	FL195 / 4500FT AMSL	Odd *(1)*	Even *(1)*	{class C} *(2)*
△ Brussels FIR / Langen FIR	493124N 0062131E					
	159/339	3.6NM	FL195 / 4500FT AMSL	Odd *(1)*	Even *(1)*	{class C} *(4)*
△ SUTAL Langen FIR / Reims FIR	492800N 0062330E					*(5)*

Route remarks:

Control units: Brussels ACC; Luxembourg APP (within Luxembourg TMA).

Segment remarks:

(2) Airspace class D at and below FL95 within Luxembourg TMA.
(3) Lower limit FL55 during activation of Low Flying Area Golf One, lower limit FL65 during activation of Low Flying Area Golf Three and lower limit FL75 during activation of Low Flying Area Golf Two South (see ENR 5.5).
(4) Airspace class E below FL100.

Point remarks:

(5) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
N853 {B-RNAV}	*(1)* H24					
△ Diekirch DVOR/DME/NDB (DIK)	495141N 0060747E					
	000/180	26.3NM	FL195 / FL105	Even *(1)*		{class C}
△ ARCKY	501757N 0060756E					

Route remarks:

Control units: Brussels ACC; Luxembourg APP (within Luxembourg TMA).

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
N872 {B-RNAV}	*(1)* H24					
△ WOODY Amsterdam FIR / Brussels FIR	512420N 0042159E					*(2)*
	206/025	16.0 NM	FL 195 / 4500 FT AMSL	Odd *(1)*		{class C}
△ Nicky DVOR/DME (NIK)	510954N 0041102E					
	199/019	18.2 NM	FL 195 / 4500 FT AMSL	Odd *(1)*		{class C}
△ DENOX	505246N 0040140E					
	202/022	19.8 NM	FL 195 / 4500 FT AMSL	Odd *(1)*		{class C}
△ Chièvres DVOR (CIV)	503426N 0034958E					
	204/023	15.2 NM	FL 195 / FL 115	Odd *(1)*		{class C}
△ MEDIL Brussels FIR / Paris FIR	502032N 0034030E					*(3)*

Route remarks:

Control unit: Brussels ACC.

Cruising levels below FL 90 are normally not available for traffic crossing Brussels TMA.

Point remarks:

(2) For continuation see *AIP the Netherlands*.
(3) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
N873 {B-RNAV}	*(1)* H24					
△ HELEN Amsterdam FIR / Brussels FIR	511407N 0035211E					*(2)*
	204/024	21.3 NM	FL 195 / FL 85		Even *(1)*	{class C}
▲ FERDI	505445N 0033813E					
	204/024	26.1 NM	FL 195 / FL 85		Even *(1)*	{class C}
△ ADUTO Brussels FIR / Paris FIR	503054N 0032142E					*(3)*

Route remarks:

Control unit: Brussels ACC.

Point remarks:

(2) For continuation see *AIP the Netherlands*.
(3) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Q50 {B-RNAV}	*(1)* H24					
△ Sprimont DVOR/DME (SPI)	503053N 0053725E					
	123/304	7.8NM	FL195 / FL145	Odd *(1)*		{class C}
△ LAREP	502634N 0054739E					
	124/304	15.6NM	FL195 / FL145	Odd *(1)*		{class C}
△ ARCKY	501757N 0060756E					
Route remarks: Control unit: Brussels ACC.						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Q70 {B-RNAV}	*(1)* H24					
△ VABIK London FIR / Brussels FIR	511447N 0020000E					*(2)*
	094/275	15.4NM	FL195 / FL65	Odd *(1)*		{class C}
△ MADUX	511336N 0022427E					
	131/311	12.2NM	FL195 / FL65	Odd *(1)*		{class C}
△ Koksy VORTAC (KOK)	510541N 0023906E					
Route remarks: Control unit: Brussels ACC. **Point remarks:** *(2)* For continuation see *AIP United Kingdom*.						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Q763 {B-RNAV}	*(1)* H24					
△ DISKI	493420N 0062814E					*(5)*
	298/118	8.3NM	FL105 / 6000FT AMSL	Even *(1)*	Odd *(1)*	{class C} *(2)*
△ LIMGO	493814N 0061654E					
	267/086	27.2NM	FL195 / FL75	Even *(1)*		{class C} *(3) (4)*
△ TILVI	493630N 0053503E					
	266/086	6.4NM	FL195 / FL75	Even *(1)*		{class C} *(3)*
△ TALUD Brussels FIR / Paris FIR	493604N 0052514E					*(6)*

Route remarks:

Control units: Brussels ACC (above FL 165); Luxembourg APP (up to FL 165).

Segment remarks:

(2) Up to FL 95: class D between LIMGO and FIR boundary; class E between FIR boundary and DISKI.
(3) Lowest usable flight level may be raised, depending on activation of EBR41.
(4) Airspace class D at and below FL 95 within Luxembourg TMA.

Point remarks:

(5) For continuation see *AIP Germany*.
(6) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
T181 {B-RNAV}	*(1)* H24					
△ ARCKY	501757N 0060756E					
	053/233	7.3NM	FL195 / FL65	Odd *(1)*		{class C} *(2)*
△ IMVIX	502221N 0061706E					
	096/276	3.1NM	FL195 / FL65	Odd *(1)*		{class C} *(2)*
△ BUGIB Brussels FIR / Langen FIR	502202N 0062158E					

Route remarks:

Control unit: Brussels ACC.

Segment remarks:

(2) Between FL 65 and FL 105: CDR 1 - H24. TEMPO closed on ATC instructions due to MIL requirements (alternate route: LNO-GESLO-LULAT). Lower limit FL 75 during activation of Low Flying Area Golf Two South (see ENR 5.5).

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
T853 {B-RNAV}	*(1)* H24					
△ ARCKY	501757N 0060756E					
	035/215	13.5NM	FL195 / FL105	Odd *(1)*		{class C} *(2) (3)*
△ IBESA Brussels FIR / Langen FIR	502900N 0062000E					*(4)*

Route remarks:

Control unit: Brussels ACC.

Segment remarks:

(2) H24 above FL175.
(3) CDR 2: below FL 175 available as specified in daily German and Belgian EAUP/EUUP.

Point remarks:

(4) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
T855 {B-RNAV}	*(1)* H24					
△ AGENI Brussels FIR / Langen FIR	504500N 0060200E					*(2)*
	229/049	9.3NM	FL195 / FL95	Even *(1)*		{class C}
△ BATTY	503857N 0055056E					
	234/054	6.5NM	FL195 / FL95	Even *(1)*		{class C}
△ Olno DVOR/DME (LNO)	503509N 0054237E					

Route remarks:

Control unit: Brussels ACC.

Point remarks:

(2) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP Type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
T857 {B-RNAV}	*(1)* H24					
△ Sprimont DVOR/DME (SPI)	503053N 0053725E					
	072/252	23.5NM	FL195 / FL175	Odd *(1)*		{class C}
△ DENOV Brussels FIR / Langen FIR	503812N 0061226E					*(2)*

Route remarks:

Control unit: Brussels ACC.

Point remarks:

(2) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Y18 {B-RNAV}	*(1)* H24					
△ DENUT	511410N 0033927E					
	182/002	19.5NM	FL195 / FL85		Even *(1)*	{class C}
△ FERDI	505445N 0033813E					

Route remarks:

Control unit: Brussels ACC.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Y28 {B-RNAV}	*(1)* H24					
△ HELEN Brussels FIR / Amsterdam FIR	511407N 0035211E					
	128/309	32.2NM	FL195 / FL55		Even *(1)*	{class C}
△ Brussels DVOR/DME (BUB)	505408N 0043217E					

Route remarks:

Control unit: Brussels ACC.

Cruising levels below FL 90 are normally not available for traffic crossing Brussels TMA.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Y50 {B-RNAV}	*(1)* H24					
△ IDOKO Brussels FIR / Paris FIR	502026N 0035223E					*(4)*
	174/354	14.1NM	FL195 / 4500FT AMSL		Odd *(1)*	{class C} *(2)*
△ Chièvres DVOR (CIV)	503426N 0034958E					
	340/160	21.7NM	FL195 / FL55	Even *(1)*	Odd *(1)*	{class C}
△ FERDI	505445N 0033813E					
	338/158	2.1NM	FL195 / FL55	Even *(1)*	Odd *(1)*	{class C}
△ GOLEX	505643N 0033657E					
	338/158	21.0NM	FL195 / FL55	Even *(1)*	Odd *(1)*	{class C} *(3)*
△ LUMEN	511610N 0032424E					
	338/158	5.1NM	FL195 / FL55	Even *(1)*	Odd *(1)*	{class C} *(3)*
△ Costa DVOR/DME (COA)	512053N 0032119E					

Route remarks:

Control unit: Brussels ACC.

Cruising levels below FL90 are normally not available for traffic crossing Brussels TMA.

Segment remarks:

(2) Lower limit FL 55 during activation of Low Flying Area Golf One (see ENR 5.5).
(3) Backward: FL 110 MAX.

Point remarks:

(4) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Y180 {B-RNAV}	*(1)* H24					
△ NISIV Langen FIR / Brussels FIR	495334N 0061435E					*(3)*
	247/067	4.8NM	FL195 / FL75	Even *(1)*		{class C} *(2)*
△ Diekirch DVOR/DME/NDB (DIK)	495141N 0060747E					
	235/054	12.4NM	FL195 / FL75	Even *(1)*	Odd *(1)*	{class C} *(2)*
△ IDOSA	494430N 0055211E					
	234/054	13.7NM	FL195 / FL75	Even *(1)*	Odd *(1)*	{class C}
△ TILVI	493630N 0053503E					
	234/054	6.3NM	FL195 / FL75	Even *(1)*	Odd *(1)*	{class C}
△ Brussels FIR / Paris FIR	493249N 0052710E					*(4)*

Route remarks:

FL150 and FL160 not available.
Control units: Brussels ACC (above FL165); Luxembourg APP (up to FL145).
Lowest usable flight level may be raised, depending on activation of EBR41.

Segment remarks:

(2) Airspace class D at and below FL95 within Luxembourg TMA.

Point remarks:

(3) For continuation see *AIP Germany*.
(4) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Y181 {B-RNAV}	*(1)* H24					
△ MAKIK Langen FIR / Brussels FIR	495812N 0061002E					*(3)*
	267/087	3.8NM	FL195 / FL75	Even *(1)*		{class C} *(2)*
△ GOPAS	495759N 0060411E					

Route remarks:

Control units: Brussels ACC (above FL145); Luxembourg APP (up to FL145).

Segment remarks:

(2) Airspace class D at and below FL95 within Luxembourg TMA.

Point remarks:

(3) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Y868 {B-RNAV}	*(1)* H24					
△ MAPAD Amsterdam FIR / Langen FIR	504946N 0060109E					*(2)*
	268/088	3.8NM	FL195 / FL95	Even *(1)*		{class B}
△ NAVAK	504939N 0055505E					
	268/088	10.0NM	FL195 / FL95	Even *(1)*		{class B}
△ Amsterdam FIR / Brussels FIR	504918N 0053915E					
	268/087	23.2NM	FL195 / FL95	Even *(1)*		{class C}
△ SOGRI	504823N 0050243E					

Route remarks:

Control unit: Brussels ACC.

Point remarks:

(2) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z104 {B-RNAV}	*(1)* H24					
△ TIPUT	500450N 0061240E					*(4)*
	268/088	3.6NM	FL195 / FL75	Even *(1)*		{class C} *(2)*
△ ROBON Langen FIR / Brussels FIR	500442N 0060705E					
	271/091	4.4NM	FL195 / FL75	Even *(1)*		{class C} *(3)*
△ GESLO	500445N 0060018E					

Route remarks:

Control units: Brussels ACC (above FL 145); Luxembourg APP (up to FL 145).

Segment remarks:

(2) Airspace class E below FL 100.
(3) Airspace class D at and below FL 95 within Luxembourg TMA.

Point remarks:

(4) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z110 {B-RNAV}	*(1)* H24					
△ Paris FIR / Brussels FIR	493235N 0054927E					*(3)*
	072/253	18.7NM	FL195 / FL75	Odd *(1)*	Even *(1)*	{class C} *(2)*
△ LIMGO	493814N 0061654E					
	027/208	12.1NM	FL195 / FL75	Odd *(1)*	Even *(1)*	{class C} *(2)*
△ BETEX Brussels FIR / Langen FIR	494857N 0062531E					*(4)*

Route remarks:

Control units: Brussels ACC (above FL 165); Luxembourg APP (up to FL 165).

Point remarks:

(2) Airspace class D at and below FL 95 within Luxembourg TMA.
(3) For continuation see *AIP France*.
(4) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z283 {B-RNAV}	*(1)* H24					
△ Olno DVOR/DME (LNO)	503509N 0054237E					
	029/209	12.1NM	FL195 / FL95		Even *(1)*	{class C}
△ PINUS Amsterdam FIR / Brussels FIR	504547N 0055145E					
	029/209	4.4NM	FL195 / FL95		Even *(1)*	{class B}
△ NAVAK	504939N 0055505E					
	028/208	7.9NM	FL195 / FL95		Even *(1)*	{class B}
△ SUMAS Langen FIR / Amsterdam FIR	505635N 0060059E					*(2)*

Route remarks:

Control unit: Brussels ACC.

Point remarks:

(2) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z310 {B-RNAV}	*(1)* H24					
△ BATAK	513416N 0044720E					*(3)*
	238/058	18.7NM	FL195 / FL95	Odd *(1)*		{class C} *(2)*
△ WOODY Amsterdam FIR / Brussels FIR	512420N 0042159E					

Route remarks:

Control unit: Amsterdam ACC.

Point remarks:

(2) Airspace class A within Amsterdam FIR.
(3) For continuation see *AIP the Netherlands*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z311 {B-RNAV}	*(1)* Conditional route, for availability see above (§ 1.3.1).					
△ BEKEM Amsterdam FIR / Brussels FIR	512556N 0043449E					*(2)*
	223/043	21.9NM	FL195 / FL95	Odd *(1)*		{class C}
△ Nicky DVOR/DME (NIK)	510954N 0041102E					

Route remarks:

Control unit: Brussels ACC.

Point remarks:

(2) For continuation see *AIP the Netherlands*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
Z717 {B-RNAV}	*(1)* H24					
△ GOBNO Langen FIR / Amsterdam FIR	505856N 0055923E					*(2)*
	241/061	1.3NM	FL195 / FL95	Even *(1)*		{class B}
△ Maastricht VOR/DME (MAS)	505819N 0055738E					

Route remarks:

Control unit: Brussels ACC.

Point remarks:

(2) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	 ↑	Controlling unit {Airspace class} Remarks
Z907 {B-RNAV}	*(1)* H24					
△ ARCKY	501757N 0060756E					
	009/189	16.5 NM	FL 195 / FL 105	Odd *(1)*		{class C} *(2)*
△ KOGES Brussels FIR / Langen FIR	503412N 0061202E					*(3)*

Route remarks:

Control units: Brussels ACC.

Segment remarks:

(2) CDR 2 below FL 175. Available as specified in daily German and Belgian EAUP/EUUP.

Point remarks:

(3) For continuation see *AIP Germany*.

3 UPPER AIRSPACE

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UL179 {B-RNAV}	*(1)* H24 *(2)* CDR 1 only, for availability see above (§ 1.3.1). Not AVBL as CDR 2.					
△ SASKI	513253N 0023000E					*(4)*
	110/291	24.3NM	FL660 / FL195		Even *(1)*	{class C}
△ KEGIT	512425N 0030624E					
	111/291	10.0NM	FL660 / FL195		Even *(1)*	{class C} *(3)*
△ Costa DVOR/DME (COA)	512053N 0032119E					
	109/290	20.5NM	FL660 / FL195		Even *(1)*	{class C} *(3)*
△ HELEN	511407N 0035211E					
	110/290	12.6NM	FL660 / FL195		Even *(1)*	{class C} *(3)*
△ Nicky DVOR/DME (NIK)	510954N 0041102E					
	086/267	24.7NM	FL660 / FL195		Even *(2)*	{class C} *(3)*
△ SONDI	511126N 0045018E					
	087/267	6.1NM	FL660 / FL195		Even *(2)*	{class C} *(3)*
△ ELSIK	511142N 0045955E					
	087/267	22.6NM	FL660 / FL195		Even *(2)*	{class C} *(3)*
△ SORAT Brussels UIR / Amsterdam FIR	511257N 0053548E					*(5)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Segment remarks:

(3) FL260 not available for flight planning purposes.

Point remarks:

(4) For continuation see *AIP United Kingdom*.
(5) For continuation see *AIP the Netherlands*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UL607 {B-RNAV}	*(1)* H24					
△ KONAN London FIR - London UIR / Brussels UIR	510751N 0020000E					*(2)*
	095/275	24.7 NM	FL660 / FL195	Odd *(1)*		{class C}
△ Koksy VORTAC (KOK)	510541N 0023906E					
	106/287	38.9 NM	FL660 / FL195	Odd *(1)*		{class C}
△ FERDI	505445N 0033813E					
	107/288	38.4 NM	FL660 / FL195	Odd *(1)*		{class C}
△ BUPAL	504323N 0043604E					
	107/287	12.5 NM	FL660 / FL195	Odd *(1)*		{class C}
△ REMBA	503944N 0045451E					
	108/288	28.5 NM	FL660 / FL195	Odd *(1)*		{class C}
△ Sprimont DVOR/DME (SPI)	503053N 0053725E					
	101/281	5.4 NM	FL660 / FL245	Odd *(1)*		{class C}
△ PELIX	502949N 0054545E					
	101/282	23.7 NM	FL660 / FL245	Odd *(1)*		{class C}
△ MATUG Brussels UIR / Rhein UIR	502500N 0062211E					*(3)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).
FL 250 not available. Belgian traffic destination EBAW shall proceed direct from KOK to NIK, unless otherwise instructed by ATC. FL 270 not available for flight planning purposes between KONAN and MATUG.

Point remarks:

(2) For continuation see *AIP United Kingdom*.
(3) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UL608 {B-RNAV}	*(1)* H24 *(2)* CDR1: H24. TEMPO closed on ATC instructions due to MIL requirements (alternate route: UM624-UL179).					
△ SASKI	513253N 0023000E					*(4)*
	110/291	24.3NM	FL660 / FL195		Even *(1)*	{class C}
△ KEGIT	512425N 0030624E					
	111/291	10.0NM	FL660 / FL195		Even *(1)*	{class C} *(3)*
△ Costa DVOR/DME (COA)	512053N 0032119E					
	121/301	13.2NM	FL660 / FL195		Even *(2)*	{class C} *(3)*
△ DENUT	511410N 0033927E					
	121/301	38.9NM	FL660 / FL195		Even *(2)*	{class C} *(3)*
△ Brussels DVOR/DME (BUB)	505408N 0043217E					
	106/287	20.1NM	FL660 / FL195		Even *(1)*	{class C} *(3)*
△ SOGRI	504823N 0050243E					
	107/288	24.8NM	FL660 / FL195		Even *(1)*	{class C} *(3)*
△ TERLA	504057N 0053956E					
	106/286	7.3NM	FL660 / FL195		Even *(1)*	{class C} *(3)*
△ BATTY	503857N 0055056E					
	140/320	36.2NM	FL660 / FL245		Even *(1)*	{class C} *(3)*
△ LIRSU	501112N 0062712E					*(5)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Segment remarks:

(3) FL260 not available for flight planning purposes.

Point remarks:

(4) For continuation see *AIP United Kingdom*.
(5) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP Type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	 ↑	Controlling unit {Airspace class} Remarks
UL610 {B-RNAV}	*(1)* H24 *(2)* CDR1: H24. TEMPO closed on ATC instructions due to MIL requirements (alternate route: UL179).					
△ LAMLA Hannover UIR / Brussels UIR	503535N 0061417E					*(6)*
	283/103	15.2NM	FL660 / FL245	Even *(1)*		{class C} *(3)*
△ BATTY	503857N 0055056E					
						(4)
△ Nicky DVOR/DME (NIK)	510954N 0041102E					
	282/102	20.3NM	FL660 / FL195	Even *(2)*		{class C} *(3)*
△ DENUT	511410N 0033927E					
	282/102	9.7NM	FL660 / FL195	Even *(2)*		{class C} *(3) (5)*
△ LUMEN	511610N 0032424E					
	282/101	25.2NM	FL660 / FL195	Even *(2)*		{class C} *(3) (5)*
△ BULAM	512109N 0024501E					
	281/101	18.7NM	FL660 / FL195	Even *(2)*		{class C} *(5)*
△ DIBLI	512443N 0021545E					
	281/101	10.0NM	FL660 / FL195	Even *(2)*		{class C} *(5)*
△ RAPIX Brussels UIR / London FIR - London UIR	512635N 0020000E					*(7)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Segment remarks:

(3) FL 260 not available for flight planning purposes.
(4) Segment not available. RNAV route UL610 continues from NIK to RAPIX.
(5) Lowest usable level may be raised due to MIL requirements.

Point remarks:

(6) For continuation see *AIP Germany*.
(7) For continuation see *AIP United Kingdom*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UL745 {B-RNAV}	*(1)* H24					
△ Brussels FIR / Amsterdam FIR	512215N 0032201E					*(2)*
	198/018	1.4NM	FL660 / FL195		Even *(1)*	{class C}
△ Costa DVOR/DME (COA)	512053N 0032119E					

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Point remarks:

(2) For continuation see *AIP the Netherlands*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UM150 {B-RNAV}	*(1)* Conditional route, for availability see above (§ 1.3.1). *(2)* From FL 200 to FL 230:CDR 1 H24. From FL 250 to FL 650:CDR 1:EV weekend: FRI 1700 - MON 0700. EV night: MON to THU 2300 - 0600. CDR 2 outside these periods.					
△ Koksy VORTAC (KOK)	510541N 0023906E					
	118/300	118.6NM	FL660 / FL195	Odd *(1)*		{class C}
△ KOMOB	500838N 0052225E					
	120/301	33.8NM	FL660 / FL195	Odd *(1)*		{class C}
△ Diekirch DVOR/DME/NDB (DIK)	495141N 0060747E					
	118/298	17.1NM	FL660 / FL195	Odd *(2)*		{class C}
△ PITES Brussels UIR / Langen FIR - Rhein UIR	494343N 0063110E					*(3)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Point remarks:

(3) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UM163 {B-RNAV}	*(1)* H24					
△ LUTAX France UIR / Brussels UIR	493258N 0054858E					*(2)*
	033/213	22.4NM	FL660 / FL195	Odd *(1)*		{class C}
△ Diekirch DVOR/DME/NDB (DIK)	495141N 0060747E					

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Point remarks:

(2) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UM170 {B-RNAV}	*(1)* H24 *(2)* Conditional route, for availability see above (§ 1.3.1).					
△ PODAT Langen FIR - Hannover UIR / Brussels UIR	504145N 0060811E					*(4)*
	249/069	9.4NM	FL660 / FL195	Even *(1)*	Odd *(1)*	{class C} *(3)*
△ DINKI	503821N 0055422E					
	247/067	8.1NM	FL660 / FL195	Even *(1)*	Odd *(1)*	{class C} *(3)*
△ Olno DVOR/DME (LNO)	503509N 0054237E					
	198/018	47.6NM	FL660 / FL195	Even *(2)*		{class C}
△ DINAN	494955N 0051953E					
	198/018	8.8NM	FL660 / FL195	Even *(2)*		{class C}
△ KUDIN Brussels UIR / France UIR	494135N 0051546E					*(5)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Segment remarks:

(3) Westbound traffic planned via UL608 shall be conducted from DINKI to BATTY (290°/2 NM).

Point remarks:

(4) For continuation see *AIP Germany*.
(5) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UM615 {B-RNAV}	*(1)* H24					
△ DENOV Hannover UIR / Brussels UIR	503812N 0061226E					*(2)*
	193/013	34.4NM	FL660 / FL245	Even *(1)*		{class C}
△ GESLO	500445N 0060018E					
	195/014	21.0NM	FL660 / FL245	Even *(1)*		{class C}
△ IDOSA	494430N 0055211E					

Route remarks:

Control unit: Maastricht UAC.

Point remarks:

(2) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	 ↑	Controlling unit {Airspace class} Remarks
UM617 {B-RNAV}	*(1)* H24					
△ Maastricht VOR/DME (MAS)	505819N 0055738E					*(2)*
	254/074	8.8 NM	FL 660 / FL 195	Even *(1)*		{class C}
△ Amsterdam FIR / Brussels UIR	505556N 0054409E					
	254/074	27.3 NM	FL 660 / FL 195	Even *(1)*		{class C}
△ SOGRI	504823N 0050243E					
	254/073	17.6 NM	FL 660 / FL 195	Even *(1)*		{class C}
△ BUPAL	504323N 0043604E					
	253/073	21.7 NM	FL 660 / FL 195	Even *(1)*	Odd *(1)*	{class C}
△ SISGA	503705N 0040324E					
	253/073	9.0 NM	FL 660 / FL 195	Even *(1)*	Odd *(1)*	{class C}
△ Chièvres DVOR (CIV)	503426N 0034958E					
	232/052	9.7 NM	FL 245 / FL 195		Even *(1)*	{class C}
△ ROBAL Brussels UIR / France UIR	502824N 0033800E					*(3)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Point remarks:

(2) For continuation see *AIP the Netherlands*.
(3) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UM624 {B-RNAV}	*(1)* H24					
△ Amsterdam FIR / Brussels UIR	511722N 0040909E					*(4)*
	171/351	7.6NM	FL660 / FL195	Odd *(1)*	Even *(1)*	{class C} *(2) (3)*
△ Nicky DVOR/DME (NIK)	510954N 0041102E					
	140/320	20.7NM	FL660 / FL195	Odd *(1)*	Even *(1)*	{class C} *(3)*
△ Brussels DVOR/DME (BUB)	505408N 0043217E					
	135/315	20.3NM	FL660 / FL195	Odd *(1)*	Even *(1)*	{class C} *(3)*
△ REMBA	503944N 0045451E					
	135/316	49.1NM	FL660 / FL195	Odd *(1)*	Even *(1)*	{class C} *(3)*
△ RITAX	500440N 0054825E					
	136/316	9.6NM	FL660 / FL195	Odd *(1)*	Even *(1)*	{class C} *(3)*
△ DEMUL	495747N 0055843E					
	136/316	8.5NM	FL660 / FL195	Odd *(1)*	Even *(1)*	{class C} *(3)*
△ Diekirch DVOR/DME/NDB (DIK)	495141N 0060747E					
	181/001	23.2NM	FL660 / FL195		Even *(1)*	{class C}
△ ROUSY Brussels UIR / France UIR	492835N 0060654E					*(5)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Segment Remarks:

(2) Forward: Only available above FL 265.
(3) FL 260 not available for flight planning purposes.

Point remarks:

(4) For continuation see *AIP the Netherlands*.
(5) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	 ↑	Controlling unit {Airspace class} Remarks
UN852 {B-RNAV}	*(1)* Conditional route, for availability see above (§ 1.3.1). *(2)* H24					
△ LUTOM Amsterdam FIR / Brussels UIR	511556N 0052516E					*(3)*
	168/348	5.1NM	FL660 / FL195	Odd *(1)*	Even *(1)*	{class C}
△ BROGY	511057N 0052656E					
	165/345	31.2NM	FL660 / FL195	Odd *(1)*	Even *(1)*	{class C}
△ TERLA	504057N 0053956E					
	164/344	6.1NM	FL660 / FL195	Odd *(2)*	Even *(2)*	{class C}
△ Olno DVOR/DME (LNO)	503509N 0054237E					
	160/340	5.7NM	FL660 / FL195	Odd *(2)*	Even *(2)*	{class C}
△ PELIX	502949N 0054545E					
	160/340	3.5NM	FL660 / FL195	Odd *(2)*	Even *(2)*	{class C}
△ LAREP	502634N 0054739E					
	160/340	23.3NM	FL660 / FL195	Odd *(2)*	Even *(2)*	{class C}
△ GESLO	500445N 0060018E					
	160/340	7.2NM	FL660 / FL195	Odd *(2)*	Even *(2)*	{class C}
△ GOPAS	495759N 0060411E					
	160/340	6.7NM	FL660 / FL195	Odd *(2)*	Even *(2)*	{class C}
△ Diekirch DVOR/DME/NDB (DIK)	495141N 0060747E					
	156/336	14.7NM	FL660 / FL195	Odd *(2)*	Even *(2)*	{class C}
△ LIMGO	493814N 0061654E					
	156/336	7.5NM	FL660 / FL195	Odd *(2)*	Even *(2)*	{class C}
△ Brussels FIR / Langen FIR - Rhein UIR	493124N 0062131E					
	159/339	3.6NM	FL660 / FL195	Odd *(2)*	Even *(2)*	{class C}
△ SUTAL Brussels UIR / France UIR	492800N 0062330E					*(4)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Segment remarks:

(3) For continuation see *AIP the Netherlands*.
(4) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UN853 {B-RNAV}	*(1)* H24					
△ IBERA Brussels UIR / France UIR	493030N 0061630E					*(2)*
	345/165	22.0NM	FL660 / FL195	Even *(1)*		{class C}
△ Diekirch DVOR/DME/NDB (DIK)	495141N 0060747E					
	000/180	26.3NM	FL660 / FL195	Odd *(1)*		{class C}
△ ARCKY	501757N 0060756E					

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Point remarks:

(2) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UN857 {B-RNAV}	*(1)* H24					
△ ARVUG Brussels UIR / Rhein UIR	495522N 0061345E					*(2)*
	226/046	5.3NM	FL660 / FL195	Even *(1)*		{class C}
△ Diekirch DVOR/DME/NDB (DIK)	495141N 0060747E					
	235/054	12.4NM	FL660 / FL195	Even *(1)*		{class C}
△ IDOSA	494430N 0055211E					
	250/070	20.6NM	FL660 / FL195	Even *(1)*		{class C}
△ TOLVU Brussels UIR / France UIR	493731N 0052218E					*(3)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Point remarks:

(2) For continuation see *AIP Germany*.
(3) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UN858 {B-RNAV}	*(1)* H24					
△ LIPNI France UIR / Brussels UIR	493148N 0055045E					*(2)*
	069/249	18.2NM	FL660 / FL195	Odd *(1)*		{class C}
△ LIMGO	493814N 0061654E					
	027/208	12.1NM	FL660 / FL195	Odd *(1)*		{class C}
△ BETEX Brussels UIR / Langen FIR - Rhein UIR	494857N 0062531E					*(3)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Point remarks:

(2) For continuation see *AIP France*.
(3) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UN872 {B-RNAV}	*(1)* H24					
△ WOODY Amsterdam FIR / Brussels UIR	512420N 0042159E					*(2)*
	206/025	16.0NM	FL660 / FL195	Odd *(1)*		{class C}
△ Nicky DVOR/DME (NIK)	510954N 0041102E					
	199/019	18.2NM	FL660 / FL195	Odd *(1)*		{class C}
△ DENOX	505246N 0040140E					
	202/022	19.8NM	FL660 / FL195	Odd *(1)*		{class C}
△ Chièvres DVOR (CIV)	503426N 0034958E					
	204/023	15.2NM	FL660 / FL195	Odd *(1)*		{class C}
△ MEDIL Brussels UIR / France UIR	502032N 0034030E					*(3)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Point remarks:

(2) For continuation see *AIP the Netherlands*.
(3) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UN873 {B-RNAV}	*(1)* H24					
△ HELEN Amsterdam FIR / Brussels UIR	511407N 0035211E					*(3)*
	205/024	21.3NM	FL660 / FL195		Even *(1)*	{class C} *(2)*
△ FERDI	505445N 0033813E					
	204/024	26.1NM	FL660 / FL195		Even *(1)*	{class C} *(2)*
△ ADUTO Brussels UIR / France UIR	503054N 0032142E					*(4)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Segment remarks:

(2) Above FL 245 odd flight levels, except DEST EHAM.

Point remarks:

(3) For continuation see *AIP the Netherlands*.
(4) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UQ50 {B-RNAV}	*(1)* H24					
△ Sprimont DVOR/DME (SPI)	503053N 0053725E					
	123/304	7.8NM	FL245 / FL195	Odd *(1)*		{class C}
△ LAREP	502634N 0054739E					
	124/304	15.6NM	FL245 / FL195	Odd *(1)*		{class C}
△ ARCKY	501757N 0060756E					
	099/279	6.1NM	FL245 / FL195	Odd *(1)*		{class C}
△ SUXIM Brussels UIR / Langen FIR	501658N 0061719E					

Route remarks:

Control units: Brussels ACC.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UQ70 {B-RNAV}	*(1)* CDR1: H24. TEMPO Closed on ATC instructions due to MIL requirements (alternate route: UL607).					
△ VABIK London FIR / Brussels FIR	511447N 0020000E					*(2)*
	094/275	15.4NM	FL245 / FL195	Odd *(1)*		{class C}
△ MADUX	511336N 0022427E					
	131/311	12.2NM	FL245 / FL195	Odd *(1)*		{class C}
△ Koksy VORTAC (KOK)	510541N 0023906E					

Route remarks:

Control unit: Brussels ACC.

Point remarks:

(2) For continuation see *AIP United Kingdom*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UQ624 {B-RNAV}	*(1)* Conditional route, for availability see above (§ 1.3.1).					
△ ROUSY Brussels UIR / France UIR	492835N 0060654E					*(2)*
	325/144	105.1NM	FL660 / FL245	Even *(1)*		{class C}
△ Brussels DVOR/DME (BUB)	505408N 0043217E					

Route remarks:

Control units: Maastricht UAC.

Point remarks:

(2) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UT27 {B-RNAV}	*(1)* H24					
△ RITAX	500440N 0054825E					
	162/342	38.1NM	FL660 / FL195	Odd *(1)*		{class C}
△ ROUSY Brussels UIR / France UIR	492835N 0060654E					*(2)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Point remarks:

(2) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UT180 {B-RNAV}	*(1)* H24					
△ Sprimont DVOR/DME (SPI)	503053N 0053725E					
	106/287	29.0NM	FL660 / FL195	Odd *(1)*		{class C}
△ PESOV Brussels UIR / Langen FIR - Rhein UIR	502239N 0062054E					*(2)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Point remarks:

(2) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UT853 {B-RNAV}	*(1)* H24					
△ ARCKY	501757N 0060756E					
	035/215	13.5NM	FL660 / FL195	Odd *(1)*		{class C}
△ IBESA Brussels UIR / Langen FIR - Hannover UIR	502900N 0062000E					*(2)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Point remarks:

(2) Route continues as T853 in German airspace (see *AIP Germany*).

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UT856 {B-RNAV}	*(1)* H24					
△ Diekirch DVOR/DME/NDB (DIK)	495141N 0060747E					
	024/204	6.2NM	FL660 / FL245	Odd *(1)*		{class C}
△ ADUSU Brussels UIR / Rhein UIR	495722N 0061146E					*(2)*

Route remarks:

Control unit: Maastricht UAC.

Point remarks:

(2) Route continues as T856 in German airspace (see *AIP Germany*).

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UT857 {B-RNAV}	*(1)* H24					
△ Sprimont DVOR/DME (SPI)	503053N 0053725E					
	072/252	23.5NM	FL245 / FL195	Odd *(1)*		{class C}
△ DENOV Brussels UIR / Langen FIR	503812N 0061226E					*(2)*

Route remarks:

Control unit: Brussels ACC.

Point remarks:

(2) Route continues as T857 in German airspace (see *AIP Germany*).

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP Type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UT880 {B-RNAV}	*(1)* H24					
△ ASDAK Brussels UIR / Langen FIR	503608N 0061507E					*(2)*
	281/100	15.6NM	FL245 / FL195	Even *(1)*		{class C}
△ BATTY	503857N 0055056E					

Route remarks:

Control unit: Brussels ACC.

Point remarks:

(2) Route continues as T880 in German airspace (see *AIP Germany*).

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UY18 {B-RNAV}	*(1)* CDR1: H24. TEMPO closed on ATC instructions due to MIL requirements.					
△ DENUT	511410N 0033927E					
	182/002	19.5NM	FL660 / FL195		Even *(1)*	{class C}
△ FERDI	505445N 0033813E					
Route remarks: Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UY28 {B-RNAV}	*(1)* H24					
△ HELEN Brussels UIR / Amsterdam FIR	511407N 0035211E					
	128/309	32.2NM	FL660 / FL195		Even *(1)*	{class C} *(2)*
△ Brussels DVOR/DME (BUB)	505408N 0043217E					
Route remarks: Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245). **Segment remarks:** *(2)* FL 260 not available for flight planning purposes.						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UY37 {B-RNAV}	*(1)* H24					
△ BATTY	503857N 0055056E					
	167/347	48.6NM	FL660 / FL195		Even *(1)*	{class C}
△ Diekirch DVOR/DME/NDB (DIK)	495141N 0060747E					
Route remarks: Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UY50 {B-RNAV}	*(1)* CDR1: H24. TEMPO closed on ATC instructions due to MIL requirements.					
△ DELOM Brussels UIR / France UIR	501853N 0040523E					
	328/148	18.4NM	FL245 / FL195		Odd *(1)*	{class C}
△ Chièvres DVOR (CIV)	503426N 0034958E					
	340/160	21.7NM	FL660 / FL195	Even *(1)*	Odd *(1)*	{class C}
△ FERDI	505445N 0033813E					
	338/158	23.2NM	FL660 / FL195	Even *(1)*		{class C}
△ LUMEN	511610N 0032424E					
	338/158	5.1NM	FL660 / FL195	Even *(1)*		{class C}
△ Costa DVOR/DME (COA)	512053N 0032119E					
Route remarks: Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UY131 {B-RNAV}	*(1)* Conditional route, for availability see above (§ 1.3.1).					
△ Nicky DVOR/DME (NIK)	510954N 0041102E					
	183/003	9.8NM	FL660 / FL195	Odd *(1)*		{class C}
△ BARTU	510011N 0041018E					
	183/003	10.2NM	FL660 / FL195	Odd *(1)*		{class C}
△ LERVO	504959N 0040931E					
	183/003	32.3NM	FL660 / FL195	Odd *(1)*		{class C}
△ NILEM Brussels UIR / France UIR	501748N 0040708E					*(2)*
Route remarks: Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245). **Point remarks:** *(2)* For continuation see *AIP France*.						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UY157 {B-RNAV}	*(1)* Conditional route, for availability see above (§ 1.3.1).					
△ MOKOM Brussels UIR / Rhein UIR	495843N 0060959E					*(2)*
	255/074	33.5NM	FL660 / FL245	Even *(1)*		{class C}
△ DINAN	494955N 0051953E					
	254/074	12.5NM	FL660 / FL245	Even *(1)*		{class C}
△ REMGO Brussels UIR / France UIR	494633N 0050116E					*(3)*

Route remarks:

Control unit: Maastricht UAC.

Point remarks:

(2) For continuation see *AIP Germany*.
(3) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UY180 {B-RNAV}	*(1)* H24					
△ NISIV Langen FIR - Rhein UIR / Brussels UIR	495334N 0061435E					*(2)*
	247/067	4.8NM	FL660 / FL195	Even *(1)*		{class C}
△ Diekirch DVOR/DME/NDB (DIK)	495141N 0060747E					

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Point remarks:

(2) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UY181 {B-RNAV}	*(1)* H24					
△ MAKIK Langen FIR - Rhein UIR / Brussels UIR	495812N 0061002E					*(2)*
	267/087	3.8 NM	FL 660 / FL 195	Even *(1)*		{class C}
△ GOPAS	495759N 0060411E					
	267/087	3.5 NM	FL 660 / FL 195	Even *(1)*		{class C}
△ DEMUL	495747N 0055843E					

Route remarks:

FL 240 not AVBL for flight planning.

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Point remarks:

(2) Route continues as Y181 in German airspace (see *AIP Germany*).

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UY862 {B-RNAV}	*(1)* H24					
△ Sprimont DVOR/DME (SPI)	503053N 0053725E					
	062/242	22.3 NM	FL 660 / FL 195	Odd *(1)*		{class C}
△ PODEN Brussels UIR / Langen FIR - Hannover UIR	504121N 0060825E					*(2)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Point remarks:

(2) Route continues as Y862 in German airspace (see *AIP Germany*).

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UY863 {B-RNAV}	*(1)* H24					
△ SOPOK	501510N 0054626E					
	105/285	16.6NM	FL660 / FL195	Odd *(1)*		{class C}
△ ETENO Brussels UIR / Langen FIR - Rhein UIR	501055N 0061130E					*(2)*
Route remarks: Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245). **Point remarks:** *(2)* Route continues as Y863 in German airspace (see *AIP Germany*).						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UY868 {B-RNAV}	*(1)* H24					
△ MAPAD Langen FIR - Hannover UIR / Amsterdam FIR	504946N 0060109E					*(2)*
	268/088	3.8NM	FL660 / FL195	Even *(1)*		{class C}
△ NAVAK	504939N 0055505E					
	268/088	10.0NM	FL660 / FL195	Even *(1)*		{class C}
△ Amsterdam FIR / Brussels UIR	504918N 0053915E					
	268/087	23.2NM	FL660 / FL195	Even *(1)*		{class C}
△ SOGRI	504823N 0050243E					
Route remarks: Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245). **Point remarks:** *(2)* Route continues as Y868 in German airspace (see *AIP Germany*).						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UY873 {B-RNAV}	*(1)* Conditional route, for availability see above (§ 1.3.1).					
△ DENUT	511410N 0033927E					
	208/028	35.8 NM	FL 660 / FL 195		Even *(1)*	{class C}
△ BELOB France UIR / Brussels UIR	504234N 0031252E					*(2)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Point remarks:

(2) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UZ29 {B-RNAV}	*(1)* CDR1: H24. TEMPO closed on ATC instructions due to MIL requirements (alternate route: UZ291).					
△ EVOSA Amsterdam FIR / Brussels UIR	511058N 0054611E					*(2)*
	270/088	59.8 NM	FL 660 / FL 275	Even *(1)*		{class C}
△ Nicky DVOR/DME (NIK)	510954N 0041102E					

Route remarks:

Control unit: Maastricht UAC.
FL 260 may be used on ATC discretion.

Point remarks:

(2) For continuation see *AIP the Netherlands*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UZ104 {B-RNAV}	*(1)* H24					
△ ROBON Langen FIR / Brussels UIR	500442N 0060705E					*(2)*
	271/091	4.4NM	FL245 / FL195	Even *(1)*		{class C}
△ GESLO	500445N 0060018E					
	269/089	7.6NM	FL245 / FL195	Even *(1)*		{class C}
△ RITAX	500440N 0054825E					

Route remarks:

Control unit: Brussels ACC.

FL240 not available for flight planning.

Point remarks:

(2) Route continues as Z104 in German airspace (see *AIP Germany*).

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UZ111 {B-RNAV}	*(1)* From FL 200 to FL230:CDR 1 H24. From FL250 to FL650:CDR 1:EV weekend: FRI 1700 - MON 0700. EV night: MON to THU 2300 - 0600. CDR 2 outside these periods.					
△ LIMGO	493814N 0061654E					
	059/239	10.8NM	FL660 / FL195	Odd *(1)*		{class C}
△ PITES Brussels UIR / Rhein UIR	494343N 0063110E					*(2)*

Route remarks:

Control unit: Maastricht UAC.

Point remarks:

(2) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UZ112 {B-RNAV}	*(1)* H24					
△ SPRIMONT DVOR/DME/ (SPI)	503053N 0053725E					
	095/276	45.1NM	FL660 / FL245	Odd *(1)*		{class C}
△ RASVO	502617N 0064742E					
Route remarks: Control unit: Maastricht UAC.						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UZ158 {B-RNAV}	*(1)* CDR 1: H24					
△ AGENI Brussels UIR / Hannover UIR	504500N 0060200E					*(2)*
	231/051	15.8NM	FL660 / FL245	Even *(1)*		{class C}
△ Olno DVOR/DME (LNO)	503509N 0054237E					
Route remarks: Control unit: Maastricht UAC. **Point remarks:** *(2)* For continuation see *AIP Germany*.						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UZ210 {B-RNAV}	*(1)* CDR 1: EV weekend: FRI 1700 - MON 0700. EV night: MON to THU 2300 - 0600. CDR 2 outside these periods.					
△ PELIX	502949N 0054545E					
	125/305	24.0NM	FL660 / FL245	Odd *(1)*		{class C} *(2)*
△ OSLUM	501603N 0061629E					*(3)*
Route remarks: Control unit: Maastricht UAC. **Segment remarks:** *(2)* Lowest usable flight level is FL270. **Point remarks:** *(3)* For continuation see *AIP Germany*.						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UZ283 {B-RNAV}	*(1)* H24					
SUMAS Langen FIR - △ Hannover UIR / Amsterdam FIR	505635N 0060059E					*(2)*
	208/028	7.9NM	FL660 / FL195	Even *(1)*		{class C}
△ NAVAK	504939N 0055505E					
	209/029	4.4NM	FL660 / FL195	Even *(1)*		{class C}
△ PINUS Amsterdam FIR / Brussels UIR	504547N 0055145E					
	209/029	12.1NM	FL660 / FL195	Even *(1)*		{class C}
△ Olno DVOR/DME (LNO)	503509N 0054237E					
	173/353	20.2NM	FL660 / FL195	Odd *(1)*		{class C}
△ SOPOK	501510N 0054626E					
	173/353	10.6NM	FL660 / FL195	Odd *(1)*		{class C}
△ RITAX	500440N 0054825E					
	173/353	20.4NM	FL660 / FL195	Odd *(1)*		{class C}
△ IDOSA	494430N 0055211E					

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Point remarks:

(2) Route continues as Z283 in German airspace (see *AIP Germany*).

Route designator {RNP Type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP Type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UZ310 {B-RNAV}	*(1)* H24					
△ BATAK	513416N 0044720E					
	238/058	18.7NM	FL660 / FL195	Odd *(1)*		{class C}
△ WOODY Brussels UIR / Amsterdam FIR	512420N 0042159E					*(2)*

Route remarks:

Control units: Amsterdam ACC (below FL 245); Maastricht UAC (above FL 245).

Point remarks:

(2) For continuation see *AIP the Netherlands*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UZ319 {B-RNAV}	*(1)* H24					
△ DENOX	505246N 0040140E					
	176/356	15.8 NM	FL 660 / FL 195	Odd *(1)*		{class C}
△ SISGA	503705N 0040324E					
	176/356	18.3 NM	FL 660 / FL 195	Odd *(1)*		{class C}
△ DELOM Brussels UIR / France UIR	501853N 0040523E					*(2)*
Route remarks: Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245). **Point remarks:** *(2)* For continuation see *AIP France*.						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / Lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UZ703 {B-RNAV}	*(1)* Conditional route, for availability see above (§ 1.3.1).					
△ BABIX Amsterdam FIR / Brussels UIR	512447N 0045419E					*(2)*
	219/039	44.8 NM	FL 660 / FL 245	Odd *(1)*		{class C}
△ LERVO	504959N 0040931E					
	219/038	19.9 NM	FL 660 / FL 245	Odd *(1)*		{class C}
△ Chièvres DVOR (CIV)	503426N 0034958E					
Route remarks: Control unit: Maastricht UAC. **Point remarks:** *(2)* For continuation see *AIP the Netherlands*.						

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UZ706 {B-RNAV}	*(1)* Conditional route, for availability see above (§ 1.3.1).					
△ ARDEN France UIR / Brussels UIR	495143N 0045128E					*(2)*
	049/230	26.2NM	FL660 / FL195	Even *(1)*		{class C}
△ KOMOB	500838N 0052225E					
	050/231	45.2NM	FL660 / FL195	Even *(1)*		{class C}
△ LENDO Brussels UIR / Langen FIR - Hannover UIR	503731N 0061643E					*(3)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Point remarks:

(2) For continuation see *AIP France*.
(3) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	FL series ↑	Controlling unit {Airspace class} Remarks
UZ707 {B-RNAV}	*(1)* CDR 1: Conditional route, for availability see above (§ 1.3.1).					
△ ULPEN Amsterdam FIR / Brussels UIR	504520N 0055539E					*(2)*
	219/039	13.1NM	FL660 / FL245	Odd *(1)*		{class C}
△ Olno DVOR/DME (LNO)	503509N 0054237E					
	231/050	57.3NM	FL660 / FL245	Odd *(1)*		{class C}
△ FAMEN Brussels UIR / France UIR	495830N 0043400E					*(3)*

Route remarks:

Control unit: Maastricht UAC.

Point remarks:

(2) For continuation see *AIP the Netherlands*.
(3) For continuation see *AIP France*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	 ↑	Controlling unit {Airspace class} Remarks
UZ709 {B-RNAV}	*(1)* Conditional route, for availability see above (§ 1.3.1).					
△ RUPIN Amsterdam FIR / Brussels UIR	512738N 0043226E					*(2)*
	207/027	30.8NM	FL660 / FL245	Odd *(1)*		{class C}
△ BARTU	510011N 0041018E					
	207/026	28.8NM	FL660 / FL245	Odd *(1)*		{class C}
△ Chièvres DVOR (CIV)	503426N 0034958E					

Route rermarks:

Control unit: Maastricht UAC.

Point remarks:

(2) For continuation see *AIP the Netherlands*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	 ↑	Controlling unit {Airspace class} Remarks
UZ717 {B-RNAV}	*(1)* H24					
GOBNO Langen FIR - △ Hannover UIR / Amsterdam FIR	505856N 0055923E					*(2)*
	241/061	1.3NM	FL245 / FL195	Even *(1)*		{class C}
△ Maastricht VOR/DME (MAS)	505819N 0055738E					

Route remarks:

Control unit: Brussels ACC.

Point remarks:

(2) For continuation see *AIP Germany*.

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial track MAG ↓ ↑	Great circle DIST	Upper limit / lower limit	FL series ↓	 ↑	Controlling unit {Airspace class} Remarks
UZ907 {B-RNAV}	*(1)* H24					
△ ARCKY	501757N 0060756E					
	009/189	16.5NM	FL660 / FL195	Odd *(1)*		{class C}
△ KOGES Brussels UIR / Langen FIR - Hannover UIR	503412N 0061202E					*(2)*

Route remarks:

Control units: Brussels ACC (below FL 245); Maastricht UAC (above FL 245).

Point remarks:

(2) For continuation see *AIP Germany*.

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ENR 3.4 Helicopter Routes

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ENR 3.5 Other Routes

1 FREE ROUTE AIRSPACE

1.1 INTRODUCTION

Free Route Airspace (FRA) is a specified airspace within which users may freely plan direct routes between a defined entry point and a defined exit point, with the possibility to file via intermediate waypoints, without reference to the ATS route network, subject to airspace availability and using the flight level orientation scheme concerned. Within this airspace, flights remain subject to ATC.

The following prerequisites refer to the issuance of ATC clearances by the competent ATC units, which allow the pilots of aircraft in the Brussels FIR/UIR to deviate from established flight procedures and use the shortest possible routes between predefined entry and exit points when flying in or crossing the FIR/UIR. The entry and exit points may be located within the same or different (e.g. adjacent) FIR. This also includes ATC clearances that allow a direct routing through several FIR as long as Brussels FIR/UIR is included.

1.2 PREREQUISITES FOR THE ISSUANCE OF ATC CLEARANCES

ATC clearances as indicated above can only be issued if the following prerequisites are met:

a. The direct routing to be cleared in the Brussels FIR/UIR shall begin (entry point) and end (exit point) at waypoints in the Brussels FIR/UIR or other FIR, determined for the purpose of defining en-route flight procedures in line with the applicable national legislation and listed in the relevant AIP (ENR 4.3 or ENR 4.4);

b. The restrictions on the use of waypoints for direct routings, determined by the air navigation service provider responsible for air traffic flow management, including the temporal availability, which can be found in Appendix 4 (DCT limits) of the *EUROCONTROL Route Availability Document (RAD)* shall be complied with. More details on the RAD can be found in ENR 1.10, § 1.3.3;

c. The direct routing shall be indicated in item 15 of the flight plan;

d. The traffic situation must permit the issuance of an ATC clearance for a direct routing in line with the requirements for safe, orderly and expeditious handling of air traffic.

2 MILITARY ROUTES

	Rotary Wing	Fixed Wing	
	Heli	15W Tpt Aircraft	Jet Aircraft
General	Night flying is allowed in any of following conditions: • In controlled airspace • Along a network of pre-determined routes • In pre-determined areas.		
Timings	Mon & Tue: night flight possible as per flying window. Wed – Fri: 15W transport aircraft; others when authorized by COMOPSAIR.		
Flight planning	FPL to be filed not later than 1100 day of flight. FI MDC to share FPL between participating squadrons for awareness.		
Pre-determined routes	Yearly assessed		BENE, Falcon and Dark Falcon routes
Route – altitude	NVG: 200FT above highest obstacle < 1KM NO NVG: 500FT above highest obstacle < 3KM	NVG: 500FT above highest obstacle < 1NM NO NVG: 1000FT above highest obstacle < 5km	1000FT above highest obstacle < 5km
Areas	In NVG only: HTAs + LFA11 +NOTAM	In NVG only: Above LFAs lateral limits	N/A
Areas – altitude	In NVG only: See ACOT-GID-TRGMST-AOLG-200	In NVG only: 500ft above obstacle < 1NM	N/A
Airbase – circuit training	After prior coordination with local ATC		
Deconfliction during flight (MIL only)	All flights in uncontrolled airspace: to check in on “night flight frequency” = 362,35 • At each reporting point: broadcast callsign, route + direction, reporting point + altitude. • When crossing: Heli stay lowest, transport aircraft above, Jet aircraft highest.		
Foreign ACFT	Not allowed, unless approval from COA		

2.1 BENE ROUTES

The BENE routes consist of an integrated system of low flying routes which have been agreed by the Belgian Air Component and Royal Netherlands Air Force and flown by jet Aircraft by night over the Netherlands and Belgium below 4500FT AMSL.

All BENE routes, except BENE THREE and SIX, may be flown by day at VFR levels.

In order to provide awareness, all night flights will be announced by the night flight message sent by Semmerzake ATCC each THU for the next week. Also, a FPL needs to be filed for any night flight not later than 1100 on the day of flight.

FI MDC will:

- provide Brussels FIC with details on MIL low level night flights activities
- Coordinate night flights between helicopters and fixed wing Aircraft.

Aircraft which have not been allocated a specific route segment shall avoid these night low flying routes, unless the respective route segment is not activated or the Aircraft is under RIS/RC.

If the pilot cannot maintain the en-route altitude for technical or other reasons, he shall assume the ESA, squawk A/7700 and request immediate ATC assistance.

Radio contact with Belga Information is mandatory for the complete formation throughout the flight, except when crossing controlled airspace.

All altitudes depicted are minimum altitudes, aircraft may fly above the minimum altitude provided that they remain outside controlled airspace.

The BENE routes are depicted on the chart in ENR 6 MAP 7 A.

Note: Only that part of the BENE routes situated within the Brussels FIR is published.

2.1.1 BENE Routes

BENE ONE

Speed (KT)	Turning point	Position	Altitude (FT)
420	BBL	511003.6N 0052808.4E	2000
	1a	512818.6N 0043949.2E	2000
		512213.2N 0055154.0E	2000
	BBL	511003.6N 0052808.4E	
Note: High level return from Vliehors direct via VKL to BBL can be flown when a flight plan has been filed accordingly.			

BENE TWO

Speed (KT)	Turning point	Position	Altitude (FT)
420	BBL	511003.6N 0052808.4E	4000
	2a	504442.0N 0054116.2E	4000
	2b	502226.4N 0053103.0E	3300
	2c	494324.6N 0053236.0E	4000
	2d	495216.8N 0045552.2E	3000
	2e	501702.4N 0050536.0E	4000
	2f	501646.2N 0041734.8E	2300
	2g	502705.4N 0034520.4E	2000
	2h	505603.0N 0032554.0E	2200
	2j	504957.0N 0025955.8E	3000
	2k	511122.2N 0033325.8E	3000
	2l	511724.0N 0043219.8E	3000
	2m	505820.4N 0052140.8E	3000
	2n	505853.4N 0054223.4E	3000
	EXIT to Kleine-Brogel - Wildenrath - Volkel	510255.8N 0052836.0E	3000

BENE TWO SHORT

Speed (KT)	Turning point	Position	Altitude (FT)
Proceed as BENE TWO till			
420	2s	502855.8N 0053607.8E	4000
	2t	502304.8N 0045950.4E	4000
then follow BENE TWO.			

BENE THREE

Speed (KT)	Turning point	Position	Altitude (FT)
420	BBL	511003.6N 0052808.4E	4000
	3a	504615.0N 0051904.2E	2000/4000 (*)
	3b	503012.6N 0035943.2E	2000
	3c	505922.2N 0033625.2E	2000
	3d	511346.8N 0034828.2E	2000
		512210.8N 0055155.8E	2000
	BBL	511003.6N 0052808.4E	
(*) To provide separation between BENE THREE and BENE FOUR.			

BENE FOUR

Speed (KT)	Turning point	Position	Altitude (FT)
420	GATE	504600.0N 0055900.0E	4000
	4a	504442.0N 0054116.2E	4000
	4b	494324.6N 0053236.0E	4000
	4c	501558.2N 0051009.0E	4000
	4d	502020.4N 0044350.4E	2000/4000 (*)
	4e	501758.2N 0041615.0E	2000/4000 (*)
	4f	503004.2N 0034023.4E	2000/4000 (*)
	4g	505344.4N 0032403.6E	3000
	Boundary	511833.6N 0033349.8E	2000
(*) To provide separation between BENE THREE and BENE FOUR.			

BENE FOUR SHORT

From position 4a

- proceed via position 502200N 0051200E to position 4d at 4000 FT AMSL
- then proceed as BENE FOUR.

BENE FIVE

Speed (KT)	Turning point	Position	Altitude (FT)
420	BBL	511003.6N 0052808.4E	2000
	5a	512718.6N 0044316.8E	2000
	5b	511936.0N 0041255.2E	2000
	5c	504500.0N 0035200.0E	2000
	5d	511600.0N 0032300.0E	2000
	VKL	513924.0N 0054224.0E	FL 260
	BBL	511003.6N 0052808.4E	

BENE SIX

Speed (KT)	Turning point	Position	Altitude (FT)
420	BBL	511003.6N 0052808.4E	3000
	6a	504441.4N 0054117.4E	3000
	6b	503557.0N 0055455.8E	3000
	6c	501759.4N 0060752.8E	4000
	6d	494256.4N 0052150.4E	4000
	6e	500557.0N 0050055.2E	4000
	6f	500748.0N 0043053.4E	4000
	6g	501457.0N 0041155.8E	2000
	6h	503055.2N 0034001.8E	2000
	6j	505401.8N 0031511.4E	3000
	Boundary	511451.6N 0034806.6E	3000
520	6o	510757.0N 0055155.8E	1000
	6p	510255.8N 0052836.0E	1000
	BBL	511003.6N 0052808.4E	

BENE SIX SHORT

Speed (KT)	Turning point	Position	Altitude (FT)
Proceed as BENE SIX till			
420	6a	504441.4N 0054117.4E	4000
	6a'	502246.8N 0050650.4E	4000
	6g'	501841.4N 0040813.2E	2000
	6h	503055.2N 0034001.8E	2000
then follow BENE SIX			

BENE SIX EBFS

Speed (KT)	Turning point	Position	Altitude (FT)
420	BFS	501428.9N 0043911.4E	4000
	6g FS	501756.9N 0040955.5E	2000
	6h	503055.2N 0034001.8E	2000
then proceed as BENE SIX till			
420	6o	505157.0N 0053755.6E	3000
	6a	504441.4N 0054117.4E	3000
then proceed as BENE SIX till			
420	6e	500557.0N 0050055.2E	4000
	BFS	501428.9N 0043911.4E	

2.1.2 BENE Routes (Belgian Air Component jet aircraft only)

BENE II

Speed (KT)	Turning point	Position	Altitude (FT)
420	BBL	511003.6N 0052808.4E	2000
	2a	504442.0N 0054116.2E	2600
	2b	502226.4N 0053103.0E	3300
	2c	494324.6N 0053236.0E	2500
	2d	495216.8N 0045552.2E	2700
	2e	501702.4N 0050536.0E	2400
	2f	501646.2N 0041734.8E	2300
	2g	502705.4N 0034520.4E	1600
	2h	505603.0N 0032554.0E	2200
	2j	504957.0N 0025955.8E	2200
	2k	511122.2N 0033325.8E	1700
	2l	511724.0N 0043219.8E	2700
	2m	505820.4N 0052140.8E	2000
	2n	505853.4N 0054223.4E	2000

BENE II SHORT

Speed (KT)	Turning point	Position	Altitude (FT)
Proceed as BENE TWO till			
420	2s	502855.8N 0053607.8E	2300
	2t	502304.8N 0045950.4E	2400
then follow BENE TWO.			

2.2 FALCON Routes

2.2.1 FALCON Routes

The FALCON routes consist of an integrated system of low flying routes, flown at day or night by Belgian Air Component jet aircraft in IMC or VMC, using two different levels.

FALCON routes may be flown at the first two usable FL in IMC.

For flights in uncontrolled airspace a Terrain Avoidance Plan (TAP) will be applied for each night flight including:

- Imposed night flight altitudes: Along predetermined routes using NVG: minimum altitude of 1000FT above the highest obstacle within a radius of 5KMof the aircraft as indicated on the Obstacle sheets per leg, avoiding populated areas.
- Obstacle sheets per respective route;
- Thorough map study;
- Emergency Safety Altitude (ESA).

The proposed routes will be flown by daylight on a yearly basis in order to update the Obstacle clearance sheet.

In order to provide awareness, all night flights will be announced by the night flight message sent by Semmerzake ATCC each THU for the next week. Also, a FPL needs to be filed for any night flight not later than 1100 on the day of flight.

FI MDC will:

- provide Brussels FIC with details on MIL low level night flights activities
- Coordinate night flights between helicopters and fixed wing Aircraft.

Radio contact with Belga Information is mandatory for the complete formation throughout the flight, except when crossing controlled airspace.

All altitudes depicted are minimum altitudes, aircraft may fly above the minimum altitude provided that they remain outside controlled airspace.

The FALCON routes are depicted on the chart in ENR 6 MAP 7 B.

Note: Only that part of the FALCON routes situated within the Brussels FIR is published..

FALCON ROUTE

Speed (KT)	Turning point	Position	FL or altitude (FT)	
			in IMC	in VMC
420	A	510100.0N 0051600.0E	3000 and 4000	3000 and 4000
	B	502226.4N 0053103.0E	FL 50 and FL 60	3000 and 4000
	C	494324.6N 0053236.0E	FL 50 and FL 60	3000 and 4000
	D	495216.8N 0045552.2E	FL 50 and FL 60	3000 and 4000
	E	501702.4N 0050536.0E	FL 50 and FL 60	3000 and 4000
	F	501646.2N 0041734.8E	FL 50 and FL 60	3000 and 4000
	G	502705.4N 0034520.4E	FL 50 and FL 60	3000 and 4000
	H	505603.0N 0032554.0E	FL 50 and FL 60	3000 and 4000
	J	504957.0N 0025955.8E	FL 50 and FL 60	3000 and 4000
	K	511122.2N 0033325.8E	FL 50 and FL 60	3000 and 4000
		511400.0N 0035900.0E (Entry Brussels TMA Three)	4000 and FL 50	3000 and 4000
		511500.0N 0041300.0E (Entry Brussels TMA Two)	3000 and 4000	3000 and 4000
	L	511724.0N 0043219.8E (Entry Brussels TMA Four)	3000 and 4000	3000 and 4000
	M	510400.0N 0050000.0E (Exit to Kleine-Brogel TMA)	3000 and 4000	3000 and 4000

FALCON ROUTE SHORT

Speed (KT)	Turning point	Position	FL or altitude (FT)	
			in IMC	in VMC
Proceed as FALCON till				
420	S	502855.8N 0053607.8E	FL 50 and FL 60	3000 and 4000
	T	502304.8N 0045950.4E	FL 50 and FL 60	3000 and 4000

2.2.2 DARK FALCON Routes (Belgian F16 only)

The DARK FALCON routes consist of an integrated system of low flying routes, flown at day or night by Belgian Air Component jet aircraft in IMC or VMC, using two different levels.

FALCON routes may be flown at the first two usable FL in IMC.

For flights in uncontrolled airspace a Terrain Avoidance Plan (TAP) will be applied for each night flight including:

- Imposed night flight altitudes: Along predetermined routes using NVG: minimum altitude of 1000FT above the highest obstacle within a radius of 5KMof the aircraft as indicated on the Obstacle sheets per leg, avoiding populated areas.
- Obstacle sheets per respective route;
- Thorough map study;
- Emergency Safety Altitude (ESA).

The proposed routes will be flown by daylight on a yearly basis in order to update the Obstacle clearance sheet.

In order to provide awareness, all night flights will be announced by the night flight message sent by Semmerzake ATCC each THU for the next week. Also, a FPL needs to be filed for any night flight not later than 1100 on the day of flight.

FI MDC will:

- provide Brussels FIC with details on MIL low level night flights activities
- Coordinate night flights between helicopters and fixed wing Aircraft.

Radio contact with Belga Information is mandatory for the complete formation throughout the flight, except when crossing controlled airspace.

All altitudes depicted are minimum altitudes, aircraft may fly above the minimum altitude provided that they remain outside controlled airspace.

This route can be flown by night with NVG. VMC conditions are mandatory.

Only to be flown clockwise.

The approval of SOF to perform VFR OPS within the CTR is not required to use this particular route when passing inside the CTR.

Climb-outs are allowed from this route (e.g. to reach a TSA…) provided that a pre-coordination is done with Semmerzake ATCC prior take-off.

The DARK FALCON routes are depicted on the chart in ENR 6 MAP 7 C.

Note: Only that part of the FALCON routes situated within the Brussels FIR is published..

DARK FALCON

Speed (KT)	Turning point	Landmark	Position	Altitude (FT)
420	7A	Stree	5016.5557N 00417.9130E	1800
	7B	Highway exit	5027.0422N 00343.7557E	1600
	7C	Road crossing	5032.8103N 00336.2393E	1600
	7D	Highway crossing	5104.5163N 00327.0206E	1600
	7E	Docks	5108.7643N 00347.4314E	1800
	7F	Loenhout	5123.9191N 00438.6253E	1400
	7G	Postel	5117.1687N 00511.3622E	1700
	7H	Y Canal	5105.6429N 00508.2832E	1600
	7I	Airfield	5047.3865N 00511.8103E	1700
	7J	Crossing Eghezee	5035.5006N 00454.7498E	2200
	7K	Highway exit	5019.0992N 00507.7858E	2900
	7L	Dam Coo	5023.4087N 00552.3129E	3400
	7M	Bridge	4941.0657N 00530.7939E	2400
	7N	Castle	4947.6150N 00503.9759E	2500
	7O	Railroad	4959.0288N 00458.6793E	2800
	7P	Railroad	5007.8642N 00516.6229E	2500
	7Q	Y junction	5021.8959N 00452.3775E	2400
	7A	Stree	5016.5557N 00417.9130E	

DARK FALCON SHORT NORTH

Speed (KT)	Turning point	Landmark	Position	Altitude (FT)
420	7A	Stree	5016.5557N 00417.9130E	1800
	7B	Highway exit	5027.0422N 00343.7557E	1600
	7C	Road crossing	5032.8103N 00336.2393E	1600
	7D	Highway crossing	5104.5163N 00327.0206E	1600
	7E	Docks	5108.7643N 00347.4314E	1800
	7F	Loenhout	5123.9191N 00438.6253E	1400
	7G	Postel	5117.1687N 00511.3622E	1700
	7H	Y Canal	5105.6429N 00508.2832E	1600
	7I	Airfield	5047.3865N 00511.8103E	1700
	7J	Crossing Eghezee	5035.5006N 00454.7498E	2200
	7K	Highway exit	5019.0992N 00507.7858E	2500
	7Q	Y junction	5021.8959N 00452.3775E	

DARK FALCON SHORT SOUTH

Speed (KT)	Turning point	Landmark	Position	Altitude (FT)
420	7K	Highway exit	5019.0992N 00507.7858E	2900
	7L	Dam Coo	5023.4087N 00552.3129E	3400
	7M	Bridge	4941.0657N 00530.7939E	2400
	7N	Castle	4947.6150N 00503.9759E	2500
	7O	Railroad	4959.0288N 00458.6793E	2800
	7P	Railroad	5007.8642N 00516.6229E	2500
	7Q	Y junction	5021.8959N 00452.3775E	

2.3 Navigation Routes 15W TPT

A Terrain Avoidance Plan (TAP) will be applied for each night flight including:

- Imposed night flight altitudes:
  - Along predetermined routes using NVG: minimum altitude of 500FT above the highest obstacle within a radius of 1NM of the aircraft as indicated on the Obstacle sheets per leg, avoiding populated areas.
  - Along predetermined routes without NVG or outside predetermined routes: minimum altitude of 1000FT above the highest obstacle within a radius of 5KM of the aircraft as indicated on the Obstacle sheets per leg.
  - Above the lateral limits of the LFA Ardennes: Minimum Safety Height to be respected is 500FT above the highest obstacle within a radius of 1NM of the aircraft.
- Obstacle sheets per respective route;
- Thorough map study;
- Emergency Safety Altitude (ESA).

The proposed routes will be flown by daylight on a yearly basis in order to update the obstacle clearance sheet.

In order to provide awareness, all night flights for the next week will be coordinated and announced by the night flight message sent by Semmerzake ATCC each THU for the next week. Also, a Flight Plan needs to be filed for any night flight not later than 1100 on the day of flight.:

FI MDC will:

- provide Brussels FIC with details on MIL low level night flights activities;
- coordinate night flights between helicopters and fixed wing aircraft.

Aircraft which have not been allocated a specific route segment shall avoid these night low flying routes, unless the respective route segment is not activated or the aircraft is under RIS/RC.

If the pilot can not maintain the enroute altitude for technical or other reasons, he shall assume the ESA, squawk A/7700 and request immediate ATC assistance.

Only pre-planned deviations will be allowed:

- For planned deviations of the routes and corridors an appropriate advance request shall be made to Semmerzake ATCC not later than 24 HR prior take-off. All deviations are subject to approval of Semmerzake ATCC;
- Upon instruction of Semmerzake ATCC, the proposed TAP shall be aborted and the flight shall be continued at the enroute altitude, ESA or the allocated flight altitude depending on the instructions received.

The 15W Navigation Routes are depicted on the chart in ENR 6 MAP 7 E.

ROUTE 1

Turning point	Position		Emergency
AFI	5054.47N	00408.33E	Climb to ESA
BE066	5043.00N	00411.20E	
BE068	5032.40N	00414.00E	
BE069	5029.80N	00407.80E	
BE057	5022.45N	00401.87E	
BE071	5018.60N	00408.20E	
FSENW	5013.10N	00423.10E	

ROUTE 2

Turning point	Position		Emergency
BUN	5107.12N	00450.52E	Climb to ESA
YANKE	5105.64N	00508.25E	
BE120	5100.00N	00513.40E	
NVG04	5050.74N	00520.32E	
BE164	5044.70N	00541.00E	
BE171	5014.90N	00543.80E	
BE181	4943.20N	00535.50E	
BE136	4948.60N	00500.30E	
FNENE	5017.10N	00453.00E	

ROUTE 3

Turning point	Position		Emergency
BE163	5051.20N	00530.00E	Climb to ESA
BEEXS	5027.91N	00455.01E	
FNENE	5017.10N	00453.00E	

ROUTE 4

Turning point	Position		Emergency
AFI	5054.47N	00408.33E	Climb to ESA
BE036	5057.40N	00334.00E	
DIKSM	5102.04N	00251.89E	

2.4 NVG Link Routes Belgian Military Helicopters

A Terrain Avoidance Plan (TAP) will be applied for each night flight including:

- Imposed Night Flight altitudes:
  - Along predetermined routes using NVG: minimum altitude of 200FT above the highest obstacle within a radius of 1KM of the aircraft as indicated on the Obstacle sheets per leg.
  - Along predetermined routes without NVG or outside predetermined routes: minimum altitude of 500FT above the highest obstacle within a radius of 3KM of the aircraft as indicated on the Obstacle sheets per leg.
  - In the HTAs: at an altitude between GND and 500FT AGL, adapting speed and height in function of the contours and cover of the ground.
- Obstacle sheets per respective route
- Thorough map study
- Minimum Safe Altitude (MSA)

The proposed routes will be flown by daylight on a yearly basis in order to update the Obstacle clearance sheet.

In order to provide awareness, all night flights will be announced by the night flight message sent by Semmerzake ATCC each Thursday for the next week. Also, a Flight Plan needs to be filed for any night flight not later than 1100 on the day of flight. FI MDC will:

- Provide Brussels FIC with details on MIL low level night flights activities
- Coordinate night flights between helicopters and fixed wing aircraft.

aircraft which have not been allocated a specific route segment shall avoid these night low flying routes, unless the respective route segment is not activated or the aircraft is under RIS/RC.

If the pilot cannot maintain the en-route altitude for technical or other reasons, he shall assume the MSA, squawk A/7700 and request immediate ATC assistance.

Only pre-planned deviations will be allowed:

- *For planned deviations of the routes and corridors an appropriate advance request shall be made to COMOPSAIR not later than 24HR prior take-off. All deviations are subject to approval by COMOPSAIR.*
- *Upon instruction of Semmerzake ATCC, the proposed TAP shall be aborted and the flight shall be continued at the en-route altitude, ESA or the allocated flight altitude depending on the instructions received.*

The Belgian Military Helicopter NVG Routes are depicted on the chart in ENR 6 MAP 7 D.

To allow maximum training value and to reduce repetitive overflights of the same route, a set of reporting points is established. The link routes are any acceptable combination of routes between those published points. Full priority will be given to night flights planned to follow route BENE TWO (see § 2.1.1 above).

NORTH SECTOR

Reporting point	Landmark	Position	Remark
N1	Cheratte	504025N 0053916E	Road crossing
N2	Tongeren	504725N 0053123E	Road crossing
N3	Zutendaal	505630N 0053400E	
N4	Remicourt	504102N 0051825E	
N5	Walshoutem	504226N 0050427E	Road crossing
N6	Sint-Truiden	504711N 0051122E	
N7	Goetsenhoven	504632N 0045717E	
N8	Lummen	510002N 0051230E	Road crossing
N9	Aarschot	505731N 0044919E	Road crossing

NORTH SECTOR

Reporting point	Landmark	Position	Remark
N10	Schaffen	505934N 0050334E	
N11	Balen Keiheuvel	511025N 0051309E	
N12	Postel	511705N 0051111E	Road crossing
N13	Weelde	512323N 0045720E	
N14	Heist o/d Berg	510421N 0044234E	Road crossing
N15	Duffel	510532N 0042923E	
N16	Zoersel	511532N 0044507E	
N17	Entry east	512316N 0043435E	
N18	Entry south	511700N 0043129E	
N19	Entry west	511911N 0042525E	
N20	Helchteren	514000N 0052400E	
N21	Kinrooi	510827N 0054416E	
N22	Lanaken	505329N 0053904E	
N23	Flora	505221N 0050800E	

SOUTH SECTOR

Reporting point	Landmark	Position	Remark
S1	Villers-le-Bouillet	503431N 0051219E	Road crossing
S2	Marche-les-Dames	512901N 0045732E	
S3	Namur Suarlée	502910N 0044605E	
S4	Gembloux	503403N 0044206E	
S5	Ivoi	502230N 0045548E	
S6	Sovet	501707N 0050215E	
S7	Tinlot	502828N 0052223E	Road crossing
S8	Spa	502834N 0055422E	
S9	Manhay	501720N 0054008E	
S10	Marche-en-Famenne	501407N 0052101E	Road crossing
S11	Saint-Hubert	500202N 0052614E	
S12	Bastogne	500018N 0054100E	Road crossing
S13	Bertrix	495318N 0051316E	
S14	Stockem	494035N 0054625E	
S15	Agimont	501000N 0044734E	
S16	Rance	500824N 0041627E	

WEST SECTOR

Reporting point	Landmark	Position	Remark
W1	Stekene	511326N 0040313E	Road crossing
W2	Zele	510405N 0040210E	
W3	Wetteren	505820N 0034922E	Road crossing
W4	Overboelare	504428N 0035115E	
W5	Amougies	504413N 0032906E	
W6	Moorsele	505106N 0030830E	
W7	Ursel	510823N 0032819E	
W8	Leers-et-Fosteau	501800N 0041500E	
W9	Carrefours Mons	502318N 0035800E	
W10	Lion de Waterloo	504029N 0042414E	

For safety and de-confliction reasons only the following route based on a set combination of points can be flown Night VFR assisted by NVG:

All routes may be flown clockwise and counter-clockwise.

Night VFR assisted by NVG

West 1 - 22		West 1 - 04		North 1 - 22		North 1 - 04		South 1 - 22		South 1 - 04	
Turning Point	FT AMSL	Turning Point	FT AMSL	Turning Point	FT AMSL	Turning Point	FT AMSL	Turning Point	FT AMSL	Turning Point	FT AMSL
EBBE		EBBE		EBBE		EBBE		EBBE		EBBE	
BIERB.	900	GAST.	900	BIERB.	900	HOEG.	900	LONG.	900	HOEG.	900
N14	800	W10	1300	N14	800	N23	800	S4	1400	N23	800
W2	800	W4	1500	N16	700	N8	800	S3	1400	N2	1000
W4	900	W2	900	N13	700	N11	900	S2	1700	N1	1300
W10	1500	N14	800	N12	600	N12	900	S7	1600	S7	1900
GAST.	1300	BIERB.	800	N11	900	N13	600	N1	1900	S2	1600
EBBE	900	EBBE	900	N8	900	N16	700	N2	1300	S3	1700
EET: 0100 MSA: 1500 FT		EET: 0100 MSA: 1500 FT		N23	800	N14	700	N23	1000	S4	1400
				HOEG.	800	BIERB.	800	HOEG.	800	LONG.	1400
				EBBE	900	EBBE	900	EBBE	900	EBBE	900
				EET: 0100 MSA: 900 FT		EET: 0100 MSA: 900 FT		EET: 0100 MSA: 1900 FT		EET: 0100 MSA: 1900 FT	

Night VFR assisted by NVG

West 2 - 22		West 2 - 04		North 2 - 22		North 2 - 04		South 2 - 22		South 2 - 04	
Turning Point	FT AMSL	Turning Point	FT AMSL	Turning Point	FT AMSL	Turning Point	FT AMSL	Turning Point	FT AMSL	Turning Point	FT AMSL
EBBE		EBBE		EBBE		EBBE		EBBE		EBBE	
BIERB.	900	GAST.	900	BIERB.	900	HOEG.	900	LONG.	900	HOEG.	900
N14	800	W10	1300	N14	800	N23	800	S4	1400	N23	800
W2	800	W4	1500	N16	700	N2	1000	S15	1900	N2	1000
W7	800	W5	1100	N18	1100	N3	1300	EBFS D	1900	N1	1300
W5	900	W7	900	N19	1000	N21	1300	S13	2000	S9	2600
W4	1100	W2	800	N17	1100	N12	900	S11	2400	S11	2600
W10	1500	N14	800	N13	1100	N13	600	S9	2600	S13	2400
GAST.	1300	BIERB.	800	N12	600	N17	1100	N1	2600	EBFS D	2000
EBBE	900	EBBE	900	N21	900	N19	1100	N2	1300	S15	1900
EET: 0130 MSA: 1500 FT		EET: 0130 MSA: 1500 FT		N3	1300	N18	1000	N23	1000	S4	1900
				N2	1300	N16	1100	HOEG.	800	LONG.	1400
				N23	1000	N14	700	EBBE	900	EBBE	900
				HOEG.	800	BIERB.	800	EET: 0130 MSA: 2600 FT		EET: 0130 MSA: 2600 FT	
				EBBE	900	EBBE	900				
				EET: 0130 MSA: 1300 FT		EET: 0130 MSA: 1300 FT					

Night VFR assisted by NVG

West 3 - 22		West 3 - 04	
Turning Point	FT AMSL	Turning Point	FT AMSL
EBBE		EBBE	
BIERB.	900	GAST.	900
N14	800	W10	1300
N18	900	W9	1300
N19	1000	W6	1100
W1	1000	W7	800
W7	800	W1	800

Night VFR assisted by NVG

West 3 - 22		West 3 - 04	
Turning Point	**FT AMSL**	**Turning Point**	**FT AMSL**
W6	800	N19	1000
W9	1100	N18	1000
W10	1300	N14	900
GAST.	1300	BIERB.	800
EBBE	900	EBBE	900
EET: 0145 MSA: 1500 FT		EET: 0145 MSA: 1500 FT	

2.5 TACAN ROUTES

Note: State aircraft traffic between Belgium, Luxembourg and France along TACAN routes must be transferred as GAT flights. Following rules apply:
- OAT flying on TG1 will be routed to France via DIK on UA242 and becomes GAT from intersection of TG-1 and UA24.
- State aircraft traffic transiting Luxembourg and south of Belgium will be routed as GAT on UR110 via NTM, LUX, MMD and vice versa.

Route designator {RNP Type}	**[Route usage notes]**					
Significant Point Name	**Significant point coordinates**					**Remarks**
{RNP Type}	**Initial track MAG**	**Great circle DIST**	**Upper limit / lower limit**	**FL series**		**Controlling unit {Airspace class} Remarks**
	↓ ↑			↓	↑	
TG1	*(1)* HX					
△ Koksy TACAN (KOK)	510557N 0023920E					
	123/305	92.0NM	UNL / FL260	Odd(1)	Even(1)	{class C}
△ Florennes TACAN (BFS)	501429N 0043912E					
	100/281	58.2NM	UNL / FL260	Odd(1)	Even(1)	{class C} (2)
△ NTM16 Brussels UIR / Rhein UIR	500405N 0060726E					

Route remarks:

Control unit: Semmerzake ATCC.

Segment remarks:

(2) For continuation see *AIP Germany*.

Route designator {RNP Type}	[Route usage notes]					
Significant Point Name	Significant point Coordinates					Remarks
{RNP Type}	Initial track MAG	Great circle DIST	Upper limit / lower limit	FL series		Controlling unit {Airspace class} Remarks
	↓ ↑			↓	↑	
TL4	*(1)* HX					
△ NPT London UIR / Brussels UIR	512941N 0020000E					(3)
	134/314	34.4 NM	UNL FL260	Odd(1)	Even(1)	{class C} (2)
△ Koksy TACAN (KOK)	510557N 0023920E					

Route remarks:

Control unit: Semmerzake ATCC.

Segment remarks:

(2) Minimum IFR cruising level FL270.

Point remarks:

(3) For continuation see *AIP United Kingdom*.

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ENR 3.6 En-route Holding

BRUSSELS - NICKY

Fix	Inbound track (MAG)	Turn	Holding level (MNM / MAX)	Control unit
BUB DVOR/DME - NIK DVOR/DME	113° / 293°	Left	FL150 / FL440	Maastricht UAC (ABV FL245) Brussels ACC (BLW FL245)

BRUSSELS - COSTA

Fix	Inbound track (MAG)	Turn	Holding level (MNM / MAX)	Control unit
BUB DVOR/DME - COA DVOR/DME	113° / 293°	Left	FL150 / FL440	Maastricht UAC (ABV FL245) Brussels ACC (BLW FL245)

GOSLY

Fix	Inbound track (MAG)	Turn	Holding level (MNM / MAX)	Control unit
GSY DVOR/DME	359°	Left	FL100 / FL230 *(1)*	Brussels ACC
(1) MNM level FL130 during MIL operational hours.				

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ENR 4 RADIO NAVIGATION AIDS / SYSTEMS

ENR 4.1 Radio Navigation Aids - En-route

Name of station (MAG VAR/year)	ID	Frequency (CH)	Hours of operation	Coordinates	DME antenna ELEV	Remarks
1	2	3	4	5	6	7
Affligem DVOR/DME (0°/2015)	AFI	114.900MHZ (CH 96X)	H24	505428N 0040820E	291FT AMSL	DOC: 40NM - FL250 Sector E: 90NM - FL250.
Antwerpen DVOR/DME (0°/2015)	ANT	113.500MHZ (CH 82X)	H24	511126N 0042821E	74FT AMSL	DOC: 40NM - FL250
Beauvechain TACAN (0°/2011)	BBE	(CH 107X)	H24	504525N 0044607E	354FT AMSL	DOC: 100NM - FL250 OPR: Belgian Air Component.
Kleine-Brogel TACAN (1°E/2015)	BBL	(CH 33X)	H24	511014N 0052758E	219FT AMSL	DOC: 40NM - FL250 OPR: Belgian Air Component.
Florennes TACAN (1°E/2015)	BFS	(CH 52X)	H24	501429N 0043912E	965FT AMSL	DOC: 100NM - FL600 Sector SE: 200NM - FL600. OPR: Belgian Air Component. TACAN restricted due to azimuth unlocks may be observed in sector R341-R347
Brussels DVOR/DME (0°/2015)	BUB	114.600MHZ (CH 93X)	H24	505408N 0043217E	178FT AMSL	DOC: 100NM - FL500
Bruno DVOR/DME (0°/2015)	BUN	110.600MHZ (CH 43X)	H24	510707N 0045032E	86FT AMSL	DOC: 40NM - FL250
Chièvres DVOR (1°E/2015)	CIV	113.200MHZ	H24	503426N 0034958E		DOC: 60NM - FL500 DVOR is located 808M from TACAN. Both aids can therefore not be considered as collocated.
Chièvres TACAN (1°/2011)	CIV	(CH 79X)	H24	503420N 0034918E	214FT AMSL	DOC: 60NM - FL500 TACAN unreliable: 056°-234° and 315°-326° beyond 30NM BLW 3000FT. OPR: USAF
Costa DVOR/DME (0°/2015)	COA	110.050MHZ (CH 37Y)	H24	512053N 0032119E	42FT AMSL	DOC: 60NM - FL500
Diekirch DVOR/DME/NDB (1°E/2015)	DIK	114.400MHZ (CH 91X) 307.000KHZ	H24	495141N 0060747E	1109FT AMSL	DOC DVOR: 100NM - FL500 DOC NDB: 50NM - FL600
Luxembourg NDB	ELU	368.500KHZ	H24	494048N 0062118E		DOC: 25NM - FL600
Flora DVOR/DME (1°E/2015)	FLO	112.050MHZ (CH 57Y)	H24	505236N 0050804E	129FT AMSL	DOC: 50NM - FL250
Gosly DVOR/DME (1°E/2015)	GSY	115.700MHZ (CH 104X)	H24	502714N 0042629E	644FT AMSL	DOC: 30NM - FL260
Huldenberg DVOR/DME (0°/2015)	HUL	117.550MHZ (CH 122Y)	H24	504458N 0043830E	372FT AMSL	DOC: 40NM - FL250 Sector NNW-NE: 32NM - FL250.

Name of station (MAG VAR/year)	ID	Frequency (CH)	Hours of operation	Coordinates	DME antenna ELEV	Remarks
1	2	3	4	5	6	7
Koksy VORTAC (0°/2015)	KOK	114.500MHZ (CH 92X)	H24	510541N 0023906E	33FT AMSL	DOC: 80NM - FL500 Sector SE: 100NM - FL500. COORD TACAN: 510557N - 0023920E. OPR TACAN: Belgian Air Component.
Liège DVOR/DME (1°E/2015)	LGE	115.450MHZ (CH 101Y)	H24	503914N 0052814E	633FT AMSL	DOC: 40NM - FL250
Olno DVOR/DME (1°E/2015)	LNO	112.800MHZ (CH 75X)	H24	503509N 0054237E	866FT AMSL	DOC: 60NM - FL500 Sector NW-SW: 80NM - FL500.
Luxembourg DVOR/DME (1°E/2015)	LUX	112.250MHZ (CH 59Y)	H24	493822N 0061450E	1234FT AMSL	DOC: 60NM - FL250
Mackel NDB	MAK	360.500KHZ	H24	505752N 0032947E		DOC: 50NM
Maastricht VOR/DME (0°/2010)	MAS	108.600MHZ (CH 23X)	H24	505819N 0055738E		DOC: 40NM - FL250 OPR: See *AIP the Netherlands*.
Nicky DVOR/DME (0°/2015)	NIK	117.400MHZ (CH 121X)	H24	510954N 0041102E	112FT AMSL	DOC: 60NM - FL500 Sector E: 100NM - FL500.
Charleroi NDB	ONC	323.000KHZ	H24	502922N 0043319E		DOC: 25NM
Liège NDB	ONL	290.000KHZ	H24	504204N 0053257E		DOC: 25NM
Oostende NDB	ONO	399.500KHZ	H24	511313N 0030042E		DOC: 50NM
Antwerpen NDB	ONW	355.000KHZ	H24	511003N 0043358E		DOC: 50NM
Sprimont DVOR/DME (1°E/2015)	SPI	113.100MHZ (CH 78X)	H24	503053N 0053725E	976FT AMSL	DOC: 60NM - FL500 Sector NW-SW: 80NM - FL500.
Luxembourg NDB	WLU	346.000KHZ	H24	493404N 0060315E		DOC: 25NM - FL600

ENR 4.2 Special Navigation Systems

NIL

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ENR 4.3 Global Navigation Satellite System (GNSS)

NIL

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ENR 4.4 Name-code Designators for Significant Points

Name-code designator	Coordinates	ATS route (ENR 3.3)	ATS route (other)
1	2	3	4
ADIXO	503453N 0050220E		SID EBBR
ADUSU	495722N 0061146E	UT856	
ADUTO	503054N 0032142E	N873, UN873	
AGENI	504500N 0060200E	T855, UZ158	
AKELU	492201N 0062750E		STAR ELLX
AKOVI	504450N 0034307E		STAR EBBR, STAR EBAW
ARCKY	501757N 0060756E	L607, N853, Q50, T181, T853, Z907, UN853, UQ50, UT853, UZ907	
ARDEN	495143N 0045128E	UZ706	
ARVOL	503245N 0032949E		STAR EBAW, STAR EBBR, STAR EBCI
ARVUG	495522N 0061345E	UN857	
ASDAK	503608N 0061507E	UT880	
ASMOX	495410N 0061634E		SID ELLX
ASPIX	502907N 0052500E		SID EBCI
BABIX	512447N 0045419E	UZ703	
BARTU	510011N 0041018E	UY131, UZ709	
BATTY	503857N 0055056E	T855, UL608, UL610, UT880, UY37	STAR EBAW, STAR EBBR, STAR EBCI
BEKEM	512556N 0043449E	Z311	STAR EBBR
BELOB	504234N 0031252E	UY873	
BETEX	494857N 0062531E	Z110, UN858	STAR ELLX
BROGY	511057N 0052656E	UN852	
BUGIB	502202N 0062158E	T181	
BULAM	512109N 0024501E	L610, UL610	
BULUX	503534N 0051505E		SID EBBR, SID EBCI
BUPAL	504323N 0043604E	UL607, UM617	
DELOM	501853N 0040523E	UY50, UZ319	

Name-code designator	Coordinates	ATS route (ENR 3.3)	ATS route (other)
1	2	3	4
DEMUL	495747N 0055843E	M624, UM624, UY181	
DENOX	505246N 0040140E	L607, N872, UN872, UZ319	
DENOV	503812N 0061226E	T857, UM615, UT857	
DENUT	511410N 0033927E	L610, Y18, UL608, UL610, UY18, UY873	SID EBBR, STAR EBOS
DIBLI	512443N 0021545E	L610, UL610	
DINAN	494955N 0051953E	UM170, UY157	
DINKI	503821N 0055422E	UM170	
DISKI	493420N 0062814E	Q763	SID/STAR ELLX
ELSIK	511142N 0045955E	L179, UL179	SID EBBR
ERIGO	505017N 0053022E	M617	
ETENO	501055N 0061130E	UY863	
EVOSA	511058N 0054611E	UZ29	
FAMEN	495830N 0043400E	UZ707	
FERDI	505445N 0033813E	N873, Y18, Y50, UL607, UN873, UY18, UY50	STAR EBOS
GESLO	500445N 0060018E	N852, Z104, UM615, UN852, UZ104	STAR EBLG
GILOM	504507N 0044627E	L607, M624	STAR EBLG, SID EBAW
GIREL	501514N 0053229E		STAR EBLG
GIRVI	504644N 0030356E		DCT (see ENR 3.5, § 1.2)
GOBNO	505856N 0055923E	Z717, UZ717	
GOLEX	505643N 0033657E	L607, Y50	
GOPAS	495759N 0060411E	N852, Y181, UN852, UY181	
HELEN	511407N 0035211E	L179, N873, Y28, UL179, UN873, UY28	SID EBBR
IBERA	493030N 0061630E	UN853	
IBESA	502900N 0062000E	T853, UT853	
IDOKO	502026N 0035223E	Y50	
IDOSA	494430N 0055211E	Y180, UM615, UN857, UZ283	
IMVIX	502221N 0061706E	T181	

Name-code designator	Coordinates	ATS route (ENR 3.3)	ATS route (other)
1	2	3	4
KEGIT	512425N 0030624E	UL179, UL608	
KERKY	505537N 0035933E		STAR EBBR, STAR EBCI
KOGES	503412N 0061202E	Z907, UZ907	
KOMOB	500838N 0052225E	UM150, UZ706	
KONAN	510751N 0020000E	L607, UL607	
KUDIN	494135N 0051546E	UM170	
LAMLA	503535N 0061417E	UL610	
LAREP	502634N 0054739E	Q50, UN852, UQ50	
LENDO	503731N 0061643E	UZ706	
LERVO	504959N 0040931E	UY131, UZ703	
LIMGO	493814N 0061654E	N852, Q763, Z110, UN852, UN858, UZ111	
LIPNI	493148N 0055045E	UN858	
LOLGI	503946N 0050913E		STAR EBCI
LUMEN	511610N 0032424E	L610, Y50, UL610, UY50	
LUTAX	493258N 0054858E	UM163	
LUTOM	511556N 0052516E	UN852	
MADUX	511336N 0022427E	Q70, UQ70	
MAKIK	495812N 0061002E	Y181, UY181	
MAKOB	503726N 0042549E		DCT (see ENR 3.5, § 1.2)
MAPAD	504946N 0060109E	Y868, UY868	
MATUG	502500N 0062211E	UL607	
MEDIL	502032N 0034030E	N872, UN872	
MOKOM	495843N 0060959E	UY157	
MOSET	493247N 0062039E		STAR ELLX
NAVAK	504939N 0055505E	Y868, Z283, UY868, UZ283	
NILEM	501748N 0040708E	UY131	
NISIV	495334N 0061435E	Y180, UY180	

Name-code designator	Coordinates	ATS route (ENR 3.3)	ATS route (other)
1	2	3	4
NIVOR	504138N 0041727E		STAR EBCI
NPT	512941N 0020000E	TL4	
NTM16	500405N 0060726E	TG1	
ORVOS	493024N 0052956E		DCT (see ENR 3.5. § 1.2)
OSLUM	501603N 0061629E	UZ210	
PABLI	503547N 0045543E		SID EBBR
PELIX	502949N 0054545E	UL607, UN852, UZ210	
PESOV	502239N 0062054E	UT180	
PETAN	493310N 0055238E		STAR ELLX
PINUS	504547N 0055145E	Z283, UZ283	
PITES	494343N 0063110E	M150, UM150, UZ111	SID EBBR
PODAT	504145N 0060811E	M170, UM170	
PODEN	504121N 0060825E	UY862	
PUTTY	512157N 0042015E		SID EBAW
RAPIX	512635N 0020000E	L610, UL610	
RAPOR	493529N 0051247E		SID ELLX
REMBA	503944N 0045451E	M624, UL607, UM624	SID EBBR, STAR ELLX
REMGO	494633N 0050116E	UY157	
RITAX	500440N 0054825E	M624, UM624, UT27, UZ104, UZ283	SID EBBR, SID EBCI, STAR EBLG
ROBAL	502824N 0033800E	M617, UM617	
ROBON	500442N 0060705E	Z104, UZ104	
RODRI	505236N 0035146E		STAR EBBR
ROUSY	492835N 0060654E	UM624, UQ624, UT27	SID EBBR
RUBUT	504905N 0024033E		DCT (see ENR 3.5. § 1.2)
RUDIX	502504N 0050607E		STAR EBLG
RUPIN	512738N 0043226E	UZ709	
SASKI	513253N 0023000E	L179, UL179, UL608	SID EBOS

Name-code designator	Coordinates	ATS route (ENR 3.3)	ATS route (other)
1	2	3	4
SISGA	503705N 0040324E	UM617, UZ319	
SOGRI	504823N 0050243E	M617, Y868, UL608, UM617, UY868	
SONDI	511126N 0045018E	L179, UL179	SID EBAW
SOPOK	501510N 0054626E	UY863, UZ283	SID EBBR, SID EBCI
SORAT	511257N 0053548E	L179, UL179	
SUMAS	505635N 0060059E	Z283, UZ283	
SUTAL	492800N 0062330E	N852, UN852	
SUXIM	501658N 0061719E	L607, UQ50	
TALUD	493604N 0052514E	Q763	
TERLA	504057N 0053956E	UL608, UN852	
TILVI	493630N 0053503E	Q763, Y180	SID ELLX
TOLVU	493731N 0052218E	UN857	
TULNI	503327N 0031656E		STAR EBAW, STAR EBBR
ULPEN	504520N 0055539E	UZ707	
VABIK	511447N 0020000E	Q70, UQ70	
WOODY	512420N 0042159E	N872, Z310,UN872 UZ310,	STAR EBAW, STAR EBBR

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ENR 4.5 Aeronautical Ground Lights - En-route

1 LAND

Name or identification	Type (intensity 1000 CD)	Characteristics	Operating hours	Remarks
Aalter (510539N 0032057E)	HBN, mast (2)	FLG R EV 1 SEC	H24	NIL
Brussels (505110N 0042405E)	HBN (10)	FLG R EV 1.5 SEC	HN	NIL
Doel (511926N 0041543E)	HBN, mast (2)	FLG R EV 2 SEC	H24	NIL
Egem (510118N 0031408E)	HBN, mast (2)	FLG R EV 2 SEC	H24	NIL
Genk (505645N 0053033E)	HBN, mast (2)	FLG R EV 2 SEC	H24	NIL
Ougrée - Bol d'Air (503439N 0053306E)	HBN, mast (2)	FLG R EV 4 SEC	H24	NIL
Wavre (504452N 0043439E)	HBN, mast (2)	FLG R EV1.5 SEC	H24	NIL
Wavre (504426N 0043512E)	HBN, mast (2)	FLG W EV 2 SEC	H24	NIL
Wolvertem (505841N 0041802E)	HBN, mast (2)	FLG R EV 1.5 SEC	H24	NIL

2 MARINE

Name or identification	Type (intensity 1 000 Cd)	Characteristics	Operating hours	Remarks
Blankenberge (511857N 0030655E)	Lighthouse (130)	Group OCC (2) W EV 8 SEC	HN	NIL
Nieuwpoort (510927N 0024325E)	Lighthouse (150)	Group FLG (2) R EV 14 SEC	HN	NIL
Oostende (511411N 0025541E)	Lighthouse (1940)	Group FLG (3) W EV 10 SEC	HN	NIL
Zeebrugge (511957N 0031225E)	Lighthouse (107)	OCC W/R EV 15 SEC	HN	NIL

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ENR 5 NAVIGATION WARNINGS

ENR 5.1 Prohibited, Restricted and Danger Areas

1 PROHIBITED AREAS

ELP01 - DUPONT DE NEMOURS

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 600M radius, centred on 493551N 0061208E.	2500FT AMSL / GND	Entry prohibited. Chemical plant.	PERM

2 RESTRICTED AREAS

EBR01 - BRUSSELS CITY

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
505311N 0042013E - an arc of circle, 0.8NM radius, centred on 505311N 0042130E and traced clockwise to 505316N 0042247E - an arc of circle, 2.7NM radius, centred on 505039N 0042142E and traced clockwise to 505311N 0042013E.	UNL / GND	Entry prohibited, unless instructed by ATC.	PERM

EBR02 - ROYAL ESTATE OF CIERGNON

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.8NM radius, centred on 500958N 0050620E.	UNL / GND	Entry prohibited, unless instructed by ATC.*(1)*	PERM
(1) not applicable to gliders.			

EBR03 - DIEST

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 3NM radius, centred on 505957N 0050355E.*(1)*	3500FT AMSL / GND	Parachute dropping zone. Entry prohibited, unless instructed by Schaffen Radio or Brussels APP.*(2)(3)*	MON 0001 (SUN 2301) - SAT SR (HOL excl) *(4)*
(1) Brussels CTA East One excl. Beauvechain TMA One A and Kleine-Brogel TMA One excl during activation. *(2)* For drops at 2000FT AMSL or below, the dropping aircraft shall contact Semmerzake ATCC before entering the area. Drops above 2000FT AMSL, except those mentioned hereafter, may only take place after prior co-ordination with Brussels APP and will only be authorized if the traffic situation in Brussels CTA East permits. During those drops, the dropping aircraft shall maintain radio contact with Brussels APP who will inform Beauvechain APP about the beginning and end of the dropping sessions. Beauvechain APP always relays this information to Kleine-Brogel APP and Semmerzake ATCC. *(3)* Drops are authorized between 2000FT AMSL and 3500FT AMSL with approval of Beauvechain APP in that part of EBR03 situated under Brussels CTA East Two. The dropping aircraft shall maintain radio contact with Beauvechain APP and Brussels APP. Beauvechain APP will inform Semmerzake ATCC and Kleine-Brogel APP of beginning and end of dropping sessions. *(4)* Additional activation possible (see NOTAM).			

EBR04 - ELSENBORN 01 (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503117N 0061200E - along the Belgian-German border - 502557N 0062234E - 502557N 0060956E - 502657N 0060841E - 503117N 0061200E.	FL170 / GND (2)	Gunnery area, destruction centre of explosives and air exercises area. Entry prohibited to all aircraft.(3)	Weekly programme announced by NOTAM (4)
(1) This airspace can be activated simultaneously with TSA28A, therefore UAV operators shall contact Shooting Range Safety Office Elsenborn, TEL + 32 (0) 80 44 21 25 or +32 (0) 80 44 21 03 or FREQ 138.975MHZ to coordinate UAV operations with gunnery/destruction activities.			
(2) Upper limit may be restricted to FL105 (see NOTAM).			
(3) Except MIL aircraft transiting to/from Camp Elsenborn and those participating in (combined) land-air exercises, after coordination with Shooting Range Safety Office Elsenborn, TEL +32 (0) 80 44 21 25 or +32 (0) 80 44 21 03. During CAS Air exercises, MIL aircraft shall obtain an additional entry clearance from the ALO “RINGO Range” on FREQ 241.700MHZ (back up 281.575MHZ).			
(4) Activation can be checked with Semmerzake ATCC or MDC. This area is contiguous to EDR117 (see *AIP Germany*). Activation of EDR117 can be checked with MDC (EBMIZGZF) or TEL +32 (0) 2 752 44 52.			

EBR05A - HELCHTEREN (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510723N 0053455E - 510157N 0053455E - 505929N 0051951E - 510452N 0051951E - 510557N 0052255E - 510723N 0053455E.	FL100 / GND	Firing and bombing exercises. Entry prohibited to non-participating aircraft.	HX(2)(3)
(1) Military aircraft proceeding to Helchteren range shall avoid to fly east of the river Meuse.			
(2) May be activated MON to FRI (HOL excl) 0800-1600 (0700-1500). May be activated MON to FRI (HOL excl) 1600-0800 (1500-0700) at irregular times. Activation can be checked with Brussels FIC, Semmerzake ATCC or Kleine-Brogel APP.			
(3) Outside activation and between 2500FT and 4500FT AMSL, during EBBL OPR HR, Kleine-Brogel TMA Two will be activated.			

EBR05B - HELCHTEREN RUN-IN (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510805N 0055036E - along the Belgian-Dutch border - 510333N 0054619E - 510157N 0053455E - 510607N 0053455E - 510805N 0055036E.	3300FT AMSL / 2050FT AMSL	Run-in lane for bombing exercises. Entry prohibited to non-participating aircraft.	HX(2)(3)
(1) Military aircraft proceeding to Helchteren range shall avoid to fly east of the river Meuse.			
(2) May be activated MON to FRI (HOL excl) 0800-1600 (0700-1500). May be activated MON to FRI (HOL excl) 1600-0800 (1500-0700) at irregular times. Activation can be checked with Brussels FIC, Semmerzake ATCC or Kleine-Brogel APP.			
(3) Outside activation and between 2500FT and 4500FT AMSL, during EBBL OPR HR, Kleine-Brogel TMA Two will be activated.			

EBR05C - HELCHTEREN DOWNWIND(1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510333N 0054619E - along the Belgian-Dutch border - 505655N 0054502E - 505528N 0053207E - 505530N 0052752E - 505533N 0051951E - 505929N 0051951E - 510157N 0053455E - 510333N 0054619E.	FL50 / 2850FT AMSL	Downwind lane for bombing exercises. Entry prohibited to non-participating aircraft.	HX(2)(3)
(1) Military aircraft proceeding to Helchteren range shall avoid to fly east of the river Meuse.			
(2) May be activated MON to FRI (HOL excl) 0800-1600 (0700-1500). May be activated MON to FRI (HOL excl) 1600-0800 (1500-0700) at irregular times. Activation can be checked with Brussels FIC, Semmerzake ATCC or Kleine-Brogel APP.			
(3) Outside activation and between 2500FT and 4500FT AMSL, during EBBL OPR HR,Kleine-Brogel TMA Three will be activated.			

EBR05D - HELCHTEREN LOFT

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
505929N 0051951E - 510157N 0053455E - 505547N 0053455E - 505528N 0053207E - 505530N 0052754E - 505929N 0051951E.	FL75 / FL50	High intensity flights of jet aircraft during loft exercises. Entry prohibited to non-participating aircraft.	HX(1)(2)
(1) May be activated MON to FRI (HOL excl) 0830-1600 (0730-1500) or MON to FRI (HOL excl) 1730-0700 (1630-0600) at irregular times. Activation can be checked with Brussels FIC, Semmerzake ATCC or Kleine-Brogel APP.			
(2) Whenever the loft procedure is requested by Helchteren RANGE and approved by Semmerzake ATCC the EBR05D is automatically activated. ACT can be checked with Kleine-Brogel APP or with Semmerzake ATCC.			

EBR05E - HELCHTEREN MEDIUM LEVEL

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
505929N 0051951E - 510157N 0053455E - 511015N 0053455E - 510838N 0052127E - 510557N 0051658E - 510057N 0051655E - 505929N 0051951E.	FL240 / FL100	High intensity flights of jet aircraft during medium level bombing exercises. Entry prohibited to non-participating aircraft.	HX(1)
(1) May be activated MON to FRI (HOL excl) 0800-1600 (0700-1500). May be activated MON to FRI (HOL excl) 1600-0800 (1500-0700) at irregular times. Activation can be checked with Semmerzake ATCC or Kleine-Brogel APP.			

EBR06A - FLORENNES

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 501436N 0043845E.	FL95 / GND	Entry prohibited.(1) Military aerodrome.	Outside EBFS OPR HR (2)
(1) Entry prohibited unless authorized by the Ministry of Defence. *(2)* EBFS OPR HR can be checked with Brussels FIC.			

EBR06B - FLORENNES

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 5 NM radius, centred on 501436N 0043845E. (1)	FL95 / GND	Entry restricted to aircraft maintaining a listening watch with Brussels FIC.(2) Military aerodrome.	HX(3)
(1) EBR06A excl. *(2)* In case of unplanned activation of EBFS CTR and TMA, aircraft shall comply with instructions of Brussels FIC and Florennes APP. *(3)* Activation announced by NOTAM.			

EBR07A - KLEINE-BROGEL

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2 NM radius, centred on 511006N 0052812E.	FL75 / GND	Entry prohibited.(1) Military aerodrome.	Outside EBBL OPR HR (2)
(1) Entry prohibited unless authorized by the Ministry of Defence. *(2)* EBBL OPR HR can be checked with Brussels FIC.			

EBR07B - KLEINE-BROGEL

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 5 NM radius, centred on 511006N 0052812E.(1)	FL75 / GND	Entry restricted to aircraft maintaining a listening watch with Brussels FIC.(2) Military aerodrome.	HX(3)
(1) EBR07A excl. (2) In case of unplanned activation of EBBL CTR and TMA, aircraft shall comply with instructions of Brussels FIC and Kleine-Brogel APP. (3) Activation announced by NOTAM.			

EBR08 - KOKSIJDE

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2 NM radius, centred on 510525N 0023910E.	1500 FT AMSL / GND	Entry prohibited.(1) Military aerodrome.	Outside EBFN OPR HR (2)
(1) Entry prohibited unless authorized by the Ministry of Defence. (2) EBFN OPR HR can be checked with Brussels FIC.			

EBR10 - BEAUVECHAIN

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2 NM radius, centred on 504528N 0044601E.	2500 FT AMSL / GND	Entry prohibited.(1) Military aerodrome.	Outside EBBE OPR HR (2)
(1) Entry prohibited unless authorized by the Ministry of Defence. (2) EBBE OPR HR can be checked with Brussels FIC.			

EBR11 - TIHANGE

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 1 NM radius, centred on 503157N 0051556E.	2300 FT AMSL / GND	Entry prohibited, unless instructed by ATC.(1) Nuclear installation.	PERM
(1) Not applicable to police flights.			

EBR12 - CHIEVRES

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2 NM radius, centred on 503433N 0034952E.	2500 FT AMSL / GND	Entry prohibited.(1) Military aerodrome.	Outside EBCV OPR HR (2)
(1) Entry prohibited unless authorized by the Ministry of Defence. (2) EBCV OPR HR can be checked with Brussels FIC.			

EBR13 - REDU

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.8 NM radius, centred on 500004N 0050841E.	4500 FT AMSL / GND	Prohibited to MIL aircraft. Satellite ground station.	PERM

EBR16 - MOL

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 3NM radius, centred on 511232N 0050456E.	4500FT AMSL / GND	Entry prohibited to MIL aircraft, unless instructed by ATC. Nuclear installations in Mol, Dessel and Geel.	PERM

EBR17A - LOMBARDSIJDE SECTOR ALPHA

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510919N 0024340E - 511020N 0024001E - an arc of circle, 2.5NM radius, centred on 510919N 0024340E and traced clockwise to 511056N 0024644E - 511010N 0024630E - 510919N 0024340E.	2500FT AMSL / SFC	Entry prohibited.*(1)* Gunnery and air exercises area.	HX*(2)*
(1) Except MIL aircraft transiting to/from Shooting Range Lombardsijde and those participating in (combined) land-air exercises, after coordination with Shooting Range Safety Office Lombardsijde, TEL + 32 (0) 2 442 37 26. *(2)* Announced by NOTAM. Shooting Range Safety Office Lombardsijde will inform MIL NOF (Semmerzake ATCC) via ATS EBFN in due time.			

EBR17B - LOMBARDSIJDE SECTOR BRAVO *(1)*

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510919N 0024340E - 511142N 0023505E - an arc of circle, 7.5NM radius, centred on 510839N 0024601E and traced clockwise to 511602N 0024819E - 511010N 0024630E - 510919N 0024340E.	FL240 / SFC	Entry prohibited.*(2)* Gunnery and air exercises area.	HX*(3)*
(1) This area includes EBR17A. *(2)* Except MIL aircraft transiting to/from Shooting Range Lombardsijde and those participating in (combined) land-air exercises, after coordination with Shooting Range Safety Office Lombardsijde, TEL + 32 (0) 2 442 37 26. *(3)* Announced by NOTAM. Shooting Range Safety Office Lombardsijde will inform MIL NOF (Semmerzake ATCC) via ATS EBFN in due time.			

EBR17C - LOMBARDSIJDE SECTOR CHARLIE *(1)*

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510919N 0024340E - 511351N 0022721E - an arc of circle, 12.8NM radius, centred on 510839N 0024601E and traced clockwise to 512114N 0024957E - 511010N 0024630E - 510919N 0024340E.	FL240 / SFC *(2)*	Entry prohibited.*(3)* Gunnery and air exercises area.	HX*(4)*
(1) This area includes EBR17A and EBR17B. *(2)* Firing activity may take place higher than FL240 (see NOTAM). *(3)* Except MIL aircraft transiting to/from Shooting Range Lombardsijde and those participating in (combined) land-air exercises, after coordination with Shooting Range Safety Office Lombardsijde, TEL + 32 (0) 2 442 37 26. *(4)* Announced by NOTAM. Shooting Range Safety Office Lombardsijde will inform MIL NOF (Semmerzake ATCC) via ATS EBFN in due time.			

EBR19 - MARCHE-EN-FAMENNE

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
501757N 0052355E - 501642N 0052625E - 501412N 0052310E - 501557N 0052155E - 501757N 0052355E.	3250FT AMSL / GND	Entry prohibited.*(1)* Gunnery and air exercises area.	MON to FRI (HOL excl), 0730-2300 (0630-2200) *(2)*
(1) Except MIL aircraft transiting to/from Camp Marche and those participating in (combined) land-air exercises, after coordination with Shooting Range Safety Office Marche-en-Famenne, TEL + 32 (0) 2 442 29 42. *(2)* Activation outside these hours announced by NOTAM.			

EBR20 - BRASSCHAAT

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511827N 0043155E - 511857N 0043055E - 511957N 0043155E - 512327N 0043655E - 512217N 0043855E - 511827N 0043155E.	FL140 / GND *(1)*	Entry prohibited. Gunnery and air exercises area. *(2)*	HX *(3)*
(1) Upper limit may be restricted to FL70 (see NOTAM). *(2)* Except MIL aircraft transiting to/from Shooting Range Brasschaat and those participating in (combined) land-air exercises, after coordination with Shooting Range Safety Office Brasschaat, TEL + 32 (0) 2 442 16 37 or + 32 (0) 477 40 42 03. *(3)* Announced by NOTAM.			

EBR21 - NORTH SEA

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512100N 0020500E - 512100N 0021300E - 512200N 0021900E - 512819N 0021900E - 512833N 0021630E - 512907N 0020500E - 512100N 0020500E.	FL150 / SFC *(1)*	Prohibited to MIL aircraft. Gunnery area, parachuting and coastguard flights.	HX *(2)*
(1) Activation limited to 4500FT AMSL maximum when TSA13 is active (see NOTAM). *(2)* Announced by NOTAM.			

EBR22 - CASTEAU

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 4NM radius, centred on 502957N 0035855E.	2500FT AMSL / GND	Entry prohibited. Supreme Headquarters Allied Powers Europe (SHAPE). *(1)*	PERM
(1) Not applicable to State aircraft or if authorized by Chièvres TWR.			

EBR23 - DOEL

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 1NM radius, centred on 511857N 0041555E.	2000FT AMSL / GND	Prohibited to MIL aircraft. Nuclear installation.	PERM

EBR24B - KOKSIJDE LET-DOWN

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510131N 0023419E - along the Belgian-French border - 504848N 0023843E - 505957N 0024337E - 510131N 0023419E.	4500FT AMSL / 1500FT AMSL	Let-down procedure space for jet aircraft.*(1)*	During EBFN OPR HR *(2)*
(1) Crossing clearance shall be requested from Koksijde APP. *(2)* EBFN OPR HR can be checked with Brussels FIC or Semmerzake ATCC.			

EBR25 - KOKSIJDE CLIMB-OUT

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
504235N 0025545E - 510045N 0023852E - 505900N 0024917E - 504626N 0030102E - along the Belgian-French border - 504235N 0025545E.	4500FT AMSL / 1100FT AMSL *(1)*	Climb-out sector for jet aircraft.*(2)*	During EBFN OPR HR *(3)*
(1) 1100FT AMSL from lateral limits of Koksijde CTR to 16NM from the ARP on an axis of 150 DEG GEO, then a slope of 5°30' to the extreme limit of this sector. *(2)* Crossing clearance shall be requested from Koksijde APP. *(3)* EBFN OPR HR can be checked with Brussels FIC or Semmerzake ATCC.			

EBR27 - LOKEREN

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510627N 0035909E - 510734N 0040144E - 510625N 0040310E - 510517N 0040122E - 510627N 0035909E.	2500FT AMSL / GND	Entry prohibited to manned balloons.*(1)*	PERM
(1) Above 1500FT AMSL manned free balloons flights are allowed if the pilot makes use either of a fully operational GPS with altitude registration or a fully operational FAI certified GPS logger or a fully operational transponder mode C with code setting A7000. Pilots using a transponder shall establish and maintain two-way radio communication with Brussels FIC on FREQ 126.900MHZ.			

EBR31 - WESTROZEBEKE-HOUTHULST

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 1.2NM radius, centred on 505752N 0025735E.	2600FT AMSL / GND	Entry prohibited.*(1)* Destruction centre of explosives.	PERM
(1) Except State aircraft in real-life operations.			

EBR41 - LAGLAND-ARLON

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
493901N 0054000E - 494053N 0054438E - 493939N 0054601E - 493745N 0054236E - 493901N 0054000E.	FL75 / GND *(1)*	Entry prohibited.*(2)* Gunnery and air exercises area.	**MON-FRI (HOL excl)** 0700-2300 (0600-2200) **SAT, SUN and HOL** 0700-1600 (0600-1500) *(3)*
(1) Upper limit 3750 FT AMSL on MON to FRI (HOL excl). Upper limit may occasionally be extended to FL75 or FL95 (see NOTAM). *(2)* Except MIL aircraft transiting to/from Camp Lagland and those participating in (combined) land-air exercises, after coordination with Shooting Range Safety Office Lagland, TEL + 32 (0) 2 441 49 01. *(3)* Activation outside these hours will be announced by NOTAM.			

EBR42 - BEVERLO 01

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510927N 0051530E - 510927N 0052125E - 510737N 0052125E - 510703N 0051530E - 510927N 0051530E.	FL65 / GND *(1)*	Entry prohibited.*(2)* Gunnery and air exercises area.	**MON-FRI (HOL excl)** JAN, FEB, NOV and DEC: 0700-1500 (0600-1400) and 1700-2000 (1600-1900) MAR and OCT: 0700-1500 (0600-1400) and 1900-2200 (1800-2100) APR and SEP: 0700-1500 (0600-1400) and 2000-2300 (1900-2200) MAY, JUN, JUL and AUG: 0700-1500 (0600-1400) and 2100-0000 (2000-2300) **SAT, SUN and HOL** 0730-1530 (0630-1430) *(3)*
(1) Upper limit 2700FT AMSL on MON to FRI (HOL excl), unless announced by NOTAM.			
(2) Except MIL aircraft transiting to/from Camp Beverlo and those participating in combined Land and Air Component A/A exercises, after coordination with Shooting Range Safety Office Beverlo, TEL + 32 (0) 2 442 49 43 or + 32 (0) 2 442 49 15. *(3)* Activation outside these hours will be announced by NOTAM.			

EBR44 - MARCHOVELETTE

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.3NM radius, centred on 503023N 0045615E.	1550FT AMSL / GND	Entry prohibited. Destruction centre of explosives.	MON to FRI (HOL excl), 0730-1600 (0630-1500)

EBR45 - BEVERLO 02

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.5NM radius, centred on 510438N 0052046E.	1450FT AMSL / GND	Entry prohibited. Demolition of explosives.	HX *(1)*
(1) Announced by NOTAM.			

EBR49 - ZUTENDAAL

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.5NM radius, centred on 505638N 0053555E.	2000FT AMSL / GND	Entry prohibited.*(1)* Fulminate and cartridge manufacturer.	PERM
(1) Except State aircraft in real-life operations and glider aircraft from and to EBSL.			

EBR50 - CLERMONT-LEZ-HUY

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.5NM radius, centred on 503342N 0052310E.	2000FT AMSL / GND	Entry prohibited, unless instructed by ATC.*(1)* Powder mill.	PERM
(1) Except State aircraft in real-life operations.			

EBR52 - PETIT-RŒULX

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.5NM radius, centred on 503357N 0041935E.	2000FT AMSL / GND	Entry prohibited.(1) Fulminate manufacturer and shooting range.	PERM
(1) Except State aircraft in real-life operations.			

EBR53 - BEVINGEN

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
504746N 0051118E - 504748N 0051123E - 504739N 0051134E - 504737N 0051129E.	1000FT AMSL / GND	RPAS testing and training zone. Prohibited to non-participating aircraft.	HJ(1)
(1) ACT can be checked with EBST local authorities (see AD 2.PVT-EBST).			

EBR54 - ANTWERP HARBOUR

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511413N 0042506E - 511432N 0042507E - 511440N 0042449E - 511456N 0042459E - 511540N 0042458E - 511540N 0042417E - 511634N 0042418E - 511635N 0042306E - 511714N 0042306E - 511730N 0042134E - 512004N 0042047E - 511952N 0041805E - 512215N 0041802E - 512221N 0041437E - 512108N 0041511E - 512056N 0041602E - 511926N 0041704E - 511823N 0041552E - 511824N 0041514E - 511709N 0041253E - 511554N 0041150E - 511443N 0041213E - 511453N 0041457E - 511557N 0041633E - 511526N 0041845E - 511410N 0041752E - 511343N 0042017E - 511429N 0042110E - 511423N 0042355E - 511412N 0042402E - 511413N 0042506E.	1000FT AMSL / GND	Unless instructed by ATC, entry prohibited to all aircraft, except inspection flights, landing and take-off of helicopters, aircraft to/ from EBHN, State aircraft missions, environmental control missions conducted on behalf of public authorities, SAR, medical flights, evacuations, fire-fighting intervention.	PERM

EBR55 - GHENT HARBOUR

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510425N 0034404E - 510428N 0034441E - 510505N 0034520E - 510631N 0034540E - 510640N 0034801E - 510700N 0034800E - 510715N 0034631E - 510731N 0034650E - 510729N 0034739E - 510825N 0034826E - 510832N 0034754E - 511010N 0034941E - 511130N 0035003E - 511132N 0034637E - 511051N 0034700E - 511049N 0034654E - 511044N 0034659E - 511030N 0034641E - 511034N 0034723E - 511032N 0034727E - 511013N 0034724E - 510948N 0034502E - 510838N 0034426E - 510900N 0034642E - 510804N 0034606E - 510649N 0034427E - 510616N 0034320E - 510545N 0034315E - 510519N 0034333E - 510515N 0034347E - 510433N 0034357E.	1000FT AMSL / GND	Entry prohibited to all aircraft, except inspection flights, landing and take-off of helicopters, State aircraft missions, environmental control missions conducted on behalf of public authorities, SAR, medical flights, evacuations, fire-fighting intervention.	PERM

EBR56 - ZEEBRUGGE HARBOUR

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511801N 0031516E - 511726N 0031319E - 511757N 0031307E - 511752N 0031234E - 511847N 0031218E - 511839N 0031108E - 511902N 0031039E - 511914N 0031042E - 511939N 0031206E - 511947N 0031307E - 512010N 0031251E - 512005N 0031232E - 512010N 0031228E - 512000N 0031151E - 511945N 0031155E - 511939N 0031106E - 512106N 0031005E - 512149N 0031116E - 512138N 0031324E - 512101N 0031339E - 512048N 0031332E - 512023N 0031340E - 512021N 0031330E - 511957N 0031345E - 511950N 0031318E - 511801N 0031516E.	1000 FT AMSL / GND	Entry prohibited to all aircraft, except inspection flights, landing and take-off of helicopters, State aircraft missions, environmental control missions conducted on behalf of public authorities, SAR, medical flights, evacuations, fire-fighting intervention.	PERM

EBR57 - EEPOEL

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.3 NM radius, centred on 511121N 0041919E.	400 FT AMSL / GND	Entry prohibited. Destruction centre of explosives.	MON to FRI (HOL excl), 0700-1600 (0600-1500)

1 DANGER AREAS

EBD26 - ARDENNES 05 *(1)*

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502536N 0050543E - 500118N 0054241E - 494735N 0054237E - 494137N 0051624E - along the Belgian-French border - 500656N 0045209E - 500728N 0045635E - an arc of circle, 8 NM radius, centred on 501521N 0045417E and traced counterclockwise to 502319N 0045550E - 502536N 0050543E.	4500 FT AMSL / 1000 FT AGL	High performance flights.*(2)*	HX*(3)*
(1) Can be activated from MON to FRI (HOL excl) between 0800-2300 (0700-2200).			
(2) Flights within this area have to stay clear of controlled airspace, prohibited, restricted zones and conflicting TSA's.			
(3) Announced by NOTAM. Activation can be checked with Semmerzake ATCC.			

EBD29 - ARDENNES 07

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500723N 0041207E - 501035N 0043103E - 501059N 0043322E - an arc of circle, 5 NM radius, centred on 501436N 0043845E and traced counterclockwise to 501218N 0044540E - 501320N 0045527E - 501918N 0045328E - 502231N 0045226E - 503001N 0052456E - 502627N 0053920E - 503042N 0055956E - 501955N 0055956E - 501324N 0060343E - 501011N 0060832E - along the Belgian-German border - 500748N 0060816E - along the Belgian-Luxembourg border - 500120N 0055102E - 500118N 0054241E - 494735N 0054237E - 494137N 0051624E - along the Belgian-French border - 500723N 0041207E.	4500 FT AMSL / 1000 FT AGL	CSAR exercises.*(1)*	HX*(2)*
(1) Flights within this area have to stay clear of controlled airspace, prohibited, restricted zones and conflicting TSA's.			
(2) Announced by NOTAM. Activation can be checked with Semmerzake ATCC.			

EBD32 - BERTRIX AREA (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495900N 0050700E - 494800N 0050600E - 494800N 0052400E - 495100N 0052400E - 495900N 0051700E - 495900N 0050700E.	4500FT AMSL / GND(2)	CAS exercises target zone. Prohibited to non participating MIL aircraft.	HX(3)
(1) May be active MON, 1230-1600 (1130-1500); TUE to THU, 0830-1100 (0730-1000) and 1230-1600 (1130-1500); FRI, 0830-1100 (0730-1000). *(2)* Military users: During opening hours and within the lateral limits of LFA Ardennes, the lowest usable level is 250FT AGL. Outside opening hours of LFA Ardennes the lowest usable level is 500FT AGL. For non-Belgian participants, the lowest usable level is 1000FT AGL at all times. *(3)* Announced by NOTAM. Activation can be checked with Semmerzake ATCC.			

EBD33 - REMAGNE AREA (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495600N 0052000E - 500300N 0053000E - 500300N 0053600E - 495400N 0053000E - 495600N 0052000E.	4500FT AMSL / GND (2)	CAS exercises target zone. Prohibited to non participating MIL aircraft.	HX(3)
(1) May be active MON, 1230-1600 (1130-1500); TUE to THU, 0830-1100 (0730-1000) and 1230-1600 (1130-1500); FRI, 0830-1100 (0730-1000). *(2)* Military users: During opening hours and within the lateral limits of LFA Ardennes, the lowest usable level is 250FT AGL. Outside opening hours of LFA Ardennes the lowest usable level is 500FT AGL. For non-Belgian participants, the lowest usable level is 1000FT AGL at all times. *(3)* Announced by NOTAM. Activation can be checked with Semmerzake ATCC.			

EBD34 - TENNEVILLE AREA (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500300N 0053000E - 501400N 0052600E - 501900N 0053100E - 500300N 0054000E - 500300N 0053000E.	4500FT AMSL / GND (2)	CAS exercises target zone. Prohibited to non participating MIL aircraft.	HX(3)
(1) May be active MON, 1230-1600 (1130-1500); TUE to THU, 0830-1100 (0730-1000) and 1230-1600 (1130-1500); FRI, 0830-1100 (0730-1000). *(2)* Military users: During opening hours and within the lateral limits of LFA Ardennes, the lowest usable level is 250FT AGL. Outside opening hours of LFA Ardennes the lowest usable level is 500FT AGL. For non-Belgian participants, the lowest usable level is 1000FT AGL at all times. *(3)* Announced by NOTAM. Activation can be checked with Semmerzake ATCC.			

EBD35 - MARCHE AREA (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500400N 0051100E - 501200N 0051200E - 501200N 0052800E - 500900N 0052600E - 500400N 0051100E.	4500FT AMSL / GND (2)	CAS exercises target zone. Prohibited to non participating MIL aircraft.	HX(3)
(1) May be active MON, 1230-1600 (1130-1500); TUE to THU, 0830-1100 (0730-1000) and 1230-1600 (1130-1500); FRI, 0830-1100 (0730-1000). *(2)* Military users: During opening hours and within the lateral limits of LFA Ardennes, the lowest usable level is 250FT AGL. Outside opening hours of LFA Ardennes the lowest usable level is 500FT AGL. For non-Belgian participants, the lowest usable level is 1000FT AGL at all times. *(3)* Announced by NOTAM. Activation can be checked with Semmerzake ATCC.			

EBD36 - SAINT VITH AREA (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502900N 0060700E - 502900N 0061900E - 502000N 0062000E - 501800N 0060900E - 502900N 0060700E.	4500 FT AMSL / GND (2)	CAS exercises target zone. Prohibited to non participating MIL aircraft.	HX(3)

(1) May be active MON, 1230-1600 (1130-1500); TUE to THU, 0830-1100 (0730-1000) and 1230-1600 (1130-1500); FRI, 0830-1100 (0730-1000).

(2) Military users: During opening hours and within the lateral limits of LFA Ardennes, the lowest usable level is 250 FT AGL. Outside opening hours of LFA Ardennes the lowest usable level is 500 FT AGL. For non-Belgian participants, the lowest usable level is 1000 FT AGL at all times.

(3) Announced by NOTAM. Activation can be checked with Semmerzake ATCC.

EBD37 - AEROBATIC SECTOR

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503941N 0044955E - 503457N 0044956E - 502758N 0045957E - 502902N 0050637E - an arc of circle, 6.5 NM radius, centred on 502912N 0051650E and traced clockwise to 503101N 0050701E - 503357N 0050551E - 504355N 0051545E - 504709N 0050621E - 504157N 0045525E - 503941N 0044955E.	2500 FT AMSL / GND(1)	MIL aerobatic and training sector for light aircraft.(2)	During EBBE OPR HR. In VMC only

(1) Military users: Minimum safety height is 500 FT AGL, except for Practice Forced Landing (see ENR 1.2, § 2.4), in which case the minimum safety height will be 200 FT AGL.

(2) Mandatory RIS on EBBE APP for transiting OAT flights.

2 TEMPORARY RESERVED AREAS AND TEMPORARY SEGREGATED AREAS

In temporary reserved areas (TRA), activities that are dangerous to non-participating aircraft take place at specified times. Restrictions apply to crossing aircraft.

In temporary segregated areas (TSA), activities that require the exclusive reservation of the area take place at specified times. These areas are not accessible to non-participating aircraft during their activation.

TRA31 - FRANCORCHAMPS (1) (2)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502300N 0050943E - 502318N 0051231E - an arc of circle, 6.5 NM radius, centred on 502912N 0051650E and traced counterclockwise to 502426N 0052348E - 503029N 0053401E - 503053N 0053725E - 503343N 0055152E - 503726N 0061055E - along the Belgian-German border - 500748N 0060816E - along the Belgian-Luxembourg border - 500426N 0055210E - 500652N 0053418E - 502300N 0050943E. (3)	FL95 / 4500 FT AMSL	Heavy traffic due to F1 Grand Prix motor race in Francorchamps.	HX(4)

(1) Airspace class C.

(2) Permission to penetrate can be obtained on Brussels ACC FREQ 128.200 MHZ.

(3) Excluding EBR04, TRA/TSA S6, TSA27C, TSA28A, TSA28B, TSA29A, TSA29B when activated.

(4) Activation announced by NOTAM.

3 RESERVATION SPECIFICATIONS (MILITARY ONLY)

EBD26 - Ardennes 05: The reservation request should be forwarded to CRC Glons and to COMOPSAIR Airspace Control Ops for approval. This airspace can only be activated together with TSA26B as a navigation warning.

EBD29 - Ardennes 07: The reservation request should be forwarded to COMOPSAIR Airspace Control Ops at least one month in advance. This airspace can only be activated together with TSA29A, TSA29B and TSA29C as a navigation warning. 'Heavy jet traffic ddmmyy xx.xxZ - xx.xxZ in Brussels FIR outside controlled airspace between 1000 FT AGL and 4500 FT AMSL'.

EBD32 - Bertrix Area: When medium level CAS is performed on the Bertrix target, the TRA S5 / TSA S5 (Neufchateau area) and TRA S2 / TSA S2 (Beauraing Area) have to be booked from 4500FT AMSL within the Brussels FIR and FL065 within the CBA16B to FL150. Radio contact with Semmerzake ATCC is compulsory for medium level CAS. When CAS is combined with an Air Defense Mission, TSA26A, TSA26B and EBD26 have to be booked and Tactical Air Control is provided by CRC Glons.

EBD33 - Remagne Area: When medium level CAS is performed on the Remagne target, the TRA S5 / TSA S5 (Neufchateau area) and TRA S2 / TSA S2 (Beauraing Area) have to be booked from 4500FT AMSL within the Brussels FIR and FL065 within the CBA16B to FL150. Radio contact with Semmerzake ATCC is compulsory for medium level CAS. When CAS is combined with an Air Defense Mission, TSA26A, TSA26B and EBD26 have to be booked and Tactical Air Control is provided by CRC Glons.

EDB34 - Tenneville Area: When medium level CAS is performed on the Tenneville target, the TRA S6 / TSA S6 (Durbuy area) and TRA S2 / TSA S2 (Beauraing Area) have to be booked from 4500FT AMSL within the Brussels FIR and FL065 within the CBA16B to FL150. Radio contact with Semmerzake ATCC is compulsory for medium level CAS. Can not be booked for combined CAS and Air Defense Mission.

EBD35 - Marche Area: When medium level CAS is performed on the Marche target, the TRA S6 / TSA S6 (Durbuy area) and TRA S2 / TSA S2 (Beauraing Area) have to be booked from 4500FT AMSL within the Brussels FIR and FL065 within the CBA16B to FL150. Radio contact with Semmerzake ATCC is compulsory for medium level CAS. Can not be booked for combined CAS and Air Defense Mission.

EBD36 - Saint Vith Area: When medium level CAS is performed on the St Vith target, the TSA 28A and TSA 28B have to be booked from GND to FL105, highest usable level FL90. Radio contact with Semmerzake ATCC is compulsory for medium level CAS.

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ENR 5.2 Military Exercise and Training Areas and Air Defence Identification Zone

1 TEMPORARY RESERVED AREAS AND TEMPORARY SEGREGATED AREAS

In temporary reserved areas (TRA), military activities that are dangerous to other aircraft take place at specified times. Crossing restrictions apply to non-participating aircraft.

In temporary segregated areas (TSA), military activities that require the reservation of the airspace for the exclusive use take place at specified times. During their activation, these areas are not accessible to non-participating aircraft.

1.1 Areas

A cross-border area (CBA) is a TRA / TSA covering airspace of two or more adjacent states.

TRA NA - TRA NORTH ALPHA

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512908N 0044913E - along the Belgian-Dutch border - 505000N 0053854E - 510057N 0051655E - 510251N 0045955E - 511835N 0043325E - 511807N 0043011E - 512049N 0042812E - 512908N 0044913E. *(1)*	FL195 / 4500FT AMSL *(2)*	Air exercises. Crossing clearance shall be requested in-flight from Semmerzake ATCC.	HX *(3)*
(1) Brussels TMA Four excl. *(2)* Upper limit FL95 in area 505000N 0053854E - 505513N 0052827E - 510023N 0054559E - along the Belgian-Dutch border - 505000N 0053854E. Lower limit FL145 in area 511835N 0043325E - 511938N 0044052E - 505408N 0043217E, along arc 26 DME DUB, 511332N 0045955E - 510251N 0045955E - 511835N 0043325E. *(3)* Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55) or Brussels FIC.			

TRA NB - TRA NORTH BRAVO

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511032N 0042037E - 512049N 0042812E - 512254N 0043326E - 512649N 0044320E - 512650N 0044925E - along the Belgian-Dutch border - 512651N 0050018E - 512651N 0050400E - 512603N 0050610E - 511857N 0052158E - 511654N 0052630E - along the Belgian-Dutch border - 510133N 0054629E - 505729N 0052350E - 505342N 0050316E - 505830N 0043650E - 511032N 0042037E.	UNL / FL195	Air exercises. Crossing clearance shall be requested in-flight from Semmerzake ATCC. *(1)*	HX *(2)*
(1) Airspace within the Amsterdam FIR is delegated for ATC provision to Semmerzake ATCC. *(2)* Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55) or Brussels FIC.			

TRA/TSA N1 - BRUSSELS AREA *(1)*

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512254N 0043326E - 511835N 0043325E - 510251N 0045955E - 510057N 0051655E - 505729N 0052350E - 505342N 0050316E - 505830N 0043650E - 511032N 0042037E - 512049N 0042812E - 512254N 0043326E.	UNL / FL195	Aerobatic area.*(2)*	HX *(3)*
(1) Status of the area can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55). *(2)* Permeable for OAT traffic after coordination with the area's controlling agency and not permeable for GAT traffic. *(3)* Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55) or Brussels FIC.			

TRA/TSA N2 - BALEN AREA (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511857N 0052158E - 512603N 0050610E - 512651N 0050400E - 512649N 0044320E - 512254N 0043326E - 511835N 0043325E - 510251N 0045955E - 510634N 0045955E - 511551N 0051647E - 511857N 0052158E.	UNL / FL95 (2)	Aerobatic area.(3)	HX (4)

(1) Status of the area can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).

(2) Subject to availability of Brussels TMA Four.

(3) Permeable for OAT traffic after coordination with the area's controlling agency and not permeable for GAT traffic.

(4) Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55) or Brussels FIC.

TRA/TSA N3 - MEEUWEN AREA (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511857N 0052158E - 511654N 0052630E - along the Belgian-Dutch border - 510133N 0054629E - 505729N 0052350E - 510057N 0051655E - 510251N 0045955E - 510634N 0045955E - 511551N 0051647E - 511857N 0052158E.	UNL / FL95 (2)	Aerobatic area. (3)	HX (4)

(1) Status of the area can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).

(2) Lower limit FL110 during activation of EBR05A and FL250 during activation of EBR05E.

(3) Airspace within the Amsterdam FIR is delegated for ATC provision to Semmerzake ATCC. Permeable for OAT traffic after coordination with the area's controlling agency and not permeable for GAT traffic.

(4) Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55) or Brussels FIC.

TRA SA - TRA SOUTH ALPHA

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503019N 0035834E - 503039N 0040151E - 504048N 0043801E - 503001N 0052456E - 502627N 0053920E - 500426N 0055210E - along the Belgian-Luxembourg border - 494738N 0054729E - 494106N 0053116E - 494038N 0051741E - along the Belgian-French border - 502101N 0040008E - 503019N 0035834E.	FL195 / 4500FT AMSL (1)	Air exercises. Crossing clearance shall be requested in-flight from Semmerzake ATCC.	HX (2)

(1) Lower limit FL100 above Brussels CTA South One and FL60 above Liège TMA One. Upper limit FL155 in area 494131N 0051633E - 494809N 0054507E - along the Belgian-Luxembourg border - 494738N 0054729E - 494106N 0053116E - 494038N 0051741E - along the Belgian-French border - 494131N 0051633E.

(2) Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55) or Brussels FIC.

TRA SB - TRA SOUTH BRAVO

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494735N 0054237E - 494137N 0051624E - 494030N 0051133E - 494040N 0045055E - 494920N 0041830E - 495835N 0040853E - 500853N 0041028E - 503205N 0040655E - 503335N 0041212E - 503813N 0043620E - 503519N 0045040E - 500118N 0054241E - 494735N 0054237E.	UNL / FL195	Air exercises. Crossing clearance shall be requested in-flight from Semmerzake ATCC.	HX (1)

(1) Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55) or Brussels FIC.

TRA/TSA S1 - NAMUR AREA (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503705N 0043024E - 503813N 0043620E - 503519N 0045040E - 501808N 0051710E - 501208N 0044021E - 503705N 0043024E.	UNL / 4500 FT AMSL (2)	Aerobatic area. Crossing clearance shall be requested in-flight from Semmerzake ATCC.(3)	HX (4)

(1) Status of the area can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).

(2) Lower limit FL100 above Brussels CTA South One. Above TRA23 first usable level FL100.

(3) Permeable for OAT traffic after coordination with the area's controlling agency and not permeable for GAT traffic.

(4) Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).

TRA/TSA S2 - BEAURAING AREA (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
501208N 0044021E - 501808N 0051710E - 500118N 0054241E - 495854N 0054241E - 494927N 0044914E - 501208N 0044021E.	UNL / 4500 FT AMSL (2)	Aerobatic area. (3)	HX (4)

(1) Status of the area can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).

(2) Lower limit FL65 within CBA16B (see *AIP France*).

(3) Permeable for OAT traffic after coordination with the area's controlling agency and not permeable for GAT traffic.

(4) Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).

TRA/TSA S3 - GIVET AREA (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500703N 0041011E - 501208N 0044021E - 494927N 0044914E - 494604N 0043047E - 494920N 0041830E - 495835N 0040853E - 500703N 0041011E.	UNL / 4500 FT AMSL (2)	Aerobatic area. (3)	HX (4)

(1) Status of the area can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).

(2) Lower limit FL65 within CBA16B (see *AIP France*).

(3) GAT is allowed to cross TRA/TSA S3 on the route MATIX - MMD on a fixed FL. The traffic shall remain below FL195. Permeable for OAT traffic after coordination with the area's controlling agency and not permeable for GAT traffic.

(4) Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).

TRA/TSA S4 - CHARLEROI AREA (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503205N 0040655E - 503335N 0041214E - 503705N 0043024E - 501208N 0044021E - 500703N 0041011E - 500853N 0041028E - 503205N 0040655E.	UNL / 4500 FT AMSL (2)	Aerobatic area. (3)	HX (4)

(1) Status of the area can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).

(2) Lower limit FL100 above Brussels CTA South One.

(3) Permeable for OAT traffic after coordination with the area's controlling agency and not permeable for GAT traffic.

(4) Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).

TRA/TSA S5 - NEUFCHATEAU AREA (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494604N 0043047E - 495854N 0054241E - 494735N 0054237E - 494137N 0051624E - 494030N 0051133E - 494040N 0045055E - 494604N 0043047E.	UNL / 4500 FT AMSL (2)	Aerobatic area. (3)	HX (4)
(1) Status of the area can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55). (2) Lower limit FL65 within CBA16B (see *AIP France*). (3) Permeable for OAT traffic after coordination with the area's controlling agency and not permeable for GAT traffic. GAT is allowed to cross TRA/TSA S5 on the route MATIX - MMD on a fixed FL. The traffic shall remain below FL195. (4) Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).			

TRA/TSA S6 - DURBUY AREA (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502536N 0050543E - 503001N 0052456E - 502627N 0053920E - 500426N 0055210E - along the Belgian-Luxembourg border - 500120N 0055102E - 500118N 0054241E - 502536N 0050543E.	FL165 / FL55	Aerobatic area. (3)	HX (4)
(1) Status of the area can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55). (2) Above TRA23 first usable level is FL100. (3) Permeable for OAT traffic after coordination with the area's controlling agency and not permeable for GAT traffic. (4) Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).			

TRA WA - TRA WEST ALPHA

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510056N 0023429E - 510045N 0023740E - 505152N 0032551E - 505047N 0032649E - 503549N 0031628E - along the Belgian-French border - 510056N 0023429E.	FL 195 / 4500 FT AMSL	Air exercises. Crossing clearance shall be requested in-flight from Semmerzake ATCC.	HX (1)
(1) Area will not be activated when CBA1C is active. Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55) or Brussels FIC.			

TRA WB - TRA WEST BRAVO

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510056N 0023429E - 510045N 0023740E - 505152N 0032551E - 505047N 0032649E - 503549N 0031628E - along the Belgian-French border - 510056N 0023429E.	UNL / FL195	Air exercises. Crossing clearance shall be requested in-flight from Semmerzake ATCC.	HX (1)
(1) Area will not be activated when CBA1C is active. Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55) or Brussels FIC.			

TRA WC - TRA WEST CHARLIE

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510056N 0023429E - 510045N 0023740E - 505152N 0032551E - 505047N 0032649E - 503549N 0031628E - along the Belgian-French border - 510056N 0023429E.	FL115 / 4500 FT AMSL	Air exercises. Crossing clearance shall be requested in-flight from Semmerzake ATCC.	HX (1)
(1) Area can be activated when CBA1C is active. Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55) or Brussels FIC.			

TRA WD - TRA WEST DELTA

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
513036N 0020000E - 512804N 0022709E - 511622N 0031752E - 510825N 0033918E - 510047N 0033351E - 511037N 0024032E - 511243N 0020000E - 513036N 0020000E.	UNL / FL195	Air exercises. Crossing clearance shall be requested in-flight from Semmerzake ATCC.	HX *(1)*
(1) Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55) or Brussels FIC.			

CBA1A - CROSS BORDER AREA ONE ALPHA

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510310N 0014100E - 510056N 0023429E - 505035N 0023658E - 504343N 0030756E - 501342N 0023048E - 501342N 0022321E - 503855N 0014913E - 505417N 0012759E - 510000N 0012800E - 510310N 0014100E.	UNL / FL115	Air exercises and unmanned remote controlled French State aircraft operations above French national territory.	HX *(1)*
(1) Activation can be checked with Paris UAC or Reims UAC (see *AIP France*). Detailed schedule is communicated via AUP France.			

CBA1B - CROSS BORDER AREA ONE BRAVO

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
504343N 0030756E - 504059N 0032002E - 503549N 0031628E - 501342N 0024856E - 501342N 0023048E - 504343N 0030756E.	UNL / FL225	Air exercises and unmanned remote controlled French State aircraft operations above French national territory.	HX *(1)*
(1) Activation can be checked with Paris UAC or Reims UAC (see *AIP France*). Detailed schedule is communicated via AUP France.			

CBA1C - CROSS BORDER AREA ONE CHARLIE

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510056N 0023429E - 510045N 0023740E - 505152N 0032551E - 505047N 0032649E - 504059N 0032002E - 505035N 0023658E - 510056N 0023429E.	UNL / FL115	Air exercises.	HX *(1)*
(1) Activation can be checked with Paris UAC or Reims UAC (see *AIP France*). Detailed schedule is communicated via AUP France.			

TRA11 - URSEL

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 5NM radius, centred on 510840N 0032820E.	4500FT AMSL / GND	Air exercises. Prohibited to all military aircraft during periods of activity	HX *(1)*
(1) Announced by NOTAM. May be active MON to FRI (HOL excl), 0700 (0600)-SS. Not in JUL or AUG.			

TRA/TSA13A - CHANNEL A (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512907N 0020500E - 512833N 0021630E - 512719N 0023000E - 511820N 0023000E - 511933N 0020500E - 512907N 0020500E.	FL105 / 4500FT AMSL (2)	Air exercises and UAV flights. (3)	HX (4)

(1) Status of the area can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).

(2) First usable level is 5000FT AMSL or FL50 whichever is higher.

(3) Other traffic may be allowed inside the TSA for transit purposes. Flights in the TSA are subject to ATS provided by Semmerzake ATCC. During air exercises, prohibited to non-participating aircraft. At all times the standard radar separation minima must be maintained between the UAV and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control.

(4) Announced by NOTAM. May be active MON to FRI (HOL excl).

TRA/TSA13B - CHANNEL B (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512719N 0023000E - 512521N 0025114E - 512114N 0024957E - an arc of circle, 12.8NM radius, centred on 510839N 0024601E and traced counterclockwise to 511637N 0023000E - 512719N 0023000E.	FL105 / 4500FT AMSL (2)	Air exercises and UAV flights. (3)	HX (4)

(1) Status of the area can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).

(2) First usable level is 5000FT AMSL or FL50 whichever is higher.

(3) Other traffic may be allowed inside the TSA for transit purposes. Flights in the TSA are subject to ATS provided by Semmerzake ATCC. During air exercises, prohibited to non-participating aircraft. At all times the standard radar separation minima must be maintained between the UAV and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control.

(4) Announced by NOTAM. May be active MON to FRI (HOL excl).

TRA/TSA13C - CHANNEL C (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512521N 0025114E - 512309N 0031403E - 512009N 0031237E - 511946N 0031105E - 511905N 0030630E - 512114N 0024957E - 512521N 0025114E.	FL105 / 4500FT AMSL (2)	Air exercises and UAV flights. (3)	HX (4)

(1) Status of the area can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).

(2) First usable level is 5000FT AMSL or FL50 whichever is higher.

(3) Other traffic may be allowed inside the TSA for transit purposes. Flights in the TSA are subject to ATS provided by Semmerzake ATCC. During air exercises, prohibited to non-participating aircraft. At all times the standard radar separation minima must be maintained between the UAV and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control.

(4) Announced by NOTAM. May be active MON to FRI (HOL excl).

TRA14 - KOKSIJDE AREA (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512719N 0023000E - 512704N 0023246E - 512258N 0025030E - 511010N 0024630E - 510955N 0024539E - 511042N 0024029E - 511050N 0023815E - 511307N 0023000E - 512719N 0023000E.	FL245 / 2500FT AMSL (2)	Marshalling area for air exercises. Prohibited to non-participating aircraft.	HX (3)

(1) Flights in the TRA are subject to ATS provided by Semmerzake ATCC.

(2) First usable level is 3000FT AMSL.

(3) Announced by NOTAM. May be active MON to FRI (HOL excl). Only active during exercises flown from DOB (Deployed Operating Base) Koksijde.

TRA/TSA15 - LO-RENINGE UAV AREA (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510056N 0023429E - 510045N 0023740E - 505641N 0030000E - 504548N 0030000E - along the Belgian-French border - 510056N 0023429E.	FL95 / 4500FT AMSL	Air exercises and UAV flights. During UAV activity, prohibited to all manned aircraft.(2)	HX (3)

(1) Status of the area can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).

(2) Other traffic may be allowed inside the TSA for transit purposes. At all times the standard radar separation minima must be maintained between the UAV and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control.

(3) Announced by NOTAM. Area will only be activated when TRA WA is active. Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).

TRA17 - AWACS AREA

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
505957N 0053955E - 505957N 0054601E - along the Belgian-Dutch border - 505246N 0053955E - 505957N 0053955E.	3500FT AMSL / 1500FT AMSL	Procedural airspace for AWACS IFR approach on ETNG RWY 09. Crossing clearance shall be obtained from Beek APP (see *AIP the Netherlands*).	HX (1)

(1) Activation can be checked with Brussels FIC or Semmerzake ATCC.

TRA/TSA22 - BERTRIX-JEHONVILLE (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 5NM radius, centred on 495333N 0051325E.	4500FT AMSL / GND	Air exercises and UAV flights. During UAV activity, prohibited to all manned aircraft. During air exercises, prohibited to non-participating aircraft.	HX (2)

(1) Status of the area can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).

(2) Announced by NOTAM. May be active MON to FRI (HOL excl), 0700 (0600)-SS. Not in JUL or AUG.

TRA23 - TIENEN AREA

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502323N 0051322E - 502112N 0045247E - 502316N 0045220E - 502900N 0045106E - 503053N 0045743E - 503353N 0050818E - 503231N 0051326E - 502323N 0051322E.	FL90 / 4500FT AMSL	VMC training sector for EBBE based aircraft. Flights in this area shall maintain two-way radio contact with Semmerzake ATCC.	HX (1)

(1) May be active during MIL OPR HR. Activation can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).

TSA24 - ARDENNES 02

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503705N 0043024E - 503813N 0043620E - 503519N 0045040E - 500118N 0054241E - 495854N 0054241E - 494927N 0044914E - 503705N 0043024E.	UNL / FL95 (1)	High performance flights. (2)	HX (3)

(1) First usable level is FL100.

(2) Not permeable.

(3) Activation can be checked with Semmerzake ATCC.

TSA25A - ARDENNES 03A

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495854N 0054241E - 500118N 0054241E - 501808N 0051710E - 500703N 0041011E - 495835N 0040853E - 494920N 0041830E - 494604N 0043047E - 495854N 0054241E.	UNL / FL95 *(1)*	High performance flights. *(2)*	HX *(3)*

(1) First usable level is FL100.

(2) GAT is allowed to cross TSA25A on the route MATIX - MMD on a fixed FL. The traffic shall remain below FL195. Not permeable. Transits from and to France via RSL01 will not be allowed during TSA25A ACT.

(3) Activation can be checked with Semmerzake ATCC.

TSA25B - ARDENNES 03B

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494604N 0043047E - 495854N 0054241E - 494735N 0054237E - 494137N 0051624E - 494030N 0051133E - 494040N 0045055E - 494604N 0043047E.	UNL / FL95 *(1)*	High performance flights. *(2)*	HX *(3)*

(1) First usable level is FL100.

(2) GAT is allowed to cross TSA 25B on the route MATIX - MMD on a fixed FL. The traffic shall remain below FL195. Not permeable.

(3) Activation can be checked with Semmerzake ATCC.

TSA26A - ARDENNES 01

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495854N 0054241E - 494735N 0054237E - 494137N 0051624E - 494030N 0051133E - 494040N 0045055E - 494920N 0041830E - 495835N 0040853E - 500853N 0041028E - 503205N 0040655E - 503335N 0041214E - 503813N 0043620E - 503519N 0045040E - 500118N 0054241E - 495854N 0054241E.	UNL / FL95 *(1)*	High performance flights. *(2)*	HX *(3)*

(1) First usable level is FL100.

(2) GAT is allowed to cross TSA26A on the route MATIX - MMD on a fixed FL. The traffic shall remain below FL195. Not permeable. Transits from and to France via RSL01, RSL09 and RSL10 will not be allowed during TSA26A ACT.Transits from and to Germany via DISKI (Southern Corridor) will not be allowed during TSA26A ACT.

(3) Announced by NOTAM. Activation can be checked with Semmerzake ATCC.

TSA26B - ARDENNES 04

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495854N 0054241E - 494735N 0054237E - 494137N 0051624E - 494030N 0051133E - 494040N 0045055E - 494920N 0041830E - 495835N 0040853E - 500853N 0041028E - 503205N 0040655E - 503335N 0041214E - 503813N 0043620E - 503519N 0045040E - 500118N 0054241E - 495854N 0054241E. *(1)*	FL95 / 4500FT AMSL *(2)*	High performance flights. *(3)*	HX *(4)*

(1) Charleroi TMA One excl. Flights within TSA26B shall stay clear of controlled airspace, prohibited areas, danger areas and conflicting TRA and TSA.

(2) Lower limit FL65 within CBA16B (see *AIP France*).

(3) Area may be crossed by flights TKOF from EBFS and flights with ADES EBFS.

(4) Announced by NOTAM. Activation can be checked with Semmerzake ATCC.

TSA27A - LEGLISE

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495854N 0054241E - 494735N 0054237E - 494137N 0051624E - along the Belgian-French border - 494957N 0045159E - 495854N 0054241E.	FL95 / 4500FT AMSL	UAV flights. Prohibited to all manned aircraft. *(1)*	HX *(2)*
(1) Other traffic may be allowed inside the TSA for transit purposes. At all times the standard radar separation minima must be maintained between the UAV and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control. *(2)* Announced by NOTAM. Area will only be activated when TRA SA is active. Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).			

TSA27B - RONCHAMP

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502125N 0051209E - 501416N 0052304E - 500613N 0053516E - 495734N 0053456E - 495313N 0051015E - 502125N 0051209E.	FL95 / 4500FT AMSL	UAV flights. Prohibited to all manned aircraft. *(1)*	HX *(2)*
(1) Other traffic may be allowed inside the TSA for transit purposes. At all times the standard radar separation minima must be maintained between the UAV and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control. *(2)* Announced by NOTAM. Area will only be activated when TRA SA is active. Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).			

TSA27C - HOTTON

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502125N 0051209E - 502441N 0052449E - 502236N 0053314E - 500618N 0054251E - 500613N 0053516E - 501416N 0052304E - 502125N 0051209E.	FL95 / 4500FT AMSL	UAV flights. Prohibited to all manned aircraft. *(1)*	HX *(2)*
(1) Other traffic may be allowed inside the TSA for transit purposes. At all times the standard radar separation minima must be maintained between the UAV and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control. *(2)* Announced by NOTAM. Area will only be activated when TRA SA is active. Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).			

TSA27D - GEDINNES

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502108N 0045210E - 502300N 0050943E - 502125N 0051209E - 495313N 0051015E - 494957N 0045200E - along the Belgian-French border - 500913N 0045232E - 501912N 0045235E - 502108N 0045210E.	FL95 / 4500FT AMSL	UAV flights. Prohibited to all manned aircraft. *(1)*	HX *(2)*
(1) Other traffic may be allowed inside the TSA for transit purposes. At all times the standard radar separation minima must be maintained between the UAV and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control. *(2)* Area will only be activated when TRA SA is active. Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).			

TSA27E - COUVIN

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500206N 0040902E - 500545N 0044211E - along the Belgian-French border - 500007N 0040903E - 50206N 0040902E	FL95 / 4500FT AMSL	UAV flights. Prohibited to all manned aircraft. *(1)*	HX *(2)*
(1) Other traffic may be allowed inside the TSA for transit purposes. At all times the standard radar separation minima must be maintained between the UAV and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control. *(2)* Area will only be activated when TRA SA is active. Activation can be checked pre-flight with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).			

TSA28A - ELSENBORN 02

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503420N 0055956E - 503754N 0061308E - along the Belgian-German border - 502557N 0062234E - 502557N 0060648E - 503042N 0055956E - 503420N 0055956E.	FL105 / GND	During UAV activity, prohibited to all manned aircraft. During air exercises, prohibited to non-participating aircraft. *(1)(2)(3)*	HX *(4)*

(1) During CAS Air exercises, all aircraft (participating or transiting) shall obtain an additional entry clearance from the ALO “RINGO Range” on FREQ 241.700 (back up 281.575).

(2) Military aircraft transiting to or from Camp Elsenborn are allowed. Military pilots shall contact Semmerzake ATCC to verify the activity of the area and to obtain transit directives after coordination with the UAV operators.

(3) Other traffic may be allowed inside the TSA for transit purposes. At all times the standard radar separation minima must be maintained between the UAV and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control.

(4) Announced by NOTAM. Activation can be checked with Semmerzake ATCC. This airspace could be activated simultaneously with EBR04, therefore UAV operators shall contact Elsenborn Sécurité des tirs, TEL + 32 (0) 80 44 21 25 and FREQ 138.975MHZ to coordinate UAV operations with gunnery/destruction activities.

TSA28B - ELSENBORN 03 *(1)*

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503042N 0055956E - 502557N 0060648E - 502557N 0062234E - along the Belgian-German border - 501011N 0060832E - 501324N 0060343E - 501955N 0055956E - 503042N 0055956E.	FL105 / GND	During UAV activity, prohibited to all manned aircraft. During air exercises, prohibited to non-participating aircraft. *(1)(2)(3)*	HX *(4)*

(1) During CAS Air exercises, all aircraft (participating or transiting) shall obtain an additional entry clearance from the ALO “RINGO Range” on FREQ 241.700 (back up 281.575).

(2) Military aircraft transiting to or from Camp Elsenborn are allowed. Military pilots shall contact Semmerzake ATCC to verify the activity of the area and to obtain transit directives after coordination with the UAV operators.

(3) Other traffic may be allowed inside the TSA for transit purposes. At all times the standard radar separation minima must be maintained between the UAV and the other traffic, therefore the manned aircraft flying within this TSA must be under radar control.

(4) Announced by NOTAM. Activation can be checked with Semmerzake ATCC. This airspace could be activated simultaneously with EBR04, therefore UAV operators shall contact Elsenborn Sécurité des tirs, TEL + 32 (0) 80 44 21 25 and FREQ 138.975MHZ to coordinate UAV operations with gunnery/destruction activities.

TSA29A - ARDENNES 06

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495835N 0040853E - 500338N 0040939E - 501425N 0043911E - 502231N 0045226E - 503001N 0052456E - 502627N 0053920E - 500426N 0055210E - along the Belgian-Luxembourg border - 500120N 0055102E - 500118N 0054241E - 494735N 0054237E - 494137N 0051624E - 494030N 0051133E - 494040N 0045055E - 494920N 0041830E - 495835N 0040853E. *(1)*	FL145 / 4500FT AMSL *(2)*	CSAR exercises.	HX *(3)*

(1) Flights within TSA29A shall stay clear of controlled airspace, prohibited areas, danger areas and conflicting TRA and TSA.

(2) Lower limit FL65 within CBA16B (see *AIP France*).

(3) Announced by NOTAM. May be active MON to FRI (HOL excl). Activation can be checked with Semmerzake ATCC.

TSA29B - ARDENNES 07

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502627N 0053920E - 503042N 0055956E - 501955N 0055956E - 501324N 0060343E - 501011N 0060832E - along the Belgian-German border - 500748N 0060816E - along the Belgian-Luxembourg border - 500426N 0055210E - 502627N 0053920E.	FL95 / 4500FT AMSL (1)	CSAR exercises.	HX (2)
(1) Upper limit may be lowered to FL75 (see NOTAM). (2) Announced by NOTAM. May be active MON to FRI (HOL excl). Activation can be checked with Semmerzake ATCC.			

TSA29C - LUXEMBOURG

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500748N 0060816E - along the German-Luxembourg border - 500118N 0060843E - 500120N 0055102E - along the Belgian-Luxembourg border - 500748N 0060816E.	FL95 / 2500FT AMSL (1)	CSAR exercises.	HX (2)
(1) Upper limit may be lowered to FL65 (see NOTAM). (2) Announced by NOTAM. May be active MON to FRI (HOL excl). Activation can be checked with Semmerzake ATCC.			

ELTSA01 - BRANDENBURG

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 1NM radius, centred on 495442N 0060907E.	3500FT AMSL / GND	UAV flights.	HX (1)
(1) Activated by NOTAM			

ELTSA02 - GRALINGEN SUD

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 0.75NM radius, centred on 495537N 0060621E.	3500FT AMSL / GND	UAV flights.	HX (1)
(1) Activated by NOTAM			

ELTSA03 - HOFFELT

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 1NM radius, centred on 500515N 0055444E.	3500FT AMSL / GND	UAV flights.	HX (1)
(1) Activated by NOTAM			

ELTSA04 - WEILER

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 1NM radius, centred on 500629N 0055747E.	3500FT AMSL / GND	UAV flights.	HX (1)
(1) Activated by NOTAM			

ELTSA05 - WEISWAMPACH

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 1NM radius, centred on 500804N 0060233E.	3500FT AMSL / GND	UAV flights.	HX *(1)*
(1) Activated by NOTAM			

1.2 Permeability of Areas

An area can be defined as either being “permeable” or “not permeable”.

Permeable means that an area can be transited by civil or military traffic while the area is occupied by booked traffic. These transits are subject to tactical co-ordination between the agency controlling the area and the agency (civil or military) controlling the transiting traffic. There will be a delegation of provision of ATS for parts of the affected area unless the controller responsible for the area decides to assume control of the transiting traffic. Temporary restrictions can be imposed on the booked traffic.

Not permeable means that the area cannot be transited by non booked traffic. However, an emergency stop of activities can always be ordered by the ATCC supervisor and/or CRC FA when air safety is endangered (aircraft in distress, weather phenomena or dangerous traffic situations).

1.3 Booking procedure (MIL only)

1.3.1 ARES

ARES (Airspace Reservation) means a defined volume of airspace temporarily reserved for exclusive or specific use by categories of users. ARES as defined above is generally used to facilitate the segregation of noncompatible air traffic, leaving the respective ATCO with the responsibility to ensure that prescribed minimum separation requirements towards the ARES boundary are maintained at all times by non participating air traffic.

Within an ARES aircraft can perform aerial manoeuvres at their own discretion and separation responsibility, after MARSA has been declared. Aircraft cleared to operate inside an ARES shall stay within its confines (maintaining a prescribed safety distance from the ARES boundary as nationally required) until cleared otherwise by the appropriate ATC unit. ARES is generally of a temporary nature and should be scheduled, activated and deactivated through the appropriate national or regional channels, using the respective Flexible Use of Airspace (FUA) arrangements.

Depending on the individual state, an ARES can be a TRA or TSA, which could be classified as an Airspace Restriction i.a.w. the respective ICAO classification.

1.3.2 Airspace Reservation

1.3.2.1 General

Belgian military users have access to LARA, and can book their airspace via this application. The AOLT or the point of contact indicated for the CAS exercise will make all airspace reservations for a CAS exercise using the LARA, or when no access to LARA, ask the Semmerzake ATCC supervisor to do it.

Foreign military users will send a fax to Semmerzake ATCC for airspace reservations or to CRC Glons for Tactical Air Ops and exercises requiring an ACU.

Airspace reservations that require a status of segregation will use the TSAXX, denomination of the area. Other reservations will use the TRAXX. The reason for a TSA booking instead of a TRA are:

- Tactical Air Operations missions under control of an ACU;
- CAS missions under control of a FAC/AOLT (Forward Area Controller/ Air Operations Liaison Team);
- Airspace reservation for a UAV flights.

e.g. An airspace reservation for a Tactical Air Ops for the Balen and Meeuwen Area's will use the TSA N2 and TSA N3, and for a training mission under the control of Semmerzake ATCC using the same volume of airspace, will use TRA N2 and TRA N3.

1.3.2.2 Tactical Air Ops

CRC Glons is the responsible agency for planning tactical air exercise requiring ACU. This includes the processing of airspace requests, the airspace reservations, confirmations and cancellations with the airspace users and with the Semmerzake ATCC supervisor in accordance with the rules in the paragraphs hereafter.

1.3.2.2.1 Booking Procedures Applicable to:

- TSA N1
- TSA N2
- TSA N3
- TSA S1
- TSA S2

- TSA S3
- TSA S4
- TSA S5
- TSA S6
- TSA 24
- TSA 25A/B
- TSA 26A/B

The reservation of a TSA or a combination of TSA under the control of an ACU has to be made by THU of the preceding week, before 1000 (0900). In case this THU is a Belgian HOL, the reservation should be made on the last working day before that THU, before 1000 (0900). All reservations shall be done via the Current Ops Weapons at CRC Glons. Every THU not later than 1100 (1000), CRC Glons will distribute the initial TSA planning for the next week and send a NOTAM proposal for TSA26 slots to Semmerzake ATCC NOF. After distribution of the weekly message, changes can be requested to the Current Ops Weapons Officer at CRC Glons, or in case of non availability to the Mission Supervisor (MS) / Fighter Allocator (FA) of CRC Glons who will request the approval of the Semmerzake ATCC supervisor.

Requests for the booking of several adjacent areas are allowed as long as a common base and top level of the whole area is booked. COMOPSAIR can allow deviations to this rule.

Requests for TSA made on the day of the planned mission (for TSA24, TSA25 A/B and TSA26 A/B after THU 1100 (1000) preceding week) will be treated on a 'first come, first served' basis, The request has to be made at least 3 HR prior the start of the reservation (TSA26 until not later than 24 HR prior slot activation) to the Current Ops Weapons Officer at CRC Glons.

Foreign military users or civil users need the approval of COMOPSAIR. The request has to be forwarded 7 working days prior the execution of the flight (Except for foreign military users requesting TSA24, TSA25 A/B and TSA26 A), for these areas see procedures in § 1.3.2.3.

1.3.2.2.2 Additional Booking Procedures and Restrictions for TSA24, TSA25 and TSA26 (TRA South A/B)

Slots for TSA24, TSA25A/B and TSA26A/B can be booked in accordence with the slot times in § 1.3.2.2.3.

TSA24 may not be used in conjunction with TSA25.

TSA25A/B may not be used in conjunction with TSA24. TSA25B can only be booked together with TSA25A.

TSA26B can only be booked together with TSA26A.

TSA26A, in combination with TSA26B and EBD26 activity, is subject to approval of COMOPSAIR.

1.3.2.2.3 Slot Time

A TSA slot has a duration of 50MIN and a 10MIN buffer (accessible) exists between two slots. After 50MIN exercise time, the join-up shall take place. During join-up the TSA remains segregated airspace controlled by CRC Glons unless otherwise agreed between Semmerzake ATCC and CRC Glons.

For two consecutive slots (different users): Slot X is 50MIN of exercise, followed by join-up (controlled by CRC Glons), during which time the aircraft for Slot X+1 are not allowed to enter the TSA (unless approved by both Semmerzake ATCC and CRC Glons).

Only once a day, two consecutive TSA26 slots can be booked, except during night flight days, when a second pair of consecutive TSA26 slots can be booked during the night time frame. For two continuous TSA26 slots (both slots used for the same mission), a NOTAM can be requested to include the 10MIN buffer between the slots as non accessible.

TSA 24 - 25A/B - 26 A/B

Nr	Slot Start	Slot End	Remarks
1.	0800 (0700)	0850 (0750)	TSA26 not available due to GOSLY holding. A booked TSA26 will be automatically converted into a TSA25 A/B.
2.	0900 (0800)	0950 (0850)	
3.	1000 (0900)	1050 (0950)	
4.	1100 (1000)	1150 (1050)	Limited to top FL190 during GAT EAW on busy fridays.
5.	1200 (1100)	1250 (1150)	Limited to top FL190 during GAT EAW on busy fridays.
6.	1300 (1200)	1350 (1250)	Limited to top FL190 during GAT EAW on busy fridays.
7.	1400 (1300)	1450 (1350)	Limited to top FL190 during GAT EAW on busy fridays.

TSA 24 - 25A/B - 26 A/B

Nr	Slot Start	Slot End	Remarks
8.	1500 (1400)	1550 (1450)	Limited to top FL 190 during GAT EAW on busy fridays.
9.	1600 (1500)	1650 (1550)	Limited to top FL 190 during GAT EAW on busy fridays.
10.	1700 (1600)	1750 (1650)	Limited to top FL 190 during GAT EAW on busy fridays.
11.	1800 (1700)	1850 (1750)	Limited to top FL 190 during GAT EAW on busy fridays.
12.	1900 (1800)	1950 (1850)	Limited to top FL 190 during GAT EAW on busy fridays.
13.	2000 (1900)	2050 (1950)	Limited to top FL 190 during GAT EAW on busy fridays.
14.	2100 (2000)	2150 (2050)	Limited to top FL 190 during GAT EAW on busy fridays.
15.	2200 (2100)	2250 (2150)	Limited to top FL 190 during GAT EAW on busy fridays.

1.3.2.3 Other than Tactical Air Ops

1.3.2.3.1 Booking Procedures Applicable to:

- TRA N1
- TRA N2
- TRA N3
- TRA S1
- TRA S2
- TRA S3
- TRA S4
- TRA S5
- TRA S6

The reservation request of a TRA or a combination of TRA shall preferably be made by THU of the preceding week, before 1000 (0900). In case this THU is a Belgian public HOL, the reservation should be made on the last working day before that THU, before 1000 (0900). All reservations have to be done via the Current Ops Weapons at CRC GLONS.

CRC shall make the initial de-confliction and insert the reservation requests in LARA before THU 1100 (1000). Requests made after Thursday 1100 (1000) are to be made via LARA by the flying units.

Planned exercises (ex calendar) and special approvals of COMOPSAIR (Waiver) are not subject to this procedure and are inserted directly in LARA by ATCC.

The request for D+1 or later shall include the priority ranking (see §13). At the end of DOF-1 the ATCC Supervisor will solve all equal priority requests for airspace that have not been solved by the users.

Requests for TRA made on the day of the planned mission will be treated on a ‘first-come, first-served’ basis to the ATCC Supervisor. The request has to be made at least three hours prior the start of the reservation.

Foreign military users or civil users need the approval of COMOPSAIR. The request has to be forwarded 7 working days prior the execution of the flight adding the reason for the reservation request and if applicable a description of the priority request. The approval will be given with the priority not later than D-1 1700L by COMOPSAIR. Requests without priority can be booked with ATCC supervisor till H-3 and approval is only given after H-3.

The requests for one or more TRA will be forwarded to the Semmerzake ATCC Supervisor through LARA (back-up TEL or FAX). Requests for the booking of several adjacent areas are allowed as long as a common base and top level of the whole area is booked. COMOPSAIR can allow deviations to this rule.

1.3.2.3.2 Booking Procedures Applicable to:

- TRA WA
- TRA WB
- TRA WC
- TRA WD

TRA WA and TRA WB reservations can only be made when CBA 1 is not active.

The units shall forward their requests to the ATCC (ARAC) not later then DAY-2 before 1000 (0900).

Requests for TRA WA, TRA WB or TRA WC made on the day of the planned mission will be treated on a 'first-come, first-served' basis to the ATCC Supervisor. The request has to be made at least three hours prior the start of the reservation.

Note: When UY873 is active, booking of TRA WB (FL195-UNL) is only possible after approval of MUAC and Belgocontrol.

Foreign military users or civil users (air test, paradrop, photomissions, …) need the approval of COMOPSAIR. The request has to be forwarded 7 working days prior the execution of the flight.

Reservation request for TRA WD shall be forwarded to COMOPSAIR Airspace Control Ops at least 14 days in advance and can only be used after approval of COMOPSAIR Ops Division (A3).

1.3.2.3.3 Booking Procedure Applicable to EBR05

Slots are to be requested to 10W Tac Current Ops (national and international), before WED W-1 1100 (1000). Slots will be allocated, in accordance with the priority list of the Pampa Range orders.

Requests, later than WED W-1 1100 (1000), will be handled on a 'first come, first served' basis.

Info on additional airspace (EBR05D or EBR05E) has to be initiated, together with the initial demand.

1.3.2.4 Large Scale Exercises

All airspace reservations concerning large scale exercises shall be made at least one month in advance to COMOPSAIR Airspace Control Operations Current Ops Officer

TEL: +32 (0) 2 701 17 36

FAX: +32 (0) 2 701 72 66

Email: comopsair-a3-air-ctrl-ops@mil.be

1.3.3 Reservation specifications

1.3.3.1 TRA/TSA

TRA/TSA S4: Not available during GOSLY holding.

TRA/TSA13A/B/C: FPL with 'TSA UAV' shall be made available to Semmerzake ATCC and Brussels FIC 60 MIN before EOBT.

TRA14: FPL are to be made available to Semmerzake ATCC 60 MIN before EOBT.

TSA28A: Reservation of the airspace shall be requested to EBSZ NOF via S3 Camp Elsenborn TEL + 32 (0) 80 44 21 03.

TSA28B: Reservation of the airspace shall be requested to EBSZ NOF via S3 Camp Elsenborn TEL + 32 (0) 80 44 21 03.

TSA29A: The reservation request should be forwarded to COMOPSAIR Airspace Control Ops at least one month in advance.

TSA29B: The reservation request should be forwarded to COMOPSAIR Airspace Control Ops at least one month in advance to allow coordination with Brussels ACC, who decide on the top level. This airspace can only be activated together with TSA29A.

TSA29C: The reservation request should be forwarded to ELLX at least one month in advance, who decide on the top level. This airspace can only be activated together with TSA29A.

1.3.4 Airspace Regulations

1.3.4.1 TRA North A/B and South A/B

ATC will strive to avoid transits through active TRA areas. For details regarding the permeability of reserved airspace, see § 1.2. Depending the permeability of the area by non participating traffic, temporary limitations can be imposed upon the traffic using the affected area (e.g. Large scale exercise departures/recoveries).

Semmerzake ATCC will not accept more then three aircraft in a single TRA, and maximum four aircraft in two TRA.

1.3.4.2 TSA N1/N2/N3 and TSA S1/S2/S3/S4/S5/S6

ATC will strive to avoid transits through active TSA areas. For details regarding the permeability of reserved airspace, see § 1.2. Depending the permeability of the area by non participating traffic, temporary limitations can be imposed upon the traffic using the affected area.

1.3.5 Confirmation and cancellation

1.3.5.1 Tactical Air Ops

All bookings shall be confirmed by the military user at least three hours before the activation time of the slot, including the requested airspace and number of aircraft participating to CRC. When CRC Glons does not receive the confirmation, the reservation will automatically be cancelled. CRC Glons will check if all conditions for the reservation are met and confirm the reservation to the Semmerzake ATCC supervisor. If not all conditions are met, CRC Glons will adapt the reservation in

coordination with the user, to make sure that all conditions are met before the airspace can be confirmed. Cancellation of missions (especially in TSA26, and TSA25B) shall be notified ASAP to CRC Glons in order to allow other airspace users to occupy the airspace. CRC Glons issues the NOTAM proposal to Semmerzake ATCC NOF for modification of the current TSA26 NOTAM.

1.3.5.2 Other than Tactical Air Ops except EBR05

All bookings shall be confirmed by the military user at least three hours before the activation time of the slot, including the requested airspace and number of aircraft participating to ATCC Supervisor. When Semmerzake ATCC does not receive the confirmation, the reservation will automatically be cancelled. ATCC Supervisor will check if all conditions for the reservation are met. If not all conditions are met, Semmerzake ATCC will adapt the reservation in coordination with the user, to make sure that all conditions are met before the airspace can be confirmed. Cancellation of missions (especially in TRA S5) shall be notified ASAP to ATCC Supervisor in order to allow other airspace users to occupy the airspace.

1.3.5.3 EBR05

Booking of EBR05 will be confirmed by the military user at least three hours prior activation time of the slot, including the requested airspace and number of aircraft participating directly to Pampa Range- Range Officer.

1.3.5.4 Changes to Reservations

Exceptionally, additional reservations for TSA-slots can be booked (TSA26 until not later than 24 hours prior slot activation, other TSAs until 3 hours prior activation) on a first come, first serve basis via the CRC Glons Current Operations weapons office.

1.3.6 Contact Information

1.3.6.1 CRC Glons Current Operations weapons office:

Contactinfo for booking

TEL: +32 (0) 4 289 32 16
FAX: +32 (0) 4 289 30 01
Email: CRC-CTL-OPS-CurOpsWps@mil.be

1.3.6.2 Master Controller assistant

Information about the TRA/TSA airspace regulations can be obtained via:

TEL: +32 (0) 4 289 32 11

1.3.6.3 Semmerzake ATCC

TEL: +32 (0) 9 389 25 55
FAX: +32 (0) 9 389 24 01
Email: atcc-atc-flops-secatm-datco@mil.be

1.3.6.4 COMOPSAIR Airspace Control Operations Current Ops Officer

TEL: +32 (0) 2 701 17 36
FAX: +32 (0) 2 701 72 66
Email: comopsair-a3-air-ctrl-ops@mil.be

1.3.6.5 10 W Tac Current Ops

TEL: +32 (0) 11 51 25 03 (CIV)
TEL: 9 26 71 25 03 (MIL)
FAX: +32 (0) 11 51 26 02 (CIV)
FAX: 9 26 71 26 02 (MIL)
Email: 10WTAC-VGP-CUR-OPS@mil.be

1.3.6.6 10 W Tac - Pampa Range Range Officer

TEL: +32 (0) 71 68 25 92 (CIV)
TEL: 9 26 71 25 92 (MIL)
Email: 10WTAC-VGP-CUR-WOC@mil.be

1.3.6.7 2 W Tac Current Ops

TEL: +32 (0) 71 68 25 02 (CIV)
TEL: 9 26 90 25 02 (MIL)
Email: 2wtac-gpv-currentopssqn-woc@mil.be

1.3.7 Priority Guidelines

See table 1.3.7.1 for general guidelines on priorities for airspace allocation.

Requests are only valid when they are received by the appropriate agency (see column d) within the delays (as stated in column c).

Requests on D-7 to D-1 are accepted according to the priority of the mission, as inserted by the user during the reservation in LARA (see table 5.7.2). Reservations on D can only book still available airspace, and are on a 'first come, first served' basis.

Booking confirmation can either:

- accept an airspace slot as requested;
- accept an airspace request with limitations (laterally, horizontally, timing, number of aircraft,…);
- refuse the airspace slot request.

Airspace requests for flights not included in the LARA priority list (see table 5.7.2) such as civil glider competitions, civil photo missions, Geographical & Environmental Surveillance flights…) will obtain a case by case priority by COMOPSAIR.

The ATCC Supervisor can himself reserve "manoeuvring" airspace for holding, separating or sequencing aircraft whenever he expects high traffic density in a specific area (for instance when large formations are returning from abroad to land at a Belgian airfield). The ATCC Supervisor will in that case make the airspace unavailable to other users through LARA. Cancellations of already confirmed airspace to create manoeuvring airspace is only allowed when flight safety would otherwise be endangered. Airspace can also be made unavailable to accommodate GAT avoiding bad weather (thunderstorms).

Overlapping requests for aerobatic areas prior D will be solved using the priority list in LARA (see table 5.7.2).

Airspace users should avoid to book airspace already requested by other users. If this occurs the ATCC Supervisor should contact the users and try to find a solution. If the users have different priority, the ATCC Supervisor shall approve the mission with the highest priority. If users with equal priority can not agree, the ATCC Supervisor will take the final decision

Operations within TSA26B will take priority over UAV operations within TSA27A/B/D/E if the TSA26B airspace reservation is made prior THU Week -1 1100 (1000). TSA27A/B/D/E airspace reservations will have priority over TSA26B airspace reservations made after THU Week -1 1100 (1000) until D -1. Reservations made on D will be treated on a 'first-come first-served basis'.

1.3.7.1 Airspace Allocation Priorities

a	b	c	d	e	f
PRIO	Type of Exercise (Exercises for which specific airspace requests are made)	Airspace Requests		Confirmation (acceptance or refusal)	
		Not later then	To	Not later then	By
0	QRA (A and T) scrambles	N/A	N/A	N/A	N/A
1.1	Exercise calendar airspace requirements	10 working days prior	ATCC	Preceding THU 1400 (1300)	ATCC (LARA)
1.2	Scheduled TSA24/25/26 and CBA1 slots	THU of the preceding week 1000 (0900)	CRC		CRC (TTY)
2.1	Belgian Air Force COMAO departures and recoveries	Preceding day 1500 (1400)	ATCC	Preceding day 1600 (1500)	ATCC (LARA)
2.2	Military paradrops	10 working days prior			
3.1	Exercises requesting one or more aerobatic areas (or portions thereof).	Preferably on D-1 at the latest (will soon be at least three hours prior execution)	ATCC (LARA)	If possible, one hour after last landing D-1	ATCC (LARA)
3.2	Foreign military users or civil users requesting TRA/TSAN1-N3 and S1-S6.	7 working days	COMOPSAIR	Preceding day 1600 (1500)	COMOPSAIR
4.1	Military opportunity traffic requesting airspace before TKOF.	30 MIN prior TKOF (will soon be at least three hours prior execution)	ATCC (LARA)	ASAP	ATCC (LARA)
4.2	Civil traffic requesting airspace before TKOF.				
5	Military opportunity traffic in flight	In flight		In flight	R/T

1.3.7.2 Airspace Reservation Priorities

1	Airspace Management	(ATC)
5	COMOPSAIR Waiver	(ATC)
11	Exercise Calendar Ex	(ATC and Air Defence)
14	Syllabus TRA N1 W	(ATC)
16	TSA and CBA1 slot for L16 COMAO	(Air Defence)
17	TSA and CBA1 slot for OCU F-16	(Air Defence)
18	TSA and CBA1 slot for other Belgian aircraft	(Air Defence)
19	TSA and CBA1 slot for foreign aircraft	(Air Defence)
20	Belgian Air Force COMAO	(ATC and Air Defence)
22	Military Paradrop	(ATC)
30	FCF/Calibration TRA S	(ATC)
31	Navaid Calibration	(ATC)
32	Syllabus Flight 1 W	(ATC and Air Defence)
33	Syllabus Flight OCU	(ATC and Air Defence)
34	Qualification Training	(ATC and Air Defence)
35	Continuity Training	(ATC and Air Defence)
36	Visiting Aircrew	(ATC and Air Defence)
41	Opportunity Traffic	(ATC and Air Defence)

2 HELICOPTER TRAINING AREAS

Within helicopter training areas (HTA), military helicopters operate at very low altitude. Other airspace users should keep a sharp look-out when crossing.

2.1 Areas

HTA01 - ARDENNES 01

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502231N 0045226E - 502723N 0051325E - 503001N 0052456E - 502845N 0053003E - 502846N 0053517E - 501008N 0051653E - 500954N 0045424E - 501320N 0045527E - 501918N 0045328E - 502231N 0045226E.	250FT AGL / GND	Low level flights.	MON to FRI (HOL excl), 0700-2300 (0600-2200)*(1)*
(1) Activated by NOTAM			

HTA02 - ARDENNES 02

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502846N 0053517E - 502846N 0054240E - 502237N 0055236E - 501030N 0055833E - along the Belgian-Luxembourg border - 495959N 0054917E - 500000N 0054318E - 501059N 0053428E - 501008N 0051653E - 502846N 0053517E.	250FT AGL / GND	Low level flights.	MON to FRI (HOL excl), 0700-2300 (0600-2200)*(1)*
(1) Activated by NOTAM			

HTA03 - ARDENNES 03

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502237N 0055236E - 502534N 0060141E - 502542N 0062226E - along the Belgian-German border - 500748N 0060816E - along the Belgian-Luxembourg border - 501030N 0055833E - 502237N 0055236E.	250FT AGL / GND	Low level flights.	MON to FRI (HOL excl), 0700-2300 (0600-2200)*(1)*
(1) Activated by NOTAM			

HTA04 - ARDENNES 04

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500954N 0045424E - 501008N 0051653E - 495442N 0052348E - 494714N 0050434E - 495410N 0045336E - 500954N 0045424E. *(1)*	250FT AGL / GND	Low level flights.	MON to FRI (HOL excl), 0700-2300 (0600-2200)*(2)*
(1) TRA/TSA22 excl when active. *(2)* Activated by NOTAM			

HTA05 - ARDENNES 05

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
501008N 0051653E - 501059N 0053428E - 500000N 0054318E - 495442N 0052348E - 501008N 0051653E.	250FT AGL / GND	Low level flights.	MON to FRI (HOL excl), 0700-2300 (0600-2200)*(1)*
(1) Activated by NOTAM			

HTA06 - ARDENNES 06

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494714N 0050434E - 495442N 0052348E - 493826N 0053833E - 493514N 0053041E - 494520N 0051208E - 494714N 0050434E. (1)	250FT AGL / GND	Low level flights.	MON to FRI (HOL excl), 0700-2300 (0600-2200)(2)
(1) TRA/TSA22 excl when active. (2) Activated by NOTAM			

HTA07 - ARDENNES 07

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495442N 0052348E - 500000N 0054318E - 495117N 0054157E - 494211N 0054751E - 493826N 0053833E - 495442N 0052348E.	250FT AGL / GND	Low level flights.	MON to FRI (HOL excl), 0700-2300 (0600-2200)(1)
(1) Activated by NOTAM			

HTA08

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
504019N 0052810E - 503248N 0045302E - 503457N 0044956E - 503941N 0044955E - 504825N 0045554E - 504737N 0050535E - 504753N 0050935E - 504019N 0052810E.	500FT AGL / GND	Low level flights.	HX (1)
(1) Activated by NOTAM. May be activated MON to FRI (HOL excl), 0700-2300 (0600-2200).			

HTA10 - COASTAL HELICOPTER TRAINING AREA(1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503147N 0032913E - along the Belgian-French border - 510521N 0023244E - along the coastline - 512223N 0032147E - along the Belgian-Dutch border - 511257N 0035731E - 510314N 0032818E - 505334N 0032421E - 504028N 0034236E - 503147N 0032913E.	2000FT AMSL / GND (1)	Training area for helicopters.	HX(2)
(1) Helicopter flights conducted within Oostende TMA shall be coordinated with Oostende APP. Helicopter flights inbound from non-controlled airspace will call 10MIN before reaching Oostende TMA for instructions and clearance.			
(2) Upper limit 1000FT AMSL below Lille TMA 2.1. Lowest usable level is 500FT AGL unless permission or instructions from Comopsair Airspace Control Ops. (3) Activated by NOTAM.			

HTA12

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
504019N 0052810E - 504753N 0050935E - 504737N 0050535E - 504825N 0045554E - 505838N 0044857E - 505636N 0050154E - 510000N 0051331E - 505533N 0051951E - 505150N 0052933E - 504024N 0053143E - 504019N 0052810E.(1)	250FT AGL / GND(2)	Low level flights.	HX (3)
(1) EBR53 excl. (3) Activated by NOTAM. May be activated in VMC from MON to FRI (HOL excl), 0700-2300 (0600-2200).			

HTA13

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
505838N 0044857E - 510739N 0043504E - 511005N 0044746E - 510452N 0051259E - 510000N 0051331E - 505636N 0050154E - 505838N 0044857E.	250FT AGL / GND	Low level flights.	HX *(1)*
(1) Activated by NOTAM. May be activated in VMC from MON to FRI (HOL excl), 0700-2300 (0600-2200).			

HTA14

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511005N 0044746E - 511606N 0043737E - 512507N 0044610E - along the Belgian-Dutch border - 511743N 0053055E - 510810N 0051238E - 510452N 0051259E - 511005N 0044746E.	250FT AGL / GND*(1)*	Low level flights.	HX *(1)*
(1) Activated by NOTAM. May be activated in VMC from MON to FRI (HOL excl), 0700-2300 (0600-2200).			

2.2 Booking Procedures

The HTA will be booked according to Air Traffic Instruction 3 Annex J through LARA or via Semmerzake ATCC (TEL: 9 26 40 25 55).

HTA01 to HTA07:

- The reservation request should be forwarded to FI MDC (TEL: 9 26 23 42 01) not later then 1400 (1300) the day before the planned operations.
- COMOPSAIR may grant authorisation for operations with foreign helicopters. Requests shall be made by FAX to the Military Aviation Authority (see GEN 1.1, § 1.1.2) at least twelve weeks in advance.
- Priority will be given to 1 W Ops.
- Permission for operations in the HTA Ardennes will be confirmed not later then 1530 (1430) the day before the exercise.
- Not accessible for foreign helicopters from 01 JUL until 31 AUG.

HTA08:

- The reservation request should be forwarded to FI MDC (TEL: 9 26 23 42 01) not later then 1400 (1300) the day before the planned operations.
- COMOPSAIR may grant authorisation for operations with foreign helicopters. Requests shall be made by FAX to the Military Aviation Authority (see GEN 1.1, § 1.1.2) at least twelve weeks in advance.
- Priority will be given to 1 W Ops.
- Permission for operations in the HTA 08 will be confirmed not later then 1530 (1430) the day before the exercise.
- Not accessible for foreign helicopters from 01 JUL until 31 AUG.

HTA09: EBZR will inform MDC TEL (+32 (0) 2 752 44 52) of periods of activity.

HTA10: Prior co-ordination by MDC (EBMIZGZF) is mandatory.

HTA12 to HTA14: COMOPSAIR Airspace Control Ops may grant authorisation for operations with helicopters other than from 1 W.

2.2.1 Accessibility

The HTA Ardennes are only accessible for operations involving Belgian military helicopters. However, COMOPSAIR may grant authorisation for operations with foreign helicopters.

2.2.2 Subdivision of the HTA Ardennes

In order to ease reservation, four grouped areas are defined within the HTA Ardennes:

- HTA Ardennes West: HTA01 + HTA04 + HTA06
- HTA Ardennes East: HTA02 + HTA03 + HTA05 + HTA07
- HTA Ardennes North: HTA01 + HTA02 + HTA03
- HTA Ardennes South: HTA04 + HTA05 + HTA06 + HTA07

2.2.3 Maximum Authorised Occupation of the HTA Ardennes

Complete HTA Ardennes: eight helicopters operating together as one talking unit.

When using three or four areas or one grouped area: four helicopters working individually (four talking units).

3 LOW FLYING AREAS

3.1 Areas

Within the military low flying areas (LFA), jet aircraft operate at very low altitude. Other airspace users should keep a sharp look-out when crossing.

LFA01 - ARDENNES 01

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502231N 0045226E - 502723N 0051325E - 503001N 0052456E - 502845N 0053003E - 502846N 0053517E - 501008N 0051653E - 500954N 0045424E - 501320N 0045527E - 501918N 0045328E - 502231N 0045226E.	500FT AGL / 250FT AGL	Low level flights.	HX*(1)*
(1) Activated by NOTAM. Can be activated MON to FRI (HOL excl), 0730-1100 (0630-1000) and 1230-1600 (1130-1500). No activation from 01 JUN till 15 SEP and during high intensity use of HTA Ardennes.			

LFA02 - ARDENNES 02

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502846N 0053517E - 502846N 0054240E - 502237N 0055236E - 501030N 0055833E - along the Belgian-Luxembourg border - 495959N 0054917E - 500000N 0054318E - 501059N 0053428E - 501008N 0051653E - 502846N 0053517E.	500FT AGL / 250FT AGL	Low level flights.	HX*(1)*
(1) Activated by NOTAM. Can be activated MON to FRI (HOL excl), 0730-1100 (0630-1000) and 1230-1600 (1130-1500). No activation from 01 JUN till 15 SEP and during high intensity use of HTA Ardennes.			

LFA03 - ARDENNES 03

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502237N 0055236E - 502534N 0060141E - 502542N 0062226E - along the Belgian-German border - 500748N 0060816E - along the Belgian-Luxembourg border - 501030N 0055833E - 502237N 0055236E.	500FT AGL / 250FT AGL	Low level flights.	HX*(1)*
(1) Activated by NOTAM. Can be activated MON to FRI (HOL excl), 0730-1100 (0630-1000) and 1230-1600 (1130-1500). No activation from 01 JUN till 15 SEP and during high intensity use of HTA Ardennes.			

LFA04 - ARDENNES 04

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500954N 0045424E - 501008N 0051653E - 495442N 0052348E - 494714N 0050434E - 495410N 0045336E - 500954N 0045424E. *(1)*	500FT AGL / 250FT AGL	Low level flights.	HX*(2)*
(1) TRA/TSA22 excl when active. *(2)* Activated by NOTAM. Can be activated MON to FRI (HOL excl), 0730-1100 (0630-1000) and 1230-1600 (1130-1500). No activation from 01 JUN till 15 SEP and during high intensity use of HTA Ardennes.			

LFA05 - ARDENNES 05

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
501008N 0051653E - 501059N 0053428E - 500000N 0054318E - 495442N 0052348E - 501008N 0051653E.	500FT AGL / 250FT AGL	Low level flights.	HX(1)
(1) Activated by NOTAM. Can be activated MON to FRI (HOL excl), 0730-1100 (0630-1000) and 1230-1600 (1130-1500). No activation from 01 JUN till 15 SEP and during high intensity use of HTA Ardennes.			

LFA06 - ARDENNES 06

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494714N 0050434E - 495442N 0052348E - 493826N 0053833E - 493514N 0053041E - 494520N 0051208E - 494714N 0050434E. *(1)*	500FT AGL/ 250FT AGL	Low level flights.	HX(2)
(1) TRA/TSA22 excl when active. *(2)* Activated by NOTAM. Can be activated MON to FRI (HOL excl), 0730-1100 (0630-1000) and 1230-1600 (1130-1500). No activation from 01 JUN till 15 SEP and during high intensity use of HTA Ardennes.			

LFA07 - ARDENNES 07

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495442N 0052348E - 500000N 0054318E - 495117N 0054157E - 494211N 0054751E - 493826N 0053833E - 495442N 0052348E.	500FT AGL / 250FT AGL	Low level flights.	HX(1)
(1) Activated by NOTAM. Can be activated MON to FRI (HOL excl), 0730-1100 (0630-1000) and 1230-1600 (1130-1500). No activation from 01 JUN till 15 SEP and during high intensity use of HTA Ardennes.			

LFA11 - KOKSIJDE TRAINING AREA

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510521N 0023244E - 510700N 0020000E - 513000N 0020000E - 512223N 0032147E - along the coastline - 510521N 0023244E.	500FT AMSL / 10FT AMSL	Training area for helicopters and fixed-wing aircraft.	HX (1)
(1) Activated by NOTAM.			

3.2 Booking procedure

The LFA will be booked according to Air Traffic Instruction 3 Annex J through LARA or via Semmerzake ATCC (TEL: 9 26 40 25 55).

3.2.1 Accessibility

The LFA regulation is applicable for operations involving Belgian Air Component fixed wing aircraft. However, COMOPSAIR may grant authorisation for operations with foreign aircraft.

3.2.2 Subdivision of the LFA Ardennes

In order to ease reservation, four grouped areas are defined within the LFA Ardennes:

- LFA Ardennes West: LFA01 + LFA04 + LFA06
- LFA Ardennes East: LFA02 + LFA03 + LFA05 + LFA07
- LFA Ardennes North: LFA01 + LFA02 + LFA03
- LFA Ardennes South: LFA04 + LFA05 + LFA06 + LFA07

3.2.3 Maximum Authorised Occupation of the LFA Ardennes

Complete LFA Ardennes: 4 formations of 4 aircraft or 3 C-130 aircraft.

When using three or four areas or one grouped area: 2 formations of 4 aircraft or 2 C-130 aircraft.

3.3 Areas to be avoided in the LFA Ardennes

In addition to the areas situated within the LFA Ardennes specified in ENR 5.1 and ENR 5.2, following areas shall be avoided:

Below 2000FT AGL - 1NM radius

Arlon	494100N	0054900E
Barvaux / Durbuy	502100N	0052845E
Bastogne	500000N	0054300E
Beauraing	500630N	0045800E
Bertrix	495115N	0051515E
Bouillon	494800N	0050400E
Ciney	501800N	0050600E
Florenville	494200N	0051800E
Habay-la-Neuve	494400N	0053900E
Han-sur-Lesse	500700N	0051200E
Houffalize	500800N	0054725E
La Roche	501100N	0053500E
Malmedy	502530N	0060200E
Marche-en-Famenne	501330N	0052100E
Neufchâteau	495100N	0052600E
Rochefort	500930N	0051320E
Stavelot	502330N	0055600E
Sankt-Vith	501700N	0060700E
Vielsalm	501730N	0055500E

Below 2000FT AGL - 2NM radius

Dinant	501445N	0045450E
Saint-Hubert	500140N	0052230E

3.4 Limitations of Simulated Attacks

It is forbidden to simulate attacks on, even temporary, populated locations or on helicopter operating in the HTA.

4 AIR DEFENCE IDENTIFICATION ZONE

NIL

ENR 5.3 Other Activities of a Dangerous Nature

NIL

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ENR 5.4 Air Navigation Obstacles

1 IN BELGIUM

The Area 1 obstacle data for Belgium as known to Belgocontrol AIM, may be downloaded in CSV format from the following address:

URL: www.belgocontrol.be/opersite/eaip/eAIP_Product/Obstacles/ObstacleDataArea1Belgium.csv

Following file contains additional area 1 obstacle data for Belgium received by third parties, but not verified by an obstacle survey:

URL: www.belgocontrol.be/opersite/eaip/eAIP_Product/Obstacles/eTODAREA1additional_info.csv

For further details on these data, see GEN 3.1, § 6.

2 IN LUXEMBOURG

No Area 1 electronic obstacle sets are currently available in Luxembourg. The list below contains all obstacles with a height exceeding 100 M that are known to ANA AIS.

Designation	Municipality	Obstacle type	Obstacle position	ELEV / HGT (FT)	Marked	Remarks
EL0001	Beidweiler	Radio mast	494343N 0061904E	1844 / 952	Yes	
EL0002	Beidweiler	Radio mast	494349N 0061915E	1838 / 952	Yes	
EL0003	Beidweiler	Radio mast	494356N 0061926E	1825 / 952	Yes	
EL0005	Dudelange	Radio tower	492748N 0060545E	2353 / 985	Yes	
EL0006	Parc Hosingen	Radio mast	500115N 0060617E	2694 / 985	Yes	
EL0007	Junglinster	Radio tower	494300N 0061529E	1857 / 716	Yes	
EL0008	Junglinster	Radio tower	494307N 0061540E	1894 / 716	Yes	
EL0009	Junglinster	Radio tower	494313N 0061551E	1913 / 716	Yes	
EL0010	Wincrange	Wind turbine	500428N 0055946E	2014 / 338	Yes	
EL0011	Wincrange	Wind turbine	500344N 0055824E	2014 / 338	Yes	
EL0012	Wincrange	Wind turbine	500411N 0055628E	1996 / 339	Yes	
EL0013	Wincrange	Wind turbine	500412N 0055711E	1999 / 339	Yes	
EL0017	Weiswampach	Wind turbine	500659N 0060056E	2199 / 598	Yes	
EL0018	Weiswampach	Wind turbine	500626N 0060139E	2233 / 598	Yes	
EL0019	Weiswampach	Wind turbine	500626N 0060200E	2208 / 598	Yes	
EL0020	Weiswampach	Wind turbine	500621N 0060115E	2189 / 598	Yes	
EL0021	Weiswampach	Wind turbine	500609N 0060059E	2175 / 598	Yes	
EL0030	Clervaux	Wind turbine	500500N 0060439E	2064 / 339	Yes	To be dismantled in 2017
EL0031	Clervaux	Wind turbine	500437N 0060453E	2032 / 339	Yes	To be dismantled in 2017
EL0032	Clervaux	Wind turbine	500435N 0060516E	1989 / 339	Yes	To be dismantled in 2017
EL0033	Clervaux	Wind turbine	500421N 0060505E	1988 / 339	Yes	To be dismantled in 2017
EL0034	Clervaux	Wind turbine	500712N 0060536E	2118 / 447	Yes	
EL0035	Clervaux	Wind turbine	500659N 0060555E	2145 / 447	Yes	
EL0036	Clervaux	Wind turbine	500632N 0060449E	2130 / 447	Yes	
EL0037	Weiswampach	Wind turbine	500731N 0060508E	2243 / 598	Yes	
EL0038	Bourscheid	Wind turbine	495346N 0060721E	1926 / 614	Yes	
EL0039	Bourscheid	Wind turbine	495432N 0060551E	2143 / 614	Yes	
EL0040	Bourscheid	Wind turbine	495542N 0060500E	2040 / 516	Yes	
EL0041	Esch-sur-Sûre	Wind turbine	495402N 0060045E	2093 / 458	Yes	
EL0042	Esch-sur-Sûre	Wind turbine	495330N 0060011E	2105 / 458	Yes	
EL0043	Esch-sur-Sûre	Wind turbine	495333N 0060033E	2126 / 458	Yes	
EL0044	Bourscheid	Wind turbine	495337N 0060104E	2136 / 458	Yes	
EL0045	Bourscheid	Wind turbine	495336N 0060129E	2127 / 458	Yes	
EL0046	Bourscheid	Wind turbine	495325N 0060109E	2105 / 458	Yes	

Designation	Municipality	Obstacle type	Obstacle position	ELEV / HGT (FT)	Marked	Remarks
EL0047	Bourscheid	Wind turbine	495309N 0060112E	2067 / 458	Yes	
EL0051	Mompach	Wind turbine	494554N 0062932E	1654 / 498	Yes	
EL0052	Mompach	Wind turbine	494550N 0062950E	1644 / 498	Yes	
EL0053	Mompach	Wind turbine	494528N 0062924E	1646 / 498	Yes	
EL0054	Mompach	Wind turbine	494507N 0062923E	1615 / 498	Yes	
EL0059	Wiltz	Wind turbine	495652N 0055458E	2273 / 642	Yes	
EL0060	Wiltz	Wind turbine	495651N 0055619E	2177 / 642	Yes	
EL0061	Goesdorf	Wind turbine	495643N 0055952E	2079 / 642	Yes	
EL0062	Goesdorf	Wind turbine	495550N 0055717E	2230 / 642	Yes	
EL0063	Putscheid	Wind turbine	495626N 0060704E	2199 / 614	Yes	
EL0064	Parc Hosingen	Wind turbine	495749N 0060441E	2240 / 642	Yes	
EL0065	Putscheid	Wind turbine	495818N 0060638E	2274 / 614	Yes	
EL0066	Parc Hosingen	Wind turbine	495946N 0060413E	2279 / 642	Yes	
EL0067	Parc Hosingen	Wind turbine	500058N 0060413E	2282 / 642	Yes	
EL0068	Parc Hosingen	Wind turbine	500155N 0060522E	2332 / 642	Yes	
EL0069	Clervaux	Wind turbine	500237N 0060243E	2263 / 642	Yes	
EL0070	Clervaux	Wind turbine	500308N 0060610E	2207 / 665	Yes	
EL0071	Weiswampach	Wind turbine	500603N 0060232E	2245 / 598	Yes	
EL0072	Clervaux	Wind turbine	500452N 0060452E	2350 / 614	Yes	
EL0073	Clervaux	Wind turbine	500606N 0060428E	2330 / 614	Yes	
EL0074	Luxembourg	Building	493718N 0060836E	1401 / 348	Yes	
EL0075	Luxembourg	Building	493719N 0060838E	1411 / 348	Yes	
EL0076	Wincrange	Wind turbine	500638N 0055738E	2304 / 663	Yes	
EL0077	Wincrange	Wind turbine	500650N 0055730E	2320 / 663	Yes	
EL0078	Wincrange	Wind turbine	500703N 0055710E	2343 / 663	Yes	
EL0079	Wincrange	Wind turbine	500715N 0055701E	2353 / 663	Yes	
EL0080	Wincrange	Wind turbine	500717N 0055636E	2343 / 663	Yes	
EL0081	Wincrange	Wind turbine	500724N 0055620E	2330 / 663	Yes	
EL0082	Wincrange	Wind turbine	500728N 0055602E	2307 / 663	Yes	

ENR 5.5 Aerial Sporting and Recreational Activities

1 GENERAL

BALEN

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 511051N 0051315E.	2500FT AMSL / GND	Glider activity. Glider towing. Glider winching up to 2200FT AMSL.	HX. In VMC only *(1)*
(1) OPR HR can be checked with EBKH OPR (see AD 2.PVT-EBKH).			

BELŒIL

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502945N 0033156E - an arc of circle, 8NM radius, centred on position 503250N 0034333E and traced clockwise to 502506N 0034014E - along the Belgian-French border - 502945N 0033156E.	1000FT AGL / GND	Training area for free manned balloons.	HJ. In VMC only *(1)*
(1) By arrangement with Chièvres TWR and Brussels FIC.			

BERTRIX

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 10NM radius, centred on 495330N 0051326E.	4500FT AMSL / GND	Glider activity.	HX. In VMC only (1)
(1) During OPR HR of the Belgian Cadets at EBBX. Activation will be announced by NOTAM			

BRASSCHAAT

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 3NM radius, centred on 512027N 0043015E.	2500FT AMSL / GND *(1)*	Glider activity. Glider towing. Glider winching up to 2500FT AMSL	HJ (MON to FRI outside MIL OPR HR only). In VMC only
(1) Upper limit 3500FT AMSL below Brussels TMA Three A and 4500FT AMSL below Brussels LCTA.			

CERFONTAINE AREA ONE

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 4km radius, centred on 500910N 0042314E.	FL145 / GND *(1)*	Parachuting.	HJ (outside MIL OPR HR only). In VMC only *(2)*
(1) MAX usable LVL: FL140. *(2)* OPR HR can be checked with Brussels FIC.			

CERFONTAINE AREA TWO

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
501046N 0042340E - 500957N 0042355E - 501006N 0042517E - an arc of circle, 3km radius, centred on position 500910N 0042314E and traced clockwise to 501046N 0042340E.	2500FT AMSL / GND	Parachuting.	HJ (during MIL OPR HR only). In VMC only *(1)*
(1) OPR HR can be checked with Brussels FIC.			

CERFONTAINE AREA THREE

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
501110N 0042333E - 500957N 0042355E - 501010N 0042556E - an arc of circle, 2 NM radius, centred on position 500910N 0042314E and traced clockwise to 501110N 0042333E.	2500FT AMSL / GND	Glider activity. Glider towing.	See AD 2.PVT-EBCF

CÉROUX-MOUSTY

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 4NM radius, centred on 503933N 0043051E.	1500FT AMSL / GND	Training area for free manned balloons.	HJ. In VMC only *(1)*
(1) By arrangement with Beauvechain TWR and Brussels FIC.			

DIEST

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 1.5NM radius, centred on 505957N 0050355E.	FL150 / GND	Parachuting and glider activity. Glider winching up to 2500FT AMSL	SAT, SUN and HOL, SR-SS + 30MIN. In VMC only *(1)*
(1) Area may be temporarily inactive due to MIL requirements (see ENR 5.1, EBR03).			

FEITSCH

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500242N 0055346E - 500105N 0055334E - 500108N 0055244E - 500244N 0055256E - 500242N 0055346E.	FL70 / 1500FT AGL *(1)*	Aerobatic sector for light aircraft.	HX. In VMC only
(1) Release between FL50 and FL70 subject to approval from Luxembourg APP.			

GENK - ZWARTBERG

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2 NM radius, centred on 510055N 0053135E.	2500FT AMSL / GND	Glider activity. Glider towing.	See AD 2.PVT-EBZW

GERAARDSBERGEN (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 504517N 0035145E.	2500FT AMSL / GND (2)	Glider activity. Glider towing. Glider winching up to 1600FT AMSL.	SAT, SUN and HOL, HJ (daily from APR to OCT). In VMC only.
(1) Use of the area is subject to prior permission of the operator of EBGG. Local instructions should be known and complied with. *(2)* Altimeter setting based on QNH provided by Brussels APP.			

GRINGLAY

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 1NM radius, centred on 495456N 0060530E.	3500FT AMSL / GND	Paragliding.	HJ. In VMC only

HASSELT - KIEWIT

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2 NM radius, centred on 505812N 0052230E.	2500FT AMSL / GND	Glider activity. Glider towing.	See AD 2.PVT-EBZH

HOEVENEN

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 511819N 0042326E.	FL130 / GND	Parachuting.	SAT, SUN and HOL, HJ. In VMC only

KONZ / KÖNEN GLIDER SECTOR NORTH

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494801N 0063129E - 494708N 0063341E - 494203N 0063405E - 494203N 0063022E - along the German-Luxembourg border - 484801N 0063129E.	4000FT AMSL / 1000FT AGL (1)	Glider activity.	HX. In VMC only
(1) 1000FT AGL or lower limit of class E airspace if higher (see *AIP Germany*).			

KONZ / KÖNEN GLIDER SECTOR SOUTH

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494203N 0063022E - 494203N 0063405E - 493212N 0063453E - 493018N 0063000E - 494203N 0063022E.	4000FT AMSL / 1000FT AGL (1)	Glider activity.	HX. In VMC only
(1) 1000FT AGL or lower limit of class E airspace if higher (see *AIP Germany*).			

KONZ / KÖNEN AEROBATICS SECTOR

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494203N 0063405E - 493900N 0063420E - 493858N 0063015E - 494203N 0063022E - 494203N 0063405E.	5000FT AMSL / 1000FT AGL (1)	Aerobatics.	HX. In VMC only
(1) 1000FT AGL or lower limit of class E airspace if higher (see *AIP Germany*).			

LEOPOLDSBURG

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 3NM radius, centred on 510712N 0051825E.	FL100 / GND	Parachuting.	SAT, SUN and HOL, HJ. In VMC only (1)
(1) By arrangement with Brussels ACC and Brussels FIC.			

MEEUWEN-GRUITRODE

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 510212N 0053121E.	FL150 / GND	Parachuting.	SAT, SUN and HOL, HJ. In VMC only (1)
(1) PPR. Permission for dropping shall be obtained from Brussels FIC on FREQ 126.900MHz (up to FL60) or from Brussels ACC on FREQ 128.800MHz (up to FL120). Continuous listening watch is compulsory as dropping may be suspended for traffic reasons.			

MOORSELE

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 505110N 0030850E.	FL150 / GND	Parachuting.	SAT, SUN and HOL, SR-SS + 30MIN. In JUL and AUG, SR-SS + 30MIN. On WED from 01 MAY to 30 JUN and from 01 to 30 SEP, 1300-SS + 30MIN. In VMC only

NAMUR AREA ONE

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 502917N 0044626E.	FL135 / GND	Parachuting.	FRI BTN 1500 and SS, outside MIL activities. SAT, SUN and HOL, HJ. In VMC only (1)
(1) Permission for dropping shall be obtained from Charleroi ATC by TEL. MET OBS of EBCI is taken into consideration only. Continuous listening watch is compulsory as dropping may be suspended for traffic reasons.			

NAMUR AREA TWO

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502928N 0044201E - 503121N 0045022E - 502320N 0045219E - 502147N 0044008E - 502259N 0044043E - 502332N 0044040E - 502428N 0044015E - 502437N 0044006E - an arc of circle, 5.5NM radius, centred on 502817N 0043335E and traced counterclockwise to 502928N 0044201E.	2500FT AMSL / GND (1)	Glider activity.	MON to THU, 0800-1900 (0700-1800). FRI to SUN and HOL, 0800 (0700)-SS. In VMC only (2)
(1) For operational reasons, highest suitable altitude for glider activity is 2000FT AMSL. (2) MET OBS of EBCI is taken into consideration only.			

NOERTRANGE

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 495847N 0055456E.	FL145 / GND (1)	Parachuting.	HJ. In VMC only (2)
(1) Release between FL75 and FL145 subject to approval from Luxembourg APP. (2) SSR Mode A/C compulsory. Permission for dropping shall be obtained from Luxembourg APP (FREQ 118.900MHZ). Continuous listening watch is compulsory as dropping may be suspended for traffic reasons.			

RIPPWEILER

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494532N 0055753E - 494506N 0055723E - 494601N 0055521E - 494628N 0055548E - 494532N 0055753E.	FL70 / 1500FT AGL (1)	Aerobatic sector for gliders.	HX. In VMC only
(1) Release between 2500FT AMSL and FL70 subject to approval from Luxembourg APP.			

SAINT-HUBERT

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 10NM radius, centred on 500209N 0052415E.	4500FT AMSL/ GND	Glider activity.	During EBSH OPR HR. In VMC only.(1)
(1) See AD 2.PVT-EBSH.			

SEPT MEUSES

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2km radius, centred on 502115N 0045135E.	1000FT AGL / GND	Delta wings.	HJ. In VMC only

SPA

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 502857N 0055437E.	FL145 / GND (1)	Parachuting.	During EBSP OPR HR. In VMC only (2)
(1) MAX usable level: FL140.			
(2) See AD 2.PVT-EBSP. Permission for dropping shall be obtained from Brussels ACC (FREQ 128.200MHZ). Continuous listening watch is compulsory as dropping at FL50 and above may be suspended at any time for traffic reasons.			

TOURNAI - MAUBRAY

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503042N 0032702E - an arc of circle, 2 NM radius, centred on 503147N 0032940E and traced clockwise to 502947N 0032953E - along the Belgian French border - 503042N 0032702E.	1500FT AMSL/ GND	Glider activity. Glider towing. Glider winching up to 1500 FT AMSL.	See AD 2.PVT-EBTY

USELDANGE GLIDER SECTOR NORTH (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494738N 0054729E - along the Belgian-Luxembourg border - 500748N 0060816E - along the German-Luxembourg border - 495656N 0061152E - 495422N 0055755E - 494804N 0060000E - 494738N 0054729E (2).	FL65 / 3500FT AMSL	Glider activity. (3)	HX (4)
(1) Non-public glider sector. All non-Useldange based VFR traffic shall contact Luxembourg APP on FREQ 118.900MHZ.			
(2) Noertrange Area excl.			
(3) No traffic information on individual glider flights will be issued by ATC			
(4) HJ only. On request of the "Cercle Luxembourgeois de Vol à Voile". Activation can be checked with Luxembourg APP on FREQ 118.900MHZ.			

USELDANGE GLIDER SECTOR SOUTH (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
494738N 0054729E - 494804N 0060000E - 494430N 0060000E - 494430N 0054958E - along the Belgian-Luxembourg border - 494738N 0054729E.	FL55 / 2500FT AMSL	Glider activity. (2)	HX (3)

(1) Non-public glider sector. All non-Useldange based VFR traffic shall contact Luxembourg APP on FREQ 118.900MHZ.

(2) No traffic information on individual glider flights will be issued by ATC

(3) HJ only. On request of the "Cercle Luxembourgeois de Vol à Voile". Activation can be checked with Luxembourg APP on FREQ 118.900MHZ.

VERVIERS - THEUX

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 2NM radius, centred on 503309N 0055118E.	3000FT AMSL / GND	Glider activity. Glider Towing.	See AD 2.PVT-EBTX

WEELDE

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512620N 0045943E - an arc of circle, 3NM radius, centred on 512339N 0045733E and traced clockwise to 512455N 0045311E - along the Belgian-Dutch border - 512620N 0045943E.	3500FT AMSL / GND	Glider activity. Glider towing. Glider winching up to 3000FT AMSL	HJ. In VMC only (1) (2)

(1) See AD 2.MIL-EBWE.

(2) Additional activities of the Belgian Air Cadets at EBWE will be announced by NOTAM.

(3) It is recommended not to cross the RWY axis below 3000FT AMSL during glider activity (winch launch). Take prior contact with Weelde radio (119.600MHZ).

ZOERSEL

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511837N 0043336E - 511938N 0044052E - an arc of circle, 26NM radius, centred on 505408N 0043217E and traced clockwise to 511332N 0045955E - 511253N 0045955E - 511253N 0044512E - an arc of circle, 3NM radius, centred on 511553N 0044512E and traced clockwise to 511342N 0044156E - 511837N 0043336E.	2500FT AMSL / GND	Glider activity.	SAT, SUN and HOL, HJ. In JUL and AUG, HJ. FRI, 1600 (1500)-SS. In VMC only

ZUTENDAAL

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 5NM radius, centred on 505651N 0053526E.	3000FT AMSL / GND	Glider activity. Winch launching up to 2300FT AGL.	FRI, 1600 (1500)-SS+30MIN. SAT, SUN and HOL, SR-30MIN until SS+30MIN. In VMC only

2 LOW FLYING AREAS GOLF

LOW FLYING AREA GOLF ONE (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
511635N 0032236E - 510500N 0031500E - 510357N 0025825E - 505900N 0024917E - 510043N 0023905E - 510059N 0023428E - along the Belgian-French border - 493232N 0054520E - 493537N 0054356E - 494032N 0054956E - 494328N 0054956E - along the Belgian-Luxembourg border - 500748N 0060816E - along the Belgian-German border - 504515N 0060116E - 504259N 0055149E - 503917N 0054900E - 502426N 0052347E - an arc of circle, 6.5NM radius, centred on 502912N 0051650E and traced clockwise to 503101N 0050701E - 503814N 0050408E - 504817N 0051953E - 505150N 0052933E - 505223N 0053407E - 505000N 0053854E - along the Belgian-Dutch border - 512844N 0043011E - 511807E 0043011E - 511835N 0043325E - 511938N 0044052E - an arc of circle, 26NM radius, centred on 505408N 0043217E and traced clockwise to 511332N 0045955E - 5100605N 0051000E - 510122N 0051315E - an arc of circle, 40NM radius, centred on 510954N 0041102E and traced clockwise to 503810N 0044949E - 503640N 0045629E - 502407N 0045910E - 501842N 0041627E - 502920N 0034840E - 503059N 0034410E - 504012N 0033609E - 505334N 0032421E - 510314N 0032818E - 511257N 0035731E - along the Belgian-Dutch border - 511635N 0032236E. (2)	FL55 (excl) / 4500FT AMSL	Glider activity.	HJ (outside MIL OPR HR) (3)

(1) Airspace class G during activation.

(2). Excluding Reserved or Segregated areas (TRA/TSA), the activation as announced by NOTAM. Liège TMA Three, Four and Five excluded during activation.

(3) Activation can be checked with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.

LOW FLYING AREA GOLF TWO NORTH (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
512844N 0043011E - 511807E 0043011E - 511835N 0043325E - 511938N 0044052E - an arc of circle, 26NM radius, centred on 505408N 0043217E and traced clockwise to 511332N 0045955E - 510605N 0051000E - 510122N 0051315E - 510057N 0051655E - 505000N 0053854E - along the Belgian-Dutch border - 512844N 0043011E. (2)	FL75 (excl) / FL55	Glider activity.	HX (3)

(1) Airspace class G during activation. Activation can only be refused for motivated operational reasons.

(2). Excluding Reserved or Segregated areas (TRA/TSA), the activation as announced by NOTAM.

(3) Only during activation of Low Flying Area Golf One. Brussels ACC will release Low Flying Area Golf Two North up to FL70 on request of the "Liga van Vlaamse zweefclubs" with 30MIN prior notice to be addressed to the Brussels ACC Supervisor. Activation of Low Flying Areas Golf Two activates Low Flying Area Golf Three and shall only be requested when meteorological services expect thermal activity above FL50. Activation can be checked with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.

LOW FLYING AREA GOLF TWO SOUTH (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500206N 0040901E - 502317N 0052111E - an arc of circle, 6.5NM radius, centred on 502912N 0051650E and traced counterclockwise to 502426N 0052347E - 503029N 0053401E - 503053N 0053725E - 503726N 0061055E - along the Belgian-German border - 500748N 0060816E - along the Belgian-Luxembourg border - 494328N 0054955E - 494032N 0054956E - 493702N 0054540E - 493258N 0052644E - along the Belgian-French border - 500206N 0040901E. (2)	FL75 (excl) / FL55	Glider activity.	HX (3)

(1) Airspace class G during activation. Activation can only be refused for motivated operational reasons.

(2). Excluding Reserved or Segregated areas (TRA/TSA), the activation as announced by NOTAM.

(3) Only during activation of Low Flying Area Golf One. Brussels ACC will release Low Flying Area Golf Two South up to FL70 on request of the "Fédération des Clubs francophones de Vol à voile" with 30MIN prior notice to be addressed to the Brussels ACC Supervisor. Activation of Low Flying Areas Golf Two activates Low Flying Area Golf Three and shall only be requested when meteorological services expect thermal activity above FL50. Activation can be checked with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.

LOW FLYING AREA GOLF TWO WEST (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
510059N 0023428E - 510043N 0023905E - 505900N 0024917E - 505334N 0032421E - 503548N 0033959E - 503119N 0033107E - along the Belgian-French border - 510059N 0023428E. (2)	FL75 (excl) / FL55	Glider activity.	HX (3)

(1) Airspace class G during activation. Activation can only be refused for motivated operational reasons.

(2). Excluding Reserved or Segregated areas (TRA/TSA), the activation as announced by NOTAM.

(3) Only during activation of Low Flying Area Golf One. Brussels ACC will release Low Flying Area Golf Two West up to FL70 on request of the "Liga van Vlaamse zweefclubs" with 30MIN prior notice to be addressed to the Brussels ACC Supervisor. Activation of Low Flying Areas Golf Two activates Low Flying Area Golf Three and shall only be requested when meteorological services expect thermal activity above FL50. Activation can be checked with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.

LOW FLYING AREA GOLF THREE (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503053N 0053725E - 503343N 0055152E - 503420N 0055956E - 501955N 0055956E - 501010N 0060535E - along the Belgian-Luxembourg border - 500426N 0055210E - 502810N 0053819E - 503053N 0053725E. (2)	FL65 (excl) / 4500FT AMSL	Glider activity.	HX (3)

(1) Airspace class G during activation. Activation can only be refused for motivated operational reasons.

(2). Excluding Reserved or Segregated areas (TRA/TSA), the activation as announced by NOTAM.

(3) HJ only. Brussels ACC will release Low Flying Area Golf Three up to FL60 on request of EBTX with 30MIN prior notice to be addressed to the Brussels ACC Supervisor. EBTX shall inform the Brussels ACC Supervisor of the end of the activity. During MIL activity, Brussels ACC will inform MIL ATC of activation of Low Flying Area Golf Three. Activation can be checked with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.

LOW FLYING AREA GOLF FOUR (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
504848N 0050505E - an arc of circle, 40NM radius, centred on 510954N 0041102E and traced clockwise to 504138N 0045603E - 504341N 0045156E - 504740N 0045503E - an arc of circle, 1.7NM radius, centred on 504654N 0045728E and traced clockwise to 504836N 0045721E - 504848N 0050505E.	FL50 / 3500FT AMSL	Glider activity.	HX (2)
(1) Airspace class G during activation. Activation can only be refused for motivated operational reasons. *(2)* HJ and outside MIL OPR HR only. Brussels APP will release Low Flying Area Golf Four for the benefit of glider operations from EBTN with 15MIN prior notice to be addressed to the Brussels APP Supervisor (TEL: +32 (0) 2 206 27 12). EBTN shall inform the Brussels APP Supervisor of the end of the activity. Activation can be checked with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.			

LOW FLYING AREA GOLF FIVE EAST (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
503318N 0055610E - 503754N 0061308E - along the Belgian-German border - 502134N 0062204E - 502240N 0061131E - 503318N 0055610E. (2)	FL95 (excl) / FL75	Glider activity.	HX (3)
(1) Airspace class G during activation. Activation can only be refused for motivated operational reasons. *(2)*. Excluding Reserved or Segregated areas (TRA/TSA), the activation as announced by NOTAM. *(3)* Only during activation of Low Flying Area Golf One and Two. Brussels ACC will release Low Flying Area Golf Five up to FL90 on request of the "Fédération des Clubs francophones de Vol à voile" with 30MIN prior notice to be addressed to the Brussels ACC Supervisor. Activation of Low Flying Area Golf Five shall only be requested when meteorological services expect thermal activity above FL70. Activation can be checked with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.			

LOW FLYING AREA GOLF FIVE WEST (1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
500206N 0040901E - 502810N 0053819E - 500426N 0055210E - along the Belgian-Luxembourg border - 494809N 0054507E - 494137N 0051624E - along the Belgian-French border - 500206N 0040901E. (2)	FL95 (excl) / FL75	Glider activity.	HX (3)
(1) Airspace class G during activation. Activation can only be refused for motivated operational reasons. *(2)*. Excluding Reserved or Segregated areas (TRA/TSA), the activation as announced by NOTAM. *(3)* Only during activation of Low Flying Area Golf One and Two. Brussels ACC will release Low Flying Area Golf Five up to FL90 on request of the "Fédération des Clubs francophones de Vol à voile" with 30MIN prior notice to be addressed to the Brussels ACC Supervisor. Activation of Low Flying Area Golf Five shall only be requested when meteorological services expect thermal activity above FL70. Activation can be checked with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.			

3 MILITARY LOW FLYING AREAS GOLF

MILFAG11 - BERTRIX GLIDING AREA(1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 5NM radius, centred on 495330N 0051326E.	FL95 / 4500FT AMSL(2)	Glider activity.	HX (3)
(1) Airspace class G during activation. (2) Upper limit may be limited to FL75 (active level can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55). (3) Activation can be checked with Semmerzake ATCC or in case of early closure of Semmerzake ATCC with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.			

MILFAG12 - SAINT-HUBERT GLIDING AREA(1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
A circle, 5NM radius, centred on 500209N 0052415E.	FL95 / 4500FT AMSL(2)	Glider activity.	HX (3)
(1) Airspace class G during activation. (2) Upper limit may be limited to FL75 (active level can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55). (3) Activation can be checked with Semmerzake ATCC or in case of early closure of Semmerzake ATCC with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.			

MILFAG13 - JOINT BERTRIX - SAINT-HUBERT GLIDING AREA(1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
495021N 0051928E - an arc of circle, 5NM radius, centred on 495330N 0051326E and traced clockwise to 495638N 0050723E - 500518N 0051811E - an arc of circle, 5NM radius, centred on 500209N 0052415E and traced clockwise to 495900N 0053018E - 495021N 0051928E.	FL95 / 4500FT AMSL(2)	Glider activity.	HX (3)
(1) Airspace class G during activation. (2) Upper limit may be limited to FL75 (active level can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55). (3) Activation can be checked with Semmerzake ATCC or in case of early closure of Semmerzake ATCC with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.			

MILFAG14 - LIBIN GLIDING AREA(1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
501922N 0054330E - 500912N 0054924E - 494435N 0050652E - along the Belgian-French border - 494926N 0045208E - 501922N 0054330E.	FL95 / 4500FT AMSL(2)	Glider activity.	HX (3)
(1) Airspace class G during activation. (2) Upper limit may be limited to FL75 (active level can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55). (3) Activation can be checked with Semmerzake ATCC or in case of early closure of Semmerzake ATCC with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.			

MILFAG15 - SANKT VITH GLIDING AREA(1)

Lateral limits	Vertical limits	Type of restriction / nature of hazard	Time of activity
502152N 0055956E - 502154N 0062159E - along the Belgian-German border - 500748N 0060816E - along the Belgian-Luxembourg border - 501010N 0060535E - 501955N 0055956E - 502152N 0055956E.	FL95 / 4500FT AMSL(2)	Glider activity.	HX (3)

(1) Airspace class G during activation.

(2) Upper limit may be limited to FL75 (active level can be checked with Semmerzake ATCC (TEL +32 (0) 9 389 25 55).

(3) Activation can be checked with Semmerzake ATCC or in case of early closure of Semmerzake ATCC with Brussels FIC on FREQ 126.900MHZ or TEL +32 (0) 2 206 29 49.

4 RADIO CONTROLLED MODEL AIRCRAFT

Location	Lateral limits	Vertical limits	Time of activity
ANLIER	A circle, 400M radius, centred on 494621N 0053743E	400FT AGL / GND	HJ. In VMC only
ANTHISNES	A circle, 400M radius, centred on 502937N 0053124E	400FT AGL / GND	HJ. In VMC only
AUBEL	A circle, 400M radius, centred on 504255N 0055026E	400FT AGL / GND	HJ. In VMC only
AUBEL	A circle, 400M radius, centred on 504153N 0055347E	400FT AGL / GND	HJ. In VMC only
AUBEL	A circle, 400M radius, centred on 504201N 0055344E	400FT AGL / GND	HJ. In VMC only
AUBEL	A circle, 400M radius, centred on 504214N 0055336E	400FT AGL / GND	HJ. In VMC only
BASSE - BODEUX	A circle, 400M radius, centred on 502050N 0054724E	400FT AGL / GND	HJ. In VMC only
BATTICE	A circle, 400M radius, centred on 503847N 0054954E	400FT AGL / GND	HJ. In VMC only
BAULERS	A circle, 400M radius, centred on 503707N 0042230E	400FT AGL / GND	HJ. In VMC only
BAULERS	A circle, 400M radius, centred on 503752N 0041913E	400FT AGL / GND	HJ. In VMC only
BAVEGEM	A circle, 400M radius, centred on 505710N 0035117E	400FT AGL / GND	HJ. In VMC only
BELSELE	A circle, 400M radius, centred on 510802N 0040544E	400FT AGL / GND	HJ. In VMC only
BERTRIX	A circle, 400M radius, centred on 495125N 0051724E	400FT AGL / GND	HJ. In VMC only
BETEKOM	A circle, 400M radius, centred on 505846N 0044617E	400FT AGL / GND	HJ. In VMC only
BORNEM	A circle, 400M radius, centred on 510450N 0041532E	400FT AGL / GND	HJ. In VMC only
BOSSIÈRE	A circle, 400M radius, centred on 503146N 0044032E	400FT AGL / GND	HJ. In VMC only
BRECHT	A circle, 400M radius, centred on 512116N 0043614E	400FT AGL / GND	HJ. In VMC only
BÜLLINGEN	A circle, 400M radius, centred on 502452N 0061635E	400FT AGL / GND	HJ. In VMC only
COUTHUIN	A circle, 400M radius, centred on 503113N 0050906E	400FT AGL / GND	HJ. In VMC only
DIEPENBEEK	A circle, 400M radius, centred on 505327N 0052323E	400FT AGL / GND	HJ. In VMC only
DILSEN	A circle, 400M radius, centred on 510152N 0054021E	400FT AGL / GND	HJ. In VMC only
DOTTIGNIES	A circle, 400M radius, centred on 504430N 0031651E	400FT AGL / GND	HJ. In VMC only
DUDZELE	A circle, 400M radius, centred on 511735N 0031422E	400FT AGL / GND	HJ. In VMC only
EEKLO	A circle, 400M radius, centred on 511156N 0033546E	400FT AGL / GND	HJ. In VMC only
FRANIÈRE	A circle, 400M radius, centred on 502509N 0044254E	400FT AGL / GND	HJ. In VMC only
FREUX	A circle, 400M radius, centred on 495844N 0052527E	400FT AGL / GND	HJ. In VMC only
GEEST-GERMONPONT-PETIT-ROSIERE	A circle, 400M radius, centred on 503850N 0045004E	400FT AGL / GND	HJ. In VMC only
GENTINNES	A circle, 400M radius, centred on 503521N 0043500E	400FT AGL / GND	HJ. In VMC only
GERPINNES	A circle, 400M radius, centred on 501905N 0043113E	400FT AGL / GND	HJ. In VMC only
GINGELOM	A circle, 400M radius, centred on 504426N 0050642E	400FT AGL / GND	HJ. In VMC only
GOUY-LEZ-PIÉTON	A circle, 400M radius, centred on 502900N 0041806E	400FT AGL / GND	HJ. In VMC only
GRAND-LEEZ	A circle, 400M radius, centred on 503517N 0044548E	400 FT AGL / GND	HJ. In VMC only
GRANDRIEU	A circle, 400M radius, centred on 501224N 0041138E	400FT AGL / GND	HJ. In VMC only
GRUITRODE	A circle, 400M radius, centred on 510517N 0053547E	400FT AGL / GND	HJ. In VMC only
HAMME-MILLE	A circle, 400M radius, centred on 504751N 0044402E	400FT AGL / GND	HJ. In VMC only

Location	Lateral limits	Vertical limits	Time of activity
HANEFFE	A circle, 400M radius, centred on 503819N 0051745E	400FT AGL / GND	HJ. In VMC only
HASSELT	A circle, 400M radius, centred on 505515N 0052152E	400FT AGL / GND	HJ. In VMC only
HAULCHIN	A circle, 400M radius, centred on 502339N 0040356E	400FT AGL / GND	HJ. In VMC only
HAUSET	A circle, 400M radius, centred on 504156N 0060314E	400FT AGL / GND	HJ. In VMC only
HAVAY	A circle, 400M radius, centred on 502110N 0035952E	400FT AGL / GND	HJ. In VMC only
HAVERSIN	A circle, 400M radius, centred on 501437N 0051229E	400FT AGL / GND	HJ. In VMC only
HEES	A circle, 400M radius, centred on 505129N 0053603E	400FT AGL / GND	HJ. In VMC only
HELCHTEREN	A circle, 400M radius, centred on 510306N 0052648E	400FT AGL / GND	HJ. In VMC only
HELDERGEM	A circle, 400M radius, centred on 505158N 0035648E	400FT AGL / GND	HJ. In VMC only
HEMPTINNE-LEZ-FLORENNES	A circle, 400M radius, centred on 501321N 0043257E	400FT AGL / GND	HJ. In VMC only
HENIS	A circle, 400M radius, centred on 504752N 0052849E	400FT AGL / GND	HJ. In VMC only
HENRI-CHAPELLE	A circle, 400M radius, centred on 504031N 0055456E	400FT AGL / GND	HJ. In VMC only
HERENTALS	A circle, 400M radius, centred on 511058N 0045214E	400FT AGL / GND	HJ. In VMC only
HONNAY	A circle, 400M radius, centred on 500436N 0050134E	400FT AGL / GND	HJ. In VMC only
HOOGSTADE	A circle, 400M radius, centred on 505852N 0024217E	400FT AGL / GND	HJ. In VMC only
HOTTON	A circle, 400M radius, centred on 501626N 0052808E	400FT AGL / GND	HJ. In VMC only
HOUTHEM	A circle, 400M radius, centred on 504728N 0025844E	400FT AGL / GND	HJ. In VMC only
IDDERGEM	A circle, 400M radius, centred on 505205N 0040214E	400FT AGL / GND	HJ. In VMC only
INCOURT	A circle, 400M radius, centred on 504044N 0044450E	400FT AGL / GND	HJ. In VMC only
JANDRAIN - JANDRENOUILLE	A circle, 400M radius, centred on 503920N 0045721E	400FT AGL / GND	HJ. In VMC only
JURBISE	A circle, 400M radius, centred on 503129N 0035542E	400FT AGL / GND	HJ. In VMC only
KIELDRECHT	A circle, 400M radius, centred on 511709N 0041114E	400FT AGL / GND	HJ. In VMC only
KOKSIJDE	A circle, 400M radius, centred on 510512N 0023847E	400FT AGL / GND	HJ. In VMC only
KONINGSHOOIKT	A circle, 400M radius, centred on 510603N 0043600E	400FT AGL / GND	HJ. In VMC only
LEEFDAAL	A circle, 400M radius, centred on 505004N 0043622E	400FT AGL / GND	HJ. In VMC only
LEMBEEK	A circle, 400M radius, centred on 504347N 0041210E	400FT AGL / GND	HJ. In VMC only
LENDELEDE	A circle, 400M radius, centred on 505250N 0031542E	400FT AGL / GND	HJ. In VMC only
LENS	A circle, 400M radius, centred on 503326N 0035137E	400FT AGL / GND	HJ. In VMC only
LES WALEFFES	A circle, 400M radius, centred on 503725N 0051304E	400FT AGL / GND	HJ. In VMC only
LESSINES	A circle, 400M radius, centred on 504225N 0034831E	400FT AGL / GND	HJ. In VMC only
LICHTERVELDE	A circle, 400M radius, centred on 510354N 0030943E	400FT AGL / GND	HJ. In VMC only
LIER	A circle, 400M radius, centred on 510651N 0043347E	400FT AGL / GND	HJ. In VMC only
LOMMEL	A circle, 400M radius, centred on 511201N 0051604E	400FT AGL / GND	HJ. In VMC only
LOMMERSWEILER	A circle, 400M radius, centred on 501451N 0060959E	400FT AGL / GND	HJ. In VMC only
LONGUEVILLE	A circle, 400M radius, centred on 504208N 0044546E	400FT AGL / GND	HJ. In VMC only
LONGVILLY	A circle, 400M radius, centred on 500240N 0054714E	400FT AGL / GND	HJ. In VMC only
LOUETTE-SAINT-DENIS	A circle, 400M radius, centred on 495708N 0045812E	400FT AGL / GND	HJ. In VMC only
LUBBEEK	A circle, 400M radius, centred on 505122N 0044911E	400FT AGL / GND	HJ. In VMC only
MACON	A circle, 400M radius, centred on 500336N 0041314E	400FT AGL / GND	HJ. In VMC only
MARCHE-EN-FAMENNE	A circle, 400M radius, centred on 501330N 0052343E	400FT AGL / GND	HJ. In VMC only
MARCQ	A circle, 400M radius, centred on 504108N 0040208E	400FT AGL / GND	HJ. In VMC only
MAZÉE	A circle, 400M radius, centred on 500606N 0044239E	400FT AGL / GND	HJ. In VMC only
MEERHOUT	A circle, 400M radius, centred on 510921N 0050455E	400FT AGL / GND	HJ. In VMC only
MERBES-LE-CHATEAU	A circle, 400M radius, centred on 502027N 0041042E	400FT AGL / GND	HJ. In VMC only
MERCHTEM	A circle, 400M radius, centred on 505627N 0041238E	400FT AGL / GND	HJ. In VMC only
MEULEBEKE	A circle, 400M radius, centred on 505724N 0032057E	400FT AGL / GND	HJ. In VMC only
MOERZEKE	A circle, 400M radius, centred on 510338N 0041032E	400FT AGL / GND	HJ. In VMC only
MOLLEM	A circle, 400M radius, centred on 505530N 0041237E	400FT AGL / GND	HJ. In VMC only
MONTZEN	A circle, 400M radius, centred on 504138N 0055559E	400FT AGL / GND	HJ. In VMC only

Location	Lateral limits	Vertical limits	Time of activity
MOORSELE	A circle, 400M radius, centred on 505106N 0030909E	400FT AGL / GND	HJ. In VMC only
MY	A circle, 400M radius, centred on 502458N 0053358E	400FT AGL / GND	HJ. In VMC only
NEERWINDEN	A circle, 400M radius, centred on 504626N 0050318E	400FT AGL / GND	HJ. In VMC only
NIMY	A circle, 400M radius, centred on 502856N 0035742E	400FT AGL / GND	HJ. In VMC only
NIVELLES	A circle, 400M radius, centred on 503437N 0042227E	400FT AGL / GND	HJ. In VMC only
OBAIX	A circle, 400M radius, centred on 503147N 0041949E	400FT AGL / GND	HJ. In VMC only
OLEYE	A circle, 400M radius, centred on 504328N 0051638E	400FT AGL / GND	HJ. In VMC only
OOSTMALLE	A circle, 400M radius, centred on 511923N 0044341E	400FT AGL / GND	HJ. In VMC only
ORBAIS	A circle, 400M radius, centred on 503853N 0044435E	400FT AGL / GND	HJ. In VMC only
PETIT-ENGHIEN	A circle, 400M radius, centred on 503955N 0040433E	400FT AGL / GND	HJ. In VMC only
POTTES	A circle, 400M radius, centred on 504316N 0032601E	400FT AGL / GND	HJ. In VMC only
RANST	A circle, 400M radius, centred on 511220N 0043231E	400FT AGL / GND	HJ. In VMC only
RAVELS	A circle, 400M radius, centred on 512301N 0050156E	400FT AGL / GND	HJ. In VMC only
ROGNÉE	A circle, 400M radius, centred on 501542N 0042349E	400FT AGL / GND	HJ. In VMC only
RUNKELEN	A circle, 400M radius, centred on 505058N 0050840E	400FT AGL / GND	HJ. In VMC only
SAINT-VINCENT	A circle, 400M radius, centred on 493940N 0052816E	400FT AGL / GND	HJ. In VMC only
SCHAFFEN	A circle, 400M radius, centred on 510019N 0050347E	400FT AGL / GND	HJ. In VMC only
SCLAYN	A circle, 400M radius, centred on 502902N 0050226E	400FT AGL / GND	HJ. In VMC only
SINT-GILLIS-DENDERMONDE	A circle, 400M radius, centred on 510048N 0040803E	400FT AGL / GND	HJ. In VMC only
SINT-HUIBRECHTS-LILLE	A circle, 400M radius, centred on 511252N 0052811E	400FT AGL / GND	HJ. In VMC only
SINT-LENAARTS	A circle, 400M radius, centred on 512232N 0044146E	400FT AGL / GND	HJ. In VMC only
SINT-LENAARTS	A circle, 400M radius, centred on 511935N 0043951E	400FT AGL / GND	HJ. In VMC only
SPONTIN	A circle, 400M radius, centred on 501854N 0045958E	400FT AGL / GND	HJ. In VMC only
STAVE	A circle, 400M radius, centred on 501639N 0043856E	400FT AGL / GND	HJ. In VMC only
STEENKERQUE	A circle, 400M radius, centred on 503902N 0040348E	400FT AGL / GND	HJ. In VMC only
TERNAT	A circle, 400M radius, centred on 505127N 0041042E	400FT AGL / GND	HJ. In VMC only
THUMAIDE	A circle, 400M radius, centred on 503228N 0033701E	400FT AGL / GND	HJ. In VMC only
TIELT	A circle, 400M radius, centred on 505438N 0045447E	400FT AGL / GND	HJ. In VMC only
TISSELT	A circle, 400M radius, centred on 510216N 0042001E	400FT AGL / GND	HJ. In VMC only
TREMELO	A circle, 400M radius, centred on 505912N 0044028E	400 FT AGL / GND	HJ. In VMC only
VERLAINE	A circle, 400M radius, centred on 503635N 0051725E	400FT AGL / GND	HJ. In VMC only
VERREBROEK	A circle, 400M radius, centred on 511556N 0041032E	400FT AGL / GND	HJ. In VMC only
VIERSET-BARSE	A circle, 400M radius, centred on 502717N 0051844E	400FT AGL / GND	HJ. In VMC only
VILLERS-LA-LOUE	A circle, 400M radius, centred on 493444N 0052847E	400FT AGL / GND	HJ. In VMC only
VLAMERTINGE	A circle, 400M radius, centred on 505008N 0024922E	400FT AGL / GND	HJ. In VMC only
VORSELAAR	A circle, 400M radius, centred on 511429N 0044524E	400FT AGL / GND	HJ. In VMC only
VOSSELAAR	A circle, 400M radius, centred on 511933N 0045305E	400FT AGL / GND	HJ. In VMC only
WAARSCHOOT	A circle, 400M radius, centred on 510906N 0033802E	400FT AGL / GND	HJ. In VMC only
WALHORN	A circle, 400M radius, centred on 503947N 0060207E	400FT AGL / GND	HJ. In VMC only
WERCHTER	A circle, 400M radius, centred on 505853N 0044546E	400FT AGL / GND	HJ. In VMC only
WIEKEVORST	A circle, 400M radius, centred on 510527N 0044812E	400FT AGL / GND	HJ. In VMC only
WOLKRANGE	A circle, 400M radius, centred on 493839N 0054753E	400FT AGL / GND	HJ. In VMC only
ZEDELGEM	A circle, 400M radius, centred on 510751N 0030733E	400FT AGL / GND	HJ. In VMC only
ZOLDER	A circle, 400M radius, centred on 510215N 0051901E	400FT AGL / GND	HJ. In VMC only
ZOMERGEM	A circle, 400M radius, centred on 510612N 0033456E	400FT AGL / GND	HJ. In VMC only
ZWARTBERG	A circle, 400M radius, centred on 510102N 0053130E	400FT AGL / GND	HJ. In VMC only

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ENR 5.6 Bird Migration and Areas with Sensitive Fauna

1 BIRD MIGRATION

The spring migration takes place between mid-FEB and the end of MAY, the most active part being in APR and MAY. This migration is more dispersed and less spectacular than the autumn one. The principal direction over Belgium is NE.

The autumn migration lasts for more than three months. The first flight movements can already be seen from the end of JUL, while the last movements of any significance are completed by the end of NOV. They have a typical stream of movement with periods of relative calm interspersed with periods of very intense migration. Between mid-AUG and mid-NOV migratory birds are particularly active. The movement takes place in a mostly SW direction.

When on actual migration, most birds make long flights at often high levels in contrast to their flying at relative low altitudes during their stay in the concentration areas.

Although a great part of the bird population that is dangerous to aircraft, start migrating from concentration areas, according to radar observations migration often appears to take place over a broad front, covering nearly the entire Belgian territory.

As a result of radar observations it is known that mass migration takes place when

- tail winds are not exceeding 5M/SEC;
- the barometric pressure is above 1020HPA;
- the temperature is at least 2 degrees below the average in autumn or above the average in spring;
- clouds are covering less than 4 octas.

This can be completely in contrast to what will be observed visually.

Heavy night migration may occur early in autumn (from mid-AUG onwards) and later in spring (till the end of MAY). During the winter months sudden snow and frost may stimulate very large numbers of water- and open land birds (geese, ducks, waders, starlings, thrushes and larks) to move to the south.

The bird strike risk resulting from these winter flights (during a period of sudden thaw, in opposite direction) is particulary high in the northern part of the country.

2 CONCENTRATIONS

As elsewhere in the world, headlands, inland waters and shallow estuaries attract flocks of birds for breeding, roosting and feeding at various times of the year. Within 10NM or so of such locations concentrations of birds flying mostly below 1000FT may be encountered.

In order to lessen the risk of bird strikes, pilots of low flying aircraft should, whenever possible, avoid flying at less than 1000FT above surface level over areas where birds are likely to concentrate. Where it is necessary to fly lower than this, pilots should bear in mind that the risk of bird strike increases with speed (it is a fact that birds rarely hit an object moving slower than 80KT).

Apart from endangering aircraft by flying close to bird colonies, the breeding of the birds may be upset and the practice should be avoided on conservation grounds. It should also be appreciated that, especially in the case of sea bird colonies, concentrations of birds may be soaring on lee waves downwind of the areas where they breed.

3 AREAS WITH SENSITIVE FAUNA

Identification	Area	Bird species
Ettenhovense polder	A circle, 200M radius, centred on 511858N 0042122E	Blue throats
Kuifeend	A circle, 1000M radius, centred on 511756N 0042114E	Blue throats, ducks, swans, herons, raptors
Molsbroek	A circle, 2000M radius, centred on 510550N 0040130E	Waterfowls
Zwin	A circle, 3000M radius, centred on 512000N 031700E	Highest concentration of birds along the coast (ducks, swans, gulls, mergansers, shorebirds)

4 MILITARY BIRD MIGRATION OBSERVATION SYSTEM

Military training and flight operations usually take place at low altitudes, where a lot of birds are present, especially near coasts and during migration periods. To prevent bird strikes, the Aviation Safety Directorate (ASD) of Belgian Defence has put in place a warning system in cooperation with national and/or international agencies.

4.1 BIRD MIGRATION OBSERVATION SYSTEM

The bird migration observation system is based upon the following networks and technical means:

a. General studies:
   - According to scientific studies, probable altitudes and migration routes are determined for each bird species, in relation with the weather and geographical conditions;
   - Daily collection of data by the Bird Control Section (BCS) from ornithological sites on the internet provides the aviation world with useful information on bird activities;

b. Radar observation:
   - A computer programme called 'Radar Observation of Bird Intensity' (ROBIN) uses specific software to monitor moving targets and detect movements of bird flocks;
   - The precision approach radars at the military aerodromes can detect important bird movements in the approach zone of the RWY axes;

c. Visual observation:
   In the aerodrome vicinity zones in-flight reports by aircrews, reports by ATC, weather observers and the local Bird Control Units (BCU) remain concrete sources of information;

d. Warning and reporting system:
   It remains a national decision to establish or not bird strike warning/risk organization and procedures for its area of responsibility. Belgian Defence has put in place a warning and reporting system in cooperation with national and/or international agencies. Its zone of responsibility has been divided in GEOREF squares and for each one a BIRDTAM can be issued;

e. For the squares above the Brussels FIR, the BCS within Aviation Safety Directorate is responsible to issue the BIRDTAM based upon:
   - the ROBIN system;
   - the general ornithological situation;
   - foreign BIRDTAM concerning the Brussels FIR;
   - any other useful information;

f. For each military aerodrome and shooting range:
   A Local Bird Intensity (LBI) warning can be proposed by the BCU and officially issued by the Supervisor of Flying Activities (SOF) based upon visual observations and possible local radar observations and being in force for the local very close traffic pattern of the related aerodrome;
   If no LBI is issued, the general BIRDTAM applicable to the GEOREF square where the aerodrome is located, remains in force.

4.2 FLYING RESTRICTIONS

Based on the risk level, local authorities apply flying restrictions that are published in the COMOPSAIR directive ACOT-GID-DOCSOP-ASBD-200.

4.3 BIRD INTENSITY SCALE

The military NOF will provide bird strike risk warning (BIRDTAM) based on the following observation intensity scale:

Bird Intensity Scale

0	Practically no risk
1	Extremely small risk
2	Very small risk
3	Small risk
4	Fairly small risk
5	Fairly great risk
6	Great risk
7	Very great risk
8	Extremely great risk

The intensity digit is acquired by means of observations of ROBIN located in Glons, interpreted by ASD / BIRDTAM office (located in Beauvechain) and relayed to the military NOF (Semmerzake ATCC). It relates only to the bird migration in the Brussels FIR.

4.4 GEOGRAPHIC REFERENCE

The Brussels FIR is situated within the following geographic references (GEOREF):

	Square defined by	
GEOREF	**Parallels**	**Meridians**
NKCG	510000N to 515959N	0020000E to 0025959E
NKDG	510000N to 515959N	0030000E to 0035959E
NKEG	510000N to 515959N	0040000E to 0045959E
NKFG	510000N to 515959N	0050000E to 0055959E
NKCF	500000N to 505959N	0020000E to 0025959E
NKDF	500000N to 505959N	0030000E to 0035959E
NKEF	500000N to 505959N	0040000E to 0045959E
NKFF	500000N to 505959N	0050000E to 0055959E
NKGF	500000N to 505959N	0060000E to 0065959E
NKEE	490000N to 495959N	0040000E to 0045959E
NKFE	490000N to 495959N	0050000E to 0055959E
NKGE	490000N to 495959N	0060000E to 0065959E

4.5 BIRDTAM TEXT AND FORMAT

BIRDTAM will only be issued when migrations reach intensity 5 or higher.

The text will include a serial number preceded by the word 'BIRDTAM'. This serial number begins, each calendar year, with 0001.

The format will be the ICAO NOTAM format with special code 'QBIRD' in the military NOTAM serie M, originator EBSZYNYX and

BIRDTAM

ITEM 'A'	FIR
ITEM 'B'	Valid from (DTG - UTC)
ITEM 'C'	Valid till (DTG - UTC)
ITEM 'E'	BIRDTAM nr BIRD INTENSITY BELGIUM Intensity of Bird migration (see § 4.3) Geographic reference (see § 4.4) per square Additional information
ITEM 'F'	Lower height limit of the hazard (in feet AGL)
ITEM 'G'	Upper height limit of the hazard (in feet AGL)

The BIRDTAMs are always issued with the priority 'DD', through the Aeronautical Fixed Telecommunication Network (AFTN) to the group address EBZZALEB.

This group address contains the following AFTN addresses:

Group Address for BIRDTAM		
	EBZZAL	IDENTIFICATION
1	EBBEZPZX	AIS BEAUVECHAIN
2	EBBLZPZX	AIS KLEINE-BROGEL
3	EBBRYNYN	BELGOCONTROL NOF
4	EBCIZPZX	AIS CHARLEROI/BRUSSELS SOUTH
5	EBCIZTZX	TWR CHARLEROI/BRUSSELS SOUTH
6	ETARYXYX KRCHYXYX	BASE OPS - ATS CHIEVRES
7	EBFNZPZX	AIS KOKSIJDE
8	EBFSZPZX	AIS FLORENNES
9	EBGLZGZX	AIS GLONS
10	EBMBZPZX	W OPS MELSBROEK
11	EBMIZGZF	CO-ORDINATION MDC
12	EDDFYFYJ	GROUP ADDRESS
13	EGVCYOYX	AIDU NORTHOLT
14	EGZZAKXX	GROUP ADDRESS
15	EHZZNTXX	DUTCH GROUP ADDRESS
16	EKMCYOYX	KARUP
17	ELLXYNYX	LUXEMBOURG
18	ETAAYOYX	USAFE NOTAM CENTRE
19	ETAAZPZX	USAFE
20	ETCKYFYX	GROUP ADDRESS
21	ETCZYOYX	GERMAN MIL NOF
22	ETGTYTYX	MIL MET COMM CENTRE
23	ETNGZPZX	GEILENKIRCHEN MIL
24	EUECYIYN	EUROCONTROL EAD
25	KCNFYNYX	US NOF WASHINGTON DC
26	LFLFSITX	ORLEANS COMM
27	LFZZNQEB	GROUP ADDRESS
28	LIZZNCEB	GROUP ADDRESS
29	LPAMYNYX	LISBON MIL AIS
30	LSZZNAEB	SWISS GROUP
31	LTAAYNYX	ANKARA NOF
32	LZIBYWYA	GROUP ADDRESS
33	RKZZNKXX	KOREA GROUP
34	UDDDYNYX	ARMENIA NOF
35	UGTBYNYX	GEORGIA NOF
36	UTTAYNYX	UKRAINE NOF

ENR 6 EN-ROUTE CHARTS

ENR 6-ENRC.01	En-Route Chart - ICAO. B-RNAV Routes in the Lower Airspace
ENR 6-ENRC.02	En-Route Chart - ICAO. B-RNAV Routes in the Upper Airspace (H24)
ENR 6-ENRC.03	En-Route Chart - ICAO. B-RNAV Routes in the Upper Airspace (H24)
ENR 6-ENRC.04	En-Route Chart - ICAO. B-RNAV Routes in the Upper Airspace (CDR)
ENR 6-ENRC.05a	En-Route Chart. Military BENE routes
ENR 6-ENRC.05b	En-Route Chart. Military FALCON routes
ENR 6-ENRC.05c	En-Route Chart. Military DARK FALCON routes
ENR 6-ENRC.05d	En-Route Chart. Military NVG routes BEL MIL HELI
ENR 6-ENRC.05e	En-Route Chart. Military Navigation routes 15W Tpt
ENR 6-ENRC.05f	En-Route Chart. Military TACAN routes
ENR 6-INDEX.01a	Index Chart. ATS Airspace: Control Zones
ENR 6-INDEX.01b	Index Chart. ATS Airspace: Civil TMA
ENR 6-INDEX.01c	Index Chart. ATS Airspace: Military TMA
ENR 6-INDEX.01d	Index Chart. ATS Airspace: Other Control Areas
ENR 6-INDEX.02	Index Chart. Prohibited, Restricted and Danger Areas
ENR 6-INDEX.03a	Index Chart. Military Exercise and Training Areas: TRA and TSA
ENR 6-INDEX.03b	Index Chart. Military Exercise and Training Areas: TRA/ TSA North, South and West
ENR 6-INDEX.03c	Index Chart. Military Exercise and Training Areas: Helicopter Training Areas and Low Flying Areas
ENR 6-INDEX.04a	Index Chart. Aerial Sporting and Recreational Activities
ENR 6-INDEX.04b	Index Chart. Aerial Sporting and Recreational Activities: Low Flying Area Golf One
ENR 6-INDEX.04c	Index Chart. Aerial Sporting and Recreational Activities: Low Flying Area Golf Two
ENR 6-INDEX.04d	Index Chart. Aerial Sporting and Recreational Activities: Low Flying Areas Golf Three and Four
ENR 6-INDEX.04e	Index Chart. Aerial Sporting and Recreational Activities: Low Flying Area Golf Five
ENR 6-INDEX.04f	Index Chart. Aerial Sporting and Recreational Activities: Military Low Flying Area Golf
ENR 6-INDEX.05	Index Chart. Transponder Mandatory Zones
ENR 6-INDEX.06	Index Chart. En-route Radio Navigation Aids
ENR 6-INDEX.07	Index Chart. Sectorisation in Brussels ACC and Maastricht UAC
ENR 6-INDEX.08	Index Chart. Military VFR flights below 4500 FT AMSL
ENR 6-INDEX.09	Index Chart. Aerodromes and Heliports
ENR 6-INDEX.10	Index Chart. Areas Prohibited to Supersonic Flight

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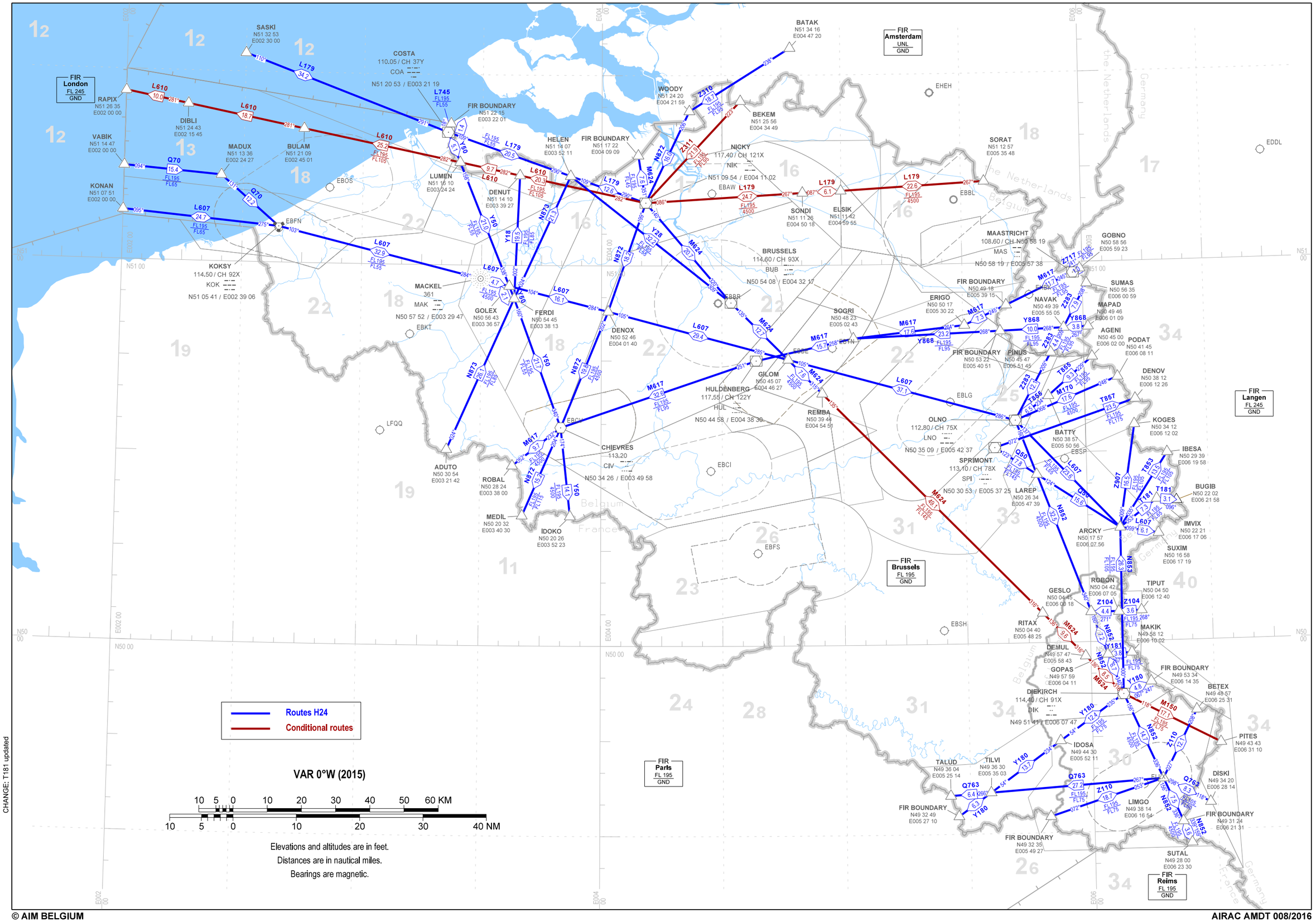
En-route Chart - ICAO

B-RNAV ROUTES IN THE LOWER AIRSPACE



CHANGE: T181 updated

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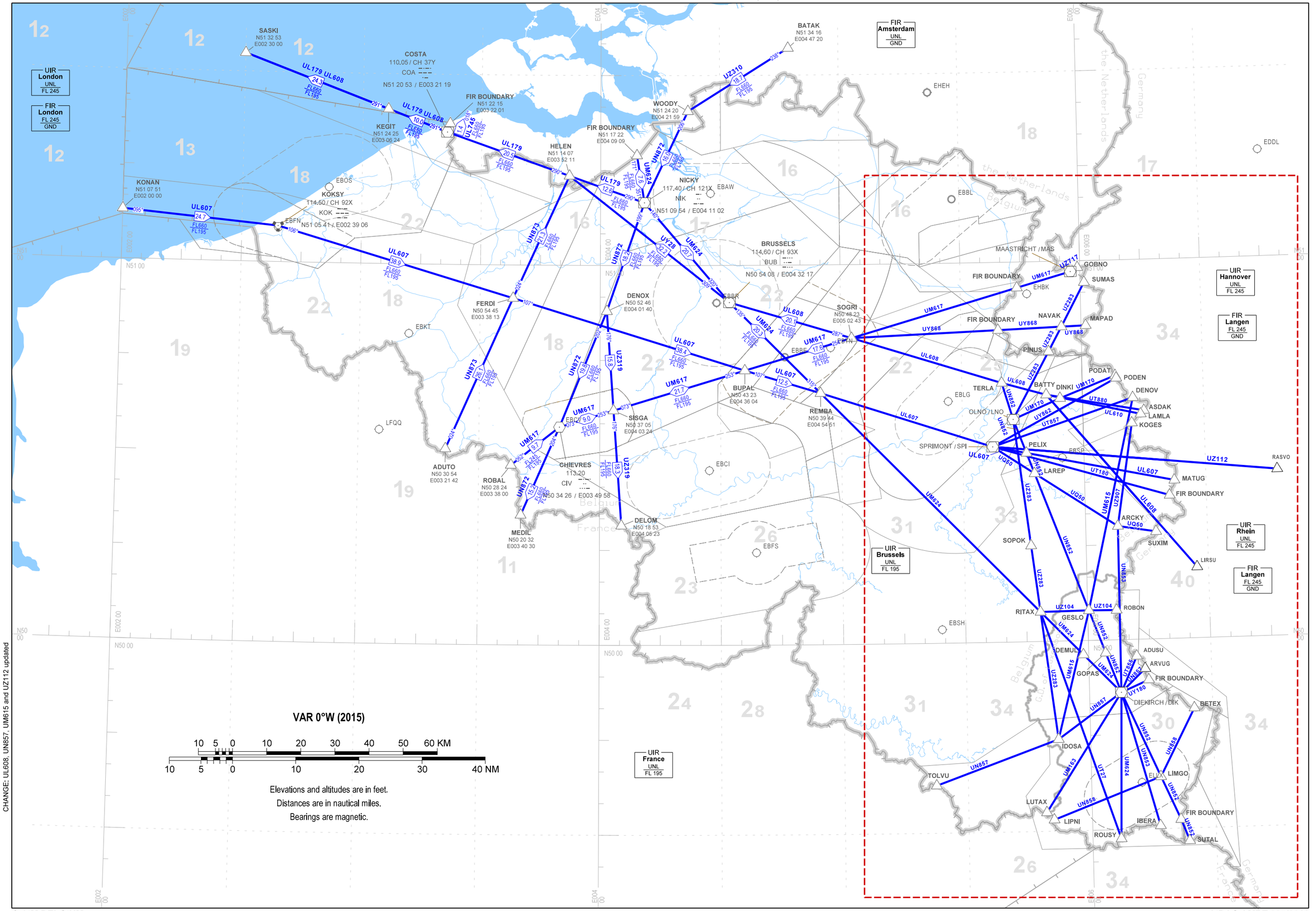
En-route Chart - ICAO

B-RNAV ROUTES IN THE UPPER AIRSPACE (H24)



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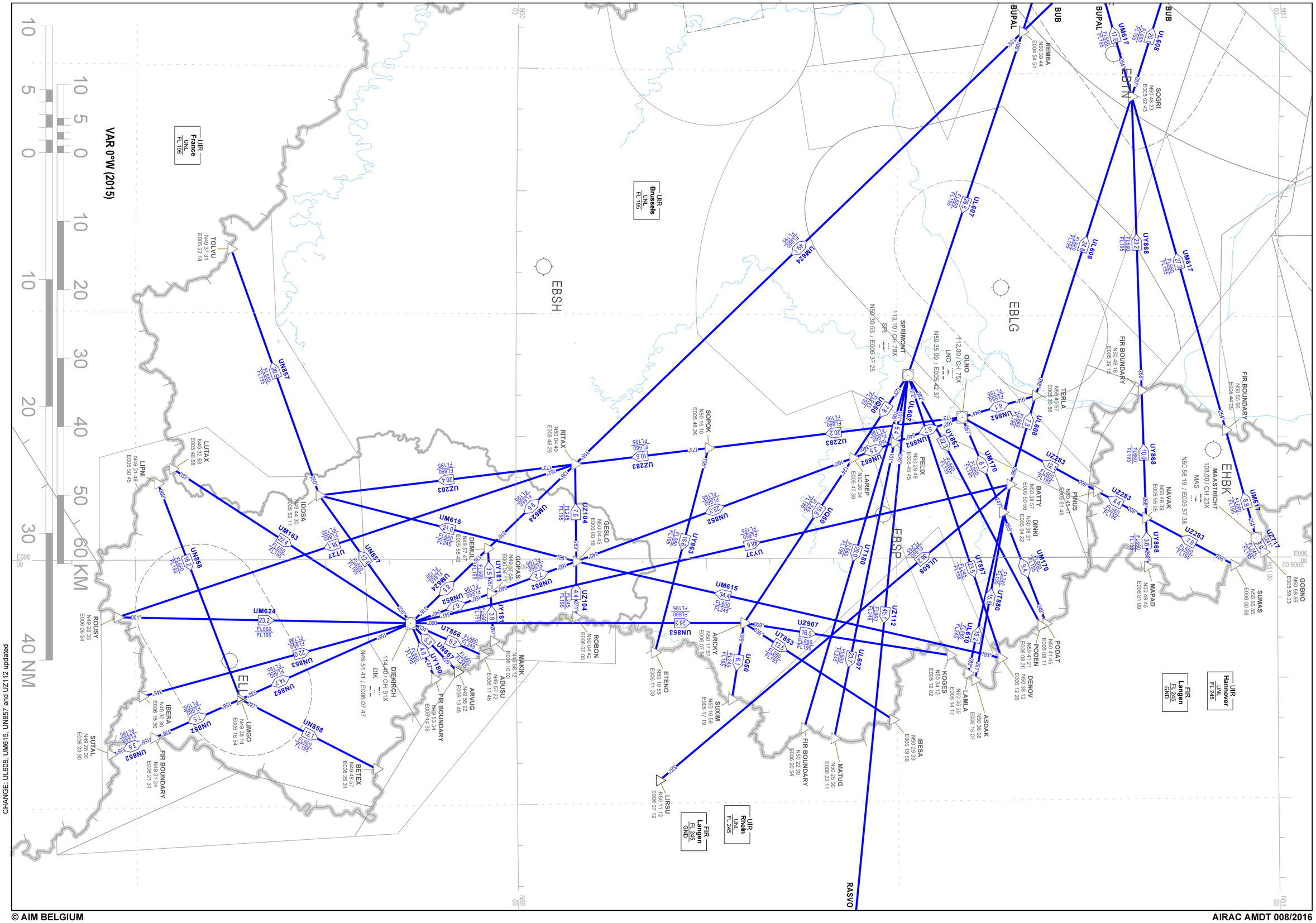
En-route Chart - ICAO

B-RNAV ROUTES IN THE UPPER AIRSPACE (H24)



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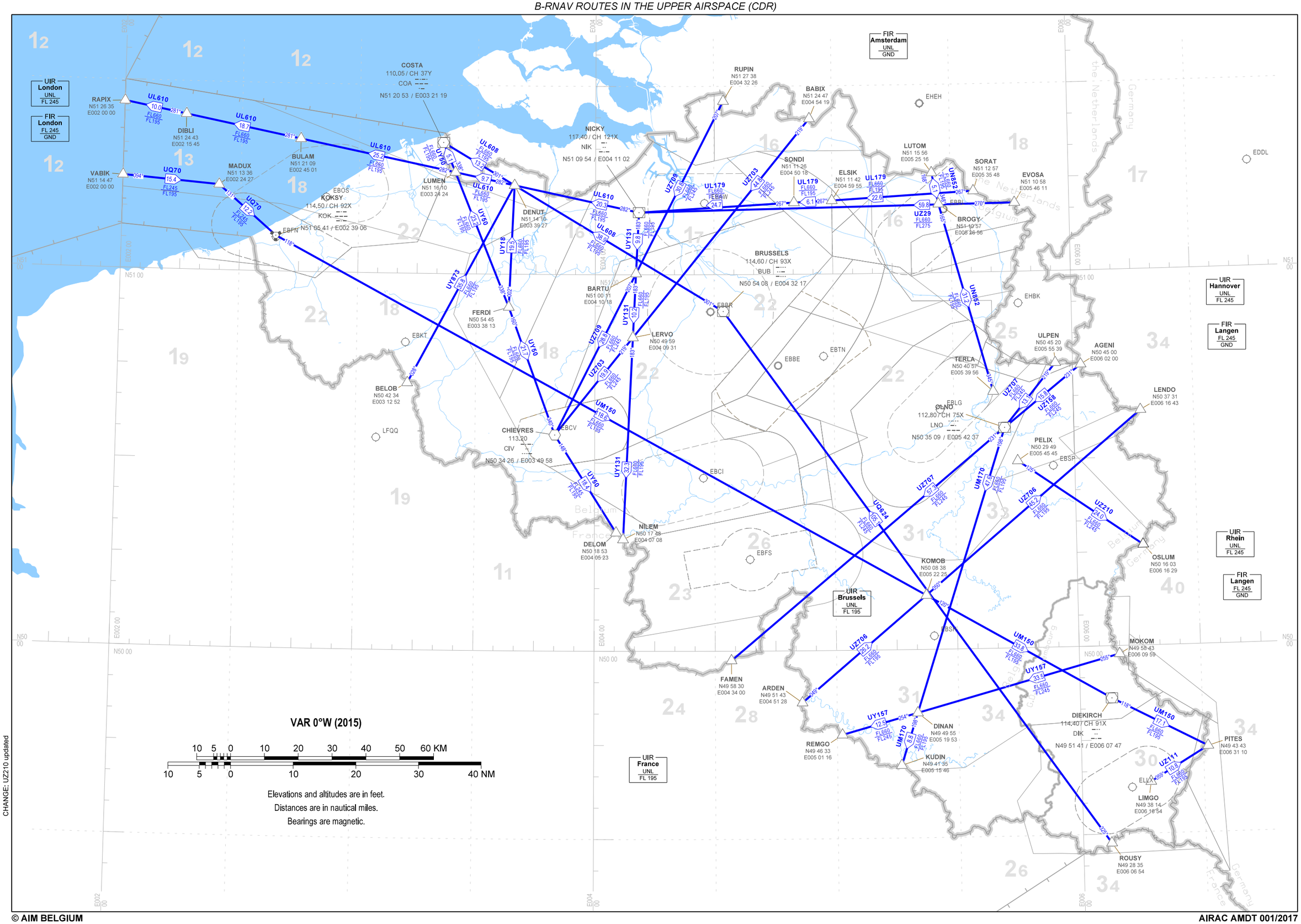
En-route Chart - ICAO

B-RNAV ROUTES IN THE UPPER AIRSPACE (CDR)



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En-route Chart

Military Routes: BENE routes

BENE ROUTE ONE
BENE ROUTE TWO
BENE ROUTE TWO Short
BENE ROUTE THREE
BENE ROUTE FOUR
BENE ROUTE FOUR Short
BENE ROUTE FIVE
BENE ROUTE SIX
BENE ROUTE SIX Short
BENE ROUTE SIX EBFS

CHANGE: New Common AIP

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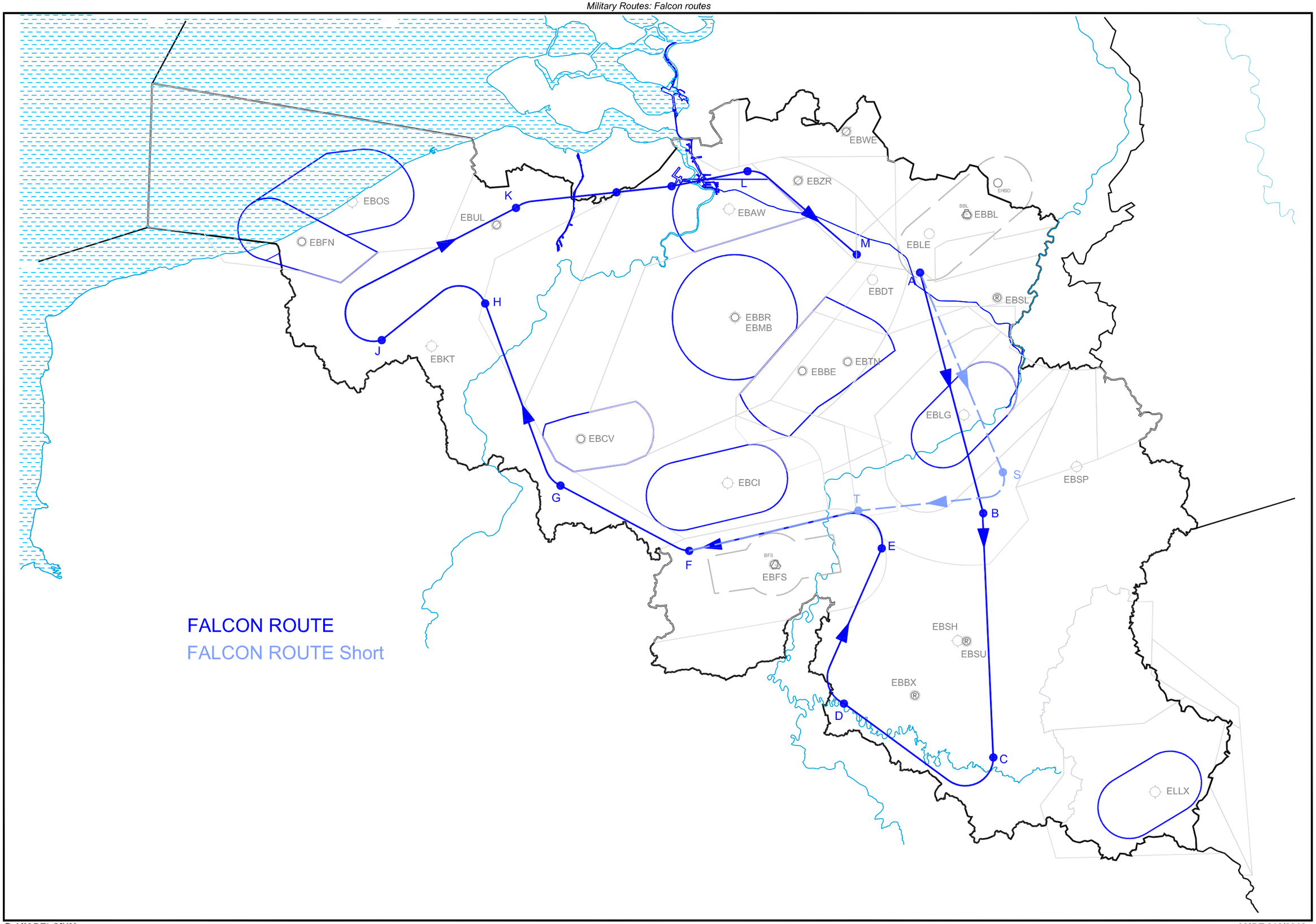
En-route Chart

Military Routes: Falcon routes



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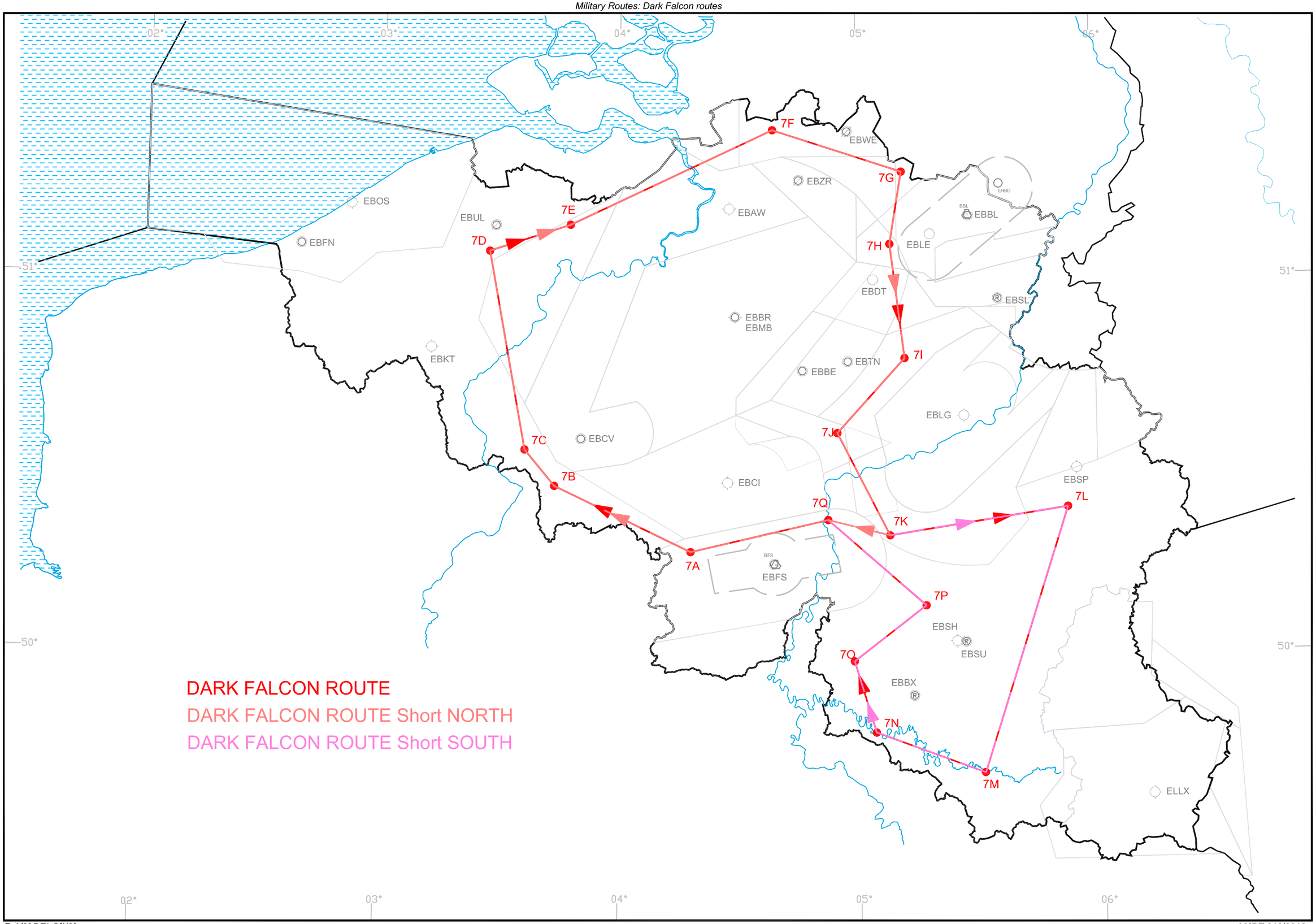
En-route Chart

Military Routes: Dark Falcon routes



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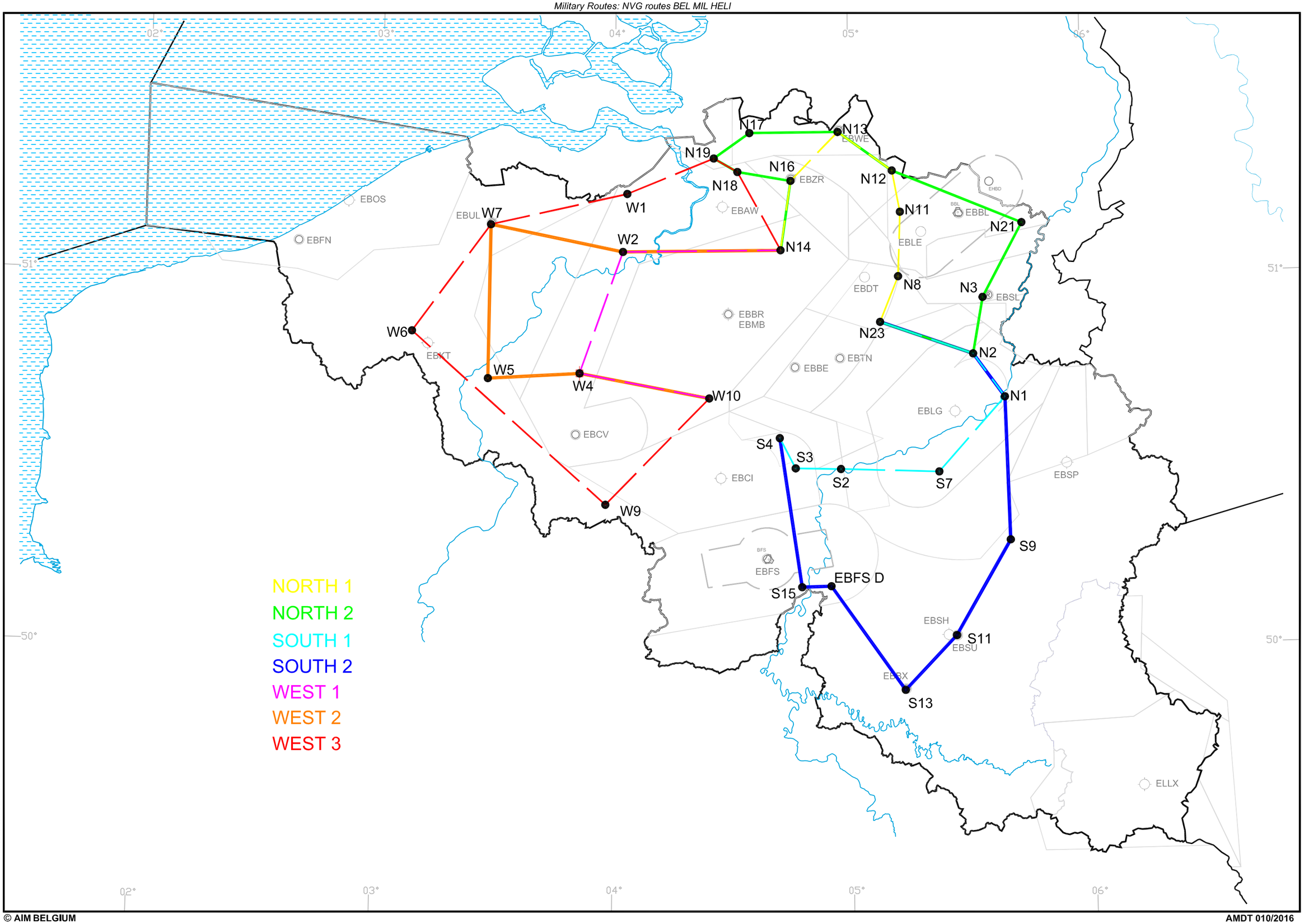
En-route Chart

Military Routes: NVG routes BEL MIL HELI



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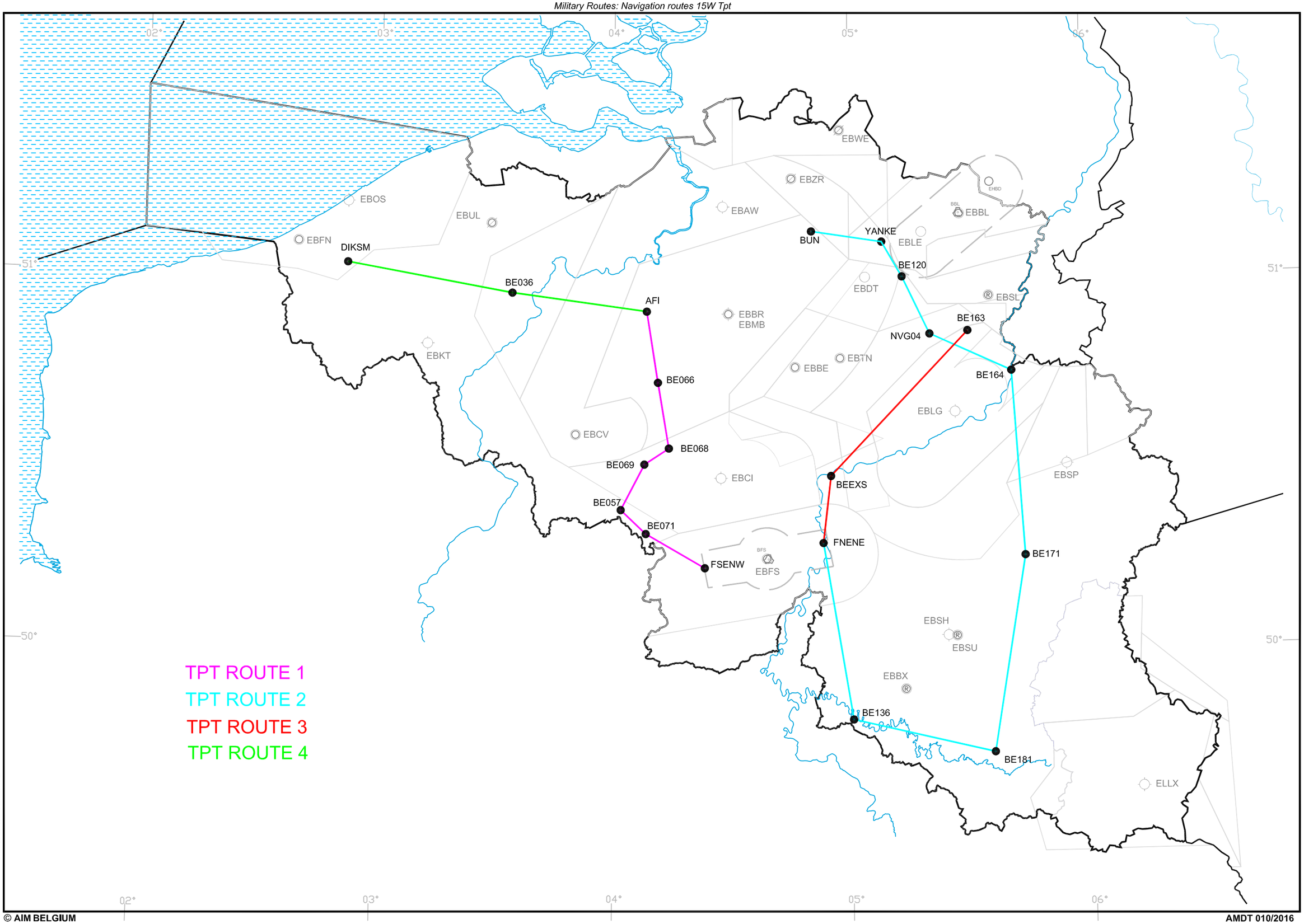
En-route Chart

Military Routes: Navigation routes 15W Tpt



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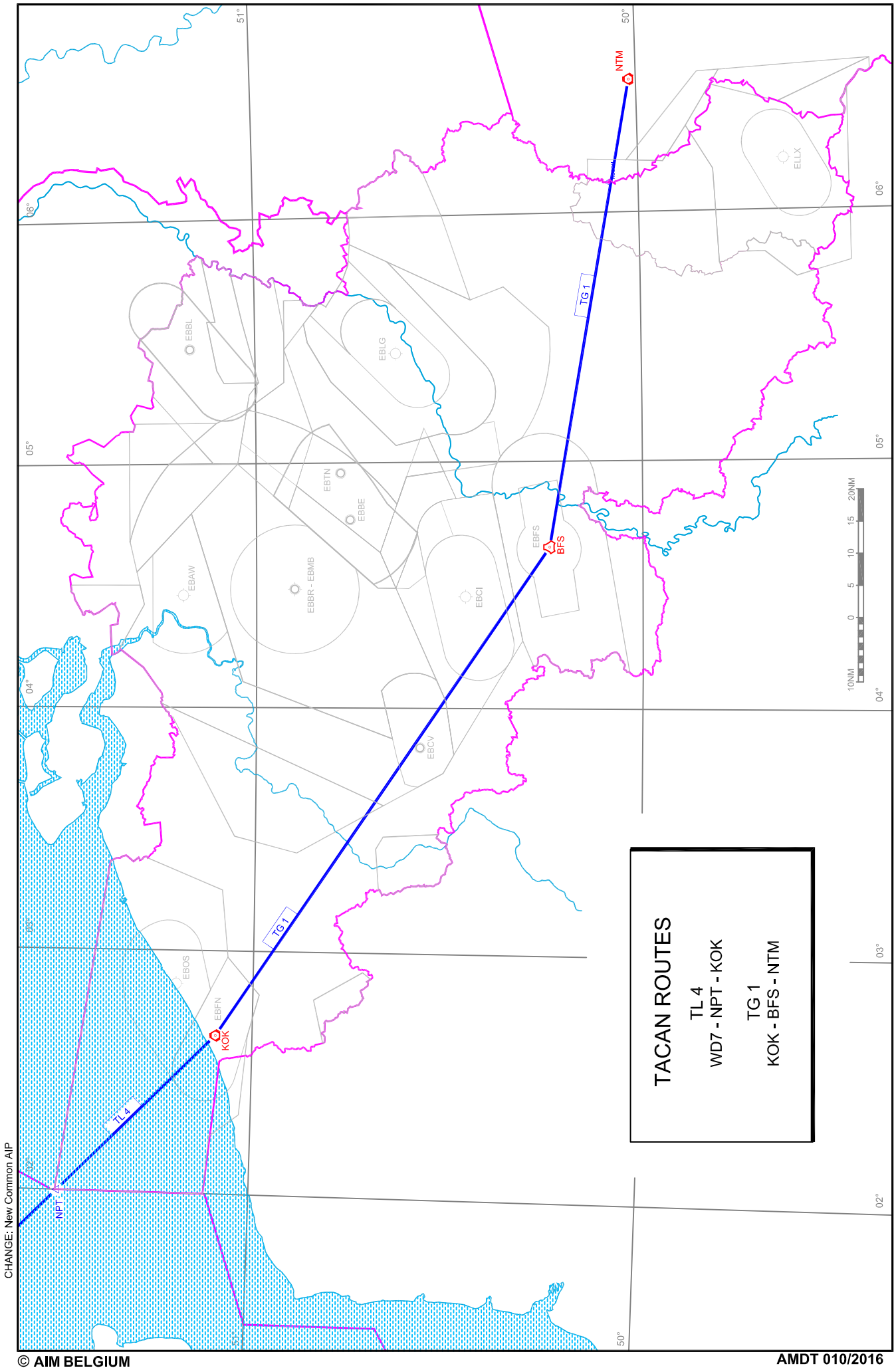
En-route Chart

Military Routes: TACAN Routes



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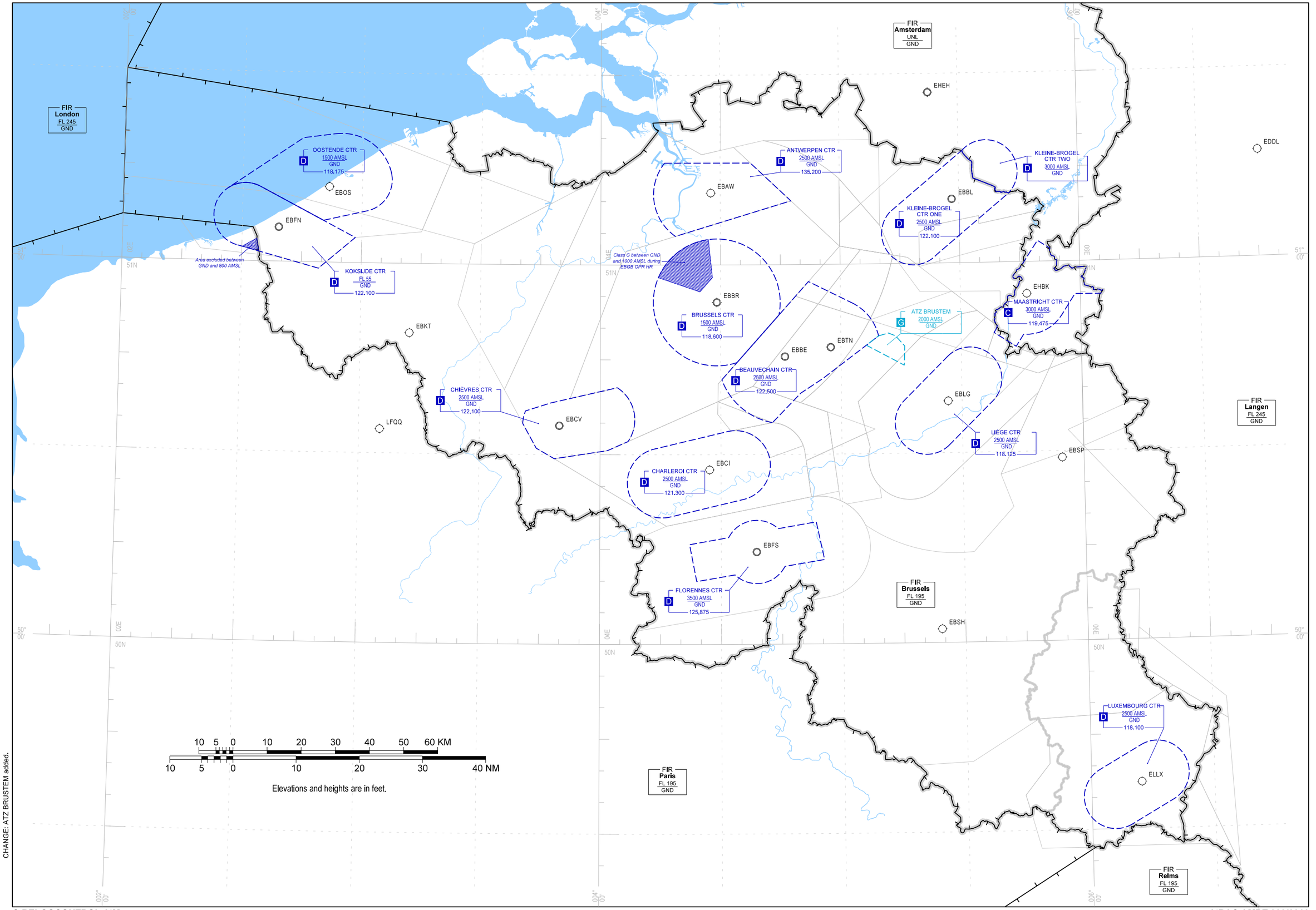
Index Chart

ATS Airspace: Control Zones



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Index Chart

ATS Airspace: Civil TMA

FIR London FL 245 GND

OOSTENDE TMA ONE C FL 55 1500 AMSL 120,600
Koksijde CTR excl. during EBFN OPR HR

OOSTENDE TMA TWO C FL 95 FL 55 120,600
AWY L607, L179, Y50 and Q70 excl.

EBOS

EBFN

LILLE TMA NINE PART ONE E 4500 AMSL 2000 AMSL

LILLE TMA TWO PART ONE D 4500 AMSL 1500 AMSL

LFQQ

FIR Amsterdam UNL GND

BRUSSELS TMA THREE B C FL 195 3500 AMSL

EHEH

BRUSSELS TMA SEVEN C FL 95 FL 55

EDDL

BRUSSELS TMA NINE A C 4500 AMSL 3500 AMSL

EBBL

BRUSSELS TMA FOUR C FL 145 2500 AMSL

EBAW

BRUSSELS TMA TWO C FL 195 2500 AMSL

BRUSSELS TMA NINE B C 4500 AMSL 3500 AMSL

PART OF MAASTRICHT TMA 2 B FL 195 FL 95

BRUSSELS TMA THREE A C FL 195 3500 AMSL

BRUSSELS TMA ONE C FL 195 1500 AMSL

EBBR

BRUSSELS TMA EIGHT C 4500 AMSL 3500 AMSL

EHBK

LIEGE TMA TWO C 2500 AMSL 2000 AMSL 119,275

BRUSSELS TMA FIVE C FL 195 3500 AMSL

EBBE

EBTN

EBKT

CHARLEROI TMA THREE A C FL 55 * 3500 AMSL 133,125
(*) 4500 AMSL when higher.

EBLG

LIEGE TMA FIVE C FL 55 3500 AMSL 119,275
TSA28A excl.

EBCV

CHARLEROI TMA ONE C FL 55 * 2500 AMSL 133,125
AWY M617 and Y50 excl.
(*) 4500 AMSL when higher

EBCI

LIEGE TMA ONE C FL 55 2500 AMSL 119,275

EBSP

LIEGE TMA FOUR C FL 55 3000 AMSL 119,275

LIEGE TMA THREE C FL 55 2500 AMSL 119,275

CHARLEROI TMA TWO B C 2500 AMSL 2000 AMSL 133,125

CHARLEROI TMA TWO A C 2500 AMSL 2000 AMSL 133,125

EBFS

CHARLEROI TMA THREE B C FL 55 * 3500 AMSL 133,125
(*) 4500 AMSL when higher

EBSH

FIR Langen FL 245 GND

LUXEMBOURG TMA TWO A E FL 145 2500 AGL 118,900
Class C above FL 100

LUXEMBOURG TMA TWO B E FL 145 1000 AGL 118,900
Class C above FL 100

LUXEMBOURG TMA TWO C E FL 95 5500 AMSL 118,900

LUXEMBOURG TMA ONE B D FL 145 3500 AMSL 118,900
Class C above FL 95

LUXEMBOURG TMA TWO D E FL 165 1000 AGL 118,900
Class C above FL 100

LUXEMBOURG TMA TWO E E FL 95 1000 AGL 118,900

LUXEMBOURG TMA FIVE D FL 165 2500 AMSL 118,900
Class C above FL 95

LUXEMBOURG TMA ONE A D FL 165 2500 AMSL 118,900
Class C above FL 95

ELLX

LUXEMBOURG TMA TWO F E FL 165 1000 AGL 118,900
Class C above FL 100

LUXEMBOURG TMA FOUR D FL 165 2500 AMSL 118,900

LUXEMBOURG TMA THREE D FL 165 2500 AMSL 118,900

FIR Brussels FL 195 GND

FIR Paris FL 195 GND

FIR Reims FL 195 GND

10 5 0 10 20 30 40 50 60 KM
10 5 0 10 20 30 40 NM

Elevations and heights are in feet.

CHANGE: LUXEMBOURG TMA 3 and 4 updated

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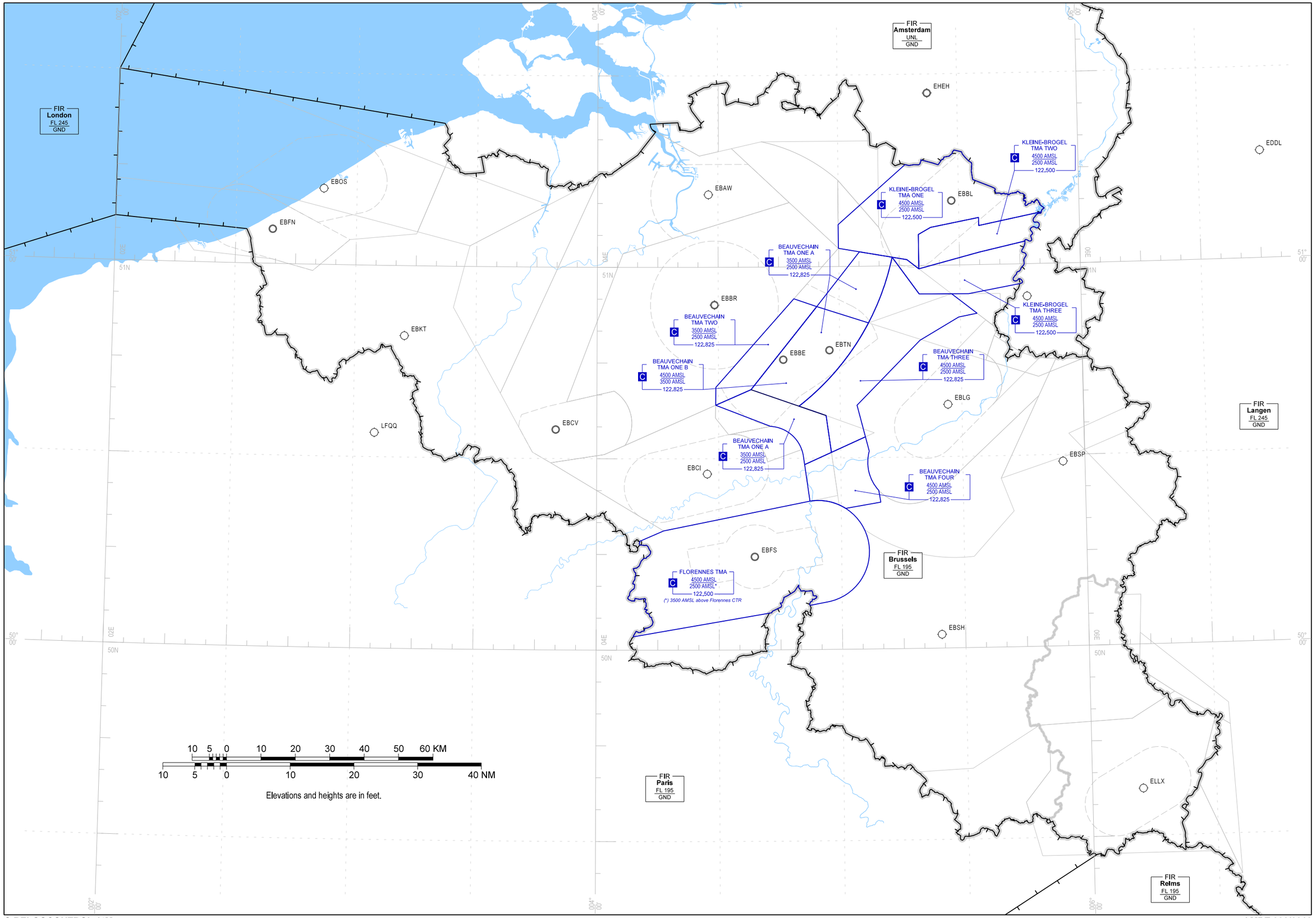
Index Chart

ATS Airspace: Military TMA



CHANGE: New AIP

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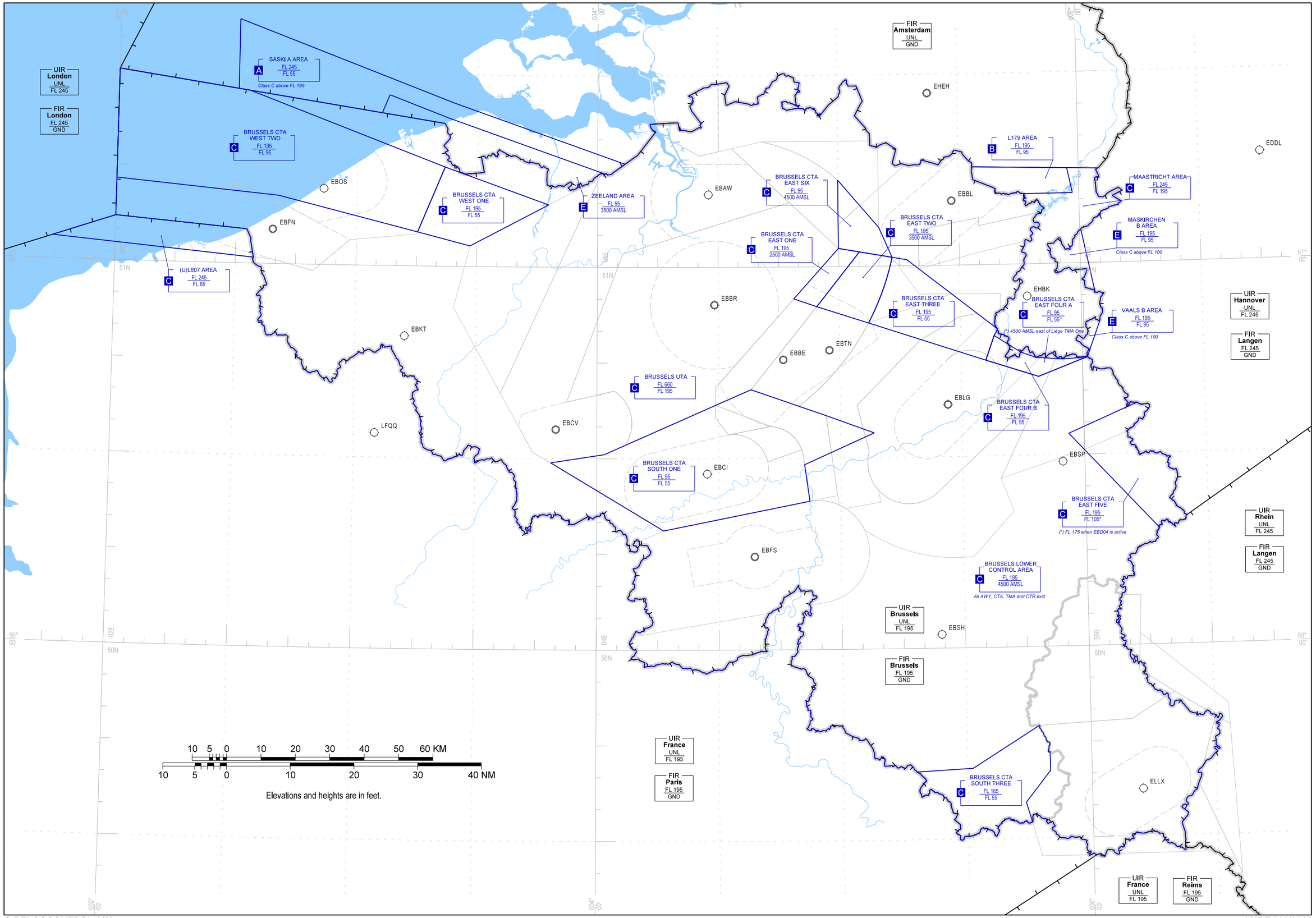
Index Chart

ATS Airspace: Other Control Areas



CHANGE: New AIP

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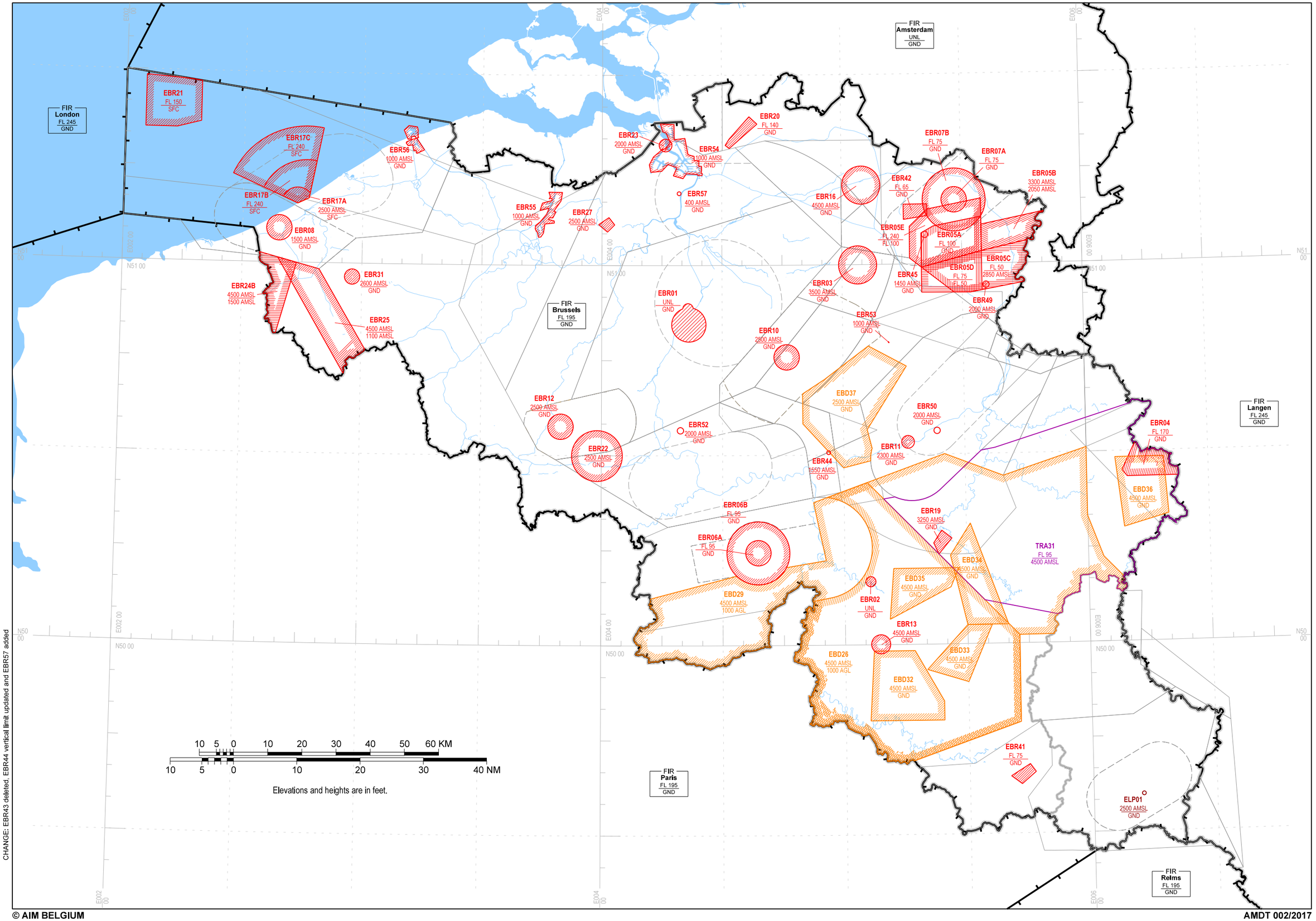
Index Chart

Prohibited, Restricted and Danger Areas



CHANGE: EBR43 deleted, EBR44 vertical limit updated and EBR57 added

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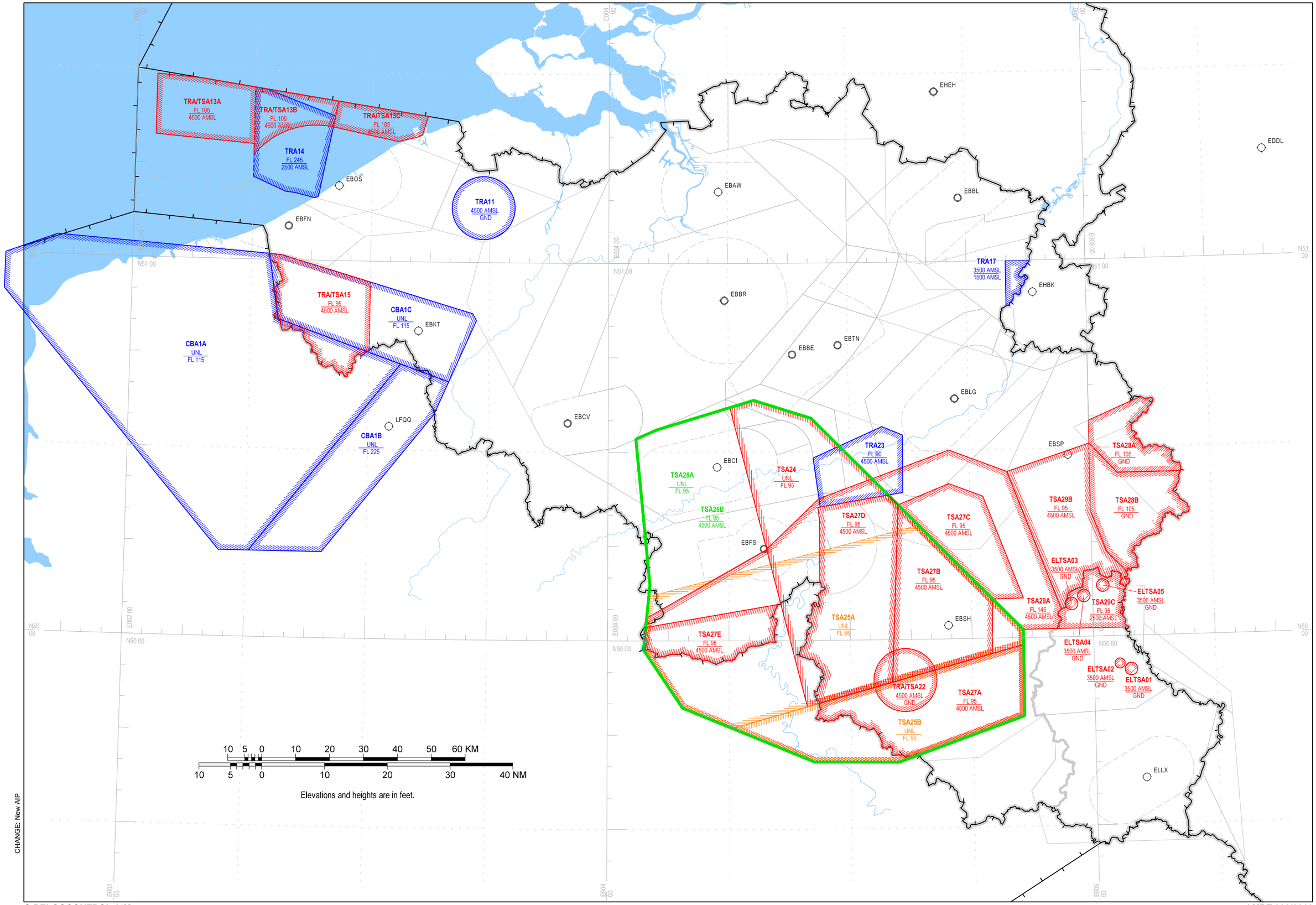
Index Chart

Military Exercise and Training Areas: TRA and TSA



CHANGE: New AIP

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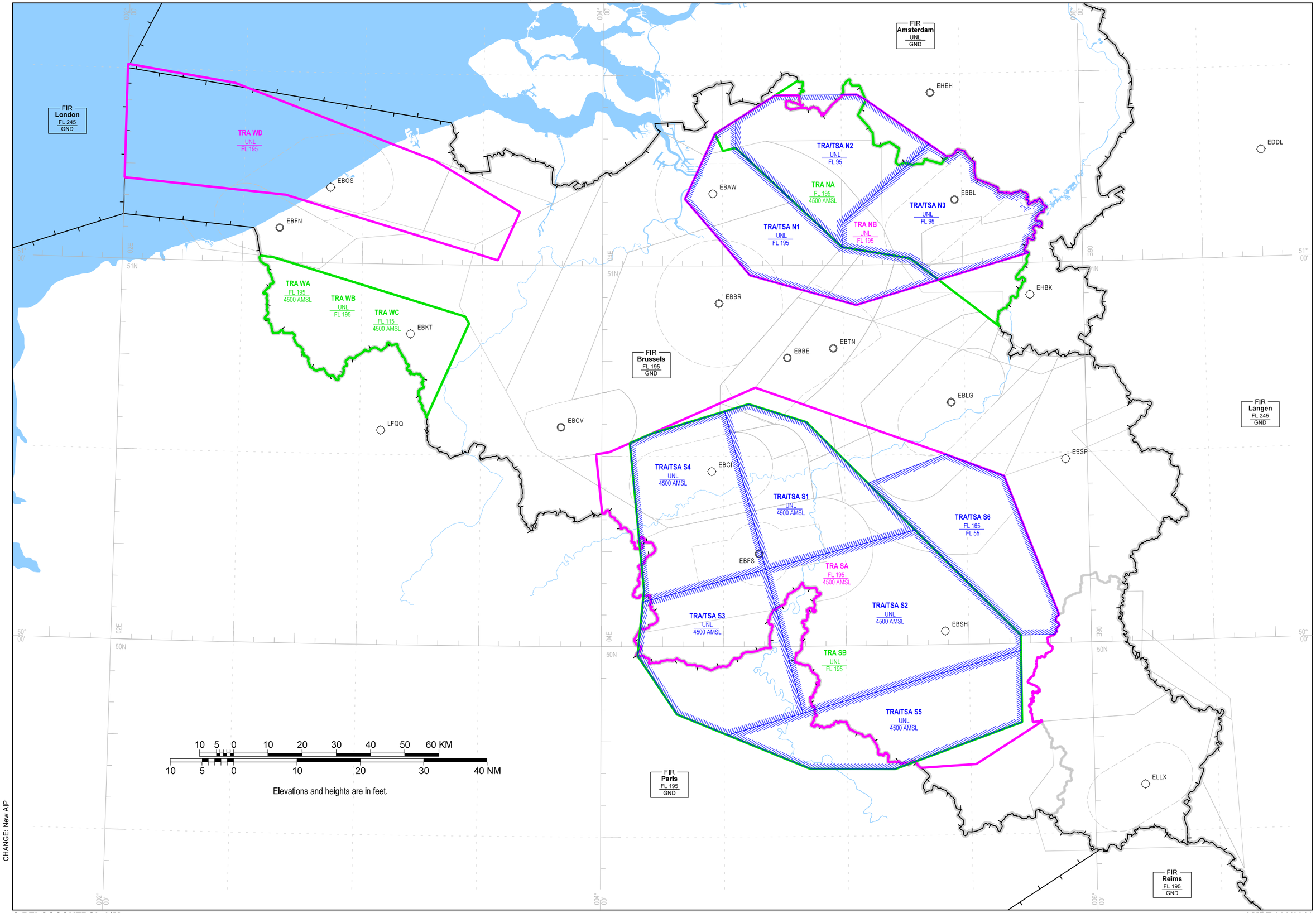
Index Chart

Military Exercise and Training Areas: TRA/TSA North, South and West



CHANGE: New AIP

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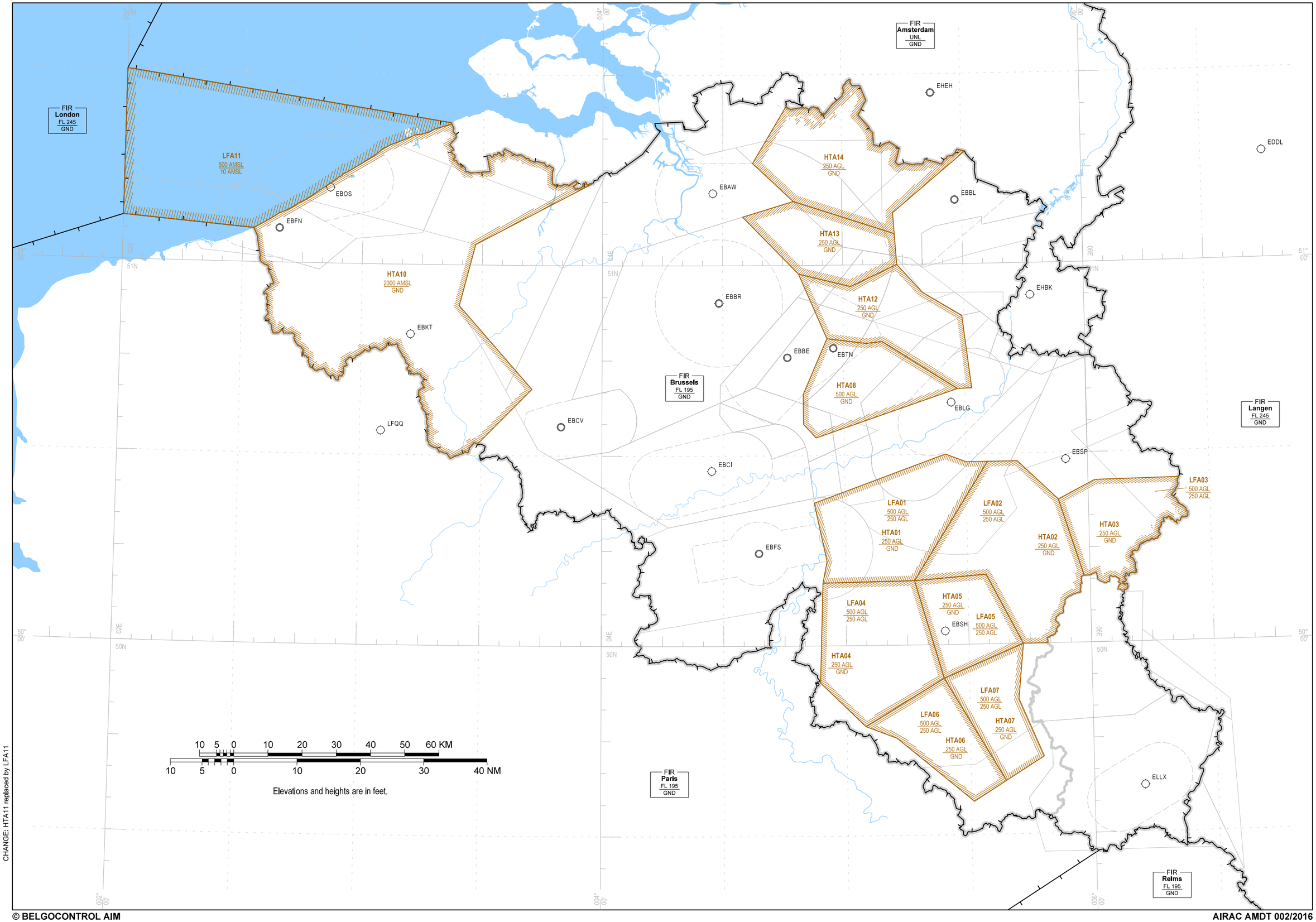
Index Chart

Military Exercise and Training Areas: Helicopter Training Areas and Low Flying Areas



CHANGE: HTA11 replaced by LFA11

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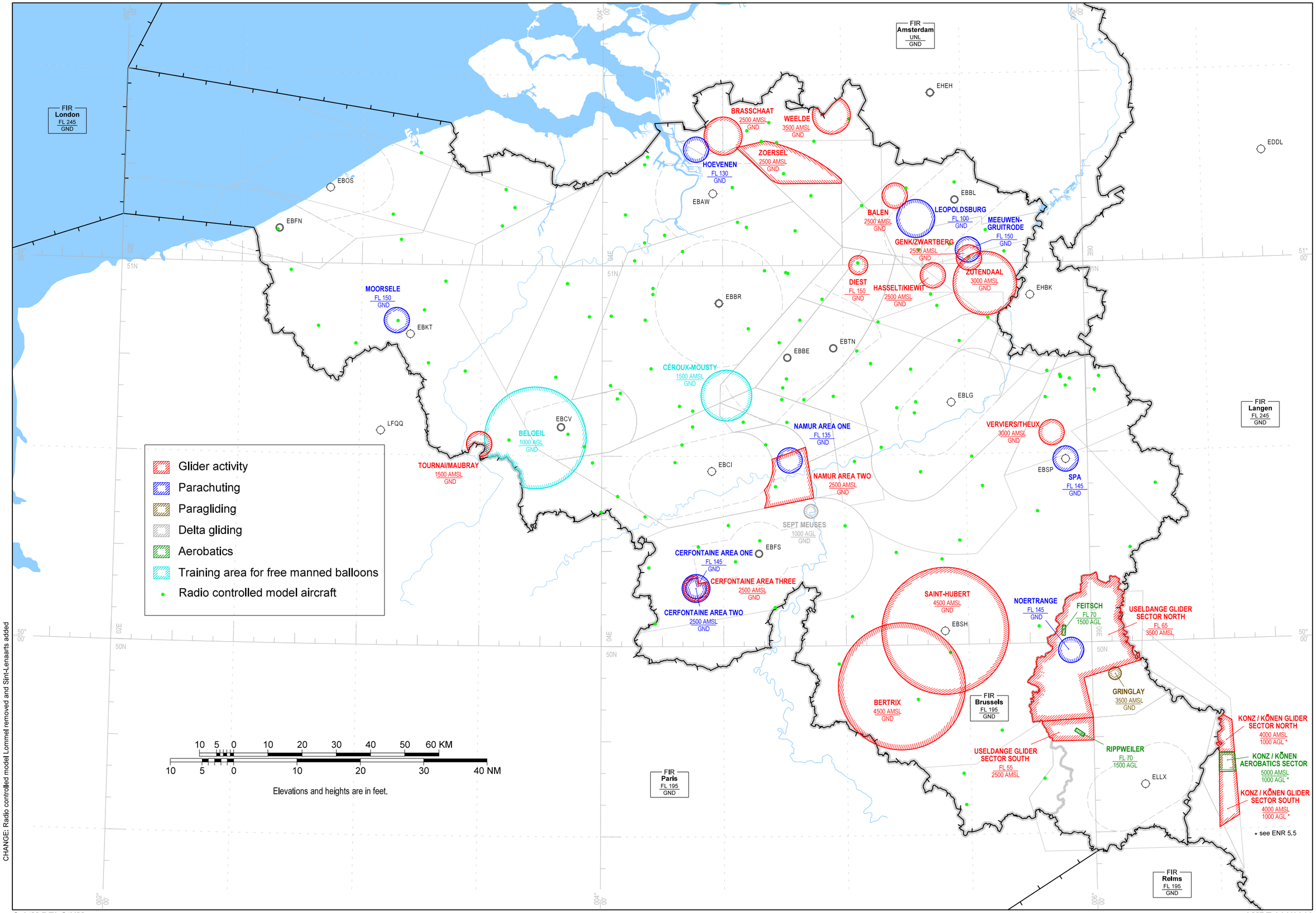
Index Chart

Aerial Sporting and Recreational Activities



* see ENR 5,5

CHANGE: Radio controlled model Lommel removed and Sint-Lenaarts added

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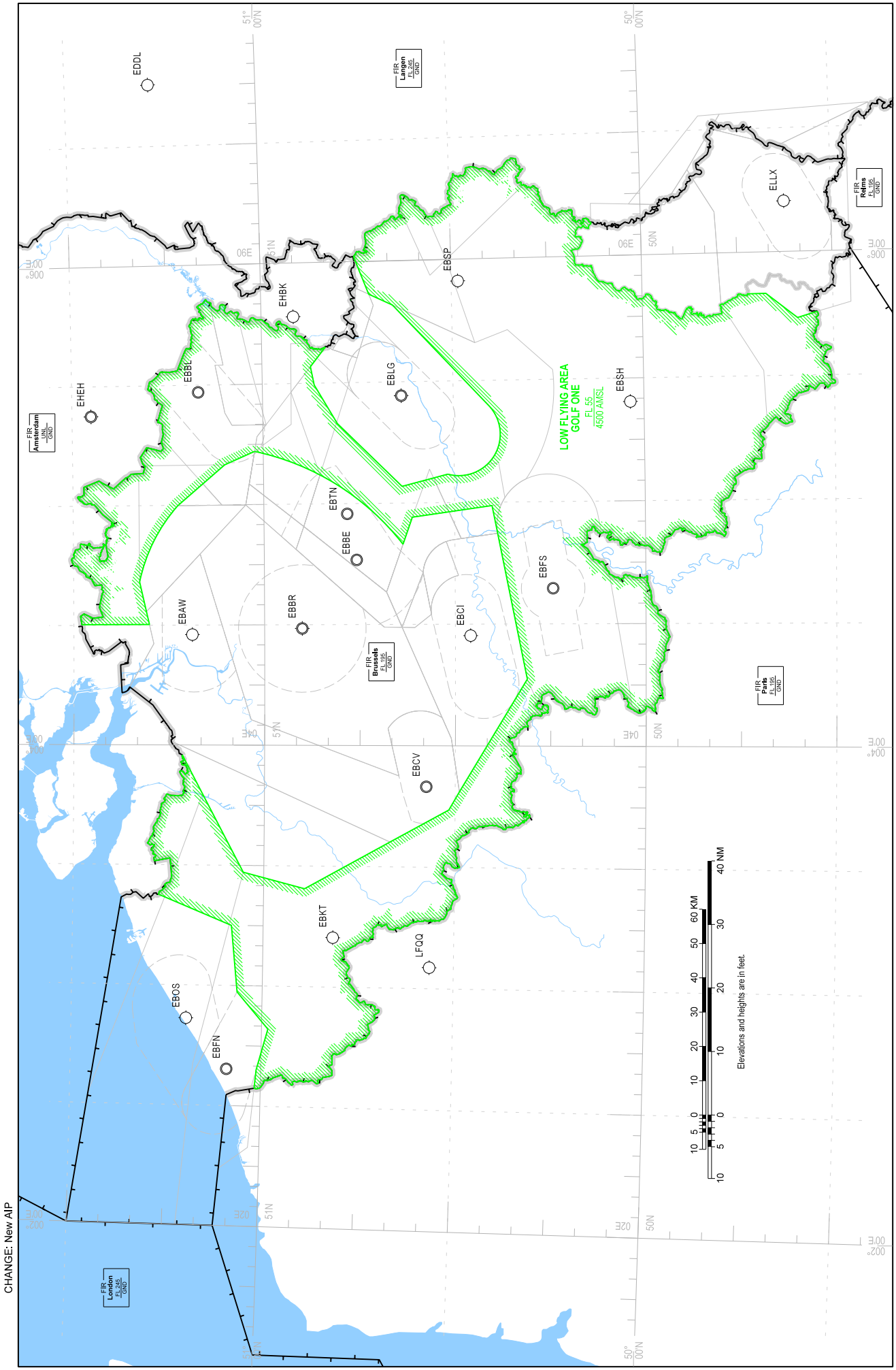
Index Chart

Aerial Sporting and Recreational Activities: Low Flying Area Golf One



CHANGE: New AIP

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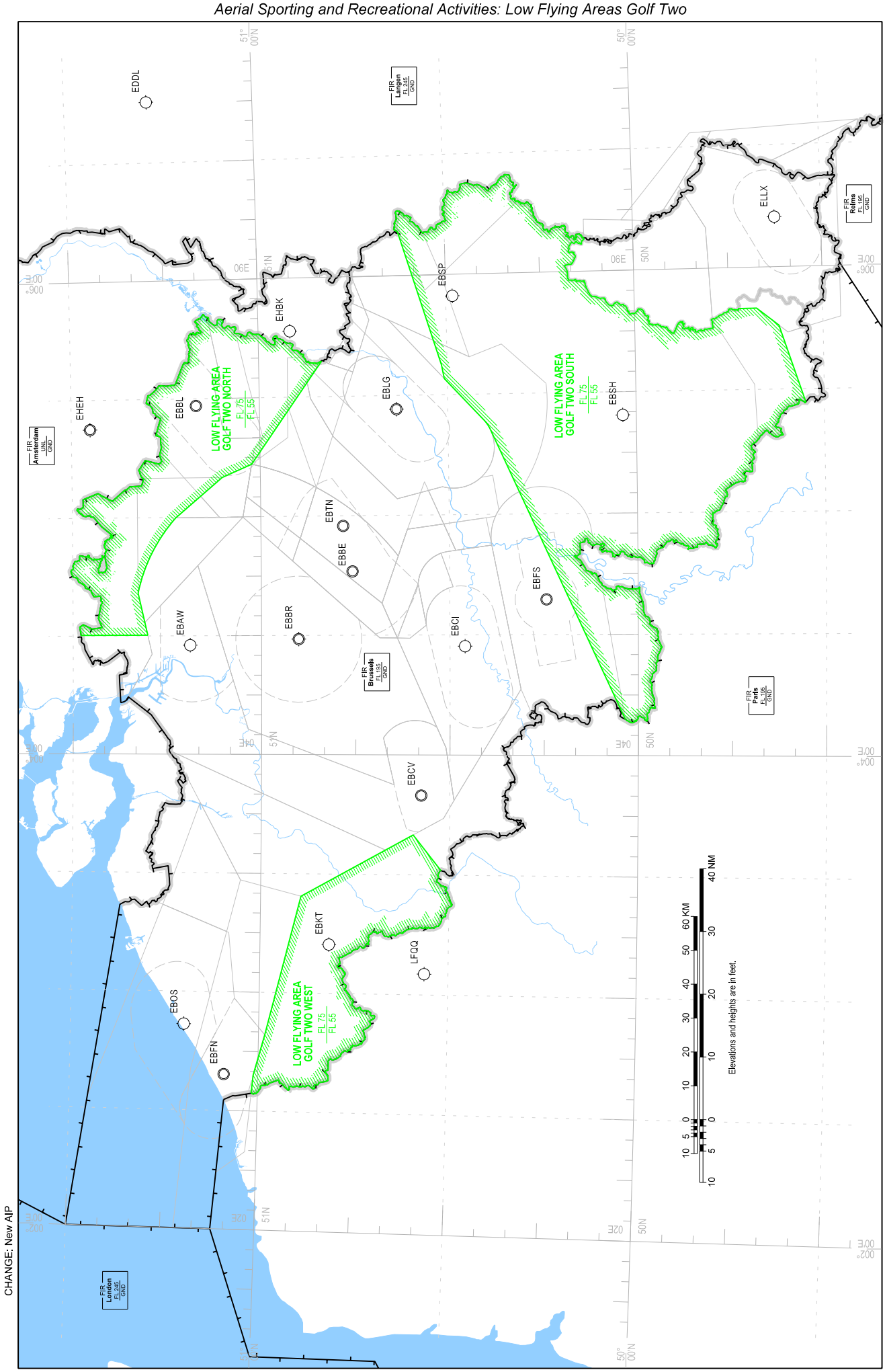
Index Chart

Aerial Sporting and Recreational Activities: Low Flying Areas Golf Two



CHANGE: New AIP

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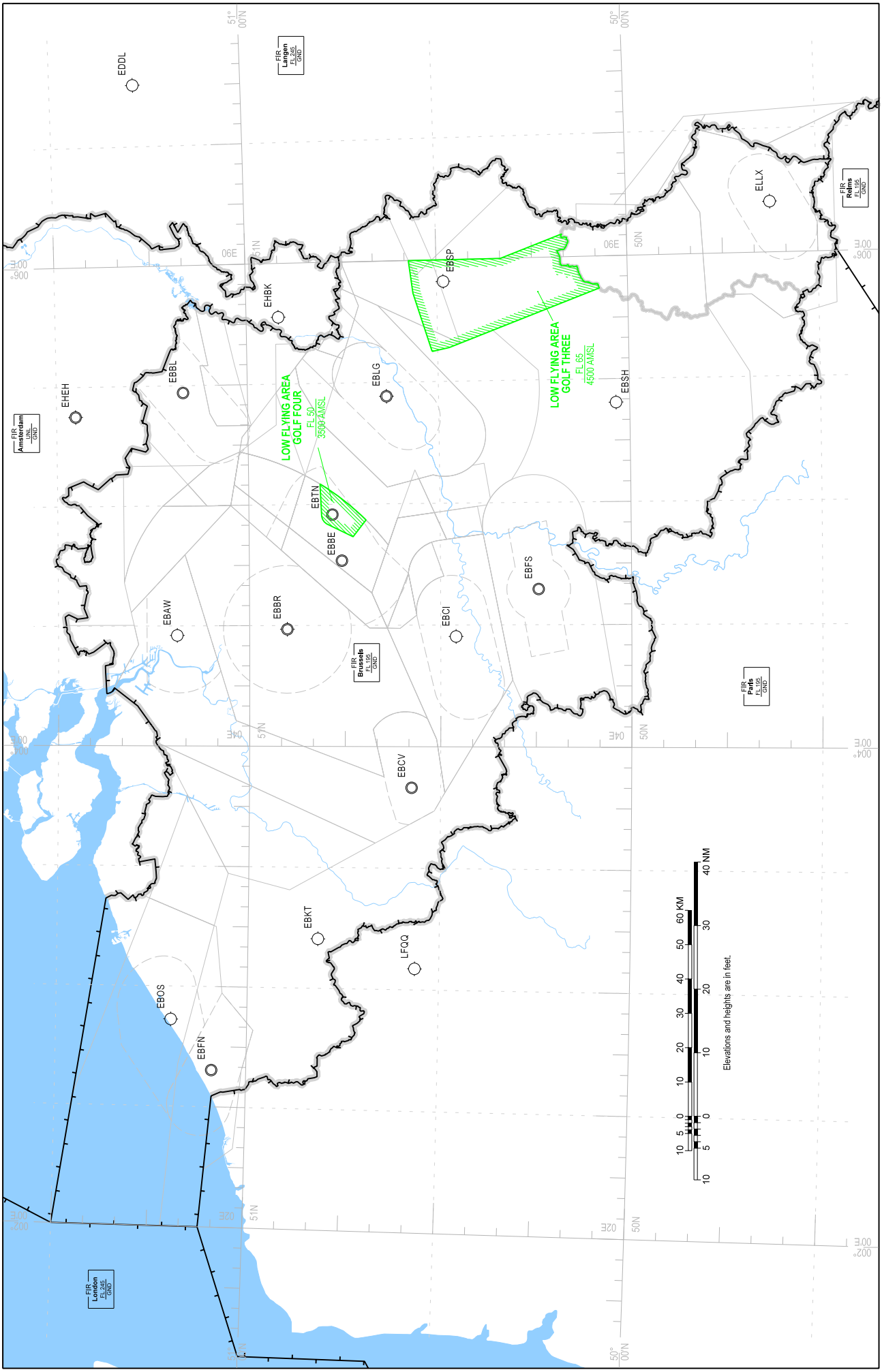
Index Chart

Aerial Sporting and Recreational Activities: Low Flying Areas Golf Three and Four



CHANGE: LFA GOLF FIVE displaced on ENR 6-INDEX.04e

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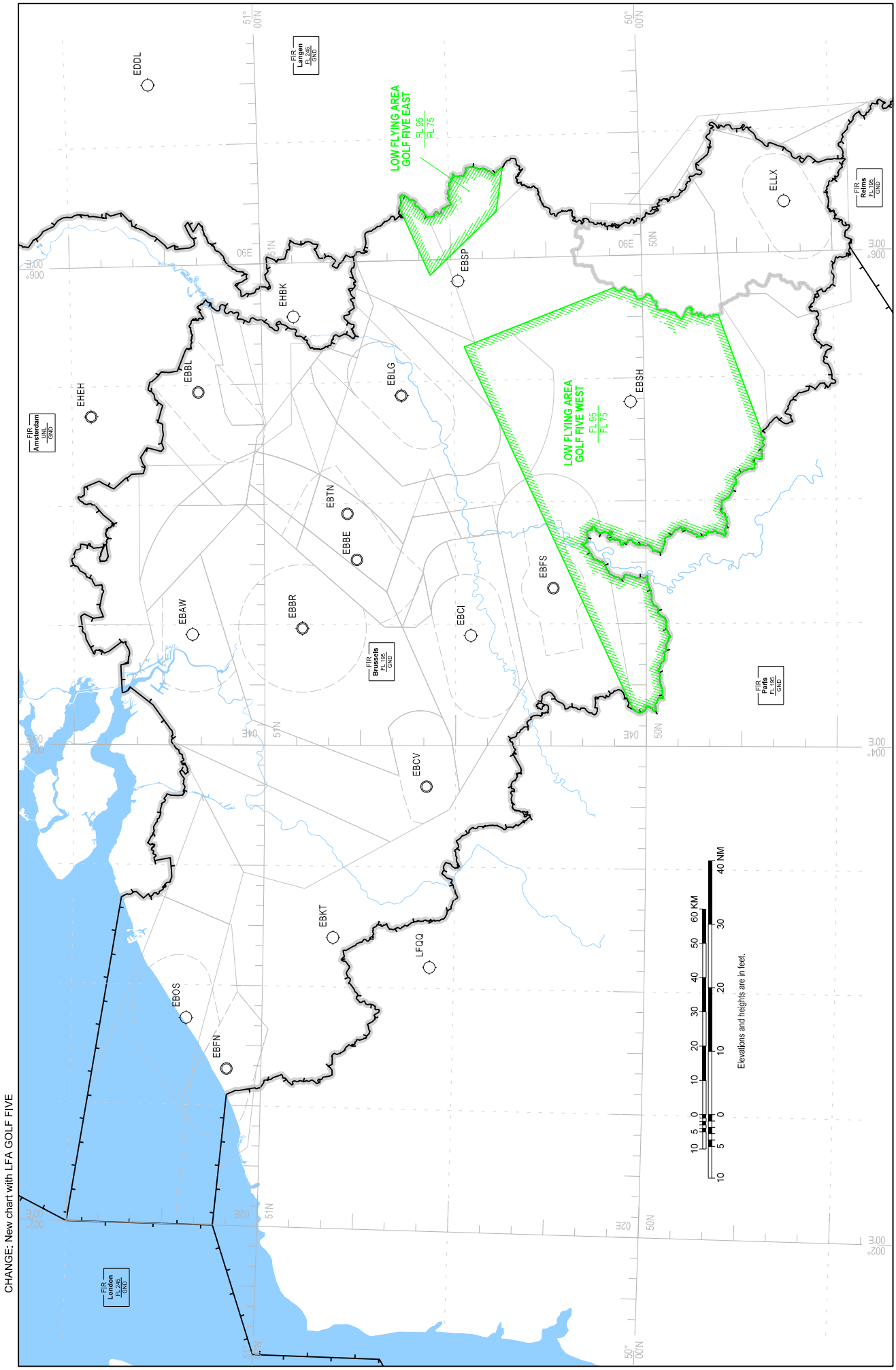
Index Chart

Aerial Sporting and Recreational Activities: Low Flying Areas Golf Five



CHANGE: New chart with LFA GOLF FIVE

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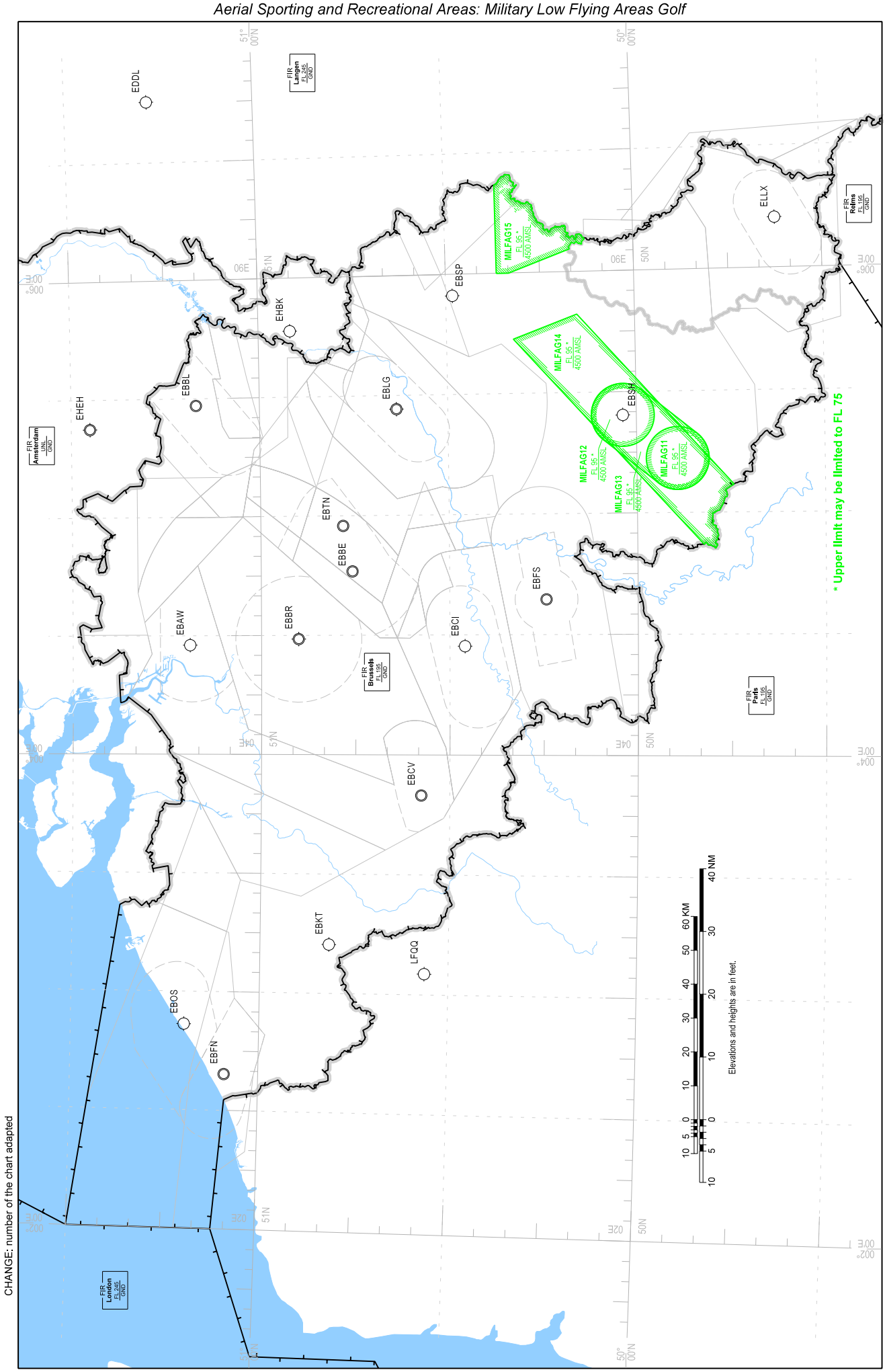
Index Chart

Aerial Sporting and Recreational Areas: Military Low Flying Areas Golf



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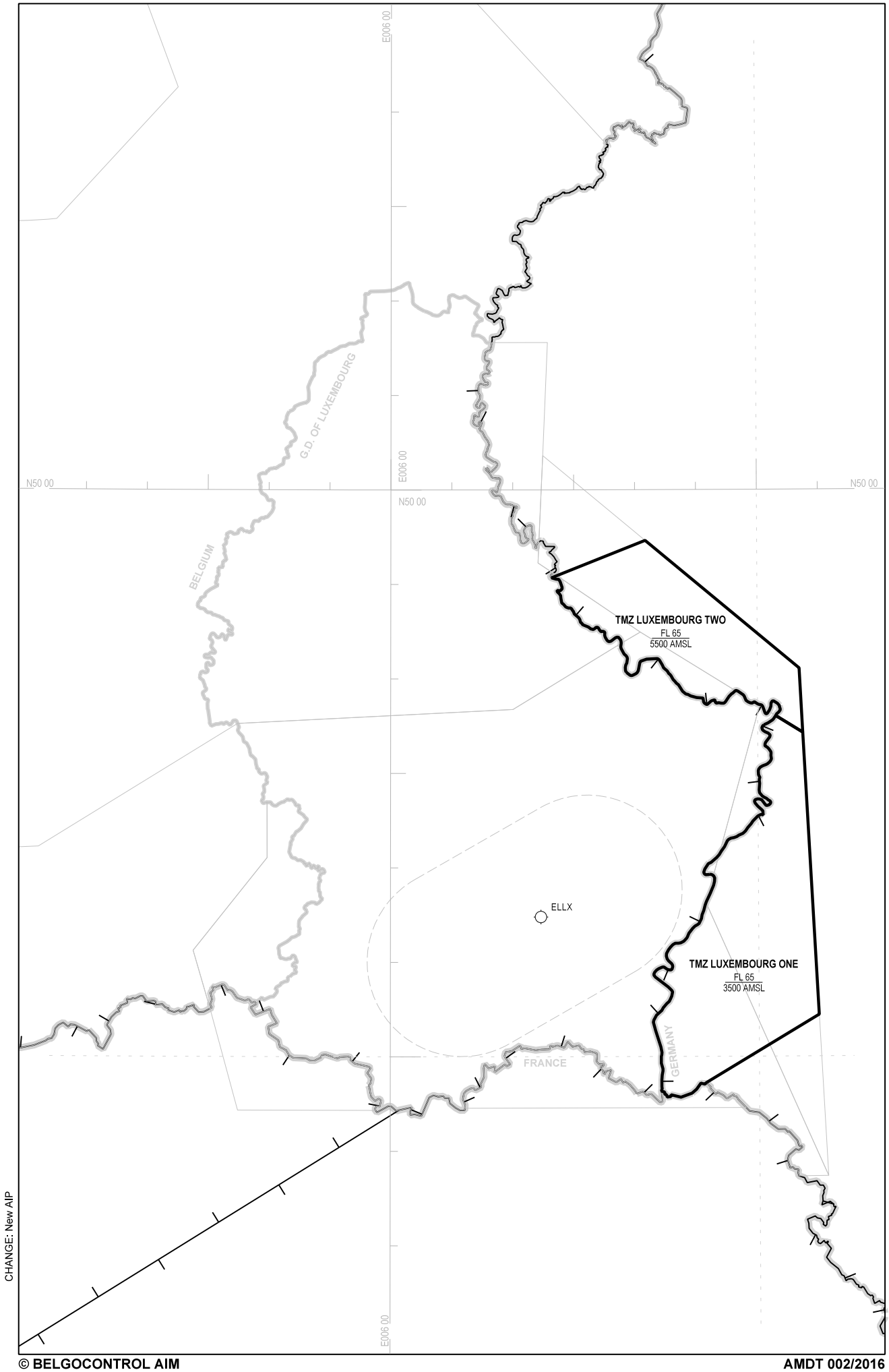
Index Chart

Transponder Mandatory Zones



CHANGE: New AIP

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Index Chart

En-route Radio Navigation Aids

FIR London FL 245 GND

FIR Amsterdam UNL GND

COSTA DVOR/DME 110.05 / CH 37Y COA N51 20 53 E003 21 19

OOSTENDE NDB 399.50 ONO N51 13 03 E002 59 47

EBOS

EBFN

KOKSY VORTAC 114.50 / CH 92X KOK N51 05 41 E002 39 06

MACKEL NDB 360.50 MAK N50 57 52 E003 29 47

NICKY DVOR/DME 117.40 / CH 121X NIK N51 09 54 E004 11 02

ANTWERPEN NDB 355.00 ONW N51 10 03 E004 33 58

EBAW

ANTWERPEN DVOR/DME 113.50 / CH 82X ANT N51 11 26 E004 28 21

BRUNO DVOR/DME 110.60 / CH 43X BUN N51 07 07 E004 50 32

KLEINE-BROGEL TACAN CH 33X BBL N51 10 14 E005 27 58

EBBL

FLORA DVOR/DME 112.05 / CH 57Y FLO N50 52 36 E005 08 04

FIR Brussels FL 195 GND

AFFLIGEM DVOR/DME 114.90 / CH 96X AFI N50 54 28 E004 08 20

EBBR

BRUSSELS DVOR/DME 114.60 / CH 93X BUB N50 54 08 E004 32 17

LIEGE NDB 290.00 ONL N50 42 04 E005 32 57

BEAUVECHAIN NDB 381.00 HTB N50 45 20 E004 46 02

HULDENBERG DVOR/DME 117.55 / CH 122Y HUL N50 44 58 E004 38 30

EBBE

CHIEVRES TACAN CH 79X CIV N50 34 20 E003 49 18

CHIEVRES VOR 113.20 CIV N50 34 26 E003 49 58

EBCV

BEAUVECHAIN TACAN CH 107X BBE N50 45 25 E004 46 07

EBLG

LIEGE DVOR/DME 115.45 / CH 101Y LGE N50 39 14 E005 28 14

OLNO DVOR/DME 112.80 / CH 75X LNO N50 35 09 E005 42 37

FIR Langen FL 245 GND

GOSLY DVOR/DME 115.70 / CH 104X GSY N50 27 14 E004 26 29

EBCI

CHARLEROI NDB 323.00 ONC N50 29 22 E004 33 19

SPRIMONT DVOR/DME 113.10 / CH 78X SPI N50 30 53 E005 37 25

FLORENNES TACAN CH 52X BFS N50 14 29 E004 39 12

EBFS

DIEKIRCH DVOR/DME 114.40 / CH 91X DIK N49 51 41 E006 07 47

DIEKIRCH NDB 307.00 DIK N49 51 41.0 E006 07 46.7

LUXEMBOURG NDB 368.50 ELU N49 40 48 E006 21 18

LUXEMBOURG DVOR/DME 112.25 / CH 59Y LUX N49 38 22 E006 14 58

ELLX

LUXEMBOURG NDB 346.00 WLU N49 34 04 E006 03 15

FIR Reims FL 195 GND

FIR Paris FL 195 GND

10 5 0 10 20 30 40 50 60 KM

10 5 0 10 20 30 40 NM

CHANGE: New AIP

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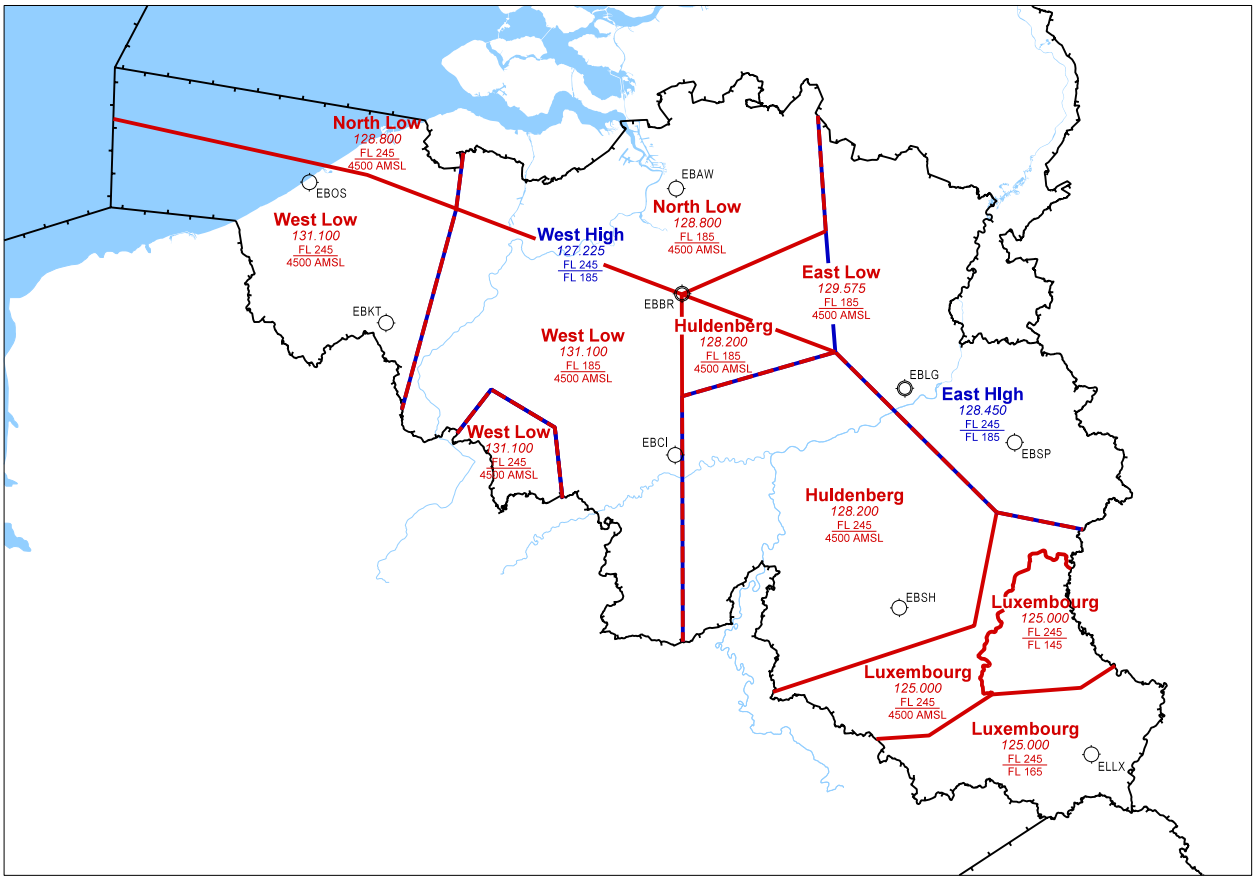
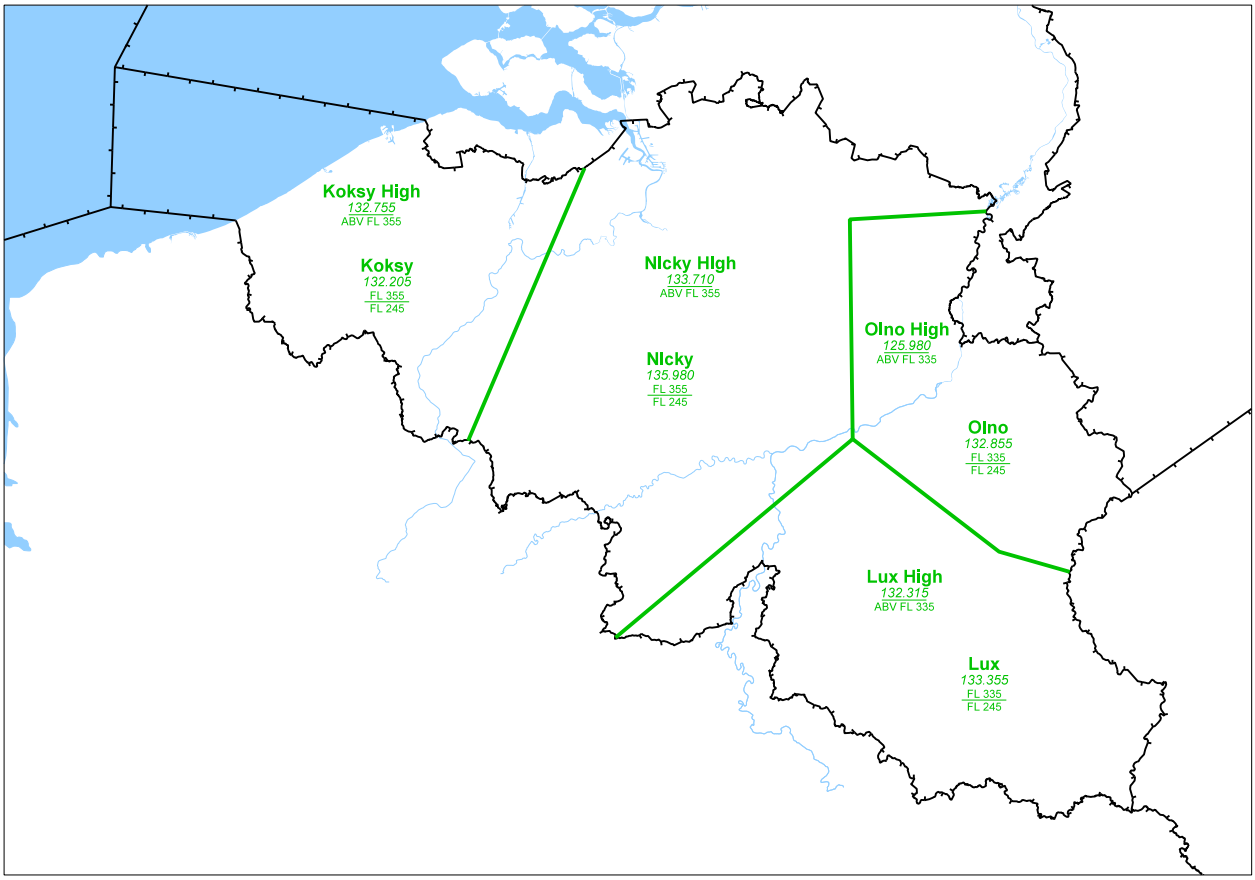
Index Chart

Sectorisation

BRUSSELS ACC



MAASTRICHT UAC



CHANGE: FREQ West sectors of MUAC updated

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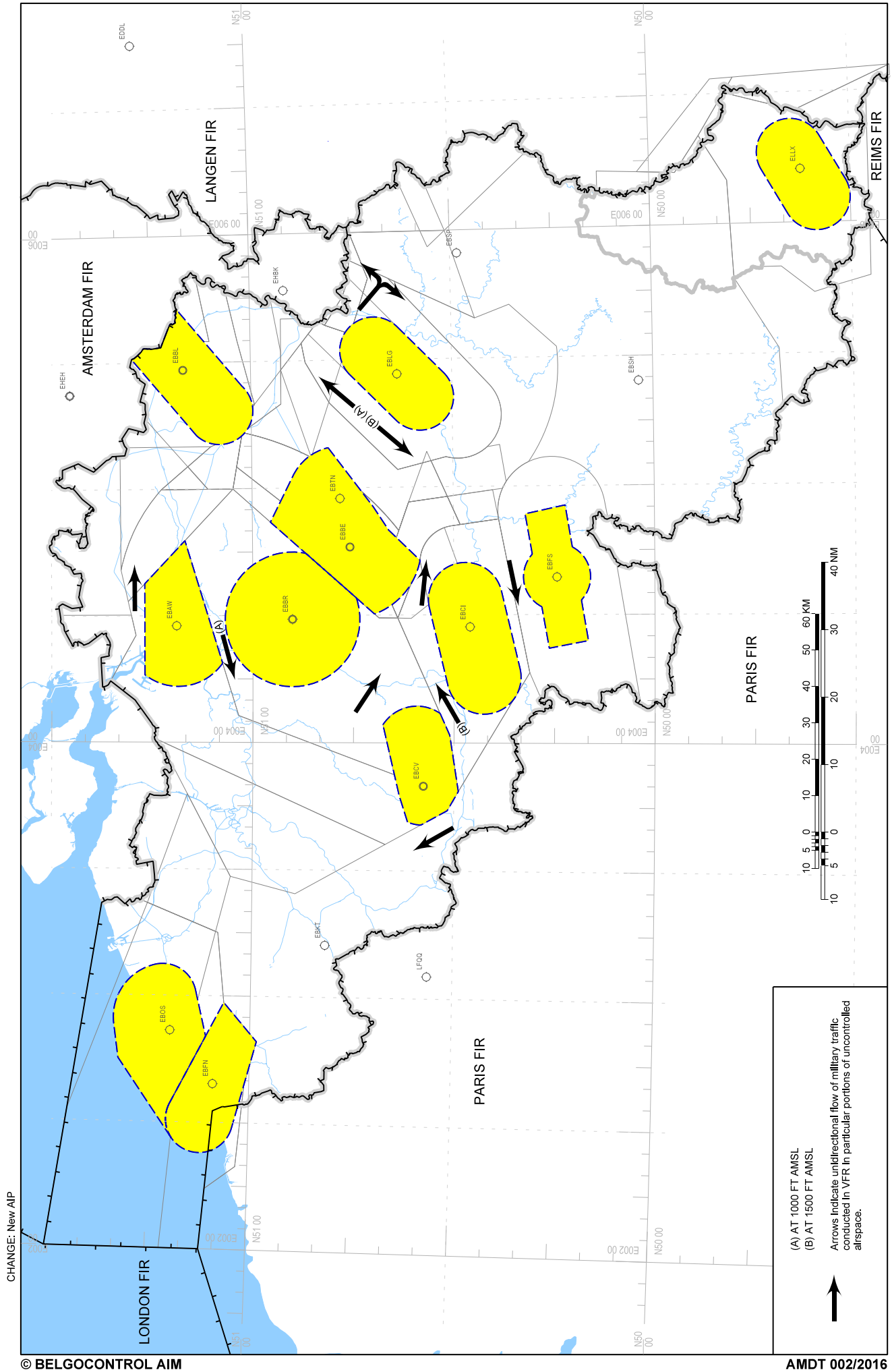
MILITARY VFR FLIGHTS BELOW 4500 FT AMSL



CHANGE: New AIP

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Index Chart

Aerodromes and Heliports

EBOS — Location indicator or name of aerodrome
13/L/H/32 — Length of longest runway in hundreds of metres
Runway surface ("H" if hard surfaced)
Aerodrome lighting ("L" if minimum lighting present)
Aerodrome elevation in feet

- Civil aerodrome
- Military aerodrome
- Joint civil and military aerodrome
- Private aerodrome
- Military aerodrome with civilian concession
- Military reserve aerodrome
- Private Heliport
- Hospital heliport

10 5 0 10 20 30 40 50 60 KM
10 5 0 10 20 30 40 NM

CHANGE: HEL EBLR closed

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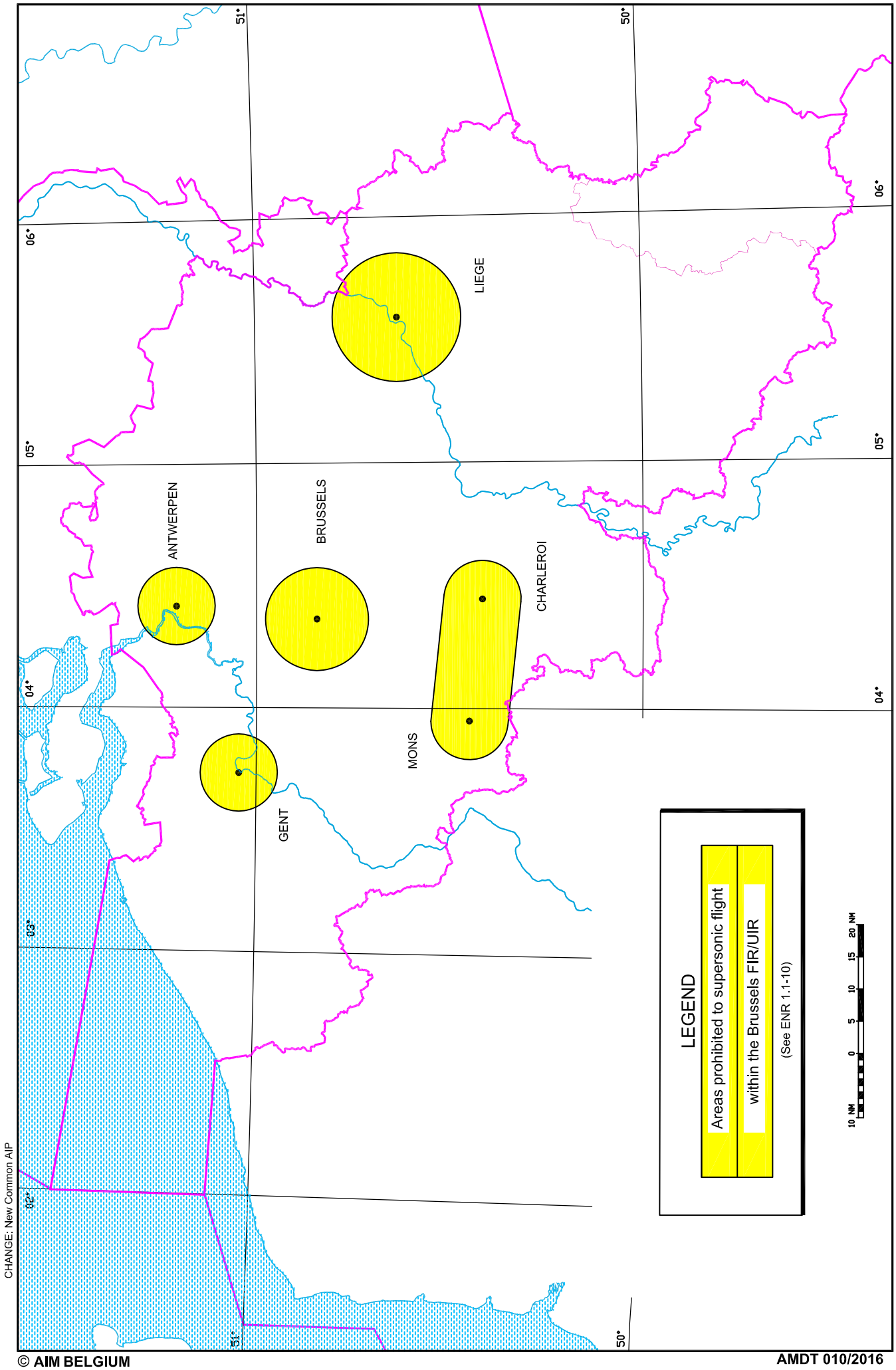
Index Chart

Areas Prohibited to Supersonic Flight



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