
GEN 1.5 AIRCRAFT INSTRUMENTS, EQUIPMENT AND FLIGHT DOCUMENTS

1. GENERAL

Commercial air transport aircraft operating in the airspace of Hungary have to adhere to the provisions of Subpart D of Annex IV (Part-CAT) to Regulation (EU) No 965/2012.

Aircraft, other than State aircraft, operating according to Instrument Flight Rules (IFR) within the Budapest FIR above 9500 FT ALT shall be equipped with, as a minimum, RNAV equipment meeting RNAV 5 in accordance with the requirements set out in ICAO Doc 7030/5 Regional Supplementary Procedures (5th edition, 2008, EUR). RNAV may only be performed by operators approved to do so and only with aircraft which are equipped with approved RNAV equipment.

2. SPECIAL EQUIPMENT TO BE CARRIED

Within the Budapest FIR special equipment is not required.

3. EQUIPMENT TO BE CARRIED ON ALL TYPES OF FLIGHT

All ACFT engaged in international flight operations shall carry and operate an SSR transponder in accordance with [ENR 1.6 para 3](#).

4. RADIO EQUIPMENT REQUIREMENTS

As required by Commission Implementing Regulation (EU) No 1079/2012 of 16 November 2012 laying down requirements for voice channels spacing for the single European sky, an operator shall not operate an aircraft in airspace where carriage of radio is required within Budapest FIR ([See ENR 1.4](#)) unless the aircraft radio equipment has the 8.33 KHZ channel spacing capability.

For exemptions from mandatory carriage of 8.33 KHZ equipment [See ENR 1.8](#).

Flights exempted from mandatory carriage of VHF 8.33 KHZ aircraft radio equipment must be flight planned to operate below FL 195, except the UHF equipped state flights.

5. REQUIREMENTS FOR FM BROADCAST IMMUNITY OF AIRBORNE RECEIVERS

- 5.1.** In the Budapest FIR, aircraft with NAV equipment which does not comply with the applicable interference immunity performance requirements for ILS localiser and VOR receiving systems (ref. ICAO Annex 10, Vol. I., Chapter 3. para. 3.1.4. and 3.3.8.) may not operate.

Exceptions: State ACFT with NAV equipment which not comply with the above referred ICAO Standards may continue operations within the Budapest FIR with the provision, that they are equipped with other suitable RNAV equipment (meeting RNAV 5 /B-RNAV/, in accordance with ICAO Doc 7030/5 European (EUR) Regional Supplementary Procedures Chapter 4.), for the en route part of the IFR flight.

- 5.2.** All VHF communication receivers operating within the Budapest FIR shall meet the ICAO FM Broadcast Immunity requirements (ref. ICAO Annex 10 Vol. III. Part II. para. 2.3.3).

- 5.3.** If any interference problems are experienced during their operations within the Budapest FIR, users are requested to report to:

Civil Aviation Authority (CAA)

Email: caa@ekm.gov.hu

The report should include the following information:

- a. frequency, on which the interference was experienced;
- b. position and level/height of the aircraft;
- c. aircraft call sign and registration (number);
- d. date and time (UTC) of the experienced harmful interference
- e. description of the interfering signal (e.g. music, speech, language, other noise, etc.)

6. RVSM OPERATION

Except in designated airspace where RVSM transition tasks are carried out, only RVSM approved aircraft and non-RVSM approved State aircraft shall be permitted to operate within EUR RVSM airspace.

RVSM approved aircraft are those aircraft for which the Operator has obtained an RVSM approval, either from the State in which the operator is based, or from the State in which the aircraft is registered.

Guidance material on the airworthiness, continued airworthiness and the operational practices and procedures for the EUR RVSM airspace is provided in the Joint Aviation Authorities (JAA) Temporary Guidance Leaflet (TGL) No. 6, Revision 1 and the ICAO EUR Regional Supplementary Procedures (Doc 7030/5).

Except for State aircraft, RVSM approval is required for aircraft to operate in the RVSM airspace within the Budapest FIR as described in [ENR 2.1](#).

Note:

The provisions applicable to non-RVSM approved civil operations in EUR RVSM airspace where RVSM transition tasks are carried out, are specified in the ICAO Regional Supplementary Procedures (Doc 7030/5 – EUR Chapter 1).

7. ACAS II REQUIREMENTS

All civil fixed-wing turbine-powered aircraft operating within airspace of Hungary shall be equipped with an Airborne Collision Avoidance System (ACAS) II type when they:

- a. have a maximum take-off mass exceeding 15 000 KG or maximum approved passenger seating configuration of more than 30,
- b. have a maximum take-off mass exceeding 5 700 KG or maximum approved passenger seating configuration of more than 19.

The exemption from this requirement applies to aeroplanes which are subject to the provisions of Annex II to the EC Regulation (EC) No. 216/2008.

8. MODE S PROCEDURES – DISPLAY OF DOWNLINKED AIRCRAFT PARAMETERS (DAPs)

The following Mode S DAPs are used in the Budapest FIR:

- DSFL- Downlinked Selected Flight Level
- DIAS- Downlinked Indicated Air Speed
- DMACH- Downlinked Mach Number
- DHDG- Downlinked Magnetic Heading.

These aircraft parameters are downlinked from aircraft by the Mode S EHS (Enhanced Surveillance) compliant transponder. Aircraft that are equipped with Mode S ELS (Elementary Surveillance) transponder only, cannot downlink these values.

Generally, for Mode S EHS equipped aircraft, the Air Traffic Controller will use the values of Indicated Air Speed, Mach Number and Magnetic Heading as displayed in the label, without the need to verbally request these.

Note 1: in certain circumstances, it may be necessary to verbally verify any of these DAPs against readings from the flight deck.

Note 2: the DRC (Downlinked Rate of Climb/Descend value is also provided by EHS compliant aircraft, but the Air Traffic Controller will not use the value, due to the fluctuation of the DRC value. However the DRC value is also displayed on the screen, to provide information about the tendency, and the order of magnitude of the vertical speed.

The carriage of a Mode S transponder capable of downlinking EHS aircraft parameters will not be compulsory in the Budapest FIR. However, where aircraft is so equipped, the installation and wiring of the instruments and transponder shall guarantee the downlinking of correct values in accordance with the certification guidance contained in EASA Document AMC 20-13, or other equivalent airworthiness specifications.