
GEN 3.4 COMMUNICATION SERVICES

1. RESPONSIBLE SERVICE

The organisation responsible for the administration and provision of the aeronautical communication services in Hungary is:

HungaroControl, Hungarian Air Navigation Services Private Limited Company

Post:H-1675 Budapest PO Box 80

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2. AREA OF RESPONSIBILITY

Inquiries, suggestions or complaints regarding any telecommunication services related to ACC or FIS airspaces within Budapest FIR or Budapest TMA should be referred to the Head of HungaroControl Technical Operations and Development Division. All other issues shall be reported to the relevant airport's administration.

3. TYPES OF SERVICE**3.1 Radio navigation services**

The following types of radio aids to navigation are available:

- LF/MF Non-directional Beacon (NDB)
- Instrument Landing System (ILS)
- VHF Omnidirectional Radio Range (VOR)
- Distance-Measuring Equipment (DME)
- Surveillance Radar Equipment (SRE)
- Secondary Surveillance Radar (SSR) Equipment
- Surface Movement Radar (SMR)

The broadcasting stations are not usable for radio navigation purposes.

3.2 Voice and/or Data Link services**3.2.1 Voice service**

The aeronautical stations maintain a continuous watch on their stated FREQ during the published hours of service unless otherwise notified.

An ACFT should normally communicate with the air-ground radio station which exercises ATS in the area in which it is flying. ACFT should maintain continuous watch on the appropriate FREQ of the station and should not abandon watch, except in an emergency, without informing the radio station.

3.2.2 Data Link service - Controller-Pilot Data Link Communication (CPDLC)

General

The controller-pilot data link communication (CPDLC) application provides a means of communication between the controller and the pilot, using data link for ATC communication. This application includes a set of clearance / information / request message elements which correspond to the phraseologies used in the radiotelephony environment. CPDLC services are available for ACFT in the entire Hungarian airspace above FL 285.

The following CPDLC services are provided in this airspace:

- DLIC (data link initiation capability)
- ACL (ATC clearances and instructions)

- ACM (ATC communications management)
- AMC (ATC microphone check)

The operational use of CPDLC is not mandatory in this airspace and is conducted at the discretion of ATC and at the initiative of the pilots concerned. If the pilot or ATC is of the opinion that CPDLC should no longer be used in the given circumstances, CPDLC shall be discontinued or terminated and the other party shall be informed about this by voice communication.

The ATN VDL Mode 2 CPDLC is supported only, connection with FANS equipment is not possible.

3.2.2.1 Flight Plan

Pilots shall file their ACFT 24-bit address code in Item 18 of their flight plan (CODE / (hexadecimal)).

3.2.2.2 CPDLC Use

In the area of responsibility of Budapest ACC, voice communication and radiotelephony instructions have priority over CPDLC instructions at all times. A clearance requested by the pilot via CPDLC should be issued via CPDLC. A clearance requested by the pilot via radiotelephony should be issued via radiotelephony. If the controller is asking explicitly for a voice read back of a CPDLC clearance the following phraseology should be used by the pilot:

Example: "CALL SIGN - CONFIRMING CPDLC CLIMB FL 360".

Clearances shall not be executed until the WILCO message has been sent back. If uncertainty arises regarding a data link message, voice communication shall always be used. CPDLC exchanges with the Budapest ACC shall only be conducted when the ACFT is under the control and responsibility.

3.2.2.3 DLIC Log-on

The data link address for Budapest ACC is LHCC. Log on is mandatory if the related equipment of the aircraft is suitable and working and the flight crew is trained to use CPDLC.

CPDLC shall be established in sufficient time to ensure that the ACFT is communicating with the appropriate ATC unit. Log-on shall be initiated by the pilot. Pilots shall log-on using their ICAO call sign as filed in the flight plan. Pilots shall not use a two-letter IATA flight ID, or insert a leading zero [0] into a call sign, as these actions will result in a failed log-on.

Log-on should be initiated 15 minutes prior to entry the Budapest FIR. For ACFT departing from an AD in close proximity to the Budapest FIR, log-on can be initiated on the ground or after being airborne, but it is expected that the log-on will only be successful when the ACFT arrives into the coverage area. Irrespective of the number of Budapest ACC sectors entered during flight, only one log-on per flight is required.

LHCC ground system may refuse log-on requests from certain flights.

3.2.2.4 CPDLC Services

- ATC Clearances and Instructions (ACL)
Pilots may receive the uplink messages via data link. Pilots may request changes to flight levels (climb or descent) via data link or clearance direct to a point on their route. Pilots are able to send emergency messages as well.
- ATC Communication Management (ACM)
The pilot response to an ATC instruction to change frequency shall be WILCO. If the pilot is unable to comply with this data link instruction, he shall revert to voice communication to inform ATC. When an ACFT is transferred by data link to an adjacent sector / ATSU, the pilot shall acknowledge the instruction by WILCO, and shall then contact the next sector / ATSU by voice communication on the FREQUENCY given.
- ATC Microphone Check (AMC)
A "Check Stuck Microphone" instruction may be sent by ATC in cases where an ACFT is inadvertently blocking a radio frequency. If the "Check Stuck Microphone" instruction relates to the radio telephony FREQUENCY currently being used, then the pilot shall check that their radio equipment is not causing the blockage. If the "Check Stuck Microphone" instruction does not relate to the radio telephony FREQUENCY being used, then no further action by the pilot is required.

3.2.2.5 Message Restrictions

Pilots shall not use free-format free-text messages when communicating with Budapest ACC via CPDLC. Use of such free-text messages will result in an error response.

3.2.2.6 Log-off

Log off is automatic on exiting from the Budapest FIR or landing in the Budapest FIR. No pilot action is then required.

3.2.2.7 CPDLC Failure

In the case of a CPDLC failure, CPDLC clearances that have not yet been confirmed shall be repeated over radiotelephony and / or confirmed.

If the pilot or ATC is of the opinion that CPDLC should no longer be used in the given circumstances, CPDLC shall be discontinued or terminated and the other party shall be informed about this by voice communication.

In the case of a planned shut down or an unexpected failure of the CPDLC system, ATC will instruct all ACFT equipped with data link to return to voice communication. In the case of an on board failure of CPDLC, the pilot shall return to voice communication and inform the ATC.

3.2.2.8 CPDLC Messages

The controller or the pilot shall construct CPDLC messages using the defined message set. The following uplink clearances and instructions may be expected by pilots using CPDLC:

ATC Basic Uplink Clearances, Answers, Instructions and Information:

- UNABLE
- STANDBY
- MAINTAIN
- CLIMB TO
- DESCEND TO
- PROCEED DIRECT TO
- CURRENT DATA AUTHORITY
- CONTACT
- SQUAWK
- CHECK STUCK MICROPHONE
- ERROR
- NEXT DATA AUTHORITY
- SERVICE UNAVAILABLE
- SQUAWK IDENT
- FLY HEADING
- LOGICAL ACKNOWLEDGEMENT
- REQUEST AGAIN WITH NEXT UNIT
- STATE PREFERRED LEVEL *
- MAINTAIN [speed]
- MAINTAIN [speed] OR GREATER
- MAINTAIN [speed] OR LESS
- RESUME NORMAL SPEED
- CLIMB TO REACH [level] BY [position]
- DESCEND TO REACH [level] BY [position]
- RESUME OWN NAVIGATION
- CONTINUE PRESENT HEADING

* Note regarding the STATE PREFERRED LEVEL message: Air traffic controller can ask for the requested level using this message. Please note that using this message cannot guarantee that the aircraft can be

cleared later for that level and this message has a different meaning than the REQUEST [level] or the REQUEST CLIMB TO [level] or the REQUEST DESCEND TO [level] messages. Answering with the PREFERRED LEVEL message: Aircraft can indicate the planned cruise level using this message.

ATC Concatenated Uplink Clearances **:

Starting basic message	Possible concatenation
UM20 CLIMB TO [level] or UM23 DESCEND TO [level]	UM106 MAINTAIN [speed] or UM107 MAINTAIN PRESENT SPEED or UM108 MAINTAIN [speed] OR GREATER or UM109 MAINTAIN [speed] OR LESS

Starting basic message	Possible concatenation
UM20 CLIMB TO [level] or UM23 DESCEND TO [level]	UM171 CLIMB AT [verticalRate] MINIMUM or UM172 CLIMB AT [verticalRate] MAXIMUM or UM173 DESCEND AT [verticalRate] MINIMUM or UM174 DESCEND AT [verticalRate] MAXIMUM

Starting basic message	Possible concatenation
UM20 CLIMB TO [level] or UM23 DESCEND TO [level]	UM74 PROCEED DIRECT TO [position]

Starting basic message	Possible concatenation
UM190 FLY HEADING [degrees] or UM96 CONTINUE PRESENT HEADING	UM106 MAINTAIN [speed] or UM107 MAINTAIN PRESENT SPEED or UM108 MAINTAIN [speed] OR GREATER or UM109 MAINTAIN [speed] OR LESS

** Note regarding concatenated uplink messages: Every concatenated uplink message contains two instructions. In case pilots reply with WILCO it means that both parts of the uplinked concatenated message are accepted and will be executed. In case of UNABLE reply it also concerns both parts of the uplinked concatenated message.

The following downlink requests, answers or information may be sent by pilots using CPDLC with Budapest ACC:

- WILCO
- UNABLE
- STANDBY
- REQUEST level
- REQUEST DESCENT TO
- REQUEST DIRECT TO
- PAN PAN PAN
- MAYDAY MAYDAY
- SQUAWKING 7500
- DUE TO WEATHER
- DUE TO AIRCRAFT PERFORMANCE
- PREFERRED LEVEL
- REQUEST [speed]

When using CPDLC, the maximum dialogue time is 120 seconds. CPDLC shall only be used for non-time-critical requests, i.e. requests that do not require the immediate reaction of the controller. Nevertheless, as in radiotelephony CPDLC messages shall be answered with the least possible delay. If the downlink request is cut off because the time limit was exceeded, the pilot should also repeat the request via radiotelephony.

3.3 Broadcasting service

The following broadcasts are available for the use of aircraft in flight:

- a. VHF RTF Meteorological Broadcast (VOLMET). Full details are given in [GEN 3.5](#).
- b. Automatic Terminal Information Service (ATIS) [See AD 2-LHBP AD-2.18](#)

3.4 Language(s) used

The language used is English.

3.5 Where detailed information can be obtained

HungaroControl, Hungarian Air Navigation Services Private Limited Company

Post:H-1675 Budapest PO Box 80

URL:<http://ais-en.hungarocontrol.hu>

4. REQUIREMENTS AND CONDITIONS

The requirements of the General Directorate of Civil Aviation and general conditions under which the communication services are available for international use, as well as the requirements for the carriage of radio equipment, conform with the provisions of ICAO Annex 10 - Aeronautical Telecommunications - and ICAO Annex 6 - Operation of Aircraft respectively.

Aeronautical Fixed Services										
Station			Correspondent		Type of channel	Radio Frequency		Type of traffic	Hours	Remarks
Name	Location Indicator	Call sign	Name	Call sign		Trans. KHZ	Rec. KHZ			
Budapest			Arad Beograd Bratislava Lviv Vienna Zagreb		LTF			ATS	H24	
BudapestLiszt Ferenc International Airport	LHBP		Beograd Bucuresti Moscow Praha		LTTdx			AFTN	H24	Emergency to: (61) 224054 Answer back code: airpt h

5. MISCELLANEOUS

NIL

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