341-500-2023 ELN-429-1/2023.



LETTER OF AGREEMENT



between

Hungarian Meteorological Service

and

Slovak Hydrometeorological Institute

MWO BRATISLAVA

MWO BUDAPEST

Effective: **1.10.2023**

Revised:

1 General

1.1 Purpose

The purpose of this Letter of Agreement (hereinafter: LoA) is to define the coordination procedures to be applied between Meteorological Watch Office Budapest (hereinafter: MWO Budapest) and Meteorological Watch Office Bratislava (hereinafter: MWO Bratislava) when issuing SIGMET messages.

In order to prevent inconsistencies between Slovak and Hungary SIGMETs concerning observed or forecasted cross border weather phenomena, coordination between meteorologists of the aviation weather services of Hungarian Meteorological Service and Slovak Hydrometeorological Institute is deemed necessary. Such coordination aims to provide consistent forecasts of hazardous phenomena which ensures that all stakeholders, especially operators and air traffic control service providers, are basing their decisions on consistent, coherent, consolidated and harmonized meteorological information.

These procedures are supplementary to those specified in ICAO, relevant EU legislation and/or National documents.

1.2 Operational status

Both MWOs shall keep each other advised of any changes in the operational status of their facilities that may affect the procedures specified in this LoA.

2 Areas of Responsibility for the Provision of Meteorological Support to Air Navigation

2.1. Areas of Responsibility

The lateral and vertical limits of the respective areas of responsibility (hereinafter: AoR) are as follows:

MWO Budapest is responsible for issuing SIGMET messages within the limits of BUDAPEST FIR/UIR:

Lateral limits: As published in AIP Hungary, Vertical limits: As published in AIP Hungary.

MWO Bratislava is responsible for issuing SIGMET messages within the limits of BRATISLAVA FIR/UIR:

Lateral limits: As published in AIP Slovakia, Vertical limits: As published in AIP Slovakia.



Fig. 1.: Map of Bratislava FIR and Budapest FIR

3 Procedures

3.1 The procedures to be applied by MWO Budapest and MWO Bratislava when issuing SIGMET messages are detailed in the following Annexes to this LoA:

Annex A:

Definitions and Abbreviations

Annex B:

Exchange of SIGMET messages

Annex C:

Procedures for SIGMET Coordination

Annex D:

Sentences for the SIGMET coordination information phone call between

MWO Bratislava and MWO Budapest

Annex E:

Contact persons

3.2 The operational staff of the MWOs concerned, shall be informed about these procedures.

4 Revision

When deemed necessary by the Signatories, the content of the present LoA can be reviewed at regular intervals to assess the need for revisions of the LoA and its Annexes.

4.1 Revisions of the LoA

The revisions of the present LoA, excluding Annexes, require the prior mutual written consent of the Signatories.

4.2 Revision of the Annexes to the LoA

The revision of Annexes to this LoA requires the prior mutual written authorisation of the representatives designated for the purpose by the respective Signatories Authorities.

The Annexes can be revised upon authorisations of the Head MWO Budapest on behalf of Hungarian Meteorological Service and the Head of MWO Bratislava on behalf of Slovak Hydrometeorological Institute.

5 Term and termination

- 5.1 This LoA shall enter into force, and the first initial phase (defined in Appendix C, C.1.1) of SIGMET coordination shall begin on 1st October 2023. It is concluded for an indefinite period of time and shall remain effective until its termination or cancellation.
- Termination of the present LoA by mutual agreement of the respective Signatories may take place at any time.
- 5.3 Cancellation of this present LoA by either Signatory is possible at any time, provided that the cancelling party declares its intention to cancel the LoA in a written form with a minimum prenotification time of 30 days before the date the cancellation is to take effect.

6 Costs

Each Signatory shall bear its own costs and expenses pertaining to this LoA unless otherwise specified.

7 Use and non-disclosure of information

- **7.1** A Signatory receiving information provided under this LoA (the Receiving Signatory) shall not use such information for any purpose other than specified in this LoA.
- 7.2 When providing or receiving information under this LoA, each Signatory shall ensure that such provision or receipt of information will not result in this Signatory's breach of its obligations under law, administrative act or contractual agreement, or internal rules and regulations including privacy obligations.

8 Liability

Each Signatory is responsible to carry out its own obligations related to SIGMET production. In case of any failure or default in the performance no liability can be transferred to the other Signatory under this LoA.

9 Settlement of Disputes

9.1 Any difference or dispute between the Signatories concerning the interpretation and/or implementation and/or application of any of the provisions of this LoA shall be settled amicably through mutual consultation and/or negotiations between the Signatories.

10 Other provisions

- 10.1 The LoA is written in English language in four (4) originals, each Signatory shall obtain two (2) of them.
- 10.2 The Signatories declare that this LoA was made out on the basis of their true will in witness of which the authorised representatives add their signatures.

2023 -10- 27

0 3 OKT. 2023

Gábor Gyula Szanka

President

Hungarian Meteorological Service

Martin Benko
Director of
Slovak Hydrometeorological Institute

RECORD OF AMENDMENTS

Date	Annex	Page No.				
		modified	added	cancelled		
		2				
+						
1						
	Date	Date Annex	New ed	New edition		

Annex A

Definitions and Abbreviations

Effective: 1.10.2023

Revised:

A.1 Definitions

A.1.1. SIGMET message

Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather phenomena which may affect the safety of aircraft operations.

A.2 Abbreviations

FIR Flight Information Region

UIR Upper Flight Information Region

ICAO International Civil Aviation Organisation

LoA* Letter of Agreement

MWO Meteorological Watch Office

Annex B

Exchange of SIGMET messages

Effective: 1.10.2023

Revised:

B.1 Means of Communication

The following means of communication are available between the two MWOs:

MWO	TELEPHONE NUMBER	AFTN ADDRESS		
MWO BUDAPEST	+36 1 346 4655	LHBMYMYC		
MWO BRATISLAVA	+421 2 4857 4264 +421 905 713 238	LZIBYMYX		

Annex C

Procedures for SIGMET Coordination

Effective: 1.10.2023

Revised:

C.1 General Conditions

- C.1.1 In the first initial phase it seems to be sufficient to have a quite simple coordination process, consisting of a short phone call just notifying and explaining the SIGMET one of both MWOs has issued. This procedure can be enhanced sometime at a later stage when it is assumed that the forecasters of both offices are sufficiently familiar with the coordination process and willing to go more into detail.
- **C.1.2** It has been agreed that MWO Budapest and MWO Bratislava shall coordinate the necessary SIGMETs with regard to weather phenomena concerning Budapest FIR and Bratislava FIR. The areas of responsibilities for each MWO are defined in LoA part 2 Areas of Responsibility for the Provision of Meteorological Support to Air Navigation.
- **C.1.3** For a fruitful collaboration it shall be noted that professional approach includes acknowledgement of the validity of additional opinions from fellow professionals. Therefore the forecasters of one MWO shall always be receptive and open-minded to the ideas/opinions of the forecasters of the adjacent MWO.

C.2 The coordination procedure

- **C.2.1** MWO Budapest and MWO Bratislava shall coordinate the SIGMETs with regard to weather phenomena concerning Budapest FIR and Bratislava FIR. The coordination process is initiated when either MWO Budapest or MWO Bratislava issued a SIGMET for the own FIR which may also affect the other FIR and vice versa. The coordination should be done via phone calls.
- C.2.2 The phone calls is initiated by respective MWO after issuing SIGMET as soon as possible with regard to the working schedules. The caller should clearly identify who is calling, from which MWO and State. It should also be clearly stated that the purpose of the call is SIGMET coordination and the phone calls should content base information about issued SIGMET (phenomenon*, validity, vertical scale, movement etc.) and the reason of issuing SIGMET. For this first initial phase it is not intended to discuss on content or location etc. The short call should just be for information only and be a possibility to start to get to know each other.
- NOTE: The adjacent MWO should also be consulted in relation to any cancellation and reissuance of SIGMET that may affect the neighbouring states' area of responsibility.
 - *Phenomenon includes one of the following: TS/TSGR, TURB, ICE (FZRA), MTW, DS, SS, VA and RDOACT CLD.
- **C.2.3** The goal of the phone calls, initiated by the respective MWO, is to reach a consensus about the content (validity period, geographical area and vertical scale) of the SIGMETs, in order to provide consistent information to the aviation community.

C.2.4 When it is estimated that a phenomenon observed and/or expected to justify a SIGMET or VA SIGMET may also affect the adjacent FIR, MWO Budapest or MWO Bratislava shall initiate a phone call as soon as possible with regard to the working schedules.

NOTE: If the SIGMET is forecasted and the meteorologist is not under the pressure of time, it is recommended that telephone call be made before the SIGMET message is issued.

C.3 Language

The language under which coordination will take place is English.

C.4 Responsibilities

Each MWO retains the right to issue SIGMET at its final discretion within its AoR when the MWOs involved cannot agree on the content of SIGMET message.

Annex D: Sentences for the SIGMET coordination information phone call between MWO Bratislava and MWO Budapest

Effective: 1.10.2023 Revised:

- (OBSC TS) obscured thunderstorms I issued a SIGMET for:

- (OBSC TSGR) obscured thunderstorms with hail

- (EMBD TSGR) embedded thunderstorms with hail - (EMBD TS) embedded thunderstorms

- (FRQTSGR) frequent thunderstorms with hail - (FRQ TS) frequent thunderstorms

- (SQL TSGR) squall line thunderstorms with hail - (SQL TS) squall line thunderstorms

which is affecting your FIR.

estimated from: Fops are about:

- satellite top temperature measurements

- radar top reflectivity

- xxxxxFT

- FLxxx

- soundings measurements

model output soundings

at:	- FLxxx	- xxxxFT	:			between:	- FLxxx & FLxxx	- xxxxFT & xxxxFT		
in the:		- western part of Slovakia		- SW part of Slovakia		- whole FIR Bratislava		1		
about severe:	from: - icing	- turbulence	- mountain waves		observation of freezing precipitation		of severe:	- icing	- turbulence	
Special Airep (pilot about severe:	report) from:	- Boeing xxx	- Airbus xxx				[Aladin/WAFS/]	model output that	calculates high	probability
The reason for the SIGMET is										
which is affecting your FIR.										
l issued a SIGMET for severe:		- (SEV TURB) turbulence		- (SEV ICE) icing		- (SEV MTW) mountain wave				

due to observation of this phenomenon. which is affecting your FIR - (HVY DS) heavy duststorm - (HVY SS) heavy sandstorm I issued a SIGMET for:

- dispersion model of radioactive cloud - dispersion model of volcanic ash - volcanic ash advisory according to: which is affecting your FIR - (RDOACT CLD) radioactive cloud I issued a SIGMET for: - (VA) volcanic ash

Example of telephone call:

Hello! This is XY from SHMU. I issued SIGMET for FRQ TS which is touching your (LHBP) FIR. Tops are about 39000 FT estimated from radar top reflectivity. Ά.

OK XY, thank you for information.

Annex E

Contact persons

Effective: 1.10.2023

Revised:

E.1 Contacts

Persons who can be notified on behalf of Hungarian Meteorological Service and Slovak Hydrometeorological Institute if necessary:

NAME/TITLE	TELEPHONE NUMBER	E-MAIL ADDRESS
ADAM VLADÁR Director of Aeronautical MET Service Slovak Hydrometeorological Institute	+421 2 5941 5261 +421 917 873 540	adam.vladar@shmu.sk
LÍVIA BERÉNYI Head of Unit of Aviation Meteorology Hungarian Meteorological Service	+36 1 346 4654 +36 70 387 1802	berenyi.l@met.hu



PÍSOMNÁ DOHODA



medzi

Hungarian Meteorological Service

a

Slovenským hydrometeorologickým

ústavom

MWO BUDAPEST

MWO BRATISLAVA

Účinnosť: 1.10.2023

Revízia:

Všeobecný popis

Účel

Účelom tejto písomnej dohody (ďalej LoA) je stanovenie koordinačných postupov, ktoré budú aplikované medzi pracoviskom meteorologickej výstražnej služby Budapešť (MWO Budapest) a pracoviskom meteorologickej výstražnej služby Bratislava (MWO Bratislava), pri vydávaní informácií SIGMET. Informácie SIGMET sú informácie o meteorologických javoch na trati lietadiel, ktoré môžu ovplyvniť bezpečnosť prevádzky lietadiel).

V záujme predísť nekonzistentnostiam medzi informáciami SIGMET, vydanými Maďarskom a Slovenskom, týkajúce sa pozorovaných alebo predpovedaných fenoménov počasia vzájomne presahujúcich hranice štátov, je nevyhnutná spolupráca meteorológov leteckej meteorologickej služby Maďarskej meteorologickej služby a Slovenského hydrometeorologického ústavu.

Táto spolupráca má zaručiť konzistentné predpovede nebezpečných javov, čo zabezpečí že všetky dotknuté subjekty, hlavne leteckí prevádzkovatelia a poskytovatelia leteckých prevádzkových služieb, vykonávajú svoje rozhodnutia na konzistentných, súvislých, konsolidovaných a harmonizovaných meteorologických informáciách.

Tieto postupy sú doplňujúce k postupom, špecifikovaných v ICAO, relevantnej EU legislatíve a/alebo v Národnej legislatíve.

Dohoda neobsahuje finančné plnenie. Začiatok účinnosti dohody je 1.10.2023 a platnosť trvá do odvolania.