



Agenda

- Item 3: Report of activities and deliverables of the Interop TF and Subgroups
d) Formulation of the 2022 Work Plan.**

WORK PLAN 2022 OF THE INTEROP TF

Inclusion of the Date of Flight (DOF) field for the Acceptance message format (ACK)

(Presented by Ecuador)

SUMMARY

This working paper presents an analysis to include the date of flight (DOF), in the ACK message, in order there to be a correlation and correspondence with the flight plan presented by the air operator.

References:

- Final Report of the SAM/IG/25 Meeting (Virtual, 2 to 4 November, 2020)
- Second Workshop/Meeting of the Interoperability Task Force Subgroups (GT Interop/2) (Virtual, 9 to 13 August 2021)
- Virtual Seminar on Centralization of Flight Plan Management (29 to 31 March 2021)
- ATM/FPL roadmap version 1.1 (October 2020)

1. Background

1.1 Within the framework of the SAM Region Implementation Group (SAM/IG), the ATM/FPL Subgroup of the Interoperability Task Force (GT Interop) was activated to deal with issues related to the mitigation of errors and duplication/multiplicity flight plans, as well as issues related to the centralization of flight plan management and associated messages.

1.2 The ATM/FPL Subgroup by means of teleconferences has discussed the centralization of the management of flight plans and associated messages and a proposal for a standard format for messages of acceptance (ACK) or rejection (REJ) of flight plans, providing feedback to flight plan originators.

1.3 During the 25th Workshop/Meeting of the SAM/IG/25 Implementation Group, carried out from 2 to 4 November, 2020, the approval of the ATM/FPL Roadmap and the message format for acknowledgment of receipt (ACK) and rejection (REJ) of flight plans and associated messages, was established through conclusion 25-06.

1.4 To reduce errors and duplication/multiplicity of flight plans, it has been considered to follow the best practices of the industry when delegating the reception of flight plans via AFTN/AMHS between the ANSPs and the users, in accordance with the stipulations. in ICAO Document 4444 Air Traffic Management, Chapter 11 part 11.2.1.1.1, in which the airlines that have the capacity, assume

the responsibility of correctly transmitting the flight plan, movement and control messages to all the ATS units involved.

2. Analysis

2.1 The acceptance message (ACK) is a means by which the originator of the flight plan is informed that the message has complied with the established formats and the successful processing, this message can be automatically given by a flight plan validation system or manually by the respective delegates.

2.2 Chapter 4 "General provisions for Air Traffic services" of Doc 4444, in part 4.4.2.1.1, establishes that flight plans will not be submitted more than 120 hours in advance of the estimated time off blocks of a flight and in this context, air operators have the possibility of sending flight plans to the ATS systems in advance of the departure date.

2.3 Having multiple flight plans in advance for the same flight on different days and in certain cases with the same EOBT, can cause confusion for both the originator and the FPL validator when receiving or sending the ACK message, because the DOF field will not be included in the message.

2.4 The messages of movement transmitted by the air operators will be reviewed in the ARO/AIS offices by the AIS officers and after these messages are reviewed and accepted, the AIS officers will proceed to respond to the air operators, via AMHS/AFTN, with messages of acceptance - ACK, or rejection - REJ, to the messages of movement.

2.5 The template example for the ACK message proposed in the roadmap is as follows:

Message Description: **ACK FPL SPIM CMP124 SPJC 1645 MPTO**

Response type = ACK
 Message type = FPL
 FIR emitting MSG = SPIM
 Flight ID = CMP124
 DEP Aerodrome = SPJC
 EOBT = 1645
 ARR Aerodrome = MPTO

2.6 Currently, air operators generate different categories of messages of movement that the DOF field contains, such as:

— presented flight plan message

06-09-21 20:38:42 lat.
 CCR3258 062038
 FF SCFZZRZX SCFZZQZX SCARZPZX SCDAZRZX SPIMZRZX SPIMZQZX SEFGZQZX
 062038 KTULSBGC
 (FPL-LAN603-IS
 -B789/H-SDE1E2GHIJ1J4J5M1RWXYZ/LB1D1V1
 -KLAX2245
 -N0507F330 PNDAH2 OTAYY DCT TIJ J1 SJD UL312 SIBAU/N0492F370
 UL312 UKABO UL401 ESDIN/N0486F390 UL401 ANPUK/N0493F390 UL401
 VTN UV206 TBN DCT
 -SCEL0956 SCFA
 -PBN/A1B1D1S2 NAV/RNVD1E2A1 DAT/1FANS SUR/ 260B **DOF/210906**
 REG/CCBGP EET/MMFR0022 MMEX0215 MHCC0337 SEFG0519 SPIM0558

SCFZ0753 SCEZ0907 SEL/CDGJ CODE/E80468 OPR/LAN PER/D RALT/KLAX
MMM MROC SEGU SPSO SCFA RMK/TCAS EQUIPPED)

— **delay message**

06-09-21 20:34:38 lat.
CCR3249 062034
FF SEFGZQZX SEGUZEZV SEGUZPZX SEQMZPZN SKECZQZX SKEDZQZX SPIMYSYA
SPIMYSYB SPIMYSYF SPIMZDZX SPIMZQZC SPIMZRZX SPJCZXRA SPJCZXR B SPLICIDF
SPSOZTZ
062034 SPIMZQZA
(DLA-N494GP/A5663-SPHI2035-SKRG-**DOF/210906**)

— **modification message**

06-09-21 13:32:22 lat.
CCR1945 061330
FF SEMTZZZX SEQUYFYX SEQUZEZX SPIMZQZX SPIMZRZX SEFGZQZX
061330 KTULSBGC
(CHG-LPE2416-SPJC1415-SEGU-DOF/210906
-16/SEGU0144 SKCL
-18/PBN/A1B1D1S2T1 SUR/260B **DOF/210906** REG/CCBFI EET/SEFG0114
SEL/BCAH CODE/E80207 OPR/LPE PER/C RMK/TCAS EQUIPPED

— **flight plan cancellation message**

06-09-21 22:09:31 lat.
CCR3527 062209
FF SCEZZQZX SCFZZQZX SPIMZPZX SPJCYOYX SEFGZQZX MHCCZQZX MHCCZFZX
MHFPZYX MMIDZRZX MMFRZQZX MMEXZRZX MMZTZRX KZLAZQZX KCMHGOOD
KDENLXDX KNPAXAAF
062209 KCMHGOOD
(CNL-SOO8028-SCEL0235-KLAX-**DOF/210907**)

— **Departure message**

07-09-21 19:52:28 lat.
CCR2689 071952
FF SBZZQZX SBPHZQZX SCDAZRZX SCELZTZ SCEZZQZX SCFZZQZX SEFGZQZX
SKEDZQZX SPIMZQZX
071952 SKEDZQZX
(DEP-JAT641/A2234-SKBO1954-SCEL-**DOF/210907**)

— **Arrive message;**

07-09-21 18:17:28 lat.
CCR2457 071817
FF SEFGZQZX
071817 SEGSZPZG
(ARR-GLG1632-SEGU-SEGS1817-**DOF/210907**)

2.7 Chapter 11 “Messages of the Air Traffic Services”, Doc 4444, part 11.2.2.1, stipulates that ATS messages will be prepared and transmitted according to standard format and texts, and in accordance with the conventional representation of data in cases and conditions prescribed in Appendix

ATS STANDARD MESSAGES AND THEIR COMPOSITION

MENSAJES NORMALIZADOS ATS Y SU COMPOSICIÓN

DESIGNADOR	TIPO DE MENSAJE	CAMPOS DE MENSAJE																						NUMEROS DE LOS TIPOS DE CAMPO
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
ALR	Alerta			3		5	7	8	9	10				13		15	16		18	19	20			Mensajes de emergencia
RCF	Falta de radiocomunicaciones			3			7															21		Mensajes de emergencia
FPL	Plan de vuelo presentado			3			7	8	9	10				13		15	16		18					Mensajes de plan de vuelo presentado y mensajes de actualización correspondientes
DLA	Demora			3			7							13			16		18					
CHG	Modificación			3			7							13			16		18			22		
CNL	Cancelación de plan de vuelo			3			7							13			16		18					
DEP	Salida			3			7							13			16		18					
ARR	Llegada			3			7							13			16	17						
CPL	Plan de vuelo actualizado			3			7	8	9	10				13	14	15	16		18					Mensajes de coordinación
EST	Estimación			3			7							13	14		16							
CDN	Coordinación			3			7							13			16					22		
ACP	Aceptación			3			7							13			16							
LAM	Mensaje de acuse de recibo lógico			3																				
RQP	Solicitud de plan de vuelo			3			7							13			16		18					Mensajes suplementarios
RQS	Solicitud de plan de vuelo suplementario			3			7							13			16		18					
SPL	Plan de vuelo suplementario			3			7							13			16		18	19				

Este campo se empieza en una línea nueva cuando se imprime el mensaje en las copias de página de los teletipos.
 Este campo se repite según sea necesario.

2.8 ACK messages are not defined in ICAO Doc. 4444 that allow a receiving ATS/AIS unit to respond to flight planning message, therefore, the inclusion of the DOF field in the ACK message with the following format, is submitted to the consideration to the ATM/FPL sub-group:

(ACK FPL LNE1405 SEQM2116 SECU DOF/210916)

2.9 The benefits included in the flight planning response message will be:

- Guarantee to the declarants of the flight plan of the correct processing of the information sent.
- Feedback to help aircraft operators correct mistakes.
- Harmonize the appropriate format in the Region.
- Reduced workload on ATC controllers, AIS officers and aircraft operators due to the existence of a consistent flight plan without errors.
- Replies can be sent to multiple addresses.

2.10 ACK messages received and sent, including the DOF field:

09-09-21 10:00:12 lat.
 CCR1247 091000
 FF SEFGZQZX
 091000 MHCCZQZX
 (ACK DEP-TAI592-SEGU1000-MSLP-DOF/210909)

18-09-21 16:15:37 lat.
CCR2084 121615
FF KTULAALD
121615 SEQMZPZO
(ACK FPL AAL2161 SEQM2005 KMIA DOF/210918)

17-09-21 10:00:12 lat.
CCR1247 091000
FF KTULSBGC
091000 SEQMZPZO
(ACK FPL LNE1401 SEQM1125 SEGU DOF/210917)

261020 021635
SEGUZPZX
(ACK FPL SEFG JBU1770 SEGU0250 JFK DOF/201026)

261020 090053
SEGUZPZX
(ACK FPKL SEFG CMP310 SEGU1154 MPTO DOF/201026)

261020 153512
SEGUZPZX
(ACK FPL SEFG LPE2439 SEQM2146 SPJC DOF/201026)

261020 163728
SEGUZPZX
(ACK FPL SEFG CMP828 SEQM1934 MPTO DOF/201026)

261020 222032
SEGUZPZX
(ACK FPL SEFG RPB7064 SEQM0142 SKBO DOF/201027=)

3. **Suggested Action**

3.1 The Meeting is invited to:

- a) Analyze the working paper on the inclusion of the DOF field in the ACK message;
and
- b) Request the SAM States to evaluate its inclusion in the ATM/FPL roadmap and its possible regional application.