Propunere amendament nr.02 la
cerințele tehnice ”Asistența meteorologică a activităților aeronautice civile”

Se propune modificarea cerințelor tehnice ”Asistența meteorologică a activităților aeronautice civile” ediția 03, aprobate prin Ordinul AAC nr.37/GEN din 06.12.2018, publicat în Monitorul Oficial nr.462-466/1769 din 12.12.2018 ca urmare a adoptării amendamentului nr.79 la Anexa 3 OACI, ”Asistența meteorologică a activităților aeronautice internaționale”.

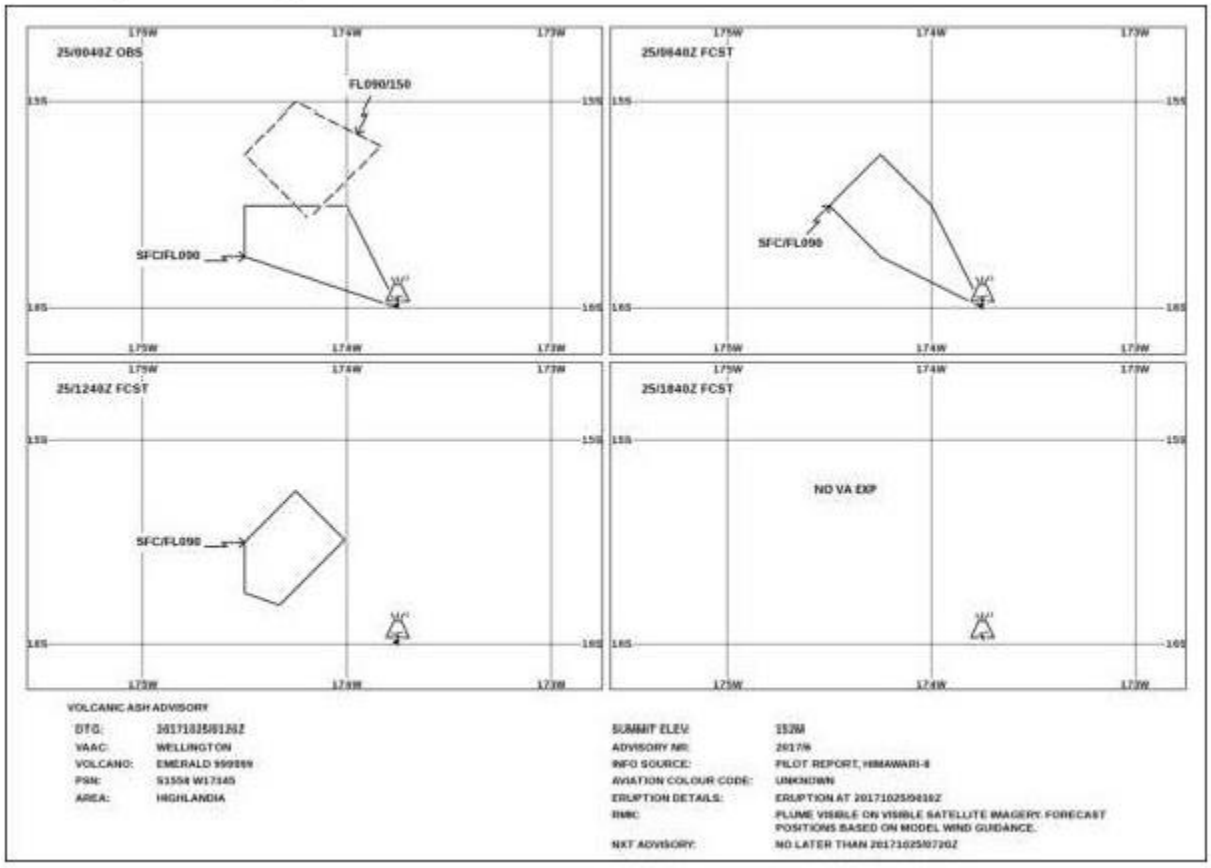
1. Punctul 1 din Preambul, cuvintele ”inclusiv amendamentul nr.77-B și nr.78” se substituie cu cuvintele ”inclusiv amendamentul nr.79”.
2. Capitolul 1 punctul 1.1 subpunctul 12), se exclud cuvintele ”în urma unei erupții vulcanice”.
3. Capitolul 2 punctul 2.2.3 se completează cu Nota care va avea următorul cuprins:
”*Notă: Materiale de îndrumare cu privire la stabilirea și implementarea unui sistem de management al calității se regăsesc în Ghidul pentru implementarea sistemelor de management al calității pentru Serviciile meteorologice și hidrologice naționale și alți furnizori de servicii relevanți (WMO-nr. 1100).”*
4. Capitolul 3 se completează cu punctul 3.4.4 care va avea următorul cuprins:
”3.4.4 În scopul furnizării armonizate a informațiilor SIGMET, centrul de veghe meteorologică aeronautică trebuie să coordoneze informațiile SIGMET cu centrele de veghe meteorologică învecinate, în special atunci când fenomenul meteorologic pe o rută se extinde sau se prognozează extinderea acestuia dincolo de limitele zonei de responsabilitate a centrului de veghe meteorologică aeronautică.”
5. Apendicele 1, Tabelul la început de apendice va avea următorul cuprins:

MODELUL A	Informaţia OPMET
MODELUL IS	Harta vântului şi a temperaturii aerului la nivele înalte, pentru suprafaţa izobarică standard. Exemplul 1. Proiecţia Mercator Exemplul 2. Proiecţia stereografică polară
MODELUL SWH	Harta fenomenelor meteorologice semnificative. Exemplu. Proiecţia stereografică polară (care arată gradul de extindere verticală a curentului jet)
MODELUL SWM	Harta fenomenelor meteorologice semnificative (nivele medii)
MODELUL SWL	Harta fenomenelor meteorologice semnificative (nivele joase) Exemplul 1 Exemplul 2
MODELUL TCG	Informaţii consultative referitor la ciclonul tropical în format grafic
MODELUL VAG	Informaţii consultative referitor la cenuşa vulcanică în format grafic Exemplul 1. Proiecția Mercator Exemplul 2. Proiecția stereografică polară
MODELUL STC	SIGMET pentru ciclonul tropical în format grafic
MODELUL SVA	SIGMET pentru cenuşa vulcanică în format grafic Exemplul 1. Proiecția Mercator Exemplul 2. Proiecția stereografică polară
MODELUL SGE	SIGMET pentru fenomene meteorologice semnificative altele decât ciclonul tropical şi cenuşa vulcanică
MODELUL SN	Foaie de notaţii utilizate în documentaţia de zbor

6. Apendicele 1, imaginea pentru Informații consultative referitor la cenușa vulcanică în format grafic **Modelul VAG** se substituie cu două imagini noi care vor va avea următorul cuprins:

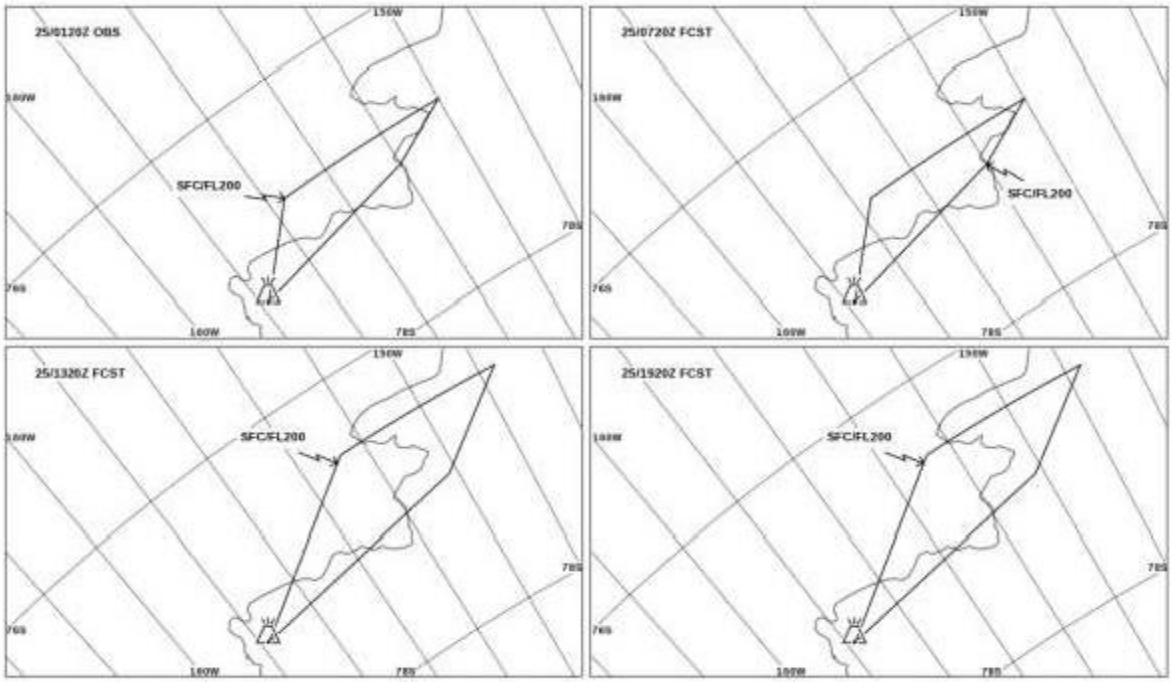
Informații consultative referitor la cenușa vulcanică în format grafic **MODELUL VAG**

Exemplul 1. Proiecția Mercator



Informații consultative referitor la cenușa vulcanică în format grafic **MODELUL VAG**

Exemplul 2. Proiecția stereografică polară



VOLCANIC ASH ADVISORY

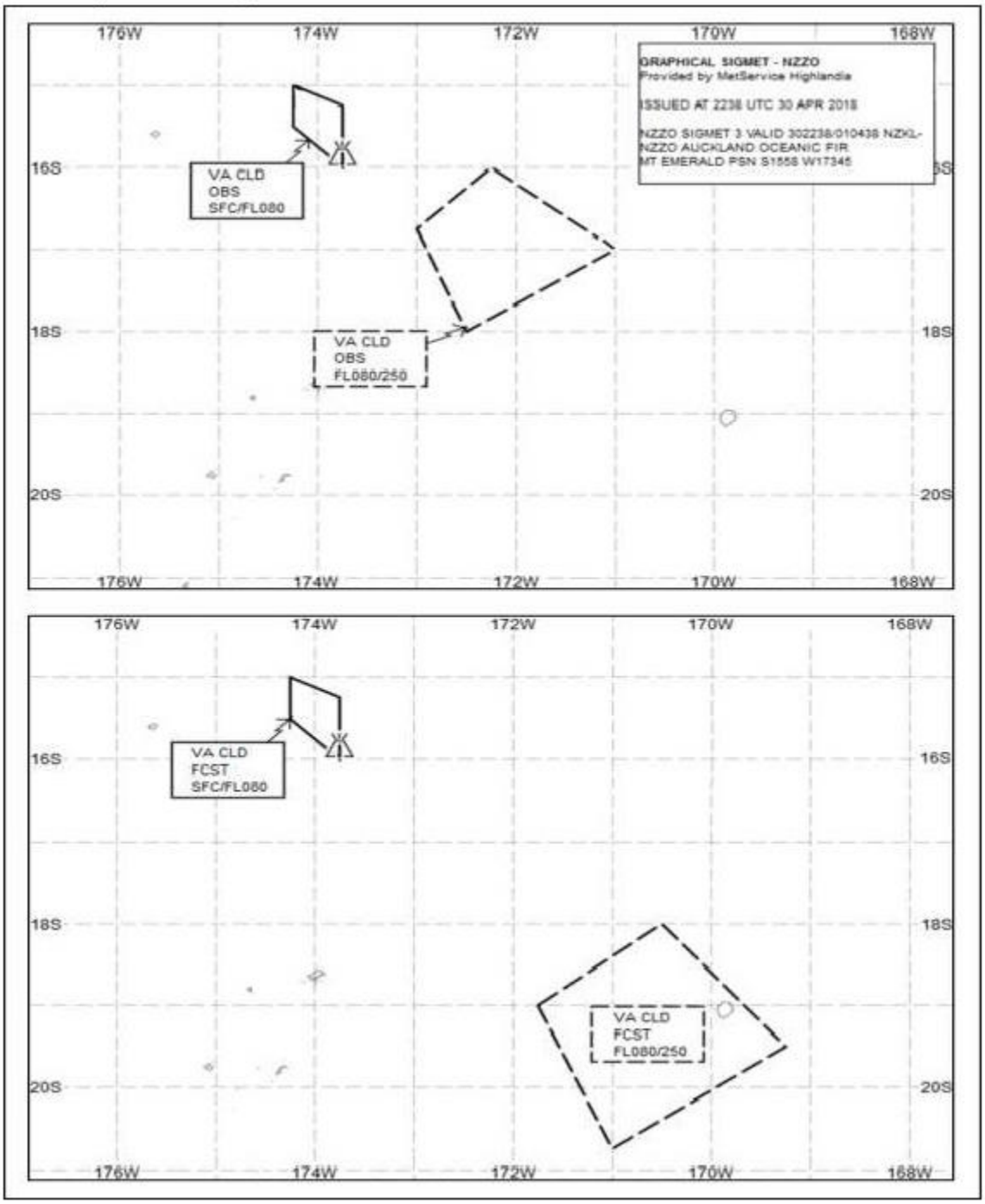
DTG:	20171025/0115Z
VAAC:	WELLINGTON
VOLCANO:	SAPPHIRE 999999
PSN:	S7715 W15747
AREA:	LOWLANDIA

SUMMIT ELEV:	321M
ADVISORY NR:	2017/7
INFO SOURCE:	SATELLITE IMAGERY
AVIATION COLOUR CODE:	UNKNOWN
ERUPTION DETAILS:	CONTINUOUS EMISSIONS TO FL200
RMK:	VA PARTIALLY OBSCURED BY MET CLOUD ALONG SOUTHERN BOUNDARY.
NXT ADVISORY:	NO LATER THAN 20171025/0735Z

7. Apendicele 1, imaginea pentru SIGMET pentru ciclonul tropical în format grafic în format grafic **Modelul SVA** se substituie cu două imagini noi care vor va avea următorul cuprins:

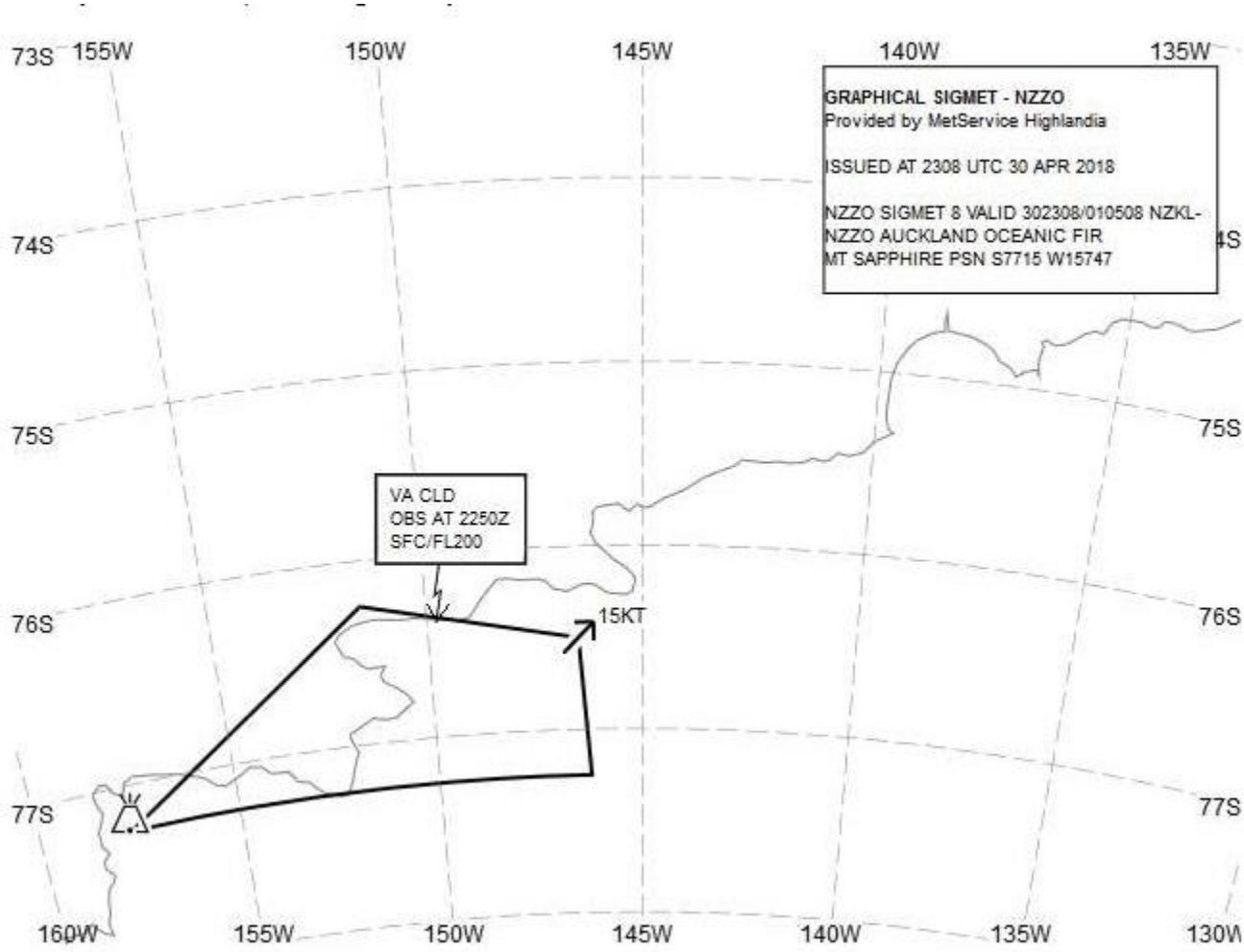
SIGMET pentru cenușa vulcanică în format grafic **MODELUL SVA**

Exemplul 1. Proiecția Mercator



SIGMET pentru cenușa vulcanică în format grafic **MODELUL SVA**

Exemplul 2. Proiecția stereografică polară



8. Apendicele 2 Capitolul 1 punctul 1.2 subpunctul 1.2.1, se exclud cuvintele ”puterea” și ”în aer și liber și în nori” și se completează cu o propoziție nouă care va avea următorul cuprins: ”Fiecare prognoză trebuie să fie diseminată cât mai curând posibil din punct de vedere tehnic, dar nu mai târziu de 5 ore după ora standard de observare.”

9. Apendicele 2 Capitolul 1 punctul 1.2 subpunctul 1.2.1 lit.f), se completează cu Nota care va avea următorul cuprins: ”*Notă: Straturile centrate la un nivel de zbor menționat la lit.f) au o grosime de 100hPa*.”

10. Apendicele 2 Capitolul 1 punctul 1.2 subpunctul 1.2.1 lit.g), va avea următorul cuprins:
”g) turbulenţa pentru straturile centrate la nivelele de zbor 100 (700hPa), 140 (600hPa), 180 (500 hPa), 240 (400 hPa), 270 (350 hPa), 300 (300 hPa), 340 (250 hPa), 390 (200 hPa) şi 450 (150 hPa); și
Nota 1. Straturile centrate la un nivel de zbor menționat la lit.g) au o grosime de 100 hPa pentru nivelurile de zbor sub 240 și de 50 hPa pentru nivelurile de zbor de 240 și mai sus.
Nota 2. Turbulența menționată la lit.g) cuprinde toate tipurile de turbulență, inclusiv cea în aer liber și în nori.”

11. Apendicele 2 Capitolul 1 punctul 1.2 subpunctul 1.2.1 lit.i) devine litera h) care se completează cu Nota care va avea următorul cuprins: ”*Notă. Nivelurile de presiune exacte (hPa) pentru lit. a), d), f), g) și h) se regăsesc în Manualul de practici meteorologice aeronautice (Doc 8896).*

12. Apendicele 2 Capitolul 1 punctul 1.2 subpunctul 1.2.4, cuvintele ”de mai sus” se substituie cu cuvintele ”de la lit. a), b), c), d) și h)”.

13. Apendicele 2 Capitolul 1 punctul 1.2, se completează cu subpunctul 1.2.5 care va avea următorul cuprins: ”1.2.5 Prognozele în punctul de grilă de la lit. e), f) și g) sunt pregătite de un WAFC într-o reţea regulată cu o rezoluţie orizontală de 0,25° latitudine şi longitudine.”

14. Apendicele 2 Capitolul 1 punctul 1.3 subpunctul 1.3.1.1 va avea următorul cuprins: ” Prognozele pentru fenomenele meteorologice semnificative pe rută trebuie să fie elaborate ca şi prognoze SIGWX de 4 ori pe zi şi trebuie să fie valide pentru perioade fixe de valabilitate de 24 de ore după momentul de timp (0000, 0600, 1200 şi 1800 UTC) la care au fost colectate datele sinoptice, care au stat la baza prognozelor. Fiecare prognoză trebuie să fie diseminată cât mai curând posibil din punct de vedere tehnic, dar nu mai târziu de 7 ore după ora standard de observare în condiții normale de operare și nu mai târziu de 9 ore după ora standard de observare în timpul operațiunilor de backup.”

15. Apendicele 2 Capitolul 1 punctul 1.3 se completează cu subpunctul 1.3.1.3 care va avea următorul conținut: ”Începând cu data de 4 noiembrie 2021, prognozele SIGWX trebuie să fie diseminate în formatul IWXXM GML, adițional la emiterea acestora în conformitate cu 1.3.1.2.
Nota 1. Ghidul privind punerea în aplicare a IWXXM este prevăzut în Manualul privind modelul de schimb de informații meteorologice OACI (IWXXM) (Doc 10003).
Nota 2. Limbajul de marcare geografică (Geography markup language-GML) este un standard de codificare al Consorțiului geospațial deschis (Open Geospatial Consortium-OGC).”

16. Apendicele 2 Capitolul 2 punctul 2.1 subpunctul 2.1.2 va avea următorul cuprins: ”Pentru a asigura uniformitatea şi standardizarea documentaţiei de zbor, datele WAFS, GRIB şi BUFR și începând cu data de 4 noiembrie 2021 datele IWXXM primite, trebuie să fie decodificate în forma standard a hărţilor WAFS în conformitate cu prevederile prezentelor CT-MET şi a procedurilor specifice aplicabile şi conţinutul meteorologic precum şi identificarea originatorului prognozelor WAFS nu trebuie să fie schimbat.

17. Apendicele 2 Capitolul 2 punctul 2.2, după cuvintele ”WAFS BUFR” se completează cu cuvintele ”și începând cu data de 4 noiembrie 2021 date IWXXM”.

18. Apendicele 2 Tabelul A2-1. Model pentru mesajul consultativ privind cenușa vulcanică va avea următorul cuprins:

Tabelul A2-1. Model pentru mesajul consultativ privind cenuşa vulcanică

Key: M = inclusion mandatory, part of every message;
O = inclusion optional;
C = inclusion conditional, included whenever applicable;
= = a double line indicates that the text following it should be placed on the subsequent line.

Note 1.— The ranges and resolutions for the numerical elements included in advisory messages for volcanic ash are shown in Appendix 6, Table A6-4.

Note 2.— The explanations for the abbreviations can be found in the Procedures for Air Navigation Services — ICAO Abbreviations and Codes *(PANS-ABC, Doc 8400).*

Note 3.— Inclusion of a colon after each element heading is mandatory.

Note 4.— The numbers 1 to 19 are included only for clarity and are not part of the advisory message, as shown in the examples.

Element		*Detailed content*	*Template(s)*	*Examples*
1	Identification of the type of message (M)	Type of message	VA ADVISORY	VA ADVISORY
2	Status indicator (C)[1]	Indicator of test *or* exercise	STATUS: TEST *or* EXER	STATUS: TEST EXER
3	Time of origin (M)	Year, month, day and time in UTC	DTG: nnnnnnnn/nnnnZ	DTG: 20080923/0130Z
4	Name of VAAC (M)	Name of VAAC	VAAC: nnnnnnnnnnnn	VAAC: TOKYO
5	Name of volcano (M)	Name and IAVCEI[2] number of volcano	VOLCANO: nnnnnnnnnnnnnnnnnnnn [nnnnnn] *or* UNKNOWN *or* UNNAMED	VOLCANO: KARYMSKY 300130 UNNAMED UNKNOWN
6	Location of volcano (M)	Location of volcano in degrees and minutes	PSN: Nnnnn *or* Snnnn Wnnnnn *or* Ennnnn *or* UNKNOWN	PSN: N5403 E15927 UNKNOWN
7	State *or* region (M)	State, *or* region if ash is not reported over a State	AREA: nnnnnnnnnnnnnnnn *or* UNKNOWN	AREA: RUSSIA UNKNOWN
8	Summit elevation (M)	Summit elevation in m (*or* ft)	SUMMIT ELEV: nnnnM (*or* nnnnnFT) *or* SFC *or* UNNAMED	SUMMIT ELEV: 1536M ELEV: SFC
9	Advisory number (M)	Year in full and message number (separate sequence for each volcano)	ADVISORY NR: nnnn/[n][n][n]n	ADVISORY NR: 2008/4
10	Information source (M)	Information source using free text	INFO SOURCE: *Free text up to 32 characters*	INFO SOURCE: HIMAWARI-8 KVERT KEMSD
11	Colour code (O)	Aviation colour code	AVIATION COLOUR CODE: RED *or* ORANGE *or* YELLOW *or* GREEN *or* UNKNOWN *or* NOT GIVEN *or* NIL	AVIATION COLOUR CODE: RED
12	Eruption details (M)	Eruption details (including date/time of eruption(s))	ERUPTION DETAILS: *Free text up to 64 characters* *or* UNKNOWN	ERUPTION DETAILS: ERUPTION AT 20080923/0000Z FL300 REPORTED NO ERUPTION – RE-SUSPENDED VA[6] UNKNOWN

	Element	*Detailed content*	*Template(s)*		*Examples*	
13	Time of observation (*or* estimation) of ash (M)	Day and time (in UTC) of observation (*or* estimation) of volcanic ash	OBS (*or* EST) VA DTG: nn/nnnnZ		OBS VA DTG:	23/0100Z
14	Observed *or* estimated ash cloud (M)	Horizontal (in degrees and minutes) and vertical extent at the time of observation of the observed *or* estimated ash cloud *or*, if the base is unknown, the top of the observed *or* estimated ash cloud; Movement of the observed *or* estimated ash cloud	OBS VA CLD *or* EST VA CLD:	TOP FLnnn *or* SFC/FLnnn *or* FLnnn/nnn [nnKM WID LINE[3] BTN (nnNM WID LINE BTN)] Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn][– Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]] MOV N nnKMH (*or* KT) *or* MOV NE nnKMH (*or* KT) *or* MOV E nnKMH (*or* KT) *or* MOV SE nnKMH (*or* KT) *or* MOV S nnKMH (*or* KT) *or* MOV SW nnKMH (*or* KT) *or* MOV W nnKMH (*or* KT) *or* MOV NW nnKMH (*or* KT)[4] *or* VA NOT IDENTIFIABLE FM SATELLITE DATA WIND FLnnn/nnn nnn/nn[n]MPS (*or* KT)[5] *or* WIND FLnnn/nnn VRBnnMPS (*or* KT) *or* WIND SFC/FLnnn nnn/nn[n]MPS (*or* KT) *or* WIND SFC/FLnnn VRBnnMPS (*or* KT)	OBS VA CLD:	FL250/300 N5400 E15930 – N5400 E16100 – N5300 E15945 MOV SE 20KT SFC/FL200 N5130 E16130 – N5130 E16230 – N5230 E16230 – N5230 E16130 MOV SE 15KT TOP FL240 MOV W 40KMH VA NOT IDENTIFIABLE FM SATELLITE DATA WIND FL050/070 180/12MPS
15	Forecast height and position of the ash clouds (+6 HR) (M)	Day and time (in UTC) (6 hours from the "Time of observation (*or* estimation) of ash" given in Item13); Forecast height and position (in degrees and minutes) for each cloud mass for that fixed valid time	FCST VA CLD +6 HR:	nn/nnnnZ SFC *or* FLnnn/[FL]nnn [nnKM WID LINE[3] BTN (nnNM WID LINE BTN)] Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn][– Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]][4] *or* NO VA EXP *or* NOT AVBL *or* NOT PROVIDED	FCST VA CLD +6 HR:	23/0700 FL250/350 N5130 E16030 – N5130 E16230 – N5330 E16230 – N5330 E16030 SFC/FL180 N4830 E16330 – N4830 E16630 – N5130 E16630 – N5130 E16330 NO VA EXP NOT AVBL NOT PROVIDED
16	Forecast height and position of the ash clouds (+12 HR) (M)	Day and time (in UTC) (12 hours from the "Time of observation (*or* estimation) of ash" given in Item13); Forecast height and position (in degrees and minutes) for each cloud mass for that fixed valid time	FCST VA CLD +12 HR:	nn/nnnnZ SFC *or* FLnnn/[FL]nnn [nnKM WID LINE[3] BTN (nnNM WID LINE BTN)] Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn][– Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]][4] *or* NO VA EXP *or* NOT AVBL *or* NOT PROVIDED	FCST VA CLD +12 HR:	23/1300Z SFC/FL270 N4830 E16130 – N4830 E16600 – N5300 E16600 – N5300 E16130 NO VA EXP NOT AVBL NOT PROVIDED

Element		*Detailed content*	*Template(s)*		*Examples*	
17	Forecast height and position of the ash clouds (+18 HR) (M)	Day and time (in UTC) (18 hours from the "Time of observation (*or* estimation) of ash" given in Item13); Forecast height and position (in degrees and minutes) for each cloud mass for that fixed valid time	FCST VA CLD +18 HR:	nn/nnnnZ SFC *or* FLnnn/[FL]nnn [nnKM WID LINE[3] BTN (nnNM WID LINE BTN)] Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn][– Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]][4] *or* NO VA EXP *or* NOT AVBL *or* NOT PROVIDED	FCST VA CLD +18 HR:	23/1900Z NO VA EXP NOT AVBL NOT PROVIDED
18	Remarks (M)	Remarks, as necessary	RMK:	*Free text up to 256 characters* *or* NIL	RMK:	LATEST REP FM KVERT (0120Z) INDICATES ERUPTION HAS CEASED. TWO DISPERSING VA CLD ARE EVIDENT ON SATELLITE IMAGERY RE-SUSPENDED VA[6,7] NIL
19	Next advisory (M)	Year, month, day and time in UTC	NXT ADVISORY:	nnnnnnnn/nnnnZ *or* NO LATER THAN nnnnnnnn/nnnnZ *or* NO FURTHER ADVISORIES *or* WILL BE ISSUED BY nnnnnnnn/nnnnZ	NXT ADVISORY:	20080923/0730Z NO LATER THAN nnnnnnnn/nnnnZ NO FURTHER ADVISORIES WILL BE ISSUED BY nnnnnnnn/nnnnZ

Notes.—

1. Used only when the message issued to indicate that a test or an exercise is taking place. When the word "TEST" or the abbreviation "EXER" is included, the message may contain information that should not be used operationally or will otherwise end immediately after the word "TEST".
2. International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI).
3. A straight line between two points drawn on a map in the Mercator projection or a straight line between two points which crosses lines of longitude at a constant angle.
4. Up to 4 selected layers.
5. If ash reported (e.g. AIREP) but not identifiable from satellite data.
6. To be included (as free text) only for those situations where volcanic ash has been re-suspended.
7. To be included (as free text) where space in the remarks section allows.

19. Apendicele 2 Exemplul A2-1. Mesaj consultativ privind cenuşa vulcanică va avea următorul cuprins:

Exemplul A2-1. Mesaj consultativ privind cenuşa vulcanică

VA ADVISORY

DTG:	20080923/0130Z
VAAC:	TOKYO
VOLCANO:	KARYMSKY 300130
PSN:	N5403 E15927
AREA:	RUSSIA
SUMMIT ELEV:	1536M
ADVISORY NR:	2008/4
INFO SOURCE:	HIMAWARI-8 KVERT KEMSD RED
AVIATION COLOUR CODE:	ERUPTION AT 20080923/0000Z FL300 REPORTED
ERUPTION DETAILS:	23/0100Z
OBS VA DTG:	FL250/300 N5400 E15930 – N5400 E16100 – N5300 E15945 MOV SE 20KT
OBS VA CLD:	SFC/FL200 N5130 E16130 – N5130 E16230 – N5230 E16230 – N5230 E16130 MOV SE 15KT
FCST VA CLD +6 HR:	23/0700Z FL250/350 N5130 E16030 – N5130 E16230 – N5330 E16230 – N5330 E16030 SFC/FL180 N4830 E16330 – N4830 E16630 – N5130 E16630 – N5130 E16330
FCST VA CLD +12 HR:	23/1300Z SFC/FL270 N4830 E16130 – N4830 E16600 – N5300 E16600 – N5300 E16130
FCST VA CLD +18 HR:	23/1900Z NO VA EXP
RMK:	LATEST REP FM KVERT (0120Z) INDICATES ERUPTION HAS CEASED. TWO DISPERSING VA CLD ARE EVIDENT ON SATELLITE IMAGERY
NXT ADVISORY:	20080923/0730Z

20. Apendicele 2 Tabelul A2-2. Model pentru mesajul consultativ privind ciclonul tropical va avea următorul cuprins:

Tabelul A2-2. Model pentru mesajul consultativ privind ciclonul tropical

Key: M = inclusion mandatory, part of every message;
C = inclusion conditional, included whenever applicable;
O = inclusion optional;
= = a double line indicates that the text following it should be placed on the subsequent line.

Note 1.— The ranges and resolutions for the numerical elements included in advisory messages for tropical cyclones are shown in Appendix 6, Table A6-4.

Note 2.— The explanations for the abbreviations can be found in the PANS-ABC (Doc 8400).

Note 3.— Inclusion of a colon after each element heading is mandatory.

Note 4.— The numbers 1 to 21 are included only for clarity and are not part of the advisory message, as shown in the examples.

Element		*Detailed content*	*Template(s)*	*Examples*
1	Identification of the type of message (M)	Type of message	TC ADVISORY	TC ADVISORY
2	Status indicator (C)[1]	Indicator of test *or* exercise	STATUS: TEST *or* EXER	STATUS: TEST EXER

3	Time of origin (M)	Year, month, day and time in UTC of issue	DTG:	nnnnnnnn/nnnnZ	DTG:	20040925/1900Z
4	Name of TCAC (M)	Name of TCAC (location indicator *or* full name)	TCAC:	nnnn *or* nnnnnnnnnn	TCAC:	YUFO[2] MIAMI
5	Name of tropical cyclone (M)	Name of tropical cyclone *or* "NN" for unnamed tropical cyclone	TC:	nnnnnnnnnnnn *or* NN	TC:	GLORIA
6	Advisory number (M)	Year in full and message number (separate sequence for each cyclone)	ADVISORY NR:	nnnn/[n][n][n]n	ADVISORY NR:	2004/13
7	Observed position of the centre (M)	Day and time in UTCand position of the centre of the tropical cyclone (in degrees and minutes)	OBS PSN:	nn/nnnnZ Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]	OBS PSN:	25/1800Z N2706 W07306
8	Observed CB cloud[3] (O)	Location of CB cloud (referring to latitude and longitude (in degrees and minutes)) *and* vertical extent (flight level)	CB:	WI nnnKM (*or* nnnNM) OF TC CENTRE *or* WI[4] Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – [Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]] *and* TOP [ABV *or* BLW] FLnnn NIL	CB:	WI 250NM OF TC CENTRE TOP FL500 NIL
9	Direction and speed of movement (M)	Direction and speed of movement given in sixteen compass points and km/h (*or* kt), respectively, *or* stationary (< 2 km/h (1 kt))	MOV:	N nnKMH (*or* KT) *or* NNE nnKMH (*or* KT) *or* NE nnKMH (*or* KT) *or* ENE nnKMH (*or* KT) *or* E nnKMH (*or* KT) *or* ESE nnKMH (*or* KT) *or* SE nnKMH (*or* KT) *or* SSE nnKMH (*or* KT) *or* S nnKMH (*or* KT) *or* SSW nnKMH (*or* KT) *or* SW nnKMH (*or* KT) *or* WSW nnKMH (*or* KT) *or* W nnKMH (*or* KT) *or* WNW nnKMH (*or* KT) *or* NW nnKMH (*or* KT) *or* NNW nnKMH (*or* KT) *or* STNR	MOV:	NW 20KMH
10	Changes in intensity (M)	Changes of maximum surface wind speed at time of observation	INTST CHANGE:	INTSF *or* WKN *or* NC	INTST CHANGE:	INTSF
11	Central pressure (M)	Central pressure (in hPa)	C:	nnnHPA	C:	965HPA
12	Maximum surface wind (M)	Maximum surface wind near the centre (mean over 10 minutes, in m/s (*or* kt))	MAX WIND:	nn[n]MPS (*or* nn[n]KT)	MAX WIND:	22MPS
13	Forecast of centre position (+6 HR) (M)	Day and time (in UTC) (6 hours from the "DTG" given in Item 3); Forecast position (in degrees and minutes) of the centre of the tropical cyclone	FCST PSN +6 HR:	nn/nnnnZ Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]	FCST PSN +6 HR:	25/2200Z N2748 W07350
14	Forecast of maximum surface wind (+6 HR) (M)	Forecast of maximum surface wind (6 hours after the "DTG" given in Item 3)	FCST MAX WIND +6 HR:	nn[n]MPS (*or* nn[n]KT)	FCST MAX WIND +6 HR:	22MPS

15	Forecast of centre position (+12 HR) (M)	Day and time (in UTC) (12 hours from the "DTG" given in Item 3); Forecast position (in degrees and minutes) of the centre of the tropical cyclone	FCST PSN +12 HR:	nn/nnnnZ Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]	FCST PSN +12 HR:	26/0400Z N2830 W07430
16	Forecast of maximum surface wind (+12 HR) (M)	Forecast of maximum surface wind (12 hours after the "DTG" given in Item 3)	FCST MAX WIND +12 HR:	nn[n]MPS (*or* nn[n]KT)	FCST MAX WIND +12 HR:	25MPS
17	Forecast of centre position (+18 HR) (M)	Day and time (in UTC) (18 hours from the "DTG" given in Item 3); Forecast position (in degrees and minutes) of the centre of the tropical cyclone	FCST PSN +18 HR:	nn/nnnnZ Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]	FCST PSN +18 HR:	26/1000Z N2852 W07500
18	Forecast of maximum surface wind (+18 HR) (M)	Forecast of maximum surface wind (18 hours after the "DTG" given in Item 3)	FCST MAX WIND +18 HR:	nn[n]MPS (*or* nn[n]KT)	FCST MAX WIND +18 HR:	21MPS
19	Forecast of centre position (+24 HR) (M)	Day and time (in UTC) (24 hours from the "DTG" given in Item 3); Forecast position (in degrees and minutes) of the centre of the tropical cyclone	FCST PSN +24 HR:	nn/nnnnZ Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]	FCST PSN +24 HR:	26/1600Z N2912 W07530
20	Forecast of maximum surface wind (+24 HR) (M)	Forecast of maximum surface wind (24 hours after the "DTG" given in Item 3)	FCST MAX WIND +24 HR:	nn[n]MPS (*or* nn[n]KT)	FCST MAX WIND +24 HR:	20MPS
21	Remarks (M)	Remarks, as necessary	RMK:	*Free text up to 256 characters* *or* NIL	RMK:	NIL
22	Expected time of issuance of next advisory (M)	Expected year, month, day and time (in UTC) of issuance of next advisory	NXT MSG:	[BFR] nnnnnnnn/nnnnZ *or* NO MSG EXP	NXT MSG:	20040925/2000Z

Notes.—

1. Used only when the message issued to indicate that a test or an exercise is taking place. When the word "TEST" or the abbreviation "EXER" is included, the message may contain information that should not be used operationally or will otherwise end immediately after the word "TEST".
2. Fictitious location.
3. In the case of CB clouds associated with a tropical cyclone covering more than one area within the area of responsibility, this element can be repeated, as necessary.
4. The number of coordinates should be kept to a minimum and should not normally exceed seven.

21. Apendicele 2 Exemplul A2-2. Mesaj consultativ privind cicloanele tropicale va avea următorul cuprins:

Exemplul A2-2. Mesaj consultativ privind cicloanele tropicale

TC ADVISORY

DTG:	20040925/1900Z
TCAC:	YUFO*
TC:	GLORIA
ADVISORY NR:	2004/13
OBS PSN:	25/1800Z N2706 W07306
CB:	WI 250NM OF TC CENTRE TOP FL500
MOV:	NW 20KMH
INTST CHANGE:	INTSF
C:	965HPA
MAX WIND:	22MPS
FCST PSN +6 HR:	25/2200Z N2748 W07350
FCST MAX WIND +6 HR:	22MPS
FCST PSN +12 HR:	26/0400Z N2830 W07430
FCST MAX WIND +12 HR:	25MPS
FCST PSN +18 HR:	26/1000Z N2852 W07500
FCST MAX WIND +18 HR:	21MPS
FCST PSN +24 HR:	26/1600Z N2912 W07530
FCST MAX WIND +24 HR:	20MPS
RMK:	NIL
NXT MSG:	20040925/2000Z

*Ficticious location

22. Apendicele 2 Tabelul A2-3. Model pentru mesajul consultativ privind fenomenele spațiale va avea următorul cuprins:

Tabelul A2-3. Model pentru mesajul consultativ privind fenomenele spațiale

Key: M = inclusion mandatory, part of every message;
C = inclusion conditional, included whenever applicable;
= = a double line indicates that the text following it should be placed on the subsequent line.

Note 1.— The explanations for the abbreviations can be found in the PANS-ABC (Doc 8400).

Note 2.— The spatial resolutions as shown in Attachment E.

Note 3.— Inclusion of a colon after each element heading is mandatory.

Note 4.— The numbers 1 to 14 are included only for clarity and are not part of the advisory message, as shown in the examples.

	Element	*Detailed content*	*Template(s)*	*Examples*
1	Identification of the type of message (M)	Type of message	SWX ADVISORY	SWX ADVISORY
2	Status indicator (C)[1]	Indicator of test *or* exercise	STATUS: TEST *or* EXER	STATUS: TEST EXER
3	Time of origin (M)	Year, month, day and time in UTC	DTG: nnnnnnnn/nnnnZ	DTG: 20161108/0100Z
4	Name of SWXC (M)	Name of SWXC	SWXC: Nnnnnnnnnnn	SWXC: DONLON[2]

	Element	*Detailed content*	*Template(s)*		*Examples*	
5	Advisory number (M)	Year in full and unique message number	ADVISORY NR:	nnnn/[n][n][n]n	ADVISORY NR:	2016/1
6	Number of advisory being replaced (C)	Number of the previously issued advisory being replaced	NR RPLC:	nnnn/[n][n][n]n	NR RPLC:	2016/1
7	Space weather effect and intensity (M)	Effect and intensity of the space weather phenomena	SWX EFFECT:	HF COM MOD *or* SEV [AND][3] *or* SATCOM MOD *or* SEV [AND][3] *or* GNSS MOD *or* SEV [AND][3] *or* RADIATION[4] MOD *or* SEV	SWX EFFECT:	HF COM MOD SATCOM SEV GNSS SEV HF COM MOD AND SATCOM MOD AND GNSS MOD RADIATION MOD SATCOM SEV
8	Observed *or* expected space weather phenomena (M)	Day and time (n UTC) of observed phenomena (*or* forecast if phenomena have yet to occur); Horizontal extent[4] (latitude bands and longitude in degrees) *and/or* altitude of space weather phenomena	OBS (*or* FCST) SWX:	nn/nnnnZ DAYLIGHT SIDE *or* HNH *and/or* MNH *and/or* EQN *and/or* EQS *and/or* MSH *and/or* HSH Wnnn(nn) *or* Ennn(nn) – Wnnn(nn) *or* Ennn(nn) *and/or* ABV FLnnn *or* FLnnn – nnn *and/or* Nnn[nn] *or* Snn[nn] Wnnn[nn] *or*Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – [Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]] *or* NO SWX EXP	OBS SWX::	08/0100Z DAYLIGHT SIDE 08/0100Z HNH HSH E18000 – W18000 08/0100Z HNH HSH W18000 – W09000 ABV FL350 08/0100Z S2000 W17000 – S2000 W13000 – S1000 W13000 – S1000 W17000 – S2000 W17000 NO SWX EXP
9	Forecast of the phenomena (+6 HR) (M)	Day and time (in UTC) (6 hours from the time given in Item 8, rounded to the next full hour); Forecast extent *and/or* altitude of the space weather phenomena for that fixed valid time	FCST SWX +6 HR:	nn/nnnnZ DAYLIGHT SIDE *or* HNH *and/or* MNH *and/or* EQN *and/or* EQS *and/or* MSH *and/or* HSH Wnnn(nn) *or* Ennn(nn) – Wnnn(nn) *or* Ennn(nn) *and/or* ABV FLnnn or FLnnn – nnn *and/or* Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – [Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]] *or* NO SWX EXP *or* NOT AVBL	FCST SWX +6 HR:	08/0700Z DAYLIGHT SIDE 08/0700Z HNH HSH W18000 – W09000 ABV FL350 08/0700Z HNH HSH E18000 – W18000 NO SWX EXP NOT AVBL
10	Forecast of the phenomena (+12 HR) (M)	Day and time (in UTC) (12 hours from the time given in Item 8, rounded to the next full hour). Forecast extent *and/or* altitude of the space weather phenomena for that fixed valid time	FCST SWX +12 HR:	nn/nnnnZ DAYLIGHT SIDE *or* HNH *and/or* MNH *and/or* EQN *and/or* EQS *and/or* MSH *and/or* HSH Wnnn(nn) *or* Ennn(nn) – Wnnn(nn) *or* Ennn(nn) *and/or* ABV FLnnn or FLnnn – nnn *and/or* Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – [Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]] *or* NO SWX EXP *or* NOT AVBL	FCST SWX +12 HR:	08/1300Z DAYLIGHT SIDE 08/1300Z HNH HSH W18000 – W09000 ABV FL350 08/1300Z HNH HSH E18000 – W18000 NO SWX EXP NOT AVBL

	Element	*Detailed content*	*Template(s)*	*Examples*
11	Forecast of the phenomena (+18 HR) (M)	Day and time (in UTC) (18 hours from the time given in Item 8, rounded to the next full hour). Forecast extent and/or altitude of the space weather phenomena for that fixed valid time	FCST SWX +18 HR: nn/nnnnZ DAYLIGHT SIDE *or* HNH *and/or* MNH *and/or* EQN *and/or* EQS *and/or* MSH *and/or* HSH Wnnn(nn) *or* Ennn(nn) – Wnnn(nn) *or* Ennn(nn) *and/or* ABV FLnnn or FLnnn – nnn *and/or* Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – [Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]] *or* NO SWX EXP *or* NOT AVBL	FCST SWX +18 HR: 08/1900Z DAYLIGHT SIDE 08/1900Z HNH HSH W18000 – W09000 ABV FL350 08/1900Z HNH HSH E18000 – W18000 NO SWX EXP NOT AVBL
12	Forecast of the phenomena (+24 HR) (M)	Day and time (in UTC) (24 hours from the time given in Item 8, rounded to the next full hour). Forecast extent and/or altitude of the space weather phenomena for that fixed valid time	FCST SWX +24 HR: nn/nnnnZ DAYLIGHT SIDE *or* HNH *and/or* MNH *and/or* EQN *and/or* EQS *and/or* MSH *and/or* HSH Wnnn(nn) *or* Ennn(nn) – Wnnn(nn) *or* Ennn(nn) *and/or* ABV FLnnn or FLnnn – nnn *and/or* Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – [Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]] *or* NO SWX EXP *or* NOT AVBL	FCST SWX +24 HR: 09/0100Z DAYLIGHT SIDE 09/0100Z HNH HSH W18000 – W09000 ABV FL350 09/0100Z HNH HSH E18000 – W18000 NO SWX EXP NOT AVBL
13	Remarks (M)	Remarks, as necessary	RMK: *Free text up to 256 characters* *or* NIL	RMK: SWX EVENT HAS CEASED WWW.SPACEWEATHER PROVIDER.GOV NIL
14	Next advisory (M)	Year, month, day and time in UTC	NXT ADVISORY: nnnnnnnn/nnnnZ *or* NO FURTHER ADVISORIES *or* WILL BE ISSUED BY nnnnnnnn/nnnnZ	NXT ADVISORY: 20161108/0700Z NO FURTHER ADVISORIES WILL BE ISSUED BY 20210726/1800Z

Notes.—

1. Used only when the message issued to indicate that a test or an exercise is taking place. When the word "TEST" or the abbreviation "EXER" is included, the message may contain information that should not be used operationally or will otherwise end immediately after the word "TEST".

2. Ficticious location.

3. One or more effects with the same intensity may be combined.

4. One or more latitude ranges may be included in the space weather advisory information.

23. Apendicele 3 Tabelul A3-2 Model pentru mesajele METAR și SPECI (aplicabil după data de 05 noiembrie 2020) va avea următorul cuprins:

Tabelul A3-2. Model pentru mesajele METAR și SPECI (aplicabil <u>după data de 05 noiembrie 2020</u>)

Key: M = inclusion mandatory, part of every message;
C = inclusion conditional, dependent on meteorological conditions or method of observation;

O = inclusion optional.

Note 1.— The ranges and resolutions for the numerical elements included in METAR and SPECI are shown in Table A3-5 of this appendix.

Note 2.— The explanations for the abbreviations can be found in the PANS-ABC (Doc 8400).

Element as specified in Chapter 4	*Detailed content*	*Template(s)*			*Examples*
Identification of the type of report (M)	Type of report (M)	METAR, METAR COR, SPECI *or* SPECI COR			METAR METAR COR SPECI
Location indicator (M)	ICAO location indicator (M)	nnnn			YUDO[1]
Time of the observation (M)	Day and actual time of the observation in UTC (M)	nnnnnnZ			221630Z
Identification of an automated or missing report (C)[2]	Automated *or* missing report identifier (C)	AUTO *or* NIL			AUTO NIL
END OF METAR IF THE REPORT IS MISSING.					
Surface wind (M)	Wind direction (M)	Nnn or ///[12]	VRB		24004MPS VRB01MPS ///10MPS (24008KT) (VRB02KT) 240//KT 19006MPS /////KT (19012KT) 00000MPS (00000KT) 140P49MPS (140P99KT) 12003G09MPS (12006G18KT) 24008G14MPS (24016G28KT) 02005MPS 350V070 (02010KT 350V070)
	Wind speed (M)	[P]nn[n] or //[12]			
	Significant speed variations (C)[3]	G[P]nn[n]			
	Units of measurement (M)	MPS (*or* KT)			
	Significant directional variations (C)[4]	nnnVnnn	—		
Visibility (M)	Prevailing *or* minimum visibility (M)[5]	Nnnn or ////[12]		C A V O K	0350 //// CAVOK 7000 9999 0800
	Minimum visibility and direction of the minimum visibility (C)[6]	nnnn[N] *or* nnnn[NE] *or* nnnn[E] *or* nnnn[SE] *or* nnnn[S] *or* nnnn[SW] *or* nnnn[W] *or* nnnn[NW]			2000 1200NW 6000 2800E 6000 2800
Runway visual range (C)[7]	Name of the element (M)	R			R32/0400 R12R/1700 R10/M0050 R14L/P2000
	Runway (M)	nn[L]/*or* nn[C]/*or* nn[R]/			
	Runway visual range (M)	[P *or* M]nnnn or ////[12]			R16L/0650 R16C/0500 R16L/////R10///// R16R/0450 R17L/0450
	Runway visual range past tendency (C)[8]	U, D *or* N			R12/1100U R26/0550N R20/0800D R12/0700

Element as specified in Chapter 4	*Detailed content*	*Template(s)*				*Examples*		
Present weather (C)[2, 9]	Intensity *or* proximity of present weather (C)[10]	*– or +*	—	VC				
	Characteristics and type of present weather (M)[11]	DZ *or* RA *or* SN *or* SG *or* PL *or* DS *or* SS *or* FZDZ *or* FZRA *or* FZUP[12] *or* FC[13] *or* SHGR *or* SHGS *or* SHRA *or* SHSN *or* SHUP[12] *or* TSGR *or* TSGS *or* TSRA *or* TSSN *or* TSUP[12] *or* UP[12]	FG *or* BR *or* SA *or* DU *or* HZ *or* FU *or* VA *or* SQ *or* PO *or* TS *or* BCFG *or* BLDU *or* BLSA *or* BLSN *or* DRDU *or* DRSA *or* DRSN *or* FZFG *or* MIFG *or* PRFG *or* //[12]	FG *or* PO *or* FC *or* DS *or* SS *or* TS *or* SH *or* BLSN *or* BLSA *or* BLDU *or* VA		RA +TSRA +DZ –SN +TSRASN –SNRA DZ FG +SHSN BLSN UP FZUP TSUP FZUP //	HZ FG VA MIFG	VCFG VCSH VCTS VCBLSA
Cloud (M)[14]	Cloud amount and height of cloud base *or* vertical visibility (M)	FEWnnn *or* SCTnnn *or* BKNnnn *or* OVCnnn *or* FEW///[12] *or* SCT///[12] *or* BKN///[12] *or* OVC///[12] *or* ///nnn[12] *or* //////[12]	VVnnn *or* VV///[12]	NSC *or* NCD[12]		FEW015 OVC030 SCT010 OVC020 BKN///	VV005 VV/// ///015	NSC
	Cloud type (C)[2]	CB *or* TCU *or* ///[12]	—			BKN009TCU SCT008 BKN025CB //////CB ////////BKN///TCU	NCD BKN025///	
Air and dew-point temperature (M)	Air and dew-point temperature (M)	[M]nn/[M]nn *or* ///[M]nn[12] *or* [M]nn///[12] *or* /////[12]				17/10 02/M08 M01/M10	///10 17/// /////	
Pressure values (M)	Name of the element (M)	Q				Q0995 Q1009 Q1022 Q0987 Q////		
	QNH (M)	nnnn *or* /////[12]						
Supplementary information (C)	Recent weather (C)[2, 9]	REFZDZ *or* REFZRA *or* REDZ *or* RE[SH]RA *or* RE[SH]SN *or* RESG *or* RESHGR *or* RESHGS *or* REBLSN *or* RESS *or* REDS *or* RETSRA *or* RETSSN *or* RETSGR *or* RETSGS *or* RETS *or* REFC *or* REVA *or* REPL *or* REUP[12] *or* REFZUP[12] *or* RETSUP[12] *or* RESHUP[12] *or* RE//[12]				REFZRA RETSRA		
	Wind shear (C)[2]	WS Rnn[L] *or* WS Rnn[C] *or* WS Rnn[R] *or* WS ALL RWY				WS R03 WS ALL RWY WS R18C		
	Sea-surface temperature and state of the sea *or* significant wave height (C)[15]	W[M]nn/Sn *or* W///Sn *or* W[M]nn/S/ *or* W[M]nn/Hn[n][n] *or* W///Hn[n][n] *or* W[M]nn/H///				W15/S2 W12/H75 W///S3 WM01/S/ W///H104 W///H/// W17/H/// W///S/		

Element as specified in Chapter 4	*Detailed content*	*Template(s)*				*Examples*
Trend forecast (O)[16]	Change indicator (M)[17]	NOSIG	BECMG *or* TEMPO			NOSIG BECMG FEW020
	Period of change (C)[2]		FMnnnn *and/or* TLnnnn *or* ATnnnn			TEMPO 25018G25MPS (TEMPO 25036G50KT)
	Wind (C)[2]		nnn[P]nn[n][G[P]nn[n]]MPS (*or* nnn[P]nn[G[P]nn]KT)			BECMG FM1030 TL1130 CAVOK
	Prevailing visibility (C)[2]		nnnn		C A V O K	BECMG TL1700 0800 FG
	Weather phenomenon: intensity (C)[10]		– *or* +	—	N S W	BECMG AT1800 9000 NSW
	Weather phenomenon: characteristics and type (C)[2, 9, 11]		DZ *or* RA *or* SN *or* SG *or* PL *or* DS *or* SS *or* FZDZ *or* FZRA *or* SHGR *or* SHGS *or* SHRA *or* SHSN *or* TSGR *or* TSGS *or* TSRA *or* TSSN	FG *or* BR *or* SA *or* DU *or* HZ *or* FU *or* VA *or* SQ *or* PO *or* FC *or* TS *or* BCFG *or* BLDU *or* BLSA *or* BLSN *or* DRDU *or* DRSA *or* DRSN *or* FZFG *or* MIFG *or* PRFG		BECMG FM1900 0500 +SNRA BECMG FM1100 SN TEMPO FM1130 BLSN TEMPO FM0330 TL0430 FZRA TEMPO TL1200 0600 BECMG AT1200 8000 NSW NSC BECMG AT1130 OVC010 TEMPO TL1530 +SHRA BKN012CB
	Cloud amount and height of cloud base *or* vertical visibility (C)[2, 14]		FEWnnn *or* SCTnnn *or* BKNnnn *or* OVCnnn	VVnnn *or* VV///	N S C	
	Cloud type (C)[2,14]		CB *or* TCU	—		

Notes.—
1. Fictitious location.
2. To be included whenever applicable.
3. To be included in accordance with 4.1.5.2 c).
4. To be included in accordance with 4.1.5.2 b) 1).
5. To be included in accordance with 4.2.4.4 b).
6. To be included in accordance with 4.2.4.4 a).
7. To be included if visibility or runway visual range < 1 500 m; for up to a maximum of four runways in accordance with 4.3.6.5 b).
8. To be included in accordance with 4.3.6.6.
9. One or more, up to a maximum of three groups, in accordance with 4.4.2.9 a), 4.8.1.1 and Appendix 5, 2.2.4.1.
10. To be included whenever applicable; no qualifier for *moderate* intensity in accordance with 4.4.2.8.
11. Precipitation types listed under 4.4.2.3 a) may be combined in accordance with 4.4.2.9 c) and Appendix 5, 2.2.4.1. Only moderate or heavy precipitation to be indicated in trend forecasts in accordance with Appendix 5, 2.2.4.1.
12. When a meteorological element is temporarily missing, or its value considered temporarily as incorrect, it is replaced by "/" for each digit of the abbreviation of the text message and indicated as missing for its IWXXM version.
13. Heavy used to indicate tornado or waterspout; moderate (no qualifier) to indicate funnel cloud not reaching the ground.
14. Up to four cloud layers in accordance with 4.5.4.3 e).
15. To be included in accordance with 4.8.1.5 a).
16. To be included in accordance with Chapter 6, 6.3.2.
17. Number of change indicators to be kept to a minimum in accordance with Appendix 5, 2.2.1, normally not exceeding three groups.

24. Apendicele 4 Capitolul 2 punctul 2.6 va avea următorul cuprins: ”Turbulenţa se raportează în termeni ai ratei de disipare a vârtejului (EDR - eddy dissipation rate).

Notă. EDR reprezintă o metodă de măsurare a turbulenței în dependență de tipul de aeronavă. Cu toate acestea, relația dintre valoarea EDR și percepția turbulenței este o funcție dintre tipul de aeronavă și masa, altitudinea, configurația și viteza aeronavei. Valorile EDR enumerate mai jos descriu nivelele de severitate

pentru o aeronavă de transport de dimensiuni medii, în condițiile tipice de zbor pe rută (altitudine, viteză și greutate).

25. Apendicele 4 Capitolul 2 subpunctul 2.6.1 cuvintele ”de rădăcini din cubul ratei de disipare a vârtejului” se substituie cu cuvintele ”ai ratei de disipare a vârtejului EDR”.

26. Apendicele 4 Capitolul 2 subpunctul 2.6.2 va avea următorul cuprins:

”Turbulenţa este considerată:

a) severă, când valoarea maximă a EDR este egală sau depăşeşte 0,45;
b) moderată, când valoarea maximă a EDR este egală sau mai mare de 0,20 şi mai mică de 0,45;
c) slabă, când valoarea maximă a EDR este mai mare de 0,10 şi mai mică de 0,20; şi
d) absentă, când valoarea maximă a EDR este mai mică sau egală cu 0,10.”

27. Apendicele 4 Capitolul 2 subpunctul 2.6.3 va avea următorul cuprins: ”Rapoarte speciale de la aeronavele în zbor privind turbulenţele se fac la orice fază a zborului, ori de câte ori valoarea maximă a EDR este egală sau depăşeşte 0,20. Raportul special de la aeronava în zbor privind turbulenţa se face cu referire la perioada de 1 minut imediat precedentă observării. Se observă atât valoarea medie, cât şi cea maximă a turbulenţei. Valorile medii şi de vârf se raportează în termeni ai EDR. Rapoartele speciale privind turbulenţa sunt emise la fiecare minut până când valorile maxime ale EDR scad sub 0,20.”

28. Apendicele 4 Tabelul A4-1. Model de raport special de la aeronave în zbor (downlink) va avea următorul cuprins:

Tabelul A4-1. Model de raport special de la aeronavele în zbor (downlink)

Key: M = inclusion mandatory, part of every message;
C = inclusion conditional; included whenever available.

Note.— Message to be prompted by the pilot-in-command. Currently only the condition “SEV TURB” can be automated (see 2.6.3).

Element as specified in Chapter 5	*Detailed content*	*Template(s)*	*Examples*
Message type designator (M)	Type of air-report (M)	ARS	ARS
Aircraft identification (M)	Aircraft radiotelephony call sign (M)	nnnnnn	VA812
DATA BLOCK 1			
Latitude (M)	Latitude in degrees and minutes (M)	Nnnnn *or* Snnnn	S4506
Longitude (M)	Longitude in degrees and minutes (M)	Wnnnnn *or* Ennnnn	E01056
Level (M)	Flight level (M)	FLnnn *or* FLnnn to FLnnn	FL330 FL280 to FL310
Time (M)	Time of occurrence in hours and minutes (M)	OBS AT nnnnZ	OBS AT 1216Z
DATA BLOCK 2			
Wind direction (M)	Wind direction in degrees true (M)	nnn/	262/
Wind speed (M)	Wind speed in metres per second (*or* knots) (M)	nnnMPS (*or* nnnKT)	040MPS (080KT)
Wind quality flag (M)	Wind quality flag (M)	n	1
Air temperature (M)	Air temperature in tenths of degrees C (M)	T[M]nnn	T127 TM455
Turbulence (C)	Turbulence in hundredths of $m^{2/3} s^{-1}$ and the time of occurrence of the peak value (C)[1]	EDRnnn/nn	EDR064/08
Humidity (C)	Relative humidity in per cent (C)	RHnnn	RH054
DATA BLOCK 3			
Condition prompting the issuance of a special air-report (M)		SEV TURB [EDRnnn][2] *or* SEV ICE *or*	SEV TURB EDR076 VA CLD FL050/100

		SEV MTW *or* TS GR[3] *or* TS[3] *or* HVY DS[4] *or* HVY SS[4] *or* VA CLD [FLnnn/nnn] *or* VA[5] [MT nnnnnnnnnnnnnnnnnnnn] *or* MOD TURB [EDRnnn][2] *or* MOD ICE	

Notes.—

1. The time of occurrence to be reported in accordance with Table A4-2.
2. The turbulence to be reported in accordance with 2.6.3.
3. Obscured, embedded or widespread thunderstorms or thunderstorms in squall lines.
4. Duststorm or sandstorm.
5. Pre-eruption volcanic activity or a volcanic eruption.

29. Apendicele 5 Capitolul 4 punctul 4.4 va avea următorul cuprins:

”**4.4 Schimbul și diseminarea prognozelor de zonă pentru zborurile la niveluri joase**

4.4.1 Prognozele de zonă pentru zborurile la niveluri joase elaborate în scopul emiterii informaţiilor AIRMET trebuie să fie schimbate între unităţile meteorologice responsabile pentru emiterea documentaţiei de zbor pentru zborurile la niveluri joase în regiunea de informare a zborurilor în cauză.

4.4.2 Prognozele de zonă pentru zborurile la niveluri joase, în suportul navigației aeriene internaționale, elaborate în conformitate cu acordul regional de navigație aeriană și în sprijinul emiterii informațiilor AIRMET, trebuie să fie diseminate către serviciile aeronautice fixe bazate pe Internet.”

30. Apendicele 6 Capitolul 4 subpunctul 4.2.6 va avea următorul cuprins:

”Turbulenţa va fi considerată:

a) severă când valoarea maximă a EDR este egală sau depăşeşte 0,45;

b) moderată când valoarea maximă a EDR este egală sau mai mare de 0,20 şi mai mică de 0,45.”

31. Apendicele 6 Tabelul A6-1A Model pentru mesajele SIGMET și AIRMET va avea următorul cuprins:

Tabelul A6-1A. Model pentru mesajele SIGMET și AIRMET

Key: M = inclusion mandatory, part of every message;
C = inclusion conditional, included whenever applicable;
= = a double line indicates that the text following it should be placed on the subsequent line.

Note 1.— The ranges and resolutions for the numerical elements included in SIGMET/AIRMET messages are shown in Table A6-4 of this appendix.

Note 2.— In accordance with 1.1.5 and 2.1.5, severe or moderate icing and severe or moderate turbulence (SEV ICE, MOD ICE, SEV TURB, MOD TURB) associated with thunderstorms, cumulonimbus clouds or tropical cyclones should not be included.

Element	*Detailed content*	*SIGMET template*	*AIRMET template*	*SIGMET message examples*	*AIRMET message examples*
Location indicator of FIR/CTA (M)[1]	ICAO location indicator of the ATS unit serving the FIR or CTA to which the SIGMET/AIRMET refers	nnnn		YUCC[2] YUDD[2]	
Identification (M)	Message identification and sequence number[3]	SIGMET [n][n]n	AIRMET [n][n]n	SIGMET 1 SIGMET 01 SIGMET A01	AIRMET 9 AIRMET 19 AIRMET B19
Validity period (M)	Day-time groups indicating the period of validity in UTC	VALID nnnnnn/nnnnnn		VALID 010000/010400 VALID 221215/221600 VALID 101520/101800 VALID 251600/252200 VALID 152000/160000 VALID 192300/200300	
Location indicator of MWO (M)	Location indicator of MWO originating the message with a separating hyphen	nnnn–		YUDO–[2] YUSO–[2]	
Name of the FIR/CTA (M)	Location indicator and name of the FIR/CTA[4] for which the SIGMET/AIRMET is issued	nnnn nnnnnnnnnn FIR *or* UIR *or* FIR/UIR *or* nnnn nnnnnnnnnn CTA	nnnn nnnnnnnnnn FIR[/n]	YUCC AMSWELL FIR[2] YUDD SHANLON[2] FIR/UIR[2] UIR FIR/UIR YUDD SHANLON CTA[2]	YUCC AMSWELL FIR/2[2] YUDD SHANLON FIR[2]
IF THE SIGMET OR AIRMET MESSAGE IS TO BE CANCELLED, SEE DETAILS AT THE END OF THE TEMPLATE.					
Status indicator (C)[5]	Indicator of test or exercise	TEST *or* EXER	TEST *or* EXER	TEST EXER	TEST EXER

Element	*Detailed content*	*SIGMET template*	*AIRMET template*	*SIGMET message examples*	*AIRMET message examples*
Phenomenon (M)[6]	Description of phenomenon causing the issuance of SIGMET/AIRMET	OBSC[7] TS[GR[8]] EMBD[9] TS[GR[8]] FRQ[10] TS[GR[8]] SQL[11] TS[GR[8]] TC nnnnnnnnnn PSN Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] CB *or* TC NN[12] PSN Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] CB SEV TURB[13] SEV ICE[14] SEV ICE (FZRA)[14] SEV MTW[15] HVY DS HVY SS [VA ERUPTION] [MT nnnnnnnnnn] [PSN Nnn[nn] *or* Snn[nn] Ennn[nn] *or* Wnnn[nn]] VA CLD RDOACT CLD	SFC WIND nnn/nn[n]MPS (*or* SFC WIND nnn/nn[n]KT) SFC VIS [n][n]nnM (nn)[16] ISOL[17] TS[GR[8]] OCNL[18] TS[GR[8]] MT OBSC BKN CLD nnn/[ABV][n]nnnM (*or* BKN CLD [n]nnn/[ABV][n]nnnnFT) *or* BKN CLD SFC/[ABV][n]nnnM (*or* BKN CLD SFC/[ABV][n]nnnnFT) OVC CLD nnn/[ABV][n]nnnM (*or* OVC CLD [n]nnn/[ABV][n]nnnnFT) *or* OVC CLD SFC/[ABV][n]nnnM (*or* OVC CLD SFC/[ABV][n]nnnnFT) ISOL[17] CB[19] OCNL[18] CB[19] FRQ[10] CB[19] ISOL[17] TCU[19] OCNL[18] TCU[19] FRQ[10] TCU[19] MOD TURB[13] MOD ICE[14] MOD MTW[15]	OBSC TS OBSC TSGR EMBD TS EMBD TSGR FRQ TS FRQ TSGR SQL TS SQL TSGR TC GLORIA PSN N10 W060 CB TC NN PSN S2030 E06030 CB SEV TURB SEV ICE SEV ICE (FZRA) SEV MTW HVY DS HVY SS VA ERUPTION MT ASHVAL[2] PSN S15 E073 VA CLD RDOACT CLD	SFC WIND 040/40MPS SFC WIND 310/20KT SFC VIS 1500M (BR) ISOL TS ISOL TSGR OCNL TS OCNL TSGR MT OBSC BKN CLD 120/900M BKN CLD 400/3000FT BKN CLD 1000/5000FT BKN CLD SFC/3000M BKN CLD SFC/ABV10000FT OVC CLD 270/ABV3000M OVC CLD 900/ABV10000FT OVC CLD1000/5000FT OVC CLD SFC/3000M OVC CLD SFC/ABV10000FT ISOL CB OCNL CB FRQ CB ISOL TCU OCNL TCU FRQ TCU MOD TURB MOD ICE MOD MTW
Observed or forecast phenomenon (M)[20,21]	Indication whether the information is observed and expected to continue, *or* forecast	OBS [AT nnnnZ] *or* FCST [AT nnnnZ]		OBS OBS AT 1210Z FCST FCST AT 1815Z	

Element	*Detailed content*	*SIGMET template*	*AIRMET template*	*SIGMET message examples*	*AIRMET message examples*
Location (C)[20, 21, 33]	Location (referring to latitude and longitude (in degrees and minutes))	Nnn[nn] Wnnn[nn] *or* Nnn[nn] Ennn[nn] *or* Snn[nn] Wnnn[nn] *or* Snn[nn] Ennn[nn] *or* N OF Nnn[nn] *or* S OF Nnn[nn] *or* N OF Snn[nn] *or* S OF Snn[nn] [AND] W OF Wnnn[nn] *or* E OF Wnnn[nn] *or* W OF Ennn[nn] *or* E OF Ennn[nn] *or* N OF Nnn[nn] *or* N OF Snn[nn] AND S OF Nnn[nn] *or* S OF Snn[nn] *or* W OF Wnnn[nn] *or* W OF Ennn[nn] AND E OF Wnnn[nn] *or* E OF Ennn[nn] *or* N OF LINE[22] *or* NE OF LINE[22] *or* E OF LINE[22] *or* SE OF LINE[22] *or* S OF LINE[22] *or* SW OF LINE[22] *or* W OF LINE[22] *or* NW OF LINE[22] Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] [– Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]] [– Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]] [AND N OF LINE[22] *or* NE OF LINE[22] *or* E OF LINE[22] *or* SE OF LINE[22] *or* S OF LINE[22] *or* SW OF LINE[22] *or* W OF LINE[22] *or* NW OF LINE[22] Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] [– Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]] [– Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]]] *or* WI[22, 23] Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – [Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]] *or* APRX nnKM WID LINE[22] BTN (*or* nnNM WID LINE[22] BTN) Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] [– Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]] [– Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]] or ENTIRE UIR *or* ENTIRE FIR *or* ENTIRE FIR/UIR *or* ENTIRE CTA *or*[24] WI nnnKM (*or* nnnNM) OF TC CENTRE *or*[25] WI nnKM (*or* nnNM) OF Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]		N2020 W07005 N48 E010 S60 W160 S0530 E16530 N OF N50 S OF N5430 N OF S10 S OF S4530 W OF W155 E OF W45 W OF E15540 E OF E09015 N OF N1515 AND W OF E13530 S OF N45 AND N OF N40 N OF LINE S2520 W11510 – S2520 W12010 SW OF LINE N50 W005 – N60 W020 SW OF LINE N50 W020 – N45 E010 AND NE OF LINE N45 W020 – N40 E010 WI N6030 E02550 – N6055 E02500 – N6050 E02630 – N6030 E02550 APRX 50KM WID LINE BTN N64 W017 – N60 W010 – N57 E010 ENTIRE FIR ENTIRE UIR ENTIRE FIR/UIR ENTIRE CTA WI 400KM OF TC CENTRE WI 250NM OF TC CENTRE WI 30KM OF N6030 E02550†	

Element	*Detailed content*	*SIGMET template*	*AIRMET template*	*SIGMET message examples*	*AIRMET message examples*
Level (C)[20, 21]	Flight level *or* altitude	[SFC/]FLnnn *or* [SFC/]nnnnM (*or* [SFC/][n]nnnnFT) *or* FLnnn/nnn *or* TOP FLnnn *or* [TOP] ABV FLnnn (*or* [TOP] ABV [n]nnnnFT) [nnnn/]nnnnM (*or* [[n]nnnn/][n]nnnnFT) *or* [nnnnM/]FLnnn (*or* [[n]nnnnFT/]FLnnn) *or*[24] TOP [ABV *or* BLW] FLnnn		FL180 SFC/FL070 SFC/3000M SFC/10000FT FL050/080 TOP FL390 ABV FL250 TOP ABV FL100 ABV 7000FT TOP ABV 9000FT TOP ABV 10000FT 3000M 2000/3000M 8000FT 6000/12000FT 2000M/FL150 10000FT/FL250 TOP FL500 TOP ABV FL500 TOP BLW FL450	
Movement or expected movement (C)[20, 26, 34]	Movement *or* expected movement (direction and speed) with reference to one of the sixteen points of compass, *or* stationary	MOV N [nnKMH] *or* MOV NNE [nnKMH] *or* MOV NE [nnKMH] *or* MOV ENE [nnKMH] *or* MOV E [nnKMH] *or* MOV ESE [nnKMH] *or* MOV SE [nnKMH] *or* MOV SSE [nnKMH] *or* MOV S [nnKMH] *or* MOV SSW [nnKMH] *or* MOV SW [nnKMH] *or* MOV WSW [nnKMH] *or* MOV W [nnKMH] *or* MOV WNW [nnKMH] *or* MOV NW [nnKMH] *or* MOV NNW [nnKMH] (*or* MOV N [nnKT] *or* MOV NNE [nnKT] *or* MOV NE [nnKT] *or* MOV ENE [nnKT] *or* MOV E [nnKT] *or* MOV ESE [nnKT] *or* MOV SE [nnKT] *or* MOV SSE [nnKT] *or* MOV S [nnKT] *or* MOV SSW [nnKT] *or* MOV SW [nnKT] *or* MOV WSW [nnKT] *or* MOV W [nnKT] *or* MOV WNW [nnKT] *or* MOV NW [nnKT] *or* MOV NNW [nnKT]) *or* STNR		MOV SE MOV NNW MOV E 40KMH MOV E 20KT MOV WSW 20KT STNR	
Changes in intensity (C)[20]	Expected changes in intensity	INTSF *or* WKN *or* NC		INTSF WKN NC	
Forecast time (C)[20, 21, 26]	Indication of the forecast time of phenomenon	FCST AT nnnnZ	—	FCST AT 2200Z	—
TC forecast position (C)[24]	Forecast position of TC centre	TC CENTRE PSN Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] *or*[31] TC CENTRE PSN Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] CB	—	TC CENTRE PSN N1030 E16015 TC CENTRE PSN N1015 E15030 CB	—

Element	*Detailed content*	*SIGMET template*	*AIRMET template*	*SIGMET message examples*	*AIRMET message examples*
Forecast position (C)[20, 21, 26, 27, 33]	Forecast position of phenomenon at the end of the validity period of the SIGMET message[32]	Nnn[nn] Wnnn[nn] *or* Nnn[nn] Ennn[nn] *or* Snn[nn] Wnnn[nn] *or* Snn[nn] Ennn[nn] *or* N OF Nnn[nn] *or* S OF Nnn[nn] *or* N OF Snn[nn] *or* S OF Snn[nn] [AND] W OF Wnnn[nn] *or* E OF Wnnn[nn] *or* W OF Ennn[nn] *or* E OF Ennn[nn] *or* N OF Nnn[nn] *or* N OF Snn[nn] AND S OF Nnn[nn] *or* S OF Snn[nn] *or* W OF Wnnn[nn] *or* W OF Ennn[nn] AND E OF Wnnn[nn] *or* E OF Ennn[nn] *or* N OF LINE[22] *or* NE OF LINE[22] *or* E OF LINE[22] *or* SE OF LINE[22] *or* S OF LINE[22] *or* SW OF LINE[22] *or* W OF LINE[22] *or* NW OF LINE[22] Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] [– Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]] [AND N OF LINE[22] *or* NE OF LINE[22] *or* E OF LINE[22] *or* SE OF LINE[22] *or* S OF LINE[22] *or* SW OF LINE[22] *or* W OF LINE[22] *or* NW OF LINE[22] Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] [– Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]]]	—	N30 W170 N OF N30 S OF S50 AND W OF E170 S OF N46 AND N OF N39 NE OF LINE N35 W020 – N45 W040 SW OF LINE N48 W020 – N43 E010 AND NE OF LINE N43 W020 – N38 E010 WI N20 W090 – N05 W090 – N10 W100 – N20 W100 – N20 W090 APRX 50KM WID LINE BTN N64 W017 – N57 W005 – N55 E010 – N55 E030 ENTIRE FIR ENTIRE UIR ENTIRE FIR/UIR ENTIRE CTA NO VA EXP WI 30KM OF N6030 E02550† WI 150NM OF TC CENTRE	—

Element	*Detailed content*	*SIGMET template*	*AIRMET template*	*SIGMET message examples*	*AIRMET message examples*
		or WI[22, 23] Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] *or* APRX nnKM WID LINE[22] BTN (nnNM WID LINE[22] BTN) Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] – Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] [– Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]] [– Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn]] *or* ENTIRE FIR *or* ENTIRE UIR *or* ENTIRE FIR/UIR *or* ENTIRE CTA *or*[28] NO VA EXP *or*[25] WI nnKM (*or* nnNM) OF Nnn[nn] *or* Snn[nn] Wnnn[nn] *or* Ennn[nn] *or*[24] WI nnnKM (nnnNM) OF TC CENTRE			
Repetition of elements (C)[29]	Repetition of elements included in a SIGMET message for volcanic ash cloud or tropical cyclone	[AND] [29]	—	AND	—

OR

Cancellation of SIGMET/ AIRMET (C) [30]	Cancellation of SIGMET/AIRMET referring to its identification	CNL SIGMET [n][n]n nnnnnn/nnnnnn *or*[28] CNL SIGMET [n][n]n nnnnnn/nnnnnn VA MOV TO nnnn FIR	CNL AIRMET [n][n]n nnnnnn/nnnnnn	CNL SIGMET 2 101200/101600 CNL SIGMET A13 251030/251430 VA MOV TO YUDO FIR[2]	CNL AIRMET 05 151520/151800

Notes.—

1. See 4.1.
2. Fictitious location.
3. In accordance with 1.1.3 and 2.1.2.
4. See 2.1.3.
5. Used only when the message issued to indicate that a test or an exercise is taking place. When the word “TEST” or the abbreviation “EXER” is included, the message may contain information that should not be used operationally or will otherwise end immediately after the word "TEST".
6. In accordance with 1.1.4 and 2.1.4.
7. In accordance with 4.2.1 a).
8. In accordance with 4.2.4.
9. In accordance with 4.2.1 b).
10. In accordance with 4.2.2.
11. In accordance with 4.2.3.
12. Used for unnamed tropical cyclones.
13. In accordance with 4.2.5 and 4.2.6.
14. In accordance with 4.2.7.
15. In accordance with 4.2.8.
16. In accordance with 2.1.4.
17. In accordance with 4.2.1 c).
18 In accordance with 4.2.1 d).
19. The use of cumulonimbus (CB) and towering cumulus (TCU) is restricted to AIRMETs in accordance with 2.1.4.
20. In the case of volcanic ash cloud covering more than one area within the FIR, these elements can be repeated, as necessary. Each location and forecast position is to be preceded by an observed or forecast time.
21. In the case of cumulonimbus clouds associated with a tropical cyclone covering more than one area within the FIR, these elements can be repeated as necessary. Each location and forecast position must be preceded by an observed or forecast time.
22. A straight line is to be used between two points drawn on a map in the Mercator projection or between two points which crosses lines of longitude at a constant angle.
23. The number of coordinates are to be kept to a minimum and should not normally exceed seven.
24. Only for SIGMET messages for tropical cyclones.
25. Only for SIGMET messages for radioactive cloud. When detailed information on the release is not available, a radius of up to 30 kilometres (or 16 nautical miles) from the source can be applied; and a vertical extent from surface (SFC) to the upper limit of the flight information region/upper flight information region (FIR/UIR) or control area (CTA) is to be applied. *[Applicable from 7 November 2019 until 4 November 2020].*
25. *Only for SIGMET messages for radioactive cloud. A radius of up to 30 kilometres (or 16 nautical miles) from the source and a vertical extent from surface (SFC) to the upper limit of the flight information region/upper flight information region (FIR/UIR) or control area (CTA) is to be applied. [Applicable 5 November 2020].*
26. The elements “forecast time” and “forecast position” are not to be used in conjunction with the element “movement or expected movement”.
27. The levels of the phenomena remain fixed throughout the forecast period.
28. Only for SIGMET messages for volcanic ash.
29. To be used for more than one volcanic ash clouds or cumulonimbus clouds associated with a tropical cyclone simultaneously affecting the FIR concerned.
30. End of the message (as the SIGMET/AIRMET message is being cancelled).
31. The term CB is to be used when the forecast position for the cumulonimbus cloud is included.
32. The forecast position for cumulonimbus (CB) cloud occurring in connection with tropical cyclones relate to the forecast time of the tropical cyclone centre position, not to the end of the validity period of the SIGMET message.
33. For SIGMET messages for radioactive cloud, only within (WI) is to be used for the elements “location” and “forecast position”.
34. For SIGMET messages for radioactive cloud, only stationary (STNR) is to be used for the element “movement or expected movement”.

32. Apendicele 6 Tabelul A6-1B Model pentru rapoartele special din zbor (uplink) va avea următorul cuprins:

Tabelul A6-1B. Model pentru rapoartele special din zbor (uplink)

Key: M = inclusion mandatory, part of every message;
C = inclusion conditional, included whenever applicable;
= = a double line indicates that the text following it should be placed on the subsequent line.

Note.— The ranges and resolutions for the numerical elements included in special air-reports are shown in Table A6-4 of this appendix.

Element	*Detailed content*	*Template*[1,2]	*Examples*
Identification (M)	Message identification	ARS	ARS
Aircraft identification (M)	Aircraft radiotelephony call sign	nnnnnn	VA812[3]
Observed phenomenon (M)	Description of observed phenomenon causing the issuance of the special air-report[4]	TS TSGR SEV TURB SEV ICE SEV MTW HVY DS HVY SS VA CLD VA [MT nnnnnnnnnn] MOD TURB MOD ICE	TS TSGR SEV TURB SEV ICE SEV MTW HVY DS HVY SS VA CLD VA VA MT ASHVAL[5] MOD TURB MOD ICE
Observation time (M)	Time of observation of observed phenomenon	OBS AT nnnnZ	OBS AT 1210Z
Observed location (C)	Location (referring to latitude and longitude (in degrees and minutes)) of observed phenomenon	NnnnnWnnnnn *or* NnnnnEnnnnn *or* SnnnnWnnnnn *or* SnnnnEnnnnn	N2020W07005 S4812E01036
Observed level (C)	Flight level *or* altitude of observed phenomenon	FLnnn *or* FLnnn/nnn *or* nnnnM (*or* [n]nnnnFT)	FL390 FL180/210 3000M 12000FT

Notes.—

1. No wind and temperature to be uplinked to other aircraft in flight in accordance with 3.2.
2. See 3.1.
3. Fictitious call sign.
4. In the case of special air-report for volcanic ash cloud, the vertical extent (if observed) and name of the volcano (if known) can be used.
5. Fictitious location.

33. Apendicele 6 Exemplul A6-4 Exemplul A6-4. Mesaj SIGMET pentru nor radioactiv va avea următorul cuprins:

Exemplul A6-4. Mesaj SIGMET pentru nor radioactiv

YUCC SIGMET 2 VALID 201200/201600 YUDO –
YUCC AMSWELL FIR RDOACT CLD OBS AT 1155Z WI

Meaning:

The second SIGMET message issued for the AMSWELL* flight information region (identified by YUCC Amswell area control centre) by the Donlon/International* meteorological watch office (YUDO) since 0001 UTC; the message is valid from 1200 UTC to 1600 UTC on the 20th of the month; radioactive cloud was observed at 1155 UTC within 30 kilometres of 60 degrees 30 minutes north 25 degrees 50 minutes east between the surface and flight level 550. The radioactive cloud is stationary.

* Fictitious location

34. Apendicele 8 Capitolul 2 punctul 2.2 va avea următorul cuprins:
”2.2.1 Informaţiile despre fenomenele meteorologice semnificative furnizate de către WAFC pentru planificarea preliminară a zborului şi replanificarea în timpul zborului sunt transmise şi trebuie să fie recepţionate în forma codificată BUFR.
Notă: Forma codificată ~~GRIB~~ BUFR este conţinută în documentul OMM nr. 306, Manualul de coduri, Volumul I.2, partea B - Coduri Binare.
2.2.2 Începând cu data de 4 noiembrie 2021, adițional la p.2.2.1, informaţiile despre fenomenele meteorologice semnificative furnizate de către WAFC pentru planificarea preliminară şi replanificarea în timpul zborului, trebuie să fie diseminate în formatul IWXXM GML.
Nota 1. Ghidul privind punerea în aplicare a IWXXM este prevăzut în Manualul privind modelul de schimb de informații meteorologice OACI (IWXXM) (Doc 10003).
Nota 2. Limbajul de marcare geografică (Geography markup language-GML) este un standard de codificare al Consorțiului geospațial deschis (Open Geospatial Consortium-OGC).”

35. Apendicele 8 Capitolul 4 punctul 4.2 subpunctul 4.2.1.1 lit. g) se completează cu Nota care va avea următorul cuprins:
”Notă. Atunci când se reprezintă grafic figuri geometrice, în special poligoane, pe hărți sunt necesare corectări corespunzătoare în cazul reprezentării în proiecții diferite de cea utilizată la producerea prognozei inițiale.”

36. Apendicele 10 Capitolul 1 punctul 1.1 va avea următorul cuprins:
”**1.1 Timpul necesar de tranzit al informaţiilor meteorologice operaționale**
Mesajele şi buletinele care conţin informaţii meteorologice operaţionale, trebuie să atingă durate de tranzit mai mici de 5 minute, cu excepţia cazului în care prin acordul regional de navigaţie aeriană se stabileşte o perioadă de tranziţie mai mică.”

37. Apendicele 10 Capitolul 2 se va corecta numerotarea, după cum urmează: punctul 1.4 devine 2.1, respectiv subpunctele 1.4.1, 1.4.2, 1.4.3 devin 2.1.1, 2.1.2, 2.1.3.

38. Apendicele 10 Capitolul 2, subpunctul 1.4.4 devine 2.1.4 și va avea următorul cuprins:
”**2.1.4 <u>Transmiterea buletinelor care conțin informații meteorologice operaționale</u>**
Buletinele meteorologice care conţin informaţii meteorologice operaţionale trebuie transmise prin intermediul serviciului fix aeronautic (AFS).”

39. Apendicele 10 Capitolul 2 se va corecta numerotarea, după cum urmează: punctul 1.5 devine 2.2, respectiv subpunctele 1.5.1, 1.5.2, 1.5.3, 1.5.4 devin 2.2.1, 2.2.2, 2.2.3, 2.2.4.

40. Suplimentul E, se substituie numărul ”30” cu ”10” din coloana ”rezoluție” linia ”Nivelul de zbor afectat de radiație”.

Andrei BZOVÎI **Șef Direcția navigație aeriană**