ANNEX I

Draft Annex I to draft Commission Implementing Regulation (EU) …./…amending Implementing Regulation (EU) No 923/2012 laying down the common rules of the air and operational provisions regarding services and procedures in air navigation

Section 12 (Services related to meteorology – Aircraft observations and reports by voice communications) in Commission Implementing Regulation (EU) No 923/2012 is amended as follows:

1. Point SERA.12005 is amended as follows:

(a) in point (a), point (9) is added:

(9) the runway braking action encountered is not as good as reported.

ANNEX II

Draft Annex II to draft Commission Implementing Regulation (EU) …/… amending Implementing Regulation (EU) 2017/373 laying down common requirements for providers of air traffic management/air navigation services and other air traffic management network functions and their oversight

Annexes IV, V and VI are amended as follows:

1. In Section 5 of Subpart A of Annex IV, the following point ATS.OR.530 is added:

‘**ATS.OR.530 Forwarding of braking action information**

The air traffic services provider, when receiving special air-reports by voice communications concerning braking action encountered that is not as good as that reported, shall forward them without delay to the appropriate aerodrome operator.’

2. In Annex V, Appendix 1 is replaced by the following:

Appendix 1

Template for METAR

Key:

M = inclusion mandatory;

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 are provided in a separate table following this template.

Note 2: The explanations for the abbreviations can be found in ICAO Document 8400 ‘Procedures for Air Navigation Services — Abbreviations and Codes (PANS-ABC)’.

Element	Detailed content	Template(s)	Examples
Identification of the type of report (M)	Type of report (M)	METAR, METAR COR	METAR METAR COR
Location indicator (M)	ICAO location indicator (M)	nnnn	YUDO
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)	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		VRB		24004MPS VRB01MPS (24008KT) (VRB02KT) 19006MPS (19012KT) 00000MPS (00000KT) 140P49MPS (140P99KT)
	Wind speed (M)	[P]nn[n]				
	Significant speed variations (C)	G[P]nn[n]				12003G09MPS (12006G18KT) 24008G14MPS (24016G28KT)
	Units of measurement (M)	MPS (or KT)				
	Significant directional variations (C)	nnnVnnn		—		02005MPS 350V070 (02010KT 350V070)
Visibility (M)	Prevailing or minimum visibility (M)	nnnn			C A V O K	0350 CAVOK 7000 9999 0800
	Minimum visibility and direction of the minimum visibility (C)	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)[1]	Name of the element (M)	R				R32/0400 R12R/1700 R16L/0650 R16C/0500 R16R/0450 R17L/0450
	Runway (M)	nn[L]/or nn[C]/or nn[R]/				
	Runway visual range (M)	[P or M]nnnn				R14L/P2000 R10/M0050
	Runway visual range past tendency (C)	U, D or N				R12/1100U R26/0550N R20/0800D R12/0700
Present weather (C)	Intensity or proximity of present weather (C)	– or +	—	VC		

	Characteristics and type of present weather (M)	DZ or RA or SN or SG or PL or DS or SS or FZDZ or FZRA or FZUP or FC[2] or SHGR or SHGS or SHRA or SHSN or SHUP or TSGR or TSGS or TSRA or TSSN or TSUP or UP	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 //	FG or PO or FC or DS or SS or TS or SH or BLSN or BLSA or BLDU or VA		RA HZ VCFG +TSRA FG VCSH +DZ VA VCTS –SN MIFG VCBLSA +TSRASN –SNRA DZ FG +SHSN BLSN UP FZUP TSUP FZUP //
Cloud (M)	Cloud amount and height of cloud base or vertical visibility (M)	FEWnnn or SCTnnn or BKNnnn or OVCnnn or FEW/// or SCT/// or BKN/// or OVC/// or ///nnn or //////	VVnnn or VV///	NSC or NCD		FEW015 VV005 OVC030 VV/// NSC SCT010 OVC020 BKN/// ///015
	Cloud type (C)	CB or TCU or ///	—			BKN009TCU NCD SCT008 BKN025CB BKN025///

Air and dew-point temperature (M)	Air and dew-point temperature (M)	[M]nn/[M]nn			17/10 02/M08 M01/M10
Pressure values (M)	Name of the element (M)	Q			Q0995 Q1009 Q1022 Q0987
	QNH (M)	nnnn			
Supplementary information (C)	Recent weather (C)	REFZDZ or REFZRA or REDZ or RE[SH]RA or RERASN 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 or REFZUP or RETSUP or RESHUP			REFZRA RETSRA
	Wind shear (C)	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)	W[M]nn/Sn or W[M]nn/Hn[n][n]			W15/S2 W12/H75
Trend forecast (O)	Change indicator (M)	NOSIG	BECMG or TEMPO		NOSIG BECMG FEW020 TEMPO 25018G25MPS (TEMPO 25036G50KT) BECMG FM1030 TL1130 CAVOK
	Period of change (C)		FMnnnn and/or TLnnnn or ATnnnn		
	Wind (C)		nnn[P]nn[n][G[P]nn[n]]MPS (or nnn[P]nn[G[P]nn]KT)		
	Prevailing visibility (C)		nnnn	C A	

						V O K	BECMG TL1700 0800 FG BECMG AT1800 9000 NSW BECMG FM1900 0500 +SNRA BECMG FM1100 SN TEMPO FM1130 BLSN TEMPO FM0330 TL0430 FZRA
	Weather phenomenon: intensity (C)		– or +	—	N S W		TEMPO TL1200 0600 BECMG AT1200 8000 NSW NSC

	Weather phenomenon: characteristics and type (C)		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 AT1130 OVC010 TEMPO TL1530 +SHRA BKN012CB
	Cloud amount and height of cloud base or vertical visibility (C)		FEWnnn or SCTnnn or BKNnnn or OVCnnn	VVnnn or VV///	N S C		
	Cloud type (C)		CB or TCU	—			

(1) To be included if visibility or runway visual range is < 1 500 m; for up to a maximum of four runways.

(2) ‘Heavy’ used to indicate ‘tornado’ or ‘waterspout’; ‘moderate’ (no qualifier) to indicate ‘funnel cloud not reaching the ground’.

Ranges and resolutions for the numerical elements included in METAR

Elements		Range	Resolution
Runway: (no units)		01–36	1
Wind direction:	°true	000–360	10
Wind speed:	MPS	00–99	1
	KT	00–199*	1
Visibility:	M	0000–0750	50
	M	0800–4 900	100
	M	5 000–9 000	1 000
	M	10 000–	0 (fixed value: 9 999)
Runway visual range:	M	0000–0375	25
	M	0400–0750	50
	M	0800–2 000	100
Vertical visibility:	30's M (100's FT)	000–020	1
Clouds: height of cloud base:	30's M (100's FT)	000–099 100-200	1 10
Air temperature; Dew-point temperature:	°C	–80 – +60	1
QNH: hPa		0850–1 100	1
Sea–surface temperature:	°C	–10 – +40	1
State of the sea: (no units)		0–9	1
Significant wave height:	M	0–999	0,1

* There is no aeronautical requirement to report surface wind speeds of 100 kt (50 m/s) or more; however, provision has been made for reporting wind speeds up to 199 kt (99 m/s) for non-aeronautical purposes, as necessary.

2. In Annex VI, in point AIS.TR.330 point (a), point (a)(29) is added:

'(29) a runway is not available due to runway marking works; or the time lag required for making the runway available, when the equipment used for such works can be removed, when necessary.'

3. In Annex VI, in point AIS TR.330, point (b)(2) is deleted.

4. In Annex VI, Appendix 3a is replaced by the following:

Appendix 3a

SNOWTAM FORMAT

(COM heading)	(PRIORITY INDICATOR)	(ADDRESSES)	<≡
	(DATE AND TIME OF FILING)	(ORIGINATOR'S INDICATOR)	<≡
(Abbreviated heading)	(SWAA* SERIAL NUMBER)	(LOCATION INDICATOR) DATE-TIME OF ASSESSMENT (OPTIONAL GROUP)	
	S W * *		<≡(

SNOWTAM →	(Serial number) <≡		

Aeroplane performance calculation section			
(AERODROME LOCATION INDICATOR)	M	A)	<≡
(DATE/TIME OF ASSESSMENT *(Time of completion of assessment in UTC)*)	M	B)	→
(LOWER RUNWAY DESIGNATION NUMBER)	M	C)	→
(RUNWAY CONDITION CODE (RWYCC) ON EACH RUNWAY THIRD) (From Runway Condition Assessment Matrix (RCAM) 0, 1, 2, 3, 4, 5 or 6)	M	D)	/ / →
(PER CENT COVERAGE OF CONTAMINANT FOR EACH RUNWAY THIRD)	C	E)	/ / →
DEPTH (mm) OF LOOSE CONTAMINANT FOR EACH RUNWAY THIRD)	C	F)	/ / →
(CONDITION DESCRIPTION OVER TOTAL RUNWAY LENGTH (Observed on each runway third, starting from threshold having the lower runway designation number) COMPACTED SNOW DRY DRY SNOW DRY SNOW ON TOP OF COMPACTED SNOW DRY SNOW ON TOP OF ICE FROST ICE SLIPPERY WET SLUSH SPECIALLY PREPARED WINTER RUNWAY STANDING WATER WATER ON TOP OF COMPACTED SNOW WET WET ICE WET SNOW WET SNOW ON TOP OF COMPACTED SNOW WET SNOW ON TOP OF ICE	M	G)	/ / →
(WIDTH OF RUNWAY TO WHICH THE RUNWAY CONDITIONS CODES APPLY, IF LESS THAN PUBLISHED WIDTH)	O	H)	<≡≡
Situational awareness section			
(REDUCED RUNWAY LENGTH, IF LESS THAN PUBLISHED LENGTH (m))	O	I)	→
(DRIFTING SNOW ON THE RUNWAY)	O	J)	→
(LOOSE SAND ON THE RUNWAY)	O	K)	→
(CHEMICAL TREATMENT ON RUNWAY)	O	L)	→
(SNOWBANKS ON THE RUNWAY (If present, distance from runway centreline (m) followed by 'L', 'R' or 'LR' as applicable))	O	M)	→
(SNOWBANKS ON A TAXIWAY	O	N)	→
(SNOWBANKS ADJACENT TO THE RUNWAY)	O	O)	→
(TAXIWAY CONDITIONS)	O	P)	→
(APRON CONDITIONS)	O	R)	→
(MEASURED FRICTION COEFFICIENT)	O	S)	→
(PLAIN-LANGUAGE REMARKS)	O	T)	) <<≡
NOTES:			

1. *Enter ICAO nationality letters as given in ICAO Doc 7910, Part 2 or otherwise applicable aerodrome identifier. 2. Information on other runways, repeat from B to H. 3. Information in the situational awareness section repeated for each runway, taxiway and apron. Repeat as applicable, when reported. 4. Words in brackets ( ) not to be transmitted. 5. For letters A) to T), refer to the *Instructions for the completion of the SNOWTAM format, paragraph 1, item b).*	

SIGNATURE OF ORIGINATOR *(not for transmission)*

INSTRUCTIONS FOR THE COMPLETION OF THE SNOWTAM FORMAT

1. General

a) When reporting on more than one runway, repeat Items B to H (aeroplane performance calculation section).

b) The letters used to indicate items are only used for reference purpose and shall not be included in the messages. The letters, M (mandatory), C (conditional) and O (optional) mark the usage and information and shall be included as explained below.

c) Metric units shall be used and the unit of measurement shall not be reported.

d) The maximum validity of SNOWTAM is 8 hours. New SNOWTAM shall be issued whenever a new runway condition report is received.

e) A SNOWTAM cancels the previous SNOWTAM.

f) The abbreviated heading 'TTAAiiii CCCC MMYYGGgg (BBB)' is included to facilitate the automatic processing of SNOWTAM messages in computer databanks. The explanation of these symbols is:

TT = data designator for SNOWTAM = SW;
AA = geographical designator for Member States, e.g. LF = FRANCE, EG = United Kingdom;
iiii = SNOWTAM serial number in a four-digit group;
CCCC = four-letter location indicator of the aerodrome to which the SNOWTAM refers;
MMYYGGgg = date/time of observation/measurement, whereby:
MM = month, e.g. January = 01, December = 12;
YY = day of the month;
GGgg = time in hours (GG) and minutes (gg) UTC;
(BBB) = optional group for:
Correction, in the case of an error, to a SNOWTAM message previously disseminated with the same serial number = COR.

Brackets in (BBB) shall be used to indicate that this group is optional.

When reporting on more than one runway and individual dates/times of observation/assessment are indicated by repeated Item B, the latest date/time of observation/assessment shall be inserted in the abbreviated heading (MMYYGGgg).

g) The text 'SNOWTAM' in the SNOWTAM Format and the SNOWTAM serial number in a four-digit group shall be separated by a space, e.g. SNOWTAM 0124.

h) For readability purposes for the SNOWTAM message, a linefeed shall be included after the SNOWTAM serial number, after Item A, and after the aeroplane performance calculation section.

i) When reporting on more than one runway, repeat the information in the aeroplane performance calculation section from the date and time of assessment for each runway before the information in the situational awareness section.

j) Mandatory information is:

1) AERODROME LOCATION INDICATOR;

2) DATE AND TIME OF ASSESSMENT;

3) LOWER RUNWAY DESIGNATOR NUMBER;

4) RUNWAY CONDITION CODE FOR EACH RUNWAY THIRD; and

5) CONDITION DESCRIPTION FOR EACH RUNWAY THIRD (when runway condition code (RWYCC) is reported 1–5)

2. *Aeroplane performance calculation section*

Item A — Aerodrome location indicator (four-letter location indicator).

Item B — Date and time of assessment (eight-figure date/time group giving time of observation as month, day, hour and minute in UTC).

Item C — Lower runway designator number (nn[L] or nn[C] or nn[R]).

Only one runway designator shall be inserted for each runway and always the lower number.

Item D — Runway condition code for each runway third. Only one digit (0, 1, 2, 3, 4, 5 or 6) is inserted for each runway third, separated by an oblique stroke (n/n/n).

Item E — Per cent coverage for each runway third. When provided, insert 25, 50, 75 or 100 for each runway third, separated by an oblique stroke ([n]nn/[n]nn/[n]nn).

This information shall be provided only when the runway condition for each runway third (Item D) has been reported as other than 6 and there is a condition description for each runway third (Item G) that has been reported other than 'DRY'.

When the conditions are not reported, this shall be signified by the insertion of 'NR' for the appropriate runway third(s).

Item F — Depth of loose contaminant for each runway third. When provided, insert in millimetres for each runway third, separated by an oblique stroke (nn/nn/nn or nnn/nnn/nnn).

This information shall only be provided for the following contamination types:

— standing water, values to be reported 04, then assessed value. Significant changes 3 mm;

— slush, values to be reported 03, then assessed value. Significant changes 3 mm;

— wet snow, values to be reported 03, then assessed value. Significant changes 5 mm; and

— dry snow, values to be reported 03, then assessed value. Significant changes 20 mm.

When the conditions are not reported, this shall be signified by the insertion of 'NR' for the appropriate runway third(s).

Item G — Condition description for each runway third. Any of the following condition descriptions for each runway third, separated by an oblique stroke, shall be inserted.

COMPACTED SNOW
DRY SNOW
DRY SNOW ON TOP OF COMPACTED SNOW
DRY SNOW ON TOP OF ICE
FROST
ICE

SLIPPERY WET
SLUSH
SPECIALLY PREPARED WINTER RUNWAY
STANDING WATER
WATER ON TOP OF COMPACTED SNOW
WET
WET ICE
WET SNOW
WET SNOW ON TOP OF COMPACTED SNOW
WET SNOW ON TOP OF ICE

DRY (only reported when there is no contaminant)

When the conditions are not reported, this shall be signified by the insertion of 'NR' for the appropriate runway third(s).

Item H — Width of runway to which the runway condition codes apply. The width in metres if less than the published runway width shall be inserted.

3. *Situational awareness section*

Elements in the situational awareness section shall end with a full stop.

Elements in the situational awareness section for which no information exists, or where the conditional circumstances for publication are not fulfilled, shall be left out completely.

Item I — Reduced runway length. The applicable runway designator and available length in meters shall be inserted (e.g. RWY nn [L] *or* nn [C] *or* nn [R] REDUCED TO [n]nnn).

This information is conditional when a NOTAM has been published with a new set of declared distances.

Item J — Drifting snow on the runway. When reported, the lower runway designator should be inserted with a space 'DRIFTING SNOW' (RWY nn or RWY nn[L] or nn[C] or nn[R].

Item K — Loose sand on the runway. When loose sand is reported on the runway, the lower runway designator shall be inserted with a space 'LOOSE SAND' (RWY nn *or* RWY nn[L] *or* nn[C] *or* nn[R] LOOSE SAND).

Item L — Chemical treatment on the runway. When application of chemical treatment has been reported, the lower runway designator shall be inserted with a space 'CHEMICALLY TREATED' (RWY nn *or* RWY nn[L] *or* nn[C] *or* nn[R] CHEMICALLY TREATED).

Item M — Snowbanks on the runway. When snowbanks are reported present on the runway, the lower runway designator shall be inserted with a space 'SNOWBANK' and with a space left 'L' or right 'R' or both sides 'LR', followed by the distance in metres from centre line separated by a space 'FM CL' (RWY nn *or* RWY nn[L] *or* nn[C] *or* nn[R] SNOWBANK Lnn *or* Rnn *or* LRnn FM CL).

Item N — Snowbanks on a taxiway. When snowbanks are present on taxiway(s), the taxiway(s) designator(s) shall be inserted with a space 'SNOWBANKS' (TWY [nn]n or TWYS [nn]n/[nn]n/[nn]/n… or ALL TWYS SNOWBANKS).

Item O — Snowbanks adjacent to the runway. When snowbanks are reported present, penetrating the height profile in the aerodrome snow plan, the lower runway designator and 'ADJ SNOWBANKS' shall be inserted (RWY nn *or* RWY nn[L] *or* nn[C] *or* nn[R] ADJ SNOWBANKS).

Item P — Taxiway conditions. When taxiway conditions are reported slippery or poor, the taxiway designator followed by a space 'POOR' shall be inserted (TWY [n *or* nn] POOR *or* TWYS [n or nn]/[n or nn]/[n or nn] POOR… *or* ALL TWYS POOR).

Item R — Apron conditions. When apron conditions are reported slippery or poor, the apron designator followed by a space ‘POOR’ shall be inserted (APRON [nnnn] POOR *or* APRONS [nnnn]/[nnnn]/[nnnn] POOR *or* ALL APRONS POOR).

Item S — NR (not reported)

Item T — Plain-language remarks.

EXAMPLE OF COMPLETED SNOWTAM FORMAT

Example SNOWTAM 1

GG EADBZQZX EADNZQZX EADSZQZX
170100 EADDYNYX
SWEA0149 EADD 02170055
(SNOWTAM 0149
EADD
02170055 09L 5/5/5 100/100/100 NR/NR/NR WET/WET/WET SNOW
)

Example SNOWTAM 2

GG EADBZQZX EADNZQZX EADSZQZX
170140 EADDYNYX
SWEA0150 EADD 02170135
(SNOWTAM 0150
EADD
02170055 09L 5/5/5 100/100/100 NR/NR/NR WET/WET/WET SNOW
02170135 09R 5/2/2 100/50/75 NR/06/06 WET/SLUSH/SLUSH
)

Example SNOWTAM 3

GG EADBZQZX EADNZQZX EADSZQZX
170229 EADDYNYX
SWEA0151 EADD 02170225
(SNOWTAM 0151
EADD
02170055 09L 5/5/5 100/100/100 NR/NR/NR WET/WET/WET SNOW
02170135 09R 5/2/2 100/50/75 NR/06/06 WET/SLUSH/SLUSH
02170225 09C 2/3/3 75/100/100 06/12/12 SLUSH/WET SNOW/WET SNOW

RWY 09L SNOWBANK R20 FM CL. RWY 09R ADJ SNOWBANKS. TWY B POOR. APRON NORTH POOR)

Example SNOWTAM 4

GG EADBZQZX EADNZQZX EADSZQZX
170350 EADDYNYX
SWEA0152 EADD 02170345
(SNOWTAM 0152
EADD
02170345 09L 5/5/5 100/100/100 NR/NR/NR WET/WET/SLUSH
02170134 09R 5/2/2 100/50/75 NR/06/06 WET/SLUSH/SLUSH
02170225 09C 2/3/3 75/100/100 06/12/12 SLUSH/WET SNOW/WET SNOW

DRIFTING SNOW. RWY 09L LOOSE SAND. RWY 09R CHEMICALLY TREATED. RWY 09C CHEMICALLY TREATED.)