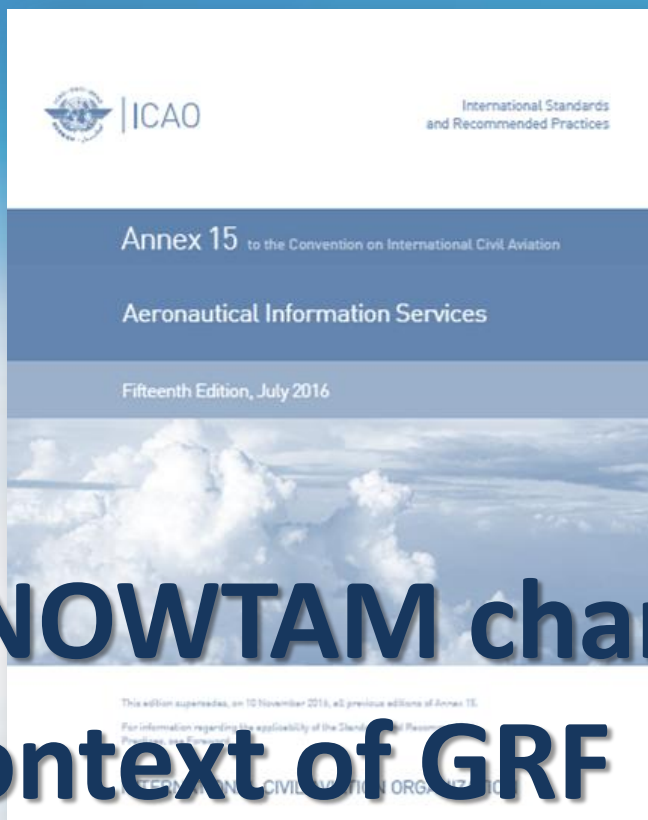




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# SNOWTAM changes in context of GRF

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ICAO Global Reporting Format (GRF) Implementation Symposium  
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# General provisions

Amendment 39 to Annex 15 arises from:

- Recommendations of the third meeting of the Aerodrome Panel (AP/3) relating to the publication of information on runway end safety area (RESA) and arresting system in the aeronautical information publication (AIP)
- Recommendations of the twelfth meeting of the Instrument Flight Procedures Panel (IFPP/12) relating to en-route airway directional use restrictions
- Recommendations of the second meeting of the Operational Data Link Panel (OPLINKP/2) relating to performance-based communication and surveillance (PBCS) and satellite voice communications (SATVOICE); and
- Recommendations of the Friction Task Force of the Aerodrome Design and Operations Panel (ADOP) relating to the ***use of a global reporting format for assessing and reporting runway surface conditions.***

| <i>Amendment</i> | <i>Source(s)</i>  | <i>Subject</i>   | <i>Adopted/Approved<br/>Effective<br/>Applicable</i> |
|------------------|---|--|--|
| 39-A             | Third meeting of the Aerodrome Panel (AP/3); Twelfth meeting of the Instrument Flight Procedures Panel (IFPP/12); Second meeting of the Operational Data Link Panel (OPLINKP/2) | Amendment concerning: <ul style="list-style-type: none"> <li>a) publication of information on runway end safety area (RESA) and arresting system in the aeronautical information publication (AIP);</li> <li>b) en-route airway directional use restrictions; and</li> <li>c) performance-based communication and surveillance (PBCS) and satellite voice communications (SATVOICE)</li> </ul> | 22 February 2016<br>11 July 2016<br>10 November 2016 |

| <i>Amendment</i> | <i>Source(s)</i>  | <i>Subject</i>  | <i>Adopted/Approved<br/>Effective<br/>Applicable</i> |
|------------------|---|---|--|
| 39-B             | Friction Task Force of the Aerodrome Design and Operations Panel (ADOP) | Amendment concerning the use of a global reporting format for assessing and reporting runway surface conditions | 22 February 2016<br>11 July 2016<br>5 November 2020  |



# Major changes

## (39B; applicable 5 November 2020)

- SNOWTAM Definition & Provisions
- SNOWTAM Format (reporting format for assessing and reporting runway surface conditions has changed)

# Assessment and reporting of the runway surface condition

- A globally-harmonized methodology for runway surface conditions assessment and reporting to provide reports that are directly related to the performance of aeroplanes:
  - **Aerodrome operator** assess the runway surface conditions, including contaminants, for each third of the runway length, and report it by means of a uniform runway condition report (RCR);
  - **Air traffic services (ATS)** provide the information received via the RCR to end users (radio, ATIS) and received special air-reports;
  - **Aeronautical information services (AIS)** provide the information received in the RCR to end users (SNOWTAM);
  - **Aircraft operators** utilize the information in conjunction with the performance data provided by the aircraft manufacturer to determine if landing or take-off operations can be conducted safely and provide runway braking action special air-report (AIREP).

# Scope of provisions

- Provisions outlined by amendments in the following documents:
  - **Annex 14, Volume 1 and PANS-Aerodromes:** elaboration of the information;
  - **Annex 6, Parts I and II:** assessment by the pilot-in-command of the landing performance and report for commercial air transport operations;
  - **Annex 8:** nature of the information provided by the aircraft manufacturers;
  - **Annex 3:** removal of the runway state group for METAR/SPECI;
  - **Annex 15 and PANS-AIM:** syntax and format used for dissemination;
  - **PANS-ATM:** communication of special air-reports concerning runway braking action and transmission of the runway condition report with a harmonized phraseology.
- Review of the guidance material:
  - Aerodrome Design Manual – Part 3 – *Pavements* (Doc 9157);
  - Circular 329: *Assessment, Measurement and Reporting of Runway Surface Conditions*;
  - Aeroplane Performance Manual (Doc 10064).

# Runway Condition Report (RCR)

- Established by the aerodrome operator.
- The RCR consists of two sections:
  - aeroplane take-off and landing performance calculations; and
  - situational awareness of the surface conditions on the runway, taxiways and aprons.
- The RCR shall be established when a significant change in runway surface condition occurs due to water, snow, slush, ice or frost (and should continue to reflect significant changes until the runway is no longer contaminated).
- Significant change:
  - any change in the runway condition code, type and depth of contaminant or in reportable contaminant coverage; and
  - any other information (e.g. a pilot report of runway braking action).

# Dissemination of information

- **Through the AIS and ATS services:** when the runway is wholly or partly contaminated by standing water, snow, slush, ice or frost, or is wet associated with the clearing or treatment of snow, slush, ice or frost.
- **Through the ATS only:** when the runway is wet, not associated with the presence of standing water, snow, slush, ice or frost.
- Description of the runway surface condition are defined in Annex 14:
  - *Dry runway.* A runway is considered dry if its surface is free of visible moisture and not contaminated within the area intended to be used.
  - *Wet runway.* The runway surface is covered by any visible dampness or water up to and including 3 mm deep within the intended area of use.
  - *Slippery wet runway.* A wet runway where the surface friction characteristics of a significant portion of the runway has been determined to be degraded.
  - *Contaminated runway.* A runway is contaminated when a significant portion of the runway surface area (whether in isolated areas or not) within the length and width being used is covered by one or more of the substances listed in the runway surface condition descriptors.



- **SNOWTAM.** A special series NOTAM given in a standard format providing a surface condition report notifying the presence or removal cessation of hazardous conditions due to snow, ice, slush, frost, or standing water or water associated with snow, slush and, ice, or frost on the movement area, by means of a specific format.
- 5.2.3 Information concerning snow, slush, ice and standing water on aerodrome/heliport pavements shall, when reported, frost, standing water, or water associated with snow, slush, ice or frost on the movement area shall be disseminated by means of a SNOWTAM, and contain the information in the order shown in the SNOWTAM Format in Appendix 2.





- “Assessment” instead of “Observation”
- The letters used to indicate items in SNOWTAM (A, B, C, ...) are only used for reference purpose and should not be included in the messages.
- The maximum validity of SNOWTAM is 8 hours (not 24 hours).
- A SNOWTAM cancels the previous SNOWTAM
- New SNOWTAM shall be issued whenever a new Runway Condition Report (RCR) is received.
- Mandatory information:
  - i) AERODROME LOCATION INDICATOR
  - ii) DATE AND TIME OF ASSESSMENT
  - iii) LOWER RUNWAY DESIGNATOR NUMBER
  - iv) RUNWAY CONDITION CODE FOR EACH RUNWAY THIRD
  - v) CONDITION DESCRIPTION FOR EACH RUNWAY THIRD (when runway condition code is reported 1- 5)

GG EADBZQZX EADNZQZX EADSZQZX  
 170350 EADDYNYX  
 SWEA0149 EADD 02170345  
 (SNOWTAM 0149  
 EADD 02170345 09L 5/5/5 100/100/100 NR/NR/NR WET/WET/WET  
 EADD 02170134 09R 5/4/3 100/50/75 NR/06/06 WET/SLUSH/SLUSH  
 EADD 02170225 09C 3/2/1 75/100/100 06/12/12 SLUSH/WET  
 SNOW/WET SNOW 35  
 DRIFTING SNOW. RWY 09L LOOSE SAND. RWY 09R  
 CHEMICALLY TREATED. RWY 09C CHEMICALLY TREATED.)

NEW

~~GG EHAMZQZX EDDFZQZX EKCHZQZX  
 070645 LSZHNYX  
 SWLS0149 LSZH 11070700  
 (SNOWTAM 0149  
 A)LSZH  
 B)11070620 C)02 D)...P)  
 B)11070600 C)09 D)...P)  
 B)11070700 C)12 D)...P)  
 R)NO S)11070920  
 T)DEICING~~

OLD

# New SNOWTAM Format

- The new SNOWTAM has 2 sections
- The new SNOWTAM is conform to the Runway Condition Report (RCR) in content and format

## 1: Aeroplane performance Section

- Item A - Aerodrome location indicator
- Item B - Date and time of assessment
- Item C - Lower runway designator number
- Item D - Runway condition code (each runway third)
- Item E - Per cent coverage (each runway third)
- Item F - Depth of loose contaminant (each runway third)
- Item G - Condition description for each third
- Item H - Width of RWY to which the RWYCCs apply

## 2: Situational Awareness Section

- Item I - Reduced runway length
- Item J - Drifting snow on the runway
- Item K - Loose sand on the runway
- Item L - Chemical treatment on RWY
- Item M - Snow banks on the runway
- Item N - Snow banks on the taxiway
- Item O - Snow banks adjacent to the runway
- Item P - Taxiway conditions
- Item R - Apron conditions
- Item S - Measured friction coefficient
- Item T - Plain language remarks



|   |                           |                          |                      |                           |                  |     |
|---|---------------------------|--------------------------|----------------------|---------------------------|------------------|-----|
| (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)           |                          |                      | ⏪                         |                  |     |
| <b>Aeroplane performance section</b>  |                           |                          |                      |                           |                  |     |
| (AERODROME LOCATION INDICATOR)  |                           |                          |                      | M                         | A)               | ⏪   |
| (DATE/TIME OF ASSESSMENT (Time of completion of assessment in UTC))   |                           |                          |                      | M                         | B)               |     |
| (LOWER RUNWAY DESIGNATORS)  |                           |                          |                      | M                         | C)               |     |
| RUNWAY CONDITION CODE ON EACH THIRD OF RUNWAY (From Runway Condition Assessment Matrix (RCAM) 0, 1, 2, 3, 4, 5 or 6)  |                           |                          |                      | M                         | D)               | / / |
| PER CENT COVERAGE CONTAMINANT FOR EACH RUNWAY THIRD   |                           |                          |                      | C                         | E)               | / / |
| DEPTH (mm) OF LOOSE CONTAMINANT FOR EACH THIRD OF RUNWAY  |                           |                          |                      | C                         | F)               | / / |
| (CONDITION DESCRIPTION OVER TOTAL RUNWAY LENGTH (Observed on each third of the runway, starting from threshold having the lower runway designation number))   |                           |                          |                      | M                         | G)               | / / |
| COMPACTED SNOW<br>DRY<br>DRY SNOW<br>DRY SNOW ON TOP OF COMPACTED SNOW<br>DRY SNOW ON TOP OF ICE<br>FROST<br>ICE<br>SLUSH<br>STANDING WATER<br>WATER ON TOP OF COMPACTED SNOW<br>WET<br>WET ICE<br>WET SNOW<br>WET SNOW ON TOP OF COMPACTED SNOW<br>WET SNOW ON TOP OF ICE  |                           |                          |                      |                           |                  |     |
| (WIDTH OF RUNWAY TO WHICH THE RWYCCs APPLY, IF LESS THAN PUBLISHED WIDTH)   |                           |                          |                      | O                         | H)               | ⏪   |
| <b>Situational awareness section</b>  |                           |                          |                      |                           |                  |     |
| (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 ADJACENT TO THE RUNWAY  |                           |                          |                      | O                         | N)               |     |
| (SNOWBANKS ON A TAXIWAY (If present, distance from the edge of runway (m) followed by "L", "R" or "LR" as applicable))  |                           |                          |                      |                           | O)               |     |
| (TAXIWAY CONDITIONS)  |                           |                          |                      | O                         | P)               |     |
| (APRON CONDITIONS)  |                           |                          |                      | O                         | R)               |     |
| (MEASURED FRICTION COEFFICIENT)   |                           |                          |                      | O                         | S)               |     |
| (PLAIN-LANGUAGE REMARKS)  |                           |                          |                      | O                         | T)               | ⏪   |
| NOTES:<br>1. *Enter ICAO nationality letters as given in ICAO Doc 7910, Part 2 or otherwise applicable aerodrome identifier.<br>2. *Information on other runways, repeat from B to H.<br>3. *Information in the Situational Awareness section repeated for each runway, taxiway and apron repeat as applicable when reported.<br>4. *Words in brackets ( ) not to be transmitted. |                           |                          |                      |                           |                  |     |

→ GG EADBZQZX EADNZQZX EADSZQZX

→ 170350 EADDYNYX

→ SWEA0149 EADD 02170345

→ (SNOWTAM 0149

→ EADD 02170345 09C 3/2/1 75/100/100  
06/12/12 SLUSH/SNOW/SNOW 35

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

# Implementation task list

- updating State's regulatory framework
  - updating National regulations (transposition of ICAO provisions to the national regulations)
  - filing differences in EFOD / publishing significant differences in AIP (if required)
- establishment of a national implementation plan that takes into account the modified ICAO provisions;
- notification to affected aerodromes, ATS units and Users (operators/airlines) of the new requirements and changes (through circular, etc.);
- revision/updating of the software/templates used to issue/receive SNOWTAM (NOTAM/SNOWTAM system); and
- updating the formal arrangements between the aerodrome and the AIS.



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