

**AD 1.2 Rescue and Firefighting Services (RFFSs), Runway Surface Condition Assessment and Reporting, and Snow Plan**

**1. Rescue and Firefighting Services**

At public aerodromes - which are used for commercial transport of passengers by aeroplanes having a MTOM of 10 ton or more, or which are certificated to carry more than 19 passengers - fire fighting services will be established in accordance with the Danish Regulations for Civil Aviation BL 3-9.

For some public aerodromes sea rescue services have also been established.

Public aerodromes without rescue and fire fighting services are approved only for commercial transport of passengers by aeroplanes having a MTOM less than 10 ton and which are certificated to carry not more than 19 passengers.

However, a public aerodrome without fire and rescue services may for other reasons be limited to a less MTOM than given above.

Information about whether there is service or not and also the extent of such service is given for each aerodrome in AD 2.

For each individual service a category will be given in accordance with the scheme below.

Temporary changes will be published by NOTAM.

**Rescue and Fire Fighting Services**

Category (CAT)	Amount of water in litres for production of synthetic foam
4	2400
5	5400
6	8000
7	12000
8	18000
9	24000

Note: Category 1, 2 and 3 are not used.

**2. Runway Surface Condition Assessment and Reporting, and Snow Plan**

2.1 Organization of the runway surface condition reporting and winter service

The runway surface condition assessment and winter service is conducted by the aerodrome operator at the aerodromes listed below:

- Aalborg
- Aarhus
- Billund
- Bornholm/Rønne
- Esbjerg
- Karup/Midtjyllands Lufthavn
- Kolding Vamdrup
- København Kastrup
- København Roskilde
- Odense/Hans Christian Andersen Airport
- Stauning
- Sønderborg
- Vojens/Skrydstrup

The aerodrome operator assesses the runway surface condition, determines the runway condition code (RWYCC) and provides the corresponding runway condition report (RCR) in accordance with the global reporting format (GRF) methodology. Pilots will be informed of the RCR-content by either SNOWTAM or under summer conditions, where STANDING WATER is present, by NOTAM, and directly by the ATS-unit including ATIS.

Clearing priorities are described for each aerodrome in section AD 2, point 7 - Runway Surface Condition Assessment and Reporting, and Snow Plan.

The aerodrome operator is responsible for surveillance of the movement area within the published operational hours of service, at least

once a day for a code number 1 or 2 aerodrome and at least twice a day for a code number 3 or 4 aerodrome. A runway is inspected whenever weather conditions or other circumstances leads to changes in the condition of the runway, or if special air-reports indicates that the runway condition deviates from what has previously been disseminated.

2.2 Surveillance of movement areas

The aerodrome operator surveils the movement area.

2.3 Surface condition assessment methods used

The aerodrome operator assesses the runway surface condition for each third of the runway using a Runway Condition Report (RCR). The ATS-unit may choose to report the runway surface condition for the whole runway instead of each third of the runway if the contaminant, depth, coverage and RWYCC is the same for each third of the runway.

The runway condition report contains among other things information about the aerodrome location indicator, time, runway, RWYCC, per cent coverage contaminant, depth and condition description. If the runway is reduced, the RWYCC reflects the conditions of the reduced runway.

The runway condition code is specified using numbers in accordance with the runway condition assessment matrix (RCAM):

RUNWAY CONDITION ASSESSMENT MATRIX (RCAM)			
Assessment criteria		Downgrade assessment criteria	
Runway condition code	Runway surface description	Aeroplane deceleration or directional control observation	Pilot report of runway braking action
6	• DRY	---	---
5	• FROST • WET (The runway surface is covered by any visible dampness or water up to and including 3 mm depth) <b>Up to and including 3 mm depth:</b> • SLUSH • DRY SNOW • WET SNOW	Braking deceleration is normal for the wheel braking effort applied AND directional control is normal.	GOOD
4	<b>SPECIALLY PREPARED WINTER RUNWAY</b> <b>-15°C and lower outside air temperature:</b> • COMPACTED SNOW	Braking deceleration OR directional control is between Good and Medium.	GOOD TO MEDIUM
3	• SLIPPERY WET • DRY SNOW or WET SNOW (any depth) ON TOP OF COMPACTED SNOW <b>More than 3 mm depth:</b> • DRY SNOW • WET SNOW <b>Higher than -15°C outside air temperature:</b> • COMPACTED SNOW	Braking deceleration is noticeably reduced for the wheel braking effort applied OR directional control is noticeably reduced.	MEDIUM
2	<b>More than 3 mm depth of water or slush:</b> • STANDING WATER • SLUSH	Braking deceleration OR directional control is between Medium and Poor.	MEDIUM TO POOR

1	<ul style="list-style-type: none"> <li>• ICE</li> </ul>	Braking deceleration is significantly reduced for the wheel braking effort applied OR directional control is significantly reduced.	POOR
0	<ul style="list-style-type: none"> <li>• WET ICE</li> <li>• WATER ON TOP OF COMPACTED SNOW</li> <li>• DRY SNOW or WET SNOW ON TOP OF ICE</li> </ul>	Braking deceleration is minimal to non-existent for the wheel braking effort applied OR directional control is uncertain.	LESS THAN POOR

Information on aerodromes approved for SPECIALLY PREPARED WINTER RUNWAY is shown under AD 2, point. 7 - Runway Surface Condition Assessment and Reporting, and Snow Plan, regarding the individual aerodromes.

The RCAM allows for making an initial assessment of the runway surface condition based on visual observation of contaminants on the runway surface: their type, depth and coverage, as well as the outside air temperature. Downgrading and upgrading is an integral part of the assessment process and essential to developing relevant reports of the prevailing runway surface condition. The aerodrome operator will appropriately down- or upgrade the RWYCC if the RWYCC in accordance with RCAM does not reflect the prevailing conditions accurately, and it is supported by other observations e.g. experience and local knowledge. Friction measurement can constitute part of assessment of the runway surface.

2.4 Actions taken to maintain the usability of movement areas  
Methods (both mechanical and chemical) used for clearing snow, slush, ice and standing water are, due to local conditions, handled individually and described under AD 2, point 7 - Runway Surface Condition Assessment and Reporting, and Snow Plan, for each aerodrome concerned. Whenever the runway condition changes due to weather conditions, the runway condition will be improved by means relevant for the actual extent and characteristics of the contaminants. The aerodrome operator will report a RCR including a RWYCC to the ATS unit and if relevant also cause the dissemination of a SNOWTAM.

Following abbreviations for de-/anti-icing substances will be used:

- (a) KAC, for potassium acetate fluids
- (b) KFOR, for potassium formate fluids
- (c) GAC, for glycerine acetate fluids
- (d) NAFO, for sodium formate solids
- (e) NAAC, for sodium acetate solids
- (f) EG, for ethylene glycol fluids
- (g) PG, for propylene glycol fluids
- (h) UREA
- (i) SAND (grain size will not exceed 3.5 mm at aerodromes used by jet aircraft, and 5 mm at aerodromes used by piston aircraft).

2.5 System and means of reporting

A runway condition report (RCR) consists of an aeroplane performance calculation section and a situational awareness section.

RCR information will be passed to pilots by the ATS-unit and/or ATIS for each third of the runway or the whole runway, cf. para 2.3, in the order of the direction of landing or take-off.

The aerodrome operator reports to the ATS-unit on matters of operational significance, particularly the presence of the following: WATER; SNOW; SLUSH; ICE; FROST; anti-icing or de-icing liquid chemicals or other contaminants, snowbanks or -drifts.

Runway condition reporting is initiated when a significant change in runway surface condition occurs due to WATER, SNOW, SLUSH, ICE or FROST. Reporting of runway conditions will continue to reflect significant changes until the runway is no longer contaminated, at which time information will be provided that the runway is wet or dry, as appropriate.

Through the upgrading procedures, RWYCC 1 or 0 can be upgraded to no higher than RWYCC 3. In case of complete removal of a contaminant, the remedial action may result in higher RWYCCs being reported. Down- or upgrading of a RWYCC will be promulgated in the situational awareness section of a SNOWTAM under item T - Plain language remarks, expressed as "RWYCC DOWNGRADED" or "RWYCC UPGRADED". When expressed by the ATS-unit or ATIS the information will be reported immediately after RWYCC.

During non-winter conditions, pilots will be informed about the location and depth of any STANDING WATER which is not connected with SNOW, SLUSH or ICE by the ATS-unit and/or ATIS and through NOTAM.

2.6 Runway closure

For RWYCC 0 assessed by aerodrome personnel or a special air-report on runway braking action LESS THAN POOR, the suspension of operations will be considered until corrective action has been taken to improve the runway surface conditions.

In case of closure of an aerodrome, information will be disseminated in a NOTAM.

2.7 Distribution of information about runway surface conditions

When a paved runway or portion thereof is SLIPPERY WET (WET in combination with information that the surface friction characteristics for a significant portion of it has been determined to be degraded or the braking deceleration is noticeably reduced), pilots will be informed by the ATS-unit and/or ATIS and NOTAM.

When the runway is contaminated by SNOW, SLUSH, ICE or FROST, STANDING WATER or is WET associated with the clearing or treatment of SNOW, SLUSH, ICE or FROST, pilots will be informed by the ATS-unit and/or ATIS and via SNOWTAM.

The maximum validity of SNOWTAM is 8 hours. A SNOWTAM cancels the previous SNOWTAM. When within the operational hours no SNOWTAM is issued after 8 hours of a previous SNOWTAM it is assumed that the condition of the runway is DRY until further information is disseminated.

However, at aerodromes with limited operational hours, the lack of a valid SNOWTAM during the period of closure, should not be considered as if the runway has been inspected and as the existence of non-winter conditions at the time of aerodrome opening.

Through the upgrading procedures, RWYCC 1 or 0 can be upgraded to no higher than RWYCC 3. In case of complete removal of a contaminant, the remedial action may result in higher RWYCCs being reported. During winter conditions up- or downgrading of a RWYCC will be promulgated in the situational awareness section of a SNOWTAM under item T - Plain language remarks - immediately after RWYCC. During summer conditions in case of STANDING WATER or SLIPPERY WET, information on up- or downgrading of a RWYCC, will be disseminated in NOTAM.

The ATS-unit including ATIS, will disseminate information on the RWYCC including a reference if the RWYCC is upgraded or downgraded followed by contaminant coverage, depth, and type of contaminant per runway third. If the runway condition is the same for all thirds in relation to the runway condition code, degree of coverage, contaminant depth and contaminant type, the information is given for the whole runway.