

Questions

The questions listed below were raised by participants during the GRF2019 Symposium. The content of the question and the answer provided express the view of the participants and do not engage ICAO.

Session 1: Global Reporting Format (GRF) key stakeholders' perspective

Will adverse pilot reports lead to an automatic downgrade?

It was mentioned that in rain, only the three RWYCC would be needed. While I agree that each condition falls into a category, but they are not necessarily RWYCC 5, 3, and 1. They are instead RWYCC 5 for WET, RWYCC 3 for Slippery when WET, and RWYCC 2 for Standing Water. Is this what was meant?

Awareness will be one of the main challenges. How can address the challenge and what would be the role of international organizations such as IATA?

Will the new online training be available in other ICAO languages?

Are the airports operators present at the event?

RWYCC are important for landing, but contaminant type and depth are what is important for takeoff. Will this information be communicated to the pilot through ATC?

In SNOWTAM syntax reduced runway length is referred as reduced LDA - what about reduced take-off distances? Modern performance software includes all runway dimensions and the software are able to handle a reduced distance as meter from THR or EOR (end of runway)...Is this TEHR- or EOR cut allowed reporting method in SNOWTAM element I)?

Will IATA provide training contents to their members? Is IATA in favour of mandating classroom or simulator training for pilots?

Will RCR reporting and SNOWTAM publishing procedure be year around process? During summer period, does the airport publish "SNOWTAM" for loose sand, water over 3 mm, slippery wet etc.?

Two questions in mind: 1) What are the guideline(s) on manpower planning to conduct runway assessment & reporting? 2) What are the training module(s) on runway assessment & reporting?

Can aerodrome also upgrade if the aircraft performances indicate better performance than the RWYCC?

How can we ensure that communications from Pilots to ATC reach the airport operators on time?

Will the system eventually become an automatic upload, perhaps in real time?

How do you propose the use of RCAM to general aviation?



Will the SNOWTAM as a term disappears in Nov 2020 and replaced by GRF?

Is available also statistics of runway excursion accidents in winter conditions (snow, ice, slush) vs. other conditions (wet, standing water, slippery wet)?

To what extent is the ANSP function only of a message conveyor? Would the runway data not also be a determining factor of the establishment of runway in use, given other factors such as noise, crosswind etc.?

How it will be possible to be sure that the information coming from flight crew will be available to other aircrafts using same runway, if it implies on RWYCC modification/degrade? This will be in charge of ATC or airport operator or both?

With the implementation of GRF do you see any offloading of decision making and responsibilities from the flight crew to the airport operators?

What are the challenges experienced by states which would prevent them from adopting ICAO GRF guidelines as they are today?

Will there be a required frequency of these reports? I.e. during tropical rain showers, a RCC could be done at 1100, but at 1144 a heavy shower passes through the Aerodrome, Pirep reports then suggest a downgrade at 1153. Would this trigger a second inspection (or 3rd, 4th....)

Is there guidance on what level of contamination triggers runway contaminant removal when available?

Do you see automation also being used for the provision of RWYCC e.g. in ground runway sensors , and quicker dissemination of the information.

What about the liability for the ANSP when a landing clearance has been issued and an incident/accident happens?

Will reporting use the IT reporting system? What is the comparison to effectiveness with the current system? What if there is a failure of IT technology?

How many times have the runway inspectors to change the RCC after a rainstorm event?

How does the tool factor in the issue of time - the gap between the observations on the ground vs the time of actual landing when the precipitation is still occurring?

In a reality were aircraft take off and land on runway every 45 sec, is continuous measuring of runway conditions a realistic target?

Session 2 : Overview of the GRF

How will friction measurements be used in RCR's?



When will the SARPS be available in order for the regulators to start drafting Regulations and Technical Standards?

Why are SNOWTAMs used when many States don't have winter conditions and have never issued SNOWTAMs?

What runway condition code is used to report HAIL typical from CB conditions which otherwise melts within 5-10 mins and becomes slush or standing water.

Is it the same report for liquid and solid contaminant?

Why there is runway width in SNOWTAM performance section H) and runway length in situational awareness section I) when length is important for airplane performance?

Is PIREP called AIREP in November 2020?

How long is a GRF Valid? How often is the GRF done? (Is this a maximum time between reports)? What is the process if the airport operator is no longer onsite to report the GRF? Is a NOTAM issued?

If we receive a small rain in a sunny day, do we change the code?

What part of the information is expected to be disseminated via ATIS?

How different is the AIREP discussed in a GRF context from the AIREP defined by provisions in ICAO Annex 3? I don't see any requirement on RCR related to AIREP in Annex 3!

How is the RWYCC communicated to the cockpit before landing? There has to be a digital way of communication.

EASA's NPA on Runway Safety envisioned the possibility of State's continuing to allow friction measurement by airports and certification of friction testing equipment on a national basis, does ICAO also envisage this possibility and would it be advisable?

Which equipment's are used to measuring of contaminant (standing water) depth and how to keep a quality of measurements?

Session 3: Implementation experience case study

How can we measure ice conditions?

How is contamination such as rubber deposits measures and reported?

How do we deal with contaminants in Africa? Rubber deposits being the main challenge.

How does rubber contaminants fit in the New Global Reporting format? How is its assessment affect airplane performance especially in wet conditions?



How many airports have implemented TALPA?

What is the exact definition of "slippery when wet"?

Now two years later, what percentage of US airports have decided to systematically report WET? How did they solve / mitigate the man power issue?

Could FAA explain the 1000 feet "minimum" TDZ for aircraft performance?

Could Alaska airline clarify whether ice would only qualify as 3 or higher if sanded?

What does a aircraft manufacturer do to implement TALPA and meet it's intent?

Does Alaskan have its own version of the RCAM with additional criteria? Do other airlines also have their own?

TALPA/GRF are there any differences?

Do you get a credit if an EMAS installed?

Session 4: State Initiatives and pre-implementation Testing

Which Canadian airports are testing GRF before the global rollout in 2020?

Is there any equipment that provides water deep over runway in order to permit a correct classification of wet globally?

From states with pre-implementation experience, what is the benefit from an implementation team / committee and which stakeholders should be included?

Do you consider national and local events an essential complement to the planned regional events to support implementation by all stakeholders at aerodromes?

What challenges did you experience in your implementation of Snow depth measurement by the French airports?

Do I understand correctly that France has moved to develop its regulation in advance of EASA finalizing its regulation?

In Japan, do you have an estimate of how many staff will need to be trained?

What are the selection criteria for trial airports for the TC?

Can Transport Canada elaborate on the "snow drift" lesson learned? How is it reported in the RCAM and what is the difference to the GRF?

How to use GRF when we never have snow?



What is the plan to ensure timely RCR transmission? Which means of communication will be used?

Do the Canadian Talpa / GRF will keep the need to change the wet or dry condition of the runway?

What does Transport Canada wish to continue issuing CRFI when it doesn't align with ICAO's recommendations?

Transport Canada mentioned the BAT tester could work with slush. How does it work with regard to drag when aircraft wheel sizes vary so widely?

Should staff and professional organisations be involved in deployment working groups?

Will CRFI be done in 3rds? If so how?

ACI has provided a training syllabus aligned with reporting one contaminant per third. Will Transport Canada provide a training syllabus for the differences they have chosen that are different from the ICAO recommendations

Were there risk assessments performed by regulators deviating from ICAO GRF?

What is the approach that can fit AFI region considering there is no snow but mostly affected by rubber deposition?

Session 5: Implementation – Regulator and airport operator perspectives

SNOWTAM will stay after Nov2020 (there is already amendment to ICAO Annex 15), but what will be then the role of RCR? Isn't it duplicate of the same information in two different messages?

Why have sand and rubber been taken out from the list of contaminants when many airports in the Middle East are facing them as their main contaminants?

The messaging from panelists was need for global harmonization and any state particularities are unsafe. We've heard some states are introducing differences/not harmonizing. Will ICAO or IATA disseminate those state differences so air operators can train to all of them?

Is Transport Canada firm on their decision to use the TALPA hybrid or will they consider following ICAO recommendations for GRF in the interest of safety and global harmonization?

There is no percentage of the contaminant on the runway in the RCAM, as one of the most important conditions for the assessment... Why?

Will EASA develop training requirements or specifications for states to use in building their own courses?

Can EASA share what kind of safety promotion activities and the automated systems mentioned in your slide?

The latest date to comply with the GRF mandate is the 5th of November 2020 and states could certainly implement this in advance. This would help in reducing the risk of last minute implementation and the associated problems of operators not knowing what system applies at the time!

Do you really think that you can get relevant RCC without knowing friction coefficients measured by friction testers?

How will Montreal airport train its staff?

Software has been mentioned by several speakers as an enabler. A big success factor in the FAA implementation was the online FICON reporting tool. Which international organization can facilitate the development and on-time international availability of such a reporting tool?

How many people do airport operators plan to train before Nov 2020? How long are the training sessions developed for the GRF, especially for runway inspectors and decision-makers responsible for the RCR?

Is training to airport personnel delivered in English or local language(s)?

A question to Steven - What type of technologies did Singapore evaluate for standing water measurements?

Could a correlation be made between heavy rain intensity and RWYCC code 2? Especially during a storm when it may be difficult to make an inspection?

Mr. Fortin mentioned they will become more conservative in their reporting under GRF. Can you explain why?

Will EASA publish Mu guidance on the RCAM for airports for down grade purposes? Not publishing guidance could lead to airports not knowing when a downgrade is necessary.

Hong Kong mention the use of sensors and other equipment as a plus to do assessments, especially regarding stand water thickness on RWY. Is it possible to use it to develop automated reports when they have 3mm of water or more?

Who should take the lead in building awareness across the continent of Africa?

We have just heard that AFI region has less knowledge on GRF mandate than any other region: do you believe that workshops, efforts and emphases should first be done in areas with less maturity than those with more.

MSP - with Mu values less than 30 why didn't you downgrade the 5/5/5 to a 3/3/3?

When you comment that FICON is on ATIS, is this a reference to the NOTAM in ATIS or a duplication of the FICON information embedded in the ATIS?

Does the runway become "slippery wet" when wet when contaminated by glycol?

Do high speed taxiways require special attention within the GRF since the aircraft speed when entering a high speed taxiway could be up to 50 knots?

Do the GRF / RCR introduce an inherent risk of continuing operations in marginal situations? Indeed, confusion is going to be introduced globally as many States and Airports will persist with friction measurement.

A publication of a Guidance Material is needed, is there a plan for stakeholders (CANSO, IATA, ICAO, EASA,...) to come together to jointly produce a guidance in support of the GRF implementation.

How often does Munich inspect and report runway conditions during snow?

Any technology available in the market that is proven to be effective in measuring the level of runway surface contamination, i.e. mud, rubber deposit, standing water... etc?

How will a successful GRF implementation affect the requirement to implement RESA?

Session 6: Implementation – Airspace user views

Is there a guideline on what should be the minimum time lag from the time the information is received/process till the time is RWYCC is being generated?

Does experience (e.g. in the US confirm) Mr Fortin's worries about more frequent RWYCC downgrades after pilot reports of poor braking action ?

How do pilots cross-correlate GRF RCR reports with the METAR and TAF that they also receive?

United systematically uses the lowest RWYCC for dispatch. Is this true for such limiting airfields as Jackson Hole? How do you deal with "Conditions not monitored"?

Can you clarify how do you evaluate "FICON appears to be outdated"?

Why only do Captains have winter training for Arctic flying (Norwegian)

Does the FAA publish friction in the NOTAM?

With the implementation of the GRF, any plans to remove/update the reporting requirements for runway friction in Annex 14?

The dispatcher needs to calculate landing distance to make the decision if the flight should depart and updated conditions are monitored enroute. - What is the impact on the airline if the flight gets to an airport and can't land? - Is payload impacted on flights to account for RCC values?

How will we make the GA/BA community aware of the GRF? Could GRF webinars be done globally?

How do you/your company expect the implementation of the GRF, to affect your regularity on winter runways in the Arctic?



Anthony had a note with valid times of FICONS- What is the issue with FICONS being in the system for 24 hours and valid for 8 hours?

Can Norwegian describe how they will train pilots in using the GRF?

The scope of required training/awareness for flight crew seems to be quite extensive. How should this knowledge be delivered?

How does a check air man validate that a pilot can discriminate between medium and medium to poor braking when providing an AIREP? How is this training validated for accuracy?

Could ICAO specifically recognize the effect of heated pre-wetted sand on ice - As a specific upgrade criterion?

Is there a standardized approach and methodology for pilot reporting of braking action? Or does every airline and potentially every pilot do it differently? Is it subjective generally or is it based on technical inputs?

Can you explain what you mean by AIS being responsible to get RCR in ACARS? There is for the moment no requirement on AIS to that extent. Do you propose to change that?

Has IFALPA or will IFALPA brief its members / pilots with regard to GRF?

Some flexibility was left for states to use friction information added. Would that not affect the desired harmonization benefits?

Would the inclusion of RCR Syntax within D-ATIS assist the pilots?

When will MOTNE disappear?

If not full width of RWY is e.g. chemically treated - should be assessed only treated part of RWY or whole one (with e.g. 25% of ice basically with no impact on braking...)?

Session 7: Implementation – ATC and AIS provider views

What is the definition of "fair" braking action? "Good" braking action?

As an ATCO what would your reply be to a pilot that asks for mu values?

How can we get destination RCR SNOWTAM and MET info to pilots earlier in advance of top of descent?
Is the best way more provision of digital ATIS over ACARS?

How an ATCO can assess that an aerodrome is available? This is a task of the flight crew and it is their decision to continue the approach or divert.

Is "Braking action" different between aircraft? IE 777 vs CRJ. If so could this lead to an issue giving such reports?



ATC communicate the RCR to flight crew - presumably ATC cannot know the crosswind limits, landing weight and pilots intentions for all flights?

CANSO mentioned a task force...who would be part of it and what would be its outcome?

What is the RWYCC transmission time lag (maximum) that is acceptable to ATC for airport operator to report the runway condition?

Will the RSC format continue to be published after post implementation of GRF? We currently subscribe to receive RSCs for select ADs. RSCs are delivered to us via the ARINC circuit. What other options are available for delivery of RSCs to the international aviation community?

What are the conditions of satisfaction by the different stakeholder for a successful implementation of GRF?

Has there been an in- depth discussion on the ATS runway in use choice based on level of contamination vis-a-vis other variables.

Is there a standard phraseology for the ATC if they were to transmit the RWYCC?

Doesn't the GRF require the latest PIREP to be used? RWYCC is to be downgraded, it is not based on interpretation or observed trend by ATC?

What are examples of software that support the airport operator's inspection reports? So that they can instantly be sent to ATC?

Session 8: Guidance Material, Measurement Tools and Future work

Is there any equipment that provides water deep over runway in order to permit a correct classification of wet globally?

How might SWIM help connect all stakeholders to make timely decisions and enhance awareness?

When will ICAO circular 355 be available in other ICAO languages?

Eye as a tool is possible to use only during runway inspection. But there is pressure to lower the number of inspection due to capacity. How ICAO consider automatic assessment of runway contamination and "Auto-RCR"?

Much of the discussion has been on snow and ice. How about measurement techniques and assessment methods for water, especially in areas where there are fast occurring and intense storms?

When will Doc 10064 - Aeroplane Performance Manual become available?

Visual observation is possible but might not be feasible for a busy runway. How else can we achieve this visual observation and at the same time still providing real time or updated information for us to generate the RYWCC?



Does it make more sense to mount sensors at all the aircrafts and automate the RWYCC reporting process? That will relieve the pressure to ATC, provide immediate information about the runway condition for the next landing/departing aircraft.

Is it allowed to installed sensors at runway surface? (Not at runway edge but at wheel path area). How many sensors are needed to be representative to report the surface conditions at every runway third?

How would you measure sand covering the runway surface because with other contaminants, the depth is generally used to make it possible to measure?

Are there any specific standards of mu-value by different friction testers (SFT, mu-meter, skiddometer, etc.)?

What are the proven measurement tools to assess the runway contamination situation for the reporting of RWYCC?

Some people are suggesting to use Block chain for Security in the Aviation Network. (SWIM).

Is there a view as to whether high definition cameras can help the digitization of reporting?

Will the GRF accelerate technology development and perhaps eventually make it cheaper?

Information Session

Obviously you cannot develop training in support of all ICAO provisions...how do you prioritize?

Pilot training is partly defined in Circ 355 Named "Assessment, Measurement and Reporting of RWY Surface Conditions" and might be difficult to find because of the name. Could pilot TRG find its way to PANS OPS or some other logical place?

What actual Standardised Training Package is ICAO preparing for STATES on how to introduce the GRF

Are there plans to increase CBT (computer based trainings) as a cost effective way for States and operators to keep themselves updated on ICAO provisions?

For some States, the USOAP CMA audits could be very challenging. Are there plans to support States to be prepared and understand the activity by giving the USOAP CBT for free to certain State specialists?

Any training package based on best practices & techniques on how to assess on the field (by aerodrome ops officers) the runway conditions?

Apart from training, are there any plans to make ICAO safety related documents for free (maybe by using advertising to cover costs?)

There are several versions of RCAM matrix - one contains mu values (overlapping intervals) another not. One contains contaminant "slush over ice", another not. Moreover there are some differences in wording (e.g. snow over ice vs. snow on top of ice). Which version is/will be obligatory?



How many staff will receive the training at BRU?

The GRF online course will be available in other ICAO languages?

Does GRF expect publishing of a Snowtam in case of any standing water (3+ mm) (flooded previously) runway condition? (During the summer)

With reduced wry width being reported: which are the recommendations for operators concerning x-wind at Idg/takeoff? What is the minimum width in relationship to wheel track? How about lateral snow banks?

Would airline operations training be very different from flight crew training (I.e. are two different courses needed)?

When will IATA have GRF training available for aircrew?

In flow chart was the first question about coverage - if less than 10% no RCR is reported. What about dry condition? No RCR for dry runway (e.g. when contamination ceased) as for DRY coverage is not reported?

Would ACI please provide more clarifications about not RCAM reportable contaminant as: sand, loose sand, rubber, ash...

Should we include GRF in an-initio training for pilots, controllers and airport operations staff? How would we reach out to associated training organizations?

What will be the mean of information transfer from RCR to SNOWTAM disseminated to end users?