Good morning Ladies and Gentlemen,

I am delighted that the Symposium has finally started after nearly a year in preparation and delighted to see such a good attendance.

The previous speeches have admirably set the stage for the rest of the symposium.

ICAO has developed a global system which will harmonize different approaches taken in different States, and which replaces sole reliance on runway friction measuring devices for operational use – mu values very widely depending on the device. We have worked on this with states and industry– airlines, pilots, ATC, aircraft manufacturers.

It will require a major joint effort to be ready for 2020, and ACI will do its part to make implementation a success by working together with our members.

The airport-operator stakeholder's perspective:

Even with the best runway clearance equipment in the world and the best trained staff, airport operators cannot instantly and completely remove all contaminants from runways.

After these best efforts to clear runways, airport staff can report on conditions and give pilots the information they need to land and take off safely - information that is useful and timely.

We wanted clarity on what airport operators are expected to report and now we have that.

The new system of Runway Condition Codes recognises two main cases: with winter contaminants (ice, snow and frost) and without winter contaminants (Wet, Slippery Wet and Standing Water). The "without winter" case requires only three Runway Condition Codes. On the other hand, winter conditions require use of the complete system of six Runway Condition Codes. After the assessment is made, a Runway Condition Report needs to be generated, and shared in the form of a SNOWTAM or in case of "wet" just a communication from the Air Traffic Service to pilots. Quite simple, in principle. Then the pilots should know what conditions to expect and can programme it into their landing or take-off preparations.

Airport operators have a vital role in the new system, and the challenge is to ensure local deployment, with adequate training.

ACI has developed a very convenient on-line training course to help airport operators to report under the new system. This is based on the published ICAO material and explains to airport staff how to recognise the need for assessments; how to make accurate assessments; how to decide when a new assessment is needed; and how to publish the runway condition report, among other things.

As Dr Liu explained, this fits into the wider context of runway safety. ICAO initiated a Runway Safety Programme, working with industry partners. The partners and ICAO

worked together to hold ICAO's Global Runway Safety Symposium in 2011, followed by regional symposia around the world. The Runway Safety Programme Partners contributed to the Global Runway Safety Action Plan, launched at the second ICAO Global Runway Safety Symposium in Lima less than two years ago, in 2017.

In parallel, specifically to develop a new airport measurement and reporting system ICAO set up the Friction Task Force under the Aerodrome Design and Operations Panel, and ACI and its members have supported the FTF since its inception.

Early on, the FTF produced Circular 329 on Runway Surface Condition Assessment, Measurement and Reporting which became a reference. It then developed the provisions of the GRF, in the PANS-Aerodromes with corresponding amendments to several Annexes. The Task Force continued work to update the guidance material – the revised Circular has just been published (355). I would like to salute the members of the FTF for their leadership.

Going back a decade

The Industry Safety Strategy Group was set up to advise ICAO on Safety and ICAO published the Global Aviation Safety Roadmap in 2006 and a Global Aviation Safety Implementation Plan later that year on risk factors in aviation – this included runway risks and mitigations.

But in terms of runway safety, attention was for a long time focussed on runway incursions.

At around the same time ACI approved a resolution on safety in late 2006 that stated that ACI will promote the use of new technologies in conjunction with procedural and training improvements to reduce the incidence of runway over-runs, runway incursions, and errors of navigation on airports.

Several fatal accidents acted as wake-up calls about the danger of runway excursions. Although all accidents are multi-factorial, it was clear that the time was ripe for a global effort to review runway operational safety, including friction measurements and reporting, and pilot training and technology on board aircraft. A global approach was needed, since aircraft operators from many countries may land at a given airport.

In the USA, the FAA set up the Take Off and Landing Performance assessment rulemaking committee.

The search for data on runway excursions

in 2007, with encouragement from ACI, the Flight Safety Foundation convened the Runway Safety Initiative, which examined data for a 14-year period from 1995 to 2008.

When in 2009 the FSF published its report titled "Reducing the Risk of Runway Excursions", it found that 29% of all accidents to commercial transport aircraft involving

major or substantial damage were runway excursions, the remaining 1% involving runways were runway incursions or runway confusion. Although only 8% of the excursions involved fatalities, excursions were so much more numerous that that they accounted for <u>83% of all runway-related accidents with fatalities</u>. Cause for concern indeed. It was clear that excursions had been neglected, and that their fatality risk had too long been assumed to be less than incursions. When we delved into the root causes, we found a lot of factors.

Causal factors

The report's analysis showed that 79% of runway excursions occurred on <u>landing</u>, and **Ineffective braking due to runway contamination** was a factor in about 25% of landing excursions. **Late or inaccurate runway condition reports** were also clearly identified as a common risk factor in Runway Excursion Events.

The report found other even more important causal factors including **Go-around not conducted**, **and Long landing**, which were addressed by guidance on the importance of stabilised approaches and clear criteria for go-arounds.

In conclusion on the airport-operator perspective,

with the new GRF system, the airport operator role is now clear as regards the reporting of surface conditions.

The GRF fits into the broader context of improving runway safety and solves a problem that has been apparent for many years.

Although it is possible that small revisions will be necessary as a result of a learning process, we believe the GRF is here to stay.

We hope that the implementation of this new system will be smooth and will be adopted by all States and by the entire industry simultaneously.

Thank you

David Gamper, ACI