Remarks of CANSO Director General, Jeff Poole, to the SESAR Innovation Days in Salzburg on 3 December 2018

Good evening. Thank you to Florian Guillermet and the SESAR Joint Undertaking (JU) for inviting me to speak as CANSO Director General on the eve of the eighth edition of the SESAR Innovation Days. As Florian knows, I have long been a supporter of SESAR. Indeed, I can remember before the SESAR JU was founded in 2006 when I and other industry representatives were arguing passionately that SESAR should only be allowed to proceed if it gathered together all of the then very fragmented R&D for air traffic management (ATM).

So, it is particularly pleasing that a key achievement of the SESAR JU has been its partnership approach in developing so many operational and technical solutions. Also, that its top priority is to continue to deliver concrete results to encourage their uptake by industry, including for example research and development of U-Space to facilitate drones.

At the same time, the SESAR JU is explicitly recognising the need for speed and to keep all stakeholders on the same page in realising the vision based on the concept of operations in the European ATM Master Plan.

State of the industry

ATM has always been an exciting industry – due to its very nature, what we do and how we do it, using such fantastic technologies and harnessing the skills and capabilities of so many people. That is why it is such a real pleasure for me today to address so many young researchers, eminent academics and industry partners. Your work now and in the future is helping develop the technologies that are transforming the air traffic management industry.

Not only is ATM an exciting industry, but these are also particularly exciting times as we are now deploying technologies, tools and processes that have been developed over recent years in SESAR, NextGen and other programmes. These are too many to mention here but they represent an alphabet soup of acronyms in in an industry that is itself an acronym – ATM. You know them all but they include the likes of space-based ADS-B, SWIM (system wide information management), TBS (time-based separation, A-CDM (airport collaborative decision making), extended AMAN (arrival manager), AI (artificial intelligence) as well as the likes of big data, digitisation, automation and free route airspace.

The SESAR community can be very proud of its achievements to date but the fact remains that the industry faces many challenges as well as opportunities. By 2040, traffic in Europe is

expected to grow to between 16 and 20 million flights a year; and we need to integrate the entry into airspace of users, not so 'new' anymore, such as drones, high altitude balloons, autonomous aircraft and other vehicles.

If we do not manage these challenges well, there will be more congestion, more fragmentation and more uncertainty. And the ATM industry in Europe has already seen quite a lot of criticism this year from airlines, airports and others over increased delays and congestion in Europe. Allow me to read you a quote:

> "*This summer will see huge delays once more from which we will all suffer. Every month so far this year, delays have been longer than last year. We cannot sit back and watch the situation unfold; Europeans expect Europe to come up with generic answers to these concerns*"

Was this from an agitated airline executive or European Commission representative last week? In fact, it was from European Transport Commissioner Loyola di Palacio, about the summer of the year 2000 – yes, 18 years ago.

While we may have achieved a tremendous amount in European ATM in recent years, it is obvious that we are barely keeping pace with growth and other challenges. So, what are we doing about this today and how can technology and the work of SESAR help?

We are seeing extraordinary technologies come on stream globally, as I mentioned earlier. These technologies are enabling ANSPs to develop new processes and techniques to reduce delays and improve efficiency, such as collaborative decision-making and air traffic flow management.

SESAR and the importance of R&D

But what is the role of SESAR in all this? Very simply it is one of the solutions to the challenges I outlined earlier. As you know well, SESAR is the mechanism which coordinates and concentrates all EU research and development (R&D) activities in ATM; pooling together experts to develop the new generation of ATM systems.

There are two developments that have the potential to boost R&D efforts considerably: digitisation will support faster and more affordable research, with more flexibility; and ATM systems will be increasingly automated, making greater use of big data and increasing the efficiency of research.

Furthermore, the role of exploratory research will be more important than ever in order to explore new concepts and emerging technologies, which are not currently researched in SESAR.

The SESAR JU has a fundamental role in ensuring that the best innovations, ideas and concepts are promoted into the main work programme of SESAR; and to develop matured SESAR solutions that can be successfully deployed.

What is CANSO doing?

CANSO is the global voice of air traffic management on behalf of its Members – the air navigation service providers (ANSPs) around the world and also the organisations that supply the technology, products, services and solutions to ATM. Our goal is to transform global ATM performance to achieve a globally harmonised and interoperable air navigation system capable of delivering a safe, efficient and seamless service.

In SESAR, CANSO itself has been instrumental in preparing the Pilot Common Projects (PCP) that identify the essential ATM functionalities in the ATM Master Plan, and is working with the SESAR JU and the European Aviation Safety Agency (EASA) to implement new working methods and technologies.

Most importantly, many CANSO Members are fully involved in SESAR and they are 'putting their money where their mouth is'. ANSPs invested EUR 6.2 billion in Europe between 2011 and 2016 in new ATM infrastructure.

So when you hear criticism from airlines and others about the lack of capacity, please remember how much has actually been achieved to date and how much investment has been made. The harsh truth is that demand has outstripped all market forecasts and it is not possible to significantly increase ATM capacity at short notice, particularly in the present European regulatory and institutional framework.

That is not an excuse, it is a reality. But it is only by working closely together and recognising such realities that we will be able to address the capacity issues in European ATM.

Political will

The challenges we face are political and institutional, not just operational because the technologies and procedures that improve the efficiency of airspace rely on a high degree of cross-border and cross-aviation industry cooperation.

The capacity and delay challenges can only be truly addressed by removing the present interoperability and institutional constraints to a true pan-European approach to airspace management.

But that is enough for a whole separate speech; suffice it to say here that CANSO believes that there is huge scope for regulatory and institutional improvements that would facilitate improved ATM performance in Europe.

Conclusion

In conclusion, I have only touched on some of the excellent work that SESAR has undertaken and that is now being rolled out. SESAR is vital to help the ATM industry manage the capacity crunch and cope with the new entrants to airspace. So, CANSO and its Members reiterate our commitment to SESAR and the SESAR JU.

I therefore wish you all the very best for the exciting SESAR Innovation Days this week. Please remember that we need the best possible innovations and technologies, we need

more of them, we need them more quickly and we need to be able to deploy them quickly. But also remember that this is an exciting industry that needs to continue to attract the very best people – so, please have fun and all be strong advocates for ATM.

Thank you.