European Institute – Breakfast Address
Washington, 30 September 2011

Good morning and may I first thank you all for coming to this event so early in the day. There may be something in the fact that it's only this side of the Atlantic that I am ever called upon to make a "Breakfast Address" – or even to attend one.

Of course, I should be careful about generalising about Europeans and Americans. The Swedes are rather different to the Swiss, just as you shouldn't assume that someone from Washington State will have the same outlook or priorities as someone from Washington DC! In fact, maybe you should presume just the opposite.

That means that now I have a major difficulty. Because if I can't generalise, then I may be talking to you for the next three hours or so as I explain how the situation in Slovenia is somewhat different to that in Slovakia. So please forgive me if I resort to a few broad, sweeping statements.

The first of these is to boldly state that aviation and Air Traffic Management – ATM - in Europe and the United States have more similarities than differences. Why do I say that?

Well, we have both seen sustained growth over the last fifty years – to the extent that we are now seeing real constraints in terms of airport and airspace capacity. We both have a frankly remarkable safety record. And in both Europe and the United States there is strong pressure on us to mitigate the environmental impact of aviation – but rather stronger in Europe.

But also we are both looking forward to a period where, while we will continue to see growth, that growth is much less rapid than we see in other parts of the world – in particular Asia. I'll come back to why this I think is so important.

But even our relatively slow growth – in Europe we're forecasting per annum growth of some two to three per cent. in the long term – even that translates into thousands of new flights every day. And without action, that means more delays, more emissions as aircraft can't fly the most direct and efficient route and even a greater safety risk as the skies become more crowded.

So what action is being taken? And here I'm focusing in particular on Europe. Well I believe the most important development is the move towards performance-driven ATM. From the first of January 2012, as part of the new European Union Performance Regime, we will have binding targets on capacity, cost-efficiency and the environment.

Every state has to have a plan saying how it will contribute to reducing delays, reducing costs and reducing emissions. For the second reference period of the Performance Regime, from 2015, a safety target will be added as well. And these targets are tough, intentionally so.

The Performance Regime is only possible because we now have the European Union playing an active role in European ATM. It is directly as a result of the fact that we now have political agreement, at a European level, on the importance of driving forward performance, not just in individual states but across the whole network. That's the basis of what is known as the Single European Sky.

Now we can expect some performance improvement just because the regime is there, in other words just because organisations know that their performance is being compared to the plan and to the targets.

But that's not enough. We need to take some more tangible actions as well. And here we see three main practical steps envisaged in the Single European Sky legislation. The first of these is aimed at the problem of fragmentation – the fact that Europe is a patchwork of relatively small countries, each with its own provider of Air Navigation Services. In the EUROCONTROL area, extending from Ireland in the West to Armenia in the East, we have 39 member states, typically each with its own provider of air navigation services. As you might guess, this is not the most efficient way of doing things.

The answer to this problem is FABs – and no, that's not a replacement for the Beatles, who some of you might remember as the "FAB 4". FAB here stands for Functional Airspace Block. The idea is to get a number of countries to work together to create a much larger area of airspace which would be managed and operated as a single block. And if we can get it to work then it should yield real benefits. We in EUROCONTROL have, for many years now, been running a control centre at Maastricht covering the upper airspace of Belgium, Luxembourg, the Netherlands and part of Germany. And it's very clearly at the top of its class in terms of efficiency, in part because it is able to plan how best to manage traffic, irrespective of national boundaries.

FABs are much broader in scope – for example Maastricht is now a member of FABEC, covering not just Maastricht's states but also France, Switzerland and the rest of Germany. Over half Europe's traffic goes through FABEC airspace. Potentially, just this one FAB is a huge step towards a less fragmented airspace.

I say "potentially" because so far, the operational impact of all the FABs is limited. They are already doing valuable work, for example on improving route design. But it will take time to get the real benefits that should be achievable from more integrated operations. There are significant technical, cultural and industrial relations challenges to be overcome.

Coming back to the developments that will help us achieve the performance targets, the second is SESAR – the Single European Sky research and development programme. One can think of it as the twin to the FAA's NextGen, although they are far from being identical twins. Some two billion euros – that's three billion dollars – are being put into developing the technology and procedures that will result in a major change in how we do ATM in Europe.

The development phase of SESAR is being managed by the SESAR Joint Undertaking – the SJU, a unique partnership between the European Commission, industry and ourselves at EUROCONTROL.

SESAR covers all the aspects of ATM, from working with airports on how they manage arrivals and departures to looking at the en-route phase. The long-term aim is to move towards the concept of 4D trajectory management – with aircraft following a flight-plan that is updated interactively in real time. Controllers would take much more of a monitoring role, rather than actively directing traffic.

But these things are never as simple as they sound. To take one example, a key enabler for SESAR will be to make a step change in how we handle aeronautical data – the basic information of where an aircraft is and where it is going. And for

that, we need to make sure that we have a solution that works globally, because that aircraft probably won't just be flying in Europe. I'll come back to this question of global interoperability later.

Of course, even once you've gone through the research, validation and development stages, you still have to implement the improvement. And this area of implementation, of deployment, is another major challenge. It's vital that deployment is coordinated across the network – and that's because we're looking to achieve benefits across the whole network, rather than piecemeal. We're currently going through a process of working out how we will handle the governance and financing of SESAR Deployment.

Financing is a key element of this review because even though the SESAR Development phase will cost some two billion euros, implementation will cost more than ten times as much. Some of this will be on aircraft equipment and here some public financing may be required. Airlines understandably don't want to spend until they have to – until the benefits are just about to accrue. Getting over this issue of 'last mover advantage' may well need tangible incentives.

Other investment will have to be made by the air navigation service providers and here we see another similarity between Europe and the US. We are both faced with the fairly major hurdle of persuading politicians to take a long term view on investment.

Now persuading politicians to take a long term view on anything is a challenge – they tend to have a horizon which is quite clearly defined by the next election – that strange time when, as someone famously said "The air is full of speeches – and vice versa".

Of course, persuading politicians is even more difficult when you're in our business because, frankly, politicians tend not to think about ATM unless and until something goes wrong.

But we have long lead times in this business and we need to be investing now in order to avoid costly delays and disruption in a few years' time. I had considerable sympathy for Randolph Babbitt when I saw his recent speech in which he noted that, and I quote "The FAA has had 21 short-term reauthorizations in the last four years". The 22nd reauthorization was passed a couple of weeks ago – but that will only fund the FAA until the end of January. As the American columnist Will Rogers once said "I don't make jokes. I just watch the government and report the facts."

Now I promised you three main practical steps to help achieve the performance improvements we need. After FABs and SESAR, the third of these is the creation of a Network Manager. EUROCONTROL has been nominated to take on this role, building on our experience of network planning and flow management.

Here I'm pleased to say that we are already starting to see some real benefits. It's never easy to measure but we believe that, this summer, we have already have a significant, positive, effect on delays. We're also taking on a much more proactive role in seeing how practical improvements can be made to the network in the short to medium term.

Now before someone else comments on this, I should say that delays this summer are still expected to be significantly above target. It's better than last year and we are doing what we can but delays are still being caused by a number of factors – for

example by the real shortage of controllers in several parts of Europe. We need to work on this, for example by improving mobility. One contribution we have been able to make is to provide a number of controllers from our centre at Maastricht to work in Vienna.

But there are other difficulties as well. Greece is facing a major challenge as its government puts through very stringent austerity measures – which are not only restricting the number of controllers but are also having a direct effect on industrial relations as controllers see effective pay cut by more than half.

Coming back to the Network Manager, a new role that we've taken on is the crisis coordination cell. This came out of the Icelandic eruption sixteen months ago, when it became very clear that we needed a much more joined up response to such events. The cell was already put to the test when Grimsvötn erupted this year and more exercises are planned on other sorts of events.

Indeed, although it caused a huge amount of disruption, the ash cloud in 2010 did have one benefit – it really highlighted the importance of aviation and of managing the whole network. You need to plan and coordinate an entire flight before it takes off – in fact, before it leaves the gate.

In recent years we've seen how important it is to have a network view and that's only going to become more evident as the skies become ever busier. And as, for example, it will become increasingly unacceptable to have stacks of aircraft waiting to land, burning expensive fuel and causing unnecessary emissions.

Indeed, the network is much wider than ever before – not only in that it now includes airports and the military but also geographically – much wider that the EU's 27 countries, even wider than EUROCONTROL's 39 member states. In fact, we have to think well outside our continent – just to take one example, a third of Heathrow's arrivals come from outside Europe.

Here, we're beginning to work more closely with our neighbours – in particular the FAA, with whom we have a strong working relationship on a range of topics. Operationally, we are coordinating flights every day – in fact not just individual flights but also the transatlantic traffic flows, the routes for which vary according to the winds. And we see aircraft racing across the Atlantic to get first in line for the holding pattern at Heathrow, which makes that pattern much harder to manage.

But the cooperation isn't just operational. We have a memorandum of cooperation with the FAA and we work together – to our mutual benefit – on a whole series of action plans – on aeronautical information management that I mentioned earlier, on ATC procedures, on wake vortex separation, on trajectory prediction, on future communications – the list goes on.

And that's important because we need to find solutions that are globally interoperable so that aircraft are using the same equipment and crews are trained on the same procedures no matter where they are flying. Now the body for global coordination is ICAO. But ICAO would be the first to say that it cannot operate on its own. It needs the active help of its members in order to make real progress.

And that's particularly relevant at the moment because next year sees ICAO's twelfth Air Navigation Conference. These are infrequent events – the last was in 2001 but they are crucial. In part that's because they represent a real opportunity to get decisions made. But it's also because they act as key milestones, focusing the

efforts of the global ATM community. Even where formal decisions cannot be made, they provide a direction for our efforts for years to come.

Indeed, just last week there was an ICAO Global Symposium as part of the preparation for the Conference next November. Both the FAA and European ATM are major players in this process.

And that needs to continue. In part, it's just local self interest. It makes sense to work to help ensure that the global decisions taken are right for our particular airspace. But I'd hope that it's more than that.

We need to take into account not just our concerns but also those of other regions, particularly those who have very different issues to face.

If we look at the Asia Pacific region, for example and measure in revenue passenger kilometres; in 2006, the traffic within that region – that is to say, flights starting and ending there – was about the same as that in Europe and rather less than that in North America. The prediction for 2036 is that traffic there will be double that in either Europe or North America. Just from that one statistic you can tell that the challenges and problems facing that region are very different to ours.

I firmly believe that while we need to work on the problems in our own regions – after all, the capacity constraints are becoming ever more pressing – we also need to pay more attention to the problems and the needs of the rest of the world as well. Aviation is inherently one of the most globally interconnected sectors that there is. And making sure that Air Traffic Management is fit for purpose on a global scale will benefit not only ATM, but the world economy as a whole.