

Keynote Speech by Dieter Kaden

– Public hearing of the Committee on Transport and Tourism of the European Parliament in Brussels on 27 June 2007 –

A. WELCOMING WORDS:

Mr Chairman, dear Members of the European Parliament, Ladies and Gentlemen:

First of all, thank you for the kind invitation to this public hearing.

It is always a great pleasure for me to come to Brussels. As you know, I also participated in a hearing in the European Parliament when the Single European Sky regulations were being discussed. Since 1995, I have been closely following developments in transport policy and I contributed to Commissioner Neil Kinnock's White Paper on "European Transport Policy for 2020". It has been an exciting experience to watch the SES project unfold.

Today I intend to explain to you how the work of the air navigation services affects CO₂ levels, what fine-tuning will be necessary after SES and what we can do to avoid emissions in the future.

B. GENERAL INTRODUCTION:

The air navigation services organisation in each country ensures the safe, orderly and expeditious handling of air traffic.

These organisations also have the statutory obligation to take environmental concerns into account, for example when planning flight routes.

At a time when concerns for the environment are growing and more emphasis is being placed on protecting our planet, the air navigation services have also begun to take a closer look at the effects of their activities on the environment.

For many years now, we have been endeavouring to reduce noise and pollution.

In the light of the climate discussion today, I would like to focus on the emission of CO₂.

C. MAIN PART:

1) Introduction to FAB/SESAR:

Please allow me to address what I regard as the main interfaces between the air navigation services and the current CO₂ debate. So what exactly are we doing today and what more can be done in the future to reduce aircraft emissions in Europe?

- As you already know, for many years now our main objective in the air navigation services in Europe has been to enhance the efficiency of our network, while maintaining the high safety level. This matter gained a sense of urgency during the capacity bottlenecks and, consequently, flight delays at the end of the 1990s. The adoption of

the Single European Sky regulations created framework conditions that were suitable and, above all, that could be enforced to facilitate the more efficient handling of traffic in European airspace. I sincerely thank you for this support.

In a nutshell, the desired increase in network efficiency requires that the European ANS organisations make the following improvements:

- Shorter (and ideally direct) routings as well as reduced separation minima between aircraft while maintaining the highest safety standards;
 - Optimised flight profiles by using fuel-efficient flight levels and continuous descent procedures;
 - Prior coordination of flight plans and other flight information in order to increase the precision and planability of flights;
 - Not to forget: Avoiding holding procedures in the air and long periods of aircraft having to wait on taxiways with running engines.
- Ladies and Gentlemen: It is perfectly normal for the harmonisation of national ANS plans to be an extremely complex and drawn-out process – mainly due to the high safety requirements that have to be met. It must also be borne in mind that cross-border functional airspace blocks (or FABs) are a matter of national air sovereignty. In other words, a number of complex sovereignty and state liability issues must be resolved before we can embark on such ambitious projects.
- Essentially, the harmonisation process has been up and running according to schedule since 2004 in the form of two projects:

“SESAR” and the foundation of the SESAR Joint Undertaking, and FAB, the establishment of cross-border functional airspace blocks. I believe that these are the main two projects in the air navigation services domain that affect the environment and present real potential to cut aircraft emissions. Please allow me to be more specific:

2) Details on FAB/SESAR:

- On the whole, we are satisfied with the progress and the timing of the projects SESAR and FAB. The SESAR Joint Undertaking will commence its work at the end of this year. A number of European States have taken steps towards establishing functional airspace blocks. For example, the Nordic States have put the NUAC in place. The German air navigation services organisation is developing the “FAB Europe Central” together with its partner organisations in France, the Netherlands, Belgium, Luxembourg, Switzerland and the EUROCONTROL Centre in Maastricht. We will hopefully begin to see environment-related improvements before 2015.
- But how exactly will the environment benefit from these projects?
 - Let us get one thing clear: There is undoubtedly high potential to reduce CO₂ emissions in all of these European projects. However, when the European Commission speaks about the *theoretical* possibility of reducing CO₂ emissions by up to 12 per cent, we have to put this figure in a practical perspective. To give you an example: In Germany today, only one per cent of flights deviate from the prescribed route network due to re-routings and holding patterns. And the deviation from the so-called “great circle”, i.e. the direct route from A to B, is in some cases only three to eight per

cent. So as you can see there is very little potential for efficiency gains, at least in some Member States.

- We must also bear in mind that all of our endeavours to reduce CO₂ will be overshadowed by a forecast sustained traffic growth of four to five per cent per annum. At the end of the day, Ladies and Gentlemen, this means that despite all of our efforts we will never achieve a decrease in air-traffic-related CO₂ emissions in absolute terms through better air traffic management. The real objective is to put the right measures in place in good time to counteract a further increase in this pollutant.

➤ Nevertheless, we must systematically pursue SESAR and the FABs.

a) SESAR:

- The SESAR Joint Undertaking with its two-million-euro budget is expected to pave the way for harmonised technologies for flight routes in Europe from 2015 on.
 - In practical terms, this involves the introduction of new procedures and systems enabling the planning and progress of cross-border flights with a precision that is impossible today.
 - Then we will be able to provide demand-oriented airspace capacity and flight profiles in real time. Delays and re-routings in the air will rarely occur, even with a higher traffic volume.

b) FABs:

- In addition to these procedural and technological advances, the creation of functional airspace blocks is, to a large extent, progressing according to schedule.

- Thanks to these FABs, and above all the FAB Europe Central as it will have the highest traffic volume, we will have a better networking and cross-border use of national airspaces. These airspaces will then be organised according to traffic flows.
- The current feasibility study clearly shows that this networking can be implemented in the form of cross-border management of so-called “hot spots” by 2015. Areas with high traffic density will be disentangled, and aircraft will fly shorter cross-border routes and have more efficient climbs and descents. In this way, a major cut in emissions will be achieved.
- By the year 2020, more than 27 national airspaces in a fragmented Europe will have been merged into six to eight large economic/ecological airspace zones. These zones will be organised according to actually required (international) flight paths. National borders in the air will then be a thing of the past.
- We are also striving to incorporate the concept of civil-military integration into FAB Europe Central. This model has been in practice in Germany since 1994 – and with great success. Airspace management is now more flexible as airspace capacity is allocated to civil and military users according to their requirements. Both user groups benefit from this integration: airlines can use additional flight routes in airspaces that up until then had been permanently prohibited, and the military can exclusively use much larger airspaces for training purposes on a temporary basis.

D. CONCLUSION:

- Ladies and Gentlemen, to conclude I would like to address a few words on behalf of our industry. We have already reached some

milestones. But there is still a long way to go. We must make the Single European Sky work. This is in the common interest of European and national legislators, ANS organisations and users.

- Yet I sometimes have the feeling that Member States are afraid to finish what they have started, that they are afraid to go all the way with the Single European Sky. If we succeed in linking the different efforts to reduce emissions (emissions trading scheme on the one hand, SES on the other) to an overall strategy for ecological air transport, then we would increase the pressure to make States more aware of their responsibilities. They would then take more of an interest as they would be in a position to make a direct and public contribution to protecting the environment.

Thank you for your attention.

ANNEX - Information

Extract of a letter of the High Level Policy Group of the Member States involved in the “FAB European Central” (FABEC) to Mr. Calleja-Crespo (Director Air Transport of the EU Commission, DG TREN), responding to the Communication from the Commission “Building the Single European Sky through functional airspace blocks: A mid-term status report” of 15 March 2007 (COM/2007/101):

“[...] In 2004 [...] a High Level Group with representatives of the Four States [B, NL, LUX, D], including the military has been created and decided to start a joint (States and ANSP’s) detailed feasibility study for the FABEC. The High Level Project Group FABEC in which the States and the ANSP’s are represented directs the project [...].

Since the effort is mainly made to ensure “added values” to airspace users, following goals have been set:

- airspace design (lower and upper airspace included) and cross border sectorization based on traffic flows and main airports*
- rationalization of existing human resources and technical infrastructure*
- improved compatibility between upper and lower airspace*
- improved use of common technical systems*
- improved models of co-ordination between civil and military service providers*
- improved contingency provisions*
- favourable results of a Cost Benefit Analysis and a Safety assessment [...]*

In October 2006, France and Switzerland then proposed to bring their respective airspaces in the FABEC initiative, and to participate as a full member in the Working Group structure of the project. Such integration of important operational interfaces with France and Switzerland in the FABEC project has been welcomed by the ANSPs and the regulators of the “original” Four States. The integration of France and Switzerland as full members in the FABEC was then followed by a modification of the overall project charter [...].

Some figures stress the magnitude of the 6 States joint effort: the civil ANSP’s human resources made available for the FABEC are 72 man/years, the military ANSP’s offered 5 man /years and the total budget is 3.5 million Euro.

In August 2006 the chairman of the HLG informed the United Kingdom about the FABEC initiative. After information exchange the UK asked to join the initiative as a co-operative partner. The UK proposal was agreed end March 2007, allowing the participation in the working process, though without having a decision right[...].”