



MUNICH SATELLITE NAVIGATION SUMMIT 2008

Opening Plenary

Prof. Dr. Guenter W. Hein, Head of the Institute of Geodesy and Navigation at the University FAF Munich and host of the Munich Satellite Navigation Summit, welcomed the participants to



Prof. Hein on the Panel

the sixth Summit. He expressed his pleasure that the number of participating countries is larger than last year. He compared the Summit with a real summit in the near Alps. There one breathe the clean air and everything seems to be very small. "You have an overview in this relaxed atmosphere" said Hein. He wishes that the Munich Satellite Navigation Summit is able to provide a similar atmosphere, to discuss with the responsible colleagues in GNSS "during a nice lunch or a drink at our receptions" and thus "the difficulties might be no more as big as they are, and perhaps there is a solution which comes up since you have not to write some minutes".

Emilia Mueller, Bavarian Minister of Economic Affairs, Infrastructure, Transport and Technology thanked all participants of the Summit 2008, in particular Prof. Hein and all members of the German government who were involved in the Galileo activities. She referred to him as one of the most important personalities in navigation in the world and we are pride to have him in Bavaria. As Mrs. Mueller briefly mentioned, the past months have been crucial in the evolution of Galileo as new business models were discussed after the Private Public Partnership (PPP) failed. The time under the German presidency was of greatest importance because it was decided to transform Galileo into a public project. She mentioned the Mission control and applications centre close to Munich, which will promote the development of new technologies. Mrs. Mueller stated clearly that we need a European

cooperation for Galileo since it is one of the most important high technology projects in the EU. Galileo has to represent the leadership of Europe and there shouldn't be further delays. The Minister expressed her wish that this Summit will help in speeding up the process.

Paul Verhoef, Director GNSS Unit, DG Transport and Energy, European Commission, Brussels, Belgium reviewed the last year's situation on Galileo as frustrating and disappointing, although satellite navigation is a fascinating business. The political decisions of the last year have made the situation different. The new public role to establish the necessary structures is essential to the system. Mr. Verhoef pointed out the close cooperation of the European Commission with GSA and ESA. Even if the European Parliament doubts the necessity of the GSA, he emphasized its importance due to its technical expertise which is essential for the whole realization of the Galileo program. The work still to be done by the EC is to fix the rules and modalities of the expenses. One of the next steps is to finalize an ESA-EC agreement on the role of ESA as procurement agent. Mr. Verhoef considers the agreement as an important step towards the negotiations necessary to achieve Full



Hein, Mueller, Štegr, Hahn, Barsi-Pataky, Verhoef, Pedreira and McKinney (left to right)

Operational Capability in 2013. The time schedule is very close and the negotiations on the six technical packages with the industry are recommended to be finalized by the end of this year. He pointed out that the procurement will be based on the rules of the EU and that the budget is fix and no longer subject to negotiations.



Finally, Verhoef mentioned the role of the EC to take care also of aspects concerning pricing for commercial services and access to PRS.

Pedro Pedreira, Executive Director of the European GNSS Supervisory Authority in Brussels welcomed all participants to the conference and reminded the audience how quickly time flies when important decisions take place as it has been the case in the past months. "Galileo is not only back on track, but it will still be there for a long time" stated Pedro Pedreira. A fundamental component in the Galileo structure is EGNOS. In his opinion EGNOS is an important step towards the improvement of navigation performance all over Europe and to reduce risks in Galileo. At the moment the GSA is very busy preparing the transition for EGNOS from a technology impulse into a real system to be operating in 2008. He supported the growth of new applications and referred to the funds of GSA for new ideas e.g. in the Framework Programme FP7. As well he mentioned the European satellite navigation competition as another way to promote satellite navigation in Europe. "All truths are easy to understand when they are already discovered", said Pedreira, "and 2007 has been a year that has brought us a valuable learning experience for the programme", that has finally made the change from PPP to a purely public financed project. Mr. Pedreira concluded wishing all participants a very successful and fruitful conference.

Petr Šlegř, the Czech Deputy Minister of Transport, pointed out that the Czech Republic as a supporter of the Galileo system wants to create a favourable environment for industrial development. The Czech Republic will further obtain full membership in the ESA by the end of 2008. This means that the country will be able to create a security environment fully compatible with the EU and ESA requirements concerning the processing of classified technologies. As a consequence, Šlegř expresses the Czech ambitions to even host the Galileo Security Monitoring Centre (GSMC) in the city of Prague. However, he is sure that the GSMC functionality should be available at least two years prior to the Full Operation Capability (FOC). This implies that one has to speed up with the establishment of GSMC. Currently, Šlegř observes that the

European Commission prefers a temporal extension of the GSA responsibility, but this may postpone the date of GSMC foundation and may increase the likelihood that the successor of GSA – the GSMC – will reside at the same location as the GSA did.

Wolfgang Hahn, Director General of Federal Ministry of Transport, Building and Urban Affairs in Berlin, looked back on the great difficulties the Galileo project was going through exactly one year ago. Galileo was in a despaired situation and was going through great financial difficulties. The fundamental question was who would assume the risk of the project. The costs for the industry were too high as no market exists today, because the system is not finished yet and no realistic estimation on the finalization can be made. Moreover, the share of the risk between the public and the private sector was also unclear. The German presidency asked for transparency in Galileo, especially regarding the funding. This led to the new public model that has been adopted and the abandonment of the PPP concept. The procurement structure of Galileo will rely on six basic pillars said Hahn. No company will be able to bid for more than two of the sectors, in order to increase competence. 2013 Galileo is expected to be operative and the Commission is in charge of making sure that the deadline will be met. Wolfgang Hahn emphasized the use of Galileo in the transport sectors without forgetting other applications of equivalent interest. Galileo will retain its high priority and the government will do a maximum of efforts to preserve the role of the German industry in the future European navigation system.



International guests at the Summit 2008



Etelka Barsi-Pataky, Member of the Committee on Transport and Tourism of the European Parliament, Rapporteur for Galileo, recalled that eleven years have passed by since the first announcement of the Galileo programme. She pointed out clearly that the European Parliament did always support the programme which is too big to be realized by one of the member states on its own. Mrs. Barsi-Pataky mentioned her experiences with the PPP which is not wrong in general, but should be avoided if it produces structures that are close to a monopoly. Internal disagreement should be avoided and in case of a space-related project like Galileo, the risk is too high for a PPP. With respect to the current tasks of the European Parliament (EP) she insisted on the agreed sum of 3.4 billion € for the programme. She expects that the EC responsible for the negotiations will ensure that the best value for Galileo will be reached. EP's responsibility comprises in particular the need to keep the information on the procurement process transparent. Moreover, newcomers in the EU should take part in the procurement process. With respect to governance she wants to make Galileo a real success story and demands to avoid doubled structures putting a critical view on the GSA.

Richard W. McKinney, Director of European Space Liaison, Office of the Under Secretary of the US Air Force, Office Paris, France started giving a short overview of the evolution of GPS over the past thirty years, since the first launch of GPS Block I on February 22, 1978. Today GPS is moving into its fourth decade of service. The first launch of an operational satellite (Block II) was on February 14, 1989. The GPS constellation Initial Operational Capability (IOC) was declared December 1993 and the FOC in July 1995, thus GPS is already operational for 12 years today. As Mr. McKinney expressed, this means that we are now beginning our 15th year of operations. On September 14, 2007 a new ground control system was set into operation. He continued stressing the fact that in September 2007, the U.S. Government announced its decision to eliminate the Selective Availability feature from future GPS satellites. This will imply that GPS will be better, more capable and more services will be provided to the worldwide users of GPS. Also in 2007 the transition to the new Architecture Evolution Plan (AEP) in the

framework of the Modernization of the Operational Control Segment (OCS) took place. He continued reviewing the GPS constellation status and availability, followed by the future GPS launch plan. To conclude, he summarized recalling the success in GPS preservation and modernization, while work continues to modernize and improve GPS. He finalized stating that GPS is an excellent global navigation utility.