## **Opening Speech**

## JOÃO AGRIA TORRES President of the IAG Subcommission for Europe (EUREF)

Dear representatives from the Norwegian Ministry of Environment and Troms County Government

Dr. Claude Boucher, President of IAG Commission X

**Dear Guests** 

Dear Colleagues and Friends

Welcome to the symposium 2000 of the Subcommission for Europe!

As you know, EUREF is a body of the International Association of Geodesy. The original scientific task of EUREF is the definition of the European Reference System and the establishment and maintenance of the correspondent reference frame based on modern space techniques. At the very beginning of EUREF this desideratum was generally fulfilled by the establishment of partial GPS networks in the various countries of Europe. Meanwhile, we are doing this mainly through the permanent EUREF network, which activities are being coordinated by Carine Bruyninx, to whom I want to express a deep recognition for the work she is doing since many years. We will hear later on during the symposium news about the Permanent EUREF Network, that is still developing very well, and about the new activities and projects for the near future, concerning the meteorological and geophysical exploitations of this infra-structure, as well as the important input for the International Terrestrial Reference Frame 2000 and the International Terrestrial Reference System.

Our Subcommission is also taking care of the European Vertical System. The developments of the United European Leveling Network and European United Vertical Network projects will be the subject for an own session within this symposium. I want also to express to the colleagues more closely involved in these projects (Wolfgang Augath, Wolfgang Schlüter and Johannes Ihde and of course all others) my appreciation for the work that is being carried out, and make an appeal to the national representatives to cooperate in the delivery of relevant data concerning their respective countries.

The other face of EUREF is of practical nature.

During all these years our Sub-Commission has been a driving force as well as a lighthouse for the activities carried out at national level, especially in the National Geodetic and Mapping Agencies, as well as in the definition and implementation of the national geodetic policies.

For this, the involvement of CERCO (Comité Européen des Responsables de la Cartographie Officielle) has been crucial, with the connection between both organizations being guaranteed by the EUREF representation on CERCO Working Group VIII, through the work and activity of our colleague Erich Gubler, to whom I also want to thank for the work developed during this last year, and formerly – not to forget – Hermann Seeger.

The close cooperation between these organizations is reflected by the presence of CERCO's General Secretary, Dr. John Leonard, in our symposium. I want to thank him, on behalf of EUREF, for the support to the realization of this symposium EUREF 2000, allowing us to invite colleagues from economically weaker countries to be present here. At this time, I want also to thank the Norwegian Foreign Ministry for the extraordinary generous support.

The adoption of ETRS89 by EUROCONTROL and by the European Commission is one consequence of this involvement of EUREF. It follows that one of the aspects that we should take into account in the future is the adoption of ETRS89 by the different countries and European-wide organizations. So, after the session in which will be presented extension and densification campaigns, as usual, we will have presentations under the topic "Adoptions of ETRS89".

Now, I will use the words of IAG's President to introduce another subject.

"...whatever will be our future structure, no doubt there can be that Services will have to increase their role in IAG; so we will try to move already in that direction giving maximum emphasis to their activity and maybe anticipating some re-structuring..."

EUREF is not a service in the understanding of IAG. However, we can identify, through the present activities, several items where either a product or a service can be provided to the community, which is not only the restricted group of people and organisations involved in geodesy, but the very large environment of Geo-Information. And this is something to think about as a possible way to go ahead.

For the time being, can be mentioned, as products or services

- the data from a set of GPS permanent stations maintained under controlled standards and guidelines and the correspondent continuous analysis
- the data from a set of GPS sites belonging to controlled quality campaigns
- the data from high precision levelling networks
- parameters for converting the national geodetic systems into an European geodetic system
- parameters for conversion between the national height systems
- guidelines for establishing local and regional geodetic reference frames and for the computation of GPS campaigns with high levels of accuracy
- services for transformation of coordinates between different geodetic systems
- advisory and expertise

If we do so, we should offer good products and services. One thing that is clear to me is that the structures must be more professional, in order to respond to the increasing and complex demands. This is one reason why we should pay more attention to the ways we use to manage and disseminate the information.

The maintenance and dissemination of the information related with all these activities, as I have just mentioned, is becoming more and more an important subject to be developed. This topic is also a concern of IAG's President, as he stated in a message sent to all IAG Officers: '...facilitate communication, among members of the structure, on new results, new projects and (specially) make them debate on open problems and in particular on new challenges that geodesy has not to miss. This requires activity: letters, e-mails, a web page, etc....'

Recognizing this need, as well as the importance of image, we are producing a new web page for EUREF, as well as a logo. As soon as it is finished (some links and information are still to be installed) we will inform the members by mail. One immediate positive result of this project is that the people involved are updating and renewing the sites and databases they are responsible for. I want to thank them also for the effort that is being done.

This subject has a clear connection with the external interfaces of EUREF. Besides the connections already established (IGS, IERS, CERCO, MEGRIN, EUROCONTROL, EC), we have some new links to be strengthened. One is the co-operation with the African colleagues in order to apply our expertise in the definition of the African Reference Frame, under the umbrella of IAG's Commission X. The other one is the tentative to use the existing geodetic infra-structure as a complement of the ground support of EGNOS – GALILEO.

Another subject: Education.

All of us recognize the importance of education and training. This subject is also a concern of the President of Commission X. In his report presented at Birmingham, one of the goals for the next quadrennium is '...to stimulate the organisation of summer schools...'

With this motivation in mind, as well as the need to promote and disseminate the use of the European Reference Frame, we are preparing a course on 'Education and training on the use of EUREF'. As soon as we have all the arrangements finished, we will inform the members.

The publication of the proceedings of our symposia has been already guaranteed, with the economical support of the Bayerische Kommission für die Internationale Erdmessung. I want to thank Professor Reinhard Rummel, on behalf of EUREF, the effort that is being done to continue a long cooperation with our Sub-Commission, and also for the support of the Secretariate, that continues to be taken by Helmut Hornik. However, this financial support has some limitations, and we will have to re-think all the process and maybe introduce digital supports, partially or entirely.

In the one year interval between our symposia, the work doesn't stop. The Technical Working Group is very active, with frequent communications between its members and the realization of meetings at different places. This is a very important body of our Sub-Commission, since it guarantees the continuity of the work and the development of new ideas, projects and directions. I want to thank everyone in the TWG in the person of its chairman, Werner Gurtner, not only for the work but also for the enthusiastic way of doing it.

The large number of participants in our past symposia, as well as in the present one, show undoubtedly the interest of the scientific community in our work and products. I want to thank Erich Gubler, once more, for his involvement as president during 8 years, that contributed very much for the present recognition of EUREF, as well as the support of Claude Boucher, the president of Commission X. I'm sure we will have an interesting symposium and I am also sure that, as usual, we will have a friendly environment. The conditions for that are already guaranteed by the Local Organizing Committee, thanks to the excellent arrangements. I want to express to our colleague Bjørn Harsson, on behalf of EUREF, my great recognition for the efforts done.

I wish you all a successful and agreeable work.