

dear Professor Lacis, Rector of the University of Latvia

dear Professor Ribitskis, Vice-Rector of Riga Technical University

dear Mr. Grinpauks, on behalf of the Ministry of Defence

dear Professor Balodis, Dr. Kaminskis and colleagues of the Local Organizing Committee

dear Dr. Altamimi, President of Regional Reference Frames IAG Sub-commission

dear colleagues and friends

Welcome to the 2006 Symposium of the IAG Reference Frame Sub-commission for Europe in Riga. It's really a pleasure to convene here, not only by the natural and environmental attributes of this city but also because of its geographical position, symbolizing the all-Europe nature of EUREF.

This year's program, as usual, covers the topics dealt by our Sub-commission. The developments occurred since the Vienna Symposium will be presented, and new projects will be discussed. I thank all the colleagues steadily involved in the work EUREF, especially the members of the Technical Working Group, chaired by Dr. Zuheir Altamimi, who will report later on the activities carried out since June 2005.

I take this opportunity to recall your attention to a few aspects of our actions and involvement, sometimes forgotten for not being very conspicuous or evident.

First, what is our role within the International Association of Geodesy?

Besides of being responsible for the establishment and maintenance of the geodetic reference frames in Europe, in general, we must conduct our actions in order to accomplish with the global level objectives of IAG. Let me mention two examples.

As you know IAG re-organized itself on its General Assembly in 2003 in Sapporo. In that occasion the project GGOS, Global Geodetic Observing System, was created. In some way, it represents "*la raison d'être*" of the Association. The project serves as a basis for the research in geo-sciences, through the integration of different geodetic techniques, models and approaches, aiming at a better understanding of the geodynamic processes and global change of our planet.

Integration means mainly three things: co-location of different instruments and techniques, parameter estimation based in different kinds of observations and common adjustment, and the delivery of a consistent and homogeneous set of parameters.

We can see all this in the GGOS poster, where the interaction between geodesy and the other geo-sciences is shown.

It's easy to recognize that EUREF fits well in this picture. In fact, the different techniques, the methodologies and the projects dealt by our Sub-commission can give a considerable contribution to GGOS: we create guidelines for data homogenization and processing and we stimulate the co-location of different geodetic techniques. Furthermore, we have in our Terms of Reference a statement saying that one of our activities is "to contribute to the IAG Project GGOS using the installed infrastructures managed by the EUREF members".

This is really important. For those who don't follow so close the IAG's policy, I mention that the International Council for Science (ICSU) recommended that GGOS should become a member of the Integrated Global Observing Strategy (IGOS) Partnership. A new theme, Dynamic Earth, will likely be developed, besides the six ones already existing. All of us hope that, besides the expectable scientific achievements, this will give a greater visibility to geodesy for the outside world.

The other topic is AFREF. IAG is very much engaged in it, asking the international community for all the possible support.

Again, EUREF can play a considerable role. I already wrote a letter, on behalf of EUREF, to the President of IAG and to the Team Leader of the Geo information Development Services Division of the United Nations expressing our will in cooperating in such an initiative. In practical terms, the contribution of EUREF can start with the inclusion of GPS permanent stations located in Northern Africa in the routine processing of the EPN, as a demonstration and example for the whole African continent.

Such a contribution must also show the importance of the long term maintenance of the observational infrastructure.

Of course our intention is not to replace any African structure or organization. Instead, our cooperation must be understood as a help to the operational start up of the AFREF project and a transfer of organizational, scientific and technical know-how.

So, I encourage all of you to consider and support any kind of cooperation with AFREF. It will be welcome and certainly contribute on our level to improve life conditions in Africa for lowering the enormous problems of this continent which we get to know every day.

Secondly, do we care about the users and the day-to-day practice?

The EUREF-IP (Internet Protocol) is one example of a user-oriented project. It was launched in 2002, based in a resolution asking the member countries to support this new activity by the necessary upgrade of the respective EPN stations and considering:

- the growing need for European-wide improved real-time positioning and navigation;
- the developments in the interconnection of mobile communications and the Internet;
- the capability of the EPN infrastructure of providing reliable and standardised real-time data;
- the efforts within the IAG towards real-time data dissemination.

I mention this project in particular because it led to the development of "Networked Transport of RTCM via Internet Protocol" (NTRIP), which is now a standard adopted by the industry, and also because of the great success of the NTRIP Symposium & Workshop "Streaming GNSS data via Internet".

The Symposium took place on 06 and 07 February 2006 in Frankfurt am Main, hosted by the Bundesamt für Kartographie und Geodäsie (BKG), and was organized under the auspices of the Radio Technical Commission for Maritime Services (RTCM), EUREF and EuroGeographics. It was attended by more than 130 colleagues from more than 30 different nations from different continents.

The message that comes out is that we must continue our efforts in permanently seeking to increase the performance of our infrastructures, making use of the best possible technologies and scientific developments, and concerned with the practical aspects and applications.

Thanks are due to the Bundesamt für Kartographie und Geodäsie (BKG) for supporting the publication of the symposia proceedings, to EuroGeographics for the financial support to the organization of this symposium, as usual, and to the Instituto Geográfico Português (IGP) for supporting the EUREF portal, where the papers presented at the symposia are available as soon as the authors have the kindness to send them.

By the way, I can announce that we have already registered an European address for the EUREF portal: <http://www.euref.eu>. It is already operational and co-existing with the usual address.

I want also to mention two events very much related with our activities.

One is the Symposium "Geodetic Reference Frames" (GRF2006), organized by the Commission 1 „Reference Frames“ of IAG, that will take place in Munich, October 09 - 14 , 2006. EUREF will actively contribute with several presentations related with its different activities. There will be common sessions with the FIG Congress, which means that it will be an excellent occasion to disseminate our work and results inside a large community.

The other one is the inauguration and publicity day of the Struve Geodetic Arc, which will be 17 June 2006 (next Saturday).

The Struve Geodetic Arc was included in the UNESCO World Heritage List on July 2005, and was the first entry related with a scientific achievement. UNESCO took into consideration that it is "The first accurate measuring of a long segment of a meridian, helping in the establishment of the exact size and shape of the world exhibits an important step in the development of earth sciences. It is also an extraordinary example for interchange of human values in the form of scientific collaboration among scientists from different countries. It is at the same time an example for collaboration between monarchs of different powers, for a scientific cause".

Personally, as a geodesist, I'm very proud that our field of knowledge is recognized by an organization such as UNESCO. It also reinforces the leading principles of our actions inside EUREF, pursuing the same examples of interchange and collaboration, hopefully with scientific success and trustable practical outcomes.

When I was preparing this symposium I found out that Latvia has two Properties inscribed on the World Heritage List. One is the Struve Geodetic Arc and the other one is the Historic centre of Riga.

So, the city of Riga and Geodesy have all in common.

It is an honour for our Sub-commission to convene at Riga, invited by the University of Latvia, the Latvian Geospatial Information Agency, Rigas GeoMetrs SIA and the Riga Technical University.

On behalf of EUREF I thank all the institutions and the organizing committee chaired by Professor Janis Balodis and by Dr. Janis Kaminskis, who made all the efforts to provide a pleasant working environment and make our stay in Riga an occasion to remember.

I wish us all an agreeable work and a successful symposium