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The GGOS Bureau of Networks and Observations: an update on the Space Geodesy Network and the New Implementation Plan for 2017 -18

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Working with the IAG geometric services (VLBI, SLR, GNSS, and DORIS) the Bureau continues to advocate for the expansion and upgrade of the space geodesy networks for the maintenance and improvement of the reference frame and other application, and for the extension and integration with other techniques. New sites are being established following the GGOS concept of “core” and co-location sites; new technologies are being implemented to enhance performance in data yield as well as accuracy. In particular, several groups are undertaking initiatives and seeking partnerships to update existing sites and expand the networks in geographic areas void of coverage.

The Bureau continues to meet with organizations to discuss possibilities of new and expanded participation and to promote the concept of partnerships. The Bureau provides the opportunity for representatives from the services to meet and share progress and plans, and to discuss issues of common interest. The Bureau monitors the status and projects the evolution of the network based on information from the current and expected future participants. Of particular interest at the moment is the integration of gravity and tide gauge networks.

The Committees and Joint Working Groups play an essential role in the Bureau activity. The Standing Committee on Performance Simulations and Architectural Trade-off (PLATO) uses simulation and analysis techniques to project future network capability and to examine trade-off options. The Committee on Data and Information is working on a strategy for a GGOS metadata system on a near term plan for data products and a more comprehensive longer-term plan for an all-inclusive system. The Committee on Satellite Missions is working to enhance communication with the space missions, to advocate for missions that support GGOS goals and to enhance ground systems support. The IERS Working Group on Site Survey and Co-location (also participating in the Bureau) is working to enhance standardization in procedures, outreach and to encourage new survey groups to participate, and improve procedures to determine systems reference points.

The 2017–2018 Implementation Plan for the GGOS Bureau of Networks and Observations has been posted on the GGOS website.

We will outline progress over the past two years and discuss the status of the network and updated plan.