Infrastructure Committee Report 2011

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The Infrastructure Committee is set with the task of studying and advising on infrastructure issues to the IGS Governing Board and the IGS network Coordinator. The latest status and recent progress of the Committee is detailed below for 2011.

Membership:
Current Members appointed 3 April, 2011 for 2 year terms:

Carine Bruyninx (OMA)
Lou Estey (UNAVCO)
Gary Johnston (GA)
Ignacio (Nacho) Romero – Chairman – (ESA/ESOC)
Mike Schmidt (NRCan)
Georg Weber (BKG)

Ex-officio Members:

Steve Fisher - Central Bureau
Jim Ray - Analysis Coordinator
Mark Caissy - Real time Working Group Chair
Bruno Garayt - Reference Frame Coordinator
Carey Noll - Data Center Working Group Chair
Ken Senior - Clock Products Coordinator

Activities in 2011:

- Continued refinement with the IGS CB of the updated ***Site Guidelines***, waiting for publication by the CB after further review and open comment period.

- Helped to organize and support the test campaign to assess the impact of ***un-calibrated Domes at co-located sites*** (together with CB, ACC, RFWG and AWG):

  This campaign has requested from organizations with co-located stations using un-calibrated Domes over their GNSS antennas that they remove the Domes for an 8-week period, and then returns the Dome to its position, so as not to break the long-term position time series. This test campaign attempts to determine whether the effect of the un-calibrated Dome can be properly characterized from the AC Sinex solutions by the Reference-Frame Working Group combination and analysis method.

  So far the following stations have participated with removing their uncalibrated Domes :

	Removal	Re-installation
CRO1	01-Apr-2011	24-Jun-2011
TSKB	01-Jul-2011	30-Aug-2011
TSK2	01-Jul-2011	30-Aug-2011
AREQ	19-Aug-2011	03-Feb-2012
FAIR	28-Apr-2012	On-going
YAR2	28-Apr-2012	On-going

- Supported the IGS CB (Robert K., David M.) on ***station issues***; introduction of new stations in India (**lcki**, **pbri**) and elsewhere, decommissioning of stations (**bran**, etc), handling un-calibrated Antenna+Dome pairs, etc.

- Making some progress to ***recover long dormant stations***: such as **yibl**, **bhr1/2**, **pre1/2**, and many other NGA stations no longer submitting data due to un-calibrated antennas at previously available IGS stations (with DCWG, CB, AWG, ACC)

- Maintained the internal ***IC webpage*** with information for the IC members, GB and NC on station data arrival statistics, station availability, Reference Frame station usage, RINEX header / station log inconsistencies, etc.

- Participated in the ***Real-Time Pilot Project telecons*** and discussions on the "Multi Signal Message" definition to ensure full compatibility of the streaming standard and Rinex 3.01

- Assisted in the RINEX "way forward" helping to ***establish the RINEX working group*** within the IGS and the RTCM (with RTPP, ACC, GB).

- Made recommendations and ***comments on the QZSS data format*** as sample files have become available from JAXA to ensure that they follow the RINEX definition.

- Assisted in the ***selection of additional reference frame candidate stations*** from Central and South America and from Africa (with RFWG and ACC)

- Clarified with the CB and the RFWG the location of the ***station logs*** for the IGS "proposed stations"

Continued activities for 2012-2013:

- Finalize the un-calibrated Dome experiment for co-located stations and promote in-depth result analysis for IGS WS 2012 presentation.

- Promote continued progress on the streaming and RINEX data formats to accommodate the new systems (QZSS, etc) (with RTPP)

- Help the IGS in the IGS WS 2012 preparations to properly cover infrastructure issues (with CB, Workshop organizing committee, etc).

Activities planned to support IGS MGEX:

Continued evaluation and assessment of capabilities by different GNSS equipment vendors as to their compliance to the RINEX standard for GNSS data (Rinex 3), provision of regional GNSS data (QZSS, Compass), etc.