

# **GGOS – The Global Geodetic Observing System of the International Association of Geodesy (IAG)**

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## **SUMMARY**

The Global Geodetic Observing System (GGOS) is an essential component of the International Association of Geodesy (IAG). It aims at advancing our understanding of the dynamic Earth system by quantifying our planet's changes in space and time. This is based on the mission of GGOS: (1) to provide the observations needed to monitor, map, and understand changes in the Earth's shape, rotation, and mass distribution, (2) to provide the global geodetic frame of reference that is the fundamental backbone for measuring and consistently interpreting key global change processes and for many other scientific and societal applications, and (3) to benefit science and society by providing the foundation upon which advances in Earth and planetary system science and applications are built. For this purpose GGOS works with the IAG components to provide the geodetic infrastructure which is necessary for monitoring the Earth system and for global change research.

Obviously, this is a cross-cutting issue both of IAG regarding its commissions, services, and inter-commission committees and of external stakeholders. Hence, the structure and the activities of GGOS have to deal with various facets of the establishment, maintenance, operation and further development geodetic observation and data infrastructure such as networks, hardware, standards and products. This presentation gives a general overview of the present state of GGOS. In particular, it focuses on the structure of GGOS which is optimized and streamlined regarding role and purpose of GGOS. Moreover, it outlines feasible results of GGOS in support of the work of the UN Committee on Global Geospatial Information Management (GGIM) and its Sub-Committee on Geodesy.

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FIG Working Week 2017

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Helsinki, Finland, May 29–June 2, 2017