**The GRUAN Implementation Plan and contributions to the GCOS Implementation Plan**

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This presentation will summarize the current GRUAN Implementation Plan (IP), what aspects of that plan are likely to support the GCOS IP, and possible processes for ensuring that the GCOS and GRUAN IPs are well aligned. The current GRUAN IP, published as GCOS-165, covers the five year period 2013-2017. The goal of this IP is to take GRUAN through operationalization and expansion of the network, certification of measurement programmes at new and existing sites, and expansion of the range of GRUAN data products on offer. The work packages comprising are oriented around reference observations, data policy and data dissemination, site considerations and network composition, science, organization, outreach, and establishing data products for other GRUAN priority 2 variables. The GRUAN IP recognizes that sites have varying capabilities, funding mechanisms and affiliations to third party networks and organizations. By the end of the period spanned by the GRUAN IP, if it is successfully implemented, GRUAN shall consist of:

* A network of 20 to 30 measurement sites each contributing to one or more GRUAN data streams. Beyond 2017, the time horizon for this IP, the network is envisage to further expand to meet the longer term goal of 40 contributing sites.
* A network serving reference quality measurements of vertical profiles from the surface through the lower stratosphere (or higher where feasible) of temperature, pressure, water vapour, wind speed and direction, and ozone. To the extent possible, these measurements will be made using redundant systems including sondes and ground-based remote sensing.
* A set of sustainable long-term measurements being used by recognized target stakeholders, as demonstrated in the peer reviewed literature.
* A network with operational and research functions, embedded within the overarching WIGOS framework, and leading to improved capabilities and practices in other broader components of the Global Observing System and its applications.

In addition to discussing aspects of the GRUAN IP of a more strategic nature, the presentation will also touch on selected specific tasks identified within the IP that are likely to support the GCOS IP, e.g.:

* Incorporating GRUAN material into GCOS and WIGOS Manuals and Guides.
* Engaging with the satellite community to ensure that the value of GRUAN is fully exploited.
* Interacting with NMHSs to encourage sites to join GRUAN.
* Implementing an agreed procedure for monitoring GRUAN data usage to the extent practical/allowable.
* Coordinating with space-based measurement agencies to ensure that measurement programmes at GRUAN sites are incorporated into satellite product validation programmes.
* Continuing to process GRUAN sites through the site assessment and certification process.
* Providing a scientific basis for sites to choose the optimal combination of measurement technologies to best meet GRUAN needs.