GRUAN ICM 10 – introductory talk by DWD Vice-president and member of the Board of Directors Dr. Paul Becker

Dear colleagues, ladies and gentlemen,

It is my pleasure to address you at this special and joyful occasion. DWD is Germany's national meteorological service, with a wide range of official tasks and obligations. One of the tasks of Germany's meteorological service is, although this is unfortunately not explicitly reflected in its name, climate. As such our focus is on providing operational, high-quality and reliable weather and climate services. "High quality" implies that our services make use of, and are based on the latest scientific advances and understanding. In this respect the two observatories operated by DWD, which are Hohenpeissenberg and Lindenberg, are key institutions for advancing our scientific knowledge. Obviously this advancement also benefits the scientific community as a whole. Both Lindenberg and Hohenpeissenberg simultaneously perform research and measurements on a long-term and more or less uninterrupted basis. Both are German government institutions that allows for stable long-term research and measurement programmes, and as such are not forced to continuously adapt our strategy and programs to in pursuit of research grants. This in contrast to typically project oriented university research. This makes them unique, not only in comparison with universities, but even among national meteorological services from other countries, and this is probably one of the reasons why the GRUAN Lead Centre is hosted by DWD's meteorological observatory Lindenberg.

As mentioned by some of the previous speakers, the "G" in GRUAN stands for GCOS, the Global Climate Observing System. In this respect it is interesting to say a few words about GCOS in Germany. Germany was the first country to establish a national GCOS office in late 1992 and a national GCOS Coordinator provided by DWD. This was a few months after GCOS had been established. Since then experts from Germany continuously served on various GCOS panels, including the GCOS Steering Committee, and it is our aim to have a

representative in at least each of GCOS' science panels. Besides these administrative activities, the national GCOS Coordinator has organized regular national GCOS meetings bringing together all the institutions that perform observations of Essential Climate Variables (ECVs) in Germany and abroad with German funding.

With the Paris Agreement now in force the importance of high quality climate information will continue to increase, as they are the underlying foundation for much needed climate services on various time scales. It therefore is also important to fully implement the Global Framework for Climate Services, GFCS initiated by the World Climate Conference III in late 2009. Climate observations and monitoring form one of the five pillars on which successful climate services rely. The importance of long-term climate observations is also recognized by the 1994 United Nations Framework Convention on Climate Change, UNFCCC in its articles 4 and 5, and therefore since late 1990s "systematic observation" is a standing agenda item, together with "research" in the annual climate negotiations, aiming at advancing the implementation of the UNFCCC, as well as now the Paris Agreement. "Systematic observation" is related to the observing systems for climate, which form the GCOS as a system of systems, and on which information about status and progress is provided to the UNFCCC - mostly through the GCOS programme jointly sponsored by WMO, IOC of UNESCO, UNEP and ICSU. DWD is providing expert advice on "systematic observation" to German delegations participating in negotiations under the UNFCCC since 2001.

So this sets the framework under which GRUAN Lead Centre is operating here in Germany, highlighting the need to further our understanding of the climate system as well as for high quality data. Progress in both areas does not happen without committed scientific and administrative staff. These must have come together in Lindenberg, which explains the many achievements reached over the past ten years. It is great to see that the GRUAN network now comprises 26 sites, which all have to meet strict standards to ensure the quality of the data collected at those sites. The WMO Vaisala Award for a paper describing the certified GRUAN data product for the Vaisala RS92 radiosonde shows that this work is highly appreciated. Some of you may still remember the so-called "Climate Gate" affair – this was about emails being stolen from a server, with opponents trying to discredit climate researchers and their work –

unsuccessfully. A clear lesson we learned from that is that our assessments of the climate system must be traceable down to the first byte of data. Your achievements are clearly important contributions towards transparency. And I am sure you already work on similar data products for other types of radiosondes and observing systems.

Although the GRUAN Lead Centre in Lindenberg plays an important role within GRUAN, it is good to know that there is an active and knowledgeable network of experts out there that keeps GRUAN alive and pushes it forward. I hope this network will remain and be extended to comprise all relevant expertise needed. After ten years GRUAN is an established brand within the scientific community and its products and services are frequently being used. This is also demonstrated by 20 to 30 scientific publications on GRUAN-related topics or based on GRUAN data.

I wish GRUAN all well for the decades to come, many more successful deliverables, but at first a fruitful meeting and our guests a wonderful stay here in this part of Germany, although it is quite remote.

Thank you and good luck!