

## **Minutes of the COSMO WG7 (WG on Predictability and Ensemble Methods) meeting, Langen, 28th February 2011**

### **Participants:**

Chiara Marsigli, Marco Arpagaus, Flora Gofa and Susanne Theis + Pierre Eckert and Adriano Raspanti

### **Minutes:**

This was the “kick-off meeting” of COSMO WG7, newly established at the 2010 COSMO GM. The main purpose of the meeting was to collect the plans of the COSMO members as regards ensemble related activities and to design the WG7 Work Plan.

It was stated that presently the development of COSMO-LEPS is part of the activities of WG7, included verification and calibration of ensemble outputs.

Currently, the CONSENS PP includes most of the COSMO activities related to the development of the 7 km ensemble system, but, since the project is ending this year, the activities which are still on-going will go into WG7.

Then, the plans of the COSMO members have been presented.

HNMS will complete the work on the development of soil moisture perturbations for COSMO-SREPS with an EOF-based technique (part of CONENS) as agreed.

After the end of this task, it is not possible to know at present if HNMS will continue to work on surface perturbation in the future, due to some uncertainty about the human resources which will be available at HNMS for COSMO.

The work on surface perturbation is of interest also for DWD, but from their side this will be carried on within the COSMO-DE-EPS development only. A cooperation on this subject is anyway a possibility for the future.

A good technical and scientific exchange has already been established between COSMO-DE-EPS and the COSMO ensemble activities and this will continue in the future.

MCH has planned the development of a convection-permitting ensemble for the next years (COSMO-E). At this stage, this is done at MCH by “getting experienced” with this kind of product by taking the COSMO-DE-EPS outputs over Switzerland and start to verify and use them. Any further development is at the moment postponed after the development of COSMO-1.

A great expertise on ensemble use, verification and interpretation is already there at MCH (especially A. Walser), hence their involvement is desirable in the WG7 meetings and possibly in the activities which will be carried on together with the WG5 (see below).

It was mentioned that Russia should get experienced with ensembles, since a 7km ensemble suite, clone of COSMO-LEPS, will be run over a Russian area for the Sochi Olympics.

It was also mentioned (communication by M. Ziemianski to C. Marsigli) that Poland would like to keep informed about ensemble developments in COSMO in view of possible future ensemble activities at IMGW.

The creation of a Work Package on ensemble verification was proposed by C. Marsigli. The WP which should be in common between WG5 and WG7 (participation of WG4).

The verification of ensemble forecasts is now part of WG7, being very much linked to ensemble development, but in the future the operational verification will be probably part of WG5 activities (VERSUS will be soon ready for this). Hence, it is proposed to start a collaboration between WG7 and WG5 of COSMO to prepare for this. In fact, to be ready for this, two main steps are necessary. First, a sort of “training” of WG5 people to be able to perform and understand ensemble verification is required, done by WG7 people. Second, WG7 people need feed-backs from WG5 about how to design verification to meet the forecasters and users need. To start this activity, it has been proposed to organise a joint session at next GM, during which ensemble verification results (and methods) will be presented to WG5 people.