**CHy Task Team on Interoperable Models and Platforms (TT E2)**

**5th Teleconference, Wednesday 18 July 2018, 7 am CEST**

**Agenda**

1. Adoption of the agenda
2. Review of actions identified during the previous teleconference
3. Other Business
4. Next Call

**Meeting Minutes**

**Participants**

The following experts attended the teleconference: Yeshewateswa Hundecha, William Scharffenberg, Etienne Le Pape, Hwirin Kim

Sends apologies: Jeff Perkins (could attend only last 30 minutes)

From WMO Secretariat: Paul Pilon, Giacomo Teruggi.

Hwirin Kim moderated the teleconference.

1. **Adoption of the Agenda** (**Annex I**)

The agenda was adopted without modification.

1. **Review of actions identified during the previous teleconference**

In the following, a detailed report on the action to be taken is provided. Please refer to the minutes of 2nd, 3rd and 4th teleconferences to better understand the discussion behind each action.

**ACTION 2c:** Secretariat to upload the minutes of the two TT Leaders teleconference on the working website. **PENDING (as Giacomo and Roberto were on mission for the last three weeks, most of the actions from the Secretariat are pending).**

**ACTION 2d:** Secretariat to follow up with Yuri and Narendra on hydrological forecast requirements for NWP **WORK IN PROGRESS** **Yuri has been contacted, but the Secretariat is waiting for feedback from him and Narendra. Reminder to be sent by the Secretariat.**

**ACTION 1b**: All to discuss via email about a possible name for labelling the category “complexity”, considering 1) installation and configuration 2) capacity building. Indicate the level of expertise needed at each step (e.g. IT expert, GIS expert, Hydrologist-BSc or MSc or PhD). **PENDING. Bill shared considerations the day before the teleconference. A “synthetic watershed”, i.e. an example case, had also been prepared and shared by Bill, to be discussed as well. Bill presented the Hydrological Modelling template and how he reflected “complexity” within it. On the “Data and analysis” category, it was noted that previously the input data format had not taken into consideration (e.g. multiple formats; needs data compilation; etc.). Based on the discussion outcomes from the previous teleconference, criteria were added under “complexity” to take this aspect into consideration. However no feedback on this issue was received by Bill before today’s teleconference. Yeshewa suggested to consider the model’s number of parameters to define the complexity of the model. Detailed discussion ensued regarding the complexity issue.**

**It was mentioned that the complexity issue is related to the “user-friendliness” of the model, e.g. if it requires multiple parameters to be adjusted, the amount of time to be spent on specific data preparation, etc. There might therefore be a cross-linkage between the “complexity” category and the example watershed, which was suggested to be used as an example to help illustrate the “complexity” of applying the model to this watershed. (was it a semi-distributed hydrological model application with reservoir modelling an hydraulic modelling, or possibly a lumped model to estimate inflows to dam 1 on the Figure I). In addition to the available information, there is a need to have a more in-depth description of a particular row (more than currently provided in column D), possibly in the form of a short paragraph within a template “guide”. Bill suggested, however, that it might be better to use something other than the synthetic watershed for the hydrological model application (it had served its purpose for advancing on the discussion of complexity). Hwirin underlined how verification was also identified as a needed category, but not necessarily reflecting on the “complexity” issue. Paul brought to the attention of the participants that for grading complexity, TT E1 has adopted a similar scale (1 to 5) but opposite to the scale of TT E2 (i.e. for TT E1 5 is the maximum score, whereas for TT E2 5 it is the minimum). Etienne mentioned that parameter estimate, calibration and verification could be done by a model in an automatically , which would be easy), or it might be done manually, which might require a lot of labour manipulating outcomes and would be difficult. He also mentioned that it might be beneficial to consider including in the template both the ability of the model to accept ensemble forecasts and to estimate the performance (uncertainty) for different forecast (warning) lead times.**

**ACTION 1b (revised)**: Bill will integrate the outcomes of the discussion and will circulate by the end of the week (20 July) a new template. Task Team Members are to provide feedback copying all participants.

**The discussion also covered issues related to actions 1e and 2b below**

**ACTION 1e:** Seek feedback from other TT E2 members on the idea of the synthetic watershed and its potential purpose(s), including sharing thought on what input is needed to reflect reservoir operations (models) or other action needed to refine their impacts on downstream conditions (e.g. flow or stage forecast)? Following discussion above, it was agreed to make use of the synthetic watershed as an example to test applicability of the different models to a standard watershed.

**ACTION 2b**: Once received from Bill, everyone to consider his revised inputs in the redrafting of their templates. Once revised, all to send their templates to the assigned reviewers. Iterate the process of including Bill’s input via email to the rest of the group. If agreement not met, then call for a teleconference. Anticipate completion of revised template distribution and completion of reviews prior to the next videoconference. **With the hydrological model effort almost finalized (pending integration of comments by Bill), other members will adapt their templates to reflect the adopted changes.**

**ACTION 4b**: Etienne offered to share a template on technology used in SCHAPI possibly including Telemac and the POM. This effort would also provide an opportunity to check the user-friendliness of the templates, and how clear the “guidance” column entries are for a new user. **DONE: a final draft has been circulated the day before the teleconference, Secretariat will upload it on the working website.**

**DUE TO LACK OF TIME, THE TELECONFERENCE ENDED HERE. In the following, some notes on the status of other pending actions (not discussed during the teleconference, but reported here to avoid losing them for next teleconference):**

**ACTION 1c:** Secretariat to check definitions of urban flooding and flash flooding **PENDING (see comment to action 2c)**

**ACTION 1d:** Secretariat to circulate the minutes to all TT E2 participants inviting them to provide their feedback on the complexity issue **DONE on 19 June 2018.**

**ACTION 3b**: Each template’s main author is to ensure consistency with Bill’s example. This item is embedded into Actions 2b and 3a. This is to be completed prior to the next videoconference. **PENDING see action 2b above.**

**ACTION 4d**: according to the work plan of the TT E2 (page 13 of the [CoP report](http://www.wmo.int/pages/prog/hwrp/chy/E2E-EarlyWarningSystems/flood-forecasting/documents/CoP_FF_2017_Final_Report.pdf)), input is needed from Yuri and/or Narendra on NWP requirements for hydrological models. Secretariat to check status of advancement of the work plan and liaise with the TT to set new deadlines. **PENDING**. **The issue has been mentioned to Yuri during the joint TT E1 and TT E2 Leaders teleconference, but follow up by email is still needed (Refer to Action 2d).**

**ACTION 4f**: Secretariat proposes to send the request to HAs, OPACHEs, CHy members, AWG and any other TT E1 member not already included in the previous categories. **PENDING (see comment to action 2c)**

**ACTION 4g**: Secretariat to draft text of the email to be circulated **PENDING (see comment to action 2c)**

**ACTION 5a**: TT E2 members to send to the Secretariat other proposed agencies that are performing operational hydrological forecasting. The Secretariat will propose an approach to minimize the work for the NHS to fill in templates, based on that described above (item 5). **PENDING**

**Review of the available templates (if any)**

The review is still ongoing, as reported above. As a reminder, the below table summarizes responsibilities for each template:

|  |  |  |
| --- | --- | --- |
| **Template** | **Main author** | **Reviewer** |
| **Hydrologic Model** | Bill  | Yeshewa  |
| **Hydraulic Model** | Jeff  | Bill  |
| **Reservoir model**  | Hwirin  | Jeff  |
| **Platforms** | Jeff  | Hwirin  |

1. **Other Business**

No time was left to discuss other issues

1. **Next Call**

Proposed date of the next call is 15 August 2018 at 8 am CEST for two hours.