

**WORLD METEOROLOGICAL ORGANIZATION  
REGIONAL ASSOCIATION VI (EUROPE)**

***Working Group on  
Technology Development and Implementation  
(WG-TDI)***



**Second Meeting**

*TSMS, Istanbul, 14-15 September 2015*

**MEETING REPORT**

Link to meeting documentation:

<http://www.wmo.int/pages/prog/dra/WGTDI-22015.htm>



**September 2015**

## **Session 1: Opening** (Chair: Dieter Schröder)

*Agenda Item 1.1* The second meeting of the RA VI Working Group on Technology Development and Implementation (RAVI\_WG-TDI-2015-2) was held at WMO Regional Training Center of the Turkish State Meteorological Service (TSMS) in Istanbul, Turkey, on the 14th and 15th of September 2015. Mr Ergün Güler, Director of Regional Directorate No. 1 (Istanbul) of TSMS, opened the meeting.

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*Agenda Item 1.2* Round table introduction of the participants: Nine members of the WG, eight rapporteurs and advisers as well as four representatives from WMO Secretariat attended the meeting. The list of participants is given in Annex I.

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*Agenda Item 1.3* The WG Chair, Dr Dieter Schröder, DWD, conducted the meeting. The proposed agenda was adopted by the participants. The agenda is given in Annex II.

## **Session 2: Reporting** (Chair: Dieter Schröder)

*Agenda Items 2 and 5* Mr Schröder gave the report of the chairperson and conveyed guidance from the third meeting of the RA VI Management Group<sup>1</sup> that took place in April 2015 in Istanbul. Main points are that the Management Group (MG) appreciates the work done by the Task Teams (TTs) and the Rapporteurs of WG-TDI, and the confirmation of priority activities of TTs and Rapporteurs. The MG fully supports requests made by the TTs. The MG also expressed sympathy for the difficult situation in the WG and the Regional Office for Europe (ROE) due to the number of new members and staff (see additional material to Agenda Item 2).

Mr Schröder expresses his explicit wish that all TT leaders may feel free to give an open assessment of their work and name achievable goals, within the meeting and after, that can be reached in reasonable time. It should also be cross-checked which tasks should be fulfilled by the WG or TTs, respectively.

Especially collaboration of TT-WIGOS and TT-RIC should be pursued in future to coordinate efforts on quality control. Work on this topic has not yet been started.

There is a standing issue to nominate members for the TTs, especially TT-WIGOS. So far expectations are not met, only 23 out of 50 member countries have issued nominations in response to the letter of SG-WMO to the PRs. Nevertheless, communication with the existing members can already start.

**Task (Ercan Büyükbas, Igor Zahumensky)** Update TT-WIGOS list of members in communication with the WMO Secretariat. It is known that nominations from Moldova are pending because of the recent change of the PR of Moldova. There are also changes in the Russian and Hungarian nominations that are not reflected so far.

Collaboration using email does not work well technically, tracking progress is very time consuming. Reason is that WMO/ROE does not provide collaboration technology at the moment. The group agreed to send a clear signal to WMO that such technology is needed as soon as possible. Several options were discussed, a strategic plan from WMO-ITD<sup>2</sup> taken into account.

**Task (Milan Dacic)** Evaluate options and provide collaboration platform for WG-TDI and sub-groups as soon as possible. Requirements to consider: urgency, price, document change history, issue tracking and discussions independent of documents, possibility to publish content to limited audiences outside the group, possible migration to WMO system when available. A very

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<sup>1</sup> <http://www.wmo.int/pages/prog/dra/RAVIMG-3.htm>

<sup>2</sup> Information Technology Division, the internal IT service provider

quickly available solution for document sharing would be BSCW<sup>3</sup> server, hosted by a German governmental agency.

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*Agenda Item 3* Mr Dacic, Chief of ROE, presented a very condensed overview of current and near future tasks and actions in ROE.

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*Agenda Item 4* Mr Shi and Mr Zahumensky reported on decisions and conveyed guidance from Cg-17 and EC-67 concerning WIS and WIGOS, respectively. Mr Shi stresses on the importance of progress review also for RA VI concerning WIS competences and capacity development in human resources. He asks the WG-TDI to provide suggestions on amendments for the development of the R-WIP. The WG-TDI is furthermore invited to submit any proposed changes to the G-DPFS manual from a regional point of view as advice for the CBS (see additional material to Agenda Item 4.2).

The concern was expressed that OSCAR/Surface does not yet support a dynamic (machine-to-machine) update process, which means that data cannot be kept up to date; this requirement needs to be included in OSCAR.

There was a discussion about the differences between WIGOS and WIS. It was stressed that WIGOS is more about observational data quality, while WIS deals with data availability. Taking into account objectives and purpose of WIGOS and WIS metadata, they are not the same. The meeting was of the opinion that WIGOS and WIS should be compliant with each other and a number of other related standards such as ISO, INSPIRE, OGC.

There was a discussion on quality monitoring services within the WIGOS data quality monitoring system (WDQMS), and how these services would be specified. It was noted that ICG-WIGOS/TT-PWPP<sup>4</sup> being held in Geneva was dealing with this issue.

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*Agenda Item 6.1* Mr Groselj, TT-RIC Leader, asks for encouragement of the PRs to officially assign members to his group. A survey to assess the members' capabilities could be sent to the PRs at the end of October. It will be combined with an invitation for inter-laboratory calibration advances. ROE will assist with the communication, the letter is already drafted by Mr Groselj but coordination with the leader of TT-WIGOS is needed. Schedule here depends on the number of participating members since metrological equipment has to be shared and each member will need around three weeks to complete the works at one site. Practical work could start beginning of November and should take about 1.5 years to be finished (assuming 20 participants).

**Task (Erkan Büyükbas)** Prepare proposal for the collaboration between TT-RIC and TT-WIGOS to collect ideas on how the inter-laboratory works could be carried out.

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*Agenda Item 6.2* Mr Kats, TT-MTDCF<sup>5</sup> Leader, supports that even though members of the TT communicate very vividly, a collaboration/publication platform would improve exchange in the group and also information flow to stakeholders outside the TT. Being able to publish results and information about ongoing work would be a great improvement.

It was discussed that approval of BUFR bulletins is not a task of the RA but for the MG. CBS should tackle this issue, the regional body is not mandated here.

The MG is concerned that the migration to TDCF takes such a long time. Reasons are that we are waiting for the point when all members are able to encode and decode BUFRs. Also a

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<sup>3</sup> Basic Support for Cooperative Work, see <http://www.bscw.de/>

<sup>4</sup> <http://www.wmo.int/pages/prog/www/WIGOS-WIS/meetings/TT-PWPP-2/TT-PWPP-2.html>

<sup>5</sup> Migration to Table Driven Code Forms

concentration on production of BUFRs instead of use of BUFRs seems to be a hindrance since the NWP community in general pays little attention to TDCF.

**Task (Alexander Kats)** Provide ROE with a list of stakeholders and communication partners in the MTDCF topic to improve outreach.

Mr Kats reports that efforts of the members in RA VI concerning MTDCF are very heterogeneous. While some already stopped TAC dissemination, others do not show any activities to migrate.

Current regulation still allows dissemination of TAC messages as long as compliant BUFRs are disseminated as well.

The chair rejects the proposal to assign RTHs with the task to convert TAC to BUFR for services that are not yet able to do so themselves. Priority should be on capacity building not assistance since it could hinder migration. It is obvious that TAC dissemination cannot be stopped until all members are able to decode BUFR messages. The chair proposes that countries that are not able to do so should approach their respective RTHs on a bi-lateral basis in order to get voluntary assistance for a limited transition period. Nevertheless, information about current capacities should be collected. At the moment about half the NMHSs are TDCF-ready.

Mr Kats announces a new web page developed by ECMWF for testing BUFR messages.<sup>6</sup> The old web page will be discontinued.

**Task (Alexander Kats)** A best practice guide for manufacturers that are supposed to provide BUFR formatted output from their devices, should be developed. A draft version will be provided by TT leader with the assistance of TT-MTDCF. There is no training material for manufacturers, yet. This will be done in cooperation with the global body.

Mr Kats gives his opinion that the R-WIPs/N-WIPs should describe how NMHSs can fulfil their duties without TAC in the future. It should be an obligation, rather than a national decision, to stop TAC dissemination. Only dissemination of TEMP messages in TAC is still mandatory.

**Task (Alexander Kats)** By November a circular letter should be send to the members to stress on CBS' decision to stop TAC dissemination, in order to encourage the community (namely GISC, DCPC, RTH in RA VI) to progress. A questionnaire should be attached to assess TAC → TDCF and TDCF → TAC capabilities. Also a regulated escalation procedure for problems that arise when migrating would be helpful to make sure that problems can be managed properly. This would also assist lesser advanced members. Mr Kats will prepare this communication and ROE will organise dissemination through SG-WMO with CC to focal points.

**Task (Alexander Kats)** Add a request to this report that members of IPET-DRMM may join the TT-MTDCF. A list of the members should be provided to ROE in order to issue invitations.

**Task (Alexander Kats)** Propose an update of the R-WIP for the migration to TDCF in RA VI.

The capability assessment can be prepared until the next meeting of the Management Group and send out afterwards.

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*Agenda Item 6.3* Mrs Glaser, TT-RMDCN<sup>7</sup> Leader, reports on the progress of implementation of Iron A / Iron B service type networks in the countries. She recommends to prefer silver maintenance, taking into account price and connection speed. Iron B type connections are not available in all countries.

**Task (Antonio Vocino, Leonid Bezruk)** Compile list of countries within their areas that are interested and state service type. Results on this effort should be ready till end of December and could possibly be discussed further at the CIS/ICH meeting in Sochi.

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<sup>6</sup> <https://software.ecmwf.int/wiki/display/EMOS/EMOS+410+Test+Suite>

<sup>7</sup> Regional Meteorological Data Communication Network

Mr Bezruk shares his impression that for some countries financial restrictions cannot be overcome easily. In some cases NMHSs are legally bound to a national provider (e.g. Azerbaijan, Belarus). The situation is rather unclear in this aspect. Mr Dacic presents the prospect that WMO/DOE could possibly provide a small trust fund in order to pay fees for those countries in the first year. On the longer term, countries have to provide their own funds. Moldova would be highly interested in such an arrangement.

Mrs Glaser recognises confusion amongst the members of her TT of whether it is mandated to set up standards. Clear answer is that the TT should only be concerned with implementation matters, standards are defined by CBS and ROC.<sup>8</sup> CBS requests better information flow from the group. A new information branch in ROC was established. Mr Peiliang Shi supports the approach as suggested.<sup>9</sup>

Synergy is very welcome in this topic, different regional groups should cooperate actively. The confusion about competences should be solved as soon as possible.

**Task (Ilona Glaser, Alexander Bezrouk)** Update list of connections and include backup connections in report. Start working on the requested document on backup connections to the RMDCN after clarification by Mr Bezrouk what the exact purpose of this document is (nearly all RMDCN connection types already have backup included). Distribute the information on IRONA/B type connections to Eastern European countries to help them in getting connected to the RMDCN; follow up the progress.

In some cases (Saudi-Arabia, Lebanon, Arab Emirates) connections cannot be checked. Manual exchange of information is needed. Mr Bezrouk is asked to provide this information to Mrs Glaser.

**Task (Milan Dacic)** Invite members again to collaborate in the group. Request official nominations by contacting PRs via SG-WMO but also with direct CC to possible candidates on working level.

The WG appreciates Mr Bezrouk's network topology diagrams as very helpful. He assures that he will maintain these further. He would also appreciate if comments and updates concerning these diagrams would be forwarded to him.

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*Agenda Item 6.4* Mr Ercan Büyükbas, TT-WIGOS Leader, hopes to establish a more comprehensive TT till the end of 2015. At the moment TT-WIGOS has only 19 member, 10 members are from Turkey. A number of advances have been discussed and taken.

The survey about WIGOS capabilities will be finalized this year, a draft will be prepared by the WIGOS Project Office (WPO). So far only 12 members have answered the survey in a comprehensive fashion. A proposed actions list including a schedule for every task will be presented in the next TT-WIGOS meeting.

**Task (Ercan Büyükbas, Igor Zahumensky)** Provide all available RA VI self-assessment checklists to Mr Büyükbas for evaluation.

One main task for TT-WIGOS is to assist countries in the development of a national WIP. Since development levels are very different in RA VI, guidance and assistance from the regional body and WIGOS-PO will be crucial, specifically for the least developed countries. It is planned to assess readiness and awareness of the members and collect best practice information.

Lack of awareness about WIGOS seems to be the major challenge the TT faces. The ToR of the TT will have to be further elaborated to address challenges within the next four years. Pilot projects and best practices from member countries will be key to the development of the national WIPs. Mr Zahumensky noted that the implementation of WIGOS means different things as it depends on a

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<sup>8</sup> here: RMDCN Operations Committee

<sup>9</sup> see presentation to this agenda item, slide 6

development stage, resources available, and user demands. Hence, focus of the group should be on a number of key building blocks of WIGOS.

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*Agenda Item 7.4* Mr Asensio, Rapporteur R-ISS-West<sup>10</sup> (report was preponed), reports on the developments of the new “WMO No. 306 Manual on Codes Volume I.3” that introduces joint ICAO/WMO standards to the Manual on Codes. ICAO plans to migrate to AvXML until 2019. Mr Bezruk voices his experience that such migrations usually take longer than three years.

Mr Teichert adds that he sees a possible conflict between the WMO Manual on Codes and the WMO Codes Registry<sup>11</sup> that publishes AvXML definitions. While the WMO Codes Registry establishes a quasi-standard for the Manual on Codes for machine to machine use, the PDF version of the manual seems to be the reference in case of conflict.<sup>12</sup> This ambiguity could cause very practical problems in the use of TDCF and AvXML formatted data.

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*Agenda Item 7.1* Mr Perron, Rapporteur R-DPFS, reports on general improvements of global and limited area models in RA VI, as well as improvements in the European radar data exchange. Sub-regional database for radar data exchange between Turkey and Russia ... He recommends to contact WG-CH and WG-TDI DPFS (TT of Christina Ekland) to assess the present status of flood forecast capabilities.

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*Agenda Item 7.2* Mr Vocino, Rapporteur R-WIS, stresses on the need that national focal points should set up national WIPs. Some members have not yet nominated responsible GISC centres.

**Task (Milan Dacic)** Link to list of WIS focal points on ROE web page and check if information in the Country Profile Database (CPDB)<sup>13</sup> is up to date concerning national, centre, and regional office focal points.

**Task (Antonio Vocino)** Provide questionnaire on WIS (prepared using Survey Monkey) as PDF for publication on the ROE web page.

**Task (Antonio Vocino)** Propose a plan to visit different GISC centres in 2016. The MG strongly supports these visits.

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*Agenda Item 7.3* Mr Bezruk, Rapporteur R-ISS-East, reports that data delivery is stable at a level of 93% to 96% of the expected products being delivered in time. If NIL messages are included the level goes up to 98% for SYNOP. Some individual countries show levels below 90% (for other data types see additional material to Agenda Item 7.3).

The next meeting will be after the next MG meeting that will be hold mid-May 2016 to get clear guidance from the MG. The prospected date for the next meeting of WG-TDI is fixed to 1st till 3rd of June 2016. Location will preferably be Rom/Italy if confirmed. Alternatives could be Belgrade/Serbia or Offenbach/Germany.

**Task (Antonio Vocino)** Consult and confirm location for next meeting with superiors.

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<sup>10</sup> regional Information Systems and Services

<sup>11</sup> <http://codes.wmo.int/>

<sup>12</sup> [http://www.wmo.int/pages/prog/www/WMOCodes/WMO306\\_vi2/LatestVERSION/LatestVERSION.html](http://www.wmo.int/pages/prog/www/WMOCodes/WMO306_vi2/LatestVERSION/LatestVERSION.html)

<sup>13</sup> <https://www.wmo.int/cpdb/>

## SECOND MEETING OF WG-TDI

TSMS, Istanbul, Turkey, 14 - 15 September 2015

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**SECOND MEETING OF WG-TDI**

TSMS, Istanbul, Turkey, 14 - 15 September 2015

**AGENDA**

- 1. Opening**
- 2. Report of the Chairperson, Guidance from RA VI Management Group  
Decisions and Guidance from Cg-17 and EC-67**
- 3. Contributions of the Task Teams – Report and future plans**
- 4. Contributions of the Rapporteurs**
- 5. Planning of RA VI TT-WIGOS Workshop in Nov.**
- 6. Future Work and Action Plan of WG-TDI**
- 7. Closure**