IAHS 2017-394
IAHS Scientific Assembly 2017
© Author(s) 2017. CC Attribution 3.0 License.



Towards internationally agreed competency standards for Hydrologists and Hydrological technicians

Claudio Caponi (1), Anil Mishra (2), Christophe Cudennec (3), and James Ball (4)

(1) World Meteorological Organization, Geneva, Switzerland, (2) International Hydrological Programme - UNESCO, Paris, France, (3) International Association of Hydrological Sciences/Agrocampus Ouest, Rennes, France, (4) International Association for Hydro-Environment Engineering and Research/ University of Technology Sydney, Australia

In the hydrological community of WMO, essentially formed by the operational Hydrological Services worldwide, a debate has been going on in recent times regarding the adoption of a general definition, applicable to all regions, of what is a Hydrologist and what is a Hydrological Technician and what would be the set of competencies (and skills) they should possess to accomplish their core tasks.

In view of the need for an agreed global understanding of the hydrological competencies (skills) and education requirements necessary to be considered as a hydrologist, WMO's Commission for Hydrology (CHy) invited UNESCO-IHP to establish a joint Task Team with the following tentative terms of reference:

- (a) Review existing definitions of Hydrologist used by Member States to evaluate, classify and promote Hydrologists;
- (b) Consider the issue of developing a definition for Hydrologists and Hydrological Technicians and their Basic Instructional Packages (at a reasonable level of detail);
- (c) Develop competency standards for a few core job tasks in critical areas.

CHy also recommended that the Task Team should include members from different Regions, with both operational and academic backgrounds, a representative from the WMO EC Panel of Experts on Education and Training, and representatives from partner organizations such as IAHS and IAHR.

A first meeting of the Task Team was held in May 2015, where general agreement was reached that the key competencies for classification as a Hydrologist or Hydrological Technician should be specified by a Basic Instruction Package for Hydrologists (BIP-H) and Basic Instruction Package for Hydrological Technicians (BIP-HT). In these documents, the competencies should be specified in terms of learning outcomes. In addition, core job tasks were defined and an initial draft of the required competencies was prepared for several of them. The final output of the work of the Task Team would be a joint WMO/UNESCO/IAHS/IAHR publication on internationally agreed competency standards for hydrologists. The present Session is an excellent occasion to revamp this initiative and consult with a wider community on the initial findings of the task team.