

**Innovation Workshop "WMO HydroHub Phase II Innovation Roadmap"**  
2 & 4 February 2022, 13:00 - 16:00 (CET), Online

**Day 1: Wednesday 2 February**

13:00 – 13:10	Opening by Harry Dixon, UKCEH			
13:10 – 14:10	<p><b>Segment 1:</b> Transitioning innovations into operational use</p> <p><u>Chair:</u> Harry Dixon</p>	<p><b>Presentations:</b></p> <ul style="list-style-type: none"> <li>• <b>Elizabeth Jamieson</b>, ECCC (Canada) – Operational side – Highlighting challenges in transitioning innovations into operational use</li> <li>• <b>Alice Soares</b>, World Bank – How innovation can help capacity development projects funded by International Financial Institutions</li> <li>• <b>Kevin Oberg</b>, USGS (United States) – An example of successful transition: ADCPs at USGS – from research/innovation to reference standard</li> </ul>	Q&A with presenters	
14:10 – 14:20	Break			
14:20 – 16:00	<p><b>Segment 2:</b> River flow and rainfall measurement with innovative non-contact technologies</p> <p><u>Chair:</u> Nick Everard</p>	<p>General presentation by <b>Flavia Tauro</b>, Tuscia University</p>	<p><b>Series of 6-minute pitches based on submitted posters:</b></p> <ul style="list-style-type: none"> <li>• <b>Mark Randall</b>, Department of Regional Development, Manufacturing and Water (Australia) – Operationalising non-contact streamflow methods in Australia</li> <li>• <b>Sumit Sen</b>, IIT Roorkee (India) – Operationalizing LIDAR-based non-contact water level monitoring in the Indian Himalayas</li> <li>• <b>Salvador Pena</b>, Photrack Ltd (Switzerland) – Opportunities and challenges in establishing image-based flow monitoring techniques</li> <li>• <b>William Castaings</b>, Tenevia (France) – Camera-based solutions for measuring and monitoring river flows</li> <li>• <b>Jonny Higham</b>, Liverpool Uni (England) – FlowOnTheGo smartphone velocimetry app</li> <li>• <b>Guillaume Valladeau</b>, vortexX.io (France) – Keep an eye on our rivers, anytime &amp; anywhere</li> <li>• <b>Mariano Re</b>, Instituto Nacional del Agua (Argentina) – Advantages and disadvantages of hydrometric innovative proposals for water quality management in a highly polluted basin</li> </ul>	Q&A with Flavia Tauro and the presenters

**Day 2: Friday 4 February**

13:00 – 13:10	Recap of day 1			
13:10 – 14:20	<p><b>Segment 3:</b> Data tools, transmission and interoperability or automated data quality control</p> <p><u>Chair:</u> Christophe Cudennec</p>	<p>General presentation by <b>Jérôme Le Coz</b></p>	<p><b>Series of 6-minute pitches based on submitted posters:</b></p> <ul style="list-style-type: none"> <li>• <b>Mirjami Kuoppala</b>, Finnish Environment Institute (Finland) – Automatic outlier detection with data-analytics / machine learning</li> <li>• <b>Hessel Winsemius</b>, TAHMO (Netherlands) – OpenRiverCam: Camera-based river flow observations with local people, local devices and open knowledge</li> <li>• <b>Muthiah Perumal</b>, Indian Institute of Technology Roorkee (India) – A real non-contact discharge estimation procedure</li> <li>• <b>Juan Bianchi</b>, Instituto Nacional del Agua (Argentina) – INA's experience in improving hydrological data interoperability</li> <li>• <b>François Rainville</b>, Environment Canada (Canada) – Continuous Data Production to Improve Real-Time Data Production in Canada</li> <li>• <b>Pete Marchetto</b>, Conservify and FieldKit (United States) – On-line, In Situ Calibration of Environmental Sensing Systems</li> </ul>	Q&A with Jérôme Le Coz and the presenters
14:20 - 14:50	<p><b>Segment 4:</b> How standards can support innovation in operational hydrometry</p>	<p><b>Presentations:</b></p> <ul style="list-style-type: none"> <li>• <b>Tommaso Abrate</b>, WMO – The role of WMO Guidance and Technical Regulations (10 minutes)</li> <li>• <b>Stewart Child</b>, ISO – The role of international standards</li> </ul>	Q&A with the presenters	
14:50 – 15:00	<p><b>Segment 5:</b> Mentimeter vote</p> <ol style="list-style-type: none"> <li>1. Top technical innovation areas that the WMO HydroHub could support in its Phase II</li> <li>2. Priority areas of support needed to advance these innovations</li> </ol>			
15:00 – 15:50	<p><b>Segment 6:</b> Moderated public-private-research sectors panel discussion - "Fostering uptake of innovative solutions in operational environments"</p> <p>Moderator: <b>Tatsuya Kimura</b></p> <p>Panelists: <b>Alexandre Hauet</b> (EDF), <b>Mark Heggli</b> (Innovative Hydrology), <b>Fabrice Fretz</b> (SDC), <b>Raul Munoz Castillo</b> (IDB), <b>Marie-Claire ten Veldhuis</b> (TU Delft), <b>Louise Croneborg-Jones</b> (Water in Sight), <b>Robert Sunday</b> (Ministry of Water, Tanzania)</p>			
15:50 – 16:00	Closing by Harry Dixon, UKCEH			