

Invitation to iAMP-Hydro Co-Development Workshop #2

Artificial Intelligence for Flow Forecasting: Latest Results for Hydropower Digitalisation in Europe

When?

04 December 2024, from 9:30 to 11:00 CET (8:30 to 10:00 Irish Time, 10:30 to 12:00 Cyprus Time)

Where?

Online event broadcasted from Cyprus

What is it about?

The current hydropower plant fleet in the EU is aged, and it is estimated that 50 % of the fleet will require upgrade actions by 2030. In particular, modernisation actions related to digitalisation are required in the short to medium term, in order to offer enhanced services, increase grid flexibility, environmental and socio-economic sustainability and to foster the green and digital transitions in Europe.

The iAMP-Hydro project will improve the operations of existing hydropower stations through the development of new digital sensors and services, which will collectively form iAMP: a novel intelligent Asset Management Platform encompassing secure, open and transparent data-sharing protocols and three novel digital solutions. These include new condition monitoring and predictive maintenance tools for hydropower turbines, the ecological water status monitoring and improved weather and flow forecasting.

The iAMP-Hydro Co-Development Workshop is an open workshop, inviting all interested parties who make up their minds how tomorrow's hydropower fleet can be made more resilient and flexible, by using different kinds of sensors, and by combining and using them to forecast the best operation mode for hydropower plants in terms of economy and ecology.

This Co-Development Workshop is the second one of a series of five workshops, and will provide information about the **status quo of digitalisation of hydropower plants**, as well as insights into the development of a "**Flow and available power forecasting model**".

It will be an open space for exchanging views and opinions, **active participation** is more than welcome.

Registration: please, register [HERE](#) or at www.iamp-hydro.eu .

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About iAMP-Hydro – INTELLIGENT ASSET MANAGEMENT PLATFORM FOR HYDROPOWER OPERATION AND MAINTENANCE



iAMP-Hydro will improve the digital operation of existing hydropower plants through the development of six expected results (R) which will collectively form a novel intelligent Asset Management Platform - in short: the iAMP - encompassing secure open and transparent data sharing protocols and three novel digital solutions. The full package of digital solutions will be validated at a diverse set of five real-world existing hydropower plants producing evidence for policy making to support the green and digital transition of hydropower.



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Agenda

Time	Topic and speaker
09:15 - 09:30	Reception phase
09:30 – 10:00	Welcome and introduction Aonghus McNabola, Trinity College Dublin (TCD), Ireland Status quo of digitalisation of hydropower plants Emanuele Quaranta, European Commission, Joint Research Centre
10:00 – 10:30	Development of the iAMP-Hydro Flow and available power forecasting model Raquel López, CARTIF Technology Centre, Spain Carlos de la Cruz, CARTIF Technology Centre, Spain Vincenzo Ezio Santovito, CARTIF Technology Centre, Spain Bogdan Popa, POLITEHNICA Bucharest, Romania
10:30 – 11:00	Breakout sessions in world-café format for participants Aonghus McNabola, Trinity College Dublin (TCD), Ireland