

WaterSpy – first six months of research

The WaterSpy project addresses the water quality challenge by developing water quality analysis photonics technology suitable for inline, field measurements. WaterSpy technology will be integrated, for validation purposes, to a commercially successful water quality monitoring platform, in the form of a portable device add-on. WaterSpy will be used in the field for the analysis of critical points of water distribution networks. This will be demonstrated in two different demo sites in Italy.

During the first six months, the WaterSpy team has focused its efforts on:

- (a) The definition of the user requirements: two different questionnaires were distributed electronically among various target groups and the results of the survey were used to draft the user requirements for the system
- (b) The detailed description of the demonstration locations: a detailed description of the use cases of the WaterSpy technology and the respective scenarios was prepared
- (c) An analysis of existing water quality analysis instrumentation and current practices: the analysis provides a description of technologies used to monitor water quality. Then, it concludes to statements regarding the innovation potentials of the WaterSpy technology with respect to the existing methods.
- (d) Performing preliminary experiments: for facilitating the drafting of the WaterSpy technical specifications and for understanding the limitations of today's technologies
- (e) Preparing the WaterSpy device system requirements, target specifications and first conceptual designs: these are prepared based on the aforementioned findings and research and will be used as a basis for the system development
- (f) Preparing the evaluation metrics for the WaterSpy device: to be used during system validation
- (g) Disseminating the project: through a newsletter, a leaflet, social media, the project website and other forms of communication

During the next six months, the project efforts will be concentrated on the development of the various system submodules. A lot of research is required in order to achieve the project targets and deliver a first prototype in about a year from now.

The WaterSpy project is funded by Horizon 2020, the EU Framework Programme for Research and Innovation for 2014-2020 and is an initiative of the Photonics Public Private Partnership (www.photonics21.org). The WaterSpy project consortium includes 9 partners from 7 different European countries, coordinated by CyRIC, Cyprus Research and Innovation Center Ltd. The project was launched in November 2016 and will run for three years, to allow enough time for the development and real-world validation of the technology.

More information about the project and the partners can be found on our website: www.WaterSpy.eu.