



STOP-IT tools tested at water utilities

The H2020-funded European STOP-IT research project, which is dealing with the protection of water infrastructures from cyber and physical threats, has reached its second stage. The project solutions and tools have been developed and are now tested at the frontrunner water utilities to guarantee applicability and adaptability of the solutions.



STOP-IT developed a toolbox of technologies for securing critical water infrastructure assets from physical threats. It contains a set of novel tools, such as smart locking mechanisms, computer vision and sensor-based tools and authorization and intrusion detection technologies. The [supporting PDF document](#) provides a detailed technological description of these tools, setup instructions, examples of the tools usage and results, contact information for the developers of each tool as well as a short discussion about relevant privacy and security concerns.

Another project outcome is the [cyber threat sharing system](#). It is collecting sources of existing threats from relevant feeds, structures the information and sends out personalized alerts. This service ensures the mitigation of threats to critical infrastructure and enhances the coordination, establishing exchange methods to prevent, reduce, mitigate and recover from existing threats. It also allows coordination to deal with those threats in a global approach.

The toolbox of technologies for securing IT and SCADA systems contains real-time fault diagnosis tools of anomalies affecting integrated sensors/actuators and assets operated by SCADA systems; IT communication analysis systems to ensure security using established network protection rules and traffic monitoring; and blockchain schemes, applied to protect the integrity of the data generated during critical infrastructure operation (logs, sensor data, etc.), both against intentional attacks or malfunction. The [accompanying PDF report](#) supports the use of the developed tools, describing their technical requirements, installation procedures and usage instructions.

All of these solutions and tools are now being tested at four different frontrunner water utilities in Spain (Aigues de Barcelona), Germany (Berliner Wasserbetriebe), Israel (Mekorot) and Norway (Oslo VAV) in order to guarantee applicability and adaptability of the solutions. Afterwards the solutions are going to be applied at four follower water utilities (Emasagra, Hessenwasser, de Watergroep and Bergen Kommune) to stimulate mutual learning, transfer and uptake.

If you want to learn more about the STOP-IT tools and outcomes, please visit our [website](#) or take a look at our [project videos](#).

