

# Critical Infrastructure Protection AG

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# Critical Infrastructure Protection

## Topic of the Action Group

- The AG integrates efforts of the ICT4Water Projects in providing digital solutions to strengthen the security and resilience of European Water Critical Infrastructures
- The AG addresses technologies for risk management covering prevention, detection, response against cyber, physical, natural and human threats, and in case of failure, mitigation of consequences including adequate warning systems.
- The AG explores and promotes collaborative work within the sector and with other CI sectors to share actionable and relevant information, so to build awareness and enable risk-informed decision making, therefore also supporting the implementation of the new directives on the resilience of critical entities.
- The AG promotes learning to increase water utilities organizational preparedness under crisis situations.

# Digital Action Plan for Critical Infrastructure Protection AG

#	Action	Activities	Timeline	Instruments
<b>Critical Infrastructure Protection (Physical and Cyber Threats)</b>				
<b>CIP_1</b>	Enable Risk-Informed Decision Making through Enhanced Situational Awareness	<u>Activity 1</u> Link Water CI data to relevant data-sharing initiatives at European level (within and across CI sectors) and applying the knowledge shared to influence policies and processes.	2022-2024	<ul style="list-style-type: none"> <li>Promote in the framework of standardisation bodies and related entities (BDVA) Relevant instruments in Horizon Europe Cluster 4</li> </ul>
<b>CIP_2</b>	Increase awareness about the water sector as a key player in Critical Infrastructure protection policies to ensure water-aware input to future CI policies	<u>Activity 1</u> Provide informed input to public consultations based on the collected insight from Water industry	2022-2032	<ul style="list-style-type: none"> <li>Internal AG activity (survey, contributions to public consultations)</li> </ul>
<b>CIP_3</b>	Explore, promote and conduct collaborative work to build common frameworks together with other sectors (energy, trading, industry, transport, telecommunications...)	<u>Activity 1</u> Establish and nurture collaboration with other clusters (e.g. the ECSI) and define common activities (STOP-IT is co-founder of ECSI)	2022-2024	<ul style="list-style-type: none"> <li>Cross European Industry clusters</li> <li>Horizon Europe and following Funding Schemas</li> </ul>

# Digital Action Plan for Critical Infrastructure Protection AG

#	Action	Activities	Timeline	Instruments
<b>Critical Infrastructure Protection (Physical and Cyber Threats)</b>				
CIP_4	Horizon scanning type exercise to assess the state of critical infrastructure protection and point towards new emerging threats (linked to digitalisation in the water sector).	<u>Activity 1</u> Live mapping of threats and exposure of CIs with a focus on emerging threats (AI-driven attacks, ransomware...)	2023 – annual update	<ul style="list-style-type: none"> <li>• Horizon Europe and following Funding Schemas</li> <li>• Current funded activities</li> <li>• European, National, Regional Funding schemas</li> </ul>
CIP_5	Improve critical infrastructure security and resilience by advancing research and development solutions	<u>Activity 1</u> Create and maintain a repository of the solutions on CI protection created by the ICT4 water projects	2022 – biannual update	<ul style="list-style-type: none"> <li>• Horizon Europe and following Funding Schemas</li> <li>• Current funded activities</li> <li>• European, National, Regional Funding schemas</li> </ul>
CIP_6	Analyze infrastructure dependencies, interdependencies, and associated cascading effects	<u>Activity 1</u> Ongoing effort connected to the collaboration activities established with other entities	2022-2032	<ul style="list-style-type: none"> <li>• Horizon Europe and following Funding Schemas</li> <li>• Current funded activities</li> <li>• European, National, Regional Funding schemas</li> </ul>
CIP_7	Strengthen coordinated development and delivery across ICT4Water (and ECSI) projects of technical assistance, training, and education.	<u>Activity 1</u> Provide regular input on the cluster projects into the AG meetings and establish collaboration spaces to provide bi-directional information flows (use cases, goals, approaches, solutions)	2022 - 2032	<ul style="list-style-type: none"> <li>• Internal AG and cluster activity</li> </ul>

# Topics under discussion for Critical Infrastructure Protection AG

1. Articulate internal mechanisms to ensure the continuous addition of new relevant projects into the Action Group (2022, first action)
2. Requirements and appetite for a repository of CI protection solutions created by ICT4 water projects including training (from 2022, CIP\_5 and CIP\_7)|KPI: repository created and updated regularly.
3. How to consolidate links with relevant initiatives on Data Sharing (FIWARE Smart Data Models, Data Spaces) to integrate CIP data (from 2022, CIP\_1)
4. How to strengthen the connection with other domains: start with projects contributing to dissemination activities of the ECSI (e.g., annual workshops) to become familiar and inform about progress and outcomes in specific CI sectors (2023, CIP\_3)

# Topics under discussion for Critical Infrastructure Protection AG

## 5. White Papers in pipeline

- “Raising Awareness on Cybersecurity in the Water Sector”: White paper I due December 2022 (~80% complete)
  1. Cybersecurity Challenges in the Water Sector
  2. Cybersecurity Landscape in the Water Sector
  3. Best practices & Recommendations for Cybersecurity in the Water Sector
  4. Synergies & Impact
  5. Roadmap for strengthening the research agenda on cybersecurity in the water sector

# Topics under discussion for Critical Infrastructure Protection AG

## 5. White Papers in pipeline

- “Policy recommendations on Cybersecurity in the Water Sector”: White paper II due December 2022 (~50% complete)
  - Feedback on relevant policies: positive points & areas for improvement
  - e.g., on NIS 2 Directive, proposal for a Cyber Resilience Act (CRA), etc.

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