Action 1.1 Towards a digital ecosystem for the environment and sustainability

Context

The current architecture of INSPIRE is outdated and does not reflect to the desired extent the challenges and opportunities related to the emergence of new data sources and new technologies. In addition, INSPIRE is often seen as a monolithic infrastructure with few links to other existing infrastructures and initiatives. At the same time, the newly adopted European strategy for data (COM(2020) 66) provides an excellent opportunity for the technological evolution of INSPIRE within the broader context of the foreseen European Green Deal data space. In order to achieve that, emerging technologies, data sources and approaches have to be included in INSPIRE to ensure that the infrastructure evolves to support a self-sustainable data ecosystem.

Proposed action

The action will work on four interdependent strands of activities:

1. A new vision for the technological evolution of INSPIRE will be developed in order to integrate the infrastructure in the European Green Deal data space.
2. An updated reference architecture that translates the vision in concrete technical approaches will be developed through the extensive use of an agile approach and sandboxing.
3. A stack of standards (incl. de-facto standards) and solutions that comply with the legal provisions will be prepared and endorsed by the MIG through the means of non-legally binding INSPIRE good practices.

The action will contribute to the improvement of the discoverability of data through search engines and the proposal of a common approach to licensing that follows a well-established framework (e.g. as defined by the Creative Commons).

Organisational set-up

The action is led by the JRC, with contribution by the MIG, MIG-T, European Commission DGs and the EEA. Temporary sub-groups and networks of experts will be established, and where necessary, procurements for ad-hoc tasks will be prepared. The action will engage with a broad spectrum of relevant stakeholders such as data reusers, standardisation bodies, solution and data providers, software developers and open source communities

Tasks

Task	Deadline (indicative)
Task 1. Vision for the technological evolution of INSPIRE within the context of the European Green Deal data space;	
Task 2. New reference architecture for the INSPIRE infrastructure as part of the Green Deal data space;	
Task 3. Experiment and summarise lessons from the use of modern technologies and standards through sandboxing;	May 2023
Task 4. Create and endorsement of a stack of ‘enabling’ good practices for data provision (based on e.g. OGC APIs, different encodings: GeoJSON, GeoPackage, VectorTiles) in collaboration with standardisation bodies, software vendors and open source projects;	December 2024
Task 5. Improve the discoverability of INSPIRE data through search engines and combine them with other sources (citizen data, private data, research data);	June 2023
Task 6. Develop and promote a common approach for licensing of datasets in accordance with existing licensing frameworks (e.g. Creative Commons).	May 2022

Outcomes

Modernised technical framework of INSPIRE that is well integrated into the European Green Deal data space and ensures the evolution of INSPIRE into a digital ecosystem for the environment and sustainability.