

Title	INSPIRE Download Services based on the OGC API – Features standard			
ID	MIWP-2020-1			
Status	<input type="checkbox"/> Proposed	<input checked="" type="checkbox"/> Endorsed	<input type="checkbox"/> In Progress	<input type="checkbox"/> Completed
Date of last update	10 June 2020			
Issue	<p>Several possible solutions for implementing download services are already endorsed by the INSPIRE Maintenance and Implementation (MIG) group. Technical guidelines documents are available that cover implementations based on ATOM, WFS 2.0, WCS and SOS. While all of these approaches use the Web for providing access to geospatial data, the new family of OGC API standards will modernise the way geospatial content is exchanged via the Web. An OGC API will provide proper machine-readable and human-readable documentation, thereby requiring less up-front knowledge of the standards involved from developers. OGC API standards currently build on the OpenAPI 3.0 Specification, a broadly adapted industry standard that is implemented by many tools. In addition, OGC API standards are aligned with the W3C Data on the Web Best Practices DWBP Best Practice 23 and DWBP Best Practice 24.</p> <p>In particular, the OGC API - Features standard¹ provides API building blocks for the creation, modification and query of features on the Web. OGC API - Features is comprised of multiple parts, and each of them is a separate standard.</p> <p>In response to this emerging trends a Draft guideline describing how to setup an INSPIRE Download service based on the OGC API - Features standard has been prepared within the context of the INSPIRE MIG-T.</p>			
Proposed action	<p>The overall objective of this action is to prepare and submit for approval by the MIG an INSPIRE good practice dedicated to the use of the OGC API Features as an INSPIRE Download service. In addition, the action should capture and document all issues and lessons learnt for the technological evolution of INSPIRE into a European environmental data space.</p> <p>The participation of data providers, software vendors, open source projects and representatives of standardisation bodies is foreseen.</p>			
Link to REFIT evaluation	Specific proposed action to "assist the Member States in applying and implementing the INSPIRE Directive (simplification of use), e.g. by the use of common tools, and promote priority setting together with the Member States " (page 12 of COM(2016)478).			
Links & dependencies	<p>Dependencies:</p> <ul style="list-style-type: none"> • OGC API – Features – Part 1: Core standard • Open API Specifications <p>Links:</p> <ul style="list-style-type: none"> • Rules for encoding of INSPIRE data through the GeoJSON standard developed by MIG Action 2017.2 (concluded); • Testing framework developed within the context of the MIG Action 2017.3 (concluded) concerning the client support for INSPIRE data. • Action 2017.4 on validation and conformity testing (development of ATS and ETS) 			
Organisational set-up	The work will be carried out by volunteer organisations in the Member States, coordinated by the JRC.			

¹ The OGC API-Features was previously known as Web Feature Service (WFS) 3.0

	Communication and discussions will take place online. If needed, one face-to-face meeting can be organised to discuss feedback and resolve comments on the draft guidelines.
Lead	JRC
Scope	This action will only address the use of the OGC API – Features as an INSPIRE Download service. The encoding of the data is out of scope. In addition, executable test suites will be developed outside the scope of the action.
Tasks	<ol style="list-style-type: none"> 1) Review the existing guideline for “Setting up an INSPIRE Download service based on the OGC API-Features standard” 2) Test the proposed approach for setting up INSPIRE Download services through deployment of OGC API – Features instances with volunteer MS data providers. Different open source and proprietary implementations of the OGC API – Features should ideally be covered. 3) Summarise the lessons learnt on GitHub, and propose revisions of the draft guideline. 4) Organise a webinar/meeting for discussing the lessons learnt and potential issues or improvement proposal. 5) Draft and submit for endorsement an INSPIRE good practice fiche. 6) Identify and document issues for (i) a possible update of the INSPIRE NS Regulation, and (ii) the technological evolution of INSPIRE in general.
Outcomes	<ul style="list-style-type: none"> • Updated guidance document • Webinar recordings • Proposal for an INSPIRE good practice • Possible suggestions for update of the INSPIRE NS Regulation
Proposed Impact	<input type="checkbox"/> Technical Adjustment / Bug Fixing <input checked="" type="checkbox"/> Technical Improvement / Development <input checked="" type="checkbox"/> Practical Support for Implementing Process <input checked="" type="checkbox"/> Cost Reducing Effect for Implementing Process <input type="checkbox"/> Direct Support on Policy-Making / - Activities
Timeline	Date of kick-off: March 2020 <hr/> Proposed Date of Completion: November 2020
Required human resources and expertise	The participants should have expertise in one or several of the following areas: <ul style="list-style-type: none"> • General knowledge of Web APIs and the OpenAPI standard • OGC Standards for access to geospatial data • Open source and proprietary software implementations of OGC Standards and client applications • Implementing Rules and existing Technical Guidelines for INSPIRE Download services
Required financial resources	<ul style="list-style-type: none"> • Meeting reimbursement (where applicable)In-kind contribution from participating organisations

Risk factors	<p>Overall risk level of the action</p> <p><input type="checkbox"/> High</p> <p><input checked="" type="checkbox"/> Medium</p> <p><input type="checkbox"/> Low</p>	<p>Risk factors to be considered</p> <p><input type="checkbox"/> Missing Resources</p> <p><input checked="" type="checkbox"/> High Complexity</p> <p><input type="checkbox"/> Interdependencies with other Actions</p>
Possible funding	<ul style="list-style-type: none"> • DG ENV funding (through Administrative Arrangement) • MS funding / in-kind contributions 	