

APIs and the High Value Dataset List

This factsheet for INSPIRE data providers describes the policy for unlocking the High Value Dataset List via Application Programming Interfaces (APIs).

High Value Dataset List

The 2019 EU [Open Data Directive \(ODD\)](#) allows the EC to maintain a High Value Data List (HDVL), which imposes an obligation on all Member States to publish data¹. Various datasets on the HDVL are already accessed via INSPIRE metadata and services. Now the EC also imposes obligations for opening up the hvdl: this data must be published and accessed as open data by all Member States, if available, via APIs and bulk download (incl. metadata). These requirements are in line with the INSPIRE Directive, both reinforce each other; the technical requirements for multiple HVD themes are based on INSPIRE and explicit open data requirements are introduced in the context of INSPIRE.

The question is: does the current access via the INSPIRE network services meet requirements of the ODD and hvdl?

APIs

The hvds must be accessed legibly via an API machine. An API is defined in ODD as **“a set of functions, procedures, definitions and protocols for communication between machines and seamless data exchange.”** No technical regulation for API functionality and technology has been drawn up. Therefore, no “technical” choice or API style is required for APIs. However, it should be “functional APIs corresponding to the reasonable needs of re-users”. For the themes geo-data, earth observation and environment and mobility, it is indicated that it is an API such as ‘the INSPIRE direct access download services’. The INSPIRE direct access download service implementation makes it possible to download only part of the dataset by own selections. Inspire data providers with HDVL data sets can use the INSPIRE network services in the following way for the HDVL²:

Inspire “network service”	API	Bulk Download
OWS: WFS, WCS, SOS	X	X
OGC API: Sta, API Features	X	X
Atom feeds		X

Standards

The international standards for INSPIRE APIs have been developed by the OGC. These first generation OWS standards, such as WFS, WCS and SOS, are based on RPC and XML. These standards are still valid and in use, but are gradually replaced by the new generation. This new generation, the OGC APIs are based on general Web architecture, i.e. REST. In the general Web architecture, the [Dutch API strategy](#) of the government is also applied.

Advice

In short, datasets accessed via INSPIRE direct access download services can also be used as HDVL APIs. There are no prescribed technical implementation rules from ODD and HDVL, but an expectation that APIs will grow with the reasonable wishes of re-users.

Therefore, implement and encourage the use of REST APIs in accordance with the [Dutch API strategy](#) and in accordance with the OGC API standards such as STA and OGC API features (INSPIRE Good Practises). This new generation of APIs are open to a much wider public for reuse. Also follow the broad European developments in the field of API implementation and ensure that the Dutch API interests are guaranteed.

¹ See also the [EU Information Handling](#).

² [MIG-T meeting 25 November 2022](#)