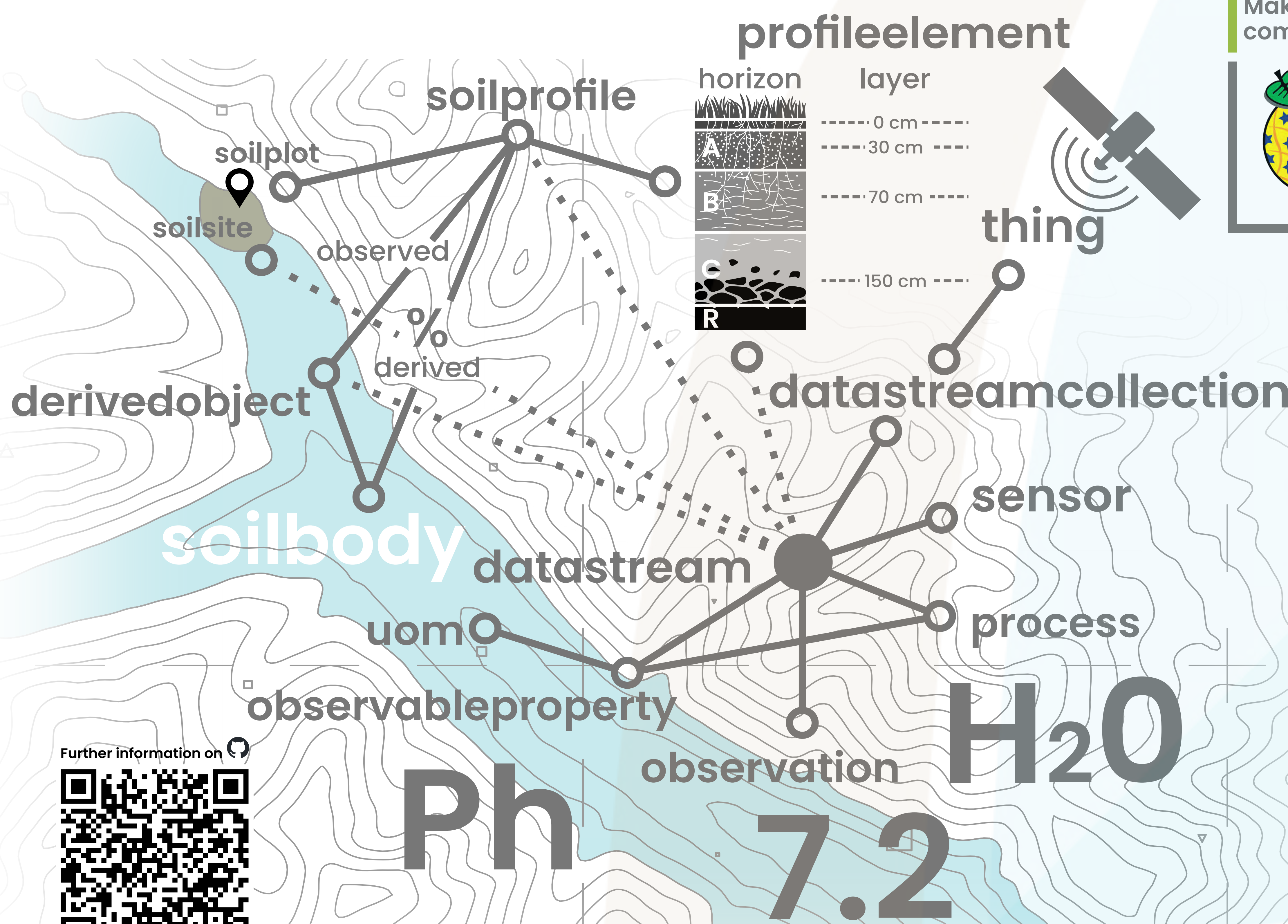


Enabling the effective exchange of INSPIRE-compliant soil data through the EJP SOIL implementation of the INSPIRE Good Practice on GeoPackage encoding

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In the framework of the working package 6 – supporting harmonised soil information and reporting of the H2020 European Joint Research Programme EJP SOIL (<https://ejpsoil.eu/>)



INSPIRE - EJP SOIL template

Make soil data interoperable and INSPIRE compliant



Findable
Metadata and data should be findable for both humans and computers

Interoperable
Data needs to work with applications or workflows for analysis, storage and processing

Accessible
Once found, users need to know how the data can be accessed

Reusable
The goal of FAIR is to optimise data reuse via comprehensive well-described metadata

INSPIRE GoodPractice for the specific implementation of Soil data theme in Geopackage format.



Lightweight
Performant in GIS environments
Efficient with limited connectivity and bandwidth

The **Geopackage** has been endorsed to be used since November 2022 as an alternative to GML.

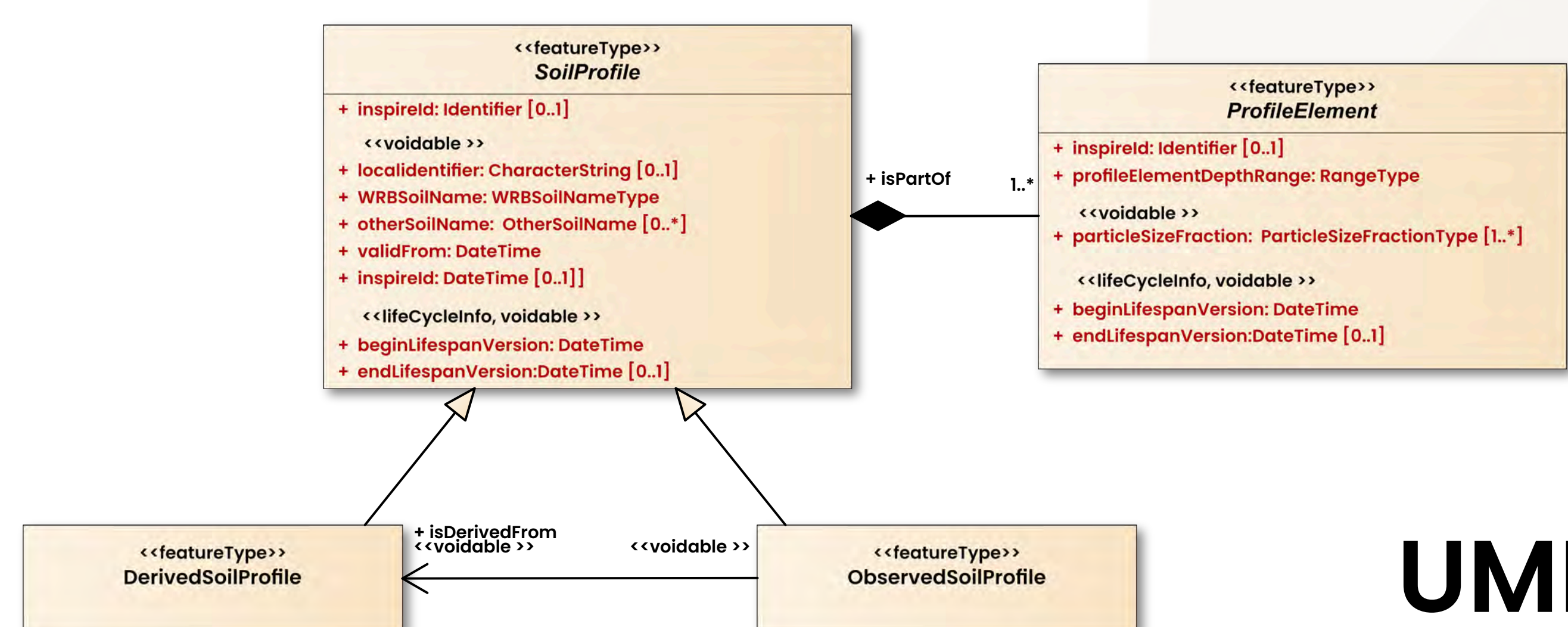
Semantic harmonisation and code list management procedures and tools.

For the provision of observation and measurement data, the transposition of the O&M model from the OGC SensorThings API has been utilized.

Triggers for quality checked soil data entry in QGIS.

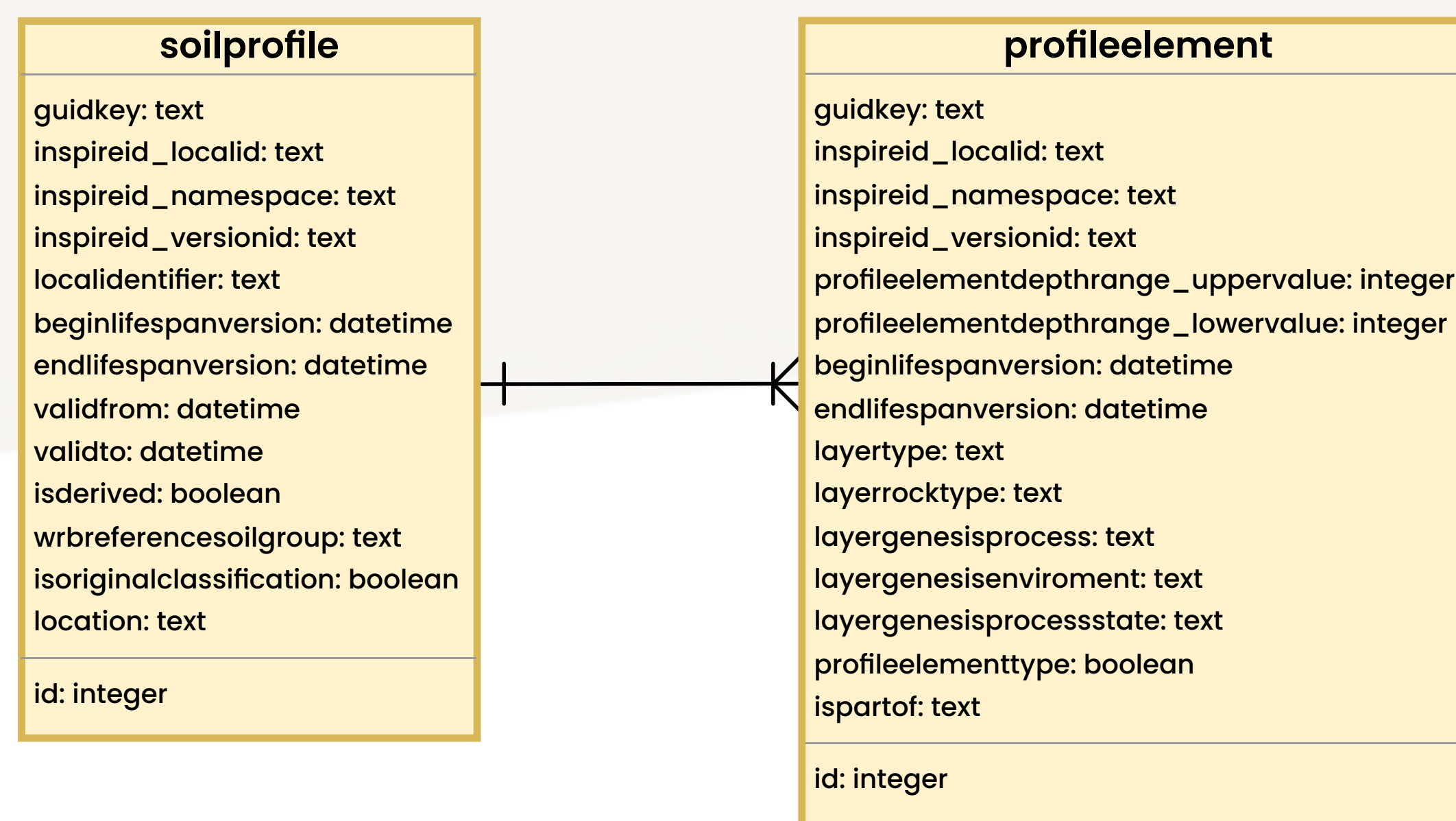
RESULTS As required by the GP specification, the following evidence has been provided:

1 a description of the **UML-to-Geopackage** model transformation rules

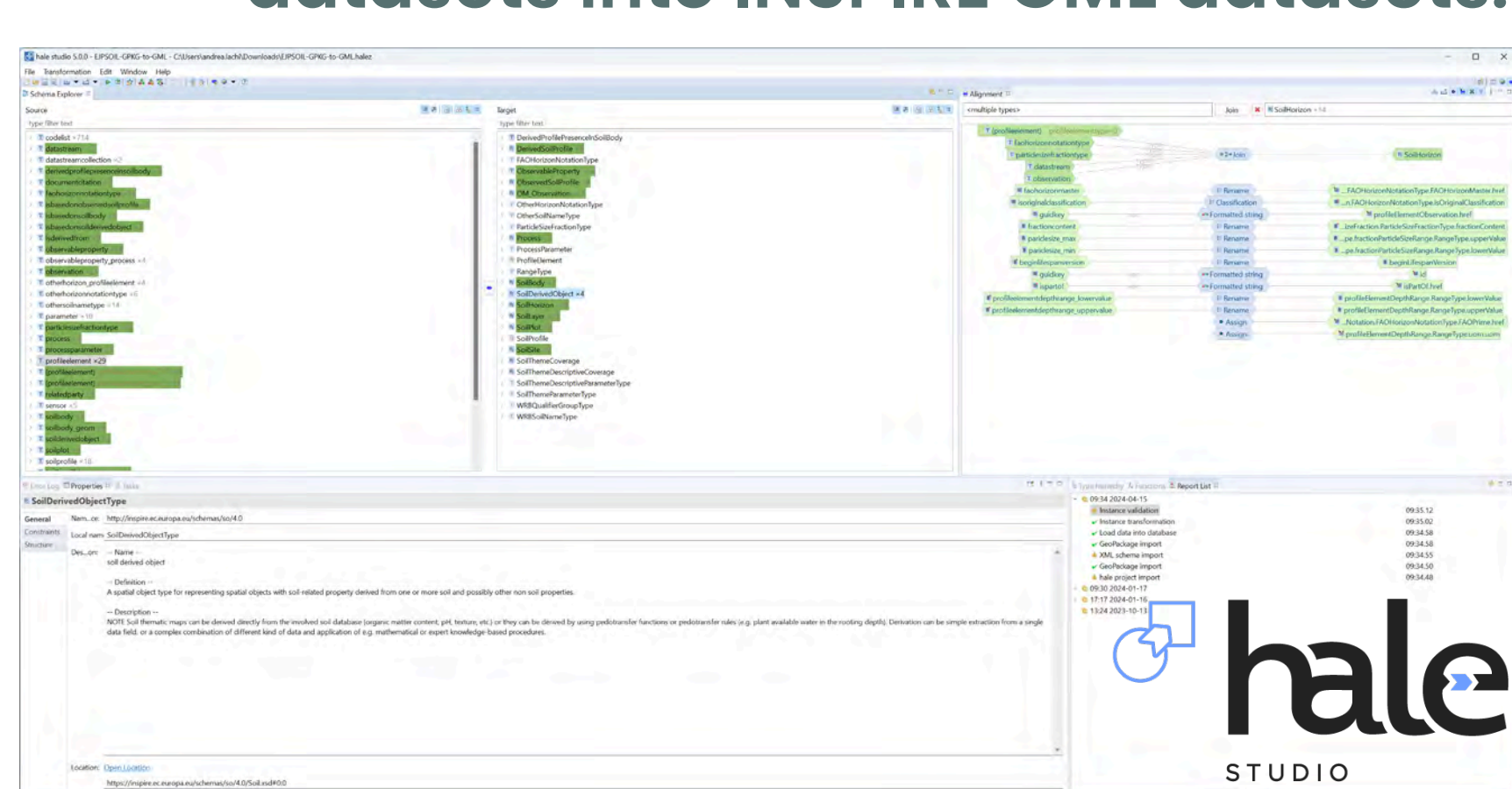


UML

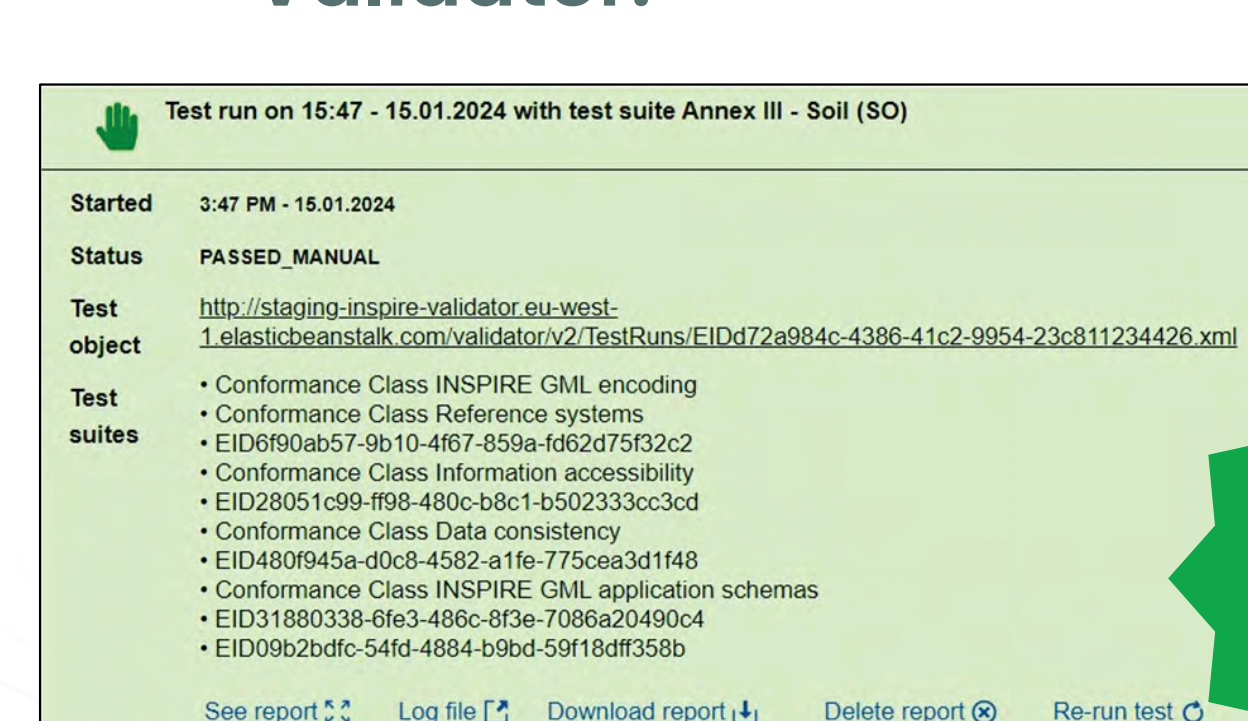
2 an empty **geopackage** template acting as database schema (also provided via SQL scripts)



3 an executable model for data transformation of GeoPackage datasets into INSPIRE GML datasets.



4 a sample GML dataset successfully validated against INSPIRE Soil requirements using the INSPIRE Validator.



5 a series of customized forms for data visualization and input in QGIS

