Discussion paper: IR on data interoperability – Change proposal(s) on code lists and their values

Detailed issues addressed
All issues related to changes in code lists and their values (sections 2.2.1 to 2.2.14 in the change proposal summary document)

Summary of the issue(s)
In order to facilitate semantic interoperability, the use of common terminology is embedded directly in the IRs by defining the code lists and their values that shall be used for certain attributes of spatial objects. The IRs provide for each code list value a language-neutral mnemonic code, a label and a definition and specify for each code list whether and how it may be extended by data providers. Through the translation of the Regulations, the labels and definitions are available in all official EU languages. For some code lists, extensions (i.e. additional values) are already included in the INSPIRE Technical Guidelines.

The INSPIRE Registry represents a key infrastructure component to allow unambiguous references to items and provide unique and persistent identifiers for resources. It makes available all INSPIRE code lists and their values (as they are defined in the IR and TGs) for human consumption (browsing and searching) and in a variety of machine-readable formats (e.g. XML, SKOS/RDF, CSV). The Registry is used in a variety of transformation and validation tools.

A Guidance/Best Practice document of registers and registries has been endorsed by the MIG that provides guidance on how to create national or community extensions of INSPIRE code lists, and how to publish such extensions in registers. It also proposes the establishment of a register of registers (RoR), which has been implemented and is available for testing in a sandbox environment.

A change management process and governance structure for the INSPIRE registers has been put in place in 2016, which is already being used by Member States' submitting organisations.

Proposed change(s)
Several of the received change proposals address issues with the code lists and their values included in the IRs, e.g. proposing additional values, changes in definitions of specific values or code list extensions.

Since domain terminology evolves in time, INSPIRE code lists/values changes are frequently proposed and further change proposals can be envisioned also for the future. Therefore, the planned IR amendment might present an opportunity to make the process for changes in code lists and their values more flexible and faster. Contrary to the time when the IRs were first adopted, the INSPIRE Registry and its formalized governance structure and procedures, now provide an alternative for managing the code lists in a transparent, yet controlled way.

---

1 They were left out of the initial version of Regulation 1089/2010, but were then added by the subsequent amendments in Regulations 102/2011 (for Annex I themes) and 1253/2013 (for Annex II+III themes).
2 except for Annex I themes
4 http://inspire-regadmin.jrc.ec.europa.eu/ror/
The amendment could therefore include the removal of all code lists and code list values from the legal text. Instead, in articles 4 and 6 (which define the requirements on code lists and enumerations), an explicit reference to the INSPIRE Registry, to be created and operated by the EC, could be included (similar to the reference to the INSPIRE geoportal in Art. 15 of the Directive). Furthermore, the governance of the code list register included in the INSPIRE Registry could be defined (at least generically), to ensure that changes can only be done with agreement of the MIG.

Possible options
Preferred option (for discussion at MIG-T meeting #48): option 2

Option 1: IR amendment addressing all proposed changes

- **Description:** Each code list-related change proposal will be evaluated, and all accepted proposals will be implemented in the IRs, TGs and INSPIRE registry (e.g. including additional recommended values).
- **Impact:**
  - The impact on the IR will be small, but further change proposals can be expected in the future, which might then require additional amendments or corrigenda.
  - There will be little impact on existing implementations, since changes will be implemented in the Registry through retirement or supersession of the previous values, but these will still remain available in the Registry; however, legally speaking, the previous values may no longer be used after the amendment (plus some period for implementing the changes).

Option 2: IR amendment removing all code list values & adding explicit reference to the registry

- **Description:** The IR amendment will comprehensively remove all references to code list values and replace them with
  - a statement that the allowed values and extensibility of each code list are specified in the INSPIRE Registry operated by the EC
  - a requirement that all changes to the Registry be endorsed by the MS expert group on INSPIRE maintenance and implementation (or another mechanism to be agreed)

Each code list-related change proposal will be evaluated and either be rejected or addressed in the TGs / INSPIRE Registry (e.g. including additional recommended values) using the established change processes.

The TGs will need to be updated accordingly.

- **Impact:**
  - The one-time impact on the IR will be considerable (removing many pages of text) and might not be easy to implement as a "remove each occurrence of x" type of amendment (we may need to replace the complete annexes). But any future change proposals will be easy and fast to address and implement.
  - Also the effort to update once all TGs will be high, but these updates could be dealt with through corrigenda.
  - There will be no impact on existing implementations, since changes will be implemented in the Registry through retirement or supersession of the previous values, but these will still remain available in the registry.
  - There will possibly be financial implications for the EC for maintaining and operating the INSPIRE Registry, if it is explicitly mentioned in the legal text.