Building the Synergy between Public Sector and Research Data Infrastructures

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INSPIRE is a European Directive aiming to establish a EU-wide spatial data infrastructure to give cross-border access to information that can be used to support EU environmental policies, as well as other policies and activities having an impact on the environment. In order to ensure cross-border interoperability of data infrastructures operated by EU Member States, INSPIRE sets out a framework based on common specifications for metadata, data, network services, data and service sharing, monitoring and reporting.

The implementation of INSPIRE has reached important milestones: the INSPIRE Geoportal was launched in 2011 providing a single access point for the discovery of INSPIRE data and services across EU Member States (currently, about 300K), while all the technical specifications for the interoperability of data across the 34 INSPIRE themes were adopted at the end of 2013. During this period a number of EU and international initiatives has been launched, concerning cross-domain interoperability and (Linked) Open Data. In particular, the EU Open Data Portal, launched in December 2012, made provisions to access government and scientific data from EU institutions and bodies, and the EU ISA Programme (Interoperability Solutions for European Public Administrations) promotes cross-sector interoperability by sharing and re-using EU-wide and national standards and components. Moreover, the Research Data Alliance (RDA), an initiative jointly funded by the European Commission, the US National Science Foundation and the Australian Research Council, was launched in March 2013 to promote scientific data sharing and interoperability.

The Joint Research Centre of the European Commission (JRC), besides being the technical coordinator of the implementation of INSPIRE, is also actively involved in the initiatives promoting cross-sector re-use in INSPIRE, and sustainable approaches to address the evolution of technologies - in particular, how to support Linked Data in INSPIRE and the use of global persistent identifiers. It is evident that government and scientific data infrastructures are currently facing a number of issues that have already been addressed in INSPIRE. Sharing experiences and competencies will avoid re-inventing the wheel, and help promoting the cross-domain adoption of consistent solutions.

Actually, one of the lessons learnt from INSPIRE and the initiatives in which JRC is involved, is that government and research data are not two separate worlds. Government data are commonly used as a basis to create scientific data, and vice-versa. Consequently, it is fundamental to adopt a consistent approach to address interoperability and data management issues shared by both government and scientific data.

The presentation illustrates some of the lessons learnt during the implementation of INSPIRE and in work on data and service interoperability coordinated with European and international initiatives. We describe a number of critical interoperability issues and barriers affecting both scientific and government data, concerning, e.g., data terminologies, quality and licensing, and propose how these problems could be effectively addressed by a closer collaboration of the government and scientific communities, and the sharing of experiences and practices.