A European Community of SMEs built on Environmental Digital Content and Languages

GeoICT SMEs and INSPIRE: outcomes from SmeSpire workshops

- *"Leveraging SMEs' strength for INSPIRE"*
- *"Concrete Steps to Implement INSPIRE : Synergies Between The Public and The Private Sector"*

Introduction

SmeSpire is an FP7 Support Action aiming to turn the challenges of the INSPIRE implementation into business opportunities for the Geo-ICT European SMEs (www.smespire.eu).

SmeSpire's purpose is to encourage and enable the participation of SMEs in the mechanisms of harmonising and making large scale environmental content available.

This will be achieved through 4 key actions:

1. the study and assessment of the market potential for Geo-ICT SMEs in relation to INSPIRE;
2. the collation and exploitation of a Best Practice Catalogue in the management of geographical and environmental content;
3. the development of a multilingual package to train environmental data analysts in the maintenance and exploitation of geospatial data commons; and
4. the creation of a network capable of transferring result-driven knowledge throughout Europe with research centres, environmental agencies, progressive technology providers and digital content providers.

Context

In May and June 2013 two major events highlighted the importance and strength of "geospatial" SMEs (or Geo-ICT SMEs) regarding INSPIRE.

The first one was the dialogue session "*Leveraging SMEs strength for INSPIRE*" organized in May by JRC during the Geospatial World Forum, in Rotterdam[1].

The second one was the workshop "*Concrete Steps to Implement INSPIRE: Synergies Between The Public and The Private Sector*" organized by the SmeSpire project in June at the INSPIRE Conference, Florence[2].

During the first event at the Geospatial World Forum, seventeen SMEs presented their point of view about strengths and weaknesses around INSPIRE: the main purpose of this dialogue session was to collect information about mechanisms for triggering innovation and growth and the role of networking between private companies and other organizations. A second set of goals was to address what SMEs stand to gain by contributing to INSPIRE and related policies, to identify the roadblocks that hinders their fruitful participation, and to discuss ways to overcome these challenges. The session addressed the needs of end-user organizations with respect to INSPIRE data, and the ways of collaboration between the key stakeholders-SMEs, data providers and end-users.

During the workshop at the INSPIRE Conference, ten panellists were invited to discuss about how to lower the existing barriers that hamper innovation and growth of SMEs.

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[1] http://www.geospatialworldforum.org/2013/sme_pr.htm

[2] http://inspire.jrc.ec.europa.eu/events/conferences/inspire_2013/index.cfm/page/ws

Outcomes

In the next years the focus of INSPIRE should be more on the **content** (data) than on technology.

Harmonised data will lead to new applications and solutions to which SMEs can contribute.

Growth of the Geo-ICT companies (especially SMEs and start-ups) should be expected in this area, both for assisting public authorities to make the data available (e.g. open data initiatives), and for re-using available data into new applications.

Local data (i.e. data from local authorities) are often seen as important only at local level, but they are not: geospatial (and environmental) data that are managed by municipalities, provinces and regions are significant also at national and supranational levels, and there is an increasing hunger for sharing and re-using local data.

Actually, it is mostly at local level that it is urgent to increase the **awareness** of INSPIRE, either for public bodies and private companies (coherently with the INSPIRE principle to implement the Directive as much close as possible to the source data).

The awareness raising to be done is not at technical level but at **operational and organizational level**: local authorities already focus on data sharing issues (SDI and interoperability), but they haven't entirely appreciated the full value of INSPIRE for their real needs in the daily work.

Often, INSPIRE is perceived differently by technical experts ("GI geeks") and users: the firsts are focused on technical aspects, while the latter are interested in specific domains' applications. These different approaches bring to different "languages" when talking about INSPIRE: it is extremely important to **glue** "GI geeks" and users (e.g. civil servants form different domains), through expertise available at local level in private Geo-ICT SMEs.

In order to "glue" technical experts and non-technical people, we need INSPIRE **training modules**: the goal is to bridge technologists, service providers, users from public sector and private organisations, to address real needs for existing and future policies.

SMEs have a fundamental role to play in this, facilitating **links** between INSPIRE and different domains: SMEs are essential, since they work closely together with **local stakeholders**.

An important and innovative aspect of INSPIRE lies in the re-use and **extension of the INSPIRE** data standards for new applications: this is an interesting opportunity for SMEs involved in activities like data modelling, processing and transforming.

In this direction, SMEs should be efficiently supported by a channel like the SmeSpire Network to provide feedback, comments and **new requirements**, so to improve the INSPIRE Implementing Rules and the Technical Guidance documents. Some new requirements have been already identified for possible inclusion in the INSPIRE framework (e.g. Sensor Observation Services (SOS) as a recognized INSPIRE Download Service; or INSPIRE compliant data for e-reporting on Air Quality) and other ones may be collected from local level through SMEs.

Conclusions and possible recommendations

Overall, there was a very positive feedback on the opportunities that INSPIRE creates for SMEs for consultancy and training activities.

On the other hand, there is not yet a consolidated "INSPIRE-related" market, and it is difficult to have a critical mass of Geo-ICT companies driving needs and requirements of the private sector; in this direction it is very important to actively involve the whole private sector in the definition of national GI/SDI policies, facilitating the participation of Geo-ICT SMEs also through dedicated budget (e.g. to reimburse travel and subsistence expenses).

Many speakers identified as crucial the need for improving public procurement procedures, with possible guidelines for calls for tenders related to INSPIRE: this may fall within the scope of the current EULF Study[3] under the Standardisation and Interoperability focus area.

Another element that strongly came out from several presentations was the difficulty for SMEs to enter and participate R&D co-funded projects: SMEs have a lot of obstacles in entering consortia, also due to practical barriers like the complexity of bureaucracy and the time requested to prepare administrative documents, as well as the low advanced payments (this forcing companies to apply for loans at banks to undertake the project).

From the perspective of Open Source Software (OSS) developers, an important key point was about Geographic Free OSS as a real European asset: many GFOSS lead developers are located in the European Union[4], therefore the European Commission should invest more on GFOSS, defining a clear strategy and linking GFOSS projects together with the ISA ARe3NA initiative[5].

In this direction, a better connection between ARe3NA, the SmeSpire Best Practice Catalogue[6] and the CORDIS R&D projects database[7] should be strongly encouraged, in order to "interlink" the three resources and facilitate the searching and browsing of GFOSS initiatives.

The need for collaboration and networking was another issue highlighted several times during the workshops: this underlines there are good opportunities for building up a strong SmeSpire Network.

To innovate, SMEs need to symbiotically collaborate among each other (even if they are competitors in the marketplace), also strengthening connections with other actors and disciplines working on geographic information (academia, research centres, public authorities, …), at all levels (EU, national, subnational).

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[3] European Union Location Framework (EULF) is an action of the ISA Programme. Please refer to the EULF Strategic Vision document (V0): http://ec.europa.eu/isa/actions/documents/isa-2.13_eulf-strategic-vision-lite-v0-3_final_en.pdf

[4] As mentioned by by S.Giannecchini during the INSPIRE workshop (quoting P.Cavallini: http://www.regione.toscana.it/documents/10180/1060591/04_Cavallini_opensource_motore_economico.pdf/f5a9cc28-e415-43c3-89b0-60509c8cb7c2)

[5] A Reusable INSPIRE Reference Platform (Are3NA) is another action of the ISA Programme: https://joinup.ec.europa.eu/community/are3na/description

[6] http://best-practices.smespire.eu/

[7] http://cordis.europa.eu/guidance/about-projects_en.html

Moreover, as the workshops' participants highlighted, there is the urgent need for clearer communication strategies and campaigns around INSPIRE, also to better describe benefits for public authorities at local level. Again, the role of SMEs is crucial as they work mainly locally: the development of multilingual training modules offered by SmeSpire[8] is targeted towards this goal, and it is essential that training activities (courses, webinars, workshops, …) will consider the local dimension, with training multimedia material translated in the different languages. Moreover it is important that training will be continued also after the end of the SmeSpire project, through the collaboration of SmeSpire Network members.

Last but not least, it is essential for SMEs to find an efficient way to participate to the future INSPIRE Maintenance and Implementation Group[9], and play a pro-active role in that; in this sense the SmeSpire Network could play as a channel to facilitate the transfer of result-driven knowledge and practical needs coming from the private sector.

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[8] http://www.smespire.eu/index.php/training-smespire

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