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

smeSpire Challenge Guidelines v. 1.0

Organizing Committee

- Raffaele De Amicis, Fondazione Graphitech, Italy
- Giacomo Martirano, Epsilon Italia, Italy
- Massimo Craglia, European Commission-JRC
- Daniele Magliocchetti, Fondazione Graphitech, Italy

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Introduction

The smeSpire project is an FP7 Support Action for SMEs driven by a consortium of key players from 12 different Member States: SMEs, research centres, environmental agencies, a public body and a non-profit association.

SmeSpire is aiming to encourage and enable the participation of SMEs in the mechanisms of harmonizing and making large-scale environmental content available.

In this context, the SmeSpire Consortium is proud to launch the first SmeSpire Challenge initiative in order to stimulate new business ideas originating from the INSPIRE implementation process having geo-ICT SMEs as key players.

The challenge is structured into two tracks: "Best Practices for INSPIRE" and "Open Source Software for INSPIRE", encouraging submissions related to successful INSPIRE implementations in vertical application domains.

The INSPIRE Directive (2007/2/EC) establishes an Infrastructure for Spatial Information in Europe to support Community environmental policies, and policies or activities which may have an impact on the environment.

INSPIRE is based on the creation, operation and maintenance of infrastructures for spatial information established and operated by the 28 Member States of the European Union plus Switzerland, Norway and Iceland, addressing 34 spatial data themes related to environmental applications.

Making data available, according to INSPIRE standards, requires specific skill sets seldom found in public authorities. The management of this content represents an opportunity for Small and Medium Enterprises (SMEs) active in this sector. SMEs can enable countries to fulfil the Directive, creating new market opportunities with increased potential for innovation and new jobs. The technical skills and organizational flexibility of SMEs can effectively support the various institutions and stakeholders directly involved in the various commitments related to the implementation of INSPIRE. Due to legal requirements, the INSPIRE implementation becomes the entry-point for crucial business opportunities, opening new or reinforcing existing perspectives. Coherently with the aim to cross-fertilizing the vertical domains benefitting from INSPIRE, the smeSpire challenge is organized in collaboration with the following EU projects:

i-Scope "interoperable Smart City services through an Open Platform for urban Ecosystems": a CIP Project started in 2012 delivering an integrated platform for smart-cities including: improved inclusion and personal mobility of aging and diversely able citizens through an accurate city-level differently-abled-friendly personal routing service which accounts for detailed urban layout, features and barriers; optimization of energy consumption through a service for accurate assessment of solar energy potential and energy loss at building level and environmental monitoring through a real-time environmental noise mapping service based on mobile crowdsourcing.

Sunshine "Smart UrbaN ServIces for Higher eNergy Efficiency": a CIP Project started in 2013 delivering innovative digital services, interoperable with existing geographic web-service infrastructures, supporting improved energy efficiency at the urban and building level such as: automatic large-scale assessment of building energy behaviour; optimisation of energy consumption of heating/cooling systems and interoperable control of public illumination systems based on Automatic Meter Reading (AMR) facilities.

eENVplus "eEnvironmental services for advanced applications within INSPIRE": a CIP Pilot Type A project aiming at: creating a comprehensive open scalable infrastructure to integrate existing infrastructures according to the INSPIRE requirements, open standards and interoperable innovative services, aiming at the creation of: a common Environment Thesaurus Framework, providing added-value services for its integration and exploitation in pilot applications; a comprehensive tool-kit with procedures for data harmonisation and validation for supporting in the Members States the application of the INSPIRE implementing rules, with guidelines and examples; a set of innovative on-line added value interoperable services aiming to facilitate the developing of innovative environmental applications and a training Framework to support with eLearning tools the necessary knowledge and Guidelines for operating with INSPIRE and SEIS directives.

Slope "Integrated proceSsing and controL systems fOr sustainable forest Production in mountain arEas": an FP7 project integrating information from remote sensing, Unmanned Aerial Vehicles (UAV) and on-field surveying systems, to support macro and local analysis to characterize forest resources to be used for Sustainable Forest Management and optimization of logistics during forest operations.

Guidelines

The challenge is open to both registered (members of the smeSpire Network) and not registered SMEs as well as to students, research centres, public bodies and single professionals. Applicants are welcome to choose any track that captures their creativity, vision and exploit their SME talents.

Each applicant can apply for one or more tracks provided that the submitted products/solutions are different. If a product/solution can fit in more than one track, the challenger should apply for the most relevant one.

Awards for the smeSpire challenge will be presented during the next INSPIRE Conference in Aalborg Denmark, 16-20 June 2014, a great window towards European market and networking opportunities. The event will also give the opportunity to announce future plans about the challenge for the forthcoming years.

Each interested participant can apply for the smeSpire Challenge subscribing at the following link: www.smespire.eu .

Submissions can be related, but not limited to:

- Building 3D Digital Cities
- Creating and maintaining databases of metadata for Urban Environment Objects
- SDI to Better Manage Large Cities
- Energy consumption optimization for private and public buildings and/or infrastructures
- Urban resource management and optimization, like water or gas
- Urban Pollution detection and management like air, noise or ground
- Automatic large-scale assessment and monitoring of building energy performances, based on data available from public services and real-time data
- Any other application domain related to one or more INSPIRE data themes.

Track 1 – Best Practices for INSPIRE

This track aims at stimulating the submission of Best Practices related to INSPIRE implementations by thematic communities engaged in dataset harmonisation according to the data specification for the INSPIRE Annex I-II-III themes.

Best practices may be submitted in the form of:

- Detailed documents (such as guidelines, reports, procedures, etc.)
- Detailed tutorials
- Multimedia material
- Other material (i.e. websites)

Track 2 – Open Source Software for INSPIRE

This track aims at lowering the many barriers existing for the adoption of open-source software by Governmental Authorities, Agencies and Enterprises. These include the common understanding that open-source licenses require derivative works to be licensed only under compatible licenses, lack of formal support and training, the velocity of change, and a lack of a long-term roadmap.

Submissions within this track shall be based on open source software that uses specific results from inputs provided by one or more datasets harmonised according to the data specifications for the INSPIRE Annex I-II-III themes.

Additionally, submissions of open source projects that allow users to interact with INSPIRE datasets or datasets accessible from the European Open Data Portal in innovative and analytics ways, are strongly encouraged

Software can be related, but not limited to:

- Innovative datasets geo-visualisation tools
- Simulation applications
- Data harmonisation tools
- Smartphone/mobile tools
- Other types of INSPIRE-related software

Deadlines

Challenge Subscription: **31 March 2014**

SmeSpire Project submission: **15 April 2014**

Final SmeSpire evaluation: **30 April 2014**

Awards Ceremony: **16-20 June 2014**

Evaluation

Projects evaluation may vary between challenges but will be based on the following criteria and scores:

	Criteria	Scores for Tracks 1	Scores for Track 2
a.	Complexity of the problem undertaken	30	20
b.	Execution (ease of installation, efficiency, speed)	N/A	20
c.	Interface quality (intuitive, efficient)	N/A	20
d.	Coordination with the community the application is meant to serve. Use by this community would allow a maximum score for this criterion. (Coordination with other University departments outside of computer science is also encouraged, i.e., history, geography, education, science, etc.	40	20
e.	System architecture (i.e. modular components, etc.) for software and overall structure quality for a best practice	N/A	10
f.	Documentation level (i.e. sufficient, direct, non-verbose, etc.)	30	10

An additional 'reusability' bonus point of 25 points will be awarded for software aiding INSPIRE implementation; supporting multi-sector reuse of INSPIRE resources and components (data, metadata, services etc.); or software that provides 'technical bridges' to help connect or integrate INSPIRE with other data-sharing or interoperability activities in Europe. This may include both open source/proprietary software, as well as other tools, services, platforms. Winning examples will also be promoted further through the ISA Programme's A Reusable INSPIRE Reference Platform (ARE3NA) https://joinup.ec.europa.eu/community/are3na/home.

An evaluation committee will score each submitted project based on the above criteria and will be composed by the following experts

- Giacom Martirano, Epsilon Italia, Italy
- Massimo Craglia, European Commission-JRC
- Piergiorgio Cipriano, smeSpire, ex JRC, Italy
- Giorgio Saio, GISIG, Italy
- Raffaele De Amicis, Fondazione Graphitech, Italy
- Danny Vandenbroucke, KU Leuven, Belgium
- Martin Ford, GiStandards, UK
- Robin S. Smith, European Commission-JRC
- Federico Prandi, Fondazione Graphitech, Italy
- Umberto Di Staso, Fondazione Graphitech, Italy
- Daniele Magliocchetti, Fondazione Graphitech, Italy
- Diego Taglioni, Informatica Trentina Spa, Italy

In case of a limited number of participants for one track, the evaluation committee reserves the rights to merge tracks together and change the evaluation criteria accordingly.

Winners

Winners will be identified before the 30th of April 2014 and will be promptly notified by email and by news on the smeSpire website.

Prizes

An award for each track winner will be assigned and an interview with each of them will be published on the smeSpire and other INSPIRE related news sites, leveraging a high resonance of the winning product/solution. Awards will not be in monetary terms.

Contacts

For more information or additional questions, please visit www.smespire.eu or contact: challenge@smespire.eu

Sponsors

smeSpire Project: http://www.smespire.eu/

Sunshine Project: http://www.sunshineproject.eu/

i-Scope Project: http://www.iscopeproject.net/

eENVplus Project: http://www.eenvplus.eu/

Slope Project: http://www.slopeproject.eu/