



European Commission
Information Society and Media



PUBLISHABLE SUMMARY



Grant Agreement number: CIP- ICT-PSP-2009-3-250455

Project acronym: HABITATS

Project title: Social Validation of INSPIRE Annex III Data Structures in EU Habitats

Funding Scheme: CIP - Competitiveness and Innovation Framework Programme.

Period covered: from April 2010 to February 2013

Name of the scientific representative of the project's co-ordinator¹, Title and Organisation:

Mariano Navarro de la Cruz, R&D & Innovation unit ICT manager, TRAGSA Group

Tel: + 34 91 322 65 21

Fax: + 34 91 322 53 00

E-mail: <mailto:mnc@tragsa.es>

Project website address: www.inspiredhabitats.eu

¹ Usually the contact person of the coordinator as specified in Art. 8.1. of the Grant Agreement.



PUBLISHABLE SUMMARY

Operational project objectives

- Build User Communities of the stakeholders involved in both the demand and supply of habitats-related spatial information and services, involving these communities in the development of usage scenarios and requirements and on the effectiveness of their daily environmental-related activities.
- Build on previous and on-going results and experiences in INSPIRE standardisation and SDI deployment
- Develop robust data and metadata models for the INSPIRE Annex III themes 16 “Sea regions”, 17 “Bio-geographical regions”, 18 “Habitats and biotopes” and 19 “Species distribution” as a coherent set of spatial habitats-related information themes. Building on existing databases and content provided by project partners and following INSPIRE principles and related standards.
- Define an open but efficient SDI network architecture for discovery, visualisation, transformation and processing of environmental data stored and maintained in services distributed throughout Europe based on INSPIRE principles.
- Set up and run a coherent set of application pilots within the concrete user scenarios and based on existing stakeholders, services and information sources.
- Disseminate project results to the broader scientific and policy community, as well as to Local Authorities and economic actors.

Description of the work performed since the beginning of the project

The HABITATS project is based on Social Validation as an innovation process in Standards definition and adoption, as a contribution to the INSPIRE directive. A great deal of effort has been required in order to get the different user communities’ involvement and commitment to implementing the INSPIRE directive. The success in terms of the involvement of each user community is highly dependent on many factors. One of Habitats’ challenges has been to make them see the advantages of adopting the open Standards.

In this sense, from the very first meeting of the project two fundamental issues emerged: on the one hand, the need to contribute to the know-how of the development of methodologies and monitoring of impact assessment as part of the innovation process generated by stakeholders communities and groups. Complementary to this issue, it also emerged the need to contribute to the extraction of lessons-learnt from the Living Lab approach in terms of data and systems exchange and integration, as well as the content-use in decision-making and standards adoption. During this period of implementation, the complex issues associated with the Social Validation process have emerged, in particular substantive amount of efforts have been deployed in the validation pilots with the assessment of the profiles so as to gain a good understanding on issues such as who are the key stakeholders in each site. The assessment included the profiling of



bottlenecks/challenges/opportunities and needs faced by each site as well as the potential role of the users in these territorial contexts.

From the technological side, the focus of the project is on design and testing metadata and data models for four selected themes Sea regions, Bio-geographical regions Habitats and biotope and Species distribution. These were agreed to test the data model of INSPIRE Technical Working Groups on practical cases. The transformation services for data format coordinate transformation and data model were designed and implementation started. Transformation of pilot data and testing of compliance with INSPIRE specification is one of the key outputs. Other technological issues are focused on architecture design. Architecture design is divided into two levels:

- Generic architecture without relation to concrete implementation
- Pilot architecture, which are concrete implementation of selected subsets of the generic architecture

The Habitats “Reference Laboratory” has been continuously developed as a central portal based on the generic architecture with the support of global data, and where cross scenarios and implementations as well as Habitats pilot applications, are being used for testing the sharing of local data and metadata. Pilots have implemented the first version of their local implementations.

Also during this period important dissemination actions have been undertaken, including attendance and presentations of the HABITATS project at the INSPIRE and FAO Conferences. Other relevant dissemination actions have been focused on local administrations or institutions.

Main results achieved so far

Main results achieved so far are:

- Construction of the project websites, repository and communication tools among partners
- Participation in the INSPIRE Thematic Working Groups BR-HB-SD
- Construction of the HABITATS Social Network and building of Habitats user community
- Promotion of social networking within pilots and Habitats themes.
- Clear definition of pilot scenarios and stakeholder requirements. Workshops with stakeholders for Social validation.
- The Reference data models for selected themes
- Design of the HABITATS Metadata Profile
- Habitats Networking Architecture
- Designs of Habitats transformation services
- Development and testing of the Habitats Reference Laboratory technology, and pilots geo-portals, working on metadata, SDI infrastructures and networking services in compliance with the INSPIRE Directive for sharing environmental data. Validation and evaluation of pilots datasets using the Reference Laboratory tools. Also, implementations of user requirement to network architecture and completion of metadata according to the Habitats metadata profile.
- Contribution to the value-added of the social validation process of HABITATS as a substantive contribution to the INSPIRE directive.
- Contribution to the extraction of lessons-learnt from the Living Lab approach in terms of the Pilot implementation activities
- Development of the planning deliverables according to the Description of Work



- Contribution to dissemination, exploitation of results and its contribution at EU and international level.
- Concrete activities were carried out at the pilot level and at the level of the communities involved in HABITATS. These activities were also environment-related activities which further supported the overall progress achieved in the assessment of the impact of the project and its social validation. From this work a more comprehensive view of how the potential impact of up-scaled adoption of HABITATS profiles, models and SDI services was distilled with particular relevance to how it impacts the daily work of stakeholders.
- Find new perspectives regarding mobile solutions for INSPIRE

Expected final results and their potential impact and use

Main impacts of the HABITATS project concern interoperability and standards adoption. Policy-push approaches are indeed necessary, but often fall short of the expected results because they fail to address the user's perspectives. It is often taken for granted that once technical barriers to interoperability have been removed, common standards agreed upon by a critical mass of users and awareness-raising activities carried out, and then the job is done. However interoperability is not just a technical concept. Social, organizational and institutional dimensions need to be also considered.

The HABITATS project considers user motivations to share data as being one of the key requirements for systems whose rationale is based more on data sharing. In this sense the HABITATS project aims to spark off positive circles where the more data is shared the greater the benefits to those who offer it.

Similar considerations hold for standards where any initiative that aims to define standards must start from the moment of adoption and its motivation. In this context HABITATS outcomes will need to be seen as the outcomes of the HABITATS communities since the standardisation is built into the co-design process.

OTHER ISSUES

This final section is devoted to different questions without direct relationship between them.

The address of the project public website:

<http://www.inspiredhabitats.eu>

Address of social network:

<http://inspiredhabitats.ning.com/>

Project logo:





Project brochure:

The validation pilots involve multi-stakeholder partnerships in which users actively participate in the design of the network services, and develop on-demand integration on the pilot service mash-up platforms. Validation pilot partnerships develop and test organisational/institutional arrangements for service sustainability and business models that underpin the project's sustainability and exploitation strategy. Specific and realistic quantified indicators measure the envisaged improvements in availability, access and use.

HABITATS OBJECTIVE

The HABITATS project focuses on the evolution of INSPIRE standards through a participatory validation process building a trans-European social network to generate usage scenarios and requirements, and assess the impact of project outcomes, to directly feed into interactive data/metadata modelling of the four INSPIRE data themes 16-19.

Widespread user validation is grounded in 7 pilot services covering these data themes across Europe, and led by content providing partners:

- Wild Salmon Monitoring (IE)
- La Palma Protected Marine Area (ES)
- Hiking Trip Planner (IT)
- Soria Natural Reserve (ES)
- Sheep and Goat Herd Management (IT)
- Ecological activity at marine coastal benthic habitats (LV)
- Czech National Forest Programme (CZ)

Partners: Trags, ICTPSP, MAC, HESBS, Thegisat, TU, HANSA, NSRA, LUGB, R. Heine, R. Schmitt

Supporting Participants: HABITATS, Trags

Social Validation of INSPIRE Annex III Data Structures in EU Habitats

www.inspiredhabitats.eu

Final conference brochures:

Public Data & Social Empowerment for a sustainable growth

Objectives and Priorities

In response to the unprecedented current & long economical crisis, the European Commission has formulated its long term vision in the Europe 2020 strategy which emphasizes action around three main priorities: smart growth, developing an economy based on knowledge and innovation, sustainable growth, promoting a more resource efficient, greener and more competitive economy, and inclusive growth, fostering a high-employment economy delivering social and territorial cohesion.

Public sector in line with the Directive on the re-use of Public Sector Information can play a key role fostering a wider use of spatial data enabling the creation of value-added services as states Vikey Study, opening up Public Sector Information (PSI) Europe can achieve an economic growth of €140 billion/year for EU27 / and €140 billion/year of direct and indirect gains.

The guarantee of success or the reasons of failure are not in the winning principles of EU policies, on the contrary it is essential to pay attention on the way how all countries apply those policies and principles, PG & INSPIRE, Smart Cities and Smart Regions, Rural and Urban areas have more in common and higher impact with a common consideration rather than with separate approaches that jeopardize its effectiveness.

The barriers and difficulties are not technological but cultural. Social spaces, social validation & social empowerment are crucial for the success of any policy and ICT acceptance by society. It can guarantee sustainability and collaboration with public information systems and perfect interoperability with advanced environmental services. It can increase the interest and decrease the cost of adopting any EU policy like INSPIRE and PSI.

http://ec.europa.eu/information_society/policy/psire/index_en.htm

Public Data & Social Empowerment for a sustainable growth

Thursday 14th February, 2013

Instituto Geográfico Nacional
 General Ballester, 3, Madrid

ICTPSP
 HANSA
 HLanData
 habitats

Public Data & Social Empowerment for a sustainable growth

Objectives and Priorities

In response to the unprecedented current & long economical crisis, the European Commission has formulated its long term vision in the Europe 2020 strategy which emphasizes action around three main priorities: smart growth, developing an economy based on knowledge and innovation, sustainable growth, promoting a more resource efficient, greener and more competitive economy, and inclusive growth, fostering a high-employment economy delivering social and territorial cohesion.

Public sector in line with the Directive on the re-use of Public Sector Information can play a key role fostering a wider use of spatial data enabling the creation of value-added services as states Vikey Study, opening up Public Sector Information (PSI) Europe can achieve an economic growth of €140 billion/year for EU27 / and €140 billion/year of direct and indirect gains.

The guarantee of success or the reasons of failure are not in the winning principles of EU policies, on the contrary it is essential to pay attention on the way how all countries apply those policies and principles, PG & INSPIRE, Smart Cities and Smart Regions, Rural and Urban areas have more in common and higher impact with a common consideration rather than with separate approaches that jeopardize its effectiveness. An adequate usage of Geospatial Information to a better understanding of environmental aspects and how human actions stress our earth represents a crucial tool for future decision-making about efficient use of land.

Knowledge of real datasets structured information systems to offer valuable multi-geographic analyses for different users and a central coordination between public administrations in the management. The barriers and difficulties are not technological but cultural. Social spaces, social validation & social empowerment are crucial for the success of any policy and ICT acceptance by society. It can guarantee sustainability and collaboration with public information systems and perfect interoperability with advanced environmental services. It can increase the interest and decrease the cost of adopting any EU policy like INSPIRE and PSI.

HABITATS and HANDATA projects are the organizers of a common workshop entitled Public Data & Social Empowerment for a sustainable growth that aims to answer the following questions:

- What is the key variable that can be used with citizens and private sector?
- Current state of the data and new possibilities for public administration and private sector.
- Co-ordinating, co-publishing, co-exploitation, co-maintenance, co-innovation and more.
- How to engage voluntary citizens to contribute to public sector information?
- How to find and explore all synergies and interdependency benefits from different scenarios, different territories, and different stakeholders?

8:00 - 8:15 Welcome and Introduction
 Antonio Azcoena Vela, Territory Observation Executive Advisor, GRI
 Daniel Guzmán, Head of Information System at the Administration Department, Navarra Government of Navarra, HLanData Co-ordinator

8:15 - 8:45 Opening and Welcome
 María García, Deputy Director General, IGN, Chairperson
 HANDATA and other EU projects on data sharing and re-use
 Paul Ellis, Director, Commission, INSPIRE Core

8:45 - 10:30 Bottom-up data flow approach
 The INSPIRE approach, Tinet Group (ES/AT), EIT-GA-ERALE Action Group on Land Monitoring in Europe

10:30 - 11:00 An evaluation case for bottom-up production/Integration Experiences from HANDATA project
 Nuria Valcarlos and Allan Delgado, IGN
 Iñaki Tena and José María López, IGN
 INSPIRE Co-ordinator, Tinet Group and IGN
 Social Innovation in the Habitatats-INSPIRE pilots, Josep Maria Ferrer, IGN

11:00 - 11:30 Public-Private Information and Decision Support Tools
 New INSPIRE Co-ordinator, INSPIRE Co-ordinator
 Easy exploitation of cartographic data to support decision making, administrative, Tomas Couque, GEAT, Czech Republic
 The Role of the Public Sector in Supporting Innovation, Maria Ballester, IGN, Habitatats

11:30 - 12:15 Smart Regions and Smart Cities
 Inés Ballester, IGN
 Smart Regions and Smart Cities: The Role of Public Sector Information
 Smart Regions and Smart Cities: The Role of Public Sector Information
 Smart Regions and Smart Cities: The Role of Public Sector Information

12:30 - 13:00 Lunch Time

13:00 - 13:30 Lessons learnt on the use and reuse of harmonized and interoperable data sets
 Michał Łukaszewski, IGN, Chairperson, The National GeoInformation Applications Centre Ltd
 IGN, Chairperson, The National GeoInformation Applications Centre Ltd
 The role of the public sector in providing interoperable data sets, Ignasi Ribera, IGN, Chairperson, The National GeoInformation Applications Centre Ltd
 The role of the public sector in providing interoperable data sets, Ignasi Ribera, IGN, Chairperson, The National GeoInformation Applications Centre Ltd

13:30 - 14:00 INSPIRE and the role of the public sector in providing interoperable data sets, Ignasi Ribera, IGN, Chairperson, The National GeoInformation Applications Centre Ltd
 INSPIRE and the role of the public sector in providing interoperable data sets, Ignasi Ribera, IGN, Chairperson, The National GeoInformation Applications Centre Ltd

14:00 - 17:00 Roundtable Addressing INSPIRE 2000 goals through INSPIRE
 Paul Ellis, Commission, Chairperson, INSPIRE Co-ordinator
 HANDATA, Chairperson, HANDATA
 HLanData, Chairperson, HLanData
 IGN, Chairperson, IGN
 INSPIRE, Chairperson, INSPIRE
 IGN, Chairperson, IGN

17:00 Closure



Final book cover:



Some contact names:

| Full Name | Email address | WP Leader |
|---------------------------------|--|-----------|
| Ana Teresa Sáez García (NSI) | a.saez@nextstepint.eu | WP 2 |
| Anda Ikauniece (IMCS) | anda@monit.lu.lv | |
| Andrea Scianna (Madonie) | a.scianna@libero.it | |
| Connor O'Reilly (MAC) | c.oreilly@mac.ie | |
| Fabrizio Levantini (NSI) | f.levantini@nextstep.eu | |
| Ferdinando Trapani (Madonie) | ferdinando.trapani@unipa.it | |
| Fipil Hajek (FMI) | Hajek.Filip@uhul.cz | |
| Francisco Pérez Trejo (NSI) | francisco.pereztrejo@gmail.com | |
| Giovanni Vacante (Madonie) | vacante@parcodellemadonie.it | |
| Giuseppe Piro (Madonie) | piro@parcodellemadonie.it | |
| Gregorio Urquía Osorio (TRAGSA) | guo@tragsa.es | WP 5 |
| Jesús Estrada Villegas (TRAGSA) | jmev@tragsa.es | WP 1 |
| Jesse Marsh (Madonie) | jesse@atelier.it | |
| John J O'Flaherty (MAC) | j.oflaherty@mac.ie | WP 6 |
| Karel Charvat (HSRS) | kch@bnhelp.cz | WP 4 |
| Klaus Tochtermann (TUGraz) | ktochter@know-center.at | |
| Lisa Maurer (TUGraz) | lisa.maurer@tugraz.at | |
| Luisa Nazzini (ISPRA) | luisa.nazzini@isprambiente.it | |
| Marek Mlcousek (FMI) | Mlcousek.Marek@uhul.cz | |
| Mariano Navarro (TRAGSA) | mnc@tragsa.es | |
| Maris Alberts (IMCS) | alberts@acad.latnet.lv | WP 3 |
| Matteo Guccione (ISPRA) | matteo.guccione@apat.it | |
| Michela Gori (ISPRA) | michela.gori@isprambiente.it | |
| Peteris Bruns (IMCS) | Peteris.Bruns@gmail.com | |
| Ramón Baiget Llompart (TRAGSA) | rbl@tragsa.es | |



Project beneficiaries:

- Empresa de transformación Agraria, S.A.
- Next Step Srl
- The nacional Microelectronics applications centre LTD
- Help Service – Remote Sensing SRO
- Tecnologías y servicios agrarios, S.A.
- Technische Universitaet Graz
- Ente Parco Delle Madonie
- Istituto Superiore per la Protezione e la Ricerca Ambientale
- Ústav pro hospodářskou úpravu lesů Brandýs nad Labem
- Latvijas Universitates Matematikas un Informatikas Instituts

