

ENVIROFI

Future Internet for Future INSPIRE

- 👤 K. Schleidt
- 👤 B. Fogarty
- 👤 M. Kobernus
- 👤 D. Havlik
- 👤 S. Schade

Introduction to ENVIROFI

As part of the FI-PPP programme, ENVIROFI consolidates the Future Internet requirements from the Environmental Usage Area perspective and provides technical specifications and prototypes of interoperable geospatial Environmental Enablers. These shall be deployed in the terrestrial, atmospheric and marine environments in collaboration with large stakeholder communities with the perspective of achieving sustainable socio-economic progress in Europe.

Marine Assets

Synergies with the market and with policy needs are necessary to deliver significant value added to Europe from its vast marine resources. Enabling technology platforms are currently deployed across a range of existing marine related sectors including shipping, security and logistics, environmental monitoring and offshore energy. Next generation decision based management tools have to dissolve national borders. They shall address these developments in respect to distributed sensing, and wireless and cable communications.

Policy Context

The Europe 2020 strategy of the European Commission (EC), especially the Digital Agenda flagship initiative, foresees the action to “work with the Member States and stakeholders to implement cross-border eEnvironment services, notably advanced sensor networks”. The concept of the Future Internet is part of the efforts to deliver economic benefits from fast to ultrafast Internet and interoperable applications.

Atmospheric Conditions

Today, we have easy access to a great deal of information via television, radio and the World Wide Web, including pollution, pollen and meteorological data. All this data contributes to a common sense, but it is not tailored to the individual user’s needs.

Biodiversity

The UN and the EU have set a new target of halting the loss to biodiversity by the year 2020. In order to meet this goal we must merge observational data on biodiversity from all available sources while assuring high quality. Using outreach groups for data survey, we can greatly widen the base from which observational data may be gleaned. Scenarios on biodiversity occurrence illustrate the use of humans, supported by mobile devices such as smart phones as the main ‘sensor’ for data provision.



Future eEnvironment services shall aid users in tailoring information directly relevant to their individual requirements.

FI PPP Program

The EC provides 0.6 billion Euros funding for Future Internet-related research in the Future Internet Public Private Partnership (FI-PPP) FP7 Programme. The FI-PPP aims to (i) to support an Internet-enabled service economy, (ii) to improve key ICT infrastructures of Europe’s economy and society; (iii) to render the Internet more reliable and secure; and (iv) to allow real time information to be processed into real time services.

Expected Outcomes

INSPIRE itself is slated to evolve as technology develops; ENVIROFI will lead the way in showing how a future infrastructure for spatial information in Europe to support European Community environmental policies, and policies or activities which may have an impact on how the environment will develop.

Furthermore, the experiences in community consolidated specifications that have been acquired during the technical co-ordination of INSPIRE provide a valuable contribution for defining the governance within the FI-PPP programme and provide an excellent opportunity to promote INSPIRE beyond the initially intended scope and audience. Along this line, the applied research, which has been carried out since the INSPIRE Directive was put into force will lead to innovation in a wide spectrum of (Future Internet) applications.



FUTURE
INTERNET
PPP



The research leading to these results has received funding from the European Community's Seventh Framework Programme (FP7/2007-2013) under Grant Agreement Number 264988



European Commission
Information Society and Media