Expected Outcomes

ENVIROFI will lead the way in showing how a future internet ICT infrastructure which support geospatial information in Europe enables European Communities, such as environmental policy makers, scientists and social communities collectively monitor, manage and protect their environment.

ENVIROFI shall make information management standards, services and resources more accessible to the wider European communities in context of the Future Internet environmental usage area and beyond. It will also lay the foundations for a Pan European environmental observation web with the following archivements:

• identifying and implementing environmental enablers operating in a multi-style Service Oriented Architecture (SOA);

• implementing reusable knowledge management services for the marine, land and atmospheric usage domains and beyond;

• enabling the wide communities to access to environmental sensing from various sources with context and situation aware spatial information;

• providing on-demand integrated information to large, communities and industries operating in diverse market sectors, such as the environmental energy and the leisure sector.

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.

Partners

Atos

JRC EUROPEAN COMMISSION

Fraunhofer IOSB

AIT AUSTRIAN INSTITUTE OF TECHNOLOGY

iT innovation

SINTEF

NILU

UBIMET

umweltbundesamt
ENVIRONMENT AGENCY AUSTRIA

intune networks

EURESCOM

Aalto University School of Science and Technology

Marine Institute
Foras na Mara

FI-PPP

The EC provides 600 million Euros funding for Future Internet-related research in the Future Internet Public Private Partnership (FI-PPP) FP7 Programme. The FI-PPP aims to:

• to support an Internet-enabled service economy

• to improve key ICT infrastructures of Europe's economy and society

• to render the Internet more reliable and secure

• to allow real time information to be processed into real time services.

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ENVIROFI
"ENVIROFying" the Future Internet

http://www.envirofi.eu
www.twitter.com/ENVIROFI

FUTURE INTERNET PPP

SEVENTH FRAMEWORK PROGRAMME

European Commission
Information Society and Media

About ENVIROFI

ENVIROFI is a co-funded research project within the Future Internet Public Private Partnership (FI-PPP) programme of the EU's Seventh Framework Programme (FP7). The project is dedicated to the environmental usage area of the Future Internet. It will explore environmental enablers (applications for collecting and processing environmental data) and provide environmental sector requirements to FI-WARE, the FI-PPP core platform project. Thus, ENVIROFI will lay the foundation for an environmental observation web, which will help Europe tackle the grand societal challenges of climate change, environmental degradation, and sustainable growth.

ENVIROFI specifically works on three environmental application areas: personalised atmospheric data, marine assets, and biodiversity.

ENVIROFI

At a glance

The Environmental Observation Web and its Service Applications within the Future Internet

EU Funding Scheme: Collaborative Project Large-scale Integrating Project (IP)

- Start date: 1st April 2011
- Duration: 24 months

Personalised atmospheric data

Today, plenty of general information on the atmospheric conditions is available via television, radio and the Internet, including pollution, pollen and meteorological data. Although this data certainly helps to better understand our environment and act accordingly, it seldom answers the individual user's needs. ENVIROFI's work on environmental enablers will lay the foundation for future e-environment services, which will help users get personalised information which is directly relevant to their individual lives.

Monitoring and protecting marine assets

The protection and management of marine resources is a central environmental task for the EU. Enabling technology platforms are currently deployed in Europe on national level across a range of marine related sectors including shipping, security and logistics, environmental monitoring as well as offshore energy. Next generation monitoring and decision-based management tools for environmental assets need to function EU-wide across national borders. They shall address these developments in respect to distributed sensing, and wireless and cable communications. ENVIROFI's research on a platform prototype will lay the basis for realising this goal.

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.