



# Citizens' Observatories

## Five approaches to empower European citizens

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*\*The views expressed are those of the speaker and do not necessarily reflect the official opinion of the European Commission*

# Background

- **There is an established tradition in environmental science of engaging volunteers to collect environmental monitoring data.**
- **With the new technologies has given rise to a new wave of citizen science projects and initiatives ("citizen cyberscience").**
- **Opportunities presented by the internet, smartphones, on-line gaming and other emerging technologies offer new ways to influence:**
  - **Environmental policy making**
  - **Environmental issues awareness raising**
- **A number of challenges to be addressed (i.e. quality of data, data security, involvement of a broad spectrum of society, etc.) (\*)**

# What are the Citizens' Observatories?

## - Definition:

### - Communities of citizens sharing:

- 1) Technological solutions (e.g. sensors, mobile apps)
- 2) Community participatory governance methods aided by social media streams

### - With the objective of:

- 1) Complementing environmental observation systems
- 2) Improving local decision-making

## - Rationale:

- The environment governance is in the hands of all citizens ("participatory democracy").
- Citizens should make informed decisions ("empower citizens").
- A need of engaging a broader spectrum of society ("awareness raising").

# What are the Citizens' Observatories?

## - Win-win situation because:

- 1) Empower communities.
- 2) Enhance our in-situ monitoring capability while limiting the charge on the public purse!

**BUT**

**-Official Baseline in-situ observation networks are vital (e.g. calibration and validation)**



# Support for Citizens' Observatories in FP7-Environment Theme

**FP7 Topic ENV.2012.6.5-1: "Developing community-based environmental monitoring and information systems using innovative and novel earth observation applications".**

## **Objective:**

- To develop "citizens' observatories" using innovative earth observation technologies (mobile telephony).**
- They should cover all the information chain (i.e. monitoring, data collection, interpretation and information delivery).**



# Support for Citizens' Observatories in FP7-Environment Theme

Five projects were funded, starting in late 2012:

1. **CITI-SENSE** "Development of Sensor-based Citizens' Observatory Community for Improving Quality of Life in Cities", <http://citi-sense.nilu.no/>
2. **WeSenseIt**: "Citizen Observatory of Water" <http://www.wesenseit.eu/>
3. **COBWEB**: "Citizen (Biosphere) Observatory Web" <http://cobwebproject.eu/>
4. **Citclops**: "Citizens' Observatory for Coast and Ocean Optical Monitoring" <http://www.citclops.eu/>
5. **OMNISCIENTIS**: "Odour Monitoring and Information System based on Citizen and Technology Innovative Sensors", <http://www.omniscientis.eu/>

**TOMORROW FINAL CONFERENCE HERE IN BRUSSELS!!!**

# The CITI-SENSE approach

## - Development of a methodology and protocols for citizen empowerment and decision making:

- Tailored for each pilot area
- Engaging citizens organisations and public authorities
- Inclusive and flexible decision making procedures

## - Implementation of methodologies and protocols together with local teams:

- Negotiating topics together
- Providing info about effectiveness of each approach
- Supporting the representativeness of citizens' participation
- Coordinated analysis across Empowerment Initiatives

# The WeSenseIt approach

- **Shift to a two-way communication channel.**
- **Implementation of an e-collaboration environment:**
  - **Gathering volunteer and official information, crowdsourcing via custom apps and social networks**
  - **Providing services for citizens and authorities**
  - **Opportunities for feedback, support for direct interaction**
- **New sensors for non-experts and for amateur scientists providing reliable information while keeping production costs low.**
- **Continuous feedback received will have an awareness raising effect of the local environments issues.**



# Collaboration between Citizens' Observatories

- **All the five projects are working in partnership to maximise benefits.**
- **They are cooperating in an open e-collaboration framework within GEOSS framework.**
- **Coordination through participating in EC-organised meetings and GEO workshops:**
  - **Citizens' Observatories Coordination Workshop (Jan 2013)**
  - **Citizens' Observatories Projects Coordination Meeting (Oct 2013)**
  - **Citizens Observatories Side event at GEO-X (Jan 2014)**
  - **Citizens' Observatories: Empowering European Society Event on 4<sup>th</sup> December 2014**





## Conclusions of First Citizens Observatories Workshop

- **Feedback to citizens is essential to keep them engaged**
- **A balance should be found between authorities' fears and citizens expectations.**
- **Citizen involvement in co-design will foster citizen contribution to local environmental governance.**
- **There is no "one size fits all" solution: cultural and social issues have to be taken into account.**
- **There is room for commonalities in the methodologies applied.**

## Support for Citizens' Observatories in H2020

- **Topic in SC5 Work Programme 2014-2015:  
SC5-17-2015: Demonstrating the concept of 'Citizens' Observatories'**
- **It calls for further development and testing in real conditions, wider deployment and commercialisation by the private sector and greater user acceptance.**
- **Focus on the domain of land cover/land use management (rural and urban areas), complementing existing systems (Copernicus) and national surveys.**
- **Strong involvement of citizens and citizens' associations and SMEs.**
- **One or more Innovation Actions (suggested size: 3-5M€, total budget ~20M€)**
- **Call open on 10<sup>th</sup> December, call deadline (1<sup>st</sup> stage) on 21<sup>st</sup> April 2015!**



**YOU ARE WELCOME TO OUR EVENT:**

# **Citizens' Observatories: Empowering European Society**

**Find more information and register on:  
<http://ec.europa.eu/eusurvey/runner/CitObsEES2014>**

**Date:** 4th December 2014

**Venue:** Management Centre Europe,  
118 Rue de l'Aqueduc / Waterleidingsstraat,  
1050 Ixelles / Elsene, Belgium.



# Thank you!

**Find out more:**

[http://ec.europa.eu/research/environment/index\\_en.cfm](http://ec.europa.eu/research/environment/index_en.cfm)