Collective Awareness Platforms for Sustainability and Social Innovation

Drawing made by primary class children for the Paradiso contest "the Internet of the future seen by the children of today"

Fabrizio Sestini @ ec.europa.eu
http://ec.europa.eu/information_society/activities/collectiveawareness

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Future Internet scenarios

distributed

people/society

Individuals/business

Collective Awareness:
(user-gen. knowledge)
P2P, blogs
social nets
e-democracy

Big Brother:
commercial services
entertainment (e.g. IPTV)
DRM-heavy
apolitical

centrally controlled

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2

Technological and Policy choices have Social and Economic impacts

	Collective Awareness	Big Brother
Internet infrastructure	**Current architecture** **ad hoc/mesh, user driven**	**Vertically integrated** **specialized nets**
Technological developments	**Interoperability** **Distributed control** **Generalized wiki**	**NGN or "clean slate" for streaming** **Walled gardens**
Security and Privacy	**Privacy / identity more than security** **Online Reputation**	**Strong Security, proprietary**
Policy	**Light / no IPR protection** **Transparency**	**Strong IPR protection**
Standards	**Open or Open source standards** **Multi-cultural support**	**Competing closed standards may prevail** **National customisation**
Network Neutrality	**Key, to enforce**	**Just a burden**

Findings from the MIT workshop

Platforms for Collective Awareness and Action

- platforms for social innovation, supporting informed and sustainability-aware decisions, based on an extended awareness of the environment and of the consequences of our actions

- Harnessing concepts from:

  – IoT - collecting data from environment

  – Social networks - interaction

  – Wikis – coproduction of new knowledge

Approach

- Sustainability
  - Beyond GDP, Low Carbon economy
- Self-regulation
  - Based on collective situational awareness
- Bottom-up
  - And coordinated
- Non commercially-driven platforms
  - That can produce new business models and (social) innovation

Applications:

- Informing consumer decisions
  - Product ranking/labelling/development
- Prompting behavioural changes
  - Life Footprint, more efficiency
- Virtual communities for change
  - Stimulating Social Innovation
- Access to simulations/statistics
  - Visual Analytics style
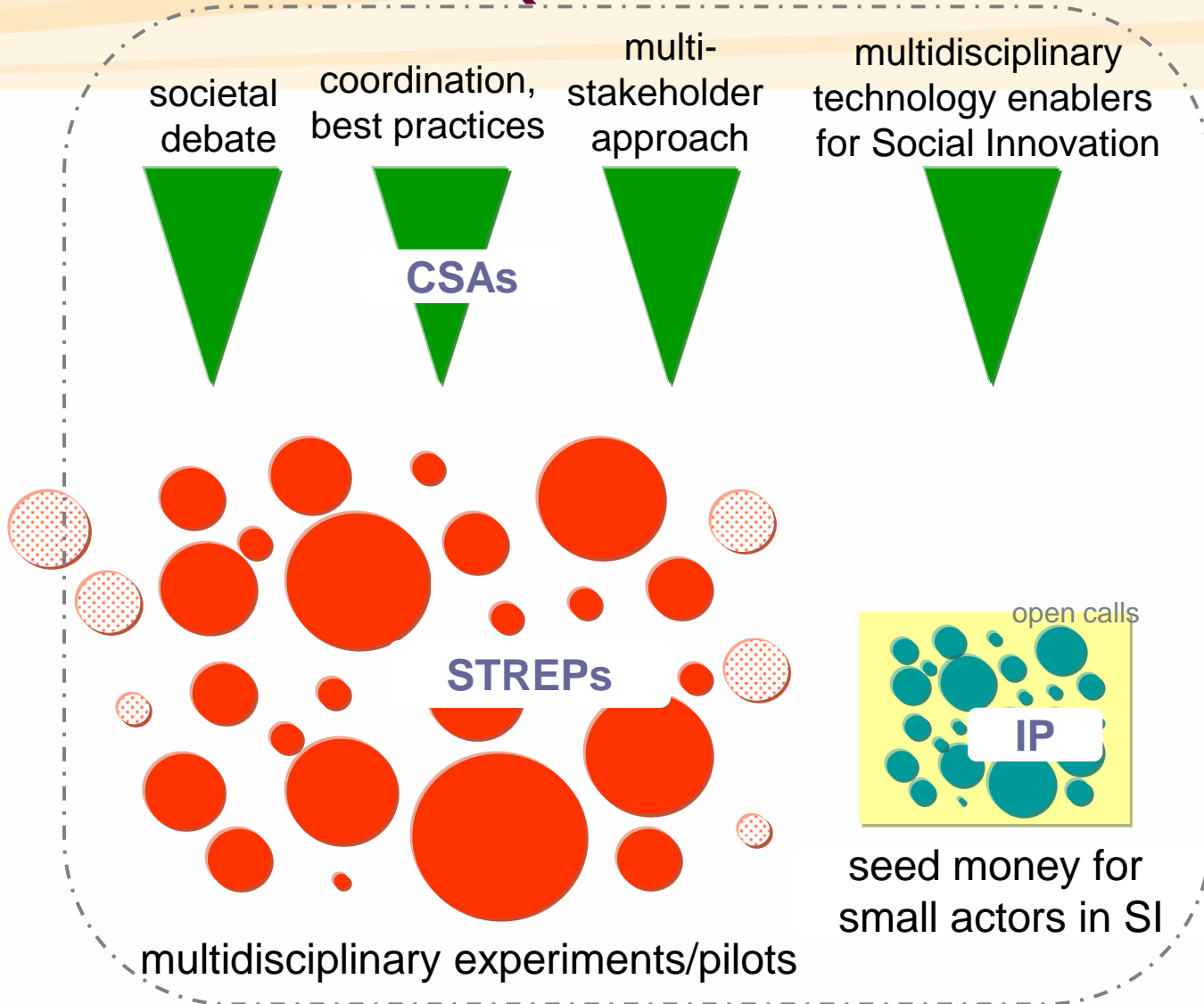- Anticipating societal changes

a framework to develop
Collective Awareness Platforms for
Sustainability and Social Innovation

- **Developing multidisciplinary experiences/pilots** of grassroots digital social innovation platforms (STREPs)
  - to trigger novel forms of societal organisation, based on sharing and collective action
  - Linked with regulatory and policy activities
  - Engaging existing (local or global) communities of citizens
  - Using free software, open hardware, open data
- **Providing Seed Money** for bottom-up digital social innovation (cascade IP)
  - based on crowdsourcing principles
  - empowering web innovators, research teams, communities and entrepreneurs
- **Raising the European knowledge on value creation and governance mechanisms of Future Internet Ecosystems fostering Social Innovation**
  - Distributed cooperative tools and non technology elements such as:
    - New business models, incentives for online collaboration
    - Innovative trust mechanisms, based on reputation
    - new forms of "self-regulation"
- **Engaging citizens and society at large** to distil best practices and link with policy/regulatory aspects (multistakeholder approach) - CAs
  - Supporting the emergence of new forms of self-regulation
  - Discussing ethical aspects, quality guarantees
  - Creating critical mass

CAPS – Collective Awareness Platforms for Social Innovation and Sustainability in ICT WP 2013 (launch: summer 2012)

societal debate

coordination, best practices

multi-stakeholder approach

multidisciplinary technology enablers for Social Innovation

CSAs

STREPs

multidisciplinary experiments/pilots

open calls

IP

seed money for small actors in SI

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how to achieve multidisciplinarity?

- Integrating life and human sciences needs **incentives**, e.g.:
require participants from at least 3 of these areas:
  - computing, communications, software, identification
  - complex systems, game theory, physics
  - knowledge management, semantics, philosophy
  - environment, energy, transport, mobility
  - sociology, anthropology, ethnology
  - security, trust, privacy, law, economics
  - psychology, perception, multimedia user interfaces
  - art, cultural expression, content creation, architecture, history

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Multidisciplinary approaches: funding opportunities in WP2013

- **Collective Awareness Platforms** (obj. 5.5)

- **Internet Science** STREPs (obj. 1.6)

  – multidisciplinary investigation of key techno-social issues, exploiting any relevant FIRE facilities, considering also benefits for citizens, ethical and sustainability aspects.

  – Examples: network neutrality, privacy by design, identity management, security trade-offs, techniques to ensure free flow of information (e.g. circumventing censorship), cloudification, crowd-sourcing, reputation mechanisms, data ownership, data retrieval and openness, citizen involvement in content generation , new collective economic models for rewarding creators and talents, performance and quality of experience as perceived by final users and behavioural and societal changes.

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Thank you for your attention

Fabrizio Sestini

fabrizio.sestini@ec.europa.eu

DG CONNECT E3 Unit – Net Innovation

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expected impact

- Bottom-up emergence and take-up of more sustainable **organisational changes**
  - harnessing the "network effect" and the resulting collective awareness
- To **strengthen civil society** by improving social and sustainability aspects of all kinds:
  - Economic perspectives
  - Working conditions
  - Inclusion
  - Education
  - Community development
  - Health
  - Environment, energy, civil protection
  - Quality of life at large