



# Future Internet Assembly Meeting Madrid, Spain, December 9 - 10, 2008

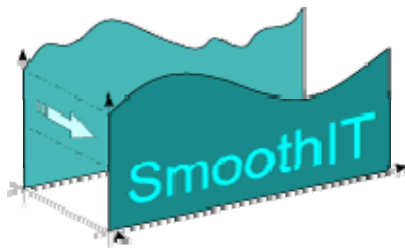


## Socio-Economics Panel

**Moderators:** David Hausheer (UniZH, SmoothIT), Pekka Nikander (HIIT & Ericsson, PSIRP), Vincenzo Fogliati (Telespazio, ISI)

**Panelists:**

**Pekka Nikander, Helsinki Institute for Information Technology and Ericsson, PSIRP**  
**Costas Courcoubetis, AUEB, SmoothIT**  
**Malte Behrmann, GAME, 4NEM**  
**Vincenzo Fogliati, Telespazio, ISI**  
**Klaus Wünnstel, Alcatel-Lucent, 4WARD**  
**Mike Boniface, IT Innovation, IRMOS**

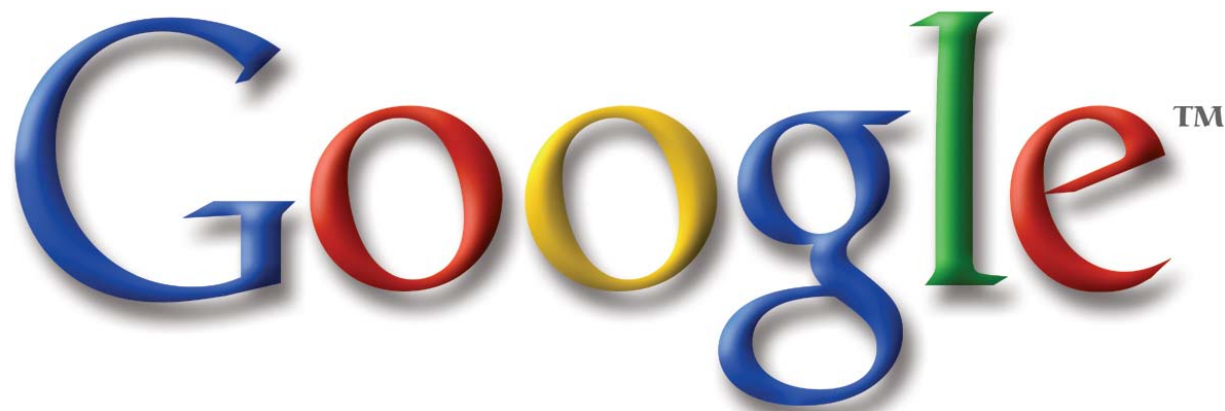


Pekka Nikander, Helsinki Institute for  
Information Technology and Ericsson,  
PSIRP

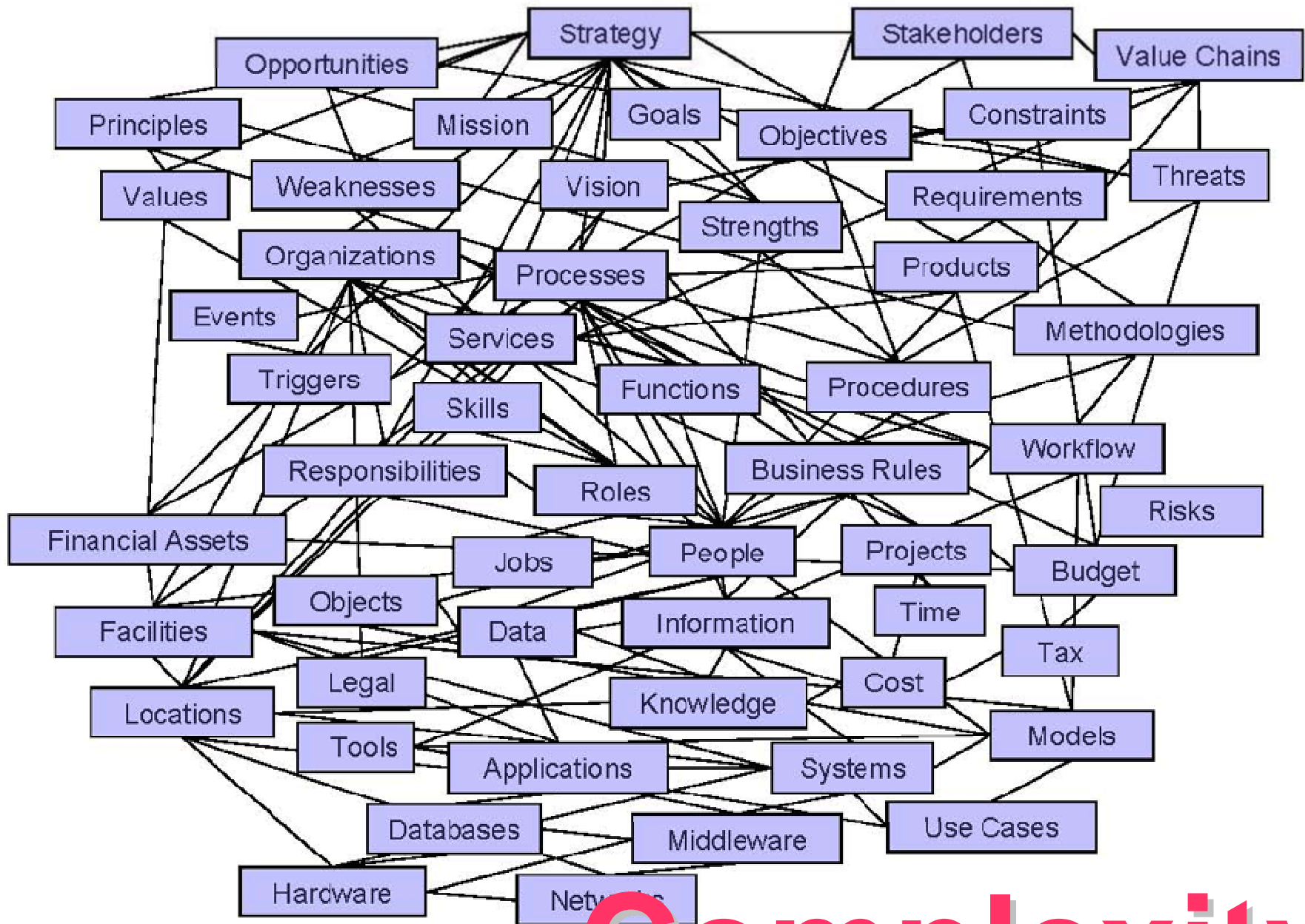


# System Dynamics

“future internet” “socio-economics” “system dynamics”

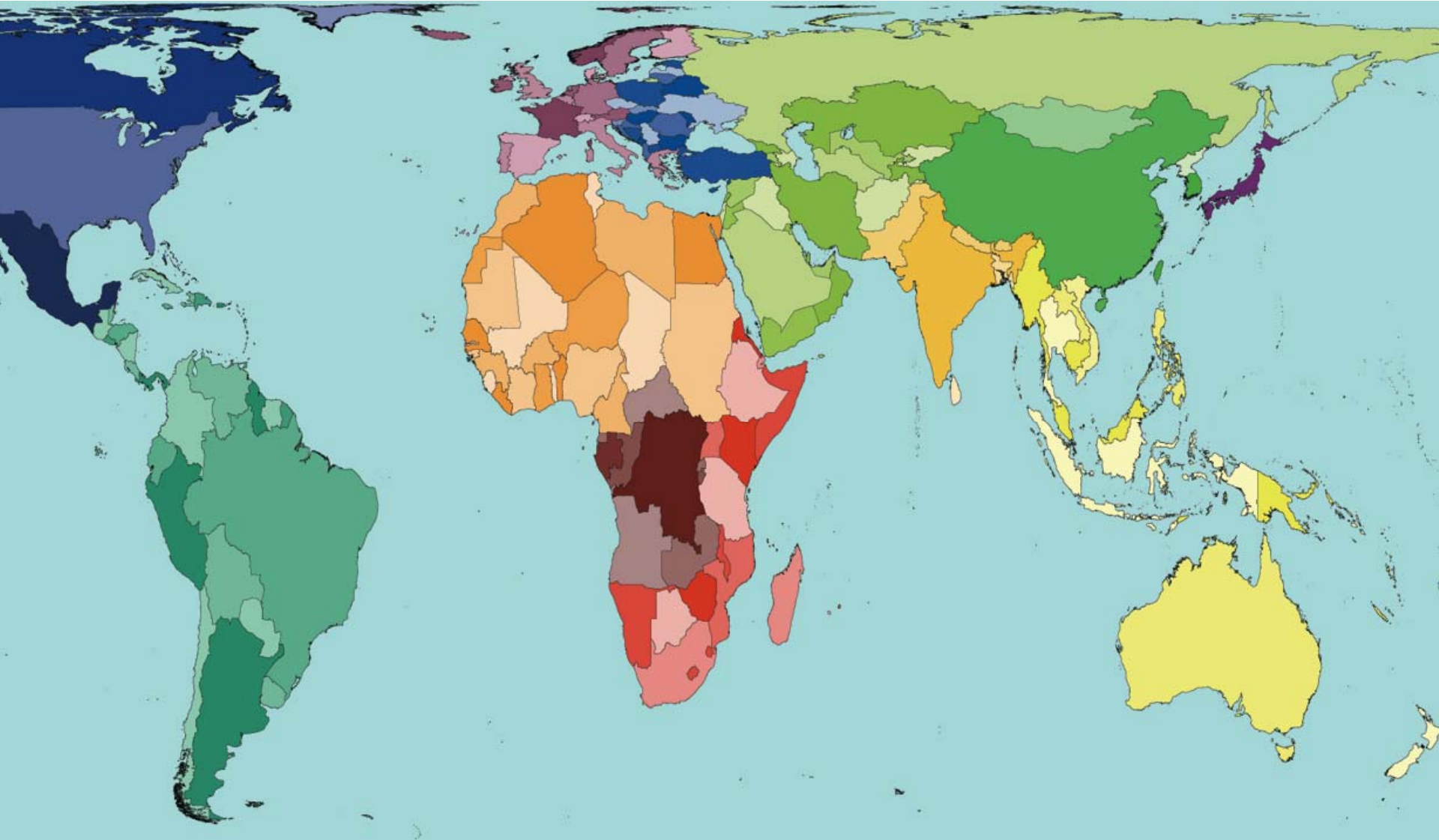
The Google logo is displayed in its characteristic multi-colored font (blue, red, yellow, blue, green, red) with a trademark symbol (TM) to the right. The letters have a slight 3D effect with shadows.

→ 18 hits

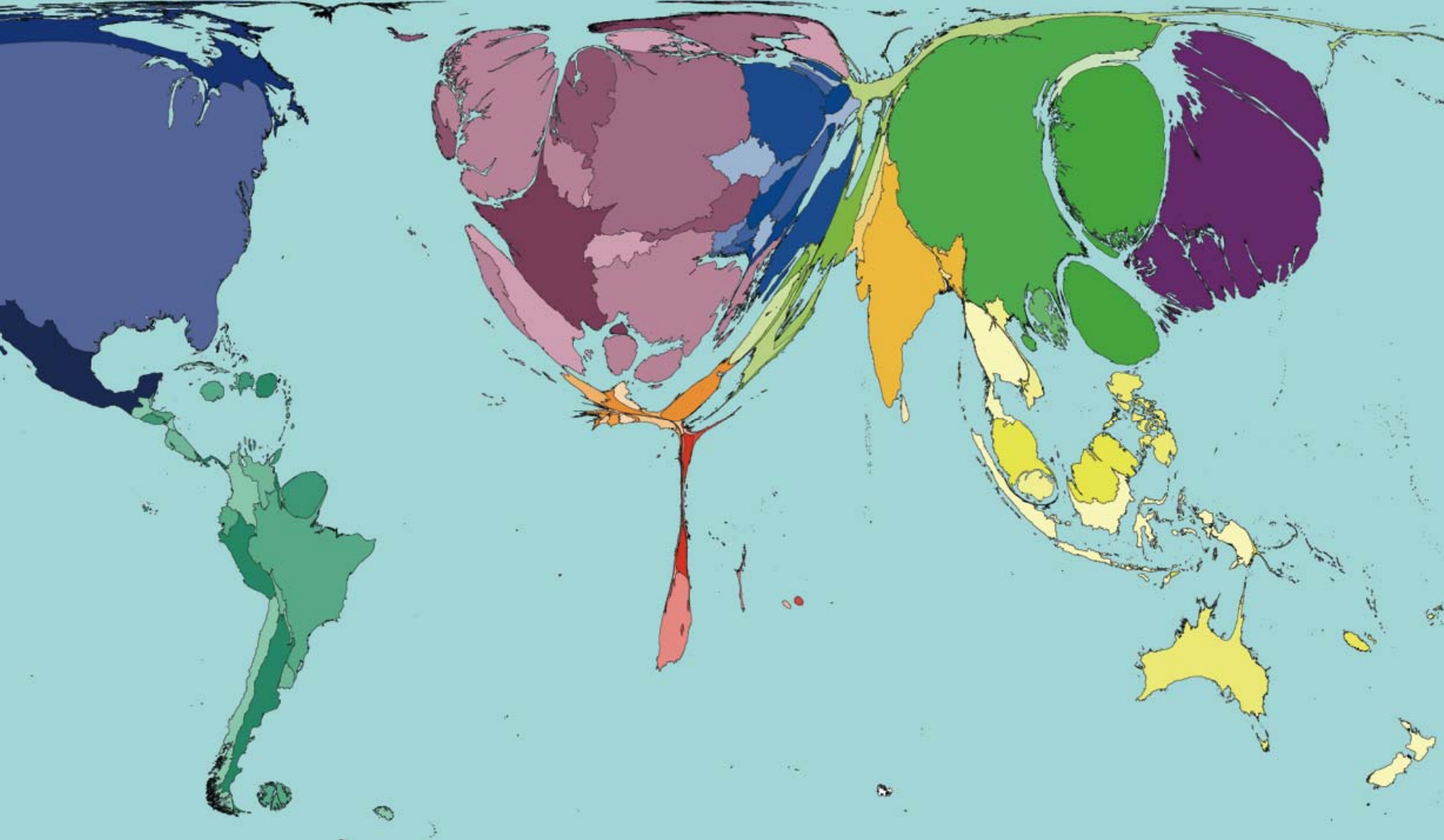


# Complexity

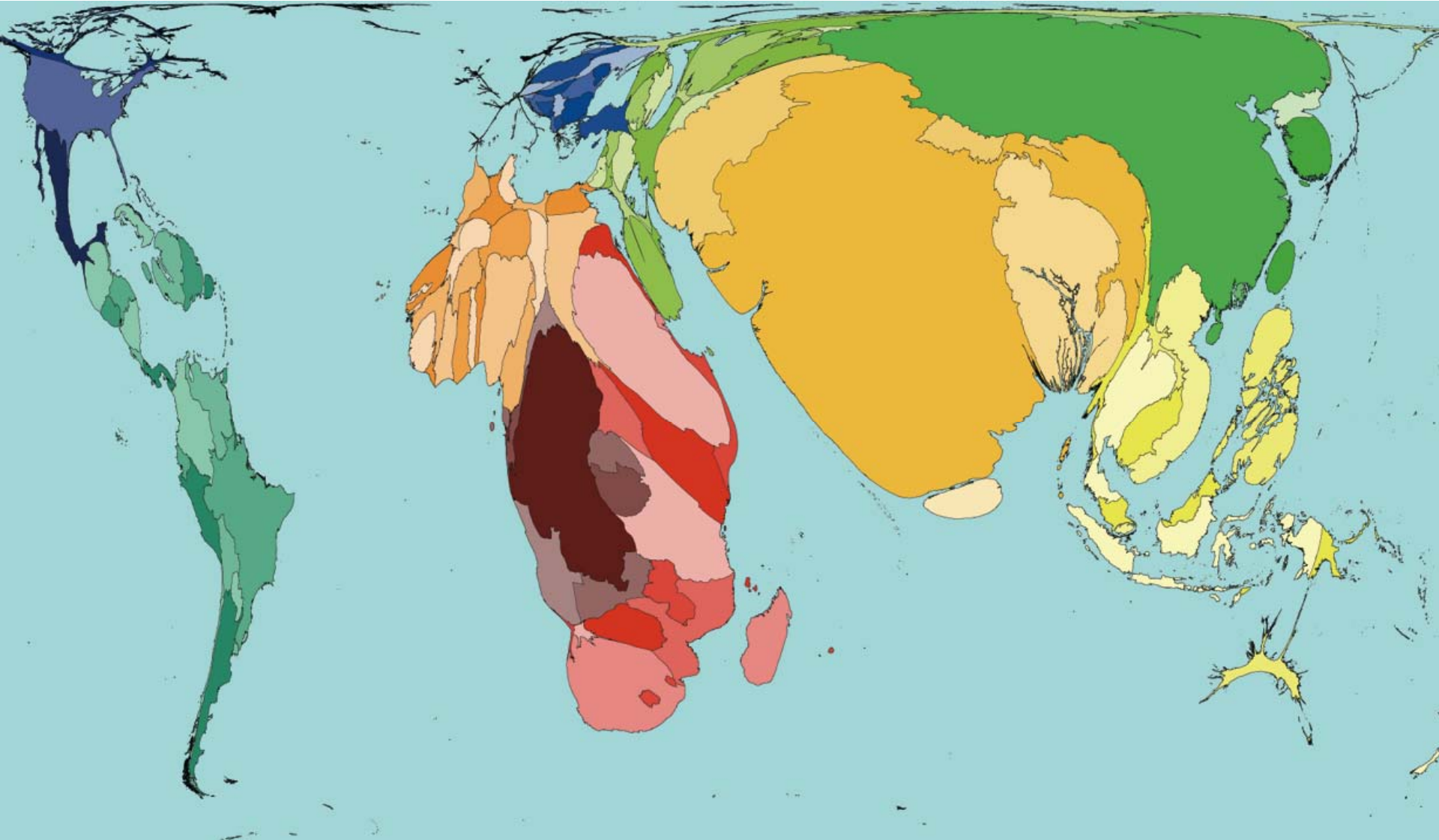
# A non-example



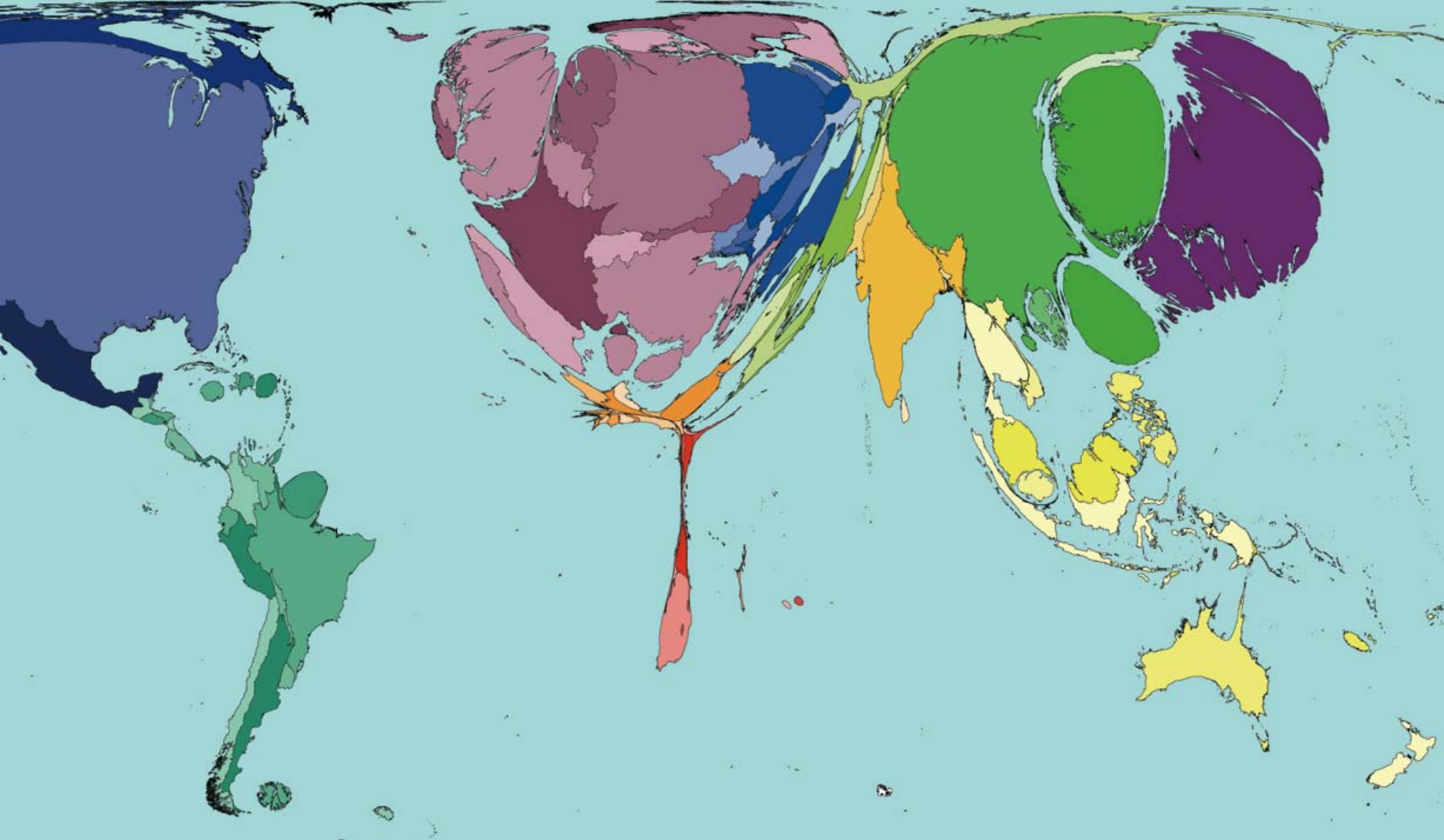
# Internet & Hunger



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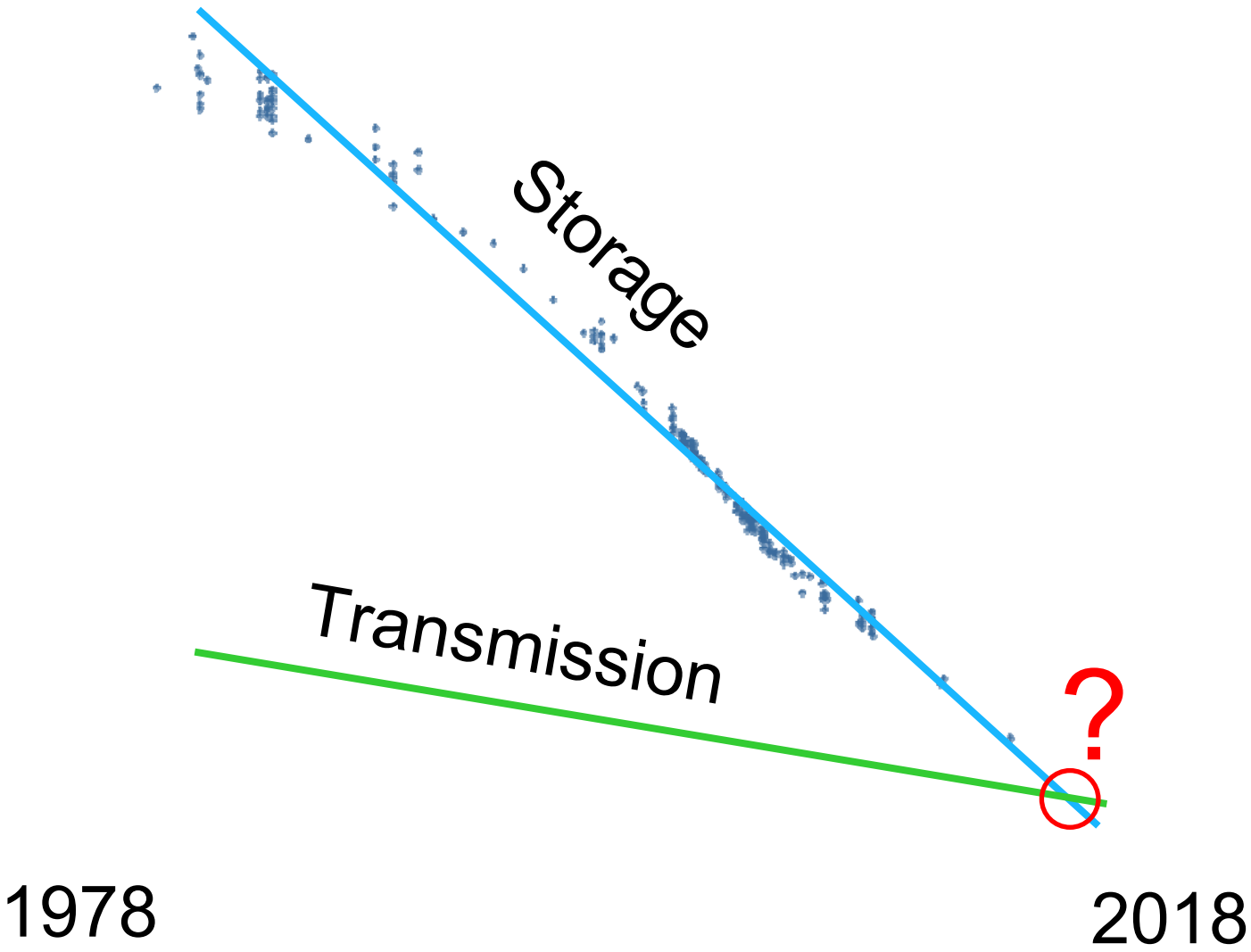




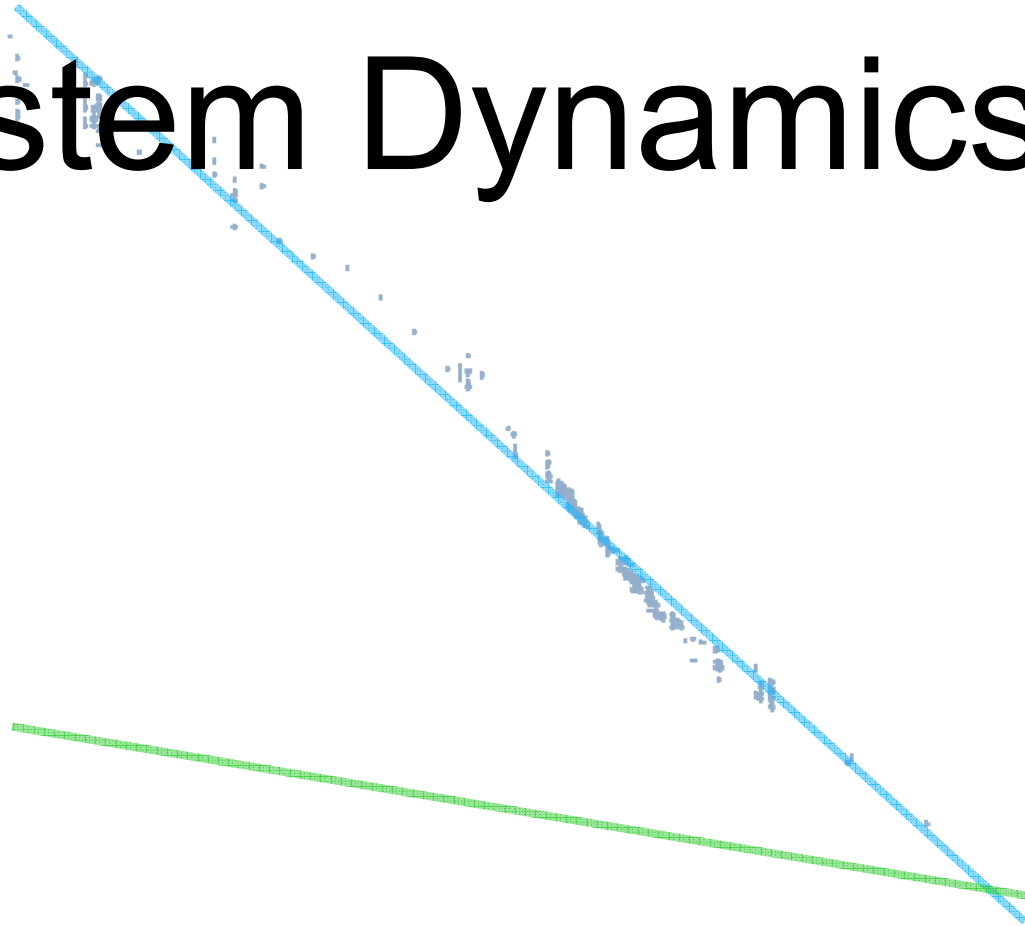
Internet → no  
hunger?

Internet → no  
hunger?

Not so simple

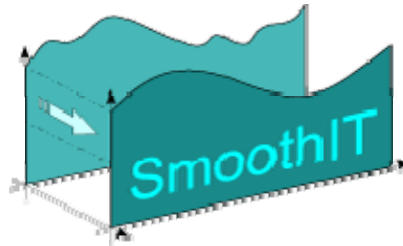


# Real Data & System Dynamics



Google<sup>™</sup>  
→ 18 hits

Costas Courcoubetis, AUEB, SmoothIT



**Malte Behrmann, GAME, 4NEM**

# Content - technology

- « invisible interface » :
  - New combination of knowledge and sources
  - Medium as content (message) and technology
  - Innovation is not necessarily only engineering
  - Now interplay between technology and content creation creates new forms of innovation
  - Creation of content is technology - related
- Standardisation
  - Long technology life cycles are improbable
  - Empowered end user decides
  - Cross section topics: Technology, Economy, Design, environment, ethics, art & culture
  - => Content => standardisation => technology
  - Examples of emerging standards
    - Now decision: Blue Ray ! A decision of content
    - Internet - IP : Now everywhere TV, Telephony
    - Content makes standard strong and open

# Who drives? Content or Technology

- Content is driven and drives equally: Interdependence !
  - Analogue world: Content follows the technology
  - Digital world: Technology follows the content
- Content creation in the converged audiovisual arena:
  - Artificial Reality: Games, animation, postproduction, special effects
  - Live action: Capturing of reality, delivery of images, digitalisation of photography
- Content drives Technology
  - „empty pipe syndrome“
  - Telecommunication services and content sellers use the same technical basis
  - Early adapters define content and shape thereby also the technology
- Example Music industry: Effect of digitalization on content
  - Democratization of tools for production
  - transaction costs sink
  - Pipes die, content survives
  - The long tail

# What do we need ?

- Encourage and develop innovative interactive media content
- Explore synergies between different delivery platforms and non-linear and linear content
- Creative authoring for personal and professional use
- Encourage and stimulate European know how in cameras, recorders, production equipment, and displays. ('vanished sciences' for Europe).
- Production of virtual content (linear and interactive) in form of middleware, production tools for mobile and fixed environments.
- Bridge the gap between the live action and the virtual worlds in camera devices, distribution models etc.
- Lines aimed at encouraging and stimulating media portal and search engine development for broadcasting, mobiles, and broadband.



# The Integral Satcom Initiative



## *Social Needs vs Future Internet*

*The Mankind Universal Internet*  
*The Emergency Internet*

*Vincenzo Fogliati*  
*FIA - Socioeconomics Session*  
*Madrid, December 9°, 2008*



## **Social needs as important drivers for Future Internet**

**The Future Internet shall put more emphasis to social needs comparing to the current situation,**  
*where the services the Internet offers are mainly driven by private sector priorities and a great deal of attention has been paid to better security in support of e-commerce, but much less to social needs.*

**Important example of collective social needs are communication services universally available, anywhere/anytime, also during emergencies**



*Future Internet to be available anywhere & anytime, to enhance civilization and ease daily life.*

- Broadband access to telecommunication networks must be guaranteed “anywhere-anytime” to universally exploit the Future Internet, which is becoming a fundamental service that communities use and rely upon.
- As such, Future Internet shall be able – among others – to support daily life in developed Countries (increasing welfare and wide availability of services) such as within developing Countries (providing a broad range of social services, including telemedicine and educational programmes).
- TLC infrastructures must be conceived to guarantee access to the Future Internet also where currently it is poor: in this view satellite communications are important.



## *Future Internet to be available under any condition, also during emergencies and for security applications*

- The Future Internet should be designed in such a way that access to network capacity and services is available also during crisis situations.
- As such, Future Internet shall be able – among others – to support emergency and security management in a trustworthy way and to assist society to restore normal situations following emergencies, crises or natural disasters. In the case of disasters, emergencies or crises, universally available Future Internet could be a real “salvation anchor” for populations.
- The use of satellite communications, in combination with other communication networks, can provide applications requiring data and audiovisual content for disaster recovery and monitoring. Moreover, satellite links can replace disrupted terrestrial backbones, restoring TLC services for rescue communications.



# Future Internet Assembly Panel Session on Socio-Economics

## Business & Regulation Challenges and Value Chains for Future Internet

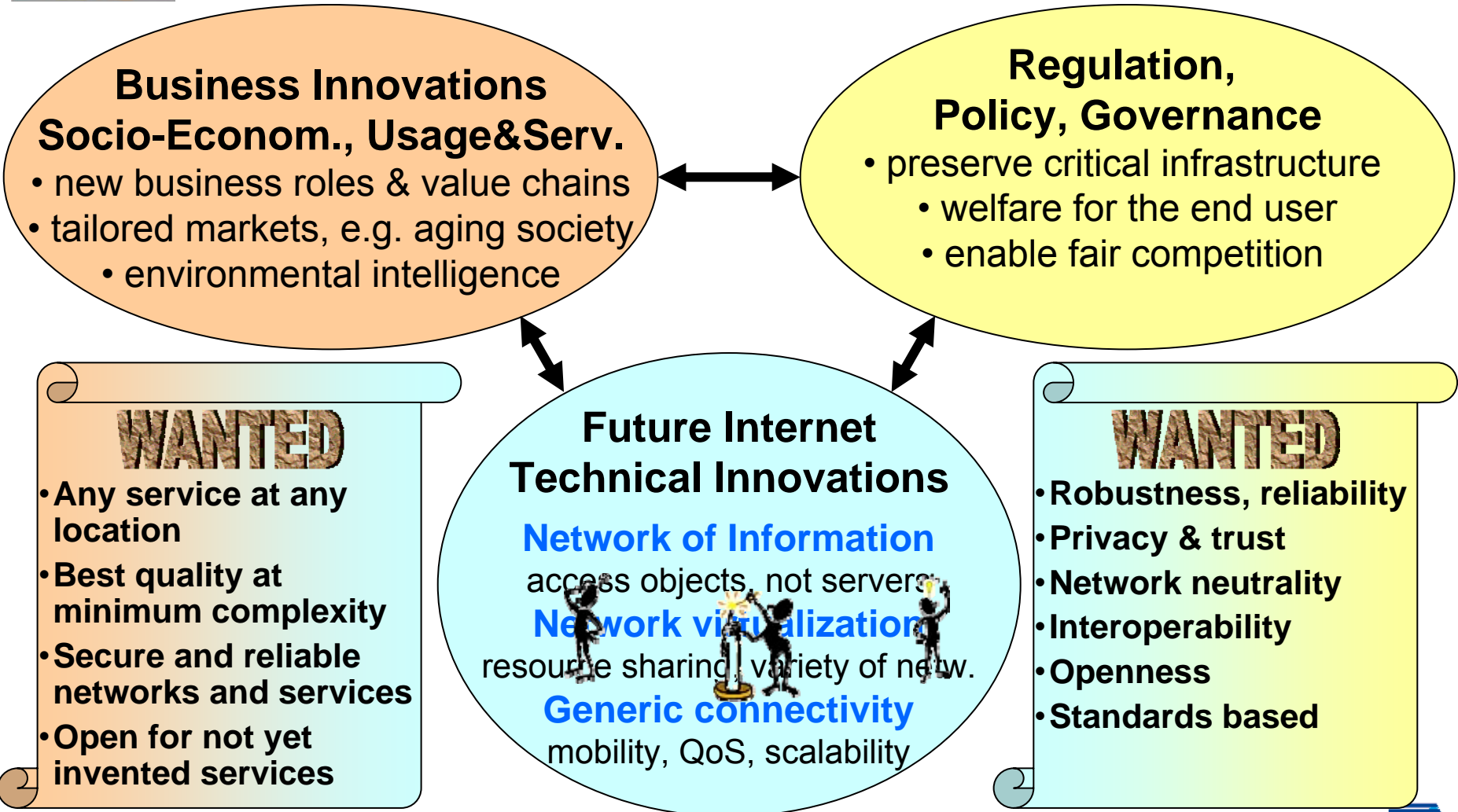
Madrid, 09 December 2008

Klaus Wuenstel, Alcatel-Lucent Bell Labs

FP7 Project 4WARD



# Business & Regulation Challenges and Value Chains for Future Internet



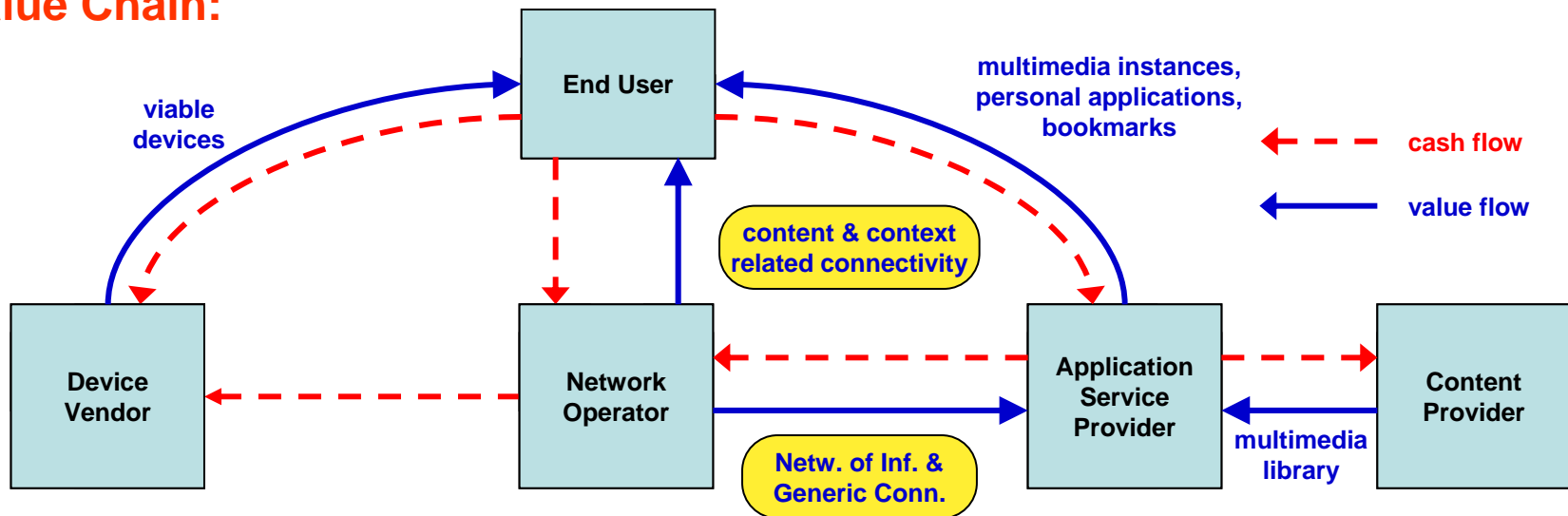


# Business & Regulation Challenges and Value Chains for Future Internet

## Business Use Case 'New Ways of Information Delivery'

(distribution of multimedia content, example taken from 4WARD)

### Value Chain:



### Major Messages:

- New networking functions will significantly impact Future Internet business
- New roles will appear, players will cover e.g. different/more roles than today
- Need to cover non-technical challenges (e.g. privacy, trust), still keeping creativity

Mike Boniface, IT Innovation, IRMOS



