

# ***Objective ICT-2009.1.5: Networked Media and 3D Internet***

***Andrzej J. Galik***

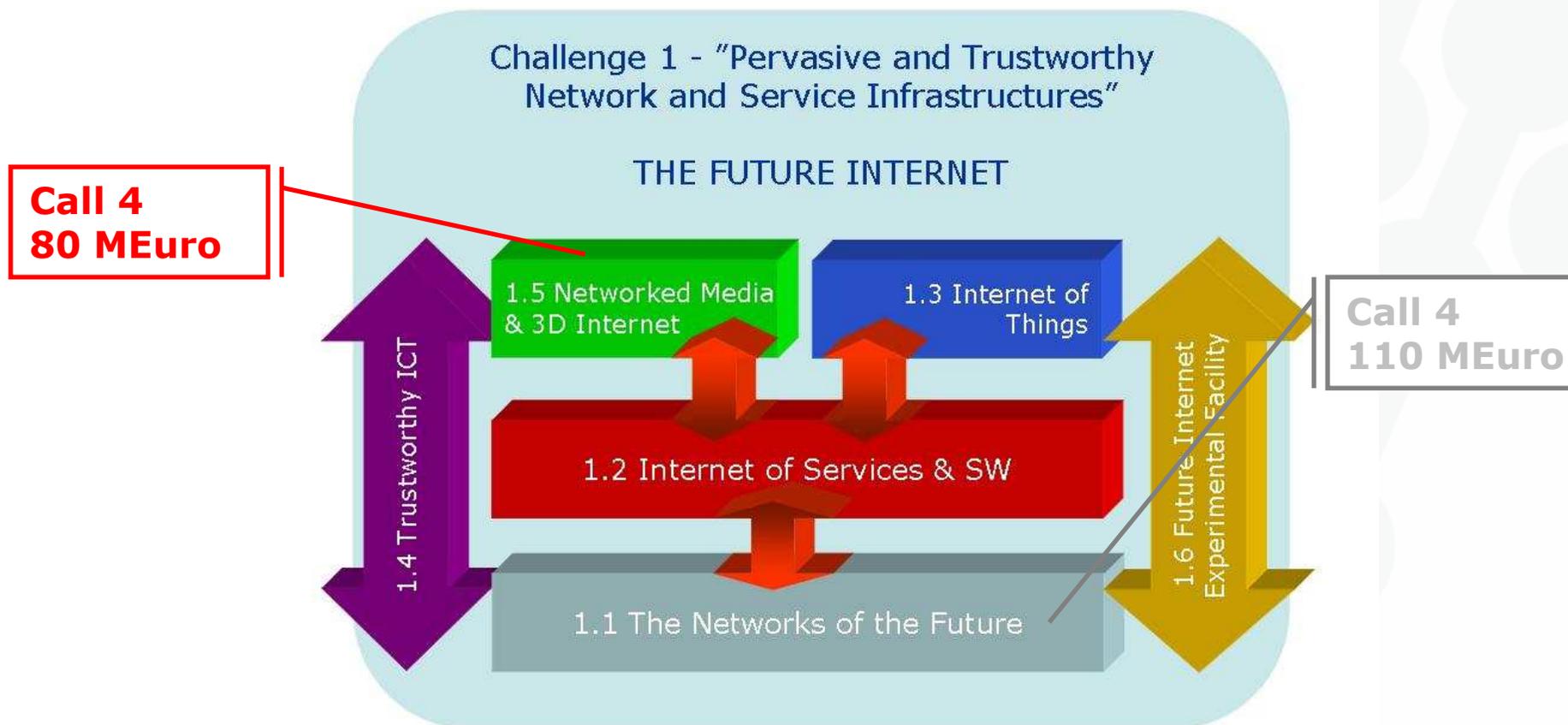
**National Contact Point  
for Research Programmes of EU  
Institute of Fundamental Technological Research  
Polish Academy of Sciences**



# Networked Media and 3D Internet

ICT-2009.1.5, Challenge 1 in FP7 Call 4

## Call 4 Focus:



'Future Internet' as a federating research theme across the six objectives in Challenge 1



## Objectives (1/6):

- ✓ a) **Content-aware networks and network-aware applications:**
  - Architectures and technologies for converged and scalable **networking** and **delivery** of multimedia **content and services** (content adaptation, user context, social networks). Services may include: home management, applications, location and mobility scenarios. Enabling multiple user roles (content producer, consumer, manager of content),
  - Maintaining integrity and quality of media to **optimise QoE** in collaborative **media creation and delivery** scenarios (sharing, storage, retrieval, fusion capabilities). **Open architectures**, especially for real-time and immersive **collaborative environments**. Enhancements of SVC, 3D & multi-view coding, leading to optimised network awareness and device delivery,



## Objectives (2/6):

### ✓ b) 3D Media Internet:

- Architectures and technologies for Future Media Internet and 3D processing enabling mass distribution, caching, filtering, aggregation and networking of 3D content and enhanced user QoE. Optimisation of real time rendering of complex scenes from personalised user perspectives and minimisation of latency due to network and processing platforms,
- Technologies for 3D content representation in multiple virtual worlds, with user controlled management of ownership, identity and rights associated to presence,
- Architectures and technologies ensuring that 3D augmented worlds are tightly coupled to the physical world (for commercial and social applications).



## Objectives (3/6):

### ✓ c) Networked search and retrieval:

- Networked technologies and architectures for optimised networked search, adaptation and access to large-scale distributed multimedia content from diverse sources and scenarios, including physical world information,
  - Interaction with content, media-to-network and media-to-device dynamic adaptation,
  - Search capabilities across distributed media systems and P2P networks, adapted to context and applications (e.g. tourism, health).
- Adaptive technologies (feedback-based) enabling personalisation of multimedia networked search, as a function of user context, perception and usage profile.



## Objectives (4/6):

- ✓ **d) Immersive media experiences and electronic cinema:**
  - **E2E architectures** for next generation multimedia and cinema experiences (beyond HDTV) with **better QoE**, based on technologies enabling: higher frame rates, wider colour gamut, higher contrast range and screen resolution, advanced “spatialised” sound, 3D capabilities, pervasive and immersive environments, innovative 3D and multi-view coding methods,
    - These optimised **E2E architectures** should cope with a massive increase of data throughput.



# Networked Media and 3D Internet

ICT-2009.1.5, Challenge 1 in FP7 Call 4

## Objectives (5/6):

### ✓ Networks of Excellence :

- Consolidation or establishment of European leadership in the fields of **content-aware networks and network-aware applications**,
- **Integration** of foundational research capability to establish research agendas, promotion of multi-disciplinary education and sharing of research facilities in the field of **3D Media Internet**,
- **Integration** of industrial and academic research capabilities to establish research agendas and to share research facilities in the field of **immersive media and electronic cinema**.



# Networked Media and 3D Internet

ICT-2009.1.5, Challenge 1 in FP7 Call 4

## Objectives (6/6):

### ✓ Support measures (CSA):

- **Collaboration** with national initiatives and/or 3rd countries, dissemination, research roadmaps, policy and socio-economic aspects, organisation of events (policy and/or scientific) in the fields of **content-aware networks and network-aware applications and 3D Media Internet**,
- **Coordination** of activities at EU-level, **cooperation** with 3rd countries, research roadmaps and organisation of events (policy or research) in the area of multimedia **networked search and retrieval**.



# Networked Media and 3D Internet

ICT-2009.1.5, Challenge 1 in FP7 Call 4

- ✓ Budget: **80 M€**
- ✓ Funding schemes:  
**IPs and STREPs - 70 M€** for a), b), c), d)
  - Minimum 50% for IPs – **35 M€**,
  - Minimum 30% for STREPs – **21 M€****CSAs – 6 M€** and **NoE – 4 M€**
- ✓ Contact: [Francisco.Medeiros@ec.europa.eu](mailto:Francisco.Medeiros@ec.europa.eu)



## Expected Impact (1/2):

- ✓ **Reinforced positioning of industry in Europe in:**
  - Networking and delivery of multimedia content and services,
  - 3D Media Internet technologies,
  - Networked search.
  
- ✓ **Strengthened European industry in:**
  - Multimedia experiences beyond HDTV,
  - Electronic cinema.
  
- ✓ **Wider uptake of networked and collaborative platforms based on 3D Media Internet.**



## Expected Impact (2/2):

- ✓ **Wider market opportunities (incl. for content-related SMEs) for innovative business and societal applications (e.g. games, entertainment, education, culture, services creation) based on novel networked media technologies and systems,**
- ✓ **Global standards and European IPRs**



# Thank you for your attention

*Andrzej J. Galik*

email: [andrzej.galik@kpk.gov.pl](mailto:andrzej.galik@kpk.gov.pl)

**National Contact Point  
for Research Programmes of EU**  
Institute of Fundamental Technological Research  
Polish Academy of Sciences

ul. Żwirki i Wigury 81  
02-091 Warszawa

phone: +4822 828 74 83  
fax: +4822 828 53 70  
e-mail: [kpk@kpk.gov.pl](mailto:kpk@kpk.gov.pl)

