

The Future of the Internet

A Content Creation & Media Delivery Perspective

BO 4

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Working Group Agenda (9:00-12:30)

- 9:00 - 9:15 Welcome and Objectives (Th. Zahariadis)
- 9:15 - 10:00 Future Internet Cross Domain Issues (Chair: Th. Zahariadis)
- Considerations from the Security group: (D. Sommer, IBM Research)
 - Considerations from the Services group (M. Surridge, M. Boniface, IT Innovation)
 - Considerations from the Networking group (David Kennedy, Eurescom)
- 10:00 - 10:15 Multimedia Content Search (Ramon.Compano, IPTS)
- 10:45 - 11:00 Coffee Break
- 11:00 – 11:10 The future of multimedia web search engines (Fausto Rabitti, ISTI CNR)
- 11:10 - 11:20 3D Internet (Petros Daras, ITI)
- 11:20 - 11:30 P2P networking (E.Leonardi, Politecnico di Torino, J.Ahola, VTT)
- 11:30- 12:15 Detailed discussion on the Issues paper (Chair: Th. Zahariadis)
- 12:15 - 12:30 Session Wrap-up and action plan for year one

Content Creation & Media Delivery Perspective

The Future Internet will provide...
the means to share and distribute...
(new) multimedia content and services with....
superior quality and striking flexibility...
in a trusted and personalized way...
improving citizens' quality of life, working
conditions, edutainment and safety

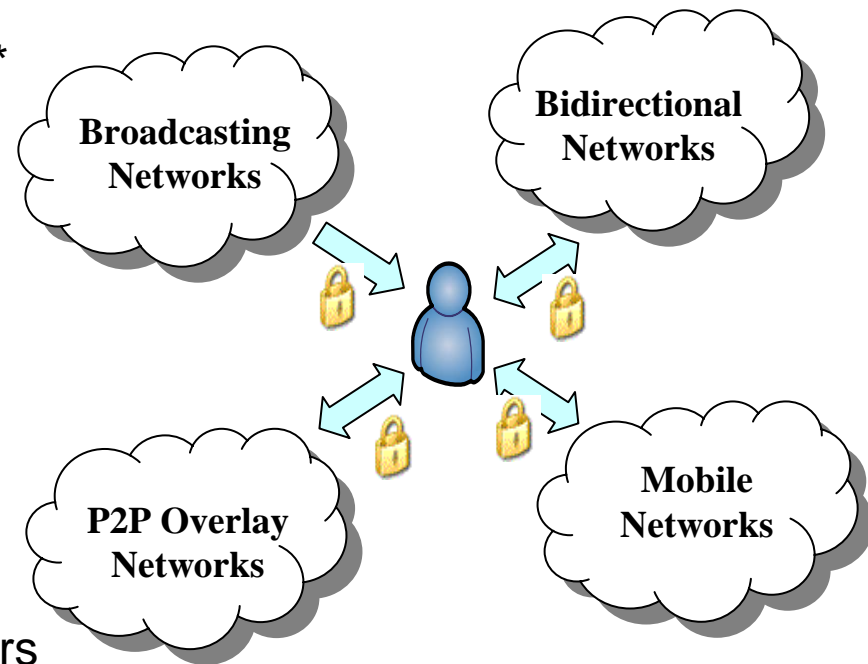
Multimedia Content and the Internet

Today

- More than 100 million Internet users have downloaded at least one (multi)media file, and over 47 million of them do so regularly *
- Content: 160 Exabytes fuelled by users**

In the next few years

- Everyone will be
 - Content Producer/Provider
 - Content Mediator
 - Content Consumer
- Content: 990 Exabytes by 2010**
- Within 3 years, 70% of created and archived content expected to come from users



*Source: www.instat.com

** SAPIR "Large Scale Multimedia Search & P2P"

THE FUTURE OF THE INTERNET
Perspectives emerging from R&D in Europe



Slovensko predsedstvo EU 2008
Slovenian Presidency of the EU 2008
La Présidence slovène de l'UE 2008

31. MARCH - 2. APRIL
BLED, SLOVENIA

Technological Achievements by 2015

- Networked Media depends on key technologies:
 - Information Technology
 - (Broadband/Mobile) Networking
 - Electronic Equipment
 - Content
- Main axes related to these achievements include:
 - *The challenge of the true broadband*
 - *The challenge of personalised intelligent media*
 - *The challenge of distributed control*

Key Technological Challenges

- Richer media exchange anywhere- anytime
- New Models of interaction – Visual sensations
- Peer-to-Peer content search and delivery
- Ultra HDTV – IP TV with Ultra High Quality
- 3D Media Internet
- Virtual Communities –Virtual Presence- Massive multiplayer Games
- Visual Sensor Networking

Deployment Scenarios (1/2)

- **Multimedia Search, Optimised Delivery and Dynamic Adaptation**
 - Multi-layered/Multi-viewed content coding
 - P2P optimisation for content searching
 - P2P multi-source/multi-network content streaming
 - Media-to-network cross layer dynamic adaptation
 - Reduce start-up/modification/adjustment delays
- **3D Media Internet**
 - Virtual 3D collaborative platforms
 - New 3D content formats
 - Virtual 3D worlds, mixing real content with computer generated
 - Efficient 3D content search

Deployment Scenarios (2/2)

- **New Methods of interactivity**
 - New multimodal interfaces and viewing/displaying methods for consumption of professional/user generated content
 - New methods that will enable natural communication between people (virtual presence)
 - Increased demand for personalisation and aggregation of services
- **Personalisation/Privacy/Trust/Right of User**
 - New Methods of personalisation/ personalised adaptation
 - Identity management, ownership, right of use
 - New payment methods and business models for commercialisation and trading of (virtual) digital objects

Session Objectives

- Consider the perspectives of the cross domain issues:
 - Services
 - Networking
 - Security
- Consider 3 main areas of the Future of Multimedia Internet:
 - Content Search/Web search
 - 3D Media Internet
 - P2P networking
- Detailed discussion, agreement and adoption on the issues paper
- Action plan and Milestones for 1 year

Discussion Points

- Important open questions?
- Methods to be applied?
- Types of cross-discipline research?
- Agreement and adoption on the issues paper
- Action plan and Milestones for 1 year