

sea

mless content delivery

Widespread and affordable broadband access opens up opportunities for delivery of new streaming services, making ICT crucial to European growth and quality of life. The networked future however, is not envisaged to be simply a faster way to go online. What is expected to fundamentally change the way that people use the network is the ability to produce, and seamlessly deliver and share their own multimedia content.

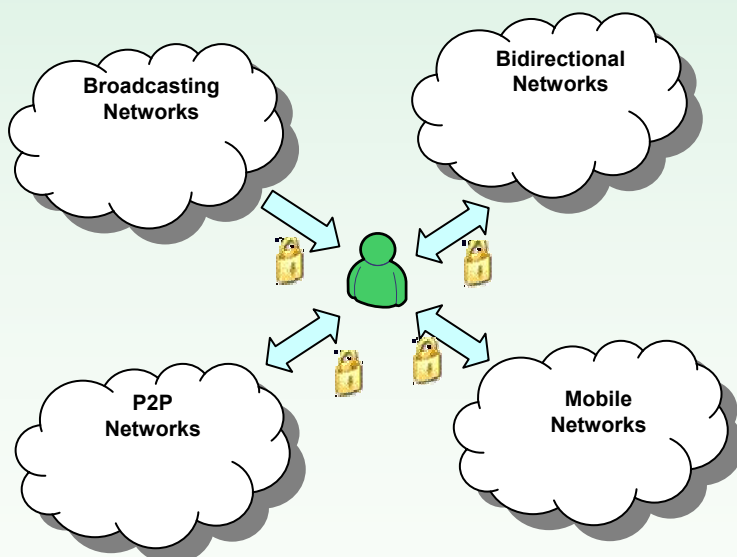
SEA consortium is confident that in a few years everyone will be multimedia content producer (by publishing digital pictures, video recordings, remote e-health services, home surveillance, etc.), multimedia content mediator (by storing/forwarding streaming content) and multimedia content consumer (digital television, video on demand, mobile broadcasting and alike).

Towards this forthcoming age, the SEA project aims to offer a new experience of seamless video delivery, maintaining the integrity and wherever applicable, adapting and enriching the quality of the media across the whole distribution chain.



Within SEA everyone can be:

- Content Producer/Provider
- Content Mediator
- Content Consumer



The **SEA (Seamless Content Delivery)** project is focused on **seamless, personalised, trusted** and **PQoS-optimised** multimedia content delivery, across broadband networks, varying from broadband broadcasting to P2P topologies.

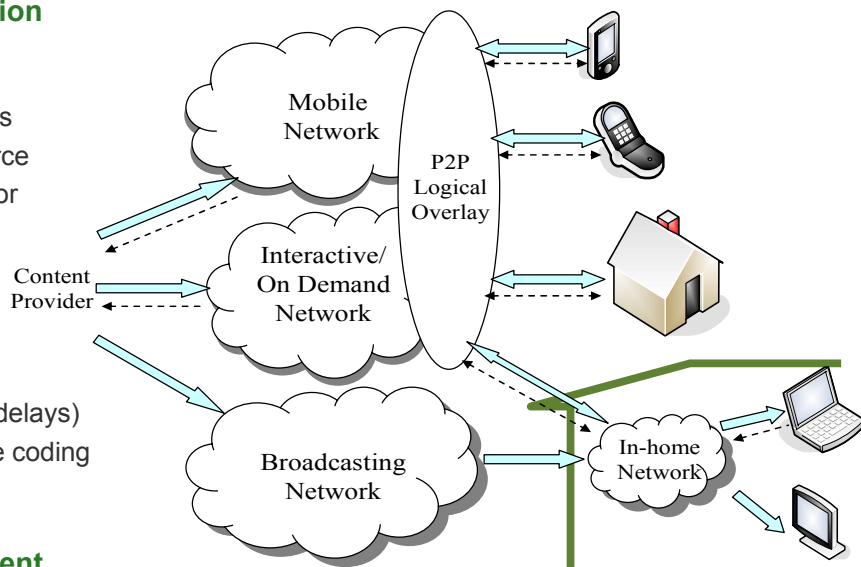


➤ Multi-layered/Multi-viewed/Multi-description content coding

- H.264 SVC (Scalable Video Coding): Layered temporal/spatial/quality scalability
- H.264 MVC (Multi View Coding): Different views embedded in a single video stream
- MDC (Multiple Description Coding): Inherited resilience

➤ Multi-source/Multi-network streaming & adaptation

Enriched PQoS by on-the fly content adaptation and dynamic reconstruction of different layers (**SVC**), views (**MVC**) and representations (**MDC**) of the same resource transmitted from multiple sources (**servers/P2P**) and/or received over multiple diverse paths.



➤ P2P video streaming

- Peer retrieval optimization
- Proper coding techniques (e.g. to limit the traffic and delays)
- Optimization of the visual quality via advanced source coding

➤ Content Protection/lightweight asset management

Cover not only the legacy content creation chain, but also the private multimedia content, which may be soon the major content category.

The SEA Consortium:

- ✓ STMicroelectronics Srl, Italy
- ✓ Synelixis Solutions Ltd, Greece
- ✓ Thomson Grass Valley, France
- ✓ Vodafone Panafon AEET, Greece
- ✓ Nomor Research, Germany
- ✓ Fraunhofer HHI, Germany
- ✓ Politecnico di Torino, Italy
- ✓ Universidad Politécnica de Madrid, Spain
- ✓ University of California, Los Angeles, USA



The SEA Vision:

Seamless Content Delivery from everyone to everyone, anytime, from any place.



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Contact

Cosimo Musca, Project Coordinator

STMicroelectronics S.r.l.

Tel: +39.039.6037491

Email: cosimo.musca@st.com



Theodore Zahariadis, Technical Coordinator

Synelixis Solutions Ltd.

Tel: +30 22210 61309

Email: zahariad@synelixis.com

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