NOTTS

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Partners:

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Alcatel-Lucent España SA, Spain
Alkit Communications, Sweden
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Project Website

https://www.celticplus.eu/project-notts/

http://projects.celticplus.eu/notts

Next generation Over-The-Top multimedia Services

The objective of NOTTS is to investigate the technical problems experienced by service providers of Over-The-Top (OTT) multimedia services, to propose realistic solutions, and to evaluate these solutions in testbeds and real networks. In addition, the project will provide technological solutions that involve a new business line for all stakeholders, so that as a result of this project the NOTTS prototype will be provided.

Main focus

The NOTTS project, in which 23 Companies and Institutions from Spain, France, Sweden, Poland, Finland and Portugal collaborate, will offer a scalable and sustainable integrated solution for the future of Internet-based media distribution, which includes:

- New and cross-disciplinary approaches to optimize the distribution of media data.
- Harmonized services, networks and formats for the whole content distribution chain.
- Methods and tools for QoE estimation and monitoring.
- Models where traditional network operators get their share of the raising OTT business.
- A scalable and robust video streaming solution able to deliver adapted contents to heterogeneous devices and networks. The main goal of this is to improve the Quality of Experience perceived by the user.
- And a context-aware and media-aware delivery platform.
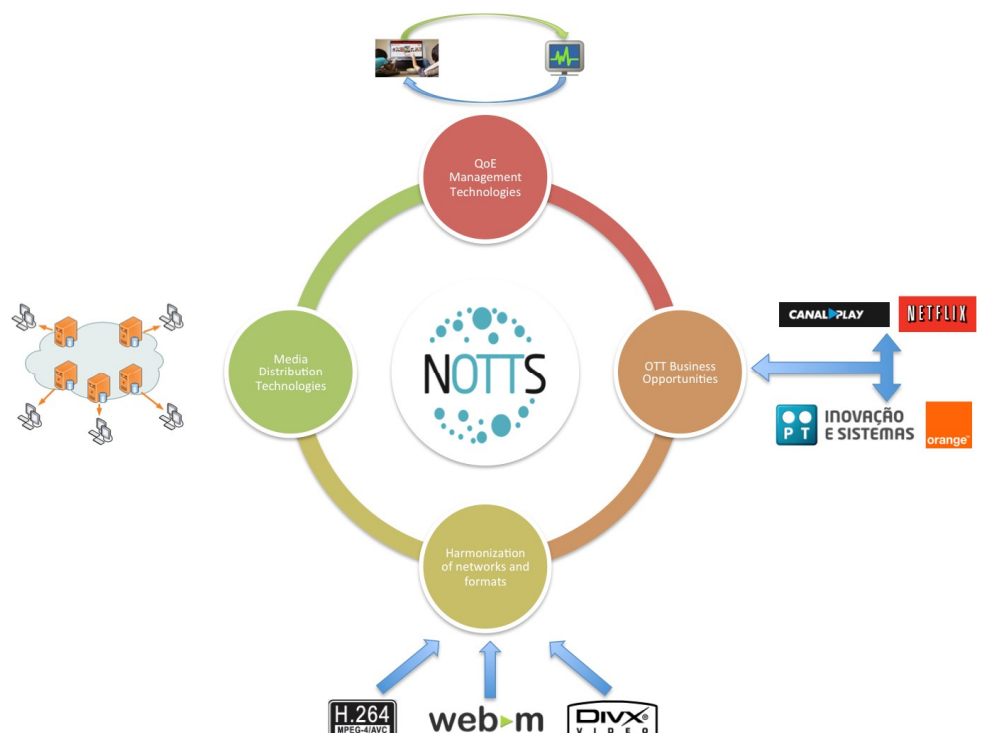
Approach

The first task in the project is the definition of the project scenarios and requirements, task that will define the scope of the project. These scenarios will be used to describe the OTT architectures and design an OTT content distribution platform, setting the technical bases of the final deliverables. In order to ensure the Quality of Experience (QoE) of the system, control and monitoring tools for OTT services will be developed, taking into account the results provided from other projects like Eureka Celtic IPNQSIS or Eureka Celtic QuEEN. The last main task will be the development of test beds and prototypes of the tools, providing a functional platform to deploy new OTT services. All these tasks are defined with the main objective of developing a prototype that allows a service provider to deploy its own OTT service while granting the user good levels of QoE at low cost.

In addition, another of the main objectives of the NOTTS project is to supply European OTT services providers with opportunities to take revenue from the business. The project will also investigate business models in which traditional network operators can be part of the OTT business. NOTTS will contribute to this objective with a combination of technical network solutions and business development.

Main results

The main result of the project is to develop a new service architecture including advanced content distribution methods together with QoE monitoring and OTT application control. This architecture will be formed by: improved products for OTT video communication and distribution; improved products for QoE monitoring and management of video and OTT distribution; solutions for content distribution, storage and distributed caching; solutions for scalable and adaptive content delivery; control mechanisms and service supervision, based on QoE monitoring; and integrated demonstrations, as well as prototypes of the systems. The consortium will test the prototypes in a real case of study. To solve the scalability problems of QoS/QoE measurements, parallel computing techniques will be applied.

Impact

The increasing high demand of quality content over the Internet (especially video) make OTT services an appealing source of business opportunities. However, the introduction of large, mostly American, media companies into the European market may pose a threat to European players. NOTTS will bring European Actors together in order to transfer knowledge and align services. This effort will build knowledge and competence, both in terms of technology and business development, contributing to successful new business. This will promote the competition between European OTT providers and large well known OTT actors.

In the other hand, the creation of a unified platform will provide advanced methods for content distribution and technology for monitoring and controlling QoE of OTT services. This will directly benefit the end users by assuring the QoE perceived by them.

About Celtic–Plus

Celtic-Plus is an industry-driven European research initiative to define, perform and finance through public and private funding common research projects in the area of telecommunications, new media, future Internet, and applications & services focusing on a new „Smart Connected World" paradigm. Celtic-Plus is a EUREKA ICT cluster and belongs to the intergovernmental EUREKA network. Celtic-Plus is open to any type of company covering the Celtic-Plus research areas, large industry as well as small companies or universities and research organisations. Even companies outside the EUREKA countries may get some possibilities to joine a Celtic-Plus project under certain conditions.

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