

## **OFELIA Lays Corner Stone For OpenFlow Enabled Research Facility In Europe**



### ***Europe Builds Unique Experimental Facility For Future Internet Research Based On OpenFlow Technology***

On October 1<sup>st</sup> 2010 a consortium of 10 partners, including operators, vendors and research institutions, launched the research collaborative project OFELIA (OpenFlow in Europe: Linking Infrastructure and Applications; <http://www.fp7-ofelia.eu/>) that will set-up an experimental facility based on OpenFlow technology. The project will receive 4.45 million Euros funding from the European Commission's FP7 ICT Work Programme.

The increasing complexity of deployment and use of today's Internet has highlighted fundamental problems in its architectural design. This has led to significant research efforts in the area of Future Internet in Europe and Clean Slate Design in the U.S. These research initiatives require appropriate experimental facilities to be established.

The OFELIA project will address these needs by creating a unique experimental facility that allows researchers to not only experiment "on" a test network but to control the network itself precisely and dynamically. The OFELIA facility is based on OpenFlow, a currently emerging networking technology that allows virtualization and control of the network environment through secure and standardized interfaces.

Five interconnected islands based on OpenFlow infrastructure will be created to allow experimentation on multi-layer and multi-technology networks. OFELIA is to provide an experimentation space which allows for flexible integration of test and production traffic by isolating the traffic domains inside the OpenFlow enabled network equipment. This allows for providing realistic test scenarios and for seamless deployment of successfully tested technology.

The OFELIA experimental facility will use OpenFlow enabled carrier grade equipment from NEC thus allowing performance tests under production conditions.

The OFELIA project will invite experimenters in Europe to bring their use cases and scenarios and to use the OFELIA test facility. Two open calls will be published offering experimenters additional funding from the OFELIA project for conducting their experiments. The first call will be published at the beginning of 2011. Details can be found on the project website.

Further, OFELIA wants to cooperate with related international efforts such as AKARI in Japan and GENI in the US.

The OFELIA project duration is from October 2010 to September 2013. The project consortium consists of the following organizations:

- European Center for Information and Communication Technologies (EICT), Germany
- Deutsche Telekom Laboratories, Germany
- University of Essex; UK
- i2CAT Foundation, Research and Innovation in the Internet Area, Spain
- Technische Universität Berlin, Germany
- NEC Europe Ltd., U.K.
- Interdisciplinary Institute for Broadband Technology (IBBT), Belgium
- Eidgenössische Technische Hochschule Zürich, Switzerland
- Stanford University; USA
- ADVA AG Optical Networking, UK

For further information about the project, please visit the official website: <http://www.fp7-ofelia.eu/>. For additional information regarding the OpenFlow Technology, please follow the link to the Open Flow Consortium: <http://www.openflowswitch.org/>.