



BONE – Building the Future Optical Network in Europe: The e-Photon/ONE Network

Program/Call Reference, Strategic Priority, Grant Agreement Number, Project Type

FP7/ICT-2007-1.1 ICT: The network of the future

Grant agreement no: 216863, NoE (Network of Excellence)

Project Objectives

The BONE-network brings together European laboratories and research institutes in a close networking infrastructure, and represents the European research activities in the field of Optical Networks. The core activity of the BONE is the stimulation of intensified collaboration, exchange of researchers and integration of activities and know-how into and amongst partners. Through the establishment of Virtual Centres of Excellence (VCE), the BONE-project looks into the future and builds and supports the “Network of the Future” through education & training, research tools & test labs on new technologies & architectures. Reaching out, linking to research activities in national programmes, or programmes outside Europe, stimulating an intensified collaboration, exchange of researchers, and disseminating the expertise and know-how of these European Research groups to a broader audience, both R&D oriented as well as industry- and decision maker oriented are other important objectives of BONE project. In side BONE project there are VCEs on specific issues (e.g. network technologies and engineering, services and applications, access networks, optical switching systems, transmission techniques and in-building networks). Hot and multidisciplinary topics are handled and looked at through a limited number of topical projects (e.g. Service aware optical network architectures, GMPLS and routing, optical networks in support of user mobility, optical interconnects, edge-to-core adaptation, and cross-layer optimization) which each have a limited duration. Some of the activities within the BONE project are defined to support the general working of the project or centralise the dissemination & teaching activities.

Project Starting Date and Duration / Total Cost – Total EU Contribution

01-2008 – 12-2010, 36 months / 4,793,853€ - 3,752,800 €

AIT's Role / Principal Investigator

Project partner and leader of two work packages/ Prof. Ioannis Tomkos (itom@ait.edu.gr)

AIT's Main Work Item

AIT is leading two topical projects, namely “Optical communication networks in support of user mobility and networks in motion” and “Alternatives for multi-layer networking with cross-layer optimization” (WP23 and WP26) in the framework of BONE along with participation in other work packages in this network of excellence.

Main Partners

	Partner Name	Role	Funding
1	Interdisciplinair Instituut voor BreedBand Technologie vzw –	Coordinator, Research,	439,027€



	IBBT	Technology	
2	AIT	Research, Technology	111,750€
	49 partners in total		3,752,800€