

Department of Electrical and Computer Engineering

Title: «Energy and cost in fixed-grid and flex-grid optical networks»

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Wednesday, 3 February 2016, 17:00 – 18:00

Room XOD 02 – 013, New Campus - University of Cyprus

Abstract:

The traffic volume in metro and core networks is forecasted to grow at very high rates, exceeding 30% per year for the next 5 years, and if the corresponding energy requirements grow analogously, they will sooner rather than later form the bottleneck for network communications. Thus, energy-efficiency in optical networks is mandatory for the sustainability of the future Internet. The objectives of this presentation are to identify the main causes of energy consumption for current fixed-grid Wavelength Division Multiplexing (WDM) and future flex-grid optical networks and propose and compare techniques for improving their energy efficiency.

Biography:

Konstantinos Manousakis is a Marie Curie post-doc fellow at KIOS Research Centre for Intelligent Systems and Networks. He holds a Diploma (2004) in Computer Engineering and Informatics from the University of Patras, Greece, an MSc (2007) and a PhD (2011) from the same department. In parallel to doctoral research, he was able to contribute to Greek and EU projects, in the field of optical networks. He also worked in the Networking Technologies Sector (NTS) of the Research Academic Computer Technology Institute as a Computer Engineer. NTS focus on the planning and the implementation of networking infrastructures, telematic services and optical networks. His current research interests include optimization algorithms for high speed optical networks, impairment aware routing and wavelength assignment algorithms, network planning and operation tools, security in optical networks, energy optimization algorithms in optical networks and techno-economic aspects of telecom networks.