



A 5G Media Delivery Network Demonstrator

A Development and Verification platform

Nikos Bakalos Research Engineer ICCS/NTUA



**Institute of Communications and Computer Systems –
National Technical University of Athens**
Internet Science Group

5G Media Delivery Network



- /// The adoption of the virtualization paradigm in both computing and networking domains portends a landscape of heterogeneous service capabilities and resources pervasively distributed and interconnected and deeply integrated through the 5G network infrastructure
- /// In this service ecosystem, dynamic service demand can be flexibly and elastically accomplished by composing heterogeneous services provisioned over a distributed and virtualized resource infrastructure.
- /// Content Caching is a promising solution that can reduce network traffic, lower latency and improve the performance in 5G cellular networks. Video content is one of the most important types of multimedia traversing the cellular networks. It generates more traffic on network than any other types of multimedia



5G Media Delivery Network



- Research and develop a platform, over which distribution of multimedia streams can be supported through innovative techniques, both as regards media encoding, but also as regards media distribution.
- To achieve this, the project will make use of scalable media coding techniques including both standard and state of the art research methods (wavelets, multiple description coding), combined with new transport and real time streaming protocols.
- Create a novel, state of the art platform from real time media distribution over a 5G network that takes advantage of user profiles for media creation and distribution, the project will address the issue of delivering Quality ensured, Content aware, Personalised, Network adaptable streaming information to end users.

