

## ***Travel report on participation in the 7th OSM Hack fest, in Patras, Greece***

ETSI's Centre and the OSM community organized the 7th OSM hack fest<sup>1</sup> in 5G networks. The hack fest took place on 9-13 September 2019, and the whole event was hosted by the University of Patras, in Greece. It was an excellent opportunity for me to have hands-on experience with expert developers from OSM and Whitestack. There were skillful speakers from Telefonica, ETSI, Canonical, and Atos as well.

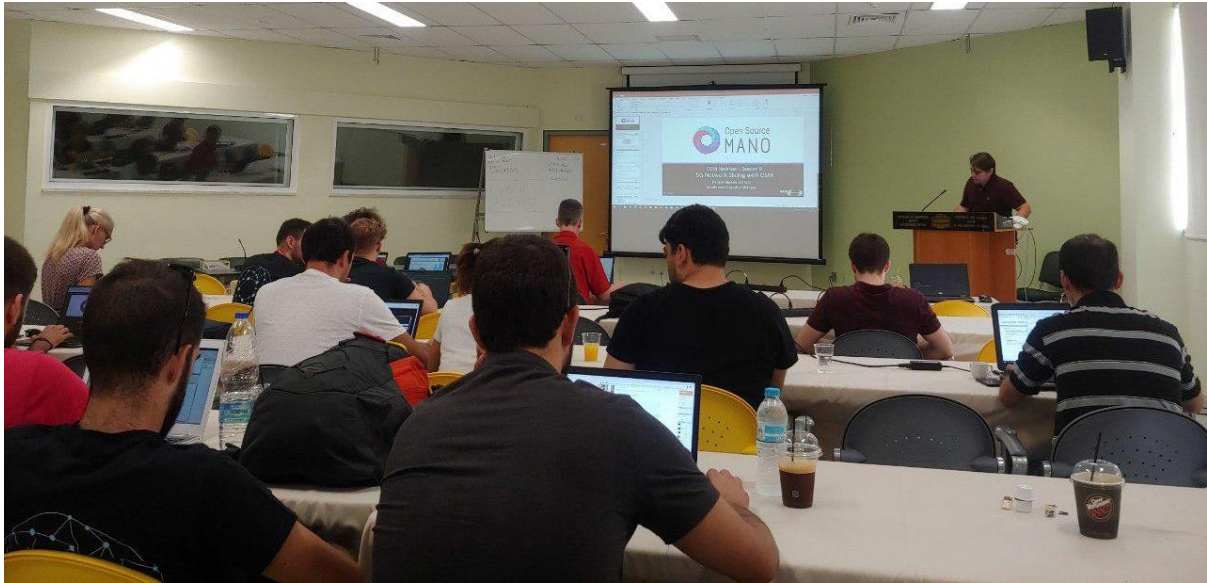


As we know, Software Defined Networking (SDN) and Network Function Virtualization (NFV) are considered as the main technologies for realization 5G. In particular, since my Ph.D. topic focuses on Network Slicing in 5G, this event granted me a fabulous understanding regarding certain and specific procedures have to be tracked in order to create a Network Slice. Basically, network slices are composed of one or several Virtual Network Functions (VNFs). The procedure starts from how to deploy a virtualized format of an arbitrary Network Function (NF) based on a file so-called NFV descriptor. All the required functionalities have to be included in the descriptor. The next step after creating NFVs is to specify the service(s) that are produced based on chaining the NFVs. A similar procedure is followed by defining a file for Service descriptor. Finally, Network Slices are created for providing the necessary services, and all the Quality of Service (QoS) information regarding a Network Slice has to be included in a Network Slice descriptor.

In this hack fest, we learned how to make the above-mentioned hierarchical approaches according to Open Source Management and Orchestration (OSM) solution. Most of the sessions in the hack fest were practical with various test scenarios. One session was also allocated to the OSM fault and performance management.

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<sup>1</sup> [https://osm.etsi.org/wikipub/index.php/7th\\_OSM\\_Hackfest#OSM\\_.26\\_5G\\_Verticals](https://osm.etsi.org/wikipub/index.php/7th_OSM_Hackfest#OSM_.26_5G_Verticals)



There were also several demos regarding how to integrate the OSM solution with 5G verticals such as media & Virtual Reality (VR), Automotive, and also security concerns about 5G networks.

In this way, presenters covered different characteristics of the OSM for deploying management and orchestration in 5G networks.

As mentioned, many experts, both from academia and industry, attended the hack fest, and they made a complementary landscape concerning numerous features of service orchestration in 5G. I had a chance to see and have a discussion with some of them especially those who are working in areas which are close to my Ph.D. topic such as Gerardo García from Telefónica Research and Development group and Jose Miguel Guzmán who has held technical and executive positions in ENTEL Chile, Google Inc and Whitestack.



I talked about my research work and in parallel, I was introducing COINS research school to those who were not aware of COINS' mission. As a result, future collaboration between NTNU and other institutes could happen. One of the possible collaboration could be hosting similar hack fest in next years when the new versions of the OSM will be released.





Apart from technical aspects, I could meet nice people from several countries and specifically Greece while enjoying nice weather, and this made my trip much more pleasant.

I am looking forward to attending such valuable events in the future.

