

TeraFlow
SDN

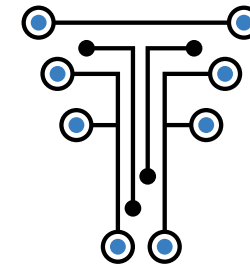
by ETSI

TeraFlowSDN: Where Research and Open Networking Meets Industry

NGON & DCI World 2022

Agenda

- Introduction to TeraFlowSDN
 - Ricard Vilalta (CTTC)
- Use cases and architecture for TeraFlowSDN
 - Oscar González-de-Dios (Telefónica I+D/Global CTIO)
- Disaggregated open networks
 - Stephan Neidlinger (ADVA)
- TeraFlowSDN and open standards
 - Daniel King (Old Dog Consulting)



TeraFlow
SDN
by ETSI

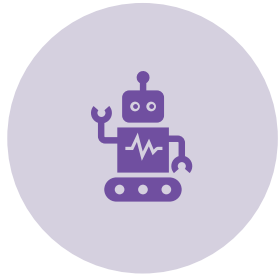
Introduction to TeraFlowSDN

Ricard Vilalta (CTTC)

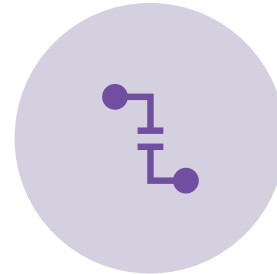
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Do we need yet another SDN controller?



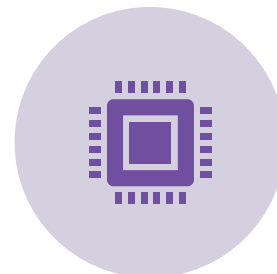
Automation is needed for Network Operators in order to fully benefit SDN adoption.



With B5G Networks, massive SDN flows will be needed. Flow aggregation at the network core, is not efficient and does not provide specific services.

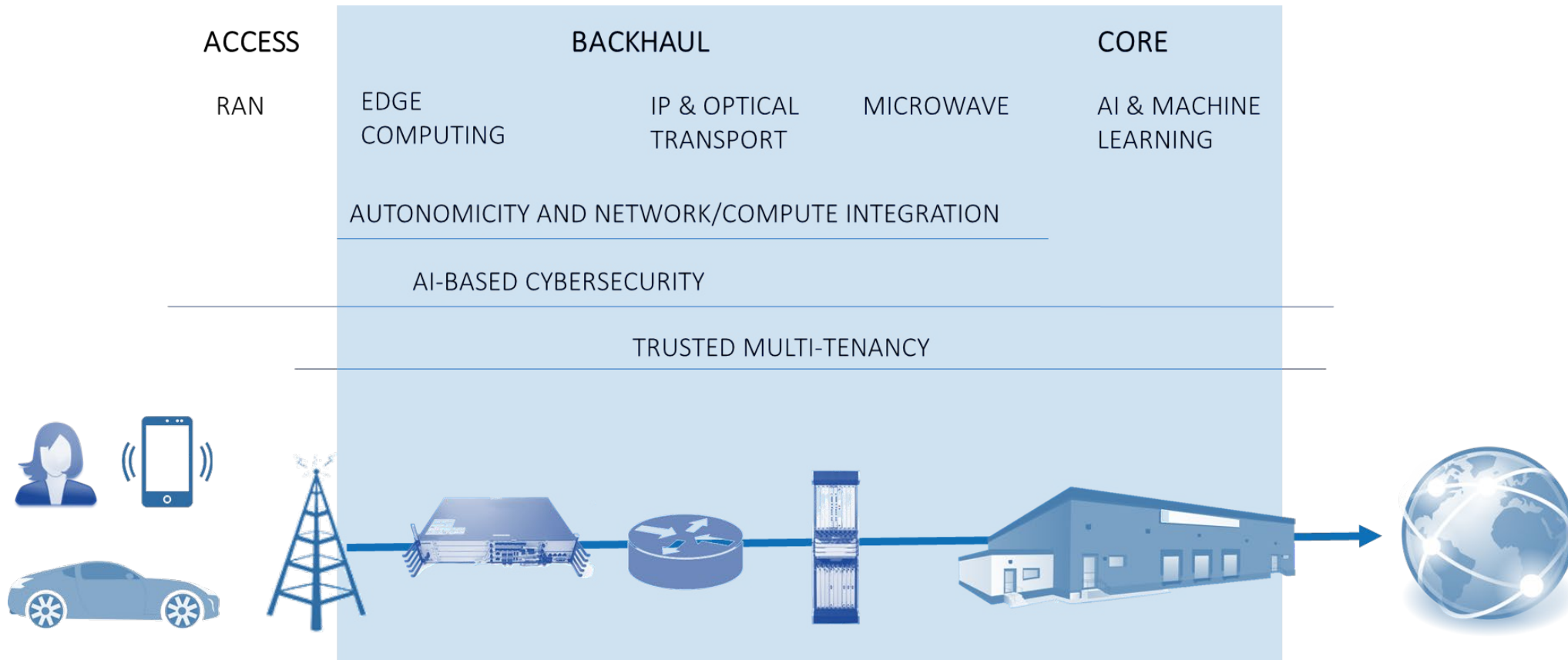


With B5G Networks, massive SDN flows will be needed. Flow aggregation at the network core, is not efficient and does not provide specific services.



We need programmable tools that provide flexibility, in case we need to change the direction and depth of specific technology deployment.

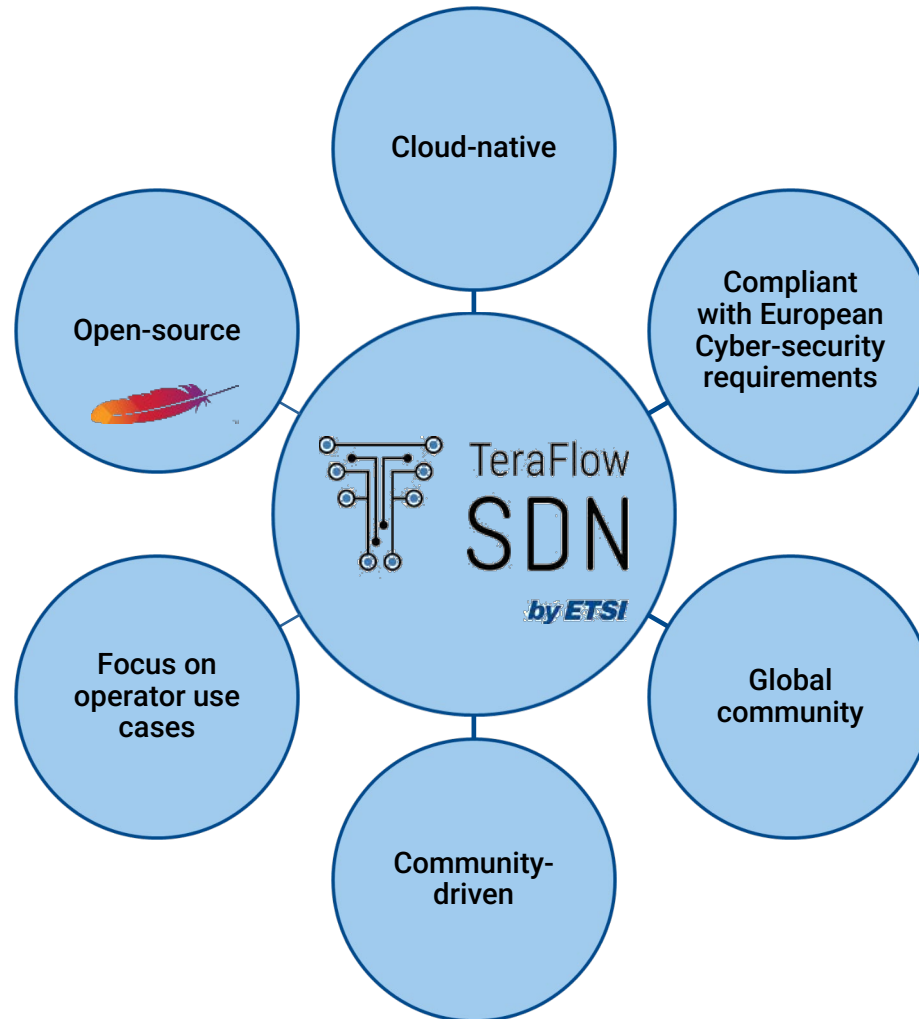
TeraFlow H2020



From H2020 TeraFlow to ETSI OSG TeraFlowSDN

- TeraFlow H2020 project started in 1/1/21
- We had the first code release in 17/2/22
- <https://gitlab.com/teraflow-h2020/controller>
- More contributions from other companies are expected
→ Need to open project to community
- ETSI accepted the creation of a new OSG



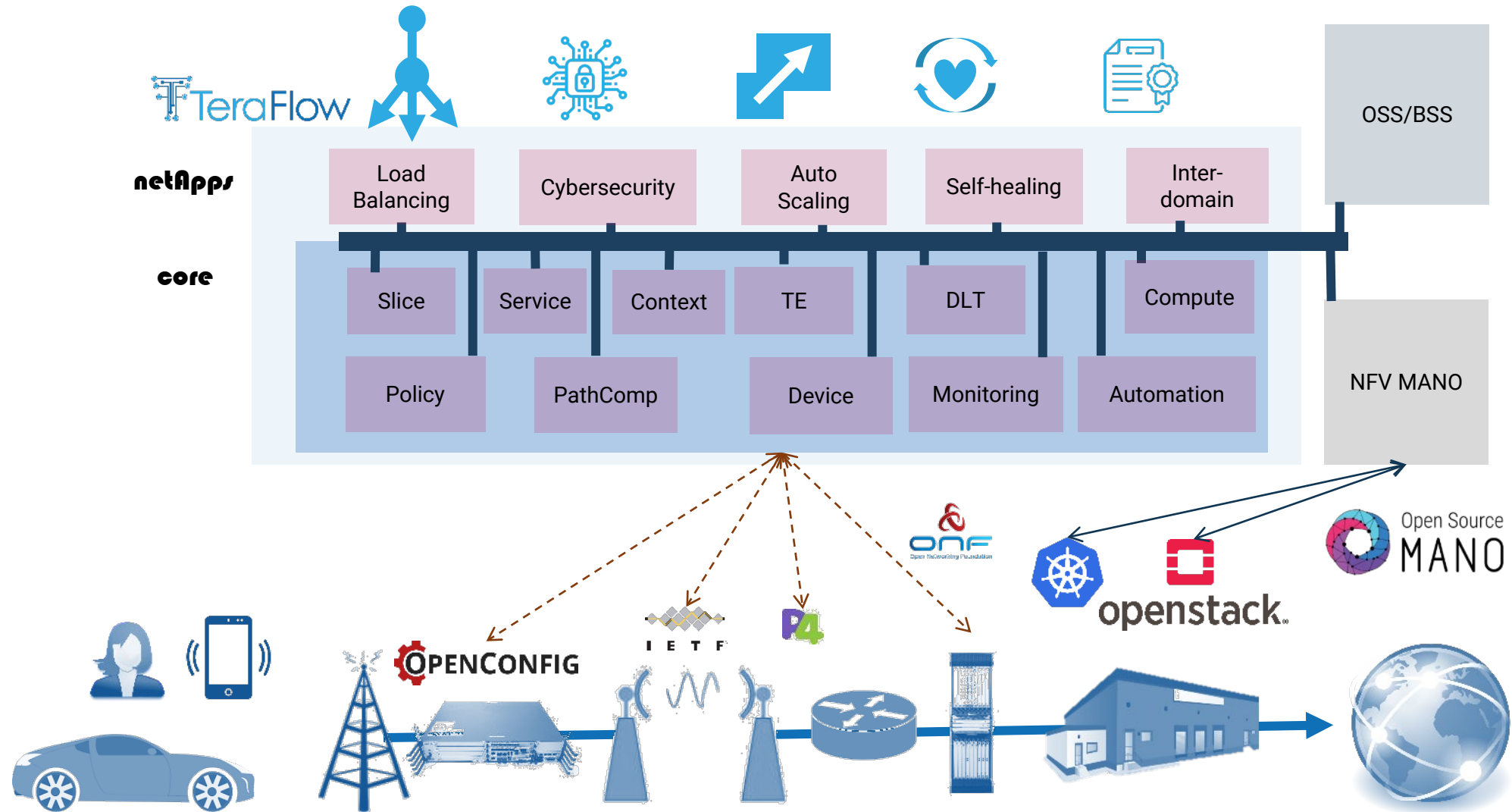


ETSI OSG TeraFlowSDN (TFS)

- Provide a toolbox for rapid prototyping and experimentation with innovative network technologies and use cases.
- TeraFlowSDN aims to ease the adoption of SDN by telco operators.
- We want to bring innovation to the ecosystem and contribute to network programmability for current 5G and beyond deployments.
- TeraFlowSDN will ease proof-of-concept demonstration for many ETSI ISGs to demonstrate the proposed standard solutions faster.
- The founding members of the group, Atos (Bull), CTTC, Telefonica SA, Telenor ASA, and SIAE Microelettronica SpA.
- Complete list of members and participants at: <https://portal.etsi.org/TB-SiteMap/TFS/List-of-TFS-Members-and-Participants>

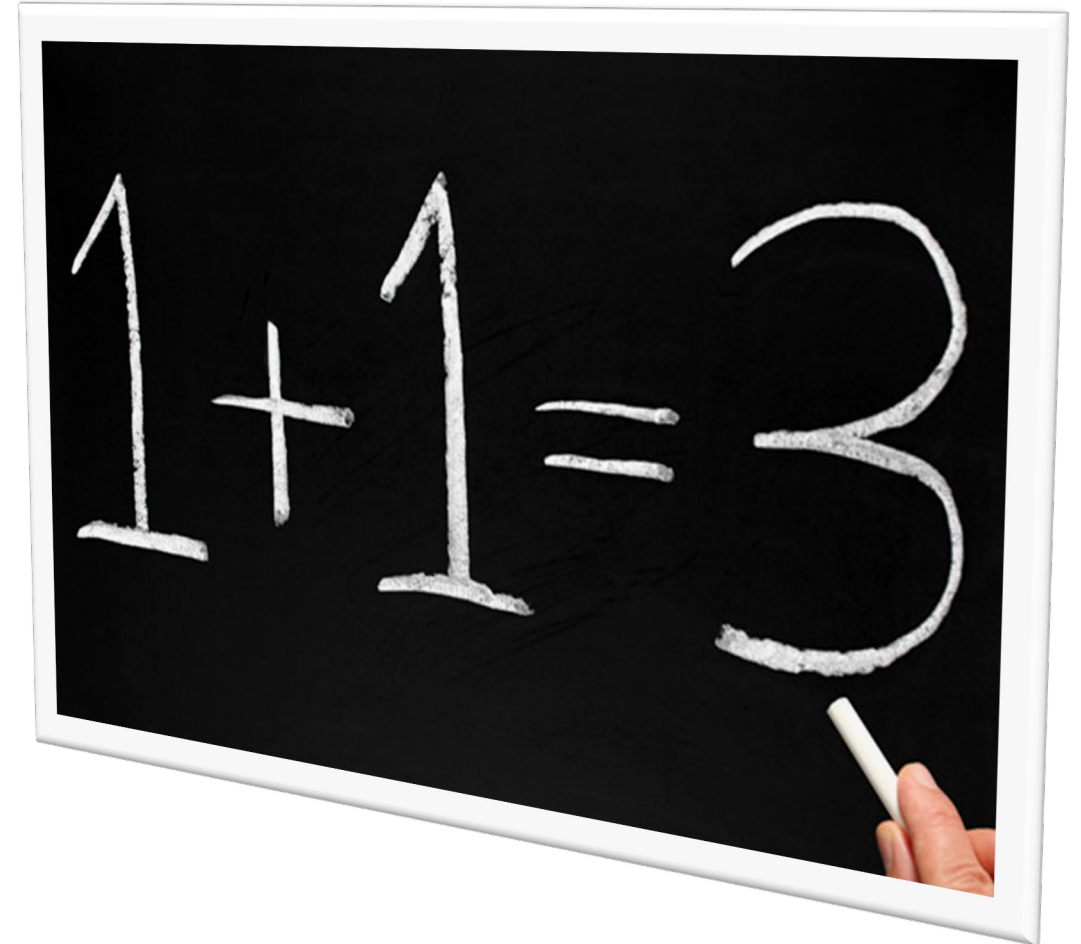


TFS architecture for release 2




Relationship between OSM and TeraFlowSDN

- TeraFlowSDN will be able to integrate with current Network Function Virtualization (NFV) and Multi-access Edge Computing (MEC) frameworks and interoperate with ETSI OSM (OpenSource MANO).




OSM-TFS integration is already on its way!

<https://www.youtube.com/watch?v=tt2ym6Hz6zg>


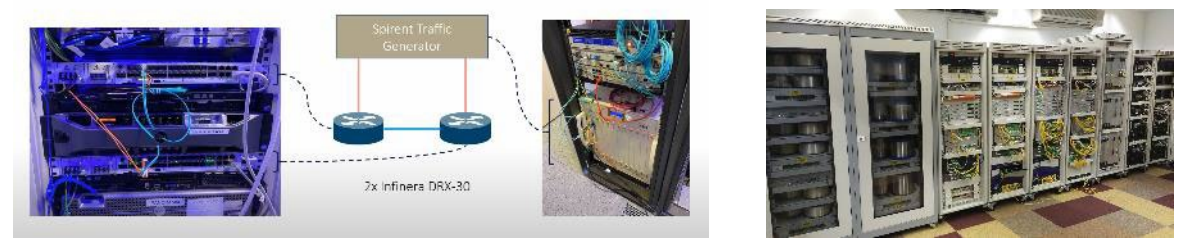
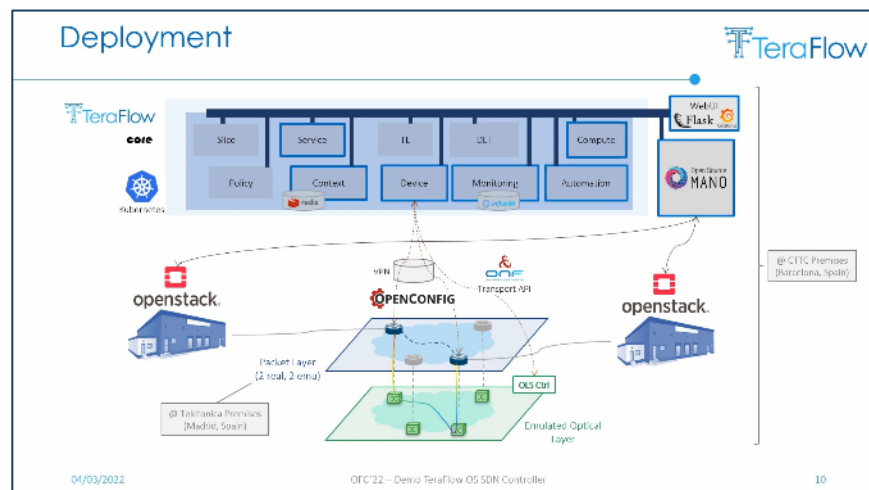
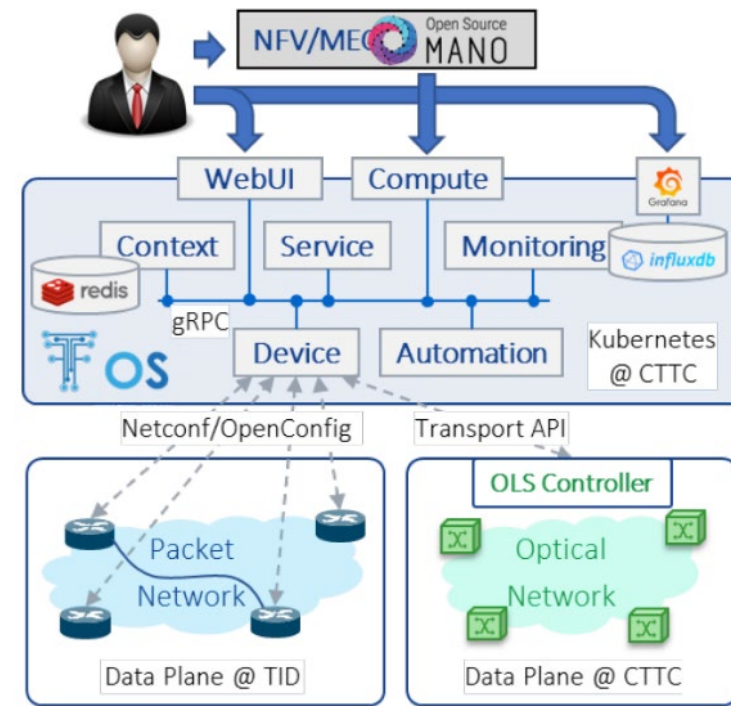


Demonstration of Zero-touch Device and L3-VPN Service Management using the TeraFlow Cloud-native SDN Controller

LL. Gifre, C. Natalino, S. Gonzalez-Diaz, F. Soldatos, S. Barguil, C. Aslanoglou, F. J. Moreno-Muro, A. N. Quispe Cornelio, L. Cepeda, R. Martinez, C. Manso, V. Apostolopoulos, S. Petteri Valivila, O. Gonzalez de Dios, J. Rodriguez, R. Casellas, P. Monil, G. P. Katsikas, R. Muñoz, and R. Vilalta

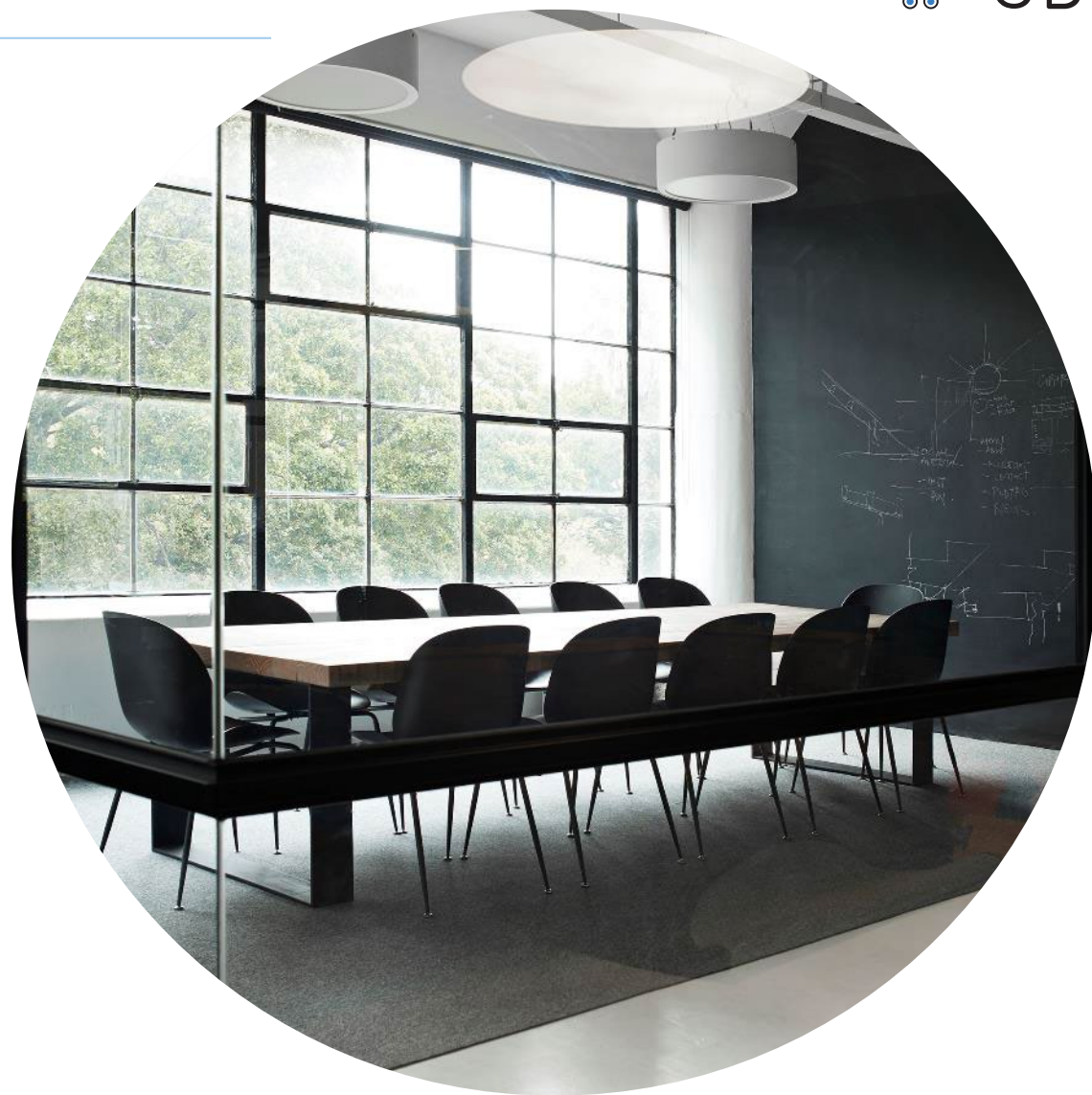


This project has received funding from the European Union's Horizon 2020 research and innovation programme under the grant agreement No. 101015857

Next events

- Virtual Kick-off Meeting, 20 June 2022
- TFS TECH Day – Tuesday 11th October 2022 – online
- 1st TFS Hackfest @Network X, Amsterdam - 20th October 2022 (f2f)
 - Collocated with OSM Hackfest
 - Tutorial Style
- TFS#2 Plenary – January 2023 – online
 - 2 days, exact dates TBD



How to join

- Participation is open to ETSI members, non members and individuals
 - [TFS Member Agreement](#)
 - [TFS Participant Agreement](#)
 - Contact TFSsupport@etsi.org



Learn more!

Website: tfs.etsi.org

Contact: TFSsupport@etsi.org

Join: [TFS Slack](#)

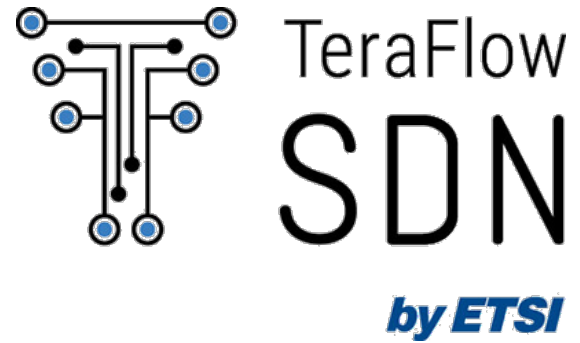
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Press Release: [ETSI Launches new Open Source Group TeraFlowSDN](#)





Thank you!
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