

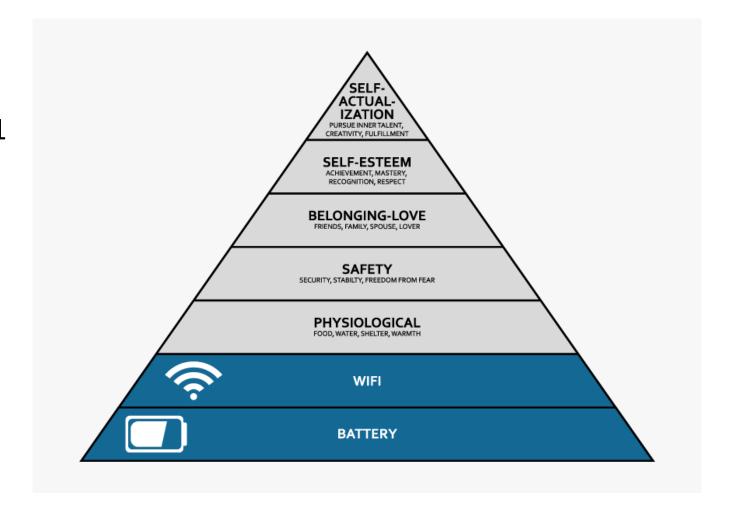
Castelldefels, 16-18 October 2023

### First things first: WiFi



SSID: cttc-guest

Password: 25GauSS90FiWi71



### Welcome to the 3<sup>rd</sup> TFS Hackfest!



- ETSI TFS: TeraFlowSDN is an ETSI hosted Open-Source Community
  - Created in May 2022, building on the work of EU H2020 project TeraFlow
  - Developing a cloud native smart SDN controller
  - In support of a large set of use cases defined by different ETSI groups (NFV, MEC, mWT, ENI, SAI, PDL, OSM...) and research projects
- This is a 1,5-day Hackfest dedicated to P4
  - Some theory today followed by hands-on sessions
  - Driven by TFS community members
- Followed by the TFS#3 Ecosystem Day on Wednesday!







### Agenda - Hackfest



#### Monday, 16 October 2023 - 2:00-6:00 pm

- Welcome & Logistics (ETSI & Host)
- TeraFlowSDN 101 (TFS Chair & TFS TSC Chair)
- Introduction to P4
- Abstractions of the TeraFlowSDN controller
  - Device Abstraction Layer
  - Service Abstraction Layer
  - Policy Abstraction Layer
- 15h30 Coffee Break (sponsored by HE SNS ACROSS)
- Walkthrough of a complete P4-based demo
  - Mininet topology setup
  - TeraFlowSDN controller deployment
  - Monitoring setup
  - Service deployment
  - Policy deployment

#### Tuesday, 17 October 2023 - 9:00 am - 6:00 pm

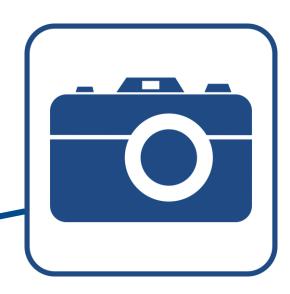
- Welcome Day 2
- Interactive Hacking Session
  - Tutorial on the Policy and Monitoring Components
- 10h30 Coffee Break (sponsored by HE SNS ACROSS)
  - Hacking the Day 1P4-based demo
- Lunch break (self-paid)
- Interactive Hacking Session
  - Hands-on exercises on P4 data plane programming
  - Interaction of P4 with TeraFlowSDN
  - First ideas towards in-band network telemetry (INT)
- 15h30 Coffee Break (sponsored by HE SNS ACROSS)
- Discussion on possible enhancements for the P4 driver of TeraFlowSDN
  - Introduction to P4-based in-band network telemetry (INT)
  - Call to action
- · Wrap-up Day 2 & end of Hackfest

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### Agenda – Ecosystem Day – Wed, 18 October

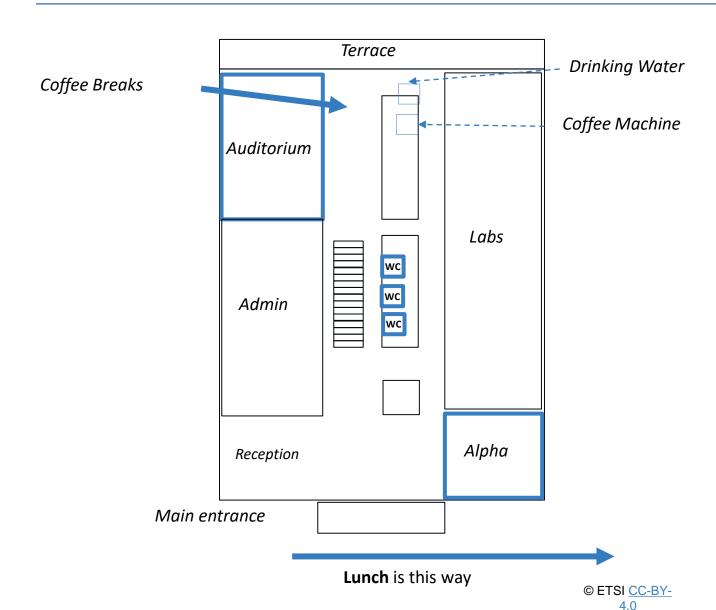


- 09h40 Local Registration, collect your badge!
- 10h00 Welcome to the TFS#3 Ecosystem Day by Ricard Vilalta (TFS Chair)
- 10h05 Hexa-X-II TeraFlowSDN and ETSI MEC by Ricard Vilalta
- 10h30 OCTAPUS Teraflow SDN as control plane for Next Generation Central Office (NGCO) in hybrid TSN/optical environments by Pietro Piscione
- 11h00 Coffee Break (sponsored by HE SNS ACROSS)
- 11h30 Flex-Scale Optical SDN controller by Nicola Sambo
- 12h00 SEASON Network Digital Twin by Achim Autenrieth/Vignesh Karunakaran
- 12h30 Int5Gent+ALLEGRO+SEASON Multi-layer slice controller architecture by Pablo Armingol
- 13h00 Lunch (self-paid)
- 14h30 Flex-Scale Energy Consumption awareness in Transport Networks by Raul Muñoz
- 15h00 OpenCAPIF New ETSI SDG for a Common API Framework by David Artuñedo
- 15h30 Group Picture & Coffee Break (sponsored by HE SNS ACROSS)
- 16h00 ACROSS OpenSlice TFS integration by Lluis Gifre
- 16h30 Closing Remarks and end of TFS#3 Ecosystem Day by Ricard Vilalta
- 20h00 Social Dinner (self-paid)



### **B4** Building Ground Floor

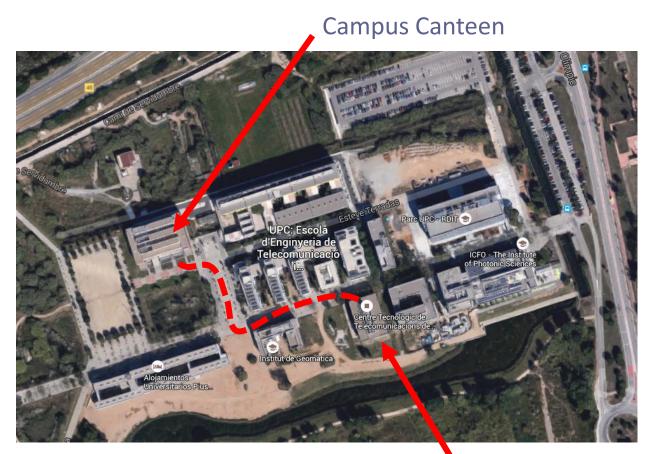




- TFS#3 Hackfest & Ecosystem Day
  - Auditorium (ground floor)
- TFS#3 Plenary Meeting
  - Alpha room (ground floor)
- Coffee breaks
  - Outside auditorium (Hall)

### Lunch at Campus Canteen (self-funded)





### Self service menu (~9 EUR):

- Starter: salad / selection from daily menu
- Main course: selection from daily menu
- Bread, water and dessert included in menu price.
- Coffee not included.

CTTC B4

## Networking Dinner (self-funded ~45 EUR) Wed 20h



#### **Restaurante AMAR**





Join us!



### Getting to the airport





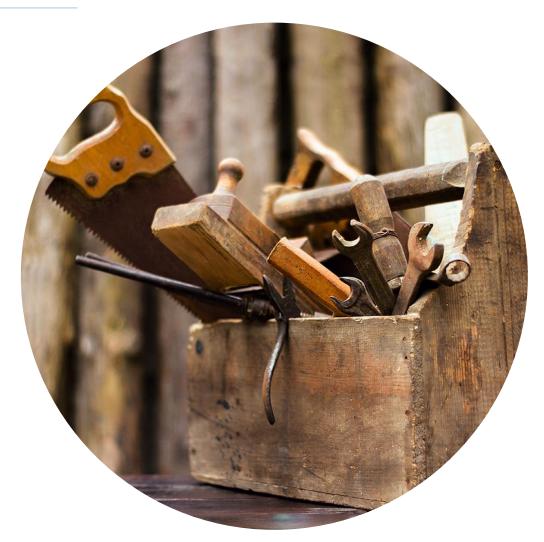
**Recommended timing**: depart from CTTC 90 minutes prior to departure.



### **Hackfest Logistics**

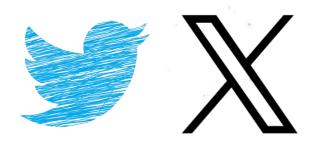


- WIKI: agenda, presentations and Hackfest material
  - https://labs.etsi.org/rep/groups/tfs/-/wikis/TFS-HACKFEST-3
- BYOD: You need your laptop + Linux + K8s environment
  - Follow the instructions in the wiki
  - USB Sticks available with pre-downloaded Hackfest VM
- Slack: Interaction with TeraFlowSDN Users and Devs
  - https://teraflowsdn.slack.com/
  - Invite Link
  - Join the <u>#hackfest3-2023-oct</u> channel



### Follow – Tag – Comment!









**#TFShackfest** 

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#### **Tomorrow**



- A satisfaction survey will be circulated
  - Please take 2 minutes to answer and leave us your comments, your feedback is precious!



- Every completed survey will be awarded with
  - A TeraFlowSDN T-shirt
  - An e-Certificate of participation



### If you enjoy the ETSI TeraFlowSDN experience..



#### Join us!

- Participation is open to ETSI members, non-members, individual contributors and users...
- Free of charge for
  - ETSI Members
  - ME/SME
  - Universities
  - Public Research
  - User and Trade Associations
  - Individuals



Learn <u>how to join</u> or contact <u>TFSsupport@etsi.org</u>

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#### Now:

□ Double check you are <u>registered</u>

☐ Collect your badge



☐ Sign up for the **Networking Dinner** on Wednesday

#### Tomorrow:

- ☐ You fill in the **survey**
- ☐ You collect your **TeraFlowSDN** T-shirt, and...
- ☐ You wear it on Wednesday for the group **picture**!











# Enjoy the Hackfest!

tfs.etsi.org
TFSsupport@etsi.org