



**World Class Standards**

**1st F-Interop 6TiSCH  
Interoperability Event  
*REPORT***

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**14-15 July 2017  
Prague, Czech Republic**

# Overview of the Event



- Event organized by:
  - ETSI (European Telecommunications Standards Institute)
  - LIST (Luxembourg Institute of Science and Technology)



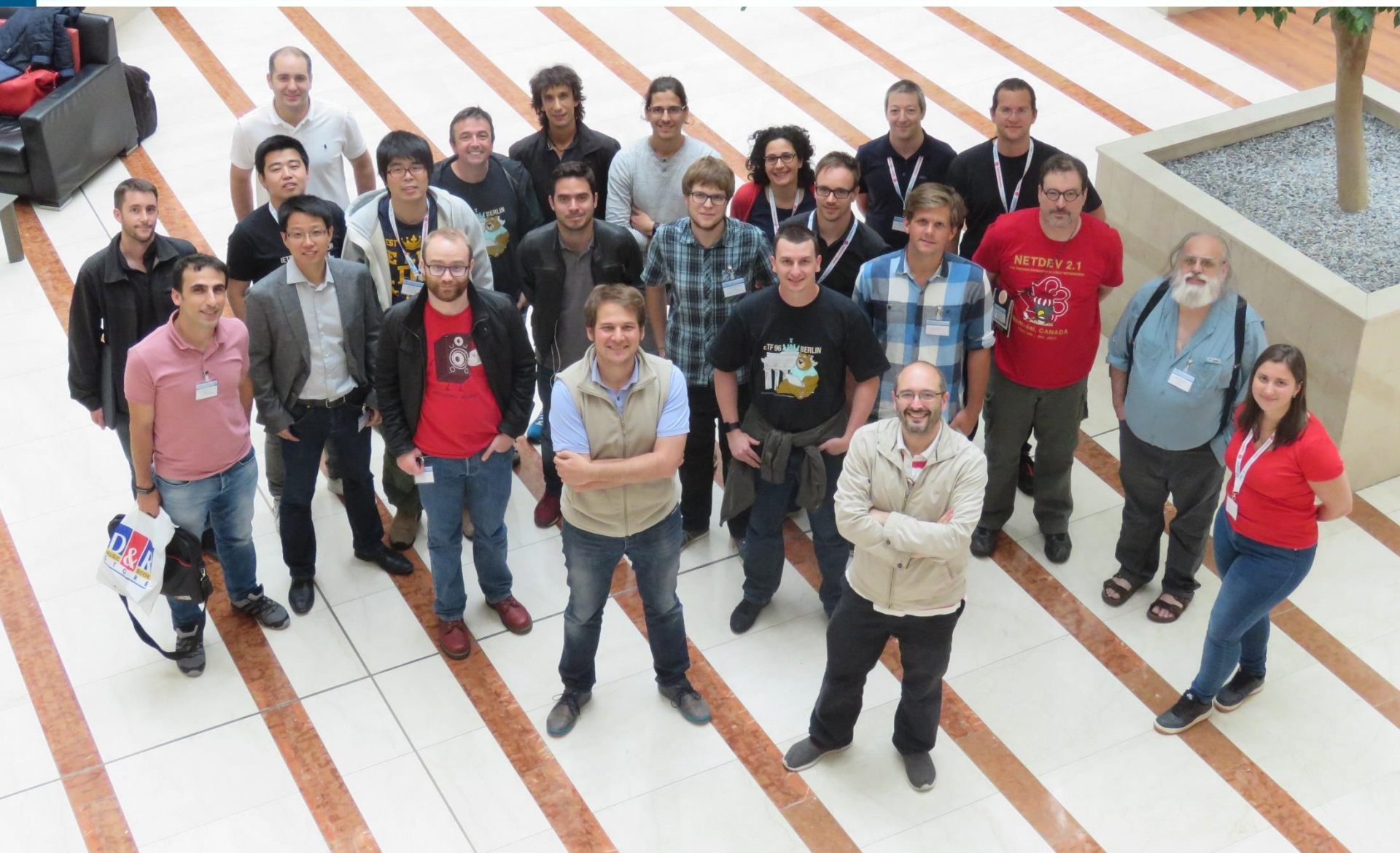
- Supporting Companies/Projects:
  - OpenMote (hardware, [www.openmote.com](http://www.openmote.com))
  - OpenWSN (firmware [www.openwsn.org](http://www.openwsn.org))

- Event sponsored and funded by:
  - European Commission
  - through the H2020 F-Interop project

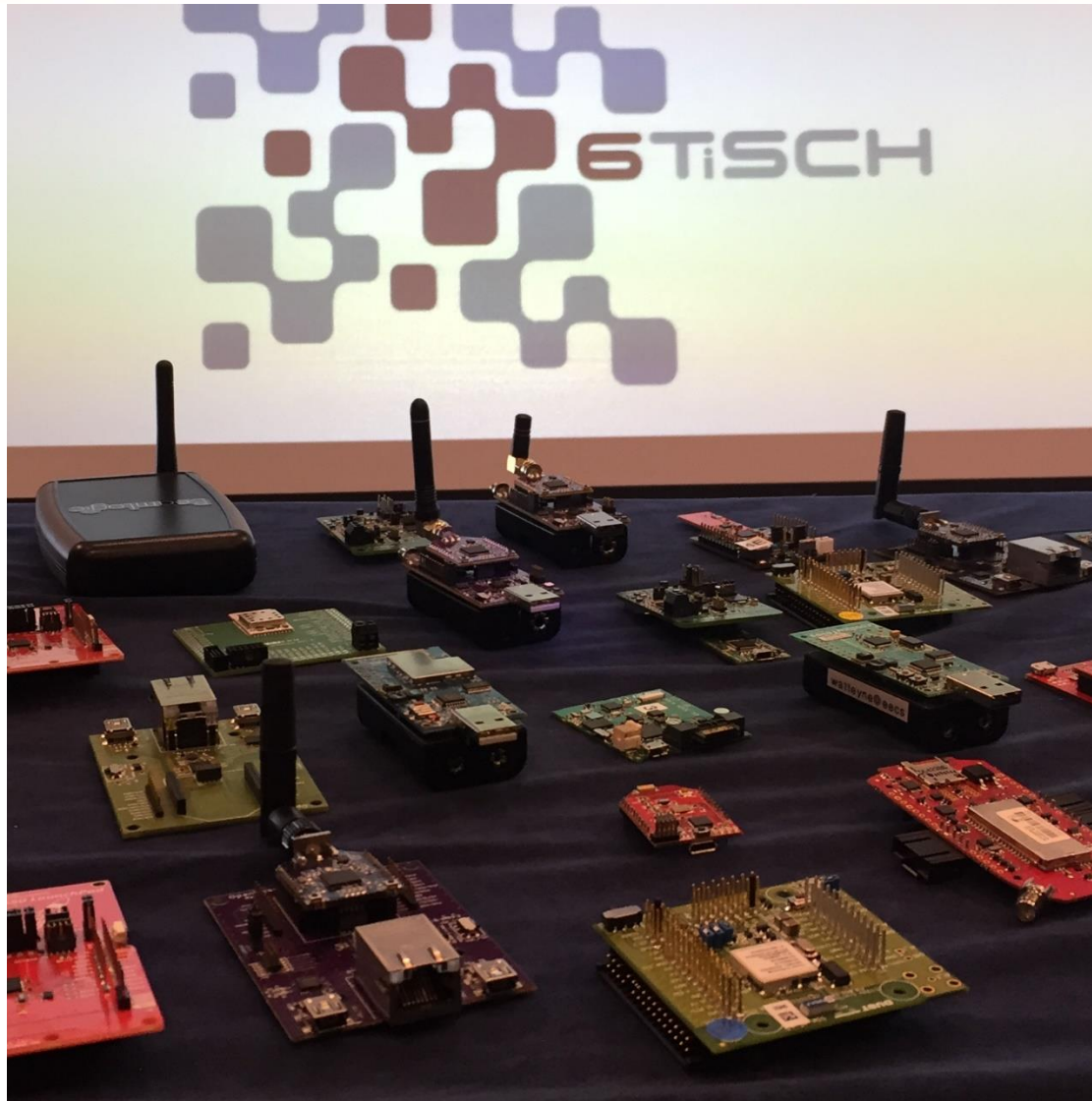


- 16 participating companies
- independent implementations
  - 5x 6TiSCH
  - 6x OSCOAP

# Participating People



# Participating Things 😊



- 1 preparation call
  - ETSI/LIST/Experts group led and organized
  - Collaborating Web conf (GotoMeeting) on 3.7.2017
  - Included Vendor Participants
  
- Test Plan Development
  - 6TiSCH -> Led by Maria Rita Palattella, Tengfei Chang, Malisa Vucinic
  - F-Interop Online Testing Tools -> Remy Leone
  - OSCoAP -> Led by Francesca Palombini

## 6TiSCH Tests description (publicly available)

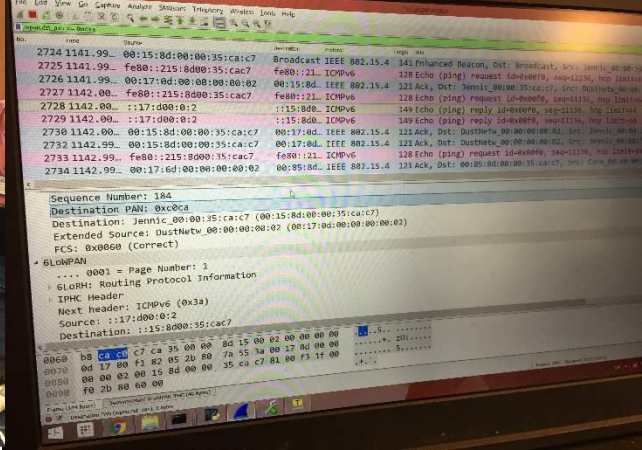
Testing: Synch, Minimal, 6top, L2 security, Secure joining

1	TD_6TiSCH_SYN_01	9	TD_6TiSCH_SECJOIN_01
2	TD_6TiSCH_MINIMAL_01	10	TD_6TiSCH_SECJOIN_02
3	TD_6TiSCH_MINIMAL_02	11	TD_6TiSCH_SECJOIN_03
4	TD_6TiSCH_MINIMAL_03	12	TD_6TiSCH_SECJOIN_04
5	TD_6TiSCH_MINIMAL_04	13	TD_6TiSCH_6P_01
6	TD_6TiSCH_MINIMAL_05	14	TD_6TiSCH_6P_02
7	TD_6TiSCH_MINIMAL_06	15	TD_6TiSCH_6P_03
8	TD_6TiSCH_L2SEC_01	16	TD_6TiSCH_6P_04


# Agenda



F-Interop 6TiSCH Agenda (14-15 JULY 2017)		
Time	Friday 14	Saturday 15
08:00 11:00		TEST SESSIONS
11:00 13:00	SET-UP / REGISTRATION	
13:00 14:00	LUNCH BREAK	LUNCH BREAK
14:00 19:00	TEST SESSIONS	TEST SESSIONS
19:00 19:30	GOING TO THE RESTAURANT	WRAP UP / TEAR-DOWN
	DINNER	

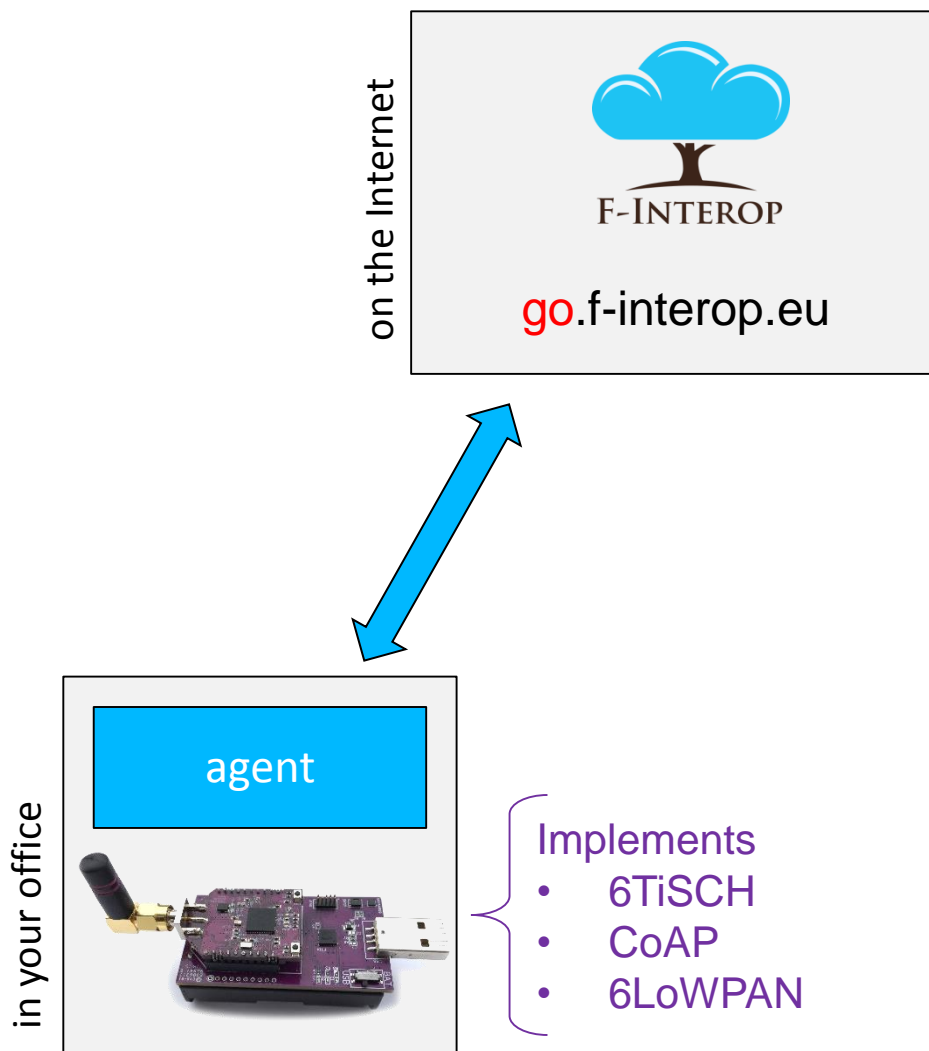




-  The results of each interoperability test session have been recorded in a dedicated web application software: the ETSI Test Report Tool (TRT)
  - After each test execution the interoperability result is agreed among all participants and then recorded
  - After each test session the report is submitted to ETSI

<b>Total</b>	<b>Passed</b>	<b>Failed</b>	<b>Not Applicable</b>
156	85	14	57
	<b>85,9 %</b>	<b>14,1 %</b>	36,5%

# F-Interop Online testing tool



Tests for:

- 6TiSCH
- CoAP
- 6LoWPAN
- LWM2M
- OSCOAP
- 6TiSCH-join
- EDHOC
- LoRaWAN
- *your tests here!*

Implements

- 6TiSCH
- CoAP
- 6LoWPAN



- It works!
- RFC8180: works on all implementations 😊
- Minor suggestions for draft-ietf-6tisch-6top-protocol:
  - In ADD command, if no cell can be reserved:
    - return error code NORES with empty CellList
    - rather than error code SUCCESS with empty CellList
  - remove the text that recommends sending a CLEAR on a generation mismatch
    - rather, discuss "roll-back" policy

## Conclusion

- Great success! Enabled to verify interoperability of RFC8180, and maturity of other drafts
- Progress through implementation and real testing.

## Next plugtests

- Fully remote F-Interop based plugtests in the fall
- Date TBA



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**THANKS!**

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