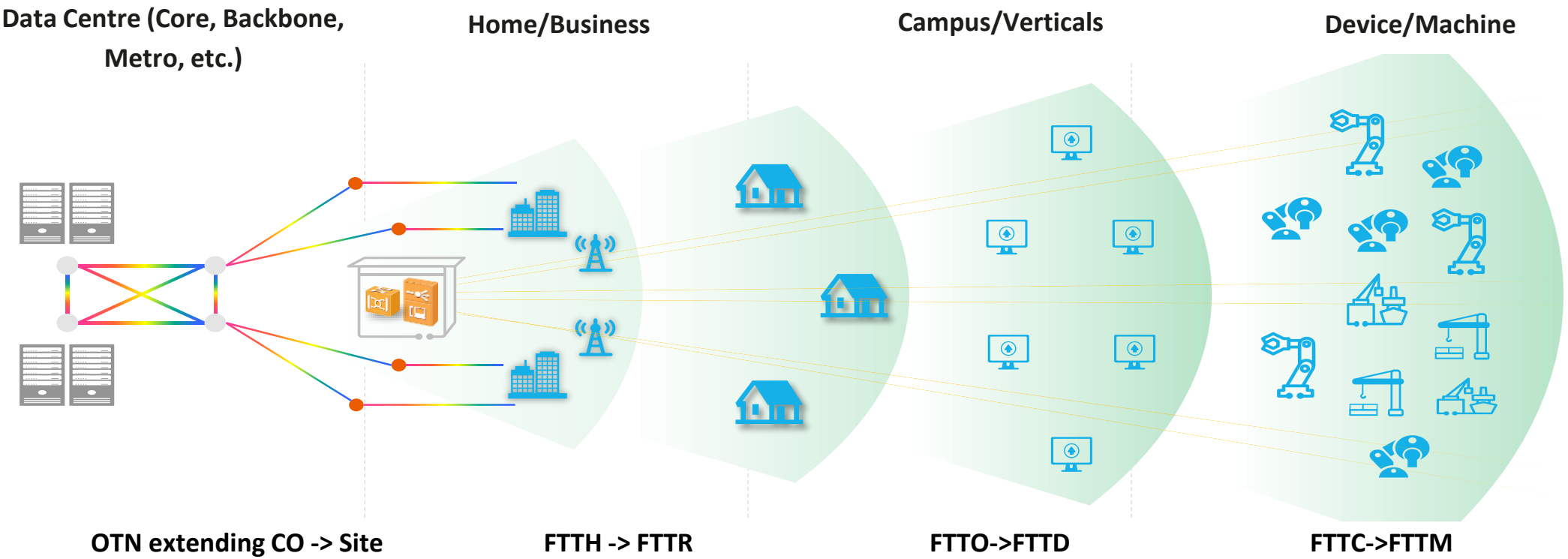
ETSI
The Standards People

Workshop : F5G and Evolution towards F6G

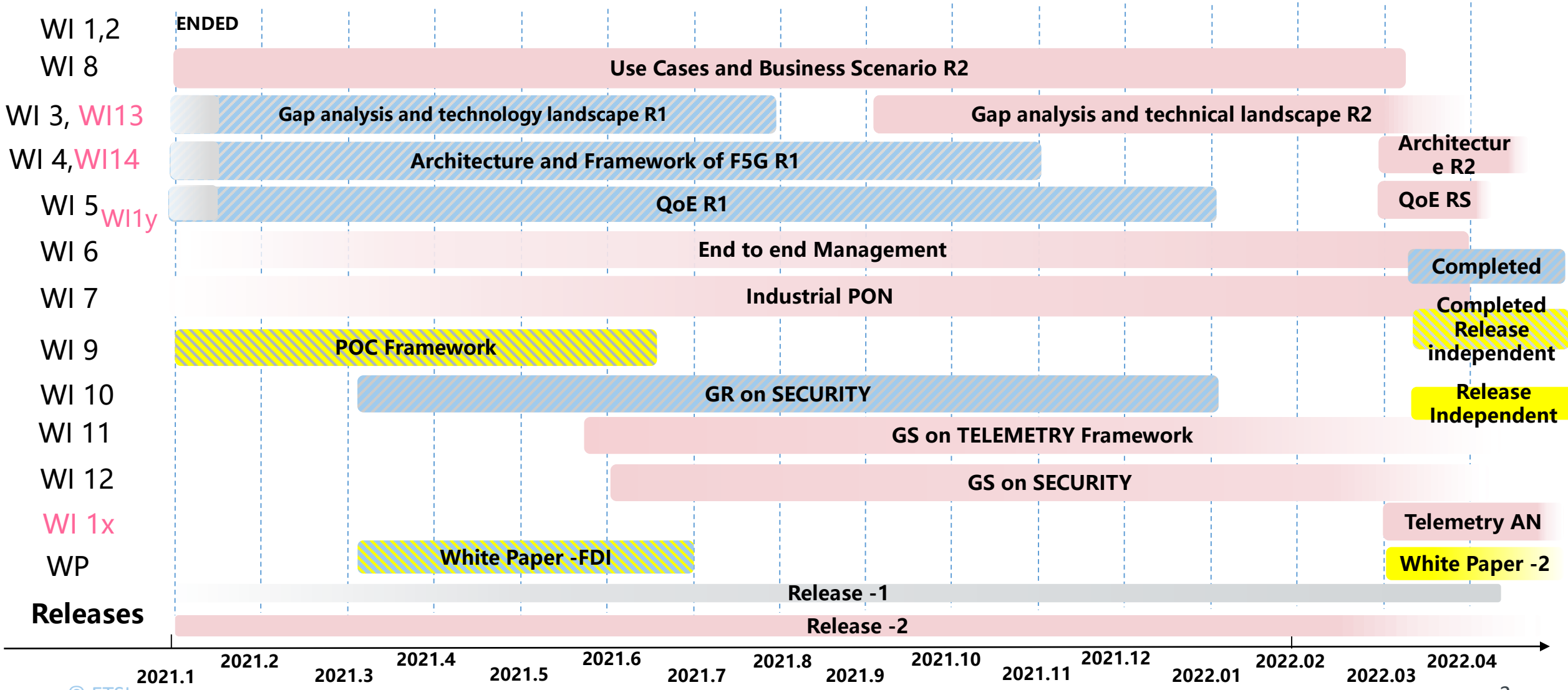
Organiser(s)	Philippe Chanclou, Orange Labs, France Xiang Liu, Huawei Technologies, China
Time & Location	18.09.2022, 09:00 – 12:30, Room Sydney

F5G Vision for Fiber to Everywhere & Everything

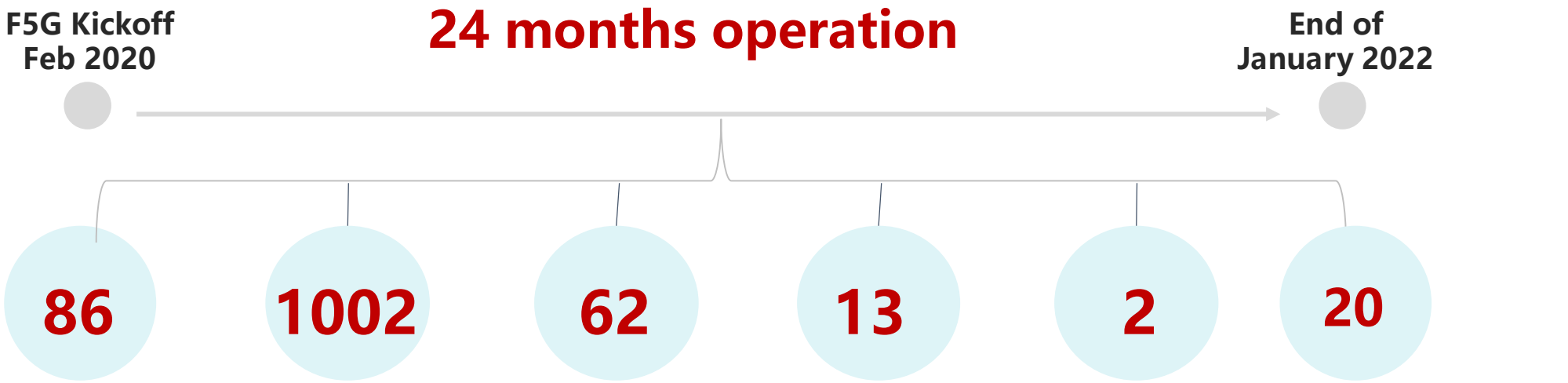


- ✓ Fiber-to-Everywhere to support diverse applications
- ✓ Extending to more end users: 2Home, 2Room, 2Business, 2Comsumer, 2Mobile, 2Device, 2Machine, etc.
- ✓ Reaching closer to end users everywhere: Km -> 100m -> 10m -> 1m
- ✓ Increasing the number of connections: x3 (Rooms), x10 (Desks), x30 (Machines), x100 (Smart cities)

Key Deliverables



ISG F5G Progresses Made in the 1st Phase (2020~2021)



Members & Participants

(starting with 10 founding members in Dec 2019, to 86 –37 Members, 48 Participants and 1 counselor)

Contributions

(2020: 374, and 2021: 628)

Liaison

(including 29 in and 33 out)

Work Items

(7 in 2020 and 6 more in 2021. Now 5 published, and the other 2 are in press, and 2 are in final stage)

White Papers

(both were published, in 2020 and 2021 respectively)

Outreach Activities

(10 in both 2020 and 2021, covering almost all the key events globally)

Members/Participants

When Created in Dec.2019
10 founding members

Now (till November 2021)
86 Members + Participants

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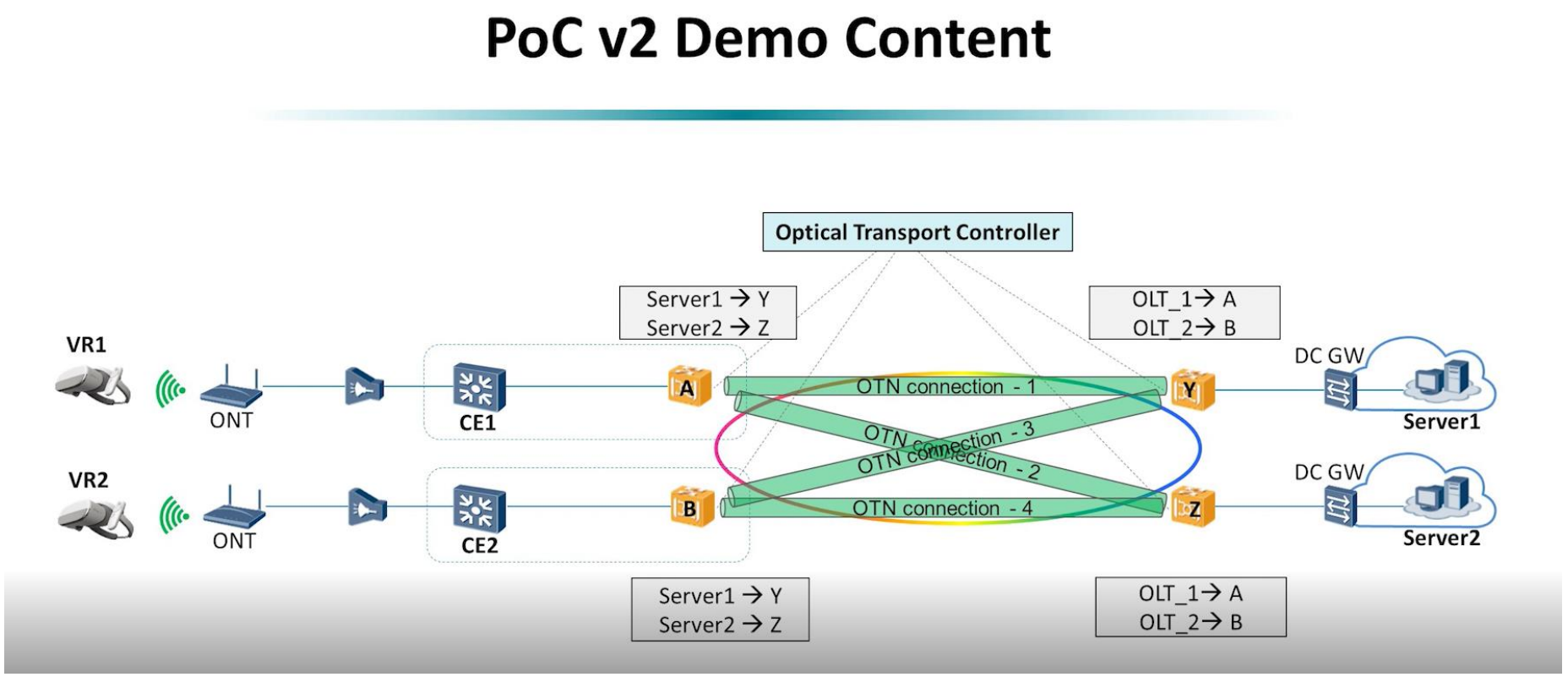
Programme & Speakers 1/2:

Session1: **F5G Applications** 9h00 – 10h30
1. F5G Update: Second Release of Use Cases by the ETSI, **Luca Pesando**, Chair of ETSI ISG-F5G, Telecom Italia, Italy 2. F5G Use Cases for Industrial Automation, **Johannes Fischer**, Fraunhofer HHI, Germany 3. Real-Time Demonstration of Fiber-to-the-Room for >1Gb/s Home Networking, Gaël Simon & **Fabienne Saliou**, Orange, France 4. Optical network evolution oriented at computing force network and metaverse, **Han Li**, China Mobile, China 5. Evolution of the fiber infrastructure for fixed networks, **Adrian Amezcua**, Prysmian, France 6. Dynamic Satellite Optical Communication Networks, **Yongli Zhao**, Beijing University of Posts and Telecommunications, China Panel Discussion Coffee break: 10h30 – 11h00

F5G PoC Demo: Flexible OTN connection to multiple clouds



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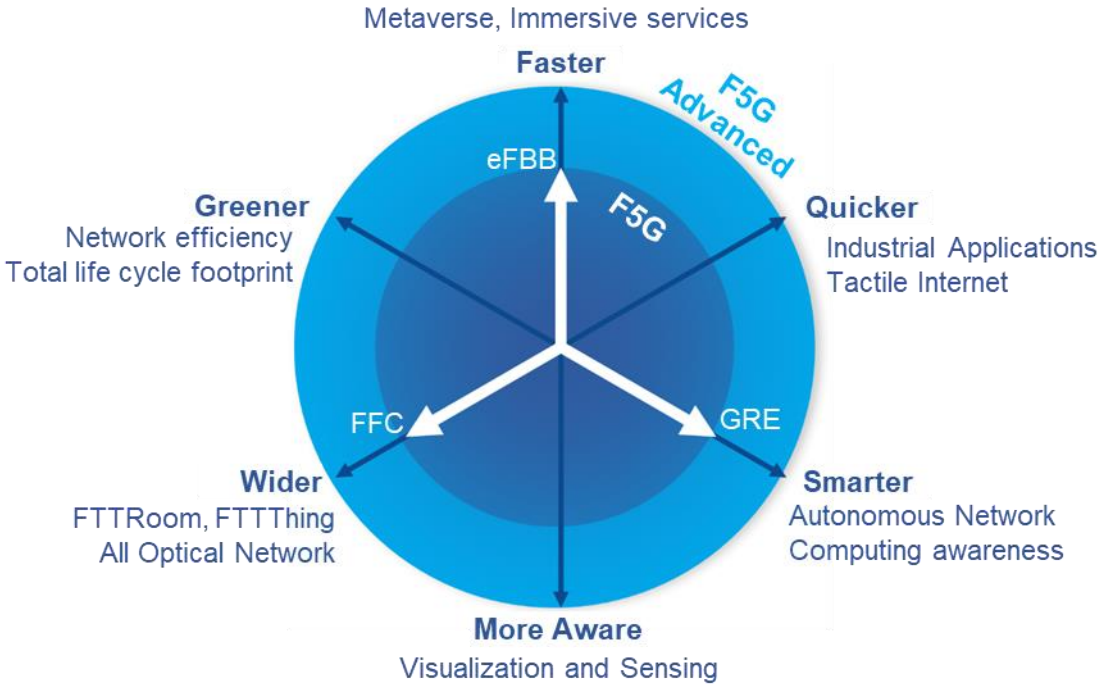
Programme & Speakers 2/2:

Session2: **F5G Opportunities** 11h00 - 12h30
1. Innovative Coherent Point-to-Multipoint Technologies for Aggregation Networks, **David Welch**, Infinera, USA 2. Opportunities and Challenges in the Evolution beyond F5G, **Ed Harstead**, Nokia, USA 3. Update on the Innovative Optical and Wireless Network (IOWN) Initiative For Fixed Networks**, Jun-ichi Kani**, NTT, Japan 4. F5G Advanced & Beyond: Vision, Mission and Pace, **Frank Effenberger**, Vice Chair of ETSI ISG-F5G, Futurewei, USA 5. F6G: Vision, Key Enabling Technologies and Research Topics**, Jean-Luc Beylat**, Nokia, France Panel Discussion Closing (12h30)

ETSI White Paper on “F5G Advanced and Beyond”

The evolution of F5G towards F6G

The six dimensions of F5G-advanced

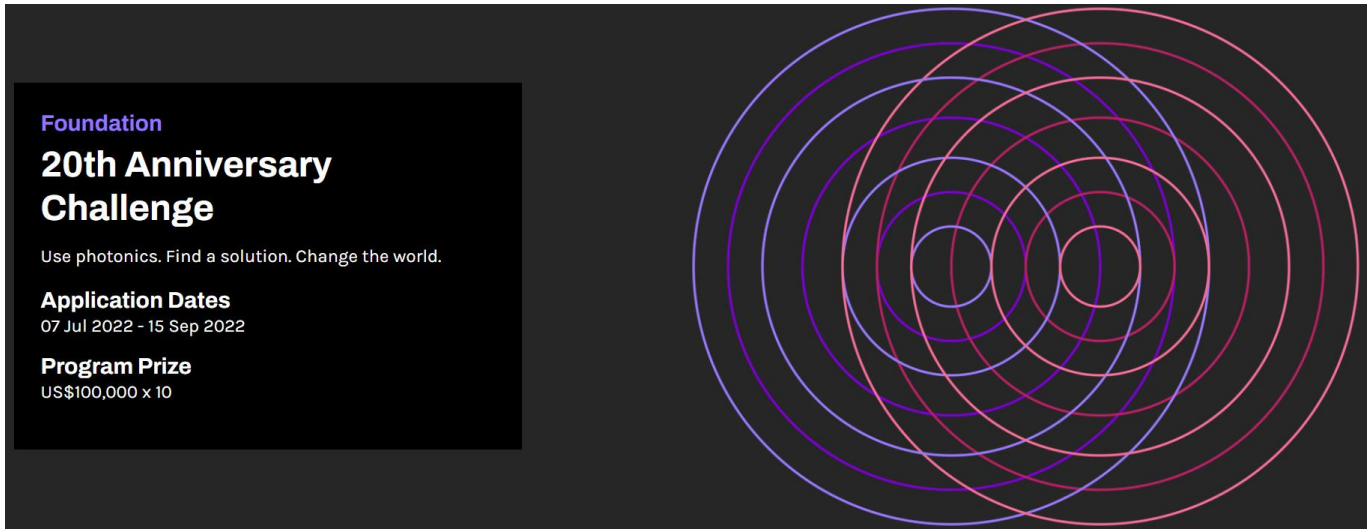


Freely downloadable at:

https://www.etsi.org/images/files/ETSIWhitePapers/ETSI-WP-50-F5G-Advanced-and-Beyond.pdf

Exciting Technical Challenges in the F5G-Advanced Era

https://www.optica.org/en-us/foundation/opportunities/competitions_prizes/20th_anniversary_challenge/



- Developing optical technologies and novel innovations that improve communication bandwidth, integrity and access at scalable levels.
- Enhancing connectivity by finding more efficient, speedy and reliable connectivity between devices, communications infrastructure and the cloud.
- Managing the data traffic and coordination required by the smart cities of the future.
- Balancing the need for resilience and performance with cost and energy efficiency in communication infrastructure.
- Exploring new optical sensing technologies to improve various parameter monitoring capabilities.
- Other proposals exploring innovative, groundbreaking research or technology developments are welcome and encouraged…

Let's work together to contribute to modern humanity and global economy in the F5G-advanced era!