



The voice of EU SMEs



The Standards People

# F5G use cases and the support of verticals

GEORGI BABINOV

# Light Pole in Smart City



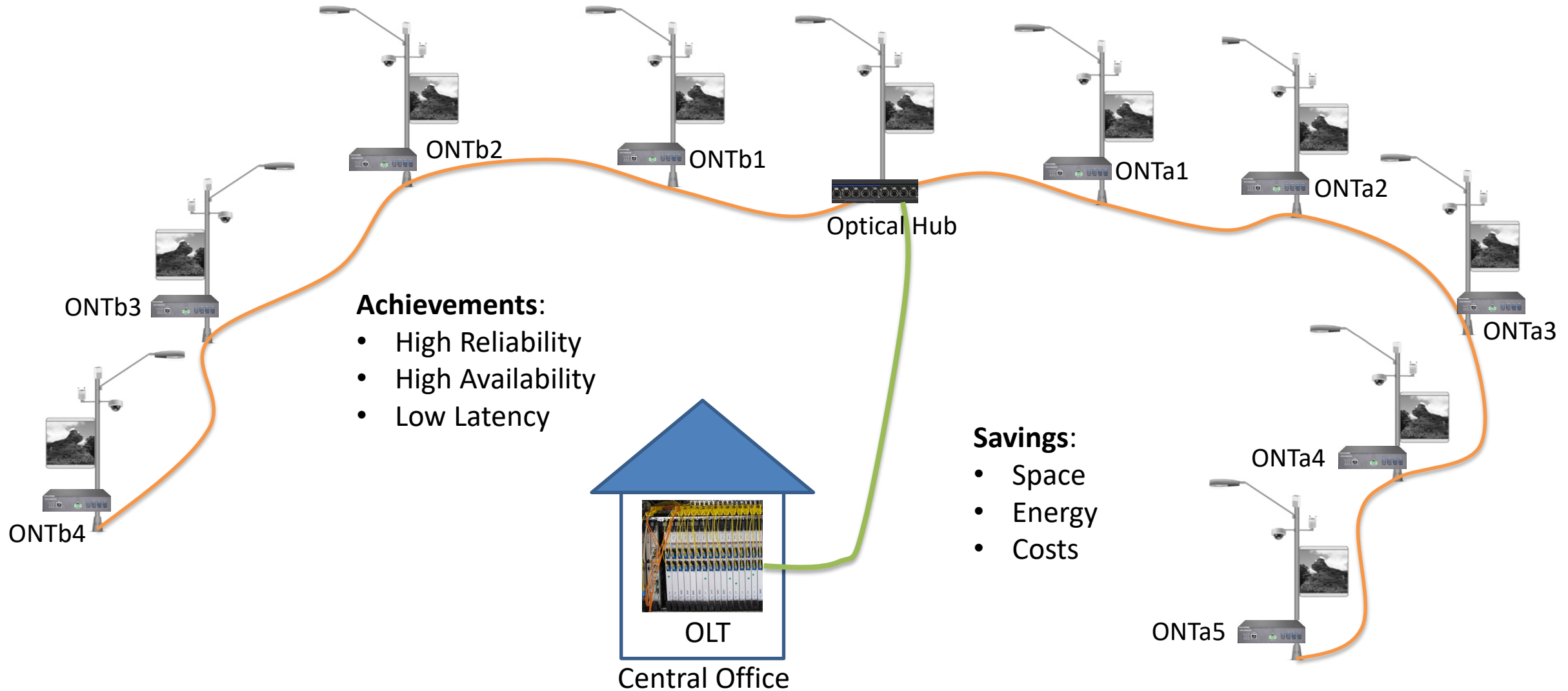
# Light Poles on a street/road



# Light Poles Fibre connection



# F5G Solution Proposal: XG(S) PON







## **Strongly demanded in certain verticals:**

- Government Institutions
- Financial Organizations
  - Banking
  - Financial services
- Medical Organisations
- Big enterprises

## **What will be the User benefits:**

- Guaranteed bandwidth: up to 100G (in 2M steps)
- High link availability: 99.999% (with redundant protection)
- Business security: physical equipment isolation; L1 hard pipe isolation; L2 logical pipe isolation
- Low latency and controlled delay jitter
- Extensive private line connections
- One-hop flexible Cloud access
- Quick provisioning
- Efficient management, operation and maintenance

# High Quality Private Line in Healthcare:



Patients Records  
Imaging Diagnostics  
Templates for chronic conditions  
Reports & Articles

Digital Synchronous Contact  
Tracing

Medical Cloud

Hospital B



Guiding/Learning/Observing

Hospital A

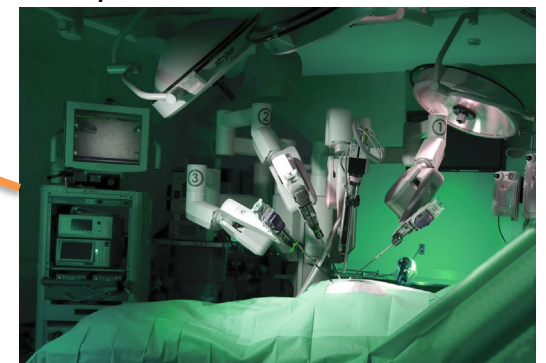


Operating Surgeon

High Quality Private Lines

Remote Surgery

Hospital C



Remotely controlled robot



## Industry 4.0.:

- Large-scale M2M communication
- Big Data Exchange & Analytics
- Autonomous Robots
- IIoT
- Industrial Cloud
- AI
- Additive Manufacturing
- Augmented/Virtual Reality

## Main Industries benefitting :

- Automotive
- Food and beverages
- Semiconductors and electronics
- Pharmaceutical industries
- Packaging

## Industrial PON solved problems:

- Reliable factory intra-plant network, communication among intelligent factories and digital shopfloors
- Supporting of fundamental network and data services for enterprises cloud connecting
- Supporting of abundant interfaces used by diversified equipment in many factories, and associated real-time data transmission

## Identified services for SMEs:

- Internet access with assured bandwidth
- Cloud service
- Secure and reliable VPN service
- Telephony services

## SME private line capabilities:

- Wide geographical coverage
- Low cost with different service packages
- Wireline and wireless connectivity for up to 128 devices
- 99.99% network availability for 1 Gbit/s to 10 Gbit/s

## Identified problems:

- EC defines SMEs to have up to 50 and up to 250 staff headcount, respectively.  
The need for more than 128 connected devices is obvious.
- Low cost is quite an undefined parameter. In the use case SMEs are supposed to share the residential network.  
The scenario where SMEs are sharing premises with big enterprises in Business Centres is not considered.
- It is not well defined how the low cost private line will ensure secure VPN service.

## **SMEs users:**

- Use F5G new features and the enhanced ones as any other businesses
- Reach new markets and customers
- Use the generated new digital services

## **Technological SMEs:**

- Unable to offer leadership due to the required deployment of very significant capital investments
- Many of the disruptive technologies and ideas are coming from SMEs IoT start-ups
- Need to co-operate with big market players
- To be involved in PPP (Public – Private Partnership)

## **What could help SMEs to participate:**

- F5G equipment suppliers diversity
- Open interfaces and data access
- EU authorities requirements for PPP projects calls

Brian Lavallée:

**“The only reason we don’t have fiber connected right to our smartphones is because we would be less mobile”.**

## Thank You!



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