October 11th

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### **TECHNOLOGIES DEMOS**

### Nokia Experience – 14 demos

Visitors can take a demo tour into the network of the future to discover live 5G network, new 5G processing boards, Cloud based architecture and platform, microwave transport, Mobile Edge Computing, network management, IoT applications, cyber security.

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#### 25 Nokia Campus 5G Experimental Network iFUN demo

Come and see an end-to-end 5G call over-the-air in Nokia Paris-Saclay campus.

The call will transmit data over the air to demonstrate the high rate of traffic available. This is the first step of our 5G live network on the campus!

#### 26 5G CV demo in anechoic room

Experience the beamforming in 5G by attending to an end-to-end 5G call over-the-air in one of anechoic chambers developed for 5G.

You'll see a call performing data transfer over the air with high data rate and the ingenious test solution put in place to validate gNB Beam Management when user position is changing during the call.

### 27 BBP ASIK/ABIL 5G Ready boards

Deliver 5G Ready capability with the ASIK controller and the ABIK/ABIL signal processing boards. The BaseBand Hardware team has designed and implemented the ASIK and ABIL boards based on Intel Xeon processor.

In this demo, we will present the ASIK/ABIK ready to run boards as well as the brand new ABIL board. We will run some performance tests to show the performance increase brought by these new boards to support 5G.

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### 28 X-HAUL 5G Ready 10 Gbps Over The Air

Microwave Transport is 5G ready: 10 Gbps throught the air

4.x and 5G are the next evolutionary steps in telecommunication networks and will introduce new capacity, reliability and latency constraints on the transport. Our next-generation Microwave Portfolio Wavence introduces a new family of ultra-broadband transceivers, delivering multi-gigabit, low latency and programmable microwave transport.

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Come see and touch Wavence, which is proving microwave to be a technically competitive, yet economical, option for 5G transport.

#### 29 Cloud RAN architecture: what is it and how does it change the eco-system

With this presentation, you will better understand the motivation, the promises and drivers of the cloud RAN.

You will also get an insight into the technical challenges and learn about the disruptive architectural changes.

#### 30 Tackling complexity for mass network configuration

How multi-layered rule system can help configuring wireless networks safely? The demonstration covers typical activity for Nokia customers:

- deployment of new LTE base stations into existing network
- network reconfiguration combining radio topology abstraction, template propagation and consistency rules
- detection and resolution of network deviations using network audit feature

### **31** MEC Smart cities crowd analytics

The Nokia Mobile Edge Computing (MEC) platform can rapidly process content at the very edge of the mobile network, delivering an experience that is ultra-responsive as latency is significantly reduced.

Demo demonstrates several technical showcases such as critical communication, augmented reality, virtual reality, WiFi AC200i live, indoor tracking and MEC streaming and stadium solution.

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### 32 AirFrame OCP hardware management

AirFrame Open Compute Project (OCP) hardware management provides an augmented reality 3D interface via Microsoft HoloLens glasses to view, monitor and maintain equipment (servers, switches etc.) within data center.

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Demo shows how an Augmented Reality approach with 3D wearable technology allows workers to have access to critical information as they work on servers within a live data center environment, saving time in maintenance operations.

### **33** Fast start to global Internet of Things (IoT)

Current IoT deployments force enterprises who need to work with multiple technology providers to look for a global IoT connectivity that rapidly and with little efforts allows them to realize new revenue streams. In this context, Nokia worldwide IoT network grid ('WING') enables enterprises to get access to a single partner with a reach across geographical borders to connect and manage a range of their IoT applications.

In this demo we will show how, for a number of connected applications, the right technology is dynamically allocated (cellular/non-cellular) and how we can guarantee, for example, SLAs arrange billing or customer care.

### **34** Cyber security and threat intelligence

One main challenge is to develop a fundamentally new approach to cyber defense to help security operation organizations to make the best use of their people, processes and technologies through automation. IoT security monitoring, detection and mitigation are performed by integrated function of our NetGuard Endpoint Security solution.

Demo shows how NetGuard security portfolio allows to secure traditional and cloud-based network architectures and protects end users and Internet of Things (IoT) devices from cyber threats. For the first time, demo combines our NetGuard Endpoint Security solution with our IoT platform called IMPACT (Intelligent Platform for All Connected Things).

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### 35 Nokia AVA – Analytics unleashed

Nokia AVA is a cloud-based platform that combines big data storage, intelligent analytics and extreme automation, allowing operators to move away from traditional reactive network operations to a cognitive approach that predicts faults and solves them rapidly.

Through this demo, we will show analytics capabilities of the Nokia AVA platform, such as the minimization of Drive Testing, the Cognitive Network Optimization and the Predictive Repair, to spot anomalies and predict hardware failures.

### **36** Virtualized box brought to reality

Today almost every household is equipped with a 'box' provided by telecom operators to access various services from home. The box delivers various features such as device management, portal, routing and address translation. In the future, most of the box features will move to the cloud in order to facilitate advanced services enhancement, time to market and cost efficiency.

While simplifying the management of the box features, virtualization will create new complexities and critical aspects such as performance and security.

Nokia enables carriers to fully assess the potential risk areas and secure flawless execution of virtualization projects such as vBOX. The proposed demo will showcase a Virtualized Network Function (vNF) through the connection and management of the Vbox.

### **37** Tactical bubbles for secured communications

Secured communication should be quickly deployed in case of specific event or in case of crisis.

Nokia tactical bubble allows to quickly deploy a compact communication system, back pack type, with needed applications linked to the public network or on fully independent manner. The solution is completed with secured terminals.

The demonstration will show how such independent communication solution can be deployed with MN Advanced Mobile Solution (MN AMS) and GS GEPS Services.

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### **38** Customer Doc with augmented reality helmet

CuDo meets... HoloLens

Do not just read. Experience!

Augmented Documentation Show, powered by Paris-Saclay Customer Documentation team.

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