

## NGNI – Software-based Networks Newsletter

The Fraunhofer FOKUS Business Unit [NGNI – Software-based Networks](#) and the associated Chair for [Next Generation Networks at TU Berlin](#) sporadically send newsletters with brief information about their latest activities.

### [\[GDPR/DSGVO\] consent needed](#)

[GDPR/DSGVO] In order to stay in contact with you and to inform you about NGNI and IIoT news and upcoming events, **we need your consent to receive our email communications by clicking here.**



#Berlin5GWeek 2018

### [Interested in sponsoring and supporting?](#)

The 3rd #Berlin5GWeek will take place from November 12 to 16, 2018 - parallel to the OpenStack Summit in Berlin. Are you interested in sponsoring or supporting?

→ [Contact](#)

→ [www.berlin5gweek.org](http://www.berlin5gweek.org)

Part of the #Berlin5GWeek 2018

## FOKUS FUSECO Forum 2018



### Preparing Industry Verticals for Edge Computing, Network Slicing & 5G

Nov 15 - 16, 2018

Fraunhofer FOKUS, Berlin, Germany

This year's edition of the FOKUS FUSECO Forum continues the very successful international event series in its ninth year, bringing together international key experts from various industry sectors to discuss the opportunities and challenges of emerging 5G-related information and communication technologies, such as cyber-physical systems, new radio access networks, edge computing, network virtualization, analytics, machine learning, and artificial intelligence, within various key industry sectors in the emerging digital world.

→ [www.fuseco-forum.org](http://www.fuseco-forum.org)

→ [Agenda - Day 1](#)

→ [Agenda - Day 2](#)

Part of the #Berlin5GWeek 2018

## Industrial IoT Forum 2018



### Future Industrial Internet - How future standards, technologies, paradigms and applications will shape the Industry 4.0

Nov 14, 2018

Fraunhofer FOKUS, Berlin, Germany

The Industrial IoT Forum will present innovations related to IIoT Programmability and Connectivity (Fog Computing, Edge Intelligence, IEEE TSN, 5G, NB-IoT, LoRa), IIoT Interoperability and Security, and IIoT Use Cases (Condition Monitoring, Digital Twins, Retrofitting, Predictive Maintenance, Smart Grid). Major focus areas include:

- Connectivity & Gateways
- Communication & Standards
- Semantics & Analytics
- Programmability & Orchestration

→ [www.iiot-forum.org](http://www.iiot-forum.org)

→ [Agenda](#)

## Edge Computing Forum 2018



### The Future of Edge Computing

Nov 13, 2018

Fraunhofer FOKUS, Berlin, Germany

At the Edge Computing Forum the latest technological advancements in the areas of Edge Intelligence, Edge Computing, Fog Computing and autonomous Cyber-physical Systems will be presented alongside best practices and experiences gained from recent testbeds and trials. Leading experts from standards-developing organizations, innovators, first movers and, early adopters present their newest achievements and discuss open issues.

- Connectivity
- Real-Time
- Data Optimization
- Smart Devices
- Security

→ [www.ec-forum.org](http://www.ec-forum.org)

→ [Video Impression](#)

## »» NGNI & IIoT NEWS »»» NGNI & IIoT NEWS »»»



Hannover Messe - IIoT News

### Testbed for time-sensitive Industrial Internet of Things (IIoT) applications

Fraunhofer FOKUS unveiled the "Time-Sensitive Networking (TSN) + OPC Unified Architecture (OPC UA)" testbed together with Huawei and 18 other partners. It provides unified real-time Ethernet for manufacturing and control applications that require low latency and adherence to timely reliable communication sequences.

→ [Read more about it](#)

Open5GCore - News about our toolkits

## New functions for Open5GCore Rel. 4



Open5GCore Release 4 (planned for September 2018) represents a genuine 5G core network including the AMF and SMF control plane functions, the support for control-user plane split (using PFCP) and the chaining of user plane functions. Additionally, the new release includes a first implementation of the 5G Service-Based Architecture, enabling the micro-service like functional split. For compatibility reasons, Open5GCore Release 4 will interoperate with legacy LTE radio networks and devices as well as with OpenFlow based switches. For more information, please contact us at [info@open5Gcore.org](mailto:info@open5Gcore.org).

→ [www.open5gcore.org](http://www.open5gcore.org)

5G Playground - News about our toolkits

## Roadmap for worldwide usage of our 5G Playground



5G Playground Berlin has as main targets to increase the knowledge for trials and pilots and to provide a comprehensive infrastructure for verticals as well as for small and medium size enterprise networks to validate their 5G-readiness. 5G Playground aims to follow an agile roadmap including the following deployments: outdoor deployment, nomadic edge network, factory-shop floor environment (all due November 2018), Dense Urban Area and Automotive Communication (due February 2019). For more information on the supported use cases, technologies involved as well as for requests of replication of the 5G Playground at different locations around the world, please contact us at [info@open5Gcore.org](mailto:info@open5Gcore.org)

→ [www.5g-playground.org](http://www.5g-playground.org)

SATis5 Testbed - Project news

## Satellites for 5G



The SATis5 project aims to showcase the advantages of satellite communications as part of the 5G environment, especially underlining the benefits provided for a large number of multimedia delivery and dedicated IoT deployments. The initial deployment using a satellite network simulator is planned for July 2018 while an over-the-air validation aims to start in November 2018 using the capacity kindly offered by SES over ASTRA satellites.

→ [More information](#)

5GENESIS - Project news

## Mobile Broadband trials with 5GENESIS



The Berlin 5G Playground (part of 5G Berlin) will be the basis of the German testbed within the 5G PPP Phase 3. The deployment will concentrate especially on the enhanced Mobile Broadband connectivity as well as on the support of live trials in dense urban areas such as during the Festival of Lights. The 5Genesis project aims to kick-off at 1st of July 2018.

5G-VINNI - Project news

### Prototyping for IoT and smart city use cases

5G-VINNI project aims to provide an open multi-slice architecture addressing the needs of the vertical markets. Within this context Fraunhofer FOKUS will provide the 5G core network for prototyping and piloting aiming to supply the flexibility required for research activities as well as the customization towards the specific massive IoT and smart cities use cases. The 5G-VINNI project aims to kick-off at 1st of July 2018.

5G-Enhance - Project news

### About 5G-Enhance

Fostering the collaboration between Europe and Japan, Fraunhofer FOKUS will act as technology path finder within the 5G testbeds context specifically for the validation of enhanced mobile broadband use cases for 3D remote class for real-time surgery and ad-hoc support for outdoor sport events both based on the dedicated micro-operator concept.

MIDIH - Project news

### MIDIH Call for Proposals

Project MIDIH Manufacturing Industry Digital Innovation Hubs foresees as an eligible activity the provision of financial support to third parties, as a means to achieve its own objectives. Fraunhofer FOKUS is partnering this project as a Competence Center for CPS/IoT. MIDIH Call-1 targets the development of data driven applications, by IT SMEs as technology providers, and experiments in CPS/IoT by Manufacturing SMEs.

The open call aims at complementing functionalities around MIDIH reference architecture and performing experiments in CPS/IOT based on the components provided by the architecture. The experiments must cover one of the three main scenarios: Smart Factory or Smart Product or Smart Supply chain.

The Open Call for Proposals is running until June 29th, 2018.

Also, there will be a webinar on June 14th, 2018.

For further information, see the link below.

→ [More Information](#)

Meet our experts

June 14th 2018, ExCeL, London, Great Britain

**5G World**

M. Emmelmann "Chair of the Session: 5G CORE ENABLING TECHNOLOGIESM", Talk: "Build your own 5G Testbed on your Premises", 5G World, ExCeL, London, Great Britain, June 14th, 2018

→ [More Information](#)

June 20th 2018, Cultural and Congress Centre Cankarjev Dom, Prešernova cesta 10, Ljubljana

**EUCNC 2018**

Marius Corici and all: "SATis5 A Satellite-Terrestrial Testbed Showcasing Different 5G Use Cases"

Satellite solutions for the 5G network of networks

Wednesday, 20 June 2018, 11:00-12:30, E4 hall

→ [More Information](#)

July 9 – 11, 2018, Santa Clara, California, USA

**IEEE 5G World Forum 2018**

Prof. T. Magedanz (Fraunhofer FOKUS/TU Berlin) is co-chair for the "5G for the Industrial Internet of Things (IIoT)" Track.

→ [More information](#)

July 18th 2018, Geneva, Switzerland

**ITU-T IMT-2020/5G**

M. Emmelmann: "Enabling real life open 5G testbeds with the new Open5GCore - Experiences from the 5G Berlin Testbed", ITU-T IMT-2020/5G Workshop and Demo Day 2018, Geneva, Switzerland, July 18th, 2018

→ [More Information](#)

Tuesday 11th and Wednesday 12th September 2018, Hotel Palace Berlin, Berlin

**EPC & Next Generation Core Networks World Forum**

M. Corici: Evolution of 4G into 5G – Seamless migration and challenges

Visit the Fraunhofer FOKUS 5G Playground equipped with its new Open5GCore on day two!

Tuesday 11th and Wednesday 12th September 2018, Hotel Palace Berlin, Berlin

→ [More Information](#)

→ [Informations on the 5G Playground](#)

October 19, 2018, Marrakesh, Marocco

### Global IEEE 5G-IoT Summit 2018

Prof. T. Magedanz (Fraunhofer FOKUS/TU Berlin) is speaker: "Open 5G-ready City Testbeds - Experiences from the Berlin 5G Playground", Co-located with WINCOM 2018

→ [More Information](#)



Sincerely Yours,

Prof. Dr. Thomas Magedanz and the Fraunhofer FOKUS NGNI and TU Berlin / AV teams

## Contact

### NGNI Webteam

For feedback please contact the NGNI webteam

→ [send Email](#)

© 2018 Fraunhofer Institute for Open Communication Systems FOKUS

Follow us:



[CONTACT](#)

[PUBLISHING NOTES](#)

[DATA PROTECTION POLICY](#)

Fraunhofer is Europe's largest application-oriented research organization. Our research efforts are geared entirely to people's needs: health, security, communication, energy and the environment. As a result, the work undertaken by our researchers and developers has a significant impact on people's lives. We are creative. We shape technology. We design products. We improve methods and techniques. We open up new vistas. In short, we forge the future.

The Fraunhofer Institute for Open Communication Systems  
FOKUS

Unsubscribe from our newsletter service.

→ [Unsubscribe.](#)

Kaiserin-Augusta-Allee 31

10589 Berlin

Phone +49 30 3463-7000

[info@fokus.fraunhofer.de](mailto:info@fokus.fraunhofer.de)

is a constituent entity of the Fraunhofer Gesellschaft, and as such has no separate legal status.

Fraunhofer-Gesellschaft

zur Förderung der angewandten Forschung e.V.

Hansastraße 27 c

80686 München

[www.fraunhofer.de](http://www.fraunhofer.de)

[→ Tell a friend](#)

Unsubscribe from all of our newsletter services:

Please consider, that you will not receive any further mails from any Fraunhofer institution after your unsubscription.

[→ Unsubscribe from all of our newsletter.](#)

**Copyright:**

Title: Matthias Heyde | Article: Fraunhofer FOKUS, pixelkleks/Aobe Stock, Zapp2Photo/shutterstock, gonin/shutterstock, Huawei, Fraunhofer FOKUS, SATis5, 5Genesis, Tom Maelsa