6th FOKUS FUSECO Forum

Nov. 5–6, 2015 – Berlin, Germany

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DAY 1 - Thursday, NOV 5, 2015 - Tutorials & Workshops

8:30 - 10:00 REGISTRATION

TUTORIALS A & B RUN CONCURRENTLY

TUTORIAL A - 10:00 - 13:00

Network Evolution towards the 5G Environment: an Overview of Use Cases and Technology (Radio, Core, Management, NFV and SDN)

With the evolution towards 5G, the mobile communication ecosystem is foreseen to adopt a new approach aiming at better subscriber service as well as to attract other markets such as industry (Industry 4.0/Industrial Internet) and cloud manufacturing, automotive, safety and security and massive M2M deployments.

TUTORIAL B - 10:00 - 13:00

A detailed Perspective on IoT, M2M, Data processing and Cyber-physical Systems required for Industrie 4.0/Industrial Internet and Smart Cities

The evolution of the Machine-to-Machine (M2M) communication towards Internet of Thins (IoT) is on the way. The number of smart objects ranging from home appliances, infrastructure, transportation, and up to industry 4.0 domain are increasingly connected with the public or private cloud platforms over various type of communication channels. The M2M protocols and technologies focus mainly on the connectivity aspects and the management of the end devices/ objects.

LUNCH BREAK / DEMOS 13:00 - 13:45

WORKSHOP 1 - 13:45 - 17:15
Towards the 5G Environment

Chairs: Giuseppe Carella, TU Berlin / Fraunhofer FOKUS, Germany

Dr. Marius Corici, Fraunhofer FOKUS, Germany

WORKSHOP 2 - 13:45 - 17:15
ICT for Industrie 4.0/Industrial Internet

Chair: Dr. Florian Schreiner, Fraunhofer FOKUS, Germany

WORKSHOP 3 - 13:45 - 17:15
The Evolution of IoT/M2M Platforms and Services for various Vertical Domains

Chair: Dr. Adel Al-Hezmi, Fraunhofer FOKUS, Germany

WORKSHOP 1 | SESSION 1 - 13:45 - 15:15
Radio and Core Network

Chairs: Dr. Marius Corici, Fraunhofer FOKUS, Germany
Antonio Manzalini, Telecom Italia, Italy

Satellite-terrestrial integration within the 5G environment
Alexander Geurtz, SES, Luxembourg

5G Backhauling
Luis Miguel Contreras Murillo, Telefonica, Spain

Theme: Generalized Orchestration
Sławomir Kukliński, Orange Lab, Poland

What Mobile Core Network Architecture Concepts will have an impact on 5G Evolution?
Jonathan Hart, BT Technology, Service & Operations, UK

Theme: 5G Core Networks
Hans Einsiedler on behalf of the EU-Commission and the 5G-PPP Association, Germany

Bringing Software-Defined Technologies into the 5G Arena
Prof. Raymond Knopp, Mobile Communication Department, Eurecom, France

Service differentiation in mobile networks with NFV, SDN and MEC
Adam MacHale, CTO Mobility EMEAR, France

IoT Security Requirements and Solutions
Daniel Godde, Ericsson GmbH, Germany

The Smart Emerging Economy, empowered through tech-laboration
Hugo Van Zyl, Telkom, South Afrika

The business impact of FIWARE and the startups
Alexander Berlin, peacefulfish, Germany

WORKSHOP 2 | SESSION 1 - 13:45 - 15:15
Information and Communication Technologies for Industrie 4.0/Industrial Internet and Factories of the Future

How IoE accelerates Industrie 4.0 / Industrial Internet
Dr. Bernd Heinrichs, Managing Director IoE EMEAR & openBerlin IoE Innovation Center, Cisco, Germany

The Architecture of the Industrial Internet
Stephen J. Mellor, Chief Technical Officer for the IIC, Australia

Industrial Internet of Things: Unleashing the Potential of Connected Products and Services. Findings from the World Economic Forum report
Bodo Körber, Managing Director at Accenture Digital Germany, Germany

Industry 4.0 - from the vision to the major trend of the economy
Wolfgang Dorst, Division Manager Industrie 4.0, BITKOM, Germany

WORKSHOP 3 | SESSION 1 - 13:45 - 15:15
The M2M and IoT Platforms as key Enabler for Smart Solutions and Applications

Chair: Philippe Houtteman, Ooredoo, Qatar

M2M Innovation in Middle East
Philippe Houtteman, Ooredoo, Qatar

oneM2M Standard Status and Key Features of next Release
Dr. Wolfgang Granzow, Senior Director Technology, Qualcomm CDMA Technologies GmbH, Germany

COFFEE BREAK / DEMOS 15:15 - 15:45

WORKSHOP 1 | SESSION 2 - 15:45 - 17:15
Virtualization

Chairs: Giuseppe Carella, TU Berlin / Fraunhofer FOKUS,

Prof. Dr. Aki Nakao, 5G Japan Promotion Chair, Tokyo University, Japan

Opportunities and Challenges in Software-defined 5G Network Architectures and emerging Agile Eco Systems
Prof. Dr. Thomas Michael Bohnert, ZHAW, Switzerland

OPOSSUM: A real implementation of Software defined infrastructure
Martin Herbst, Multikom Austria Telekom GmbH, Austria

Theme: End-to-End SDN: A Unified Framework to Empower Diverse Services
Eiji Kawai, NICT, Japan

Cloud Browser RTEs and APIs
Alexandra Mikityuk, Deutsche Telekom AG, Germany

Theme: Telco Business in the Era of SDN and NFV
Lauri Isotalo, Elisa Corp., Finnland

Orchestration of an EPC-as-a-Service
Simone Ruffino, Senior Network Engineer at Telecom Italia

The application of Machine Learning and Data Analytics to Network Management for large scale networks
Robert Mullins, TSSG, Ireland

Theme: LOLTEL: A mostly open-source based fully virtualised experimental MVNO. What we did last year and what we will do next year, and how you can do it too.
Werner Eriksen, Telenor Digital, Norway

perspective
Gus Desbarats, Alloy Chairman, UK

reThink: Disruptive Communication Infrastructure for Smart Cities
Joachim Schonowski, Senior Innovation and Project Manager, T-Labs, Deutsche Telekom AG, Germany

WORKSHOP 2 | SESSION 2 - 15:45 - 17:15
ICT enablers for Industie 4.0 / Factories of the future

Industrial ICT Infrastructure Boosting New Business Models and Processes
Edwin Sutedjo, Nokia, Germany

Wireless Automation for Advanced Manufacturing/ Industry 4.0
Dr. Lutz Rauchhaupt, ifak e.V., Germany

Industrie 4.0 Application Monitoring and Control
Eckhard Hohwieler, Fraunhofer IPK, Germany

The BERCOM Project - Blueprint for Pan-European Resilient Critical Infrastructures based on evolved LTE COMmunications
Prof. Dr.-Ing. Christian Wietfeld, TU Dortmund, Germany

Cloud Fieldbus: Connect Industry to Internet

WORKSHOP 3 | SESSION 2 - 15:45 - 17:15
Innovative M2M/IoT Solutions and Applications

Chair: Dr.-Ing. Adel Al-Hezmi, Fraunhofer FOKUS, Germany

SmartSantander: Experimenting on a Future Internet enabled Smart City
Luis Sanchez, SmartSantander WP3 Leader, University of Cantabria, Spain

The end of M2M and the rise of Enterprise IoT
Emil Berthelsen, Machina Research, UK

IoT and 5G, a perspective
Roberto Minerva; Telecom Italia, Italy

Design and IOT, from both and 'object' and a 'service'

PANEL DISCUSSIONS 17:10 - 18:00

WORKSHOP 1 | PANEL DISCUSSION 17:10 - 18:00
Opportunities and Challenges in Software-defined 5G Network Architectures and emerging Agile Eco Systems
Chair: Prof. Dr. Thomas Michael Bohnert, ZHAW, Switzerland

- Alexander Geurtz, SES, Luxembourg
- Luis Miguel Contreras Murillo, Telefonica, Spain
- Sławomir Kukliński, Orange Lab, Poland
- Jonathan Hart, BT Technology, Service & Operations, UK
- Hans Einsiedler, T-Labs,Deutsche Telekom, Germany
- Prof. Raymond Knopp, Mobile Communication Department, Eurecom, France
- Adam MacHale, CTO Mobility EMEAR, France
- Martin Herbst, Multikom Austria Telekom GmbH, Austria
- Eiji Kawai, NICT, Japan
- Alexandra Mikityuk, Deutsche Telekom AG, Germany
- Lauri Isotalo, Elisa Corp., Finnland
- Simone Ruffino, Senior Network Engineer at Telecom Italia
- Robert Mullins, TSSG, Ireland
- Werner Eriksen, Telenor Digital, Norway

WORKSHOP 2 | PANEL DISCUSSION 17:10 - 18:00
Panel Industrie 4.0/Industrial Internet

- Dr. Bernd Heinrichs, Managing Director IoE EMEAR & openBerlin IoE Innovation Center, Cisco, Germany
- Stephen J. Mellor, Chief Technical Officer for the IIC, Australia
- Bodo Körber, Managing Director at Accenture Digital Germany, Germany
- Edwin Sutedjo, Nokia, Germany
- Wolfgang Dorst, Division Manager Industrie 4.0, BITKOM, Germany
- Dr. Lutz Rauchhaupt, ifak e.V., Germany
- Eckhard Hohwieler, Fraunhofer IPK, Germany
- Prof. Dr.-Ing. Christian Wietfeld, TU Dortmund, Germany

WORKSHOP 3 | PANEL DISCUSSION 17:10 - 18:00
M2M Panel – M2M/IoT challenges and opportunities
Chair: Emil Berthelsen, Machina Research, UK

- Roberto Minerva, Telekom Italy, Italy
- Paul Conway, Engineering Director (EMEA), B+B Smartworx, USA
- Philippe Houtteman, Ooredoo, Qatar
- Daniel Godde, Ericsson GmbH, Germany
- Mourad Mouhouty, Sales Manager IoT/M2M at Teleena (MVNO), Netherlands
- Joachim Schonowski, Senior Innovation and Project Manager, T-Labs, Deutsche Telekom AG, Germany
- Adam Kapovits, Programme Manager, Eurescom GmbH, Germany

Friday, Nov 6, 2015 - Conference

9:00-9:30 WELCOME
Prof. Dr. Thomas Magedanz, Director of NGNI
Competence Center NGNI, Fraunhofer FOKUS/TU Berlin, Germany

9:30-11:00 SESSION 1

Evolution Path 5G: Radio, Core and Management Networks

Chair (PDF): Prof. Dr. Aki Nakao, 5G Japan Promotion Chair, Tokyo University, Japan

True challenges to "5G" – How can "5G" adapt to diverse requirements?
Dr. Fumio Watanabe, KDDI R&D Laboratories Inc., Chairman of the Board of Directors, Japan

5G in Europe
Hans Einsiedler on behalf of the EU-Commission and the 5G-PPP Association, Germany

5G Activities at Deutsche Telekom
Franz Seiser, Deutsche Telekom, Germany

5G Visions from Vodafone
Walter Häffner, Vodafone, Germany

Panel: 5G Revolution or Evolution
Dr. Fumio Watanabe, KDDI R&D Laboratories Inc., Chairman of the Board of Directors, Japan
Hans Einsiedler on behalf of the EU-Commission and the 5G-PPP Association, Germany
Franz Seiser, Deutsche Telekom, Germany
Walter Häffner, Vodafone, Germany
Jonathan Hart, BT, UK

COFFEE BREAK / DEMOS 11:00 - 11:30

11:30-13:00 SESSION 2

SDN and NFV Perspective

Chair: Prof. Paul Kühn, University of Stuttgart, Germany

An overview from Softwarization to 5G: Challenges, Risks and Opportunities
Antonio Manzalini, Telecom Italia, Italy

Moving NFV beyond trials
Bruno Chatras, Orange, France

Operational, organizational and business challenges for network operators in the context of SDN and NFV
Luis Miguel Contreras Murillo, Telefonica, Spain

Open Edge Computing – Driving New Services for 5G
Dr. Rolf Schuster, Head of Partner Innovation Centres, Vodafone Group, Germany

Panel: Experiences from PoCs and the role of SDN in 5G
Antonio Manzalini, Telecom Italia, Italy
Bruno Chatras, Orange, France
Luis Miguel Contreras Murillo, Telefonica, Spain
Dr. Rolf Schuster, Head of Partner Innovation Centres, Vodafone Group, Germany
Christian Schäfer, 7 Principles, Germany
Alberto Diez, Core Network Dynamics GmbH, Germany

LUNCH BREAK / DEMOS 13:00 - 13:45

13:45-15:15 SESSION 3

M2M, IoT and Data as Key Communication Drivers around the World

Chair: Serge Fdida, Lip 6, France

IOT and 5G
Henning Schulzrinne, Columbia Univ, USA

Transformation to Digital Business Strategies and Technology Choices
Ben Younes Khaled, OOREDOO Tunisia

Smart City Initiative in Indonesia
Dr. Andri Qiantori, Senior Manager, Innovation & Design Centre, PT. Telkomunikasi Indonesia

Service Development and Delivery
Hugo Van Zyl, Telkom, South Afrika

Panel: Best Practices in M2M Applications
Henning Schulzrinne, Columbia University, USA
Ben Younes Khaled, OOREDOO Tunisia
Hugo Van Zyl, Telkom, South Afrika
Dr. Andri Qiantori, Senior Manager, Innovation & Design Centre, PT. Telkomunikasi Indonesia
Sebastien Ziegler, President of the IoT Forum and/or Vice-Chairman of the IEEE Subcom on the IoT, Switzerland
Roberto Minerva, IOT IEEE, Telekom Italia, Italy

COFFEE BREAK / DEMOS 15:15 - 15:45

15:45-17:15 SESSION 4

Industrie 4.0: Cyber-physical Systems Innovation-driving Factories of the Future

Chair: Hans Schotten, University of Kaiserslautern, Germany

Value Generation Options in Industrial Internet – An Operator Perspective
Ernst-Joachim Steffens, Deutsche Telekom, Germany

Industrial Internet Perspectives – Visions from a Global Player
Dr. Stefan Bungart, CISCO, USA

Automotive Requirements for Future Mobile Networks
Thorsten Hehn,Volkswagen, Germany

Panel: Best Practices in Smart Cities and Industrie 4.0 Communications
Ernst-Joachim Steffens, Deutsche Telekom, Germany
Dr. Stefan Bungart, Head of Industrial Solutions, CISCO, Germany
Thorsten Hehn,Volkswagen, Germany

CLOSING AND FAREWELL 17:15 - 17:30