NGMN Alliance Update

NGMN Alliance

20th October 2016

3GPP PCG#37

London, UK

Overview

- New NGMN Board and Chairman
- Update on NGMN Partnership and Co-operations
- Focus areas und Flagship projects
- Deliverables and activities
- Next steps, major milestones ahead of us on deliverables
- Events

New NGMN Board and Chairman

- New Board appointed for 2016-2018 at Annual General Meeting
- New NGMN Chairman elected for 2016-2018: Johan Wibergh, Global CTO, Vodafone
- Priorities for NGMN stated by J. Wibergh at NGMN Industry Conference & Exhibition 12th October 2016:
  - Set the foundations for making 5G a success
  - Provide concrete guidance into the 3GPP 5G work. One global standard based on NGMN requirements
  - Focus on the key topics of the industry through 5G work programme
  - Strengthen NGMN Alliance's global reach

The Global Partnership of the NGMN Alliance

ngmn
the engine of broadband wireless innovation

Members: NGMN Operators with over 200 networks serving more than 60 % of all global customers,…

at&t, Bell, BT, 中国移动通信 CHINA MOBILE, 中華電信 Chunghwa Telecom, T-, kpn, kt, docomo, HKT, LIBERTY GLOBAL, ligado NETWORKS, ooredoo, orange, Singtel, SK telecom, Sprint, T-Mobile, TELE2, TIM, Telefonica, Telia Company, TELEKOM AUSTRIA GROUP, TELUS, TURKCELL, U.S. Cellular, verizon, VimpelCom, vodafone

Contributors: NGMN telco vendors, software companies and many other leading industry players contributing and driving the advancement of future mobile network technologies, …

amdocs, Amphenol, Anritsu, Apple, APPLIED COMMUNICATION SCIENCES, BROCADE, CISCO, cohere technologies, COMMSCOPE, Commonwealth Licensing Services, 大唐电信科技产业集团, ERICSSON, facebook, FIH, FUJITSU, gemalto, Giesecke & Devrient, HUAWEI, intel, INTERDIGITAL, JUNIPER NETWORKS, KATHREIN, KEYSIGHT TECHNOLOGIES, lenovo, LG Electronics, MEDIATEK, Microsoft, MOBI 摩比, MPEGLA, NEC, NOKIA, P3, QUALCOMM, RF DSP Multiplying the Spectrum, ROHDE&SCHWARZ, Rosenberger, SAMSUNG, SiBEAM, SISVEL, smoptics, SPINNER, SPIRENT Communications, VECTIS, VIA LICENSING, ZTE

Advisors: NGMN research institutes contributing substantially to mid- to long-term innovation,….

RWTH AACHEN UNIVERSITY, 中央研究院 Academia Sinica, ASTRI, EURECOM, Fraunhofer Heinrich Hertz Institute, III, 工業技術研究院 Industrial Technology Research Institute, Institute for Infocomm Research A*STAR, 國立中興大學, 國立中山大學, NYU POLYTECHNIC SCHOOL OF ENGINEERING, 세종대학교 SEJONG UNIVERSITY, 서울대학교 SEOUL NATIONAL UNIVERSITY, TNO innovation for life, TTA, Technische Universität Braunschweig, TECHNISCHE UNIVERSITÄT DARMSTADT, TECHNISCHE UNIVERSITÄT DRESDEN, TU/e, UNIVERSITÄT DUISBURG ESSEN, UNIKASSEL VERSITÄT, University of Stuttgart Germany, UNIVERSITY OF TORONTO, UNIVERSITY OF WATERLOO

NGMN Co-operation Partners

5G Work-Programme: Three Key Focus Areas

Guideline to ensure relevance of deliverables and work:

- Concrete requirements, impactful
- Fast, flexible
- Globally aligned, against fragmentation
- Addressing business needs

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Flagship Projects Launched in Each Focus Area

Eco-system Building and Interaction

- **IPR Forum:** SEP declarations / assessment, Patent Pools
- **Spectrum:** Candidate bands, spectrum requirements
- **Vertical Industries + V2X:**
  - V2X: Operator alignment on V2X, co-operation with automotive industry, evaluation/promotion V2X
  - Selected other verticals

Guidance to SDOs and the Wider Industry

- **E2E Architecture:** E2E Architecture framework/ “big picture”, global alignment perspective
- **Security:** Finalisation deliverable covering MEC, low latency use cases, user experience
- **Operations:** 5G Network & Service Management and Orchestration

Evaluation Test and Proof of Concept Results

- **5G Trial & Testing Initiative:** Definition proof points, evaluation and benchmarking, reporting 5G progress and promoting options

5G Work-Programme Deliverables and Activities since June 2016

- **End-to-End Architecture**:
  - Update on Network Slicing Concept to **3GPP SA and RAN, ETSI NFV IFA**
  - Edge Computing Deliverable to **3GPP SA, RAN, ETSI ISG MEC**
- **Verticals Requirements:**
  - Perspectives on Vertical Industries and Implications for 5G to **3GPP RAN, SA, SA1**
- **BPG Capabilities:**
  - Key capabilities and issues to be addressed for 5G **to RAN, SA, SA1, SA2**
- **V2X Group:**
  - Joint workshop held by NGMN and GTI on October 12th to establish dialogue for cross-industry communication on V2X and help drive development and success of V2X.

Next Steps, Major Milestones Ahead of Us on Deliverables

- **Security Work Stream:**
  - Deliverable on Mobile Edge Computing / Low Latency / Consistent User Experience expected to be published shortly
- **Network Management & Orchestration:**
  - Deliverable expected to be published by EoY 2016
- **E2E Architecture Framework**:
  - Architecture Principles as input for SA2 by 11/16
  - Final public deliverable by EoY 2016

- Highest participation level ever
- 10 year celebration
- Comprehensive overview on the Status of Demand & Delivery of 5G
- First-class line-up of top management speakers and panelists
- Exhibition: Leading international partners with demonstrations of 5G concepts and solutions

Upcoming Public Events 2017

- **Press and Industry Briefing at MWC 2017, Barcelona (Spain), 28th February 2017**
- **NGMN 5G contribution at CeBIT 2017, Hannover (Germany), 20-24 March 2017**
- **NGMN Industry Conference & Exhibition 2017, October, Asia**