

NGMN Alliance Update

NGMN Office
28th September 2017
3GPP PCG#39
Vienna, Austria

- Update on Partnership and Co-operations
- 5G Work Programme - Overview
- 5G Work Programme - Current Scope
- 5G Work Programme - Recent Deliverables
- Events 2018

The Global Partnership of the NGMN Alliance...



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



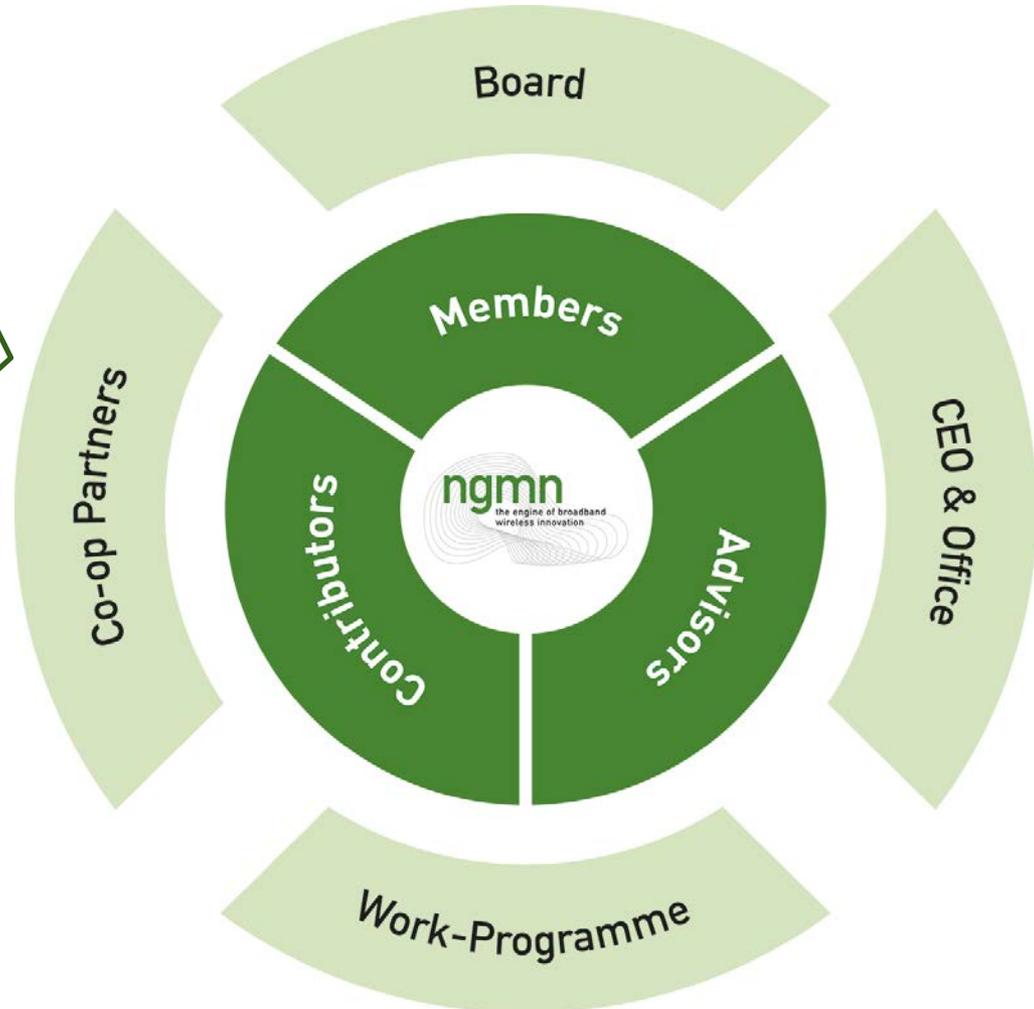
Contributors: NGMN telco vendors, software companies and many other leading industry players contributing and driving the advancement of future mobile network technologies, ...



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



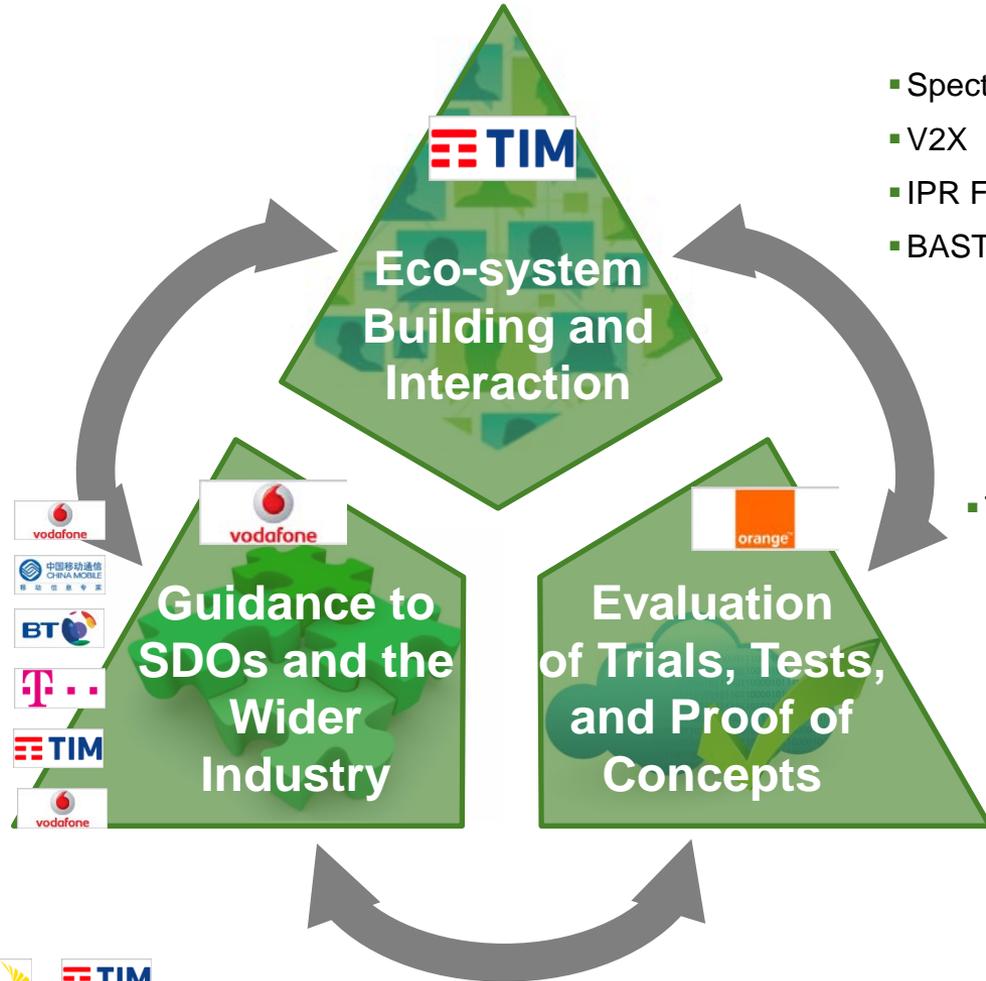
...and Strong Co-Operations



5G Work Programme - Overview



Overview Workstreams and -leads



- Spectrum
- V2X
- IPR Forum
- BASTA

- E2E Architecture:
 - Framework and Principles
 - Service-based Architecture
 - RAN Functional Split
 - Management & Operations
- Security Competence Team
- Extreme Requirements

- Trial & Testing
 - Tech. Building Blocks
 - Proof of Concept
 - Interworking
 - Pre-commercial NWs

Plus: “3GPP Reporting” on SA, CT, and RAN done by

5G Work Programme – Current Scope (1/2)

Guidance to SDOs and the Wider Industry



Security

- Security of network capability exposure in 5G
- Security related to V2X



End-to-End Architecture FW

- Definition of requirements in terms of entities and functions that characterize the capabilities of an e2e framework.



Extreme 5G Requirements

- Assessment of “extreme” 5G requirements for certain use-cases and the impact on the architecture

Eco-System Building and Interaction



IPR Forum

- Declaration of Standard Essential Patents
- Legal requirements for patent pools in 5 regions
- Open Source and Standards in 5G



Spectrum

- Spectrum licensing and other regulatory issues for 5G
- Additional spectrum bands for 5G



V2X

- Drive adoption and success of V2X and promote LTE-V2X for V2V and V2I communication

BASTA

- Active Antennas
- Review and Update of White Paper published in Q1/2017



Guidance Given to International SDOs and other Organisations (3GPP and ETSI) via Liaisons, White Papers etc. (see annex)

5G Work Programme – Current Scope (2/2)



Evaluation Test and Proof of Concept Results

Trial and Testing Initiative

Technology Building Blocks

Proof of Concept

Interoperability

Pre-commercial Networks

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- Collection of 5G Building Blocks and corresponding test cases and test results

- Definition of a PoC approach by reviewing scenarios, system dependencies and testing strategies

- Testing of key interfaces for ensuring that there are no different interpretations of the standard between solutions of 2 to 3 different providers

- Development of a testing framework for 5G NR (3GPP) allowing the harmonization of the testing methodologies between the different parties conducting trials

other work items:

TF 4.3-10 Connector

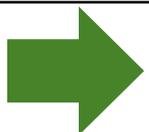
- 4.3-10 Radio Frequency Connector Migration Strategies

5G Work Programme – Recent Deliverables



Deliverables relevant for 3GPP/ETSI since April 2017

NGMN Project	Trial and Testing Initiative	End-to-End Architecture FW	Service Based Architecture
Recipient(s)	<ul style="list-style-type: none"> Technology Building Blocks (June 2017) 	<ul style="list-style-type: none"> NGMN Paper on 5G End-to-end Architecture Framework (May 2017) 	<ul style="list-style-type: none"> NGMN Contribution to 3GPP on Service Based Architecture (May 2017)
LS Title	<ul style="list-style-type: none"> TO: 3GPP TSG RAN, 3GPP TSG SA 	<ul style="list-style-type: none"> TO: 3GPP TSG SA WG2 CC: TSG SA and TSG RAN 	<ul style="list-style-type: none"> TO: TSG SA WG2, TSG CT WG3, TSG CT WG4 CC: TSG SA, TSG CT
Topic	<ul style="list-style-type: none"> First project deliverable from Trial and Testing Initiative containing first test results regarding 5G candidate technology building blocks 	<ul style="list-style-type: none"> Sharing of interim version of the NGMN Architecture Framework document for SA2 to become aware of additional principles 3GPP to consider the architectural principles in the document in the context of their ongoing work on the 5G Architecture 	<ul style="list-style-type: none"> NGMN operators expect that SA2 will develop the SBA approach for the 5G system in Release 15 and continue to enhance the SBA approach beyond Release 15 Furthermore NGMN operators kindly request CT3/CT4 to work on the appropriate protocol design for the Service-Based Interfaces in Release 15



Guidance Given to International SDOs and other Organisations via Liaisons, White Papers etc. (see annex)

Events 2018



NGMN Press & Industry Briefing at Mobile World Congress 2018
27th Feb 2018 in Barcelona, Spain

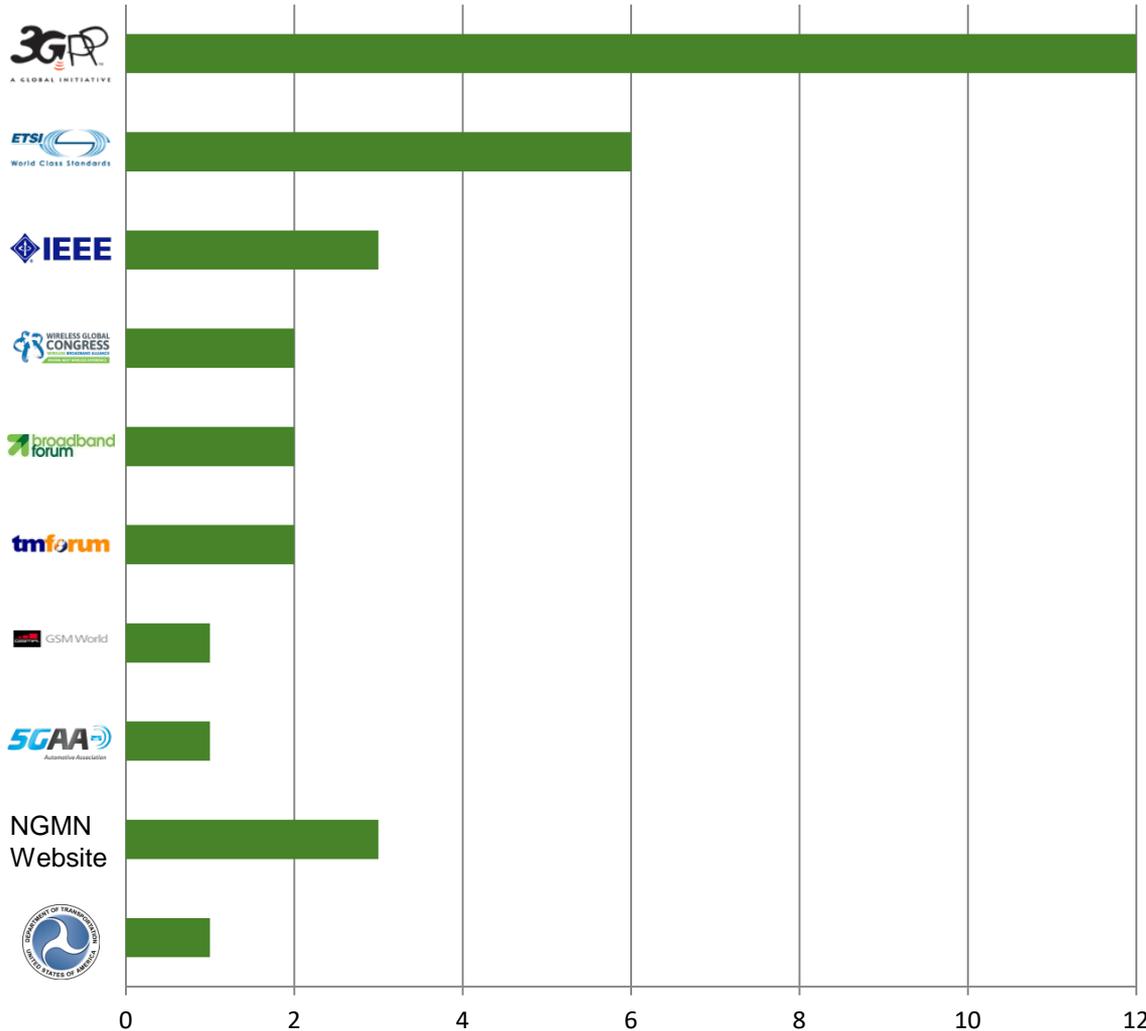
NGMN Industry Conference & Exhibition
planned for 6th until 8th November 2018 in Vancouver, Canada kindly hosted by Telus



Annex



Published Liaison Statements and White Paper in 2016/2017



Remarks

- 33 Liaison Statements sent out since October 2016
- Most of them with multiple recipients (up to 19 different organisations in one case)
- Multiple groups within 3GPP counted as one recipient only
- Other recipients: ARIB, ATIS, CCSA, CEN/CENELEC, IEC, IETF, ISO, ITU, MEF, TSDSI, TTA, TTC