

# Next Generation Mobile Networks

## Verticals URLLC Requirements

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**Title:** Liaison between NGMN project on Verticals URLLC Requirements and 5G-ACIA

**Source:** Next Generation Mobile Networks (NGMN) Project Verticals URLLC Requirements

**To:** **5G-ACIA**  
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**CC:**

**Date:** 08<sup>th</sup> October 2018

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### 1. Overall Description

Supporting vertical URLLC use cases is one of the most important differentiators of 5G. To facilitate the technology development in standards developing organizations (SDO), to support operator business development and to foster the ecosystem, a holistic view of URLLC use cases and their requirements on 5G is needed.

The board of NGMN decided in June 2018 to set up the project “Verticals URLLC Requirements” (hereafter referred to as “NGMN URLLC project) to

- Collect URLLC use cases, requirements from verticals, operators and vendors. The project focuses on URLLC use cases in Energy, Transport, Health, Manufacturing, Smart cities etc. Use cases in automotive is out of scope.
- Study end-to-end how 5G can meet the vertical requirements, and what the architectural considerations and deployment models are.
- Find out a balance between highly-specialised customisation of solutions and a one-size-fits-all type of approach. Address as many use cases as possible with a common solution, while providing some differentiation in the offerings for different industry sectors.
- Feed requirements to the ecosystem (& future SDO work) - Influence 3GPP & its scope on priorities / requirements from the operators and monitor the progress
- Share the best practices on vertical application and understand the role of (and value provided by) the operators in this ecosystem
- Demonstrate 5G capability to vertical industries

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NGMN URLLC project plans to publish three deliverables

- D1: URLLC Requirement Document, tentatively Dec. 2018
- D2: Best Practices, tentatively Feb. 2019
- D3: End to end technology and Solutions, May 2019

### 2. Actions

In order to further strengthen the ties between the NGMN URLLC project and 5G-ACIA (noting that some members of NGMN URLLC project are also members of 5G ACIA), it is suggested that:

1. 5G-ACIA updates NGMN URLLC project with the latest use cases and their requirements on 5G; NGMN URLLC project will feedback from operator and/or telecom point view with respect to 5G network planning, deployment, operations & maintenance.
2. NGMN URLLC project shares information via Liaison Statements with 5G-ACIA to seek feedback.
3. Joint NGMN URLLC/5G-ACIA (web-)meetings are set up to get insights into URLLC use case requirements on 5G and build consensus.
4. NGMN URLLC project provides 5G-ACIA with suggestions on how to build 5G to best serve vertical industries' URLLC use cases, technically and economically.

### 3. Date of the next meetings of the NGMN URLLC project

- The project was kicked-off on Sept. 7, 2018 and holds weekly web meeting to advance its work. Meetings are held at 3 – 4pm CEST, Thursdays. 5G-ACIA is invited to present the latest of its WG1, WG2 and WG3 results, at earliest convenience of 5G-ACIA.
- 5G-ACIA representatives are invited to NGMN URLLC project meetings:
  - In late November 2018, to give feedback to NGMN's consideration of URLLC use cases and requirements.
  - In January 2019, to give feedback to best practices of URLLC use cases in 5G.
  - In March 2019, to give feedback to e2e technology and solutions from NGMN perspective.

Exact dates of the above meetings will be decided based on the progress of NGMN URLLC project and agreed with 5G-ACIA.