



The Standards People



*Insights for Edge Software Developers*



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For: **everyone**

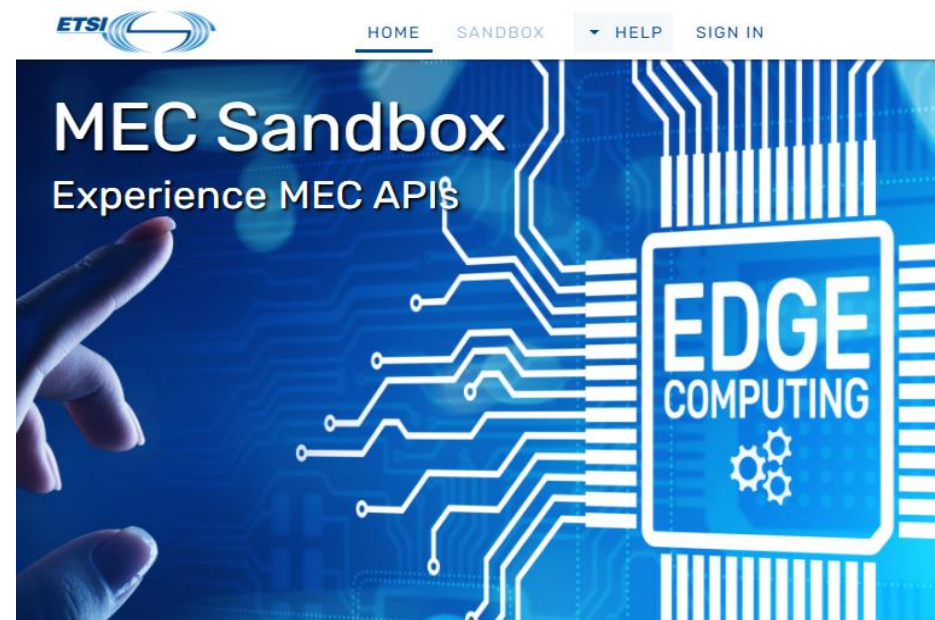
**Episode #9 – VIS API in MEC Sandbox**

# In this episode ...

- We will learn:
  - What is new about MEC Sandbox V2X Information Service (VIS)
  - Predicted QoS functionality
  - Possible use cases
  - Demo comprising of how to interact with the new V2X network scenario



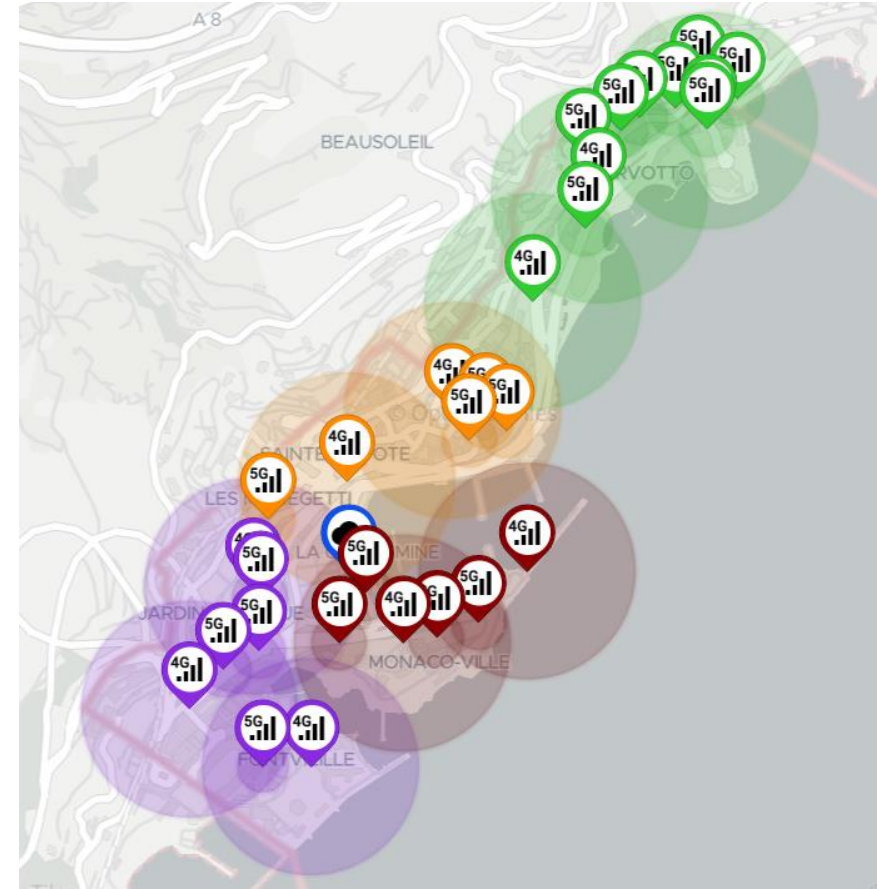
[try-mec.etsi.org](https://try-mec.etsi.org)



# V2X Information Service (VIS) in MEC Sandbox

“/provide\_predicted\_qos” supported endpoint provides the following:

- QoS specified in terms of RSRQ/RSRP values of (the strongest) radio signal being received at a specific geo-location
- Used to query predicted/estimated values of RSRQ/RSRP on potential UE routes
- One set of RSRQ/RSRP values for one set of location coordinates



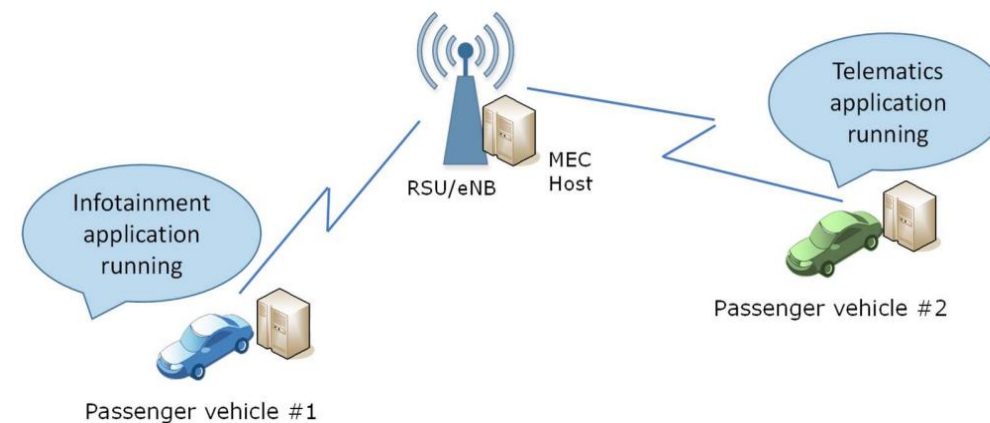
# 1 – Predicted QoS functionality

- A new network scenario is added in the MEC Sandbox (4g-5g-macro-v2x) which contains the VIS functionality.
- Multiple geo-coordinates along a route (or multiple routes) can be sent in the request.
- VIS returns predicted QoS values (RSRQ/RSRP) for all the geo-coordinates sent in the request for a particular sandbox instance (user) using pre-defined traffic patterns via a prediction function.



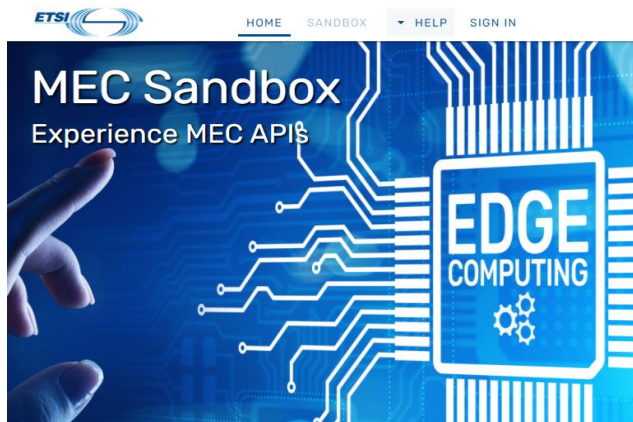
## 2 – Possible Use cases

- QoS values along a planned vehicular route can be used to trigger, modify or postpone
  - The application of certain V2X functionalities; and/or
  - The download of content delivery software / packages.
- Different MEC applications (e.g., Machine Learning applications) can use the QoS values to send some useful data to (for example) another application for processing (e.g., for training a ML/AI data model).



Developers can perform actions in their applications based on the QoS Information gained from MEC Application/service consumer of V2X information service of MEC Sandbox

# 3 – V2X scenario in MEC Sandbox



## Configuration

Simulated Network

Select a network

- Select a network
- 4g-5g-macro-v2x**
- 4g-5g-wifi-macro
- 4g-macro
- 4g-wifi-macro
- dual-mep-4g-5g-wifi-macro
- dual-mep-short-path

MEC Service APIs

- mep1
  - Location (013)
  - MEC Application Support (011)
  - MEC Service Management (011)
  - Radio Network Information (012)
  - V2X Information (030)**
  - WLAN Access Information (028)

It provides new network scenario in MEC Sandbox to support [MEC030 Service API](#)

# 4 – Demo

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# Conclusions and further resources



## What we have learnt:

- Implementation of V2X service in the MEC Sandbox
- How to play around with the V2X service in the MEC Sandbox
- Applications / Use cases related to this new service

## Interested to learn more?

- Visit the MEC Sandbox and play with V2X Information Services: <https://try-mec.etsi.org/>
- MEC Sandbox Wiki: [https://mecwiki.etsi.org/index.php?title=MEC\\_Sandbox\\_Help](https://mecwiki.etsi.org/index.php?title=MEC_Sandbox_Help)
- Learn more about V2X Information Service API in MEC030 at [https://www.etsi.org/deliver/etsi\\_gs/MEC/001\\_099/030/02.02.01\\_60/gs\\_mec030v020201p.pdf](https://www.etsi.org/deliver/etsi_gs/MEC/001_099/030/02.02.01_60/gs_mec030v020201p.pdf)
- Also look at V2X Information Service API in MEC030 at <https://forge.etsi.org/rep/mec/g030-vis-api>
- Follow also the [next episodes of the MEC TECH Series](#) 😊





# Enjoy the



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