

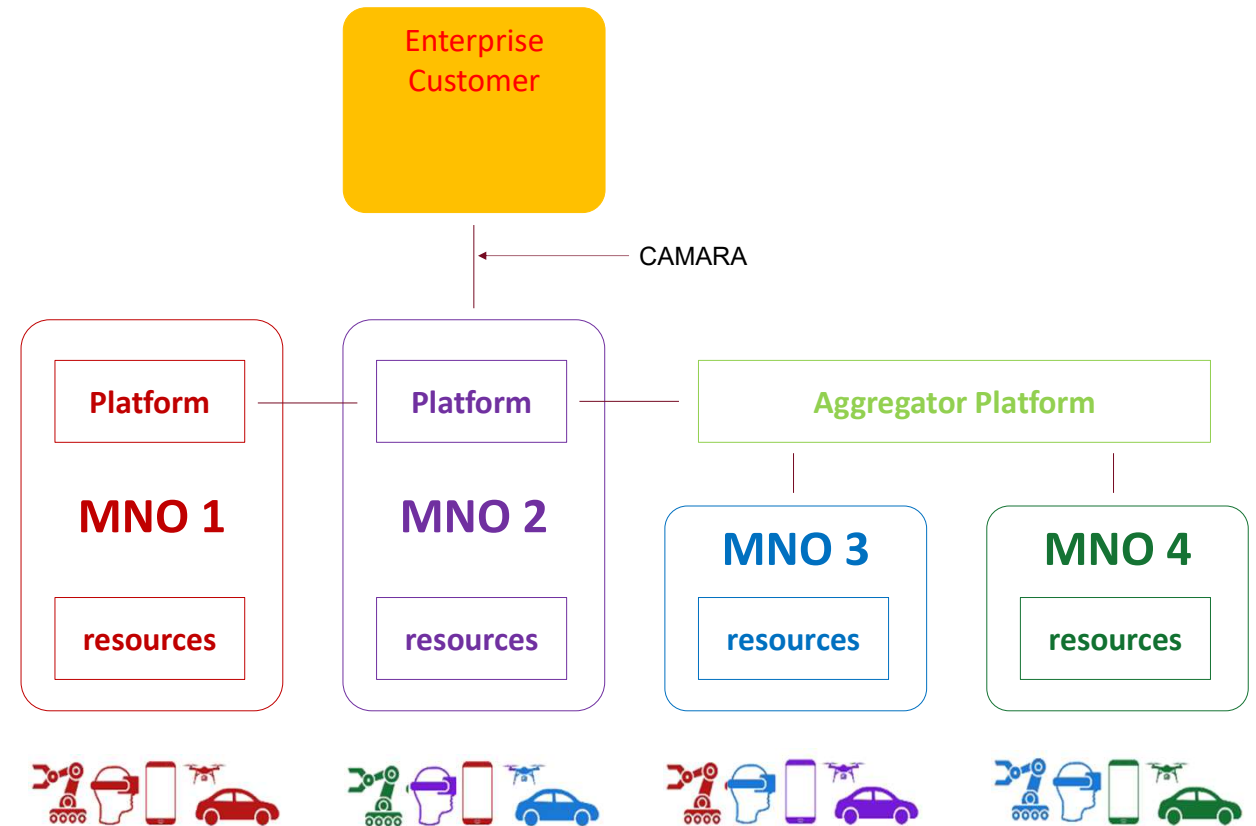
13th April 2023



GSMA™ OPG: status update to CAMARA

Reminder: OP federated, capability exposure

- Platform offering enterprise customers/developers access to Operator capabilities and resources
- Using CAMARA APIs on NBI to isolate the enterprise customer from differences in network and edge architectures in operator networks and hide complexity of the delivery where possible
- Federated: Enterprise customers can connect directly or indirectly to the Operator Platform of the operator of their choice and gain access to the footprint of all federated operators
- Supporting various deployment architectures



Reminder: Organisation and participants

- **Developed in GSMA OPG and OPAG**

- Working under GSMAAA.35 process: open to all GSMA members and to non-member participation

- **Cooperating with various other groups**

- CAMARA
- GSMA Open Gateway: see further
- GSMA WAS: to develop commercial models for federation
- GSMA FASG: for security aspects
- Potentially GSMA TSG for terminal aspects and GSMA IG for identity solutions
- 3GPP SA and subgroups for interaction with core network, UNI for edge and charging function
- ETSI ISG MEC on Edge architectures
- Likely soon TM Forum for support of Network Slicing

- **OPAG to contribute to CAMARA through Sandbox**

- allows developing contributions under Apache 2.0
- Already used for Traffic Influence in CAMARA Edge project

Selection of participants

- **Operators (50+) e.g.:**



- **Telco Vendors (40+) e.g.:**



GSMA Open Gateway: Technical Work

- **Technical work for Open Gateway being integrated into OPG and OPAG**
 - Ensures openness through compliance to AA.35
 - May be done partly in separate taskforce to ensure sufficient bandwidth for all topics
 - Other parts covered in OPG and OPAG themselves: see further
- **Focus on federation capabilities and models to enable that**
 - Need enhancement beyond what is already available
 - E.g. developer identification, consent handling
 - Will focus on API first rather than waterfall approach with lengthy discussions on documents
 - To ensure required implementation timelines can be met
 - Will rely on a GitHub for East/Westbound API of Operator Platform
 - Taking input Proof of Concepts
 - (Full) Documentation will be done based on stable API

Network Slicing as a Service (NSaaS)

- **Initial set of requirements delivered**
 - Starting point with more to be covered in future update
 - e.g. federation, roaming support, subscriber provisioning
- **New OPAG taskforce for delivery**
 - Identification of available APIs for realising requirements southbound
 - Looking mainly at TM Forum and 3GPP APIs
 - i.e. no intention to reinvent the wheel given that a lot of work is available
 - Looking into e.g. Network Slice lifecycle management, KPIs and provisioning of URSP rules for device access to Network Slice
- **Intention to start OPAG Sandbox to propose NSaaS API(s) to CAMARA**
 - Needs good understanding of capabilities available first

Other areas of current focus

- **Integration with Charging Function**
- **Realisation of CAMARA NBI APIs with Operator Platform**
 - Should be documentation keeping up with CAMARA evolutions supporting API realisation in Networks
 - Note: not including code. That is covered well by CAMARA's provider implementations already.
 - Topics
 - Mapping to Southbound Interfaces
 - Includes identification of gaps in southbound capabilities e.g. capability to map public IP to more permanent subscriber identifier
 - may reach out to SDOs to help closing those gaps and/or provide feedback to relevant CAMARA project (i.e. opening an issue)
 - Routing concept for federation
 - Data to provide to Charging Function
- **Federation API**
 - Delivered initial concept for using (CAMARA) Service APIs on the East/Westbound Interface
 - Evolve APIs based on lessons learnt from PoCs and initial deployments
 - In combination with Open Gateway integration moving to model focussing on API definition first

New specifications published in March

OPG.02 v4.0

Operator Platform Telco Edge Requirements

New version covers NSaaS and interaction with client-side QoS mechanisms (L4S)

OPG.03 v2.0

Southbound Interface Network Resources APIs

New version includes API for mapping public IP address to MSISDN and Private IP

OPG.04 v2.0

East/Westbound Interface APIs

New version includes enhancements of existing API for Edge and API concept for using Service APIs on E/WBI

OPG.05 v1.0

User-Network Interface APIs

First version, focussing on 3GPP's UNI for EDGEAPP architecture

For more information or participation

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Thank You