

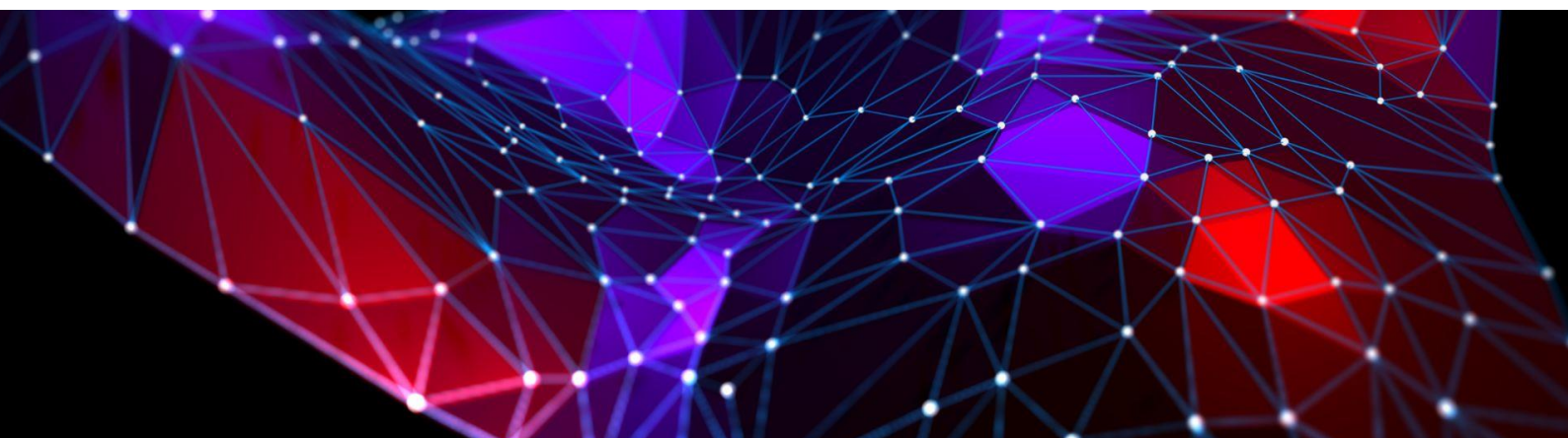
Subscription Manager M2M

SM-SR | SM-DP

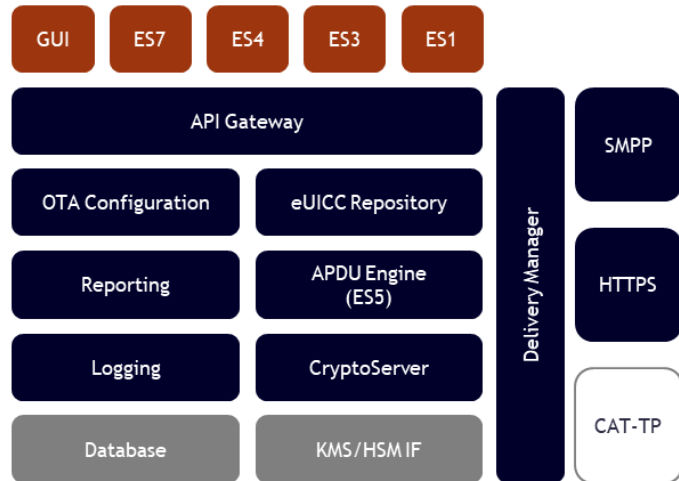
The functional scope of the Subscription Management platform is to handle the network access credentials securely in the form of MNO profiles and to provide these profiles to the eUICC in M2M devices. A close integration of the Subscription Management components with the MNO infrastructure and adoption of the supported workflows for the MNO business processes are the key to success for deploying the Subscription Management services.

The achelos Subscription Manager is compliant with:

- GSMA: Embedded SIM Task Force Requirements and Use Cases, Version 1.0
- GSMA: SGP.01 - GSMA Embedded SIM Remote Provisioning Architecture, Version 1.1
- GSMA: SGP.02 - Remote Provisioning Architecture for Embedded UICC - Technical Specification, Version 3.2
- GSMA: SGP.11 - Remote Provisioning Architecture for Embedded UICC Test Specification, Version 4.0
- GSMA: SGP.16 - M2M Compliance Process, Version 1.1
- Trusted Connectivity Alliance (TCA): eUICC Profile Package - Interoperable Format Technical Specification, Version 2.2
- GSMA: FS.08 - GSMA SAS Standard for Subscription Manager Roles, Version 3.0
- GSMA: FS.09 - SAS-SM Methodology, Version 6.0
- GSMA: FS.17 - GSMA SAS Consolidated Security Requirements, Version 4.0



The **SM-SR** (Subscription Manager Secure Routing) is in charge of eUICC management and represents the eUICC owner. It is also the entity that securely delivers the encrypted operator profile to the eUICC. Information about available eUICC types and their respective configuration and state is stored in its eUICC repository in the form of an extended EIS record (eUICC Information Set), which contains proprietary fields in addition to those defined by GSMA.



The **SM-DP** (Subscription Manager Data Preparation) is responsible for creating and protecting operator credentials, i.e. the profile. It uses the functionality of the SM-SR for communication with eUICC. The core of the SM-DP is the service to deliver MNO profile to devices compatible with GSMA M2M specification.



As a separate security domain, the SM-DP ensures that mobile operator profiles are encrypted and, in principle, can therefore be passed through any SM-SR, whether it is the solution’s internal module or an interconnected external SM-SR.

All core components are built in the form of microservices and are loosely coupled, communicating via TCP/HTTP(S)/MessageBroker interface for asynchronous and via TCP/HTTP(S) interface for synchronous data exchange, providing a high level of cohesion between the services. This approach has been selected in order to achieve excellent horizontal scalability of the complete system and to significantly improve system testability.

Interface Off-card	End Points	GSMA Standard	Support	Comment
ES1	EUM – SM-SR	yes	yes	
ES2	MNO – SM-DP	yes	yes	Customer can interface achelos' SM-DP via REST/HTTP interface
ES3	SM-DP – SM-SR	yes	yes	
ES4	MNO – SM-SR	yes	yes	Customer can interface achelos' SM-SR via REST/HTTP interface
ES7	SM-SR – SM-SR	yes	yes	

Interface eUICC	End Points	GSMA Standard	Support	Comment
ES5	SM-SR – eUICC	yes	yes	SMS and HTTPs are supported by default
ES6	MNO – eUICC	yes	no	This interface is not supported by the product because eUICC profile content management is performed by an OTA platform of the MNO
ES8	SM-DP – eUICC	yes	yes	achelos' SM-DP supports profile descriptions in the format defined by TCA (ex. SIMalliance)