



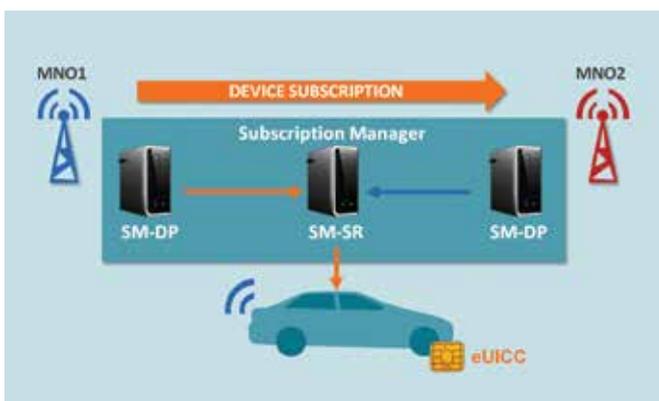
Connected “Things” – Biggest Market Revolution in 20 Years Flexible Connectivity Solutions for IoT

Biggest Market Revolution in 20 Years

In the coming decade an exponential increase of M2M connections is being forecasted. The main threats to a successful M2M implementation are reliability, availability, and security. Security, in this case, is most critical, and mostly overlooked in the interest of reducing cost and fast time to market.

The growing ecosystem of electronic devices and machines communicating with each other from all corners of the world via mobile networks has prompted the development of the embedded SIM (eSIM or eUICC) technology, which represents the major evolution of the SIM card technology in the last 20 years. SIM cards embedded in M2M devices are able to host multiple provider profiles and offer the owner a greater flexibility of connectivity provider choice. The novelty using embedded SIM technology is the possibility to change the ownership.

Whereas the removable SIM card is owned by an MNO and provided to the consumer as a subscription token, the eSIM is part of a device and thus is owned by the device owner. Here the MNO merely owns the network access credentials that are loaded to the eUICC over-the-air (OTA) as part of the MNO profile.



M2M Subscription Management as Defined by GSMA

The M2M market covers a broad spectrum of applications ranging from updating electronic billboards, device tracking, in-vehicle-entertainment and accident prevention mechanisms, smart meter monitoring, and IoT applications such as machine lifecycle management or data transfer between devices. All are using mobile networks and requiring MNOs to facilitate accessibility and flexibility for business customers and consumers in this rapidly growing market.



Associate
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Flexible Connectivity Solutions for IoT

The connectivity management solution from achelios is addressing the current version M2M and IoT market. It has been specifically designed to enable the remote management of mobile network operator (MNO) profiles with network access credentials, empowering device owners to make the best possible connectivity choice for their business and M2M devices.

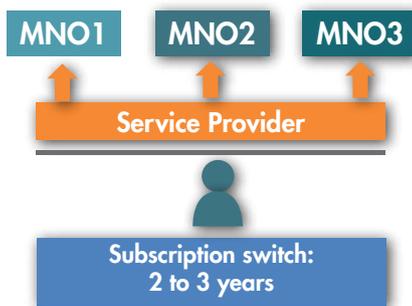
The achelios solution complies with the specifications developed by GSMA and SIMalliance for subscription management, eUICC and interoperable profiles. By loosening the dependencies between eUICC and the eUICC management platform (Subscription Manager), the two institutions have opened the door for independent eUICC and solution providers to grow the adoption of eUICC technology in the M2M market.

achelios is among the first companies to offer such a comprehensive subscription management solution as completely independent technology providers.

Deployment Scenarios Between Players

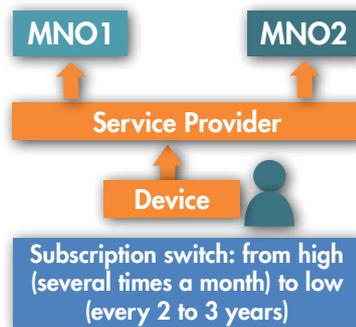
B2B: Industrial M2M

The M2M Service Provider (SP) operates a fleet of devices offering a service to business users (e.g., smart meters). Connectivity contracts between M2M SP and MNOs are established for a fixed period of time.



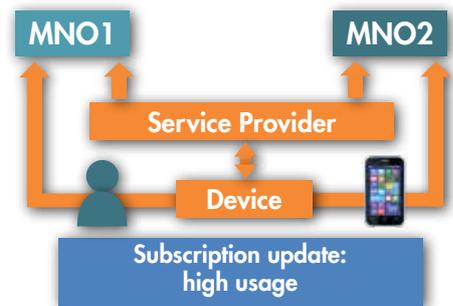
B2B2C: Service driven consumer devices

Another M2M SP or consumer owns a device purchased from a device manufacturer, OEM, MNO. Connectivity is included into the service to the end user, sometimes also being used by the end user for other purposes (user billing may be impacted). Connectivity contracts between M2M SP and MNOs are established for a fixed period of time.



B2C: Consumer device without service

The MNO, the device manufacturer or the service provider offers a device with a service package to an end user (e.g. tablet). The consumer selects a connectivity provider directly or via service provider to install simultaneously multiple subscriptions on a device.



Freedom of Choice

The subscription and connectivity management solution is interoperable and compatible with eUICC products from various manufacturers. This gives customers the freedom of choice allowing full control of the service. Our solution is the true alternative to the offers available from the traditional market players, like SIM and SIM OS vendors. The achelos solution is designed to meet the wide variety of the deployment options from stand-alone systems deployed in a secure hosting environment to cloud-based services (e.g. Amazon AWS).

Key Advantages

- Compliant with GSMA remote subscription management specifications for M2M
- Implementation follows GSMA SAS-SM security certification requirements
- Extended with Connectivity Management framework providing greater flexibility for event-triggered subscription switching
- Multiple delivery channels (SMS, HTTPS)
- Ready for cloud deployment (e.g. Amazon AWS)
- Optionally provides full OTA platform functionality

Why achelos is the Right Partner for You

We are independent and experienced players. Our team consists of experts in security and prevention in various market segments. We are developing innovative technical solutions securing electronic identities. Our customers benefit from our strong knowledge in micro-processor-technology, a powerful product portfolio and the consequent implementation of specifications, as well as additional features to meet customer requirements.

