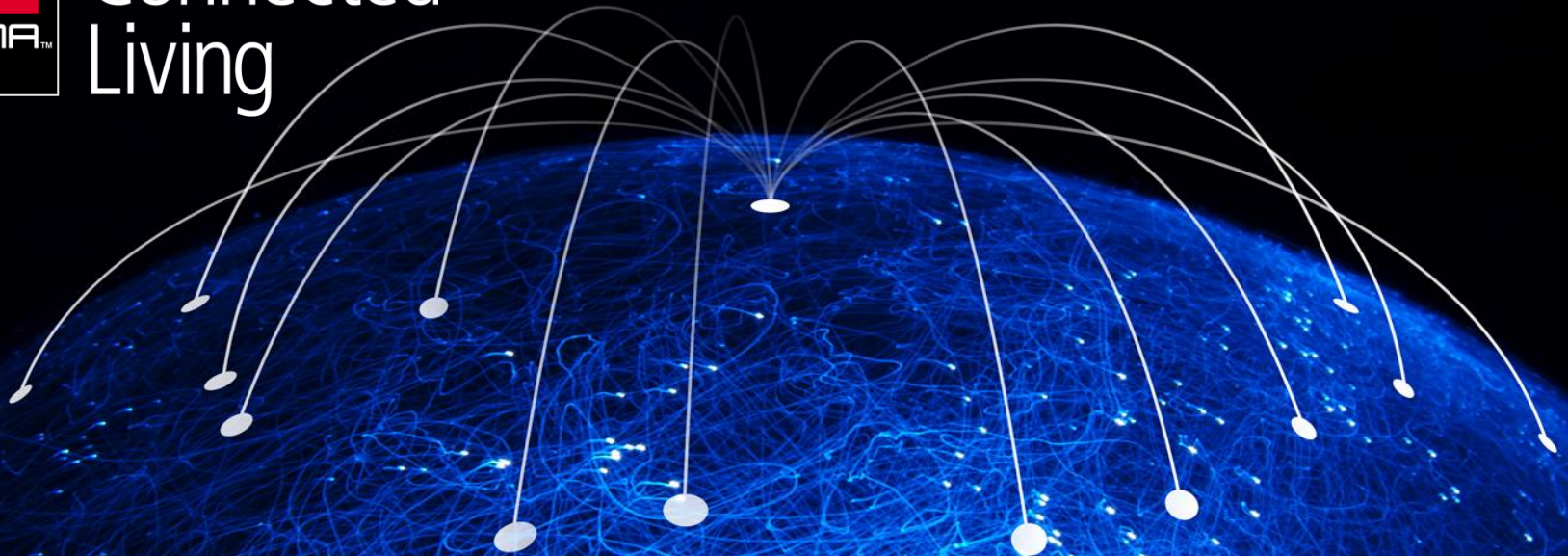




Connected Living



GSMA Embedded SIM Specification Remote SIM Provisioning for M2M

A single, common and global specification to accelerate growth in M2M

GSMA Embedded SIM – Essential benefits



- Accelerating the market growth of Machine to Machine (M2M)
- Increasing operational efficiency for the M2M ecosystem
- Single Stock Keeping Unit at point of manufacture
 - Enables flexible global product distribution
 - Selection of operator subscription is performed on first switch on in destination country
 - Allows change of operator during the product lifecycle
- Enables new business models
- Preventing market fragmentation by avoiding different, incompatible technical solutions
- Driving economies of scale within the M2M industry



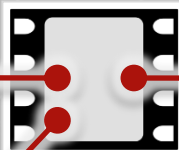
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GSMA Embedded SIM at a glance



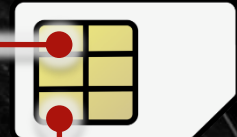
1

An 'embedded' SIM has the same functionality as a removable SIM, but in a different form factor – a chip, designed to be permanently soldered into an M2M device.



2

It has 8 electrical pins, which are exactly the same as the 8 gold contacts on a normal SIM.



3

These SIMs have many benefits for the M2M industry: cheaper to produce, withstands vibration, and its small size lends itself well to the growing IoT market.

4

But there's a problem:

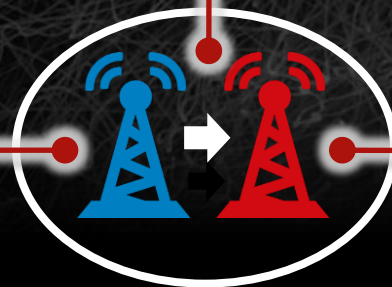
If you can't easily change SIM, how can you change from one mobile operator to another?

5

The GSMA Embedded SIM Specification solves this by allowing new operator profiles to be downloaded when required.

This makes it possible to change from one operator to another at the end of contract.

All of this carried out securely Over The Air.



6

The GSMA Embedded SIM Specification also applies to removable M2M SIMs too.

There are millions of M2M devices already deployed using removable SIMs - retrofitting them with GSMA Embedded SIMs allows them the same benefits going forward.

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Global standardisation is vital for scaling the market



- The GSMA goal is to accelerate growth of the M2M Industry by providing a single de facto standard for remote SIM provisioning
- The GSMA Embedded SIM Specification avoids market fragmentation and also drives economies of scale for all stakeholders
- Supports development of a strong, global M2M ecosystem, unifying operators, SIM suppliers and vendor partners

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Broad based industry support



13th October 2014, Dubai, United Arab Emirates:

'Leading Mobile Operators, SIM Vendors and Module Manufacturers Deploy Solutions Compliant with GSMA Embedded SIM.'



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Benefits for Business Customers



- Business opportunities from new M2M connected services including new deployment models
- Remote service activation enables the up-sell of connected options after initial sale
- Connectivity management will be more flexible and cost effective

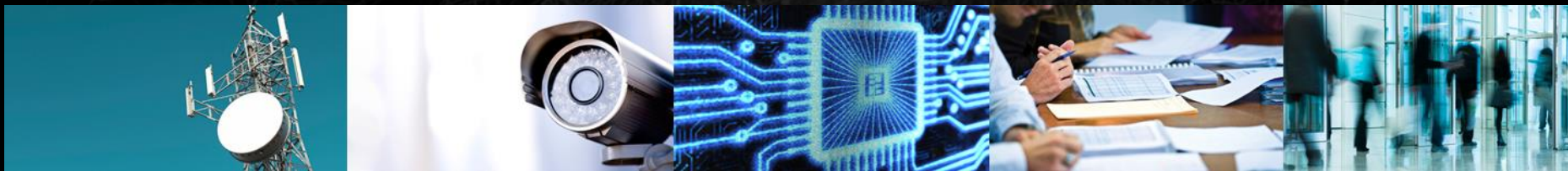


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Benefits for End Consumers



- Improved customer experience – products will work ‘out of the box’
- Lower cost connected products
- Increase in number of valuable connected services



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GSMA Embedded SIM Specification - scope



■ Specification covers

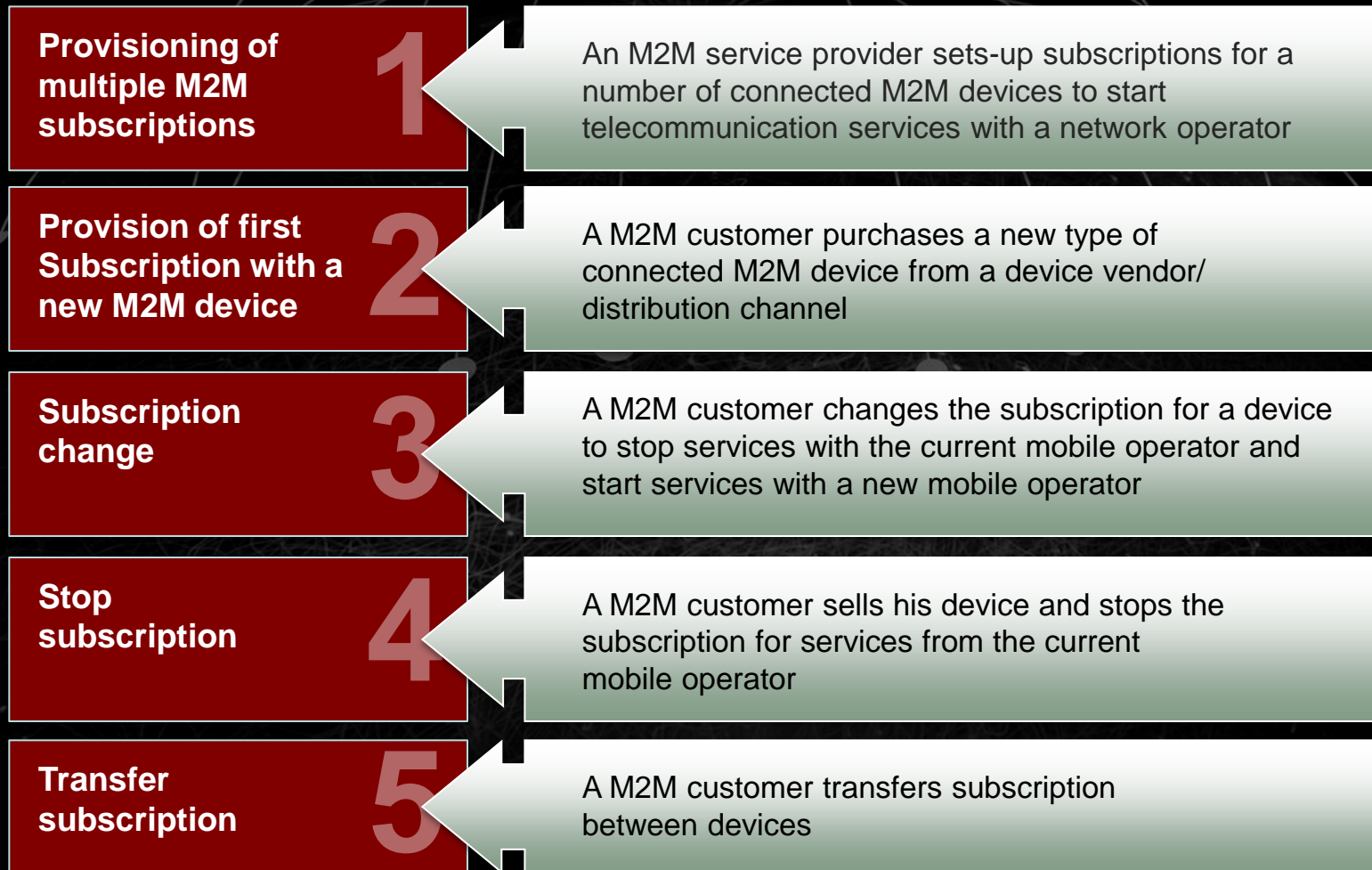
- The remote *over the air* provisioning of a one (or more) operator profiles into a SIM.
- The remote *over the air* enablement / disablement of an operator profile within the SIM, thus enabling a change of active operator.
- *Over the air* deletion of an operator profile within a SIM.

■ Operation

- To facilitate the secure *over the air* management of mobile operator credentials within a SIM.
- Two new key network elements have been specified by the GSMA.

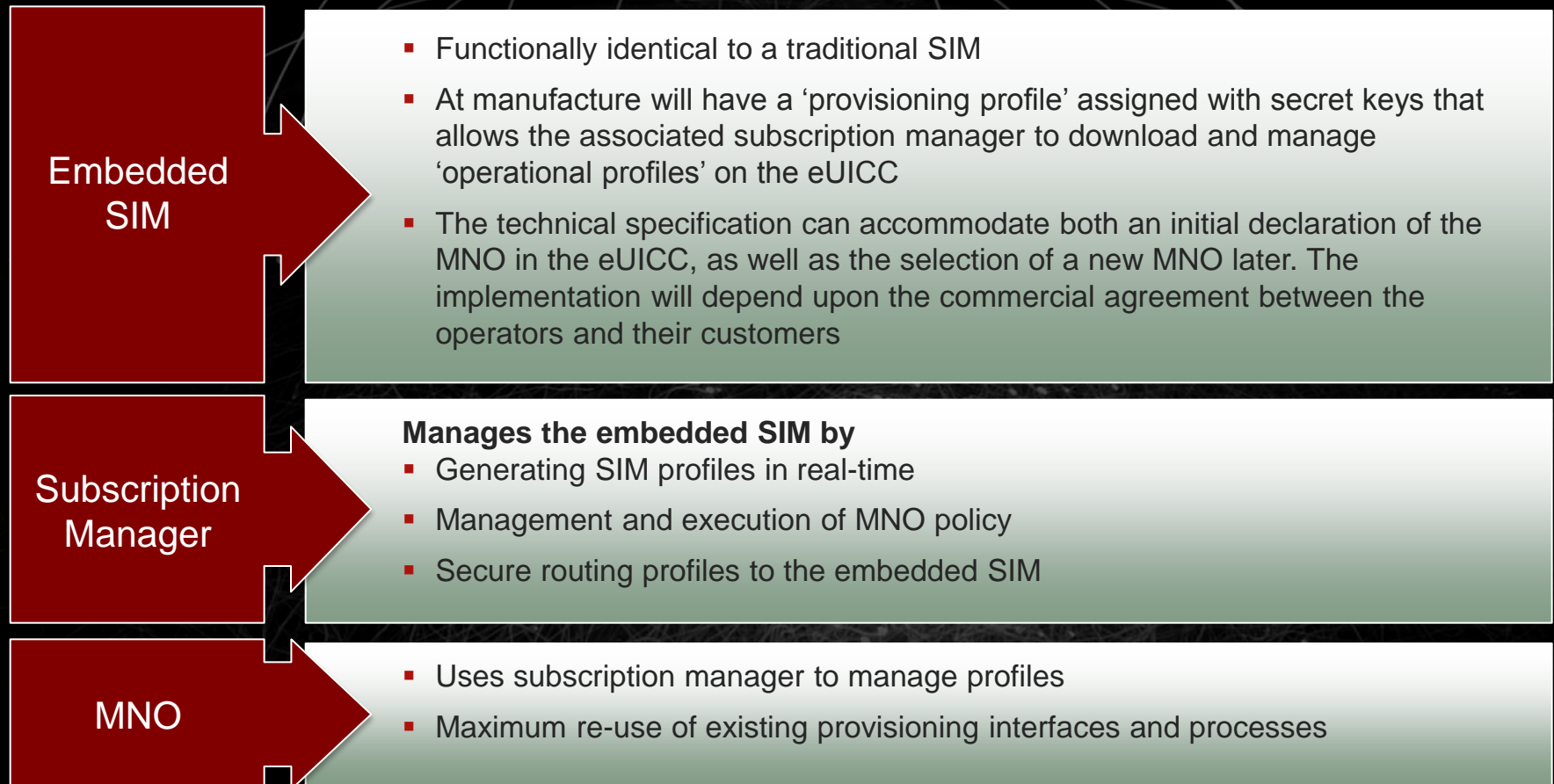
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Uses of Embedded SIM Specification



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The Elements Involved



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- Q. Why the does GSMA Embedded SIM Specification use the word 'Embedded'?
- A. Given the focus on M2M it is likely that the SIM will be soldered into the device (an embedded SIM form factor such as MFF1/MFF2), but of course the GSMA Specification also allows the use of removable M2M SIM form factors also.



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- What is the role of the GSMA in relation to ETSI?
 - The GSMA has delivered the GSMA Embedded SIM Specification as a pre-standard in order to meet the immediate needs of the M2M market.
 - The GSMA is very supportive of ETSI activity and believe that ETSI is best placed to agree a long term standard.
 - ETSI is kept regularly updated by GSMA on the GSMA Embedded SIM project.



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- **How can I find out more information about the Embedded SIM project progress?**
 - The Embedded SIM project is part of the Connected Living Programme
 - for more information contact connectedliving@gsma.com



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