



GCFTM

Global Certification Forum

Upcoming RSP Certification

Preparation for RSP enabled consumer devices

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LTE Workshop September 7 2017 Shenzhen

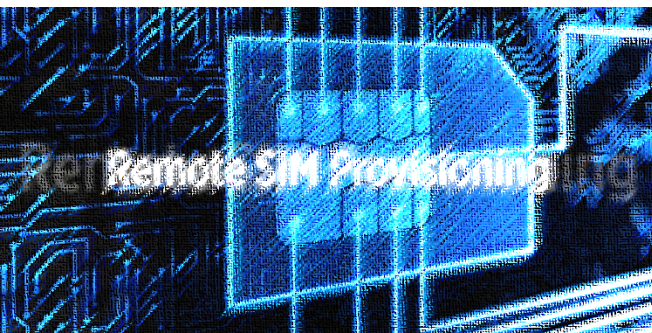
Agenda

- Remote SIM provisioning
- GSMA Specifications
- RSP for consumer devices
- Physical SIM provisioning
- Remote SIM provisioning
- GCF Work Items
- Types of devices to be certified
- GCF Certification
- 'standalone' Certification
- RSP only participation
- Routes to Certification
- RSP Certification Activation
- RSP M2M



Remote SIM provisioning ...

- Over the past 5 years the GSMA have been uniting the industry to establish ways for electronically distributing SIM cards that are secure, fully interoperable and portable between devices.
- RSP (Remote SIM Provisioning) is the technology that enables stakeholders to manage the eUICC (removable or soldered) which can be deployed in any device and any segment to allow access to a subscription to a mobile network service.
- **Benefits ...**
 - Allows consumers easy and immediate connection of their devices to mobile networks.
 - Extends mobile connectivity to much smaller device form factors, including smart watches, health bands etc.
 - Avoids fragmentation in the market.



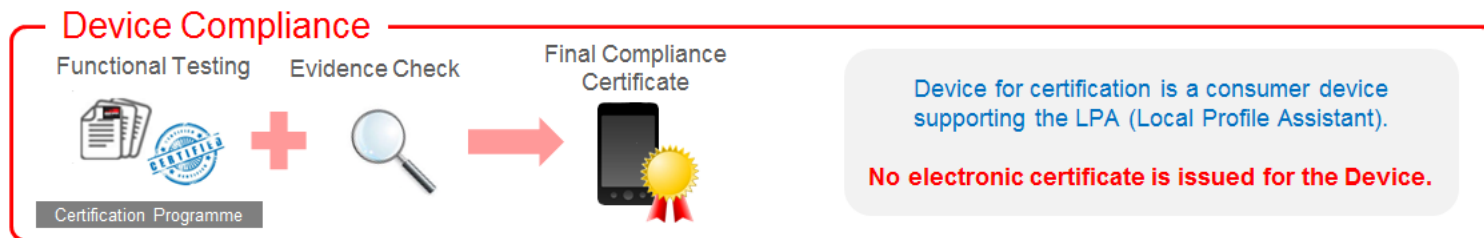
GSMA Specifications ...

GSMA Specifications for Remote SIM Provisioning (RSP) for consumer devices:

- GSMA PRD SGP.21 RSP Architecture Specification
- GSMA PRD SGP.22 RSP Technical Specification

GSMA Specifications around interoperability and compliance:

- GSMA PRD SGP.23 RSP Test Specification
- GSMA PRD SPG.24 RSP Compliance Process

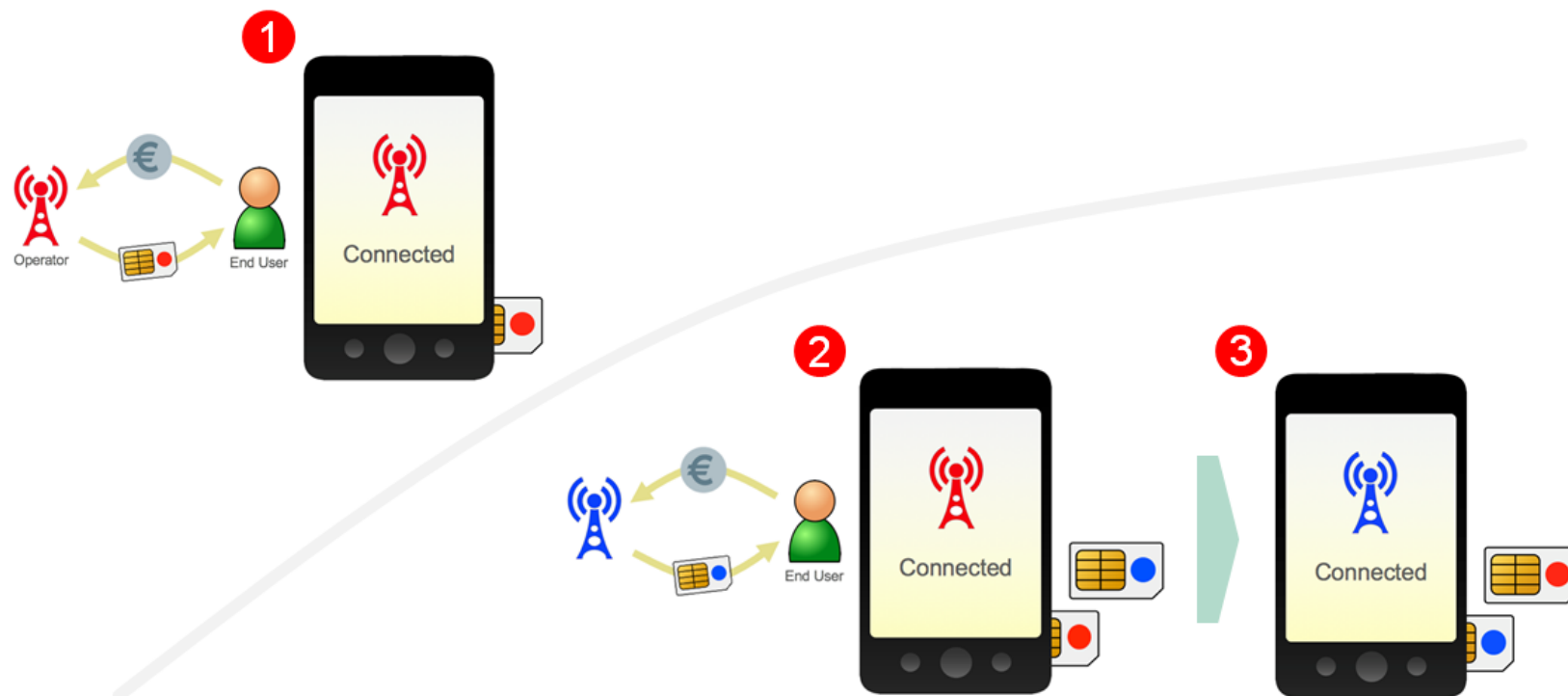


RSP for consumer devices ...

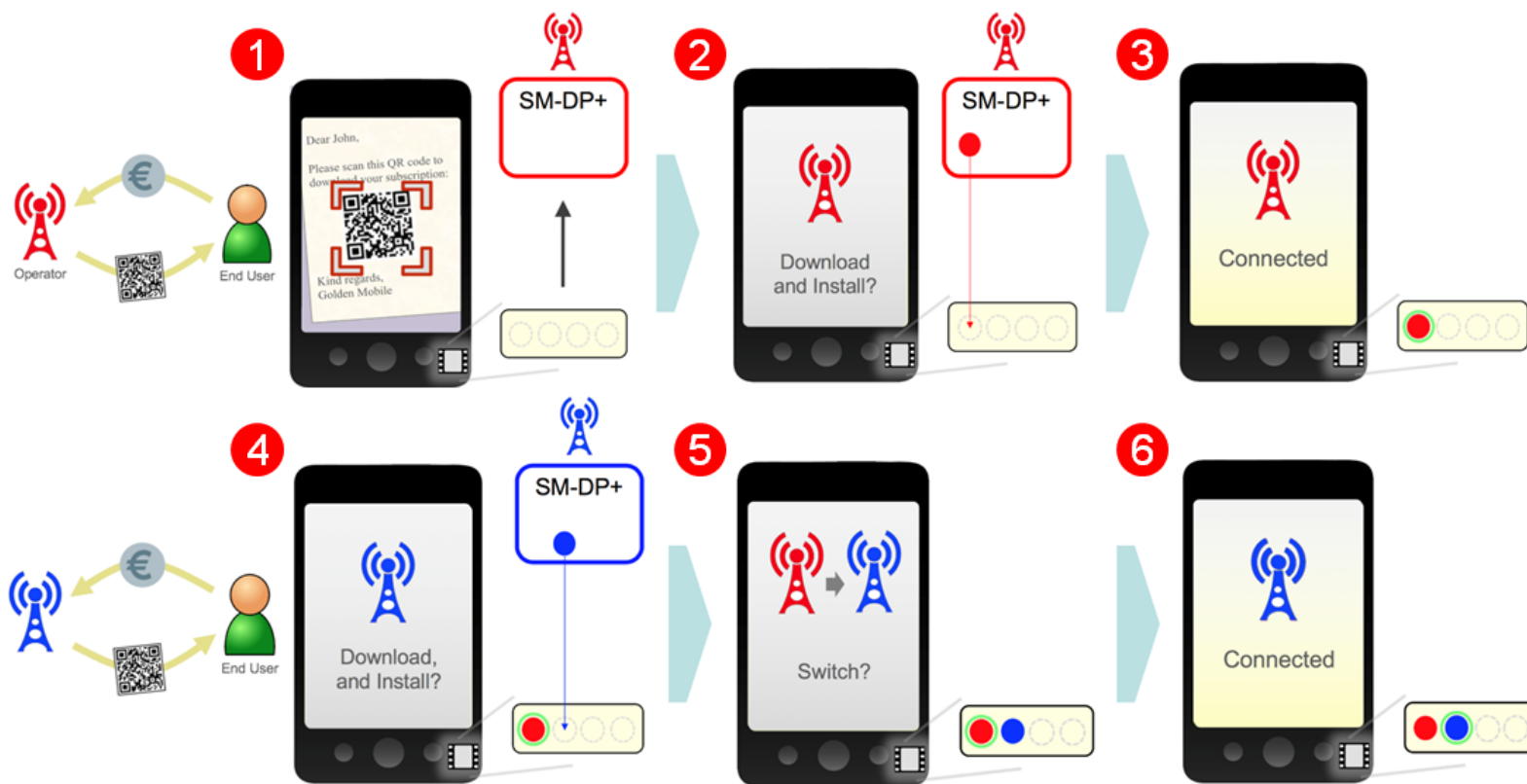
- Remote SIM provisioning allows the remote provisioning and management of an Embedded UICC in consumer devices. This technical solution provides the basis for ensuring global interoperability between eSIMs, devices and networks in different deployment scenarios.



Physical SIM Provisioning ...



Remote SIM Provisioning ...



GCF work items ...

Work Item 274:

- RSP Device (LPAd) Conformance Testing defined by SGP.23
- Test cases for critical features to provide the basic functionalities for the customers, i.e. Download, Enable/Disable a profile, and important features for MNO e.g. Notifications.
- Critical test cases and prioritization defined by GSMA RSP group
- The scope of this work item is conformance testing of GSMA's RSP consumer devices.
- Expected activation Q4 2017

Work Item 276:

- RSP Device (LPAd) Conformance Testing
- Test cases for features where a risk of delay is high due to the availability of components/implementations and for enhanced features such as SM-DS.
- Target activation date is Q1 2018



Types of devices to be certified ...

- **Primary Device**

- A Device that can be used to provide some capabilities to a Companion Device for the purpose of Remote SIM Provisioning.

- **Companion Device**

- A Device that relies on the capabilities of a Primary Device for the purpose of Remote SIM Provisioning.


- **Standalone Device**

- A Device which provides all the capabilities to be able to be used in an RSP environment and needs no other Device for the purpose of Remote SIM Provisioning.



GCF Certification ...

- GCF Manufacturer members will have the ability to declare their devices supporting RSP as fulfilling the GSMA RSP requirements by passing those applicable tests contained in WI-274 and WI-276.
- A simple check box on the GCF Declaration and uploading supporting documentation will provide evidence of the device being compliant with GSMA SGP.24.
- GSMA will use GCF RSP certification as compliance reference within their SGP.24 Compliance Process.



Annex F4.6 RSP Result Annex
Remote SIM Provisioning conformance classification
VERSION 3.6x.0

DEVICE

Manufacturer	Product Name	Product
<xxx>	<xxx>	

Product Types

Companion Device A Device that relies on the capabilities of a Primary Device for the purpose of Remote SIM Provisioning.

Primary Device A Device that can be used to provide some capabilities to a Companion Device for the purpose of Remote SIM Provisioning.

Standalone Device A Device which provides all the capabilities to be able to be used in an RSP environment and needs no other Device for the purpose of Remote SIM Provisioning.

VERSION OF STANDARDS USED

Organisation	Standard	Version used
GSMA	SGP.21	<xxx>
GSMA	SGP.22	<xxx>
GSMA	SGP.23	<xxx>

RSP FEATURES

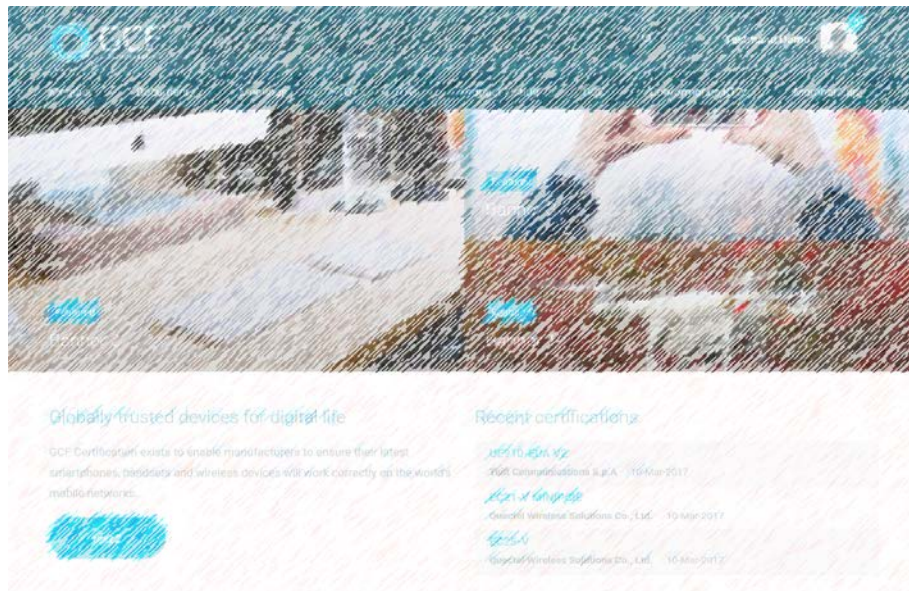
The Device supports LPAid	(YES/NO)
The Device supports GSM/GERAN	(YES/NO)
The Device supports UTRAN	(YES/NO)
The Device supports cdma2000 1X	(YES/NO)
The Device supports cdma2000 HRPD	(YES/NO)
The Device supports cdma2000 eHRPD	(YES/NO)
The Device supports LTE/LTE-U	(YES/NO)
The Device supports NFC as defined in GSMA TS.26	(YES/NO)
The Device supports eUICC CRL	(YES/NO)
Initiation of the Enable Profile procedure is allowed on a Profile that is enabled already	(YES/NO)
Initiation of the Enable Profile procedure is allowed even if the currently enabled Profile has PPR1	(YES/NO)
Device offers a user interface to enter a PIN for user authentication	(YES/NO)
Device allows the End User to initiate the disabling or deletion of an enabled Profile with ppr1	(YES/NO)
Device allows the End User to initiate the deletion of a Profile with ppr2	(YES/NO)
Initiation of the Disable Profile procedure is allowed on a Profile that is disabled already	(YES/NO)
Initiation of Disable Profile procedure is allowed even if the currently enabled Profile has PPR1	(YES/NO)
Device retries after unsuccessful CC entry attempt	(YES/NO)
The Device provides that ILE functionality to restore Profile Download	(YES/NO)

BEARER AGNOSTIC

Audio 3GPP release implemented	(Rel-x/ Not Supported)
Supports USIM Application Toolkit (USAT)	(Rel-x/ Not Supported)
Supports OMA MMS 1.0, 1.1, 1.2 or 1.3	(YES/NO)
Supports OMA Browsing 2.1, 2.2 or 2.3	(YES/NO)
Supports OMA Device Management 1.2	(YES/NO)
Supports SUP1.1.0	(YES/NO)
Supports SUP1.2.0	(YES/NO)
Supports UICC Based NFC Services (See Note 10)	(YES/NO)
Supports RCS (CPR)	(YES/NO)
Supports RCS (UP1.0)	(YES/NO)
Supports GAN	(YES/NO)
Supports SWP/HCI	(YES/NO)
Ciphering Indicator: User Menu available to override SIM/USIM Settings	(YES/NO)
Supports Steering of Roaming (Managed Roaming) feature	(YES/NO)
Supports SIM Lock	(YES/NO)
Supports ZUC (See Note 8)	(YES/NO)
Supports both A-GPS and A-GLONASS (see Note 11)	(YES/NO)
Supports Voice over WiFi (GSMA IR.51)	(YES/NO)
Supports Enhanced Voice Services (EVS)	(YES/NO)
Supports RSP (Remote SIM Provisioning) (See Note 23)	(YES/NO)

'standalone' Certification ...

- To help support GSMA's RSP Compliance process, GCF are investigating a standalone website for RSP Certifiers to declare a device RSP compliant according to GCF RSP certification Criteria.
- The 'standalone' website will be powered by GCF and be open to use by existing GCF Manufacturers and those 'non-GCF members' who have an interest in RSP.
- All conformance testing will be based on GCF's WI-274 and WI-276 with GCF RTO (Recognised Test Organisation) performing testing.



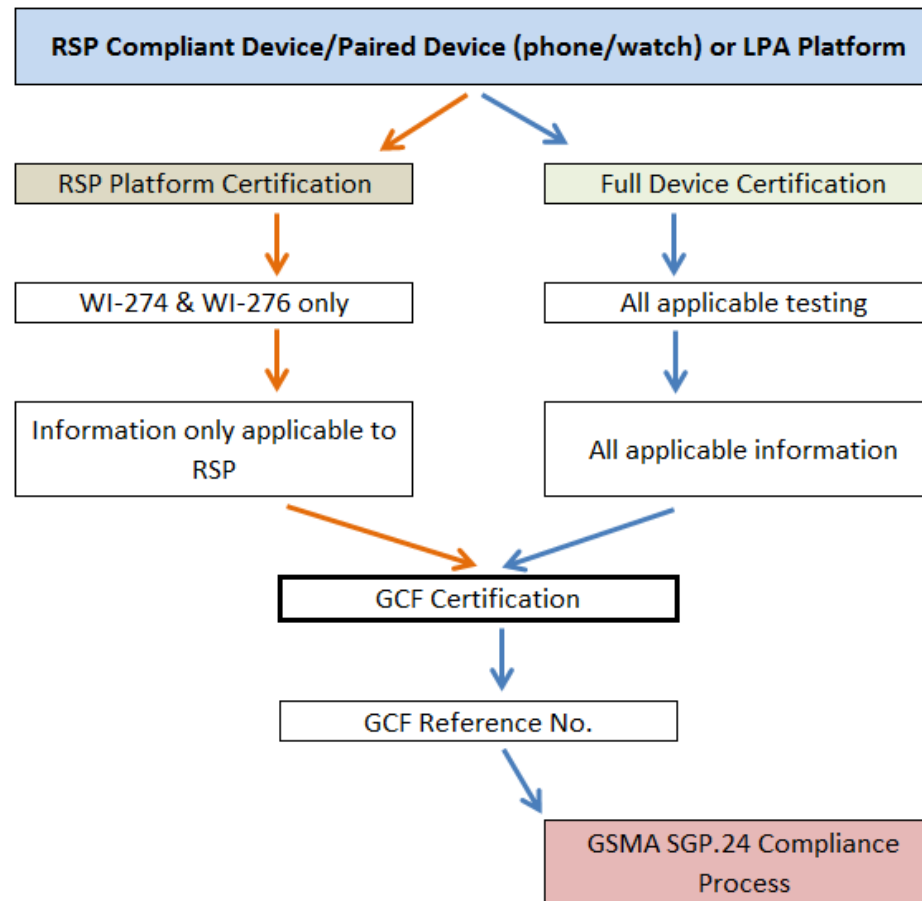
- The 'standalone' site will be accessed via a separate login with no direct link to the main GCF website.

RSP only participation ...

- GCF understands the needs of both the GSMA and the industry to capture the widest range of manufacturers with an interest in RSP as possible.
- To this end, RSP interested organisations can 'sign up' for access on the standalone website in the following categories ...
 - **RSP Certifier:** Interested in certifying the RSP function of a consumer device or a Platform via GCF's Standalone RSP website only.
 - **RSP Observer:** Interested third party involved in the design, development, testing, service provisioning, standards and/or requirements development, etc., of a RSP Product, not being an RSP Operator or a RSP Certifier.
 - **RSP Operator:** Network Operator with an interest in RSP activities associated to the GCF's Standalone RSP website.
- The current expectation is that for 2018, RSP participation will be at zero cost.
- Service Agreements will be available later in 2017 once the standalone site is up and running.

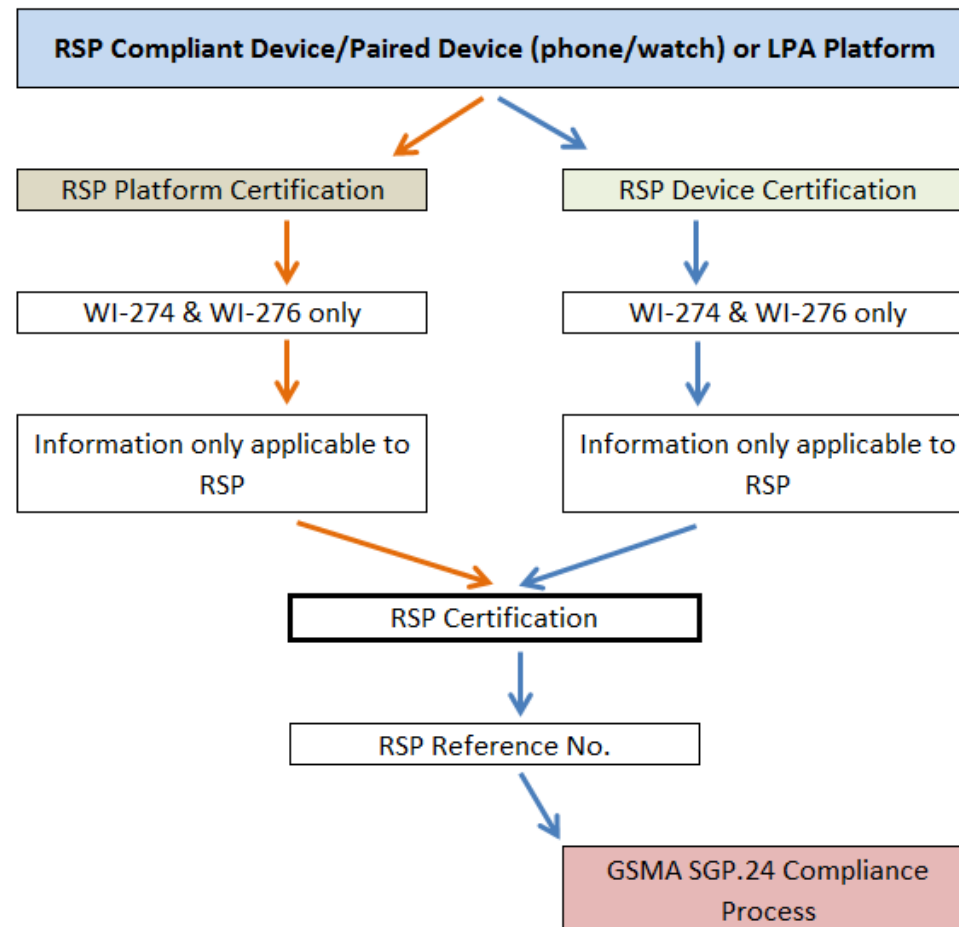
Routes to Certification ...

- For an existing GCF Manufacturer Member the route to certification is the same as now.



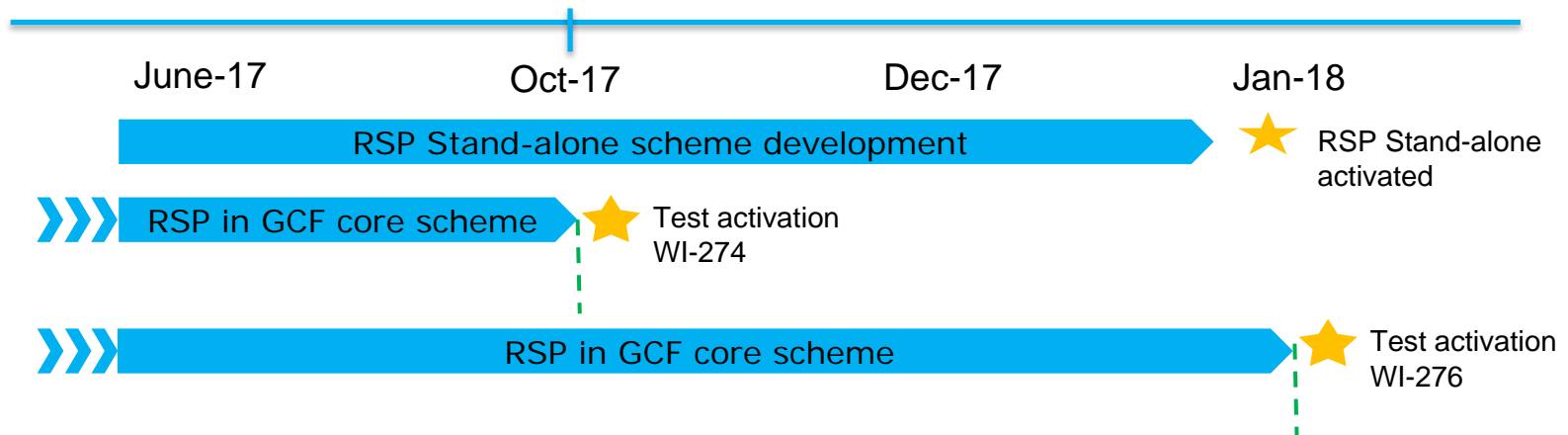
Routes to Certification ...

- For existing GCF Manufacturer Member's or those RSP Certifier's the route to certification will be via the 'standalone' website.



RSP Certification Activation ...

- In GCF, validations of the initial WI-274 is ongoing with a status of validation expected to be announced at GCF CAG#52 meeting to be held on October 24-25th.
- Activation of RSP Conformance testing is expected at CAG#52 in October.
- For the standalone Scheme; development of the website will start at the end of September with expected completion date of November/December.
- Launch date for the standalone Scheme is scheduled for January 1st 2018.



RSP M2M ...

- GSMA have developed test specifications for the eUICC SGP.11.
- GlobalPlatform have implemented a compliance programme based on this SGP.11.
- There are no specific device test cases for the M2M eUICC defined; device certification will rely on the legacy device testing within the GCF scheme (core and standalone).
- There is a plan for GSMA RSP CERT to merge the Consumer and M2M into the existing SGP.21 and SGP.22 but there is no firm fixed schedule.

A world map composed of blue puzzle pieces. Several hands are shown placing the pieces into the map. One hand is visible in the bottom left corner, placing a piece into South America. Another hand is visible in the bottom right corner, reaching towards the bottom of the map. The background is a light yellowish-white.

Thank you