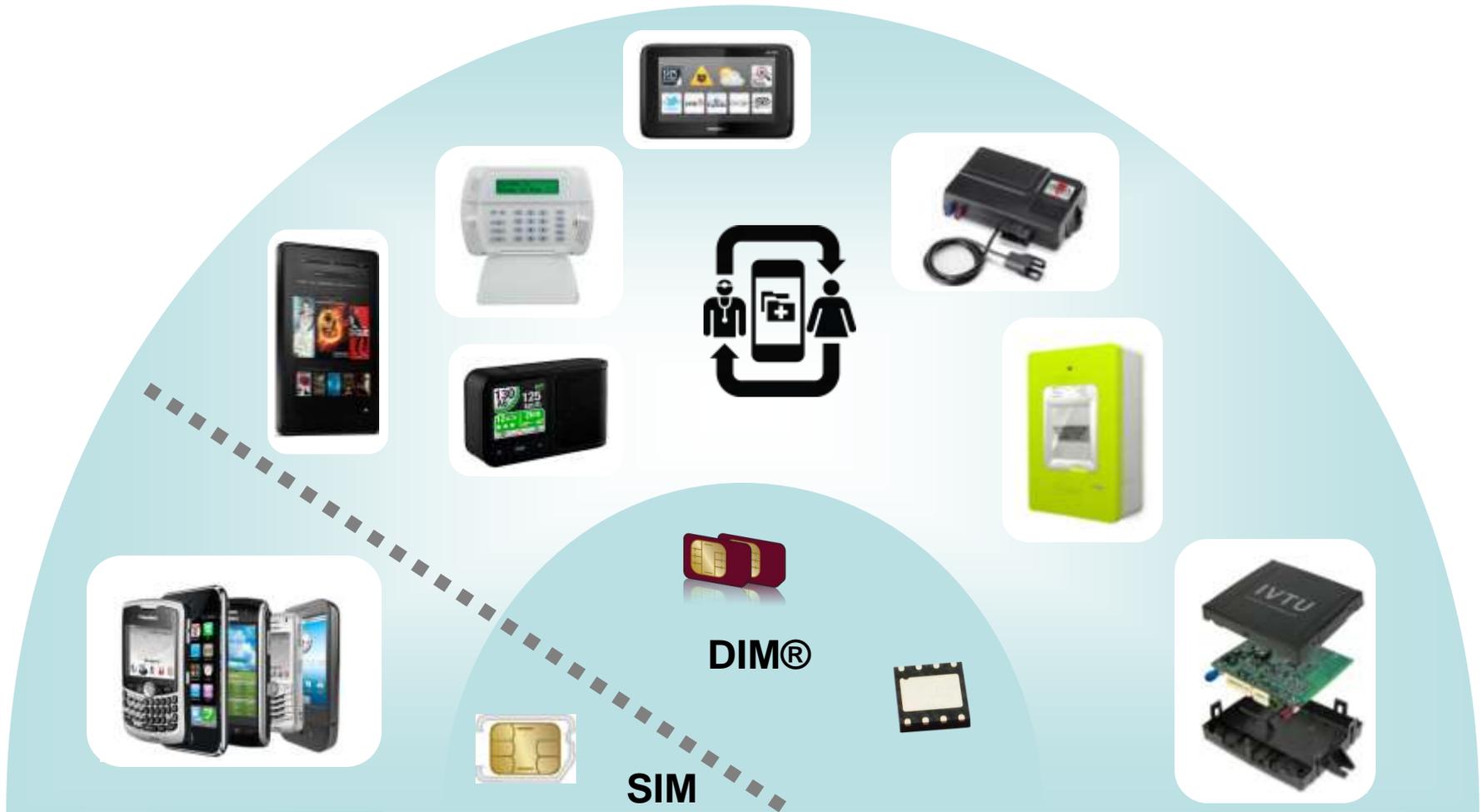
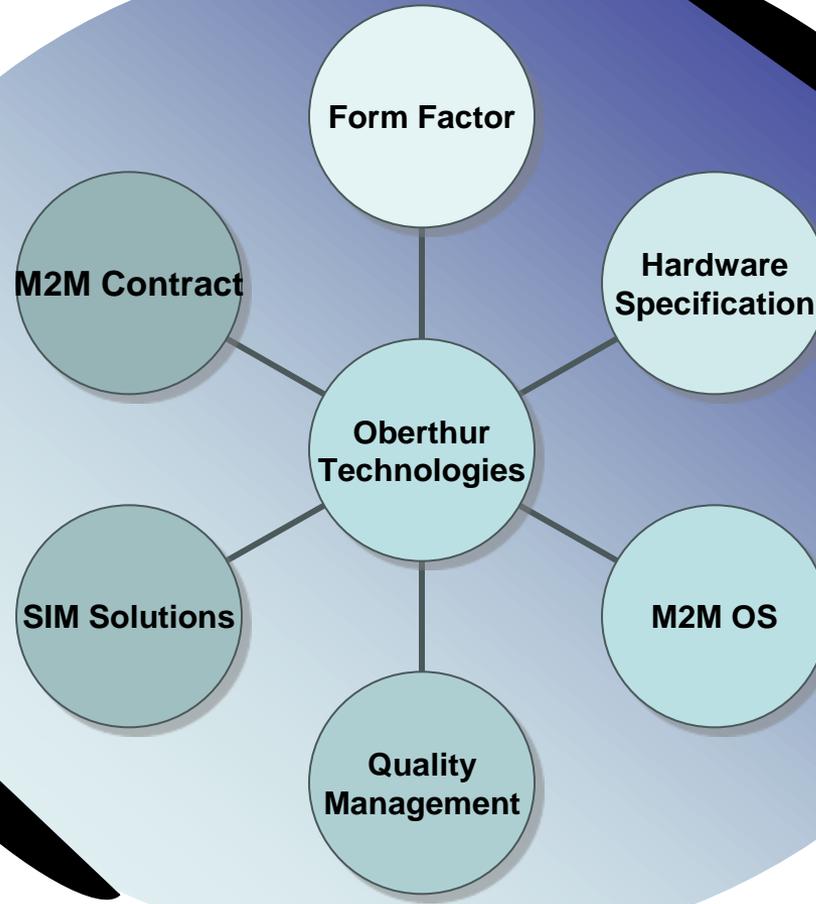
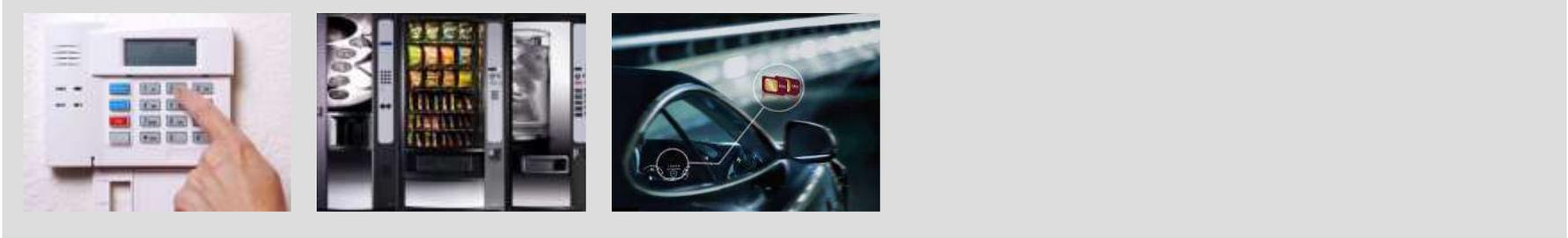


M2M Forum - Milan SIM Challenges





- MNO
- OEM
- M2M Service Provider
- Device Manufacturer



● DIM® for Commercial

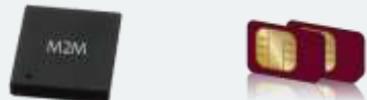
- Home alarms, gateways, stand alone Personal Navigation Device, Fixed Wireless Telephone, speed camera alert, eBook and dedicated tablet

● DIM® for Industrial

- Energy metering, control and monitoring, vending machines, payment terminal, Aftermarket Automotive

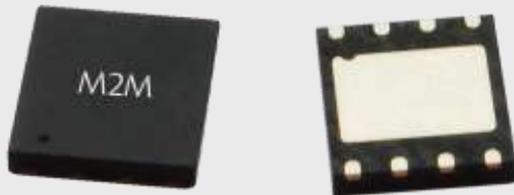
● DIM® for Automotive

- Embedded Telematics applications developed by car manufacturers and requesting Automotive quality management

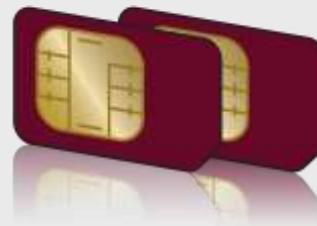
DIM® 2.0	DIM® Commercial	DIM® Industrial	DIM® Automotive
Markets	Home alarms, gateways, stand alone Personal Navigation Device, Fixed Wireless Telephone, speed camera alert, e-book and dedicated tablet	energy metering, control & monitoring, vending machines, payment terminal	Embedded Telematics applications developed by car manufacturers and requesting automotive quality management
Form Factor			
Quality	Standard	M2M Class	Automotive grade
Temp. Range	-25°C +85°C	-40°C +105°C	
M2M features			
NVM Cycling	Ruggedized OS		
Audit/Monitoring	SIM Life Monitoring		
Data Retention	Up to 10 years @85°C	Up to 10 years @105°C	Up to 15 years @105°C

Both formats are relevant for M2M markets

- MFF2 : Surface Mounted Device form factor
 - M2M Form Factor #2 (ETSI naming)
 - High Robustness to stringent environment
 - High integration (end-device assembly)
 - Fits in high throughput assembly processes
- **+**:
 - Follow production process
 - Improved security against fraud
- **-**:
 - Not removable, preventive maintenance required
 - After sales management



- 2FF : Plug form factor
 - 2nd Form Factor (ETSI naming)
 - M5 robust contact plate
 - Enhanced module materials
 - Reinforced plastic (PETF/PC/PETF)
- **+**:
 - Easy Removable for maintenance
- **-**:
 - Requires Applet to prevent from fraud
 - Manual production process



Subscription Manager

How to connect the car in any country?

Connected cars



80 M modules in 2016

Smart Metering



44 M modules in 2016

How to change mobile operator?

How to enable use of local tariff?

Roaming devices



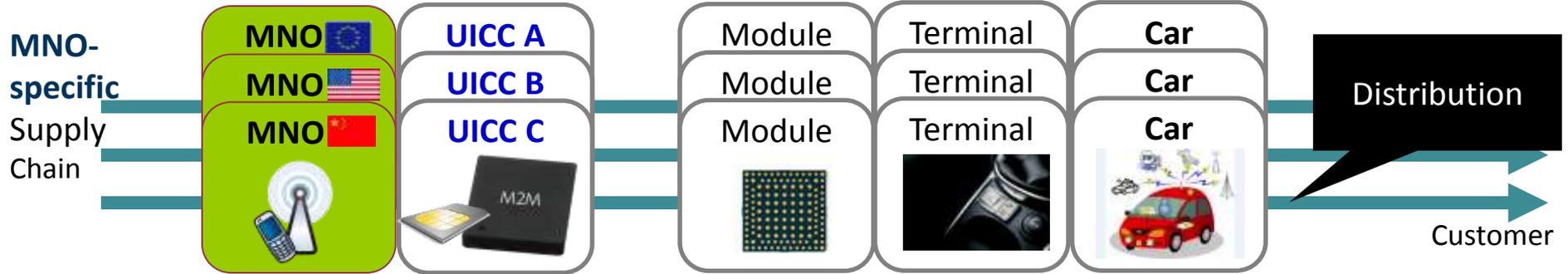
How to manage these subscriptions ?

Other devices



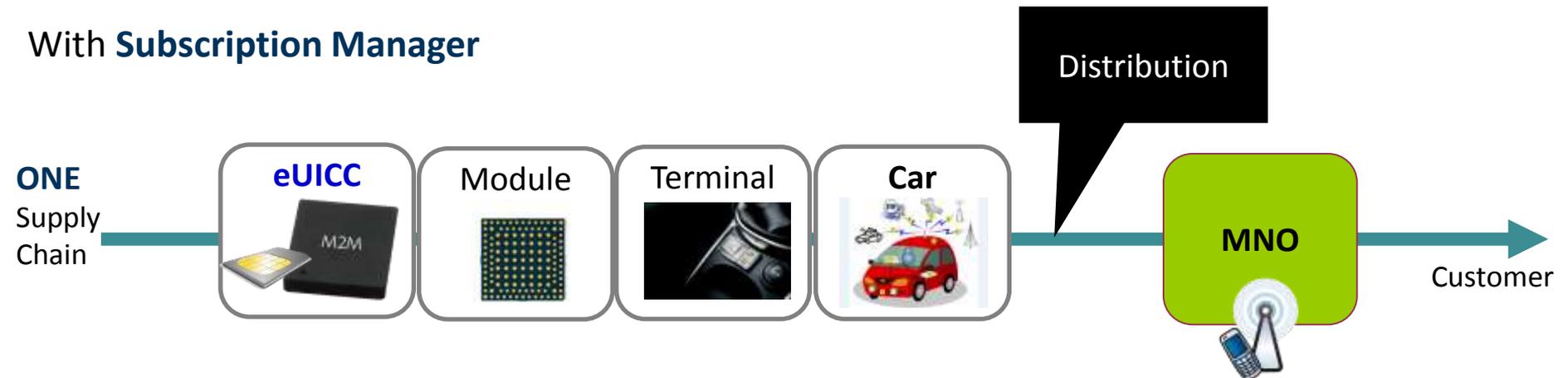
How to optimize connections?

Today's OEM process for selecting mobile operator ...



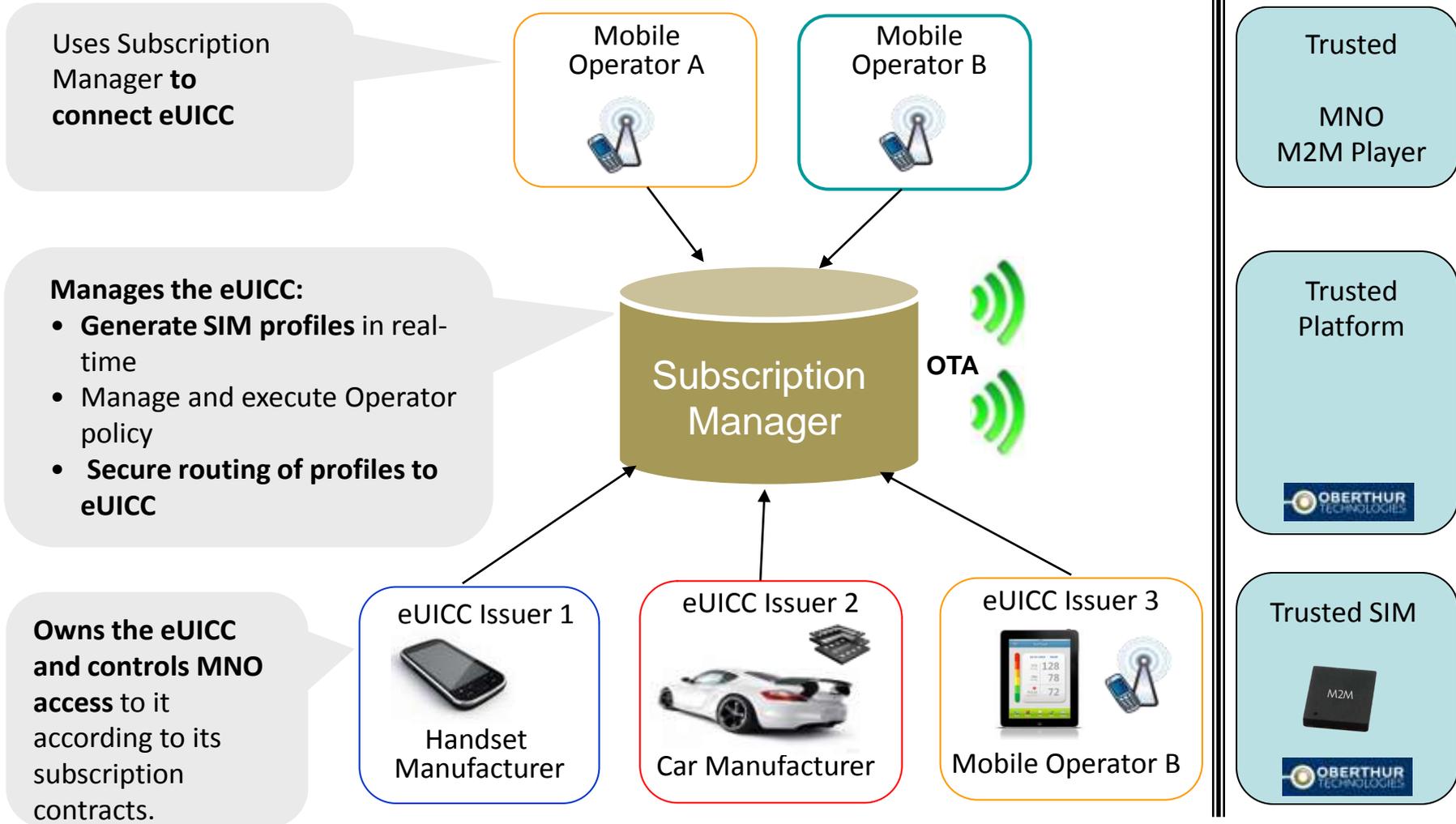
... as part of **M2M device manufacturing phase**

With **Subscription Manager**

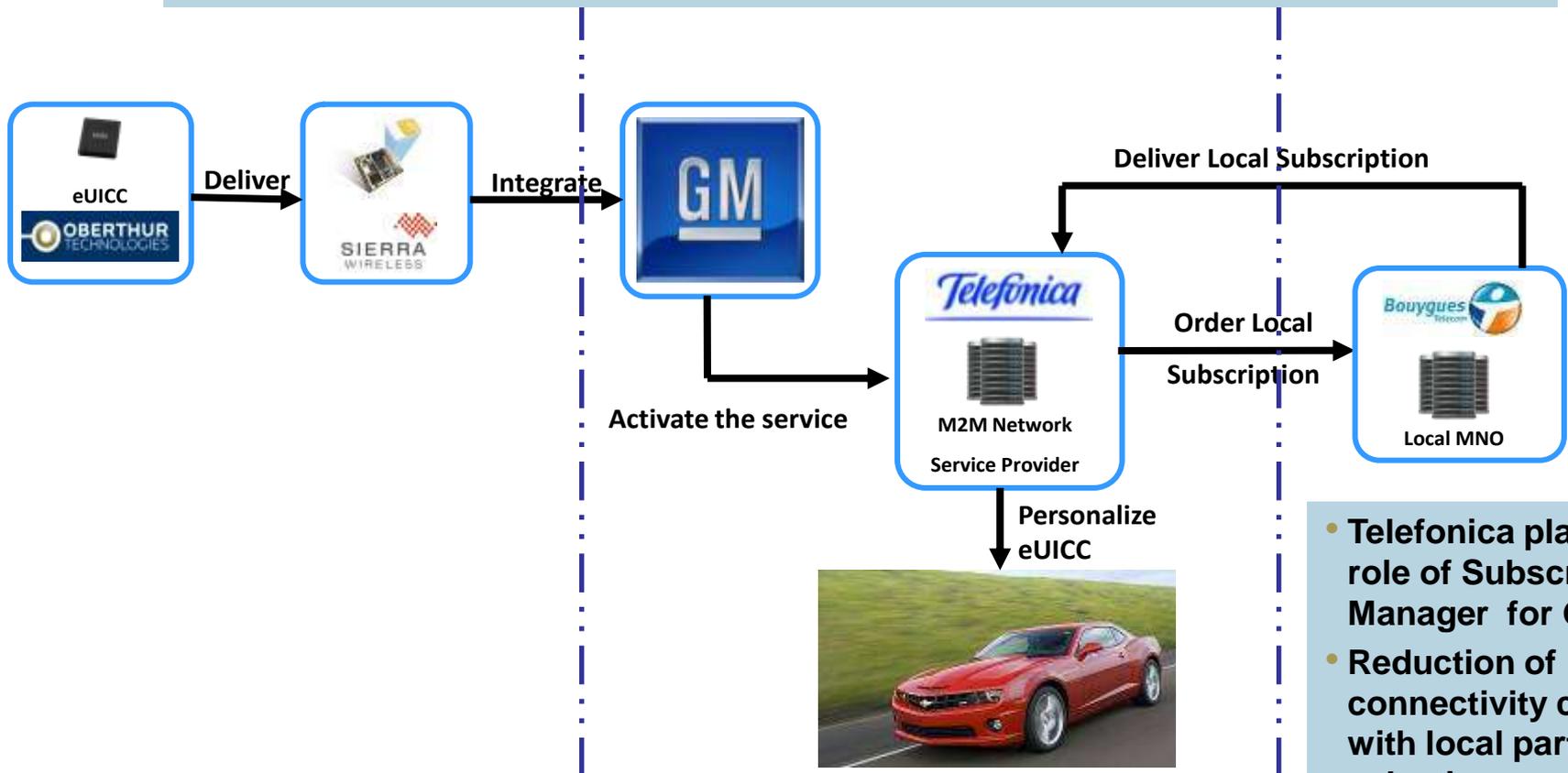


... M2M OEM manufactures with "generic"
eUICC

... then selects operator at service
activation



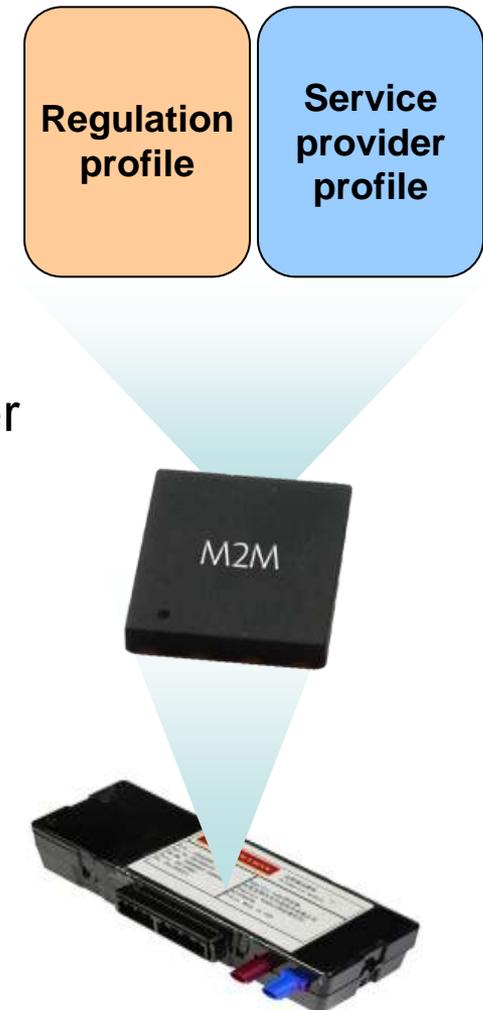
GM can use one identical module for all countries and activate a local subscription once the car is sold

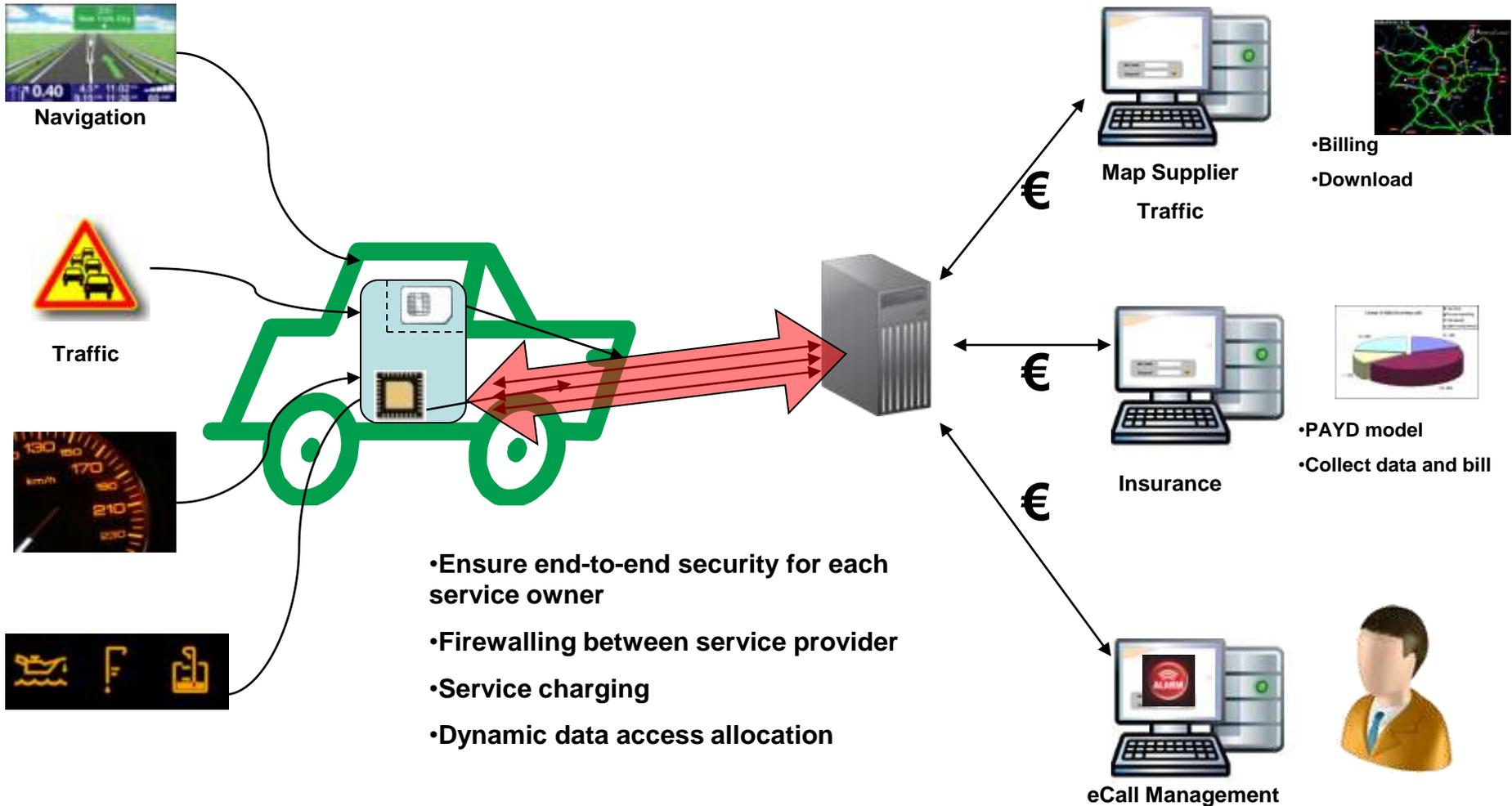


- **Telefonica plays the role of Subscription Manager for GM**
- **Reduction of connectivity cost with local partner selection**

New opportunities

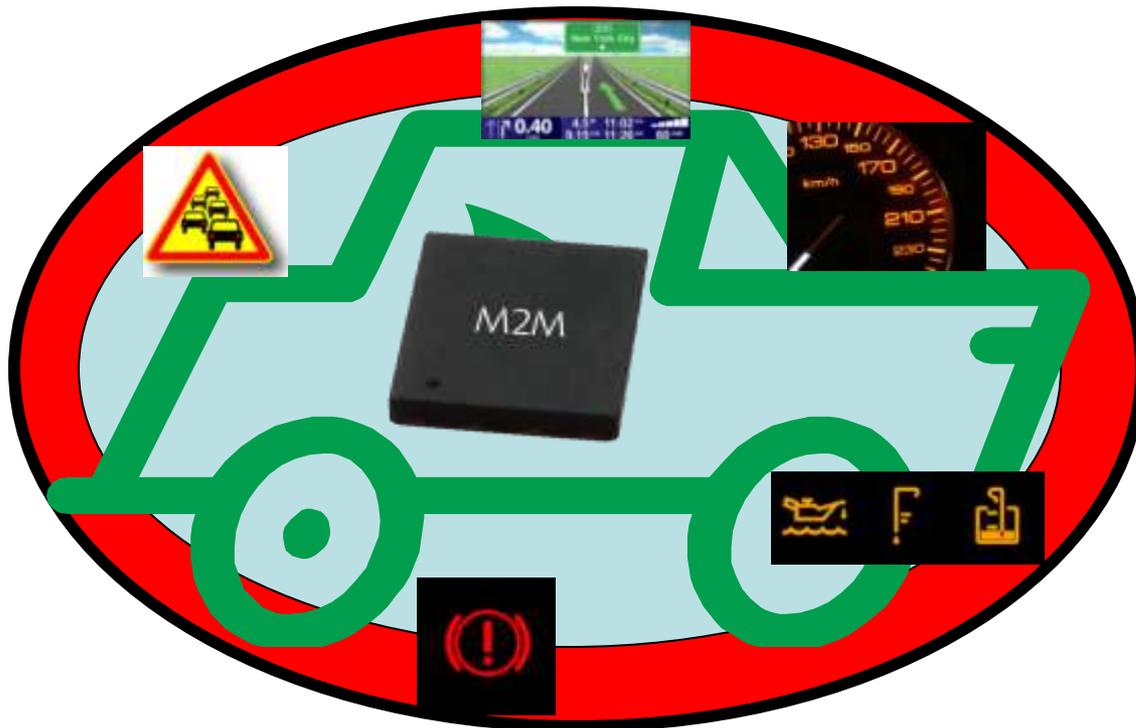
- Regulation drives deployment
- New OEM services will be possible
- Share same Hardware for different service owner
- Ensure dedicated charging
- Service provider profile OTA downloaded







- Door lock/unlock
- Act on vehicle data
- Collect data (position)
- Generate vehicle malfunction



- Strong Authentication
- Cyphering the data
- Signature verification & generation
- Random number generation
- Secure Storage

Trusted Partnership



Secure & Certified Assets
Secure SM Production & Personalization
Certified Secure Platforms

Flexible Supply Chain

1. Delivery-On-Demand Anywhere

Ship-to any location

Ship-to any customer sub-contractors

According to SLA

2. Unitary & Customizable Traceability

SM form factors can be laser marked

Packing & Labeling can be customized

Production traceability recording

Seamless Assembly

3. Secure Handling & Assembly

No need for secure and protected area in production

No on-chip operations required during assembly

SM is handled as any common & standalone component

4. Flexible Assembly

SM available in 2 form factors (SMD or Plug)

to match gateway manufacturing

and end-equipment environment constraints



Merci