Automotive OEMs are the next Telcos!

Presentation to the ConnecteDriver & Smart Mobility

Geneva. March 8th, 2018

Presented by
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Transatel introduction
The Leading European Enabler of MVNO & IoT

Transatell at a glance

18 years' experience in MVNO & IoT market

80+ Live operations Worldwide

Full Cellular Core Network & Enabling platform

180 Experts in mobile connectivity services

130+ Destinations covered with local data agreement in 2017
A wide expertise within the MVNO and IoT Industries

Transatel enables non-telecom players to become MVNOs. We offer different business models, from MVNE/A to branded partner, based on our own full Enabling Platform and interconnections with our MNO partners.

Transatel enables M2M players to include airtime connectivity into their services, as well as a wide range of applications we support, such as fleet and asset tracking, vehicle telematics, smart metering, entertainment, tele-health, …

Transatel enables Device Manufacturers to enrich their value proposition with a global 3G/LTE connectivity offering, thanks to 901 SIM cards that can be embedded at manufacturing stage.

A few references

www.transatel-solutions.com
www.transatel-m2m.com
www.transatel-sim901.com
Our market focus on IoT

**Consumer Devices**
Enable device manufacturers to innovate around connectivity and capture new revenue

**Automotive**
Provide connectivity solutions for both vehicle- and passenger-centric applications

**Industrial IoT**
Provide a global connectivity solution for any IoT devices

**Module & SIM Markets**
Develop strategic partnerships to address IoT device manufacturers

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**Device OEM**
Microsoft ‘Always Connected PC’
Service providers

**Car OEMs**
Application providers

**Enterprise & Resellers**
**IoT Integrators**
**IoT Platform providers**

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**Microsoft**
**VAIO**
**ACER**
**AIRFRANCE KLM**
**TOSHIBA**
**Leading Innovation**
**bitebird**
**FIAT CHRYSLER AUTOMOBILES**
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Automotive OEMs are the next Telcos!
The Connected Car enables new services

**Vehicle Centric Services**
- Firmware update OTA
- Predictive maintenance
- Stolen Vehicle Tracking
- Fleet management
- Remote control & car sharing
- eCall & bCall
- Autonomous driving
- Live information for continuous design and manufacturing improvements
- Data analytics
- ...

**Passenger Centric Services**
- Smart navigation
- Usage Based Insurance
- Smart parking services
- Infotainment (video & music streaming)
- WiFi hotspot (On/Off board)
- Conciergerie
- In-car purchasing services (highway tolls, parking, gasoline, etc...)
- Personalized in-car advertising
- ...
The Connected Car – OEM SWOT

**Opportunity**
- Recurring customer interactions
- Brand differentiation
- New mobility needs (new services / new business models)

**Threats**
- GAFAM & BATX on connected services
- EV pure play OEMs
- Mobile operator capturing most value

**Weaknesses**
- Learning curve to master Connectivity
- Integration with cellular carriers across multiple markets
- Strategic disconnect between OEMs and MNOs (longer life cycle / risk of lock-in)

**Strengths**
- OEMs control the HW (the ON button)
- Strong culture of safety and reliability
- Bundled offer at time of vehicle purchase (pre-loaded service bundle)
A few key requirements

- Security

- Service control and differentiation from GAFA
  - Split billing
  - Sponsored data
  - Vehicle centric vs. Passenger centric

⇒ Both require tight integration with core network
  - HLR / HSS
  - GGSN / PGWay
  - Sim card

- Long term economical sustainability
  - Service in car need to be provided for at least 10 years
  - Data volume increase by 20% to 40% per year
  - Data costs/price is reducing by 20% to 40% per year
Connected Car current pain point: integration with Carriers

Vehicle Centric Services

- Vehicle Centric Apps

Passenger Centric Services

- Passenger Centric Apps

### Connected Car

- **Vehicle Centric Services**
  - M2M Connectivity Management Platform (activation, diagnostics, wholesale billing...)

- **Passenger Centric Services**
  - B2C Connectivity Management Platform (retail bundles, zero rating, user registration...)

### Current Pain Points

- **CARRIER SPECIFIC TIGHT INTEGRATION**
  - (provisioning, routing, security, traffic classification, split billing)

### Cellular Carriers Domain

- Radio Network + Backbone + Network Service Layer
- Core network (HLR/HSS, GGSN/PGW, SMS-C...)

### Connectivity Solution Provider

- M2M Connectivity Management Platform
- B2C Connectivity Management Platform

### Services Provider

- Telematics
- Vehicle Centric Apps
- Passenger Centric Apps

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Focus on pain points on MNO change

- eUICC needs that the car is
  - under coverage
  - Stopped
  - Switch-on (modem)

- Move from MNO-1 M2M P/F to MNO-2 M2M P/F …..

- Re-do service integration
  - Billing / Split billig / Sponsored data
  - Security solutions
OEM strategic move to control the Core Network

Vehicle Centric Services
- Vehicle Centric Apps
- M2M Connectivity Management Platform
  (activation, diagnostics, wholesale billing...)

Connected Car

Passenger Centric Services
- Passenger Centric Apps
- B2C Connectivity Management Platform
  (retail bundles, zero rating, user registration...)

Network Service Layer
Core network (HLR/HSS, GGSN/PGW, SMS-C...)

Move from a Service Agreement to an Access Agreement

OEM controlled
- Integrate once, deploy globally
- Freedom to innovate by controlling the end-to-end service delivery platform
- Flexibility to switch networks at will

Radio Network + Backbone

Cellular Carrier Domain
<table>
<thead>
<tr>
<th>Resources (MNC)</th>
<th>Wholesale agreements</th>
<th>Core network &amp; Management platform</th>
<th>Go Live organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Apply for MNC</td>
<td>• Negotiate direct wholesale deals in key markets</td>
<td>• Formalize Functional &amp; Technical requirements to support the Vehicle &amp; Passenger &amp; OEM centric services</td>
<td>• Regulatory compliance in local markets</td>
</tr>
<tr>
<td>• Apply for GSMA membership</td>
<td>• Rely on 901 Sponsor for rest of the world</td>
<td>• CAPEX / OPEX model (own or outsource)</td>
<td>• Operational marketing</td>
</tr>
<tr>
<td>• Select a 901 Sponsor for extended coverage</td>
<td>• Implement and operate these wholesale agreements</td>
<td>• Roll-out project + in-life operations</td>
<td>• Customer support &amp; billing</td>
</tr>
<tr>
<td>• Manage coexistence &amp; transition between OEM own MNC &amp; Sponsor MNC</td>
<td></td>
<td></td>
<td>• Wholesale billing reconciliation</td>
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</tbody>
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www.transatel.com