EURO MD2 project proposal

Celtic-Plus event

Basel, Nov. 18, 2014

Why Customer Experience Analytics to provide enhanced steering solution ?

High Throughput

Low % of dropped calls

Good 3G & 4G coverage

I've got good coverage but I cannot connect. I will share this feedback with my operator through their great App!

After my OS version upgrade, my device is much slower and consumes more battery

I cannot make voice calls from a specific location

My favourite video streaming app is slow when I use public WiFi

There's an App Draining my data plan and I hardly use it

40% of dissatisfied Customers are likely to switch service provider

Network view

Customer reality

Project proposal

✕ **Transparent Multi Device Data roaming across Europe**

"Improve User experience for IP based services while roaming within EUROPE.
New roaming solutions to perform Device-based LTE roaming steering according to the device parameters and the Measurement of customers perceived experience (QoE)".

gemalto

Project partners

- **GEMALTO (France):**
  Mobile handsets database

- **SMS (Spain):**
  QoE solution / server, mobile apps

- **MCTEL (Monaco)**
  Roaming steering platform

- **EURECOM Insitute (France) :**
  Roaming users profiling apps & LTE validation

- **MONACO TELECOM (Monaco) :**
  LTE Validation infrastructure & use cases

- **Associated partner : Com4innov (France)**
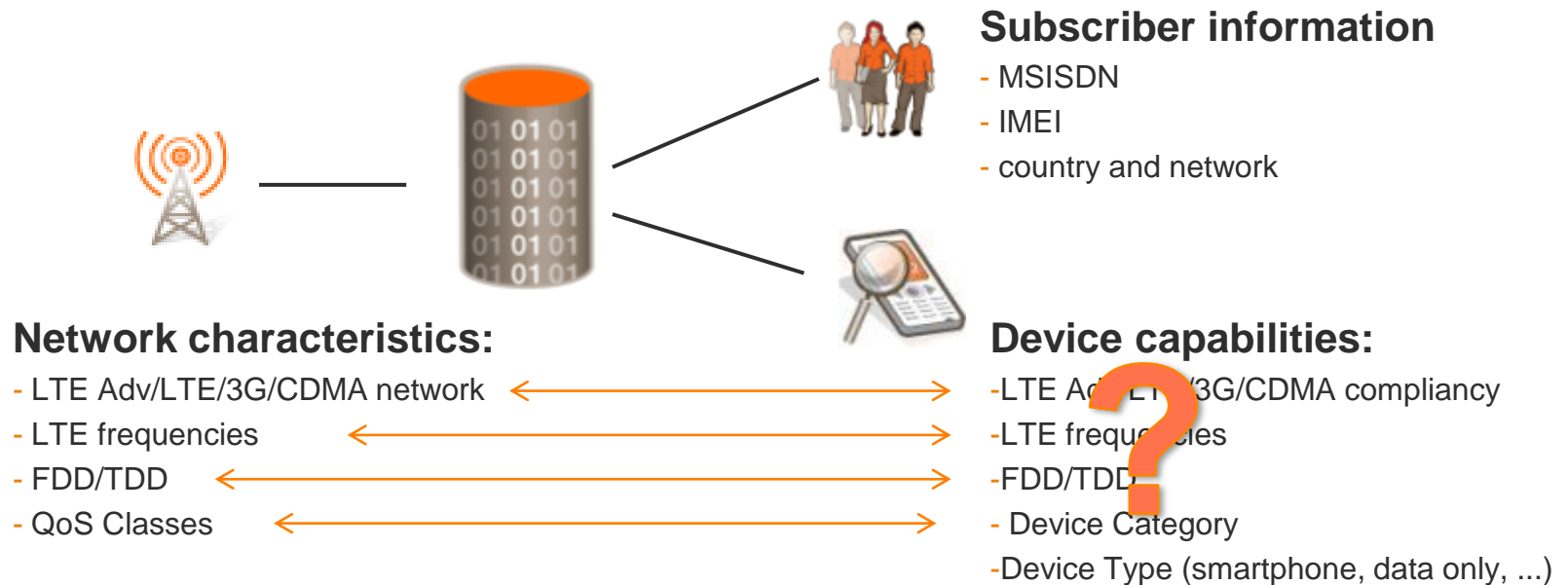 Experimental testbed - LTE & Roaming

Improve User experience for IP based services while roaming within EUROPE

Propositions	Activities / Partnership
Perform Device based LTE roaming steering according to the device parameters: • Device Type (Brand, Model) • Radio Frequencies supported • TDD vs FDD access method • Native VoLTE support • SRVCC support • Native RCS support • Refresh support • Device/network categories • LTE Advanced support • LTE broadcast support • Etc…	Collection, Test & Validation of device characteristics is required
Perform LTE Roaming Steering according to the QoE of outbound roamers and steer accordingly: • Steering rules take into account the Network view, Device dimension and QoE perceived by Customer • Measure MNO services performance (Measure Quality Of Experience as seen by roamers) for network coverage and Data Services • Customer Network Analytics: set of reports and views to help the Operator to quickly understand QoE of different services	SW integration of Roaming Steering platform and Customer Network Analytics platform In situ validation with LTE validation infrastructure

Device based steering for LTE

✗ Is it possible to steer correctly a subscriber in a LTE world without knowing their device capabilities?

Subscriber information
- MSISDN
- IMEI
- country and network

Network characteristics:
- LTE Adv/LTE/3G/CDMA network
- LTE frequencies
- FDD/TDD
- QoS Classes

Device capabilities:
- LTE Adv/LTE/3G/CDMA compliancy
- LTE frequencies
- FDD/TDD
- Device Category
- Device Type (smartphone, data only, ...)

> Device knowledge is required to avoid LTE blind steering

Gemalto Steering Offer

gemalto

Device based steering use cases for LTE

Partner	Device	Steering policy
3G		Signaling **rejected the first time** or accepted but with OTA request to push him to LTE partner
lte		Accepted to boost the LTE usage
3G		Depends on the operator objectives
lte		Depends on the operator objectives but **not prioritary**

Device based LTE steering for a "like at home" experience

7 | State of the art (e.g. current Gemalto Steering Offer)

gemalto

Enjoy powerful customers segmentation

- Apply different steering rules for each **roaming profile** and for each **device type** and **QoE experience collected**
  - Steer prepaid subs on CAMEL partners
  - Steer heavy data users on LTE networks
  - Steer accordingly to the M2M use case and needs

> Customer segmentation
>
> device based steering
>
> and QoE experience
>
> are key to deliver the best Quality of Experience

LTE

M2M

Business

postpaid   prepaid

=> Target is to reconciliate Network and Users views

gemalto
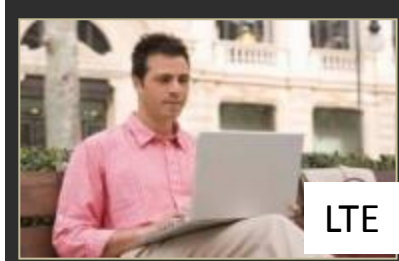
Euro MD2 project proposal overview

- Advanced concept of stirring solution using device database and QoE analytics

- Targeting CELTIC Plus, Feb. 2015, « spring call »
  - **"While connected" Celtic Plus area** i.e. once communication is established, including requirements for end-to-end services and applications.
  - Duration: 24 months

- Search for additional partners:
  - With strong mobile expertise: device data base or mobile services or solution developer to assess the stirring quality
  - Complementary techno bricks improving the technical approach
  - French or Spanish or MC, SMEs/ETI to ease funding process and relevancy

Contact : laurent.manteau@gemalto.com

and herve.troadec@gemalto.com

gemalto