TELEKOM AUSTRIA GROUP

The role of Telecom Service Providers in the Smart Metering Eco-system

TAG M2M @ Croatian technology platform 2013

Roko Raspovic, Telekom Austria Group M2M | July 2013

TELEKOM AUSTRIA GROUP Smart Metering

Telekom Austria Group M2M GmbH - Profile

Facts and Figures

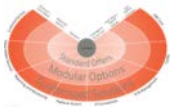
> Telekom Austria Group is the leading Telekommunications provider in Austria and CEE and serves customers in 8 countries with more than 41m inhabitants

> Telekom Austria Group M2M serves as a competence center for M2M to all daughter companies of TAG and is the single point of contact for international M2M customers and partners

Core Value Proposition

Dedicated organization, experts and technologies to accompany you from design to operation

Best network in our countries and vast international roaming coverage



Modular solution with best price/performance and flexible customized services

M2M Application Areas

- Automotive
- Consumer Electronics
- Healthcare
- Logistics & Transportation
- Industrial & Smart Business
- Retail & Payment
- Security & Surveillance
- Energy & Utilities
- Smart Homes & Smart Cities

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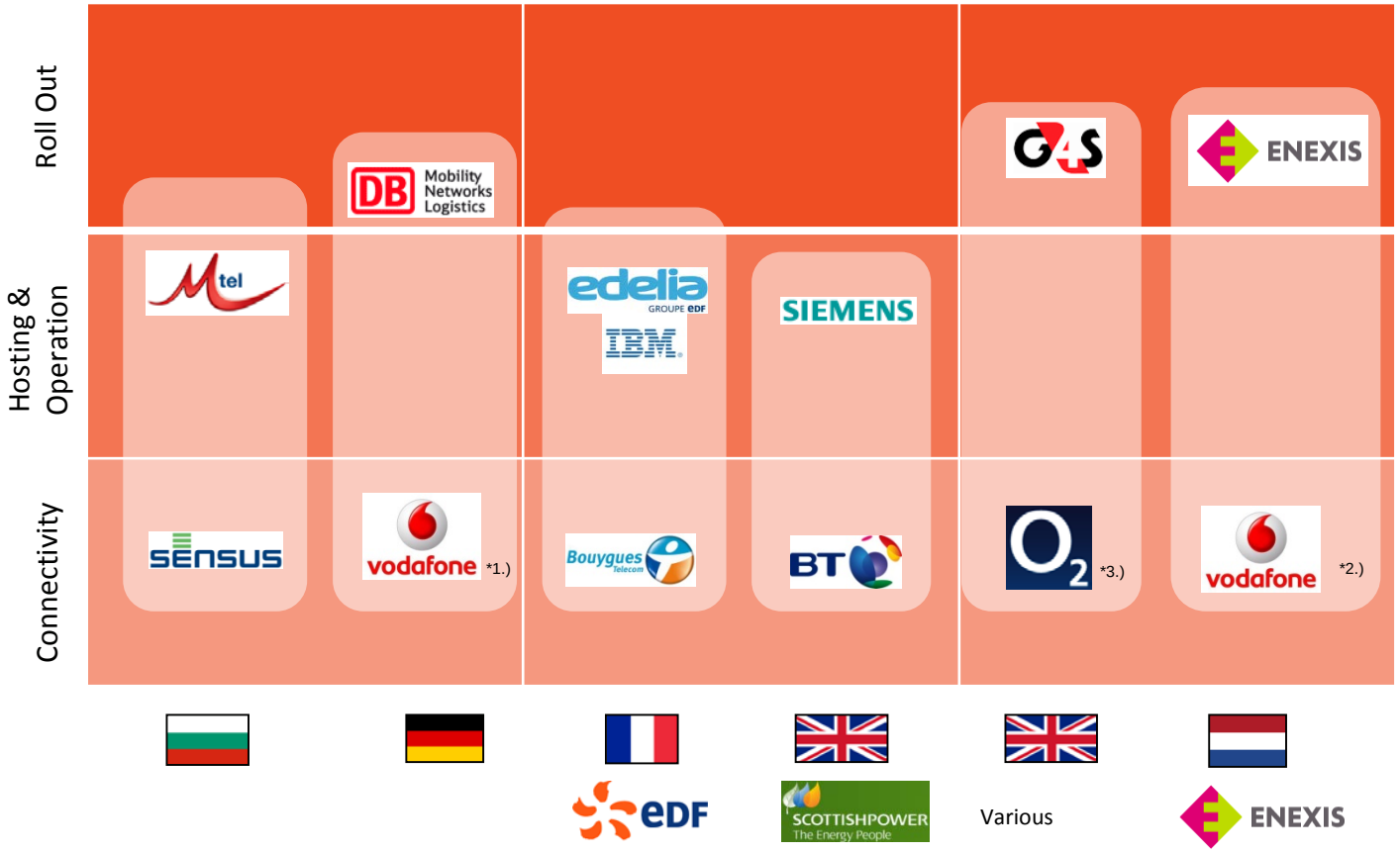
TELEKOM AUSTRIA GROUP Smart Metering

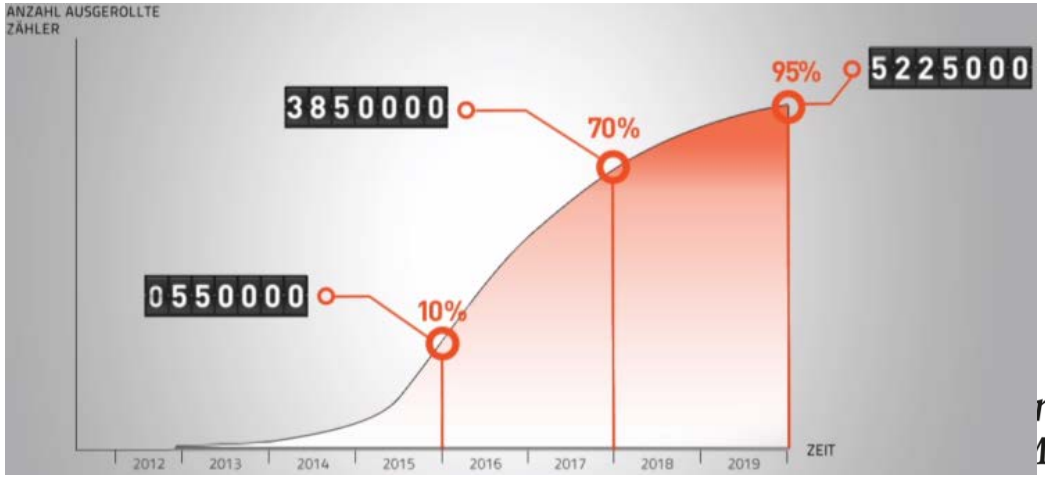
TELCOs as attractive partners for utilities regarding smart metering projects



Sources:
1.) http://www.vodafone.de/unternehmen/presse/pm-archiv-2012_201632.html
2.) http://m2m.vodafone.com/why_vodafone/customer_references/enexis.jsp
3.) https://m2m.telefonica.com/m2m-media/m2m-news/item/315-news-g4s-utility-services-awards-telefonica-uk-one-of-the-uk%E2%80%99s-biggest-ever-m2m-wins

Motivation for Smart Metering

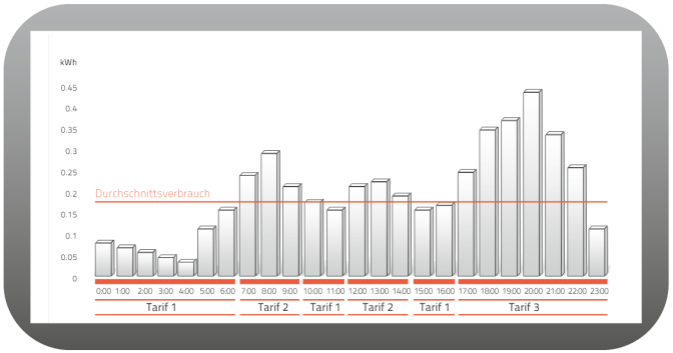
1. EU legislation
   - DIRECTIVE 2009/72/EC OF THE EUROPEAN PARLIAMENT , Attachment 1/ Mandate M/441 of the European Union
   - Macedonia will have to align with the EU regulative for smart metering
2. Increase of revenue for the utility
   - Exact billing and prevention of lost goods
   - Increase of precision when billing
   - Increase of efficiency for distribution of water, gas, electricity
3. Remote management capability
   - Solutions for high risk regions for remote management
4. Pay As You Grow lease model – no CAPEX needed
   - Full lease model including hardware, software, connectivity, meter data management and all elements needed to supply the end user with the functionality



mart
Metering

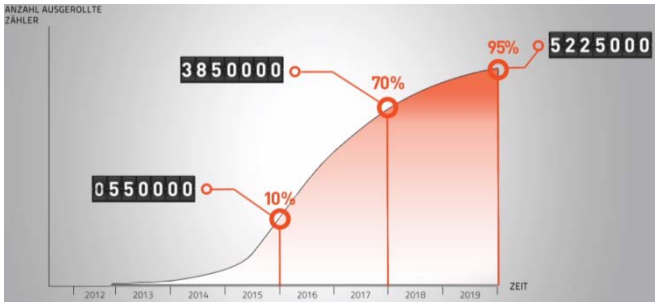
The introduction of Smart Metering in M2M has the most potenial – ideal use of our core assets

> Smart Metering is the networked measurement of energy consumption/production for end-users with the help of Smart Meters



> Goal is more energy-efficiency through near real-time visibility on their own electricity consumption and the possibility of time/load dependent rates

> In Austria the legal framework requires the introduction in 3 steps by 2019 – followed by the other EU TAG footprint countries by 2020



> The total investment for the roll-out in Austria will be around 1 billion euros, the current operation is about 50 million euros

> TAG has the perfect assets for positioning itself as an E2E service provider on Smart Metering – for all utilities whose strategy allows the use of external service providers

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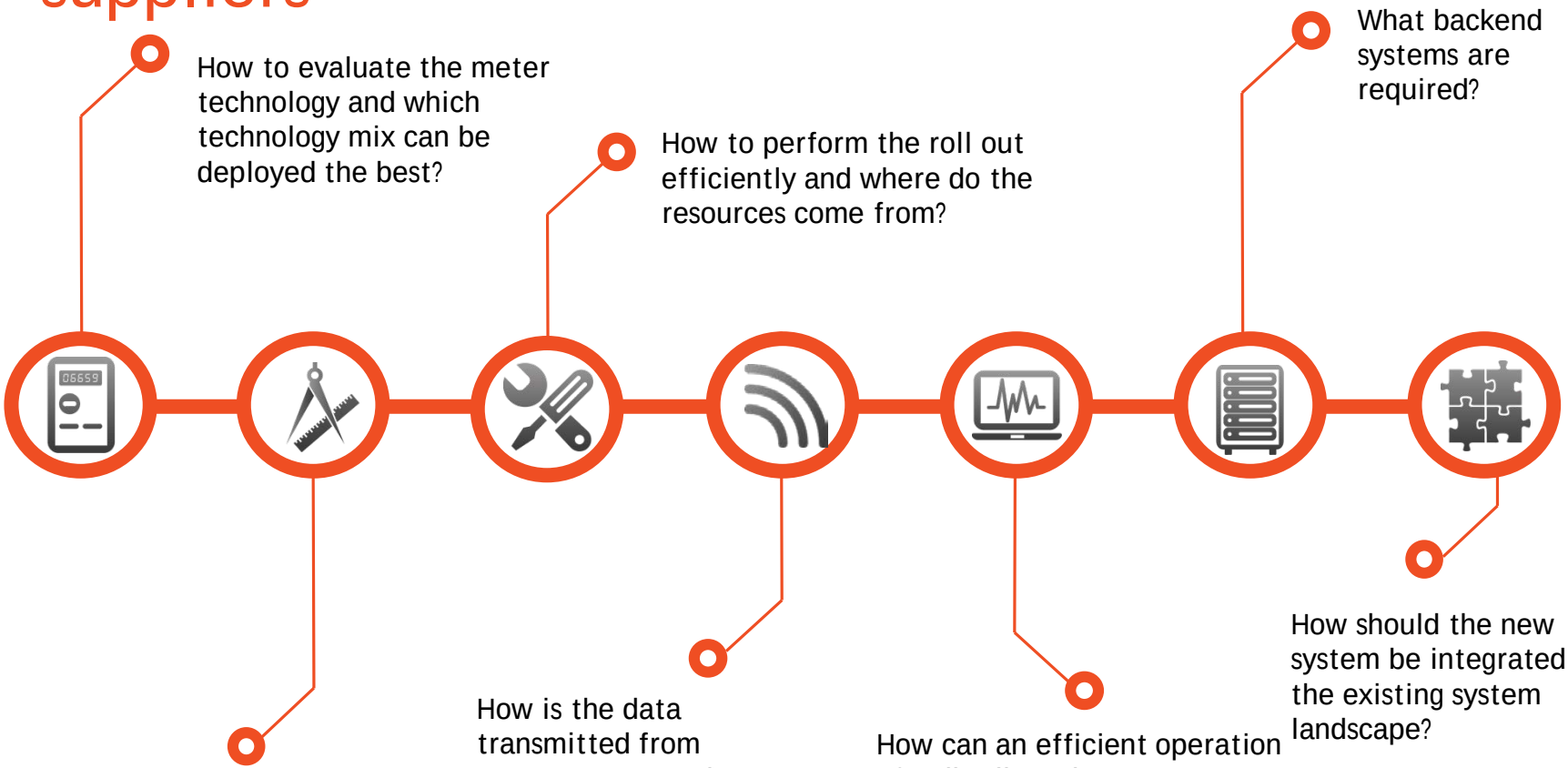
Smart metering and the challenges for electricity suppliers



How to evaluate the meter technology and which technology mix can be deployed the best?

How to optimally plan the use of the various components?

How to perform the roll out efficiently and where do the resources come from?

How is the data transmitted from smart meters to the backend system?

What backend systems are required?

How can an efficient operation of a distributed smart metering system be ensured?

How should the new system be integrated into the existing system landscape?

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Smart metering and the challenges for electricity suppliers

Certified meter systems
- > Int. Supplier screening and contract manufacturing
- > Purchasing synergies and economies of scale
- > Quality assurance, testing and certification

Roll-out planning & installation
- > Roll-out planning
- > Delivery management & workforce management
- > Supply chain & logistics
- > On site installation

Central platforms
- > MDM software and hardware
- > Installation & licences
- > Hosting
- > Application operation

Integration
- > Partner networks for complex IT integration

Network planning
- > Technology agnostic communications network planning
- > For A1 networks and alternative last-mile technologies
- > E2E Security Design

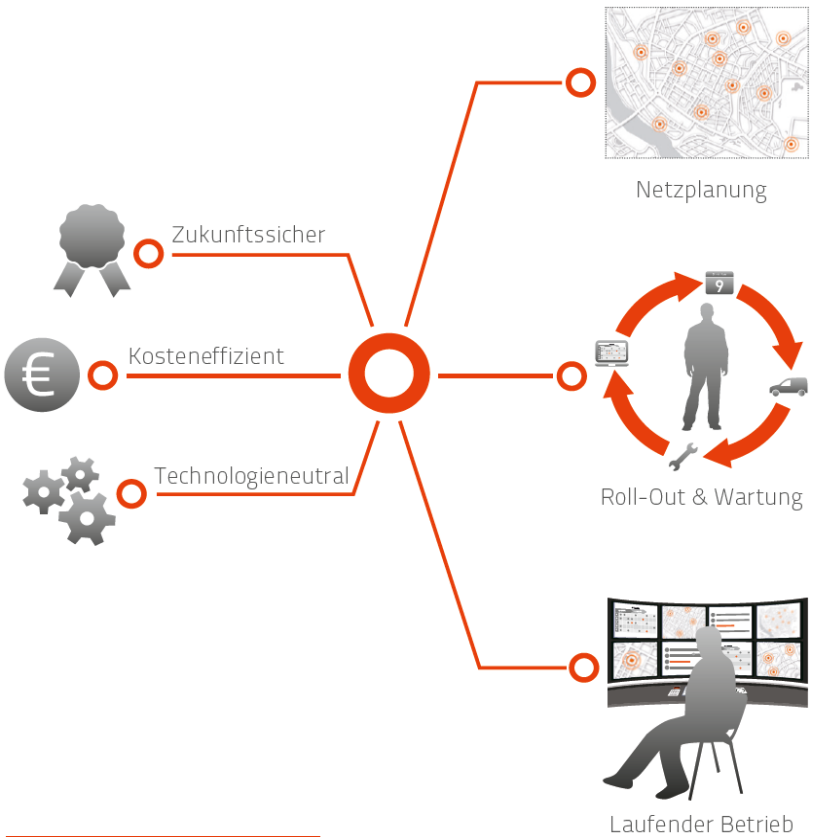
Data transfer
- > Best network coverage of mobile and fixed lines
- > Only EDGE infrastructure in Austria (2,5G data rates up to 384kb/s)
- > Cost efficient usage
- > Durability and flexibility through standardized solutions
- > State-of-the-art data security
- > Optional: national roaming

Operation of communications infrastructure & IT
- > SLA based outsourcing of operation and maintenance
- > Operation of distributed infrastructure and core IT systems
- > On site & remote operation
- > Always on 24/7/365

Future proof ✓ **Technology neutral** ✓ **Cost efficient** ✓

TELEKOM AUSTRIA GROUP Smart Metering

Telekom Austria Group – your reliable partner for smart metering planning, roll out and operation



CEEs leading communications provider, with 19.000 employees and 130 years of experience in the telecommunications business we offer many years of experience with:

- Complex and unique IT- & communications outsourcing solutions
- Network planning expertise for various communication networks
- Experience with roll out, installation, maintenance and operation of mass-market solutions in customer households
- *Austria´s largest field service organization*
- Security expertise and trained staff to meet high privacy and data security requirements

Telekom Austria Group has the required experience, expertise and resources to handle smart metering with cost efficiency and security.

TELEKOM AUSTRIA GROUP

Thank you for your attention!

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