SMART METERING AS A SERVICE

ERICSSON
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SMART METERING GLOBAL OFFERING LEAD
NETWORKED SOCIETY

- 15 years: 50 billion connected devices
- 25 years: 5 billion connected people
- 100 years: 1 billion connected places

Connections (billion)

1875 1975 2000 2020

20 40 60

10 20 30 40 50
WHY SMART METERING AS A SERVICE?

Utility benefits:

› Utility can focus on core business/activities
› Optimal Technology choice
› One Single-Point-of-Contact
› Access to best in class resources for managing their network
› A controllable and visible solution operational cost
› Flexible solution that follows the company’s core activities requirements
› A proven approach to reducing the total cost of ownership

RELIABLE PARTNER CAN TAKES CARE FOR NON MISSION CRITICAL SOLUTIONS
BUSINESS CHALLENGES

FUTURE PROOF
- Long term technology sustainability
- Open or easy to access data, technologies and protocols
- Flexible and adaptable to regulatory and market changes

EFFICIENCY
- Use of existing infrastructure (no redundant investments)
- Connectivity agnostic
- Cost reduction due to economies of scale

SCALABILITY
- Many services (water, electricity, waste, street lights, etc.),
- Geographic scalability
- Capable to enable smart city development

CONTROL
- Utilities needs to keep the control of the operational data and solution development
- Security and data privacy need to be managed

SMAAS SHOULD ENABLE MARKET COMPETITION
TECHNICAL CHALLENGES FOR A SIMPLE CASE

SP as integrated provider of connectivity and data collection services

Interaction with commodity/public services and other services providers

Communication HUB in buildings with multiprotocol HAN

NAN for public lighting service and also sensors for smart city services (waste, pollution, traffic, safety, etc)

Home Appliances

IHD

Sensors

Health

Security

Power Meter(s)

Gas Meters

Water Meters

Car Charging

EV

Public Lights

Other Sensors

Repeater

Zig-bee

Zig-bee/RF-Mesh

2G/4G access, with ADSL/RF Mesh for hard to reach sites

2G/4G access,
with ADSL/RF
Mesh for hard to
reach sites

Marketplace for device data (DDX) so to foster development of new services

WM-Bus

PLC/WM-Bus

WM-Bus

PLC

PLC - Bus

WM- Bus

HAN

NAN

Cloud Services

Energy Supplier

CRM

MDM

IT Legacy

DSO Power

MDM

IT Legacy

Public Lighting

MDM

IT Legacy

DSO Water

MDM

IT Legacy

Municipality

IT Legacy

Citizen Portal

IT Legacy

Other Service Provider

Service Provider

IT Legacy

Service App

IT Legacy

PC/ Mobile devices

WM - Bus

PLC/ WM - Bus

2G/4G/ADSL/RF Mesh

3G / 4G ADSL

Marketplace for device data (DDX) so to foster development of new services

IT

Legacy

Legacy

Legacy

Legacy

Legacy

Legacy

Legacy

Legacy

Legacy

Legacy

Legacy
SMART METERING IS MORE THAN AMI

MANAGED SERVICES
- O&M and Service Desk
- LCM & Regulatory management
- Hosting
- 3rd party management
- Dispatching & Field Services

Governance & Development Planning Process
- Best in class operational tools and processes
  (Ericsson MS-TOP - eTOM - ITIL)

3rd party management

REAL CASES

- Third largest power distributor in Italy (and #1 water distributor in Italy).
- Complete managed Advanced Metering Management operation service for 1.6 million electricity meters and 500 street-lighting substations
- E.ON Elnat Sverige, part of E.ON Group
  - Ericsson operates more than 600,000 E.ON smart meters from 20 different vendors in Sweden
  - Solution combines managed services, system integration, ICT and field services
  - Industrialization of “Meter-to-Cash” processes
- Electrilevi is the main DSO in Estonia
  - Ericsson as prime integrator to supply, deploy, system integrate and run a smart metering network
  - Includes deployment of 630,000 smart meters and the needed IT systems
- Ericsson chosen to deliver nationwide SMaaS (including related field operations) for more than 700,000 L&G meters and more than 20 customers in Finland. Contract starts Oct 1st, 2014
  - Contract includes transfer of 13 L&G employees to Ericsson

ITALY

SWEDEN

ESTONIA

FINLAND
ESTABLISH & OPERATE NEW SERVICES

CUSTOMER NEEDS

› Competence and skills to launch a new services and technology

› Managing risks during a change in the communication network and metering devices roll-out

No decline in performance during the process
ESTABLISH & OPERATE NEW SOLUTION
SMART METERING AS SERVICE TO OFFER

› Global knowledge and experience delivered locally within your premises

› Quality improvement linked to Operational Readiness activities

› End to end operations responsibility during critical change period

› Competence transfer

Fast time to market for new solution and services
The Transition – Operation – Transformation methodology helps guarantee a successful service outsourcing and transformation program.
Ericsson SMaaS acts as main point of contact for all Smart Metering related activities, simplifying the utilities relationship with internal and external clients.
MAIN COMPONENTS OF A INDUSTRIALIZED SERVICE MANAGEMENT MODEL

GOVERNANCE MODEL

- Three-level governance model:
  - Level 1: Operations, Commercial, Planning & Innovation review
  - Level 2: Performance review
  - Level 3: Steering Board review

SLAS & REPORTING

- KPIS/SLAs to be agreed between both parties, including severity level, description, type & threshold
- Reports include:
  - Quarterly Service Performance Report (scorecard & quality indicators, KPI trends, Procedure Manual Reviews, and proposals for strategy changes)
  - Monthly Service Performance Reports (status report, forecast, Service Quality & SLA fulfilment, complaints, etc.)
  - Incident / Service Fault Reports

OPERATIONAL MODEL

- Industrialized processes and procedures
- Combination of local dedicated, local/global dedicated/shared resources
- Based on Ericsson Managed Services Blueprint

RESPONSIBILITY MATRIX

- RASCI (Responsible, Accountable, Support, Consult, Inform) matrix covering all service domains (Service Management & Service Operations) according to MSTOP framework:
  - Delivery management (service strategy)
  - Planning & Engineering
  - Deployment & Integration
  - Service Operations
SMAAS: TECHNICAL SOLUTION
MODEL FLEXIBILITY /ADAPTABILITY

OPTION COULD BE IMPACTED BY:

- Regulation (reading data into the borders)
- Client strategy
- “Shoring” model
- Service scope (main impacting areas; field services and connectivity)

Technical solution shall be flexible to achieve best fit to Utility business requirements
MODEL BENEFITS

- **Evolve business**
  - Flexibility
  - Future proof

- **Manage quality & complexity**
  - Improved service quality management
    - Service optimization
    - Connectivity management in scope
  - 3rd party management
    - Work automation
    - Staff optimization
    - Off shoring
    - Consolidation of operations

- **Cost efficiency**

Methodology should guarantee a proper knowledge transfer to avoid service provider lock in
NEXT STEPS

- Begin with non mission critical services (Smart metering)
- Put focus in the KPIs management related with security and processes improvement
- Work with a reliable partners
ERICSSON UTILITIES REFERENCES
SOME EXAMPLES

SMART GRID OPERATIONS

SMART METERING

SMART GRID COMMUNICATIONS

Some examples include:
- Enel
- Hydro Québec
- EDF
- E.on
- Endesa
- Terna
- ESB
- Accia
- Ausgrid
- RTE
- SNAM
- ITALGAS
- FederUtility
- Fortum
- Pepco
- Grid
- Terna
- ES
- ACCIA
- Ausgrid
- RTE
- SNAM
- ITALGAS
- FederUtility
UTILITIES TRACK RECORD

>42 MILLION METERS
MANAGED BY PLATFORMS DEVELOPED, OPERATED OR MAINTAINED BY ERICSSON

>20% SAVINGS
IN COST OF COMMUNICATIONS OPERATION, BY UTILITIES THAT HAVE SELECTED OUR COMMUNICATIONS NETWORK OPERATING SERVICES

INNOVATION
FOCUS ON INNOVATION FOR UTILITIES, PARTICIPATING IN SEVERAL INNOVATION PROJECTS SUCH AS GAD, STOCKHOLM ROYAL SEAPORT, AUSGRID, FINESCE, ADDRESS, PRICE AND ELVIIS

STANDARDS
PARTICIPATING IN SEVERAL STANDARDIZATION BODIES FOR UTILITIES SUCH AS MANDATES M441 AND M490, ESMIG, ETSI M2M, NIST, IEEE, UTC, GWAC, ETC.

FIRST
4G (LTE) NETWORK
DESIGNED AND DEPLOYED FOR SMART GRID & FIELD FORCE COMMUNICATIONS

9 UTILITIES
HAVE SELECTED ERICSSON’S SMART METERING AS A SERVICE MODEL
NEXT GENERATION ENERGY NETWORK
POWERED BY ICT...

LOOK FOR STRONG GLOBAL TECHNOLOGY ECO-SYSTEMS
CONTRIBUTE TO & LEARN FROM GLOBAL EXPERIENCE
MUCHAS GRACIAS

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