

IUBS Programme



Smart Grid in Malta

3rd March 2010





Agenda

- Water Services Corporation / Enemalta Corporation
- Smart Metering within a Smart Grid
- Where are we today?
- Benefits to the consumer





Building a Smarter Energy and Water System

In recent years, a complex series of challenges required immediate attention to ensure that Malta is able to deliver affordable and secure energy, as well as supply Malta with an increasing demand for water, while protecting the environment.



Water Service Corporation



Enemalta Corporation





Specific Challenges to be addressed

- 7% Non-technical revenue electricity losses;
- 23% non-technical revenue water losses;
- 20% of 6-monthly bills issued on estimated readings due to no-shows;
- €1m annual incremental cost to provide bi-monthly actual bills;
- The cost of producing electricity varies by season and time of day. Tariffs do not correlate price with the cost of production;



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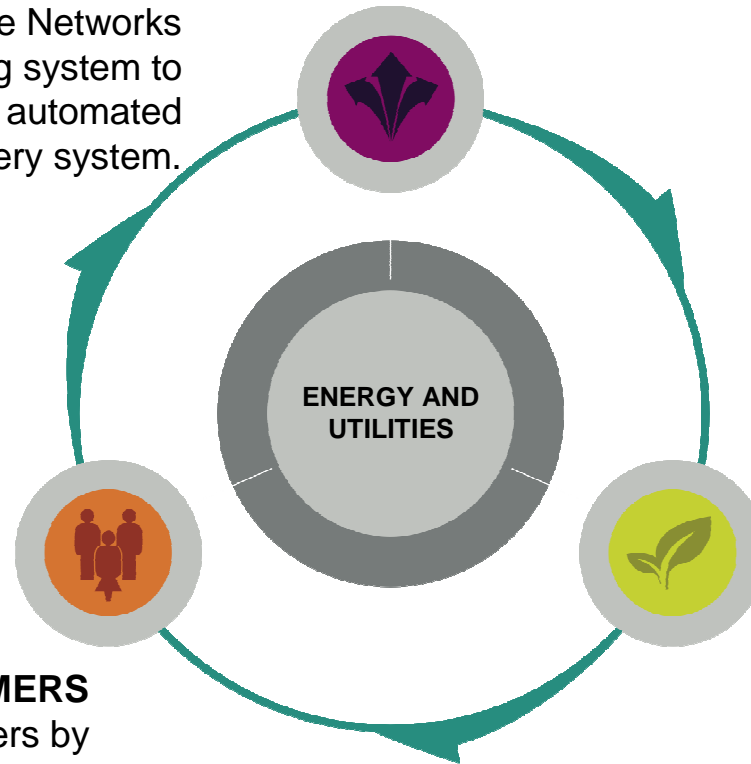




A Smarter Energy Value Chain.

TRANSFORM UTILITY NETWORKS

Transforming the Networks from a rigid analog system to a dynamic and automated energy delivery system.



REDUCE GREENHOUSE GAS EMISSIONS

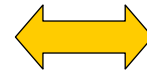
Meeting stringent greenhouse gas emissions targets while maintaining sufficient, cost-effective power supply.

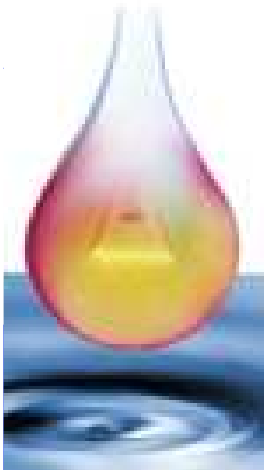
EMPOWER CONSUMERS

Empowering consumers by providing them with near real-time, detailed information about their energy usage.

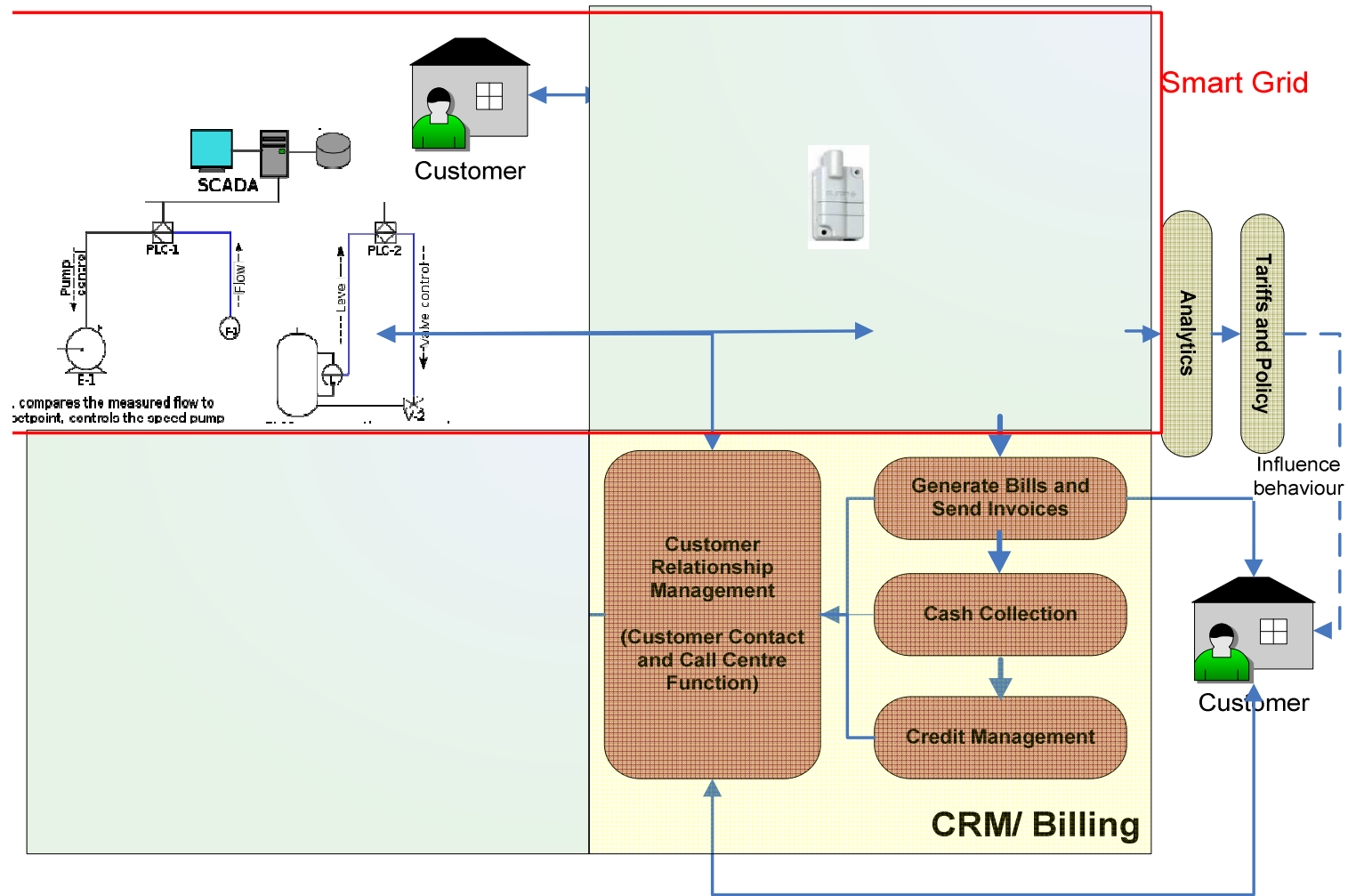


Integrated Utilities Business Systems



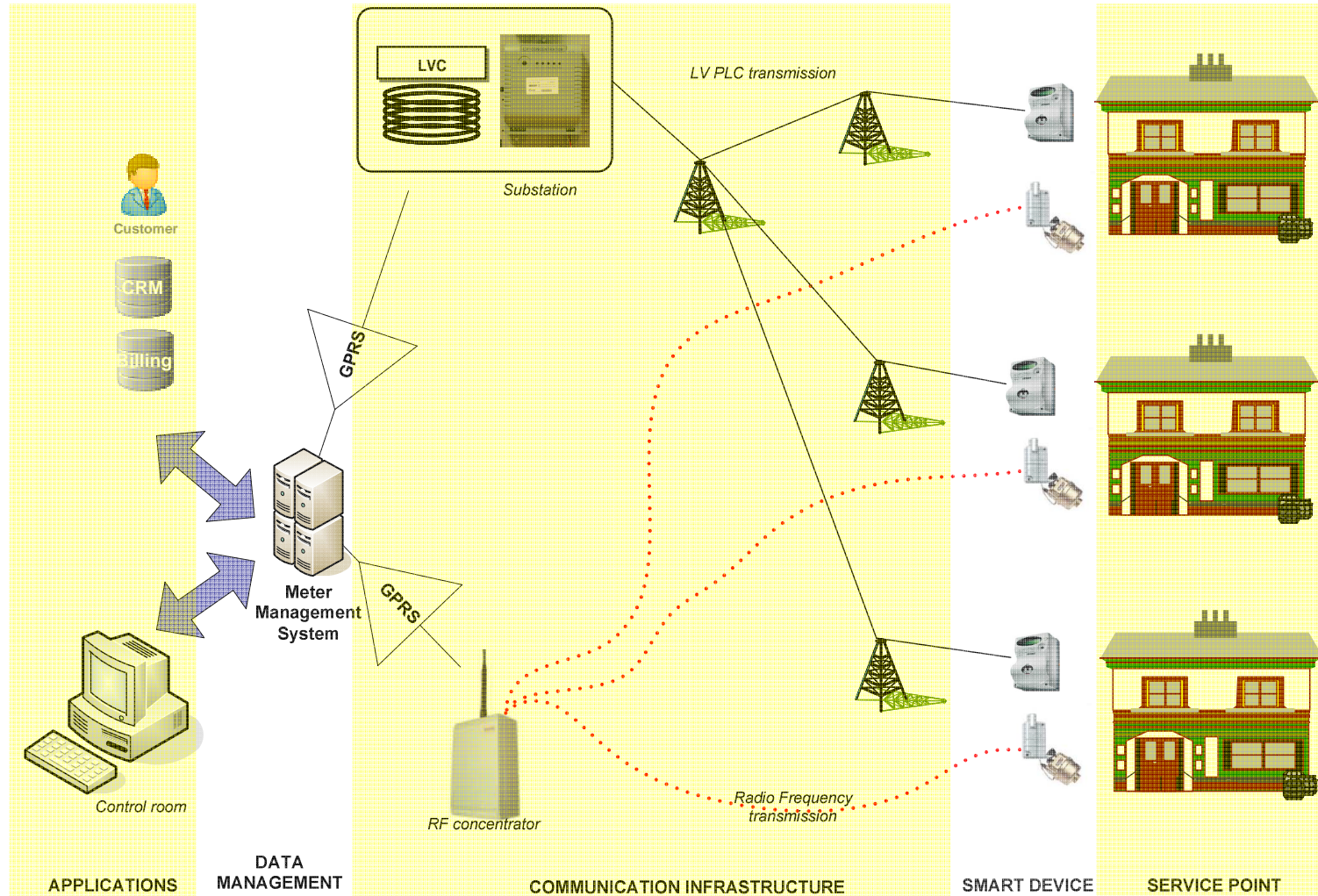


An Integrated Programme Overview





Smart Meter Network





Agenda

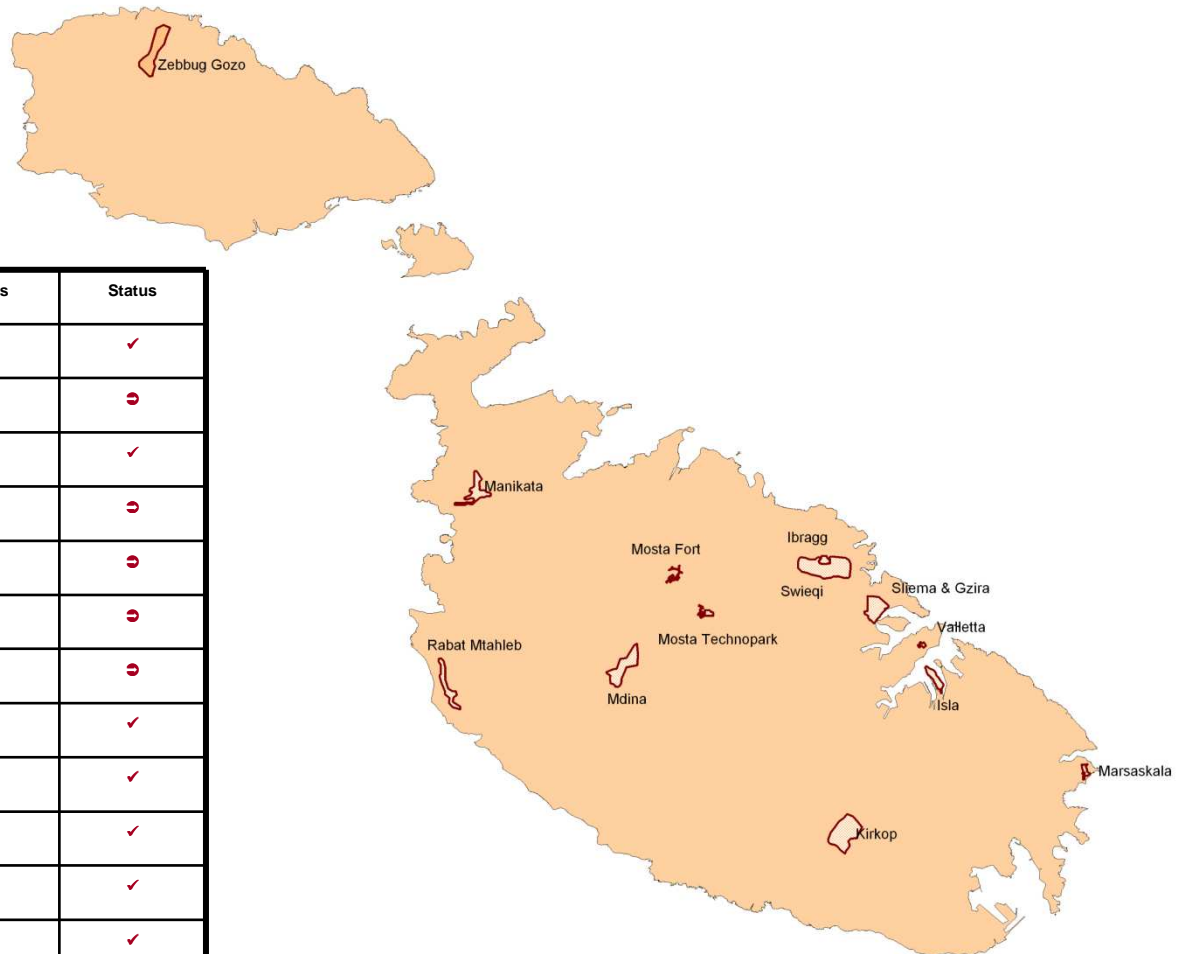
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Smart Metering Pilot Project

Locality	Premises	Status
Ibragg & Sweiqi	4910	✓
Mdina	190	⊕
Manikata	220	✓
Mosta	360	⊕
Paceville	100	⊕
Zebbug (G)	767	⊕
Gzira & Sliema	2658	⊕
Marsascala	220	✓
Isla	1770	✓
Valletta	230	✓
Imtahleb	20	✓
Kirkop	960	✓
Total	12405	





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Better Meter Display

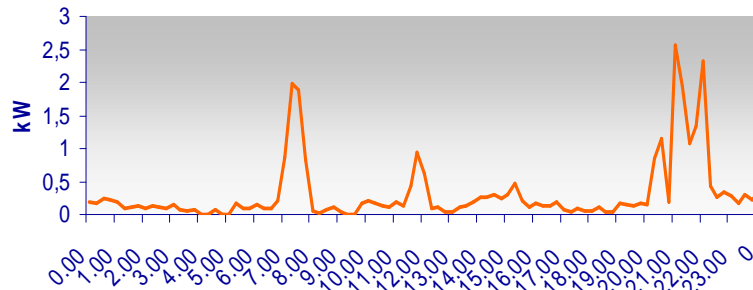


- Active tariff
- Instantaneous power
- Current Energy consumption
- Previous Energy consumption
- Date/hour
- Contact Center telephone number
- Contract types

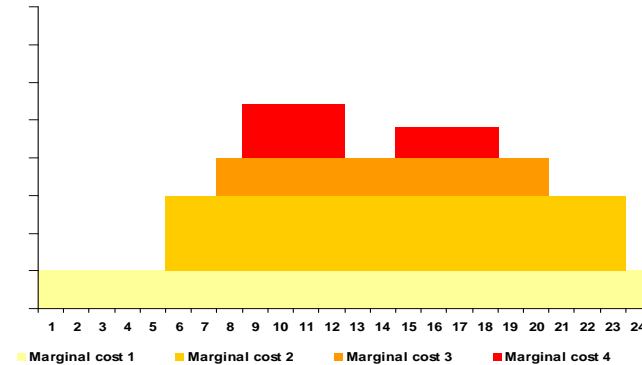
Electricity Meter



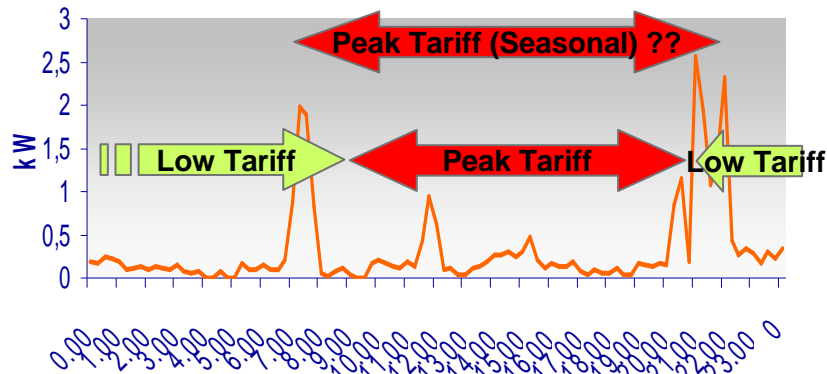
Embedded intelligence to manage pricing and power



AMM records individual load profiles with 15 minutes intervals



AMM permits to bill the real value of energy with dynamic adjustments any 15 minutes



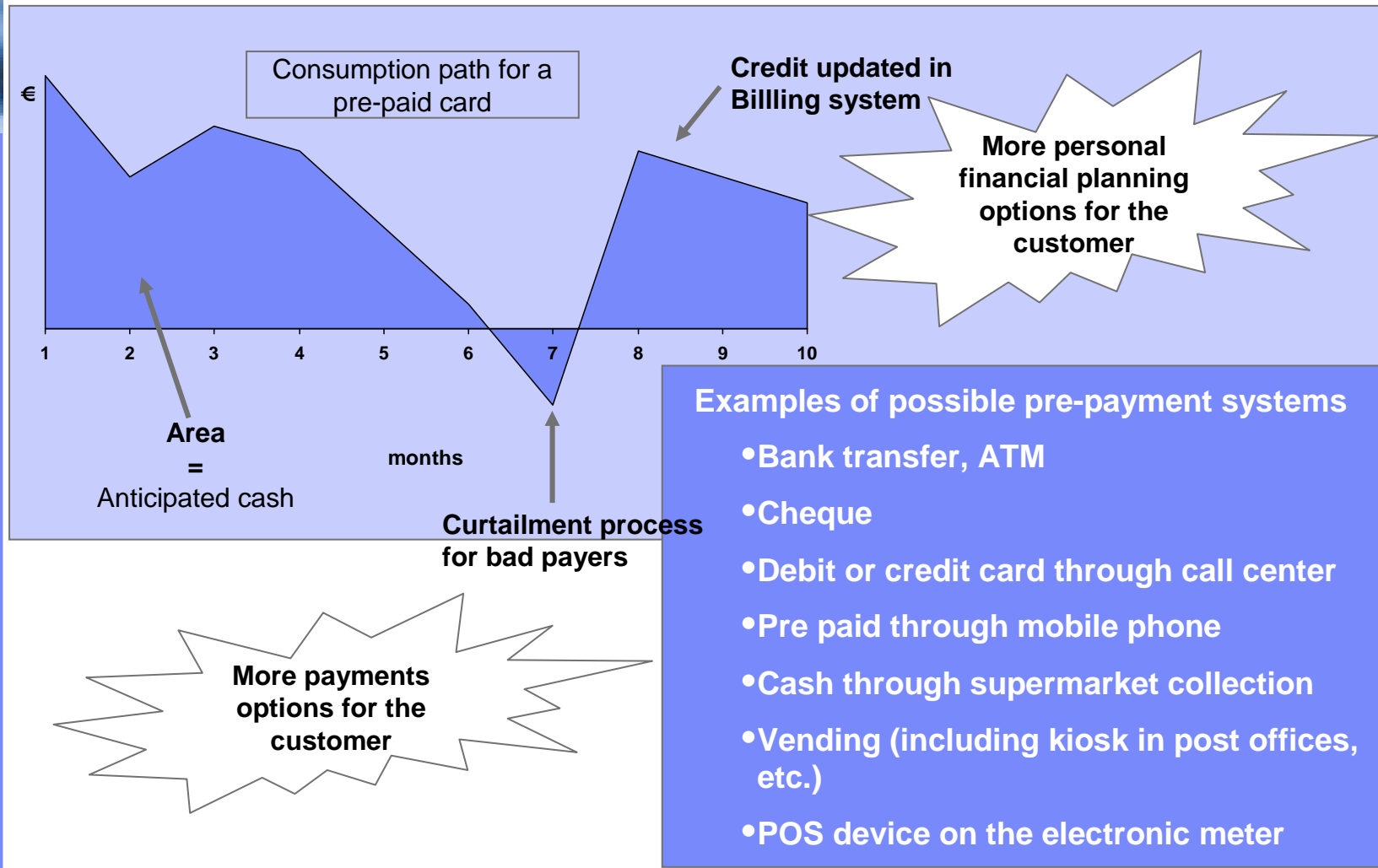
AMM enables the design of tariffs for optimal energy usage



AMM introduces the very innovative capability to curtail the power supplied to specific customers at any time



Credit collection channels can be re-designed including pre-payment methods





Reaping collective benefits

- Decreased cost of managing the meters
- Demand side management emanating from a better knowledge of load profiles
- Lower losses



- A higher yield in energy distribution means less pollution for the same economic benefit
- Reduced pollution due to better power plant utilisation

- Improved service level
- Billing performed on real readings, not on projection
- Flexible tariff structure
- Flexibility of billing periods
- Possibility of consumption optimization



Portal – Empowering further the consumer

AUTOMATED REVENUE MANAGEMENT SERVICES LIMITED

Roderick Bartolo | Log out
type your search! english | maltese

Global position
Account management
Order management
Customer services
Meter services
User preferences
FAQs

Select Account

Please, select contract account from the list below:

U2315123 | Residential

Communication Center

Inbox(2)...

! Water leakage detected | [more info](#)

+ Your application is beign processed. | [more info](#)

+ Change of tariff requested | [more info](#)

[see all](#)

Quick links

- [View Invoices online](#)
- [Payment online](#)
- [Meter reading dates](#)
- [Supply interrupts](#)
- [Account management](#)
- [Consumption overview](#)

Last bills

Date	Bill Number	Billed Amount	Balance	Status	Days overdue	Interest Acc.
! 22nd March	231123	200.23€	+180.45€	Open	67	3.23€
+ 25th April	123456	120.63€	+17.95€	Paid	0	0.00€
+ 15th May	234543	232.16€	+37.95€	Paid	0	0.00€
! 22nd June	1223667	122.56€	+77.89€	Open	23	0.00€
+ 14th July	34354632	211.89€	+55.55€	Paid	0	0.00€

[see all bills](#)

Bills overview

Electricity Consumption (units) vs bill date

Water Consumption (units) vs bill date

Contract events

Here are your contract events summary for last period.

! You consume more water than the average household

+ You consume less electricity power than the average household

! Your carbon footprint has been 20Kg of CO2

+ Your carbon footprint is equivalent to 10 trees

! You have two unpaid bills | [more info](#)

! You are beign charged for dunning on this account | [more info](#)

[see all events](#)

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IUBS Programme



Thank You

3rd March 2010

