

Smart Metering solution

Long Range Automated Meter Reading

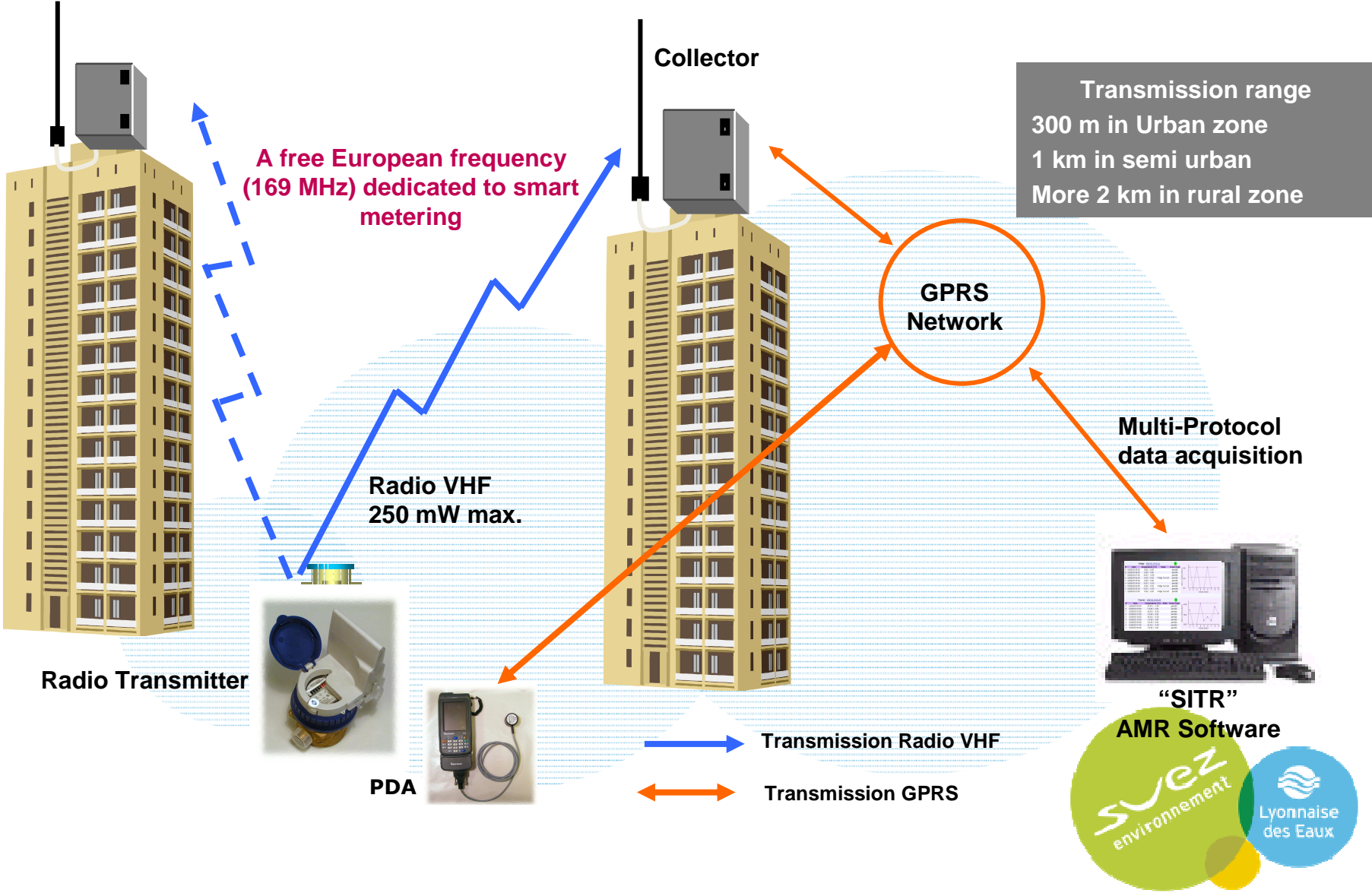
ICT for water management
June 11th, 2010



Suez Environment solution



Long-range solution – General principles



Long-range solution – Concepts

- ❑ Simple, one way direct transmission from meter to wide area Data Collectors
 - Requires long range RF transmission (VHF)
 - compatible with meters buried in pits
- ❑ Easy to install and maintain
 - No repeaters, no extra deployment actions in the streets



Radio Transmitters products

Compact Actaris



Compact Sappel



Regular - Sappel



Different transmitters but inter-operable products

Inter-operable:

Same configuration tool:



PDA/ PC tablet compatible with Windows CE

Opto-connected cable on an RS232 port

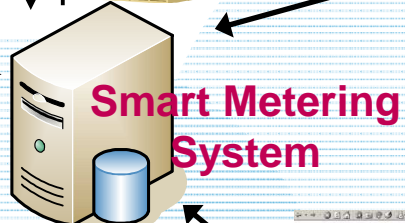
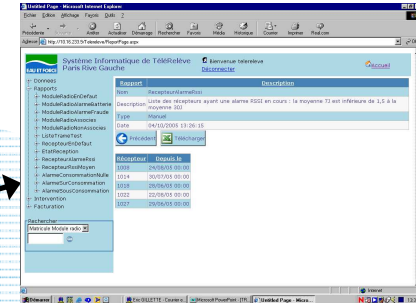


Smart metering system based on Know how in water operation

INSTALLATION SOFTWARE



MAINTENANCE & MONITORING



AB010 270.0

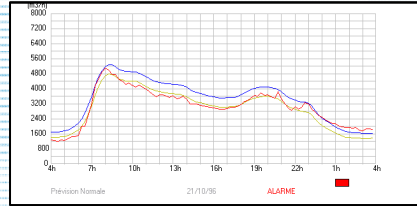
NISTO - G Y C L A D E S

Client : 89510 GERARD RONDEAU Rang 08

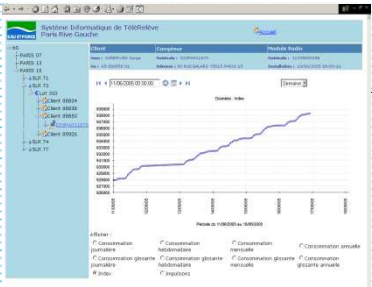
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0404	01	R	121084	0827172	970.78	001	01	08	121084	E			882	423	
0403	01	R	200754	0872149	1870.59	001	01	08	200754	E	ABD		450	450	
0402	01	R	100484	1068910	1106.54	001	01	08	100484	E	B		35269	5	
0401	01	R	230284	1082962	1800.42	001	01	08	108184	E			34155	489	
0304	01	R	181803	0029251	1446.22	001	01	08	091803	E			34235	450	
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0302	01	R	110402	0031901	1258.08	001	01	08	180402	E			32329	546	
0201	01	R	100103	0031191	320.02	001	01	08	070103	E			32720	429	
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FUNCTION : NISTO CLE : 89510

BILLING SOFTWARE



SCADA System



CONSUMPTION ANALYSIS e-Services



INTERNET ACCESS (BtoB or BtoC)



Smart metering: Finalized and ongoing projects



2004-2008: Paris deployment



**219 Receivers installed on Paris Seine river left bank
28.000 meters read daily**



99.8% of meters invoiced monthly based on AMR reading

2010-2015 : France

- ❑ 2010: 120.000 meters installed
- ❑ Collectors installed for recovering about 500.000 meters
- ❑ Plan to cover over 1 million water meters, within few years



International deployment

- ❑ **France - Lyonnaise des Eaux**
 - **100.000 equipped**
 - **100.000 in course of deployment**

- ❑ **Malta – Water Services Corporation**
 - **AMR solution has been selected by Malta’s government and IBM**
 - **250.000 water meters to equip**

- ❑ **Spain - AGBAR**
 - **Objective of 160.000 meters equipped within 3 years**

- ❑ **France – GRDF pilot**
 - **AMR solution was selected to participate to the Gas pilot – 5.000 meters**



Customer services



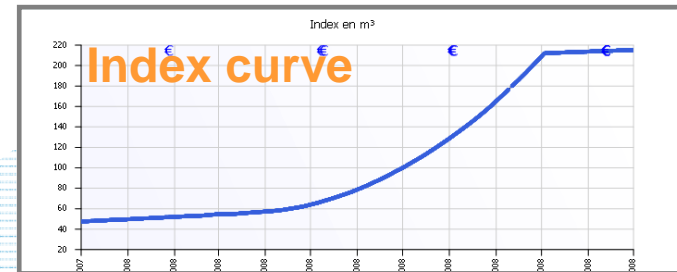
Customer benefits

- Now:
 - More frequent Invoicing based on real data reading
 - Leak detection
 - Backflow detection (& measurement)
 - Environmental friendly attitude
 - Action efficiency control
- Tomorrow
 - Tariffing options
 - New means of access
 - Advices
 - Include new sensors and datas

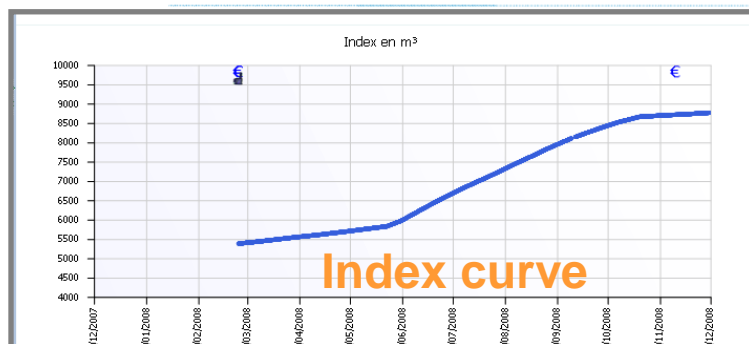


SOME ACTUAL EXAMPLES

- An individual apartment owner had a leak in his **boiler** in October 2008 and **was able to have it repaired 10 days after being alerted of the leak.**



- In September 2008, a managing agent received a report of leaks from its meters, in particular in a building with a restaurant on the ground floor (**708 L/h**). The agent implemented an action plan to deal with the increased consumption. **Consumption returned to normal in December.**



Smart metring : standardization



Smart metering standardization

- M441 mandate
 - End of work targeted 2012, vote on standards in november 2010
 - **Opportunities:**
 - Interoperability achievement
 - Cost reductions
 - **Threats:**
 - Strongly lead by electricity metering
 - Risk of resulting in unadapted solution (for EC water market)

Note: our 169MHz solution is based on EC decision DEC/2005/928 allocating the frequency and for metering applications



Smart Metering

Thank You

