

## **AMR/AMM : application for Electricity meter reading in the Gulf countries**

*An opportunity for utilities for cutting down operational costs for reading and operating electricity meters. Description of an advanced residential electricity meter combined with a management system based on Euridis and DLMS Plan (power line carrier) protocols*

This paper looks back to the business drivers which are pushing utilities in the United Arab Emirates area to invest into Automatic Reading and Management (AMR/AMM) systems for electricity residential applications, and describes the advanced metering system installed and commissioned by Actaris and MAEC. This meaningful case study illustrates how a combination of EURIDIS and DLMS Plan protocols at the metering network level and an appropriate management system can provide value added services for the utilities.

### **Description :**

Actaris is currently supplying and installing 3 phases AMR Euridis advanced residential meters for a key utility in the UEA area. Quantity planned are 60 000 over 2 years. Meters are installed in multiple storeys buildings with air conditioning or in outdoor cabinets in residences. 90% of meters are direct connected and integrate a 3x100A contactor which will allow the utility to perform remote disconnection of the customer load from the central system.

### **Business drivers**

- Remote Reading : for reducing reading errors, improving understanding of customers demand via load profiles and maximum demand
- Remote Connection/Disconnection : for improving customer services to tenants, solving non-payment problems and limiting costs of disconnection on the field
- Billing : for improving accuracy of measurement with solid state metering, shortening billing period and issuing bills based on real meter reading instead of estimations

### **AMR system description**

The AMR/AMM system to be installed will allow to remote read

- tariff and billing registers
- consumption profiles
- network and meter events

to perform actions like

- resetting maximum demand
- date/time synchronisation,

and to remote disconnect/connect customers' loads.

### **About the author**

*Olivier Rochon is Product manager for Commercial and Industrial (C&I) applications at Actaris Metering and Systems. He has been in the metering and reading systems business for more than fifteen years, with a strong technical background in software and firmware process & technologies, & telecoms. He has worked as system manager in UK for three years until 2001, before becoming programme manager for C&I meters and then Product manager for Actaris C&I product and systems business line*