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Press Release

INDRA LAUNCHES INMETER, ITS STATE-OF-THE-ART ELECTRICITY SMART METERS, TO THE MARKET

- **These meters combine in a single device the external connection for the set of meters in a building, which is a much more economical solution for distributors with high customer concentrations**
- **The technological multinational has successfully completed the certification process and commenced integration activities for the product at Censolor, its Centre for Renewable Energy Support in Bembibre (León)**
- **The company boosts its positioning in the field of *Smart Grids*, where it participates in developing new solutions and technologies that it is starting to export to other countries**

Indra, the leading Spanish multinational consulting and technology firm and one of the main players in Europe and Latin America, has commenced the market launch of InMeter, its state-of-the-art compact electricity *Smart Meter* solution. This allows the company to make progress in its objective of positioning itself as one of the leading development companies of new solutions and technologies for the *smart grids* market. Throughout 2012, the Indra devices have been metrologically certified by Applus+ and their communications by KEMA.

For the integration and final assembly of the equipment, Indra relies on the collaboration of Censolor, its Centre for Renewable Energy Support located at San Román Industrial Park in Bembibre, in León (Spain). The calibration and functional verification tasks for the batches of *Smart Meters* the multinational plans to distribute for use by power companies in Spain and Latin America are also being carried out at this centre.

This new generation of meters developed by the technological multinational combines in a single device the elements for measuring, viewing, monitoring (detecting service quality, power supply shortages and voltage levels) and controlling power levels as well as remotely cutting supplies. Its main feature is the ability to concentrate in a single device the external connection for the set of meters in a building, which is a much more economical solution for power distributors in areas with high customer concentrations (buildings in urban areas) since it avoids multiplying the communication capability in each meter. In this regard, it is worth mentioning that 50% of Spanish customers live in blocks of flats.

This is possible because in the InMeter device, two-way communications from or to the distribution company's central remote management system do not reside at each individual



meter (InMeter EBM) but rather at a communications hub (InMeter RCC) that performs the *Gateway* connection function between the various InMeters associated to it and the central remote management system. Therefore, the InMeter RCC hub is the device that houses the communications device.

High adaptability and multi-utility capability

The separation between the measurement and visualisation function, which completely resides in the InMeter EBM meters, and the communications function, which is implemented in the InMeter RCC hub, houses important benefits such as the adaptability and ease of communication updates, the multi-utility capability and the addition of value-added services for customers.

As a result, the solution can use different communication technologies, depending on the technical requirements or the items required by the customer (GPRS/G3, WIFI, PLC solutions, Ethernet, etc.), regardless of the meter. This adaptation capability also facilitates communication updates throughout the equipment's useful life, without having to modify the measurement aspect.

On the other hand, the possibilities offered by the InMeter RCC hub as a communications *Gateway* allow it to simultaneously combine different communications technologies so it may be used as a multi-utility hub for capturing power, water and gas readings, for example. It is also capable of interacting with customers in applications that add value to *Smart Metering* technologies and that provide consumption information through an in-home display, which is an residential power consumption monitoring system that allows verifying in real time the total consumption as well as its daily, weekly or monthly cost.

This InMeter functionality formed part of the Integris (Intelligent Electrical Grid Sensor Communications) project funded by the European Commission and led by Enel Energy Europe and ENDESA. In this project, InMeter was used concurrently as a *Smart Meter* as well as a communications gateway between the transformation centre's control and the customer's home. The system's flexibility has enabled the simple use of broadband PLC communications with the transformation centre's control, and simultaneously, internal connectivity with the customer's home.

The solution also has a modular and increasingly compact design that requires much less space for installation, increases security and integrates anti-fraud devices to prevent its manipulation.

Indra has also completed the development of an innovative remote management system, Smart Platform for Efficient Energy Distribution (InSPEED), for this new generation of smart meters that will facilitate collecting information in real time about residential consumption.

Smart Meters will be a key aspect in the modernisation and evolution of existing power grids towards *Smart Grids*. Specifically, in Spain, all power companies must replace their existing



electromechanical meters (approximately 25 million) with remotely-managed electronic meters before 2018.

The innovative remote management system for this type of equipment and its capability to collect information about consumption will allow power distributors and commercialisation companies to manage more efficiently the power available during each time period and offer new services to customers.

It could offer important benefits to customers in an electrical market with flexible rate models since it provides precise consumption data almost instantaneously, making it possible to manage more efficiently or take advantage of the cheapest time period rate. These meters provide extremely useful information about how electricity is consumed in order to promote changing user consumption habits and attempt to move towards improved energy efficiency.

Commitment to innovative solutions that promote energy efficiency

The development of this new generation of meters is part of Indra's global strategy aimed at developing new technologies and solutions in the area of energy efficiency and sustainability for generation, transmission, distribution, transport, industrial and residential consumption. The company is involved in various projects for new Smart Grids infrastructures that ensure sustainable, secure and economic development, and it is involved in an advisory capacity in the Spanish National Energy Commission's for the development of Smart Grids.

It is also collaborating with the leading Spanish power companies in their main projects, whose products and knowledge is beginning to be exported to other countries, especially in Latin America, such as Brazil and Peru. In this last country, Indra has designed the strategic plan for implementing *Smart Grids* in the electrical system on behalf of the Supervisory Body of Investments in Energy and Mines (OSINERGMIN).

Indra and Gas Natural Fenosa have led the Energos R&D&i project, which had the aim of developing methods and technologies for the grids of the future. It has also participated together with the power company in the European Union's 3E Houses project, which has the aim of demonstrating and quantifying ITC's contribution towards improving energy efficiency in homes through a pilot programme for subsidised homes in San Cugat del Vallés. It is also co-leading the ZIGAMIT project that is focused on making the infrastructure being rolled out for remote meter management and offering residential customers integrated home comfort management services.

In addition, it is working on other R&D&i projects together with Endesa and Iberdrola to develop new computer systems (grid models, real time integration platforms and two-way communication solutions). Lastly, the technological firm is also actively involved in work groups fostered by the Ministry of Industry to promote the development of electric vehicles in Spain, in addition to collaborating in various research projects and initiatives with different agents and companies within the energy sector.



Indra

Indra is one of the world's largest consultancy and technology multinationals, a leader in Europe and Latin America and is expanding in other emerging economies. Innovation is the cornerstone of its business, which is highly focussed on the customer and on sustainability. The multinational is one of the leaders in its sector in Europe in terms of investment in R&D and innovation, having invested more than €550M in the last three years. With sales approaching €3,000 million, it employs 42,000 professional and has customers in 128 countries.