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**Energy Consumption Management through SITEL
systems and devices as a form of energy
efficiency - personal and social responsibility!**

Energy efficiency for company SITEL and its partners means rational energy consumption management through tailor made systems and measuring devices, which reduce energy losses to the lowest possible level. Rational and practical energy consumption management stands out as personal, but also social responsibility. Especially within the environment where the limits of conventional energy sources' exploitation are obvious, while constantly searching for new, cleaner and more efficient energy sources to decrease energy losses and increase major savings.

Today, the European Union laws propose very requiring standards for production of electronic measuring devices and designing modern distribution and energy management systems. This legislative brings a number of benefits for all stakeholders in the implementation of "smart grid" systems: the state, distribution centers, end users (households and industries), while setting international standards in this area.

State benefits of implementation of modern SITEL systems for energy consumption management:

- The electricity market has to enable all interested bidders to distribute electricity as well as any other goods, creating an offer based on market demands. Existing devices for the measurement of electricity consumption do not have either that option or the option of giving reports on the balance of energy and financial responsibilities. In addition, the new systems that are in line with modern standards are fully compatible, regardless of manufacturer.
- In accordance with modern standards, new devices for power management are able to communicate with all other devices that measure energy consumption: gas meters, water meters, calorimeters, etc. This allows centralized management of energy resources, as well as many additional analyses, planning and promotion, as well as billing and collection, to the remote enabling and disabling of consumers.
- Creating more efficient systems which shift consumption of produced energy to the maximum, based on "just in time" information system. This enables the state to directly distribute all of the produced energy toward the exact consumers who just need it! Instead of building new energy sources, modern SITEL systems could allow fully efficient use of all produced electricity.

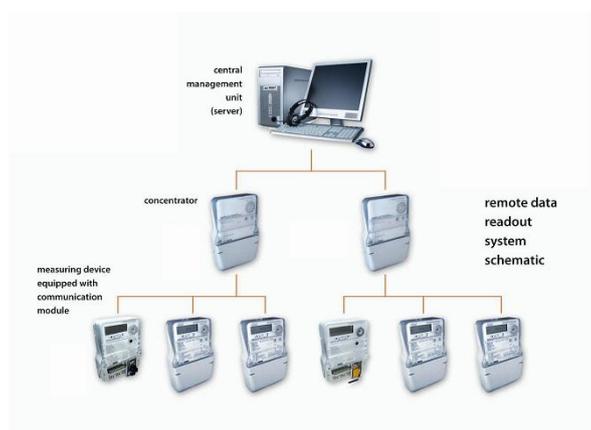
Distributors' benefits of implementation of modern SITEL systems for energy consumption management:

- Remote reading and adjustment of measuring devices reduce financial costs and save time. Modern SITEL systems enable all readings to be performed completely automatically or semi-automatically.
- SITEL systems eliminate the influence of the "human factor" and theft while installing and reading systems' devices. Devices' memory registers all attempts to steal or have any impact on the system with alarming central software. If necessary, the system can disable users from the network immediately after the determined attempt of theft or assault on the device.
- Auto disabling or enabling of end users within a network reduce costs and increase the efficiency of the system, because those who do not pay for their energy, could immediately be disabled (without hiring additional resources and additional claims, which often become uncollectible).
- By using accurate measurement and complex software, devices could be connected to the systems that measure energy losses at all stages or even show micro locations where the losses are made.

- One of the most important features of these systems is reflected in maximum rationalization of data collection on the current / short-term / long-term spending, as well as planning of available energy redistribution to fulfill the maximum level consumption, etc. In case we could track consumption at any time, electricity could be effectively redistributed, or special rates could be created to certain customers according to the market requirements.
- The new EU standards imply that power distribution companies are obliged to deliver energy to end users following the agreed quality and quantity, which requires the installation of new metering and management tools, allowing monitoring of all power quality parameters.
- Deregulation and enabling the creation of special relationship with each buyer of electricity, power distribution companies, by using smart electric meters, could create tailor made profiles or electricity delivery tariffs to all end users or sub groups.
- The fact that smart electric meters could collect, store and analyze the data from other measuring devices, such as gas or water meters, etc. opens brand new field of data services to be offered from the power distribution companies. At the same time, there is huge possibility of renting of energy networks to energy trading companies.
- In addition to linking other measuring devices to the system, some smart electric meters are equipped with PLC or BPL modems, which enable access to all appliances and industrial machines. In the future it is expected that the "smart home" concept will be designed based on the use of smart electric meters.

End users' benefits of implementation of modern SITEL systems for energy consumption management:

- Through the communication modules, not only power distribution companies, but also end users themselves, may check at any time their electric meters. The user is entitled to request a specific quantity and quality of energy.
- End user with a smart electric meter could simply and independently choose electricity supplier, or combine several of them, in order to meet his needs and requirements. Also, the user could set the timer to automatically switch to the selected vendors for a specified period, as well as to change vendors as often as he wants.
- With these systems, end user at any time could check if he is exposed to low quality of electricity. In cases of damage to the equipment or home/business appliances caused by the faulty electricity supply, the user could collect damages from power distribution or insurance company.
- End user could easily create himself a suitable system of using various devices (i.e. remote temperature adjustment in the house, turning lights on and off, alarm management, cameras, etc.) with the overall effect of improving his life quality.



SITEL systems and devices for power consumption management provide many opportunities for increasing the use of electricity at all levels and for all participants in the process. The overall benefits are obvious: to enable the highest level of standards and the possibility of applying the most demanding legislation in this area, opening a free market for energy distribution, with an emphasis on quality, a very precise analysis and planning, with maximum rationalization and the least possible energy losses. End users are given the opportunity to fulfill their consumer rights - to choose the energy vendor, get guaranteed quality, to manage, to have the right information on consumption at any time and, ultimately, to save, without giving up their demands. State, thereby also saves money, and the potentials for electricity manipulations or theft are reduced to the theoretical minimum.

Therefore, the process of introducing modern SITEL systems for electricity consumption management should be the strategic investment project on the state level.