



transform smart utilities new intelligence empowers

Smart energy. Powering progress

Atos
Worldgrid



“Atos is extremely well positioned to manage the utilities industry’s present and future needs.”

IDC MarketScape: IT Service Providers in the EMEA Utilities Market, Analysts: **Roberta Bigliani** and **Gaia Gallotti**, May 2013

What's so special about now?

Right now, there is something very special happening right across the utilities sector. It follows the waves of change driven by deregulation and privatization; by the commercial reality of renewable energy sources; and by the raised industry and public consciousness of sustainability. Right now, we are entering a period in which data and intelligence are becoming the key to long-term success.

In just about every strategic discussion with our utility clients, conversation now turns to a common challenge. Our clients want to make the shift from utilities to smart utilities. You want to exploit the constant flows of real-time data that run through your operations. You want to turn that data into actionable intelligence, boosting operational efficiency, driving out cost and building ever more durable relationships with your customers.

This shift is transformational. For the utility company, focus extends beyond the pure supply of energy to the supply of energy and complementary value-added services. Smart utilities must be empowered through intelligence to offer more.

Improved data quality and integration combine with the arrival of smart metering and smart grid to redefine and strengthen your relationships with both domestic and business customers.

Making connections

This new and intense focus on actionable intelligence has begun to erode many of the functional and organizational barriers which have existed until now.

When customers had no choice of supplier, no control over consumption except to turn devices on or off, and no opportunity to generate locally – a reading, a statement of total consumption and a bill were good enough.

It's not like that anymore.

Where previously discrete systems were adequate, today, you need to make the data connections between them. The emergence of smart grid and the new levels of control over the low voltage network are both transformational. The logic is clear and there are examples everywhere:

- ▶ As clients feed back into the grid, relationships change - the "prosumer" is born
- ▶ With electric vehicles gaining in popularity, utility companies prepare for the impact on both the grid and retail operations.
- ▶ Power generation and transmission can be optimized with continual fine-tuning, and risk and cost can be reduced through predictive maintenance

A practical vision

For Atos, this shift from utilities to smart utilities is a quiet revolution. We are not proposing massive re-engineering across the systems and processes on which your business depends. You do not want the risk, the cost or the disruption.

We are, however, asking how with each project or service we provide, we can anticipate the need for greater connectivity between systems - and how we can help you ensure that the data which flows through every aspect of your operations can become a genuine and differentiating asset.

Continuity, safety and compliance rightly make utility providers risk averse. In our joint considerations of this changing landscape, security and data governance will feature prominently.

Atos is an international services company. Over 3,000 of our 76,400 business technologists are dedicated energy and utilities experts. We have more than 30 years' experience in the energy and utility sectors. We offer process and IT consulting, and a full range of both sector-specific and generic IT services. Atos executes integration and transformation projects, and delivers both IS and business process outsourcing.

In 2010, Atos established its dedicated energy and utility unit, Atos Worldgrid. This specialist team is particularly skilled in helping utility companies optimize their business processes to exploit real-time data flows.

Redefining a data-driven value chain

Understanding how the utility value chain has changed becomes the starting point for your transformation from utility to smart utility. Things used to flow one way through clearly delimited functions. Now those flows are multi-directional – and your ability to master this change will underpin sustainable success.

Utilities - The past



Utilities - The future



Start by thinking about the customer. Domestic, commercial and civil customers are all changing. For now, we are using the word “prosumer” to describe customers who can both produce and consume.

We are all familiar with the ways in which domestic customers can now reduce their own electricity costs through locally installed wind or solar generation. But even where the final customer is not actively producing, they are still able to become more pro-active in their use of energy and in their commercial relationships with providers. In-home devices and smart appliances, for example, allow us to tune consumption – and this in turn makes us less likely to accept bills generated by infrequent readings and estimates.

Move back along the chain, and the repercussions of these changes are amplified and echoed:

- ▶ Active control over the low voltage grid becomes a necessity
- ▶ Transmission and Distribution can now manage demand
- ▶ Trading systems become more articulated and dynamic

And this is just the beginning. Until now, for example, storage has never been part of the story. But will the changes in battery technology, already influencing the adoption of electric vehicles, soon become a part of the utility landscape?

The IT Mirror

Each of these changes in the power value chain are mirrored in your IT and data management systems. As a consequence, it's only right that you expect them to deliver more business value.

- ▶ When customers, for example, can expect immediate and precise statements of usage from their banks and telecoms providers, why shouldn't they expect the same from their energy company?
- ▶ Now that smart devices in the home and workplace can combine with GPRS and mobile communications, can we tune consumption more intelligently – setting ambient temperature in anticipation of our arrival time?
- ▶ Will the utilities' commercial and business development functions have the information they need to make fair and flexible offers to domestic, commercial and civic customers?

In all of these example scenarios, the degree of interoperability between your business and operational IT systems will make a direct contribution to agility and performance.

Business models will not change overnight – but from now on, openness and interchange must be part of every process and IT discussion.

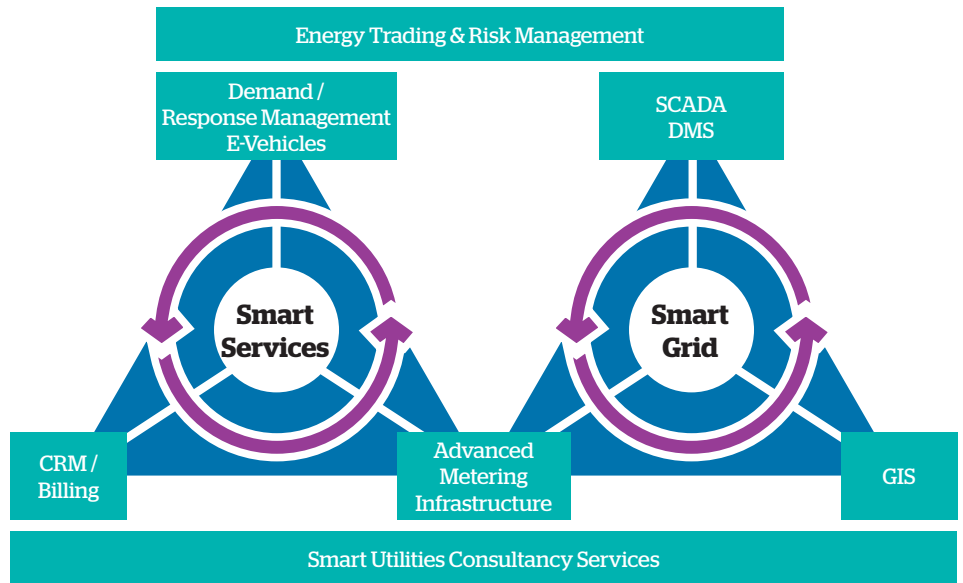
From Utilities to Smart Utilities

Dedicated teams at Atos Worldgrid are focused on a number of specialist energy and utility processes and solutions. These range from smart metering and smart grid, through to trading, CRM and billing.

We have taken a step back to examine the relationships between these specialties, and to ask how by applying principles of interoperability and real-time data and asset management, we can help our clients reveal new levels of operational intelligence.

Through this work, we have established a model which will help you transition from utility to smart utility. Our approach is generating a high degree of interest from both clients and independent industry observers.

Using the Atos Worldgrid Smart Utilities model as a point of departure, our consultancy teams are ready to help you envision and implement new data-driven futures.



Extended Service

Atos' 76,400 business technologists deliver end-to-end. The specialized utility solutions from Atos Worldgrid are at the core of our Smart Utilities proposition – but it doesn't stop there. With our Adaptive Workplace services, for example, we will ensure that every one of your employees and contractors is given secure and cost-effective access to essential IT resources.

Smart Utilities are data-driven, and Atos leading position as a provider of transactional services creates special value. Fully outsourced loyalty schemes, for example, add a differentiating edge to your customer relationship strategy.

Growing Capability

Enabling our utility clients to make the transition to fully integrated and data-driven business is a strategic objective for Atos. We are investing accordingly.

We have fully integrated utility specialists e-utility in Atos Worldgrid, with their winning smart meter roll-out and implementation programs. We have done the same with ENERGY4U, with their exceptional strengths in SAP for Utilities.

In parallel, our association with Siemens continues to grow, with its special focus on joint R&D for the utility sectors.

The new importance of actionable real-time data also requires new options for your information architecture, and Atos is also leading the way in secure cloud delivery.

Every utility company has already made significant investments in a wide range of commercial and grid management systems. It is essential that these investments continue to deliver value – our Smart Utilities model is designed to create new value from existing resources.



Specialized capabilities

Behind our Smart Utilities model, lie a number of highly specialized capabilities and solutions. We can and do offer each of these as discrete projects or services. But when we're working together to envision your future as a smart utility, all of this knowledge and experience adds depth and value.

Smart Utilities Consultancy Services

The transformation from utility to Smart Utility demands real depth of both sector and technology expertise. Our specialist consultant teams combine them both.

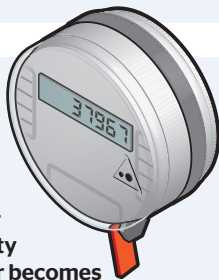
Expert in IT strategy and business process analysis, they will design a smooth and secure journey to your new Smart Utility.



Smart Metering

The smart meter is the physical enabler for every smart utility company. The meter becomes the foundation for new customer dialogue and intelligence.

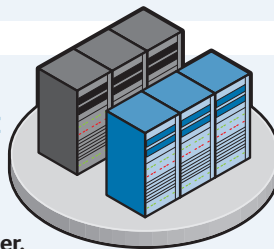
Our smart metering solutions provide highly automated meter management and control.



Atos Smart Grid Suite

ASGS is the new smart grid nerve center. The suite collects and processes all smart meter data, aggregating it with all commercial and operational systems.

This is the key function for any smart utility - it's the bridge which allows new intelligence to be revealed.



Trading and Risk Management

Effectiveness depends on the quality and scope of multiple data feeds - real-time communication increases profit and reduces risk.

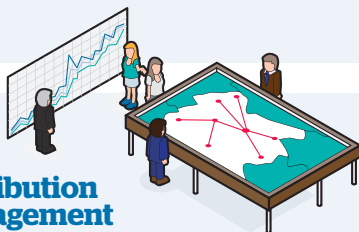
Our power trading and risk management solutions (PTRS) ensure that scheduling and trading teams are supplied with consistent, timely and accurate data. Traders can access energy markets and manage their portfolios with solutions that support long-term contracts and spot deals with equal facility.



Distribution Management

Pro-active management across your distribution systems can now be conducted according to active and emerging conditions revealed by both smart metering and commercial systems.

Our LYNX Distribution Management System uses a management cockpit to provide a highly-structured, clearly visualized, real-time view of all electricity, gas or water networks.



E-vehicles

No smart utility company can ignore the impact of new connected mobility. This is not just about powering vehicles. Geo-location and customer data also open up new opportunities in the Personal Data Economy for business partnerships in other sectors.

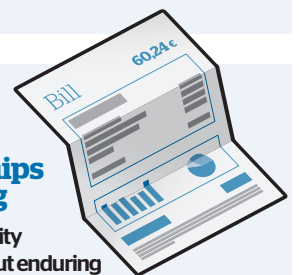
Our e-vehicle initiatives (ecarga) are building new bridges between utilities, automotive companies and civic authorities, enabling them to manage events, service transactions and customer relationships. For smart utilities, the customer relationship no longer stops at the wall socket.



Customer relationships and billing

Every smart utility company will put enduring customer relationships at the very top of the agenda - and the way you manage those customers influences every other area of business and strategy.

In today's liberalized markets, customer loyalty must be continually earned through enhanced client engagement. Atos CRM and billing solutions for utilities are ready for the new world of increased choice and more dynamic customer relations. We support both pre-paid and post-paid billing.



A person with long hair, wearing a dark top and light-colored pants, is standing on a large rock in a mountainous landscape. They are in a yoga pose (Tree Pose) with one leg raised and arms outstretched. The sun is low on the horizon, creating a warm, golden glow and long shadows. The sky is filled with soft, white clouds. The background shows rolling hills and some evergreen trees.

Next steps

The shift from utility to smart utility is happening now. For many utility companies, smart metering was initially regarded largely as a major investment, forced on them by regulatory change. But within that investment, the smart meter becomes a trigger for an extended chain of value in which all aspects of your business can benefit from new data interconnections.

In liberalized markets, utility transformation is already underway. Unbundling requires entirely new levels of inter-company data exchange – and leads to a stronger than ever focus on CRM as the start of an extended chain of value.

Patterns which until now have been hidden will be revealed. You will link operations across the grid with trading and risk management, and link customer behavior with sustainability. There are as many connections as there are activities. As an end-to-end service aggregator, with a deep knowledge of the specific requirements and conditions of the utility sector, we are ready to help.

But you don't make the change with a single solution, project or service.

You initiate transition by asking the right questions in every initiative.

Atos has begun to make this a practical reality with our utility clients. In our Business Technology Innovation Centers we offer hands-on innovation workshops, enabling you to see exactly how new connections reveal new opportunities.

Take time out with our business technologists.

Transformation is your current reality.

Integrated intelligence empowers smart utilities

About Atos

Atos SE (Societas Europaea) is an international information technology services company with annual 2012 revenue of EUR 8.8 billion and 76,400 employees in 47 countries. Serving a global client base, it delivers Hi-Tech Transactional Services, Consulting & Technology Services, Systems Integration and Managed Services. With its deep technology expertise and industry knowledge, it works with clients across the following market sectors: Manufacturing, Retail & Services; Public sector, Healthcare & Transports; Financial Services; Telecoms, Media & Technology; Energy & Utilities.

Atos is focused on business technology that powers progress and helps organizations to create their firm of the future. It is the Worldwide Information Technology Partner for the Olympic and Paralympic Games and is quoted on the NYSE Euronext Paris market. Atos operates under the brands Atos, Atos Consulting & Technology Services, Atos Worldline and Atos Worldgrid.

About Atos Worldgrid

Atos Worldgrid is an Atos business unit delivering sophisticated integration projects and real time Smart Energy solutions to Energy & Utilities companies across the power, water, oil & gas value chains. With 1,600 engineers and over 30 years' experience, Atos Worldgrid operates in more than 15 countries. It has in particular equipped 70 nuclear power units with its Supervision and Command & Control software in France, UK, Russia and China and delivered the world's largest smart metering system. Atos Worldgrid operates under the brands e-utile in Italy and Energy4U in Germany, and Atos Worldgrid in the rest of the world.



For more information:
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