

Smart metering

# future-proofed smart metering

end-to-end and smart-grid ready



**Atos**  
Worldgrid

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**In 2010, Atos established its dedicated energy and utility specialist company, Atos Worldgrid. With over 1,500 specialists, we are particularly skilled in creating value from real-time operational and business data. Atos Worldgrid wants to put integrated smart metering at the top of your business agenda.**



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# A quiet revolution

There is a quiet revolution happening. As smart metering gathers inevitable momentum, the relationship between consumer and provider changes. Behavior changes too. Domestic, civic and commercial users seek to reduce usage and cost. Service providers, in turn, seek to exploit smart technologies in pursuit of optimized delivery and operational efficiency.

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The smart meter itself is a natural point of focus for these changes. But what is it, in reality, which really makes the difference? It is the processes and systems which surround the meter which are going to make the revolution happen.

This is the moment for smart metering. It is happening now. Over the next ten years, we will see smart meters become the norm for every utility company in the world.

But the experience of adoption will not be the same, for either the utility companies or the consumers and businesses they serve.

- ▶ For some, the actual planning and roll-out will be smooth and controlled
- ▶ For some, the adoption of smart meters will be fully integrated with wider smart grid initiatives – delivering new levels of operational control and minimizing environmental impact
- ▶ For some, metering initiatives will be part of transformational CRM strategies – increasing billing efficiencies, helping build brand and loyalty, and winning new business.

There is no reason why every smart metering program should not deliver all these benefits. But your smart metering initiatives will only create value in all these areas, if they are part of the picture from day one.

And the good news?

Atos Worldgrid brings the demonstrable end-to-end expertise needed to address all aspects of planning, roll-out and, most importantly, full integration with:

- ▶ Smart grid operations
- ▶ All associated processes and systems, including billing and CRM.

## Differences

The success of your smart metering initiative does not only depend on your ability to see it in the wider operational and business context. It also depends on your ability to understand what makes your requirement and ambitions different.

- ▶ It may be scale and intimacy – a metropolitan service provider with 100,000 endpoints has a different position from a national or multi-national player serving millions
- ▶ It may be heritage and maturity – a utility company with billing systems at the end of their life-cycle, for example, has different needs from one that has recently invested
- ▶ It may be compliance and culture – different rules and practices exist in different countries.

Atos Worldgrid has active smart metering, smart grid, and utility billing and CRM projects across Europe, the Americas and Asia Pacific. Atos Worldgrid respects difference while seeking to maximize the benefits our clients gain through worldwide best practice.

# Painting the big picture

In any smart metering initiative you need to balance the detail with the big picture. You need to couple meticulous planning with vision and strategy. With Atos Worldgrid you will achieve both, laying a sound foundation for years to come and ensuring that each step is executed with care and precision.

Integration is absolutely central to the Atos Worldgrid vision and proposition for smart metering. We can classify our focus according to three broad areas of solid expertise:

1. Smart metering - program and project design, implementation and management
2. Integrated meter-to-grid
3. Integrated meter-to-bill and CRM

Although these categories help us focus on the different business and operational areas of your smart metering initiatives, we will always help you keep the big picture in mind: the smart meter is a means to an end - and not an end in itself.

Treating the different aspects of a major smart metering initiative with this modular approach, delivers practical advantages. Following initial analysis with our specialist teams, we can plan and resource according to the characteristics of each client and each project.

It also helps you to phase implementation with real precision and security. We can pilot, test and refine each aspect of your smart meter initiative under tightly controlled conditions, before scaling up to hundreds of thousands, or indeed to millions of endpoints.

## Design, implementation and management

Smart metering projects are sophisticated. Isolated metering hardware is replaced by a comprehensive information network. Even when you restrict the focus to installation and switch-over - logistics, sourcing and supplier management can become massively articulated.

Getting it right is not just about cost-efficiency and the coordination of field resources. You also need to ensure that consumers are prepared and are happy with the results from day one.

Atos Worldgrid has designed and delivered smart metering solutions for over 40 million endpoints across Europe, the USA and Asia Pacific. We have consolidated this experience in tools and methods for smart metering projects.

Our specialist planning and project management tools and methods reduce risk and increase efficiency. We naturally use them ourselves. We can also make them available to third parties, as required.

**When two major metropolitan providers in Italy decided to combine resources in a new smart metering initiative, Atos Worldgrid specialist partner e-utile provided the management tools and methods needed to plan and implement the program to two million households and businesses without missing a beat. These included its specialist Meter Rollout Automation system.**

## Integrated meter-to-grid

Atos Worldgrid was one of the first companies to realize that the best smart meters don't need to be too smart. Our smart metering model is fully interoperable, and our smart grid ready approach creates intelligence through smart grid nodes in the low-voltage distribution network.

This not only frees the utility company from dependence on any single meter provider. It also future-proofs smart grid operations - allowing the entire network to be tuned and enhanced through the secure and efficient distribution of new Java service to the smart grid nodes.

The smart grid foundation you lay today must be good for years to come. As, for example, distributed power generation and the importance of stored energy in electric vehicles increases, then your grid management approach must be able to handle these shifts without re-engineering.

The Atos Worldgrid smart metering approach is smart grid-ready now. This not only minimizes future investment costs - it also delivers the agility needed to test and trial intelligently and creatively.

**ERDF chose the Atos Worldgrid smart grid-ready approach for its Linky smart metering initiative. The successful initial pilot for 300,000 endpoints will roll-out to 35 million households and businesses. Not only does this fully distributed information network deliver near real-time intelligence. It also ensures exceptionally robust scalability and extensive support to the client's field service operation.**

## Integrated meter-to-bill and CRM

Atos Worldgrid meter-to-bill solutions deliver both clinical efficiency and exceptional business intelligence. Utility companies must be able to actively promote the advantages of smart metering with their clients, and the Atos Worldgrid approach ensures you can do this with flair and confidence.

This goes beyond an end to the “estimated bill”. Not only do domestic, civic and business consumers receive bills which provide a clear, timely and accurate reflection of actual consumption. It allows the service provider to establish new tariff models, tailored to specific consumer types, if desired.

Billing is only a part of the consumer relationship, however. The Atos Worldgrid approach enables the utility company to encourage more active consumer involvement in the battle to save energy. Once the smart meter is live and accepted, then the consumer can actively manage consumption from energy dashboards via home displays, web portals and smart phones.

**For this German metropolitan utility company, the scope was wider than electricity. Atos Worldgrid designed and implemented a system that allows the provider to manage billing, usage and account data for electricity, gas, water and area heating provision. In addition, the client also needed to provide efficient and easy-to-use tools for clients wishing to change provider.**

## Atos Worldgrid: Key Facts

- ▶ 1500 engineers with professional backgrounds in energy and utilities
- ▶ Over 50 smart metering projects worldwide
- ▶ Atos Worldgrid has designed smart metering projects and delivered solutions for over 40 million endpoints
- ▶ Collaborative centers of excellence in France, Germany, China and the USA
- ▶ 5% spent in R&D.

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# Agility and independence

Even though we are all keen to reduce consumption, our dependence on electricity will only increase. It's going to be true twenty years from now. It's going to be true fifty years from now. It's not surprising that the utilities who serve us take the long view.

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As a utility company, you cannot afford to be pushed into a dead-end street by IT companies or service providers. You will make IT decisions which have a lasting impact, but as a point of principle, vendor-independence is always desirable.

The Atos Worldgrid smart metering approach ensures maximum independence and agility. Because the function and most of the intelligence, for example, sit with the smart grid node rather than with the meter, you are not forced to choose a single supplier.

Not only does this raise your commercial negotiating position: you retain and develop know-how in distribution grid management. It also means that in future expansion through merger, acquisition or international partnership, business and operational integration is smoothed and accelerated.

## ERP Choices

Atos does have vendor-specific IT and business skills - but these are always offered as an option, and not as a sole choice. Take ERP, for example.

Over 75% of the utility companies we serve now use the SAP for Utilities suite of solutions for business functions including account management, billing and CRM. Atos has over 10,000 SAP specialists who provide an extensive range of development, integration and ongoing management services. This is clearly an attractive resource to clients who have chosen SAP.

Around 25% of our utility clients, on the other hand, have chosen not to use SAP. If you want to talk ERP, we have skills and experience, and are ready for informed and independent discussion. But we will not compromise our vendor-independence by promoting any one platform.

## When smart gets smarter

The great thing about smart metering is that it can only get smarter. We haven't even begun the journey yet. Within the next four or five years, we anticipate that machine-to-machine traffic is going to outstrip all other types of data communications - and the implications of this alone for utilities are enormous.

Not only will domestic and industrial appliances happily engage in self-governing conversations to reduce consumption and increase performance. Utilities with the information smarts will begin to shape entirely new service propositions. (The idea that a retailer can be a bank is now entirely normal - less than twenty years ago it was unheard of).

As your business profile shifts, so will ours. Most utility companies today, for example, see billing and CRM as being core business processes. The moment that you question this, Atos is ready to extend its own responsibility for these basic business transactions. (Through our specialist Atos Worldline unit, we are the number one European provider of outsourced transaction services for payment and CRM).

Atos Worldline is similarly well-positioned to serve the massive real-time data processing requirements of the new smart grid and smart metering landscape, and indeed to offer full business process outsourcing for smart meter services as required.



## Next steps

Every utility company today is aware of the immediate incentives surrounding smart metering. As well as eliminating an entire layer of labor-intensive, expensive and inefficient meter reading, the shift to smart makes billing precise and lays the foundation for more active relationships between supplier and consumer in which:

- ▶ Consumers have greater control over usage, with benefits both in cost and reduced environmental impact
- ▶ Suppliers create more opportunities to win, retain and manage customers – whilst balancing supply and demand more effectively.

In some parts of the world, this increased control is regarded as an absolute business, social and environmental imperative. (Atos Worldgrid is active in projects where intelligent control over consumption is now regarded as being non-negotiable).

The regulatory and cultural landscape does change from nation to nation, and with smart grid and smart metering, there are clearly leaders and followers.

Whatever your position, we believe that there is a strong case to be made for informed and intelligent review. This is particularly so for those of you who are eager to consider the bigger picture, encompassing all aspects of operational delivery and commercialization in the context of smart metering.

As a practical next step, Atos Worldgrid offers Smart Meter Value Discovery Workshops. These workshops give you the chance to share notes with people who have personal experience of a wide range of smart metering engagements. Most importantly, they allow you to explore the wider implications of smart metering for your business future.

Future-proof your smart metering strategy.

Start the quiet revolution.

Your business technologists.

Powering progress. Atos.

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## About Atos

Atos is an international information technology services company with annual revenues of EUR 8.7 billion and 78,500 employees in 42 countries. Serving a global client base, it delivers hi-tech transactional services, consulting, systems integration and managed services. 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 Games and is quoted on the Paris Eurolist Market. Atos operates under the brands Atos, Atos Consulting, Atos Worldline and Atos Worldgrid.

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## About Atos Worldgrid

Atos Worldgrid is an Atos business unit delivering sophisticated integration projects and real-time smart energy solutions to Energy and Utilities companies across the power, water, oil & gas value chains. With 1,500 engineers and over 30 years experience, Atos Worldgrid operates in more than 15 countries. It has in particular equipped 70 nuclear power plants with its supervision and command & control software in France, UK, Russia and China and delivered the world's largest smart metering system.

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