

# From in-house to pay-per-use: why now's the right time to outsource smart meter testing



[ expleo ]

## About Expleo

Expleo is a trusted partner for end-to-end, integrated engineering, quality services and management consulting for digital transformation. We help businesses harness unrelenting technological change to successfully deliver innovations that will help them gain a competitive advantage and improve the everyday lives of people around the globe. We operate in 30 countries.



# Contents

Navigating diverse challenges .....	5
Keeping all the plates spinning .....	6
Testing is no longer a competitive advantage.....	7
Making the case for automation .....	8
Good quality creates a virtuous circle .....	9
Remaining compliant while saving money .....	10
Looking ahead to a smarter future.....	11

On the launch of the new Smart Services offer, Expleo makes the business case for off-the-shelf assurance. To meet the deadline for a smart meter in every UK home, the use of shared services – powered by automation – can offer economies of scale that will cut costs, save time and standardise quality.

**Energy suppliers in the UK have their own visions for the future, yet they face many of the same immediate challenges. How to manage escalating costs in a landscape of constant change while keeping risk low? How to maintain an excellent customer experience in an increasingly competitive world? Those suppliers that can answer these two questions most successfully over the coming years will come closest to turning their visions into reality.**

If that's the big picture, then smart meters are at the foreground of the canvas. Suppliers are under pressure from the regulator Ofgem to make smart meters a success story. The aim to improve customer choice, control environmental impact and protect the most disadvantaged in society remains as valid today as when the mission began.

The government's 2024 deadline for a smart meter in every UK home is an obvious marker on the horizon. However, the need to improve smart operations – and therefore reduce expenditure, strengthen quality and improve the customer experience – is a bigger prize that will help drive change across the whole business. The end of 2024 is no longer the destination, but rather a staging post on a much longer journey towards decarbonisation and a more flexible energy sector.

In this paper, we discuss the major challenges faced by suppliers in terms of smart meters, such as navigating external change factors, solving technical complexities and cutting costs while remaining compliant. We'll also share why we believe in the merits of outsourcing of testing and quality assurance to an independent partner that can automate processes and achieve valuable economies of scale. This belief is at the heart of our new Smart Services offer. The time for change is now.



# Navigating diverse challenges



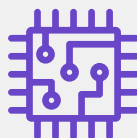
Putting a smart meter in every UK home by the end of 2024 is a challenge in itself, but this high priority assignment is made all the more taxing by the level of change happening in the background. Suppliers need to respond to a diverse range of parallel challenges such as:



The enrolment and adoption of SMETS1



Consumers switching suppliers



Upgrades to firmware versions



Ever-increasing variety of SMETS2 devices



New DCC and adapter releases

**What began as a technical and operational challenge has now grown into a test of change management. Finding a way to respond in an agile and efficient way to these competing demands has become business critical.**

# Keeping all the plates spinning



The sheer weight of priorities needing immediate attention can lead to distribution bottlenecks and reputational damage. In today's ultra-competitive and increasingly-regulated market, these setbacks will prove especially costly. The need to assure devices and new releases is therefore growing in step – but then so too is the complexity of the testing. For example, the DCC will be releasing new Comms Hub firmware four times per year. This alone will drive the need to assure changes quarterly.

This comes at a time when in-house teams are already stretched and suppliers are trying to reduce headcount, rather than build larger testing labs.

Suppliers often need to hire in contractors and consultants, given the scarcity of skilled people with the resources to test. However, unless they can stay on top of quality, then confidence and precision will be further undermined.



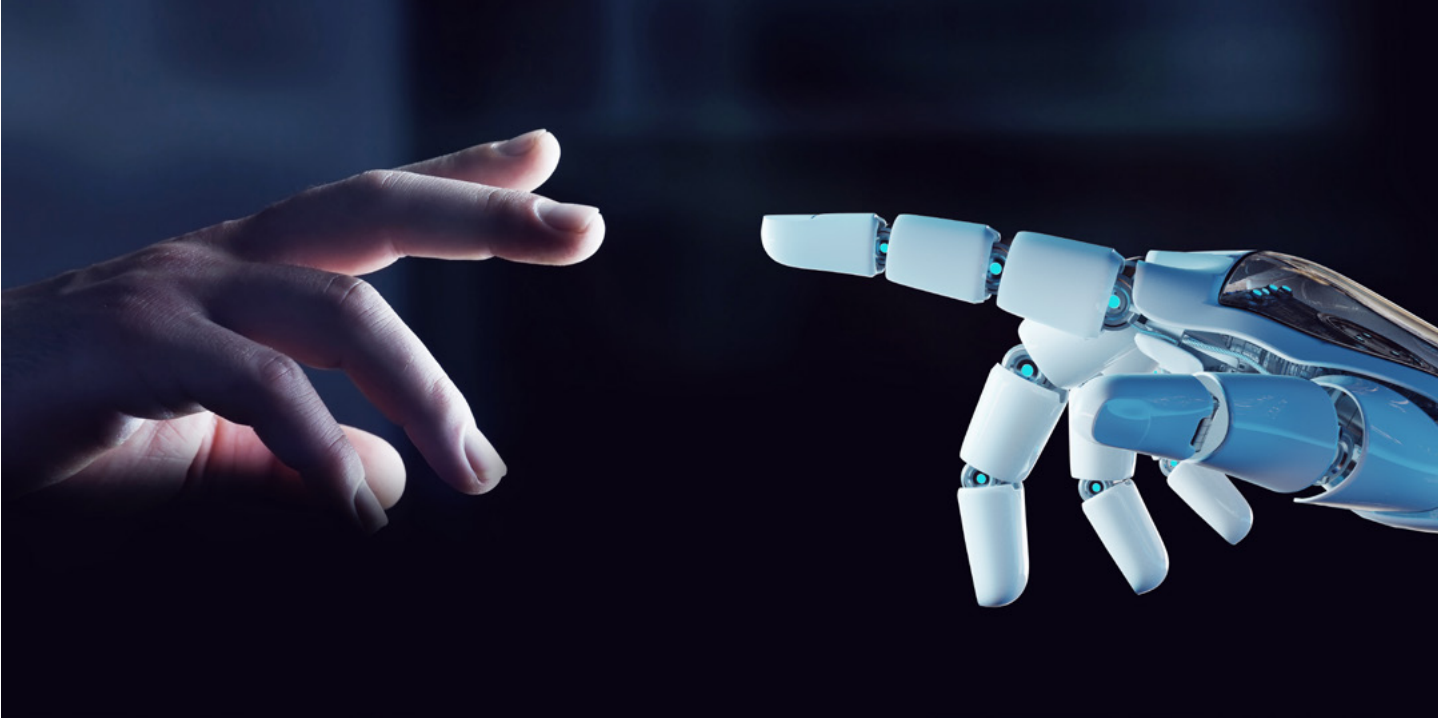
# Testing is no longer a competitive advantage

There was a time when the standard of quality assurance was a business differentiator. Given the centralised nature of the market and the vast number of devices, testing has now become an overhead. Shared services and standardised processes offer an opportunity to remove the need for non-core, repetitive testing. Put simply, these communal labs offer an opportunity to offload some of the 'boring operational stuff' so that suppliers can focus more on innovative products and services. Supplier entrants are coming up with eye-catching products to tempt away customers. Incumbents must keep up or give way.

**Outsourced testing gives suppliers one less thing to worry about. They can test the end-to-end change in their smart meter landscape on an ongoing basis without the stress of managing their own labs. The market is already showing signs of moving towards centralised Remote Test Labs, which could offer a more viable alternative for medium and small suppliers.**

From a financial perspective, shared testing allows suppliers to reduce operational costs, despite the growing market complexity, by streamlining a process that they are all doing anyway in multiple places all over the country. Suppliers could also 'assure' products more quickly, which speeds up roll out and support for smart meters, against the 2024 targets. The meters can then be maintained at a lower cost too. In effect, the cost reduction is operationalised.

# Making the case for automation



Automation, especially in areas such as regression testing, will accelerate the process further. Robotics can also reduce human error that can creep in when organisations ‘mark their own homework’. An independent quality assurance specialist can help ensure that smart meter programmes move to a steady state in a fast and safe way. By outsourcing repetitive tasks, the economies of scale will speed up delivery and drive down the cost of assurance – by as much as 60% and 50% respectively.

For example, Expleo partnered with a leading supplier to reduce the overall cost of delivery of their ERP release change. This gave a 60% saving in test duration and a 90% reduction in testing costs. Overall, the volume of regression testing doubled, which helped to improve customer satisfaction and facilitate a return to profitability.

Automation will likely prove invaluable for suppliers to keep pace with change, as they seek to retain their customers. The SMETS1 roll out created headaches for suppliers, even with control of their

own end to end supply chain. SMETS2 promises to bring its own complications, especially with proliferation of devices and the need for suppliers to test against so many permutations.

Suppliers will need to assure different manufacturers as their devices change – and not just the ones they originally rolled out. Every time there’s a change of firmware or a comms hub, a DCC release or even an adaptor – these all need to be tested. Automation will make this ongoing challenge more manageable.



# Good quality creates a virtuous circle

Of course, the savings don't end in the lab. As customer complaints rise, so costs increase. By assuring that what you deploy is reliable, suppliers can avoid home visits to fix smart meter problems. They can invest to save with assurance on devices, freeing up more time and money to focus on innovation that will benefit the wider business.

Those suppliers that can get it right first time will move up the customer experience rankings, which are themselves a powerful marketing tool. The more positive feedback, the more that brands can understand which functionalities that customers appreciate. They can spot potential flare-ups before the customer finds out, avoiding the need for expensive call-outs. Faster, high-precision quality assurance has a direct impact on the bottom line.



There is an indirect benefit too. Peace of mind and confidence are hard to calculate, but it's also hard to operate a successful business without them.

# Remaining compliant while saving money

Suppliers are under pressure to reduce costs across the business in light of the price cap and its impact on profits. Innovation has become a business necessity rather than a 'nice to do', in the race to maintain profitability and protect jobs. However, driving down operational costs can increase risk in terms of quality. Suppliers want to effectively deploy smart meters and change customers with a strong assurance that they will 'go live' without issues.

Suppliers are vying to move their smart meter programme to a steady state by managing business change versus regulatory change, so that service or product releases are made in the most efficient order. For example, if suppliers fast-track a release to meet the regulatory timelines, they may not have time to properly assure quality. Likewise, in the race to remain competitive, suppliers can chase advanced functionality that boosts customer experience but reduces profitability due to price caps.

Technical debt is another source of business risk if the back office is not yet ready to support a new release. A shared service won't have the same dependency on back office readiness. It may also be able to test more extensively than in-house labs, clearing the path for 'go live'. Without being tied to back-office releases, suppliers will be able to test their chosen devices against un-released functionality. Due to the length of time that external defects can take to fix, suppliers will be able to accelerate end-to-end back-office testing by finding glitches earlier in the delivery lifecycle.



Accountability and transparency are additional imperatives. Suppliers must keep assurance and test evidence of device interoperability with DCC for all device and firmware versions. To maintain the credit worthiness of their company, suppliers must take all reasonable steps and demonstrate an audit trail, although this can prove quite manual and time consuming due to the different combinations that need to be tested. They need forward visibility of costs to remain proactive and responsive.

A shared service will provide this audit trail in a simple package while helping to benchmark costs and provide predictability.

# Looking ahead to a smarter future

The media are often quick to paint a glum picture around smart meters. Yet, there is still time for good news stories to fill the column inches. After all, if suppliers can migrate their customers successfully to the DCC, millions of people in the UK would regain their smart reading functionality. Getting SMETS2 right will drop many of the jigsaw pieces in place to enable a smart grid that will drive economic, environmental and social change.

**Outsourcing quality assurance is just one step towards this smart energy future – but it's one we believe is well worth considering.**

## Find out more:

[expleo.com/smartservices](https://expleo.com/smartservices)  
[info\\_uk@expleogroup.com](mailto:info_uk@expleogroup.com)

+44 2074484620

## Meet the team



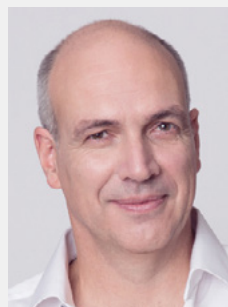
**Rachel Eyres**  
Client Director –  
Energy and Utilities  
+44 (0) 750 004 8691  
[rachel.eyres@  
expleogroup.com](mailto:rachel.eyres@expleogroup.com)



**Nathan Jones**  
Account Director –  
Energy and Utilities  
+44 (0) 797 326 4104  
[nathan.jones@  
expleogroup.com](mailto:nathan.jones@expleogroup.com)



**Jack Coxeter**  
Lead Utilities Consultant  
+44 (0) 758 084 2835  
[jack.coxeter@  
expleogroup.com](mailto:jack.coxeter@expleogroup.com)



**Angus Panton**  
Business Unit Lead –  
Energy and Utilities  
+44 (0) 771 865 9946  
[angus.panton@  
expleogroup.com](mailto:angus.panton@expleogroup.com)

**Think bold, act reliable**  
[expleogroup.com](http://expleogroup.com)

**( expleo )**