# Issue Report

# Issue 84 'Enable the cost recovery of the Radio Teleswitch Service (RTS) arrangements extension'


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## About This Document

This document is the Issue 84 Group's Report to the Balancing and Settlement Code (BSC) Panel. ELEXON will table this report at the Panel's meeting on 12 September 2019.

There are two parts to this document:

This is the main document. It provides details of the Workgroup's discussions and proposed solutions to the highlighted issue and contains details of the Workgroup's membership.

Attachment A contains the Issue 84 proposal form.



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# 1 Summary

SSE Electricity Limited raised Issue 84 'Enable the cost recovery of the Radio Teleswitch Service (RTS) arrangements extension' on 10 July 2019.

Issue 84 was raised to consider the below solutions for the RTS operational cost recovery arrangements:

- **Solution 1** - Extending the existing Radio Teleswitch Service (RTS) Contract between the Energy Networks Association (ENA) and ELEXON, to facilitate RTS operational cost recovery across all Trading Parties; and
- **Solution 2 -** Raising a BSC Modification to introduce a requirement for the BSCCo to recover operational RTS costs from Suppliers/RTS Users under BSC cost recovery mechanisms.

## Issue

Industry discussions identified that the full range of Smart Meter variants required to support the replacement of Load Switching devices (which are used primarily by Suppliers to switch between registers on Meters) are not currently available for Electricity Suppliers to deploy at large scale. As a result, the RTS arrangements are still required for a time period beyond the current March 2020 end date for the RTS service.

An initial contract extension between the Energy Networks Association (ENA) and the British Broadcasting Corporation (BBC) has been agreed, enabling the continuation of the RTS service that will apply from 1 April 2020 to 31 March 2021.

As part of the Energy UK discussions with the Supplier community, options to enable the recovery of the RTS costs were put forward, with a request to respond with a preferred option. The outcome from this was presented to the Energy UK board, with agreement that a cost-recovery mechanism under the BSC should be pursued.

SSE subsequently raised Issue 84 to consider options to enable the recovery of RTS costs from 1 April 2020 onwards.

Since Issue 84 was raised, Energy UK's continued discussions with the Supplier community have concluded that in order to ensure a stable transition away from the current RTS arrangements through to the deployment of the necessary Smart Meter variants, the current RTS service will be required until 31 March 2022.

## Conclusions

The Issue 84 Workgroup (WG) considered potential solutions for recovering RTS costs and agreed the following:

- A contract amendment to the existing RTS contract between Elexon and the ENA should be implemented at the earliest opportunity to enable cost recovery through the existing BSC RTS charge across all Trading Parties.
- ELEXON will engage with the ENA to discuss the details of the contract change. Industry will be notified of the contract change outcome and implementation timelines.
- The WG noted a Modification could be raised by a BSC Party to progress operational cost recovery proportionately amongst Suppliers or only on an RTS user basis, if a BSC Party wishes to do so.

**What is the Radio Teleswitching System**

The system which makes use of the BBC's long wave Radio 4 service infrastructure, in order to send signals to teleswitched meters and allow for remote load control.

The system relies on a chain of messaging, rules and contractual agreements among Suppliers (acting as group code sponsors), Distribution System Operators (DSOs) (acting as access providers), ENA and the BBC.


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Further detail and justification for these recommendations can be found in sections 3 and 4 of this paper.


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# 2 Background

## What are the current arrangements?

RTS access providers are Licensed Distribution System Operators (LDSOs) who manage switching schedules on behalf of Suppliers. RTS was primarily intended for load management enabling the switching on of large numbers of night storage heaters and water heaters to be staggered to avoid sudden large increases in load as night rate systems cut in. More recently, it has been developed as a tariffing system.

Access providers have a group code sponsor, who will always be a Supplier. Group code sponsors determine in agreement with the LDSO the switching time for pre-established groups of meters with a special teleswitch device installed at consumer premises. Radio teleswitches with the same group code and other features respond simultaneously to the instructions sent by the group code sponsor.

RTS access providers currently recover the costs they incur in providing access to the service in various ways or in some cases, not at all. Methods include; Distribution Use of System (DUoS) charges, direct invoicing, and miscellaneous charges on a per customer/MPAN basis. The ENA apportions all operating costs for the RTS service to access providers according to message usage.

**What is DUoS?**

Distribution Use of System (DUoS) charges recover the cost of installing and maintaining the local distribution networks.

The charges apply to every connection to the distribution network and collect the revenue the Distribution Licensee needs to build, operate, maintain, repair and invest in the network.

DUoS charges are one component of a customer's electricity bill.

## What is the Issue raised?

Industry discussions have identified that the full range of relevant Smart Meter variants are not yet available to support the replacement of all Teleswitched Meters. Therefore the RTS service should continue, to ensure that customers with Teleswitched metering arrangements can continue to be supported until alternative Smart Metering arrangements are available to deploy at scale.

An initial contract extension between the ENA and BBC has been agreed, enabling the continuation of the RTS service that will apply from 1 April 2020 to 31 March 2021 (noting that since Issue 84 was raised, the ENA has confirmed to ELEXON that the RTS service will be required until 31 March 2022). However, the ENA confirmed that the existing cost recovery arrangements cannot be used as a majority of access providers (LDSOs) no longer need the RTS for their own purposes.

If RTS arrangements do not continue, there will be an impact to the Profiling calculations from a Settlements perspective, with a subsequent impact to consumers. As such, the BSC is an appropriate vehicle to consider this issue for RTS operational cost-recovery. The RTS should be continued to ensure Suppliers can continue to support bilateral contracts with their customers. Any Supplier could gain an RTS MPAN. Suppliers need to have the right devices to manage load switching.

**What is a Load Managed Area?**

Areas of the distribution system where there is a need to reinforce or extend the capacity to control Load Switching Regimes.

## Justification for Examining the Issue

Without the RTS service operating, it is possible that some consumers could potentially lose all hot water and heating functionality following the RTS service switch off. Currently there are approximately 1.46Million (M) RTS related MPANs[1] covered by 113 Supplier ID's

[1] Meter Point Administration Numbers



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(out of 228). An RTS operational cost recovery method needs to be in place by April 2020 when the BBC contract extension begins.

Further, LDSOs could lose the ability to manage their Load Managed Areas (LMA).

In the recent Ofgem Smart Rollout open letter, the provision of RTS was referenced with an expectation that Suppliers and network companies will work together to identify and develop solutions.

## Potential Solution

The Proposer put forward the following solutions for WG consideration:

1) Utilising the existing Radio Teleswitching Contract between the ENA and ELEXON, to also facilitate the RTS operational cost recovery. This current contract requires/facilitates ENA to provide certain data to ELEXON and for ELEXON to pay the ENA for the data. The BSC provides for costs associated with this contract to be passed through to BSC Trading Parties in accordance with BSC Section D 'BSC Cost Recovery and Participation Charges'. No Modification would be required for this solution; and

2) Raising a Modification to the BSC to introduce a requirement for the BSCCo to recover the operational costs of RTS under the BSC. This solution could be used if the Issue Group wished for a differing proportional cost recovery mechanism other than those currently provided for in Section D. For instance, across all Suppliers, or only those Suppliers with RTS related MPANs.


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# 3 Issue Group's Discussions

A single Issue 84 meeting was held on 31 July 2019. The Issue WG discussions focused on potential solutions for an RTS cost recovery mechanism, rather than the wider issues with replacing the Teleswitch infrastructure, with such wider discussions to be held outside the BSC.

## Overview of the BSC Issue process

The Issue 84 WG discussions started with an overview of the BSC Change process and the Issues process specifically. ELEXON outlined the circumstance in which a BSC Party can raise an Issue e.g. when the Party would like to discuss a concern or issue with the wider industry and how this process differs to the Modification Procedures. Members were informed that the output of the Issue process is a final Issue Report to the Panel. The WG members acknowledged that a BSC Party can take forward a Modification or Change Proposal to implement the outcomes of an Issue Group, should it wish to do so.

## Defining the Issue

ELEXON provided the background to Issue 84 and the WG noted the below points:

- The RTS contract extension agreed thus far will apply from 1 April 2020 to 31 March 2021. The WG should consider solutions to enable RTS cost recovery from 1 April 2020.
- Northern Ireland Electricity Networks (NIE) and Scottish and Southern Electricity Networks (SSEN) will continue to contribute costs to the RTS extension with payments made directly to the ENA, with the remainder of the costs being recovered through the BSC arrangements. The WG noted the NIE arrangements are outside the BSC remit.
- The LDSOs cover Load Managed Areas with direct impact on the Distribution Network. It is important that RTS continues to support customers on Load switching devices until an alternative method is available. It was noted that DCP 326 being progressed under DCUSA[2] is seeking to introduce a process for retaining the diversification of demand in LMAs during the replacement of RTS.
- The ENA stated that the BBC contract extension has been agreed from April 2020. The quoted (approximate) £1.4M costs for the RTS service to be recovered through the BSC will apply for April 2020 to March 2021. The ENA noted the RTS costs may be higher if the extension of the RTS service requires systems upgrades, and is further extended past March 2021 due to system maintenance and message transmission costs. Whilst the ENA has since confirmed the extension will need to run until at least March 2022, no further cost estimates for this extended period have been provided.

## Key Workgroup considerations

The WG considered the following key points. The WG discussions and conclusions are detailed in this report.

| Questions considered under Issue 84 | |
|---|---|
| 1 | Extent of the issue |

[2] The Distribution Connection and Use of System Agreement


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| Questions considered under Issue 84 | |
|---|---|
| 2 | Benefits to having a solution |
| 3 | Costs implications for Parties |
| 4 | Implementation Timescales |

Table 1: A summary of key areas considered under Issue 84

## Current Arrangements

The ENA presented the current RTS cost recovery arrangements highlighting that:

- Currently access providers recover costs using different methods such as DUoS charges, direct invoicing, and miscellaneous charge per customer/MPAN, while some do not recover any costs. It was clarified that access providers are only LDSOs. They will have a code sponsor which will be a Supplier.
- The arrangements for Central Teleswitch Control Unit (CTCU) equipment come to an end in 2020. The CTCU is the system used to collate and direct switching times to the BBC. It is owned and operated by the ENA and receives, monitors and validates the instructions transmitted by the LDSOs, preparing them for transmission.

  The CTCU hardware may need upgrading sometime in 2020, if the RTS service is to be required past the contract extension to March 2021. There should be a principle for managing these arrangements in place going forward and recovering the costs for required infrastructure upgrades. The WG noted there may be additional costs to the RTS arrangements due to these system updates, above the £1.4m currently forecast for the April 2020 – March 2021 period (though the WG noted that it's not clear when these costs would be recovered if incurred.
- The ENA clarified that Suppliers are the main RTS users. The only network that uses load managed areas is SSEN hence their continued involvement with RTS as the access provider.

### What is the potential solution?

The WG considered the following solutions for recovering RTS cost:

1) Solution 1 - Utilising the existing RTS Contract between the ENA and ELEXON that is already in place, to facilitate the RTS operational cost recovery. Solution 1 could be delivered under:

   - Option a) allowing for RTS costs to be delivered by total market share across all BSC Trading Parties.

2) Solution 2 - Raising a Modification to the BSC to introduce a requirement for the BSCCo to recover the costs of RTS under the BSC. Solution 2 could be delivered through one of the below options:

   - Option b) calculating costs proportionately across all Suppliers or;
   - Option c) calculating costs by RTS User market share basis.

**Solution 1**

The WG asked for clarification on the current RTS contract between the ENA and ELEXON. ELEXON explained that the current RTS contract falls under the Supplier Volume Allocation


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(SVA) cost recovery arrangements in BSC Section D. The current provision allows for costs associated with the Teleswitch Agent to be recovered. The existing contract is for the provision of the service for transmitting messages that go into Supplier Volume Allocation Agent (SVAA).

The WG discussed the implementation option for Solution 1 which proposes a change to the existing RTS contract between the ENA and ELEXON. For the first year of the contract, circa £1.4M will be apportioned across all BSC Trading Parties. 50% would be recovered from Suppliers via the SVA Metering System Specified Charge and 50% recovered from Generators via Funding Share.

A member asked how the £1.4M cost was determined. The ENA explained that it is based on usage per access provider. The Northern Ireland network operator NIE and LDSO SSEN will continue to pay the same proportion and the left over £1.4M previously paid for by LDSOs will be allocated to BSC Trading Parties.

The Workgroup agreed that Solution 1 Option a) would be easy to implement and there are no additional costs for making the required change.

**Solution 2**

Solution 2 would require a BSC Modification to be raised to implement an option for calculating RTS costs proportionately across all Suppliers or; by RTS User market share basis. This solution may require system changes. On the potential options some WG members felt that the RTS service should be paid for by Suppliers with RTS customers and not all Suppliers. WG members suggested this would incentivise Suppliers with RTS related MPANS to move customers away from RTS onto alternative solutions.

However, Option c) could have a detrimental effect on a small Supplier should they be left with a large proportion of RTS related MPANs once other Suppliers move to smart Meters. If option c) is progressed, a method for apportioning costs when few Suppliers are left with RTS MPANs should be agreed to avoid negative financial consequences on small Suppliers.

The Proposer suggested that Option b) which proposes for proportionate calculation of RTS costs could also incentivise Suppliers to move from RTS by working together as an industry. ELEXON explained that costs recovered from all Suppliers via the SVA Metering System Specified Charge will lead to an approximate increase of £0.0038 per Meter per month. In consideration of this cost, the WG concluded that this is not a huge amount for Suppliers to pay. However, the industry should look at effective ways to end RTS.


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## Pros and cons of potential solutions

The WG considered pros and cons noting the below points:

| **Solution 1 – Option [a]**<br>**Contract change** – costs apportioned across all BSC Trading Parties | **Solution 2 – Option [b]**<br>**Modification** – costs proportionately across all Suppliers | **Solution 2 – Option [c]**<br>**Modification** – costs apportioned by RTS User market share basis |
|---|---|---|
| There is no cost for making this change.<br>The only timescales would be the discussions to agree the ENA and ELEXON contract amendment.<br>Ensures there is cost recovery in the interim. | Utilises the current system, but adds new parameters to the existing processes.<br>There will be some costs for implementing this option.<br>This option is equitable with an incentive to roll out smart Meters to customers across the industry. | There will be costs for implementing this option.<br>Potential changes to the billing systems and maintenance.<br>The WG determined that 0.0038 charge is not that material to progress with Option c). However, it will provide an incentive for Suppliers to move away from RTS.<br>£1.4M is a small proportion for Suppliers once smeared across all Parties. |

A member suggested that Solution 1 – Option a) could be implemented for the time being and a Modification raised to progress either Option b) and c). The WG agreed with the suggestion for option a) to be implemented and a Modification could be raised to implement either option b) or c) on an alternative cost allocation basis, if a BSC Party wished to raise such change.

A member asked whether it would be appropriate for a target end date to be added to the cost recovery mechanism regardless of whichever option was pursued. ELEXON explained that placing an end date to the RTS arrangements could put a risk on consumers. It creates uncertainty as the industry is not fully aware of when the RTS will end. The WG agreed that an end date should not be placed on the RTS operational cost-recovery, as operational cost recovery should continue until the RTS service is no longer utilised, which is an issue outside the BSC.

To help determine the WG preference of whether a Modification should be raised to apportion costs amongst all Suppliers, or amongst Suppliers that use RTS, WG members provided views through an indicative vote. The outcome was split, with two votes for each option, and two members abstained from voting.


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# 4 Conclusions

Following discussions as part of Issue 84, the WG agreed that a contract amendment between the ENA and ELEXON to facilitate cost-recovery across all Trading Parties be implemented, per Solution 1 option a. Further, the WG noted a Modification could be raised by a BSC Party, if it wished that RTS costs would be better recovered either across all Suppliers, or across Suppliers on an RTS user basis, per Solution 2 options b or c.

## Issue Group Recommendation

The WG unanimously agreed that:

- The RTS should continue and a cost recovery solution should be implemented before 1 April 2020; and
- The BSC is the appropriate mechanism for the RTS to continue.

The WG agreed on the following implementation method:

- Solution 1 – Option a) should be implemented and a Modification could be raised to progress Solution 2 Option b) or c) if a BSC Party wishes to do so. This solution will result in an extension of scope to the existing RTS contract between the ENA and ELEXON.

To ensure transparency with the industry:

- ELEXON will engage with the ENA to discuss the details of the contract change. An email notification will be issued to inform the industry of the contract change outcome and implementation timelines.
- Industry will be notified of the WG decision and Parties can raise a Modification should they wish to progress with Solution 2. Solution 2 requires a Modification to place RTS arrangements in the BSC. Under this solution Suppliers' costs could be apportioned across all Suppliers or allocated only to Suppliers with RTS related MPANS.

### Further WG conclusions

The WG reiterated that while it's important to have an RTS cost mechanism in place, the industry should focus on ending RTS. The ENA and Energy UK are leading on discussions on ending the RTS and facilitating what Suppliers will need in place to support consumers.

The CTCU upgrade costs are not included in the £1.4M to be allocated to Suppliers. The cost for system/ hardware changes has not yet been determined. Costs will be passed to ELEXON at the appropriate time and recovered accordingly through the methods outlined in this report.

It's important that the preferred solution is implemented before 1 April 2020. Options b and c) (requiring a Modification) implementation may result in BSC Central System changes, which may take longer to implement. For this reason, the contract change as a minimum is important to ensure that, if no BSC Party wishes to raise a Modification, or the Modification cannot be implemented by April 2020, the BSC will still recover RTS costs.


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# Appendix 1: Issue Group Membership

## Issue Group membership and attendance

| Issue 84 Group Attendance | | |
|---|---|---|
| Name | Organisation | 31 July 2019 |
| Elliott Harper | ELEXON *(Chair)* | ✓ |
| Fungai Madzivadondo | ELEXON *(Lead Analyst)* | ✓ |
| Darren Draper | ELEXON (*Finance, Subject Matter Expert*) | ✓ |
| Kevin Spencer | ELEXON *(Design Authority)* | ✓ |
| Sam Cannons | SSE Electricity Ltd *(Proposer)* | ✓ |
| Daniel Simpson | ENA | ✓ |
| Walter Hood | Everis | ✗ |
| Phil Russell | Consultant | ✓ |
| Paul Duffus | Western Power | ☎ |
| Andrew Jones | EDF Energy | ✗ |
| Steven Gough | SSE Networks | ☎ |
| Gil Hilton | SSE Networks | ✗ |
| Nigel Kempson | Western Power | ☎ |
| Aily Armour-Biggs | Global Energy Advisory | ✗ |
| Faye Harkin | Bryt Energy | ✗ |
| Derek Weaving | British Gas | ✗ |
| Alison Heath | ENA | ✓ |
| Kevin Woollard | British Gas | ☎ |
| Jason Stevens | Energy UK | ✗ |


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# Appendix 2: Glossary & References

## Acronyms

Acronyms used in this document are listed in the table below.

| Acronym | Definition |
|---|---|
| BBC | British Broadcasting Corporation |
| BSC | Balancing and Settlement Code |
| BSCCo | Balancing and Settlement Code Company |
| CTCU | Central Teleswitch Control Unit |
| DCUSA | The Distribution Connection and Use of System Agreement |
| DNO | Distribution Network Operator |
| ENA | Energy Networks Association |
| LMA | Load Managed Areas |
| MPANs | Meter Point Administration Numbers |
| NIE | Northern Ireland Electricity Networks |
| RTS | Radio Teleswitch Service |
| SSEN | Scottish and Southern Electricity Networks |
| SVA | Supplier Volume Allocation |
| SVAA | Supplier Volume Allocation Agent |
| WG | Workgroup |

## External links

A summary of all hyperlinks used in this document are listed in the table below.

All external documents and URL links listed are correct as of the date of this document.

| External Links | | |
|---|---|---|
| Page(s) | Description | URL |
| 2 | Issue 84 page on ELEXON Website | https://www.elexon.co.uk/smg-issue/issue-84/ |
| 5 | Ofgem Smart rollout open letter on Ofgem website | https://www.ofgem.gov.uk/system/files/docs/2019/06/2019.05_open_letter_2019_smart_rollout_plans.pdf |
| 5 and 7 | BSC Section D on cost recovery arrangements | https://www.elexon.co.uk/documents/bsc-codes/bsc-sections/bsc-section-d-bsc-cost-recovery-and-participation-charges/ |
| 6 | DCP 326 Webpage on the DCUSA Website | https://www.dcusa.co.uk/Lists |


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