

Report on Issue 52 'Billing for Data Transfer costs and the 'Total Cost of Ownership' for using a replacement solution to send DTS Flows'

Meeting Name	BSC Panel
Meeting Date	14 November 2013
Purpose of paper	For Information
Summary	This paper sets out the discussions, conclusions and recommendations of the Issue 52 Group. The Group recommends that no changes should be progressed. Issue 52 is now closed.

Background

The BSC Panel raised Issue 52 at its meeting on 8 August 2013 in order to facilitate industry debate around the cost allocation and delivery of BSC information using the Data Transfer Service (DTS). In particular the Panel wanted to understand whether an alternative mechanism could be used to deliver the data flows and how the costs of the associated services should be charged to BSC Parties. This discussion arose following a review undertaken by ELEXON of its DTS strategy.

What is the DTS?

The DTS provides a communication network for SVA traffic within the electricity industry, known as the Data Transfer Network (DTN). DTS charges are split across three main areas: infrastructure costs, data traffic and Supplier Charges. The data traffic charges are levied on a '£ per MB' basis and form the majority of the DTS costs incurred by ELEXON, who accounts for around half of all DTS data traffic. ELEXON's forecast for its DTS costs is £1.1m in 2013/14.

How are DTS charges recovered from BSC Parties?

Under the current arrangements, ELEXON recovers its share of the DTS costs through the BSCCo Charges under [BSC Section D 'BSC Cost Recovery and Participation Charges'](#). These costs form part of the SVA Costs, which are recovered from Parties based on their respective Funding Shares in each calendar month. This means that Parties



are charged for the DTS based on their market share rather than their actual usage of the network. This results in generators being charged despite not using the network, while distributors, who do use the network, do not incur any of the associated costs.

What were ELEXON's recommendations from its review?

As part of its review, ELEXON proposed that the DTS costs should be separated out from the SVA Costs and charged on a 'user pays' mechanism. This would allow the cost-recovery of these charges to be fairer, as BSC Parties would be charged these costs in proportion with their use of the DTS, rather than in proportion to their market share.

It was noted that moving to a 'user pays' charging model would increase the costs for some BSC Parties and reduce the costs for others. To understand if it was possible to reduce the overall cost to BSC Parties, ELEXON investigated options for using alternative mechanisms for delivering the data flows currently sent over the DTS, which would allow Parties to avoid using the DTS and thus avoid the associated charges. ELEXON proposed the use of the ELEXON Portal, where the files could be placed in secure folders for the relevant participants to download manually or collect via a secure FTP connection.

ELEXON presented its findings from its review to the Panel on 9 May 2013 ([Panel 212a/07](#)). Following this, ELEXON engaged with BSC Parties and Panel Committees in order to gauge industry views on the proposals the review put forward. These views were presented to the Panel at its meeting on 11 July 2013 ([Panel 214/10](#)), along with a recommendation to progress ELEXON's proposals. It was noted that progression of the 'user pays' charging model would require a Modification.

What was the BSC Panel's view?

At its meeting on 11 July 2013, the Panel considered there to be merit in raising an Issue to allow for further industry discussion and to help develop potential solutions before any Modification could be considered. The Panel raised Issue 52 at its meeting on 8 August 2013 ([Panel 215/05](#)).

When raising Issue 52, the Panel noted two areas that it would like the Issue Group to discuss. It requested that the Group should:

- Evaluate the benefit of moving to a 'users pays' charging mechanism for the DTS costs incurred by ELEXON; and
- Evaluate the 'Total Cost of Ownership' of ELEXON using a replacement solution to send DTS flows.

Moving to a 'user pays' charging methodology

What are the potential billing options?

The Issue Group considered three potential solutions for a 'user pays' charging model:

- **Option 1:** A variable charge per MB, which will be based on the £/MB charge in the Data Transfer Service Agreement (DTSA) plus a monthly proportion of the fixed/Party Agent costs attributed that that Trading Party;
- **Option 2:** A fixed MB tariff per Trading Party, to include the £/MB in the DTSA and the fixed/Party Agent costs per Trading Party; and
- **Option 3:** A variable charge per MB, which will be based on the £/MB charge in the DTSA, with the fixed/Party Agent costs apportioned based on the current Funding Shares.

The Issue Group noted that the three options were fundamentally the same, in that costs would be attributed to participants based on their usage of the DTS in a 'recipient pays' scenario. The costs to implement these options would also be similar, with one-off costs of around £20k necessary for implementing the new billing systems. This change would require a Modification, in particular to amend Section D, and so any final decision would lie with the Authority. One member asked if the Authority had been involved in the previous discussions on these proposals. It was noted that the Authority had been consulted with and had been present in all the Panel meetings where the Panel had discussed these proposals, but it had not commented one way or the other.

What would be the impact of moving to a 'user pays' model?

Analysis was undertaken into how different types of participant would likely be impacted as a result of moving to a 'user pays' charging model. The estimated impacts on each type of participant are summarised in the table below:

Participant	Estimated Impact	Notes
Large Supplier	↓ £30k-£120k	
Small Supplier	↑ £10k-£35k	
Distributor	↑ £6k-£10k	Not currently charged
Generator	↓ £0-£45k	Would no longer be charged
Supplier with Generation	↓ £1k-£2k	Dependent on size, but generation element would reduce costs
Party Agent	— —	Not currently charged and would not be affected

A move to a 'user pays' methodology would not reduce the £1.1m total costs incurred by ELEXON, but would redistribute these charges between participants, primarily from generators and large Suppliers towards smaller Suppliers and distributors. Although generators would be removed entirely, larger Suppliers would still incur some costs, but these would be less than what they are currently allocated.

One Group member queried why larger Suppliers appeared to benefit while smaller Suppliers seemed to lose out. This is due to the participants currently being charged based on market share, which would be much larger for a larger Supplier. Under a 'user pays' model, the costs would likely be more equally spread across all Suppliers, as Suppliers tend to receive fairly equal amounts of data over the DTS regardless of market share. The detailed analysis behind these numbers indicated that the biggest 'losers' appeared to be the 'larger' smaller Suppliers, and that the impacts on Suppliers generally were larger than expected. However it was highlighted that any changes made to the charging methodology should be made based on principle and not on who would win or lose from the change.

It was suggested that any additional costs incurred by distributors would be passed on to Suppliers through the Distribution Use of System (DUoS) charge. This would reduce any savings or enhance any increases in the costs Suppliers would incur as a result of moving to a 'user pays' model. One member commented that this would mean Suppliers, primarily the smaller ones, would be hit twice: once in their BSCCo Charges and again in their DUoS charges. It was also noted that DUoS charges are much more volatile, which would make this portion of the Suppliers' costs much harder to predict.

It was believed this move would have a detrimental impact on competition (Applicable BSC Objective (c)) as Suppliers would pass these extra costs on to their customers. This could be especially so for smaller Suppliers if the extra costs they could incur from this impacted their ability to participate effectively and competitively in the market, and could ultimately lead or force them to exit the market. However, a couple of members considered that it may promote competition with respect to generators, who would no longer be charged for a service they don't use.

Members commented that a 'user pays' model would be more complex to operate than the current model. While they agreed that charging participants based on their usage of a particular service would be fairer and more equitable, it would be harder to operate and would make costs for participants more variable. Members noted that a move to 'user pays' would not reduce the overall costs, but would only redistribute them. Indeed, it was thought that participants would likely incur extra costs in managing the added complexity, and so the overall costs would actually increase as a result of such a change. Members did not believe the case for change was proven sufficiently to offset this impact.

One member considered that the 'user pays' approach is an important economic concept, in that people should pay for the services they use. They believe that, as a rule, services would be charged in this way if there was economic

sense and benefit in doing so. However, they conceded that this may not always be the most effective approach, and can be economically unviable in some cases. In the case of DTS charges, the 'user pays' model would just redistribute existing costs and add further costs through complexity. With no economic driver, the principle becomes the only argument for change, and ultimately it would be consumers that would end up paying.

Are DTS charges a suitable charge for a 'user pays' methodology?

One member commented that participants have little choice in their use of the data flows that are distributed through the DTS. Participants are required to send and receive the data flows they do as part of the operation of the market. Consequently, participants would not be able to choose not to send or receive these data flows in order to reduce their costs under a 'user pays' methodology. Other members concurred with this view, and agreed that, while some support the principle of 'user pays' in general, DTS charges may be the wrong service to target as participants have no choice in their use, or their level of use, of this service.

Could such a move cause other areas to follow?

Several members had concerns that moving to a 'user pays' model for DTS costs could 'open the door' to other areas also being charged in this way. In particular, areas relating to the Performance Assurance Framework (PAF) or to BSC Change had been highlighted in previous discussions as such potential areas. It was noted that Issue 52 could only focus specifically on DTS costs and the Group would not be able to explore other areas, but one member highlighted that there would be nothing to stop Parties from raising further Issues or Modifications to explore other areas should they so wish. However, members considered that it would depend on the areas in question as to whether a 'user pays' approach could be taken, and that it was hard to see how such an approach would work for the BSC Change elements. There was also a concern that charging for particular services in this way could result in Parties trying to cut BSC costs to such a degree that the industry could be left with a poorer central service.

Members discussed similar changes that had been implemented within the gas market, with many areas being charged in a 'user pays' fashion. In particular, the gas equivalent of the Electricity Central Online Enquiry Service (ECOES) is charged based on market share, and it had been considered to charge based on the number of hits. The gas market had undertaken a lengthy debate on the subject, similar to the discussions being initiated by Issue 52. The original definition put forward on what should be charged under 'user pays' had been quite wide, but was narrowed down over time, with the key question being where the line should be drawn. Some members believe that the gas industry's approach to 'user pays' does work, but noted that it took a long time to get there.

One member thought that this came down to a choice between a simple low-overhead approach and everything going down a 'user pays' approach. Other members returned to arguments that had already been made against having a 'user pays' methodology for the DTS charges and noted that these would be enhanced the more the industry elected to shift to such an approach.

Ultimately, the Group were concerned that, should DTS charges be recouped on a 'user pays' basis, this could open the floodgate for many other BSC charges to do the same, and could open up the debate within other industry Codes that currently socialise costs. The Group noted there would be much industry discussion, but felt there was little economic benefit in moving away from socialised costs for central services.

Alternative mechanisms for delivering DTS flows

What potential alternative mechanisms are there?

The Issue Group considered three potential alternative mechanisms to the DTS for delivering the relevant flows required by the BSC:

- **Option 1:** The use of the ELEXON Portal and associated FTP connection, as put forward by ELEXON as part of its original review;
- **Option 2:** The use of the BSC Wide Area Network (WAN), also referred to as the CVA Network; and
- **Option 3:** An FTP set-up similar to the current CVA Infrastructure set-up.

Option 1 was assessed at a high level by ELEXON as part of its review, which indicated one-off costs of around £160k would be needed to implement it. Options 2 and 3 were only at a high level concept stage, and no cost details were available to the Group. Detailed assessments of each option would be sought only if there was a desire by the Group to explore any of them further. The Issue Group also noted that Options 2 and 3 could cater for both inbound and outbound traffic, while Option 1 would only cater for outbound traffic.

Members queried whether the BSC WAN had sufficient capacity to account for DTS traffic to be incorporated. There is a significant amount of bandwidth left, although it is not fully clear whether this would be sufficient. This would be ascertained as part of any further assessment.

The DTS Operator representatives put forward a fourth option whereby some of the flows issued by ELEXON could be issued via a 'broadcast' facility. ELEXON would send just one copy of the relevant flow into the DTS, which would then be broadcast out to an agreed distribution list. This could potentially halve the amount of data sent by ELEXON, reducing the relevant costs accordingly. It was noted that this solution had been explored previously, but had not been progressed at the time due to the reduction in ELEXON costs being reallocated to other DTS Users through the Supplier Charges mechanism.

How would an alternative mechanism impact wider DTS costs?

It was highlighted that, while any reduction in the amount of data sent or received by ELEXON through the DTS would deliver cost-savings under the BSC, other costs would likely increase. The DTS Operator representatives noted that their costs for operating the DTS were fixed. They operate a not-for-profit service in the same way as ELEXON does and so the fixed costs of their service provider for the DTS need to be recouped from users of the service. If ELEXON's share of those costs were to decrease as a result of less usage, these total costs would need to be recovered elsewhere and the most likely place for these to be recouped through would be through Supplier Charges. This would be via an increased cost per 1,000 MPANs, with an estimated increase for these charges of around 25% if all of ELEXON's costs were removed.

It was noted that the total increase in ELEXON's DTS charges seen over the last five years were due to increased data traffic as well as DTS price increases. The DTS Operator representatives also informed the Group that they would be completing their procurement for the DTS service shortly, and anticipated a small cost-reduction in the overall DTS costs in the next financial year. One member enquired whether the DTS could be delivered through an alternative service, such as something akin to the BSC WAN. It was noted that this is why the service is procured every few years and that the service currently being used is the most cost-effective at this time.

What requirements would an alternative mechanism need to deliver?

The Group considered whether comparing any of the alternative mechanisms proposed with the DTS was comparing like-with-like, as the different mechanisms would work in different ways. It could be expected that Parties would want any alternative mechanism to deliver these data flows to have the functionality expected from the DTS, such as security, reliability and the ability to send and receive different versions of flows.

One member noted that reliability is paramount; if the data flows cannot be sent then everything else comes to a halt. There have been no issues with availability of the DTS over the last few years, and users would expect equal reliability from any alternative mechanism. The Group also considered data security to be important, and noted that additional EU regulations on data protection are anticipated to come into force in the next few years, which any alternative mechanism would need to comply with. However, the security levels for the DTS are designed for sensitive data, and it was questioned whether that level of security is higher than is necessary for BSC data flows. Some members also highlighted that not all participants may want all features from the service.

The Group's general view was that alternative mechanisms would be worth exploring further if the same service was being delivered for less, but they did not believe that they were comparing like-for-like, and if the services were not comparable, it would be hard for participants to make a judgement.

One member highlighted that the industry already has a potential alternative network for delivering data flows in Xoserve's network, but the industry generally prefers the DTS. In addition, there is a possibility that the introduction of the Data Communications Company (DCC) may create a further network. Members questioned whether it was worth ELEXON developing a further alternative solution at a potentially large cost if it was not certain that participants would use it, and which may be made redundant in the future through the introduction of smart metering. Although competition is beneficial in driving down prices, members considered whether it may be cheaper overall to remain with a single solution.

Would an alternative delivery mechanism affect the 'user pays' charging methodology?

The Group was informed that the proposals to move to a 'user pays' charging mechanism and to introduce an alternative flow delivery mechanism were linked. It was considered that many smaller participants would be detrimentally impacted by moving to a 'user pays' charging mechanism for DTS charges. The introduction of an alternative route for receiving the relevant data flows would allow them the option to move away from the DTS and thus avoid those costs altogether. However, Group members highlighted that, while this would result in cost-savings under the BSC, those costs would need to be reallocated to Supplier Charges to allow the DTS Operator to fully recoup its costs. This would result in no cost-savings overall, and could further compound the detrimental effect moving to 'user pays' would have on smaller participants.

It was considered that without the 'user pays' mechanism under the BSC, there would be no incentive for participants to move to any alternative mechanism developed by ELEXON, reducing the business case for the development of such a solution. Consequently, the Group saw little point in examining any of the proposed options further.

Issue 52 Group's Conclusions

The Group believes that there is no benefit to moving to a 'user pays' charging mechanism as:

- Such a move would redistribute rather than reduce costs, and may even increase costs due to added volatility and complexity;
- The increase in costs allocated to smaller participants compounded with increased DUoS charges as distributors pass on their costs would impact their ability to participate effectively and competitively in the market, which would be detrimental to competition. This would outweigh the positive effects on competition gained from removing generators from the charge; and

- There was concern that moving to a 'user pays' model for DTS costs may 'open the floodgates' to further BSC charges doing the same.

The Group also believes that there is no benefit in developing an alternative delivery mechanism as:

- While the development of an alternative mechanism could allow ELEXON to reduce the costs incurred under the BSC in using the DTS, these costs would need to be reallocated by the DTS Operator, resulting in no overall benefit to participants;
- It is difficult to make a like-for-like comparison between the proposed alternative mechanisms and the DTS, which makes it harder to judge whether any alternative mechanism would be better than the DTS; and
- Without the incentive offered by the 'user pays' mechanism, there would be little benefit in developing an alternative mechanism as take-up is likely to be low.

Overall, the Issue 52 Group has concluded that there is no benefit in progressing any of these areas further. Consequently, it recommends that no further work should be undertaken in regards to Issue 52 and that no changes should be raised or progressed from this.

Recommendations

We invite you to:

- **NOTE** the Issue 52 Group's discussions and conclusions;
- **NOTE** the Group's recommendation that no changes should be progressed; and
- **NOTE** that Issue 52 is now closed.

List of Appendices:

Appendix 1 – Issue Group Membership

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Appendix 1 – Issue Group Membership

Name	Organisation	17 Sep 13
David Jones	ELEXON (<i>Chair</i>)	✓
David Kemp	ELEXON (<i>Lead Analyst</i>)	✓
Matt Wood	ELEXON (<i>Project Sponsor</i>)	✓
Darren Draper	ELEXON (<i>Finance</i>)	✓
Walter Hood	IBM	✓
Glenn Sheern	E.ON	✓
Martin Brandt	SSE	✓
Richard Mawdsley	Haven Power	✓
Jonathan Moore	GDF Suez	✓
Matt Keen	Npower	✓
Emma Piercy	First Utility	✓
Jo Smith	Callisto	✓
Kevin Woollard	British Gas	✓
Tony Thornton	Gemserv	✓
Paul Gath	ElectraLink	✓
Brian O'Shea	ElectraLink	✓