

ElectraLink

ElectraLink Ltd

## Impact Assessment

on behalf of BSC P222 Modification Group

27<sup>th</sup> February 2008



# 1. Introduction

In response to a request from Chris Stewart at Elexon, ElectraLink is pleased to provide an impact assessment based on the requirements of the P222 Modification Group, set out as:-

*There are two potential solutions in which there would be an increase in flows over the DTN.*

\* *Proposed Solution:*

\* *The D0019 is sent by NHHDCs to relevant Distributors (based on MPAN values) at the same time that any D0019 is sent to the NHHDCs and Suppliers (Mandatory to send to Distributors).*

\* *For the avoidance of doubt, there will be no validation undertaken on the D0019 sent to the Distributor's.*

\* *An informal process outside of the BSC will be used to handle any queries on the data. There will be no additional obligations place on Suppliers in this area.*

\* *Potential Alternative Solution:*

\* *A new flow is created which is essentially a 'disaggregated' version of D0041. This is sent by NHHDCs to the relevant Distributors on a quarterly basis (Mandatory to send to Distributors).*

\* *For the avoidance of doubt, there will be no validation undertaken on the new flow sent to the Distributor's.*

\* *An informal process outside of the BSC will be used to handle any queries on the data. There will be no additional obligations place on Suppliers in this area.*

*The Group are interested in:*

*Given the Proposed solution would result in a **50% increase in D0019 flows**, what would be the impact of this on:*

- **Total cost increase?**
- **Performance?**
- **Would sending a snapshot of the information less frequently (eg monthly or quarterly) have much difference?**

*Given the Potential Alternative solution would result in a **new large flow, but only quarterly** what would be the impact of this on:*

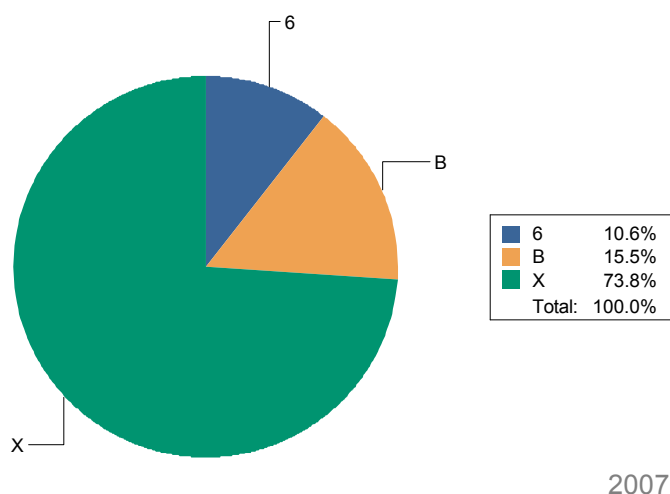
- **Total cost increase?**
- **Performance?**
- **Can you confirm that the cost is borne by the sender of the information?**
- **Additionally, is there anything else that you think the Group should be aware of, or consider?**

## 2. Analysis of D0019 data transfers

An analysis of Data Transfer Service sent files containing D0019 data flows for the period 1/1/2007 to 31/12/2007 shows a total sent data volume of 18.845 Giga bytes.

The distribution of this 18.8 GB is represented graphically by the following pie chart.

**NHHDC D0019 distribution by receiving Role Code**



### **Annual D0019 volume by receiving Market Role:**

6	Non Half Hourly Data Retriever	10.6%	2GB
B	Non HH Data Aggregator	15.5%	2.9GB
X	Supplier	73.8%	13.9GB

The expectation of a 50% increase in D0019s implies that the DNO would be added as a third recipient of each D0019 sent by the NHHDC. Whilst the above analysis shows an uneven distribution of D0019s between Suppliers and NHHDCs, the data transfer volume impact posed by the proposed solution is assumed, for the purpose of this impact assessment to be a 100% increase of the 13.9GB annual total sent from NHHDCs to Suppliers.

### 3. Impact on costs

The cost impact of sending an additional 13.9GB of D0019 data, in terms of apportioned Data Transfer Service Traffic Usage Charges will be born directly by the sending parties (NHHDCs).

Based on the 2007 data volumes the total annual increase in DTS Traffic Usage Charges would be (at today's DTS Prices):- **£25,020**

### 4. Impact on Performance

The estimated annual increase in D0019 data by 13.9GB can be accommodated by the existing Data Transfer Service infrastructure without any material effect on performance or the need to change the infrastructure components.

Batching a full month of data and sending it at once could theoretically be a problem if the file size is very large. It would be useful if the group could estimate the largest data file size that would be sent in this scenario. We would recommend in this case that the sender splits any extremely large files into a number of sub 20 Byte files.

With specific regard to the effect of loading on performance, it is worth restating the formal DTS Service Levels provided for each High Volume gateway connection type:-

*The DTS will deliver 99% of files within 2 hours, and 100% within 4 hours; subject to the following loading profile:-*

*The total of Messages Sent from the Gateway in any Time Period may be up to 250 Mbytes, and the total number of Messages Sent in that Time Period may be up to 1500.*

*The data volume of a Message is measured in its user file format.*

*"Time Period" means consecutive intervals of 120 minutes measured using the DTN time source. For the avoidance of doubt, the first Time Period commences at 00:00:00 (H:M:S), and ends at 01:59:59. The second Time Period is therefore 02:00:00 to 03:59:59 and the measurement continues on this basis throughout each day.*

### 5. Other considerations

In addition to the alternative solution being considered; the concept of a D0019 data snapshot has also been raised by the group. In both cases; as the DTS Traffic Usage Charges are applied in a linear fashion the effect of the alternative solution and 'snapshot' approach will be a direct and proportional reduction in the estimated Traffic Usage Charges based on the percentage reduction in data volume achieved by either solution.

The requirements set out by the group state that there will be no validation on the D0019 flows to DNOs. At present the DTS validates all data flows syntactically. The requirement for no validation on D0019s to DNOs would require further development

of the DTS to enable the NHHDC to DNO D0019 flows to be handled differently to all others (i.e. not validated).