

# Competition in Connections: Report on NIE Networks Cost Recovery Proposals

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## 1. Summary of Conclusions

The Utility Regulator (UR) has asked Gemserv to review NIE Networks proposals for the introduction of 'Competition in Connections' and provide a report under contract CON25/16.

Gemserv have carefully considered the evidence listed in this report and, where needed, have requested additional clarity from NIE Networks. Consideration has been given to the changes in the revised proposal submitted to the UR on 14 March 2017 that updated the 'Competition in connections' proposal dated 14 September 2016 and increased the proposed budget from £5.106M to £5.534m.

Based on our analysis it is considered that an allowance of £4.764K for reasonable external costs should be adequate to introduce full competition in electricity connections in Northern Ireland. We consider all the costs to be capital expenditure and should be allocated to a 5 year RAB.

Gemserv is content for this report to be shared with NIE Networks.

## 2. Introduction

The UR has asked Gemserv to review NIE Networks proposals for the introduction of 'Competition in Connections' and provide a report under contract CON25/16.

This document provides the UR with Gemserv's opinions and recommendations about NIEN's cost proposals after a detailed review and analysis.

Following on from an initial briefing meeting the UR provided Gemserv with the following information:

- Letter from NIEN to the UR dated 14 September titled 'Competition in connections'.
- NIEN slides 'Connection Business Transformation programme - Utility Regulator update – 1 August 2016'
- Early draft of proposed licence changes – Condition 18.

NIEN started the Connection Business Transformation Programme in 2015 to enable contestable network connections and had opened the >5MW connection market to competition in late 2016. The scope of this report provides recommendations on the costs incurred up to the end of 2016 and those expected to be incurred by NIE Networks up to March 2018.

As all operational costs are expected to be recovered from the connection charges, this report focuses on the capital costs related to the necessary changes to systems and processes.

This report notes the considerable NIEN manpower used within the project (reported as £2m) and has taken these resources into account in the conclusions and recommendations. It is noted that these internal costs are not directly allocated to the project and Gemserv assumes they are included in the RP5 price control. Furthermore, Gemserv understands that cost recovery will continue as part of the RP6 price control but is not aware of how these employees will be deployed post March 2018 when the competition in connections project closes.

Gemserv is pleased to report that NIEN, and especially the main contact, has fully supported this assurance work and have provided additional assistance as and when requested.

### 3. Initial Review

Gemserv noted from the information provided by the UR that NIE Networks already have opened contestability for connections of more than 5MW and plan to complete the preparations for all connections by March 2018. The table in the NIE Networks letter also shows that the work is well advanced with about £1.5m of the proposed budget already spent.

#### 3.1 Request for information

After perusing this information, Gemserv contacted NIE Networks on the 03 January 2017 and requested further information as detailed below:

##### *Project Office*

- The Project Initiation Document (PID) as approved by the Project Board;
- The original detailed project plan associated with the PID and any subsequent re-plan approved by the Project Board;
- The associated detailed project budget providing information about each resource required by type and by period (weekly or monthly);
- Details of the procurement processes for all external resources;
- All other relevant Project Board papers.

##### *System and Process Design*

- The high level options initially considered by NIE Networks (e.g. manual, semi manual, automated processes) along with the assumed metrics for each category of connection type;
- The business requirements provided to Capita (or the relevant contractor(s)) to quote for the IT changes, including any options;
- All relevant responses from Capita (or the relevant contractor(s)).

##### *Costs to date*

- Details of all actual costs incurred to date by period (weekly or monthly);
- Latest Best Estimate (LBE) for completion of the project;
- Project Board papers reporting on period progress and expenditure;
- An explanation of any material deviations to the budget.

The initial request for information is reproduced in Appendix 1. Also a provisional date of Monday 6th February 2017 was agreed to meet NIE Networks.

Following Gemserv's information request to NIE Networks the following additional documents were received:

- NIE NETWORKS's readiness check list Go-No go ver1.0 (Excel)
- PWC- Internal Audit Report 2016 NIE Networks Readiness for Contestability in greater than 5MW connections (Phase 1) NIE Networks 16\_15 Final Report (PDF)
- NIE Networks Contestability in Connections Programme (PDF)
- Connections Business Transformation Programme - Project Initiation Document. Version 1 dated 31 March 2106 (PDF)
- Appointment of external consultants: Overview of approach – 6th January 2017 (Word)

- Estimated IT Connections costs as presented to the IR on the 1 August 2016
- Competition in Connections - Supporting documentation - 24/01/2017
- Connections Workflow Solution – Proposed Options/Board approval paper dated 6 October 2016
- Connections Drawing Package– Proposed Options/Executive approval paper dated 6 October 2016
- A generic overview of the agile approach (PPT)
- Business Transformation Programme Timeline ( PPT)
- CBTP Phase 2 Programme Plan 27-07-17 (MPP)
- CBTP Phase 2 Programme Plan 27-01-17 v1.1m (EXCEL)
- NIE Networks Contestability in Connections Prog Plan v1.0
- CBTP Benefits Quadrant 25-01-17 (PDF)
- Project Briefs version 1.2 dated 10-01-17 (PDF)
- BTP Budget at 27-01-17 (EXCEL)
- BTP cost report Dec 16 (EXCEL)
- CBTP Costs Actuals and Forecast Jan 27.01.17 v1.0
- Competition in Connections - Supporting documentation version 2 24/01/2017 (PDF)

Based on the initial review of the documents provided by NIE Networks the agenda for the first meeting was agreed as:

- General overview of the project, how it has been set up, along with the core team responsibilities;
- Discussion about the project plan including phasing, milestone and deliverables (A Microsoft Project version of the plan was provided);
- A discussion about the business requirements for each deliverable;
- The IT requirements and how they will be implemented (changes to existing systems and /or introduction of new systems);
- How the Agile development process is being implemented in the NIE Networks environment, business and the interface requirements;
- The project's historical costs;
- The actual costs up to the end of 2016;
- Derivation of each budget cost line including the profiling of resources;
- AOB;
- Further actions.

## 3.2 Meeting with NIE Networks on the 6th February 2017

The meeting took place at NIE Network's Connection business office at Channel Wharf, Belfast, BT3 9DE. The meeting was informal but roughly followed the agenda and scope agreed with the UR.

Some of the keys points arising from the meeting:

### 3.2.1 Employee Costs

Gemserv noted that employee costs were in the budget spreadsheet and the actual costs were being reported but they did not seem to be included in the proposals submitted to the UR in 2016. It was clarified that although over £2m of employee costs were planned to be used to support the Connection Business Transformation Programme, NIE Networks were not asking for additional cost recovery for these costs.

### 3.2.2 Total projected costs requested for cost recovery

Gemserv's starting point was the Letter from NIE Networks to the UR dated 14 September 2016 entitled 'Competition in connections' that projected a total cost of £5.106M. As there were no consistent headline costs in the various documents provided by NIE Networks Gemserv asked for clarity about what costs NIE Networks were seeking to recover. NIEN indicated that their latest update to the actual and forecast budget (as at the 27/01/17) was £5.534m. This figure would imply their latest projected costs had increased by £0.428m since the submission on the 14 September 2016.

Gemserv indicated to NIE Networks that their remit was to review costs based on the 14 September 2016 submission and that any increase would require a new proposal to the UR indicating why the projected costs had changed.

NIE Networks provided a spreadsheet of this latest update that indicated the actual external costs incurred as at 31 December 2016 and the forecast costs for 2017/18 were:

Actuals	2015/16	2016/17	Total actual costs
	Up to 31 Mar 16	1 Apr - 31 Dec	31 Dec 21016
	Actuals (£00's)	Actuals (£00's)	Actuals (£00's)
	535	1079	1614

Forecasts			
2016/17	2017/18	2017/18	Total
1 Jan - 31 Mar	RP5 (Apr - Sept)	RP6 (Oct-Mar)	
Forecast (£000's)	Forecast (£000's)	Forecast (£000's)	Forecast (£000's)
738	1516	1666	3920

NIE Networks were advised that they needed to update their original submission to the UR and provide reasons why the forecast costs had changed.

Gemserv agreed they would proceed on the premise that a revised submission would be forth coming and the UR would accept it.

Subsequently on the 14 March 2017 the UR received a revised proposal from NIE Networks that has been used to supplement our analysis.

### 3.2.3 Budget comparison

Gemserv carried out a high level comparison between the 14 September 2016 and the 14 March 2017 submissions. The following table provides the original and revised cost lines with the differences:

External resources	Budgets		
	Original £000's	Revised £000's	Difference £000's
XX	XX	XX	XX
XX	XX	XX	XX
XX	XX	XX	XX

External resources	Budgets		
	Original £000's	Revised £000's	Difference £000's
XX	XX	XX	XX
XX	XX	XX	XX
XX	XX	XX	XX
XX	XX	XX	XX
<b>Subtotal</b>	<b>2354</b>	<b>2841</b>	<b>487</b>
<b>IT expenditure</b>			
XX	XX	XX	XX
XX	XX	XX	XX
XX	XX	XX	XX
XX	XX	XX	XX
XX	XX	XX	XX
XX	XX	XX	XX
XX	XX	XX	XX
XX	XX	XX	XX
XX	XX	XX	XX
<b>Subtotal</b>	<b>2275</b>	<b>2327</b>	<b>-8</b>
<b>Miscellaneous</b>			
XX	XX	XX	XX
XX	XX	XX	XX
XX	XX	XX	XX
XX	XX	XX	XX
<b>Subtotal</b>	<b>476</b>	<b>426</b>	<b>-50</b>
<b>Total (£000's)</b>	<b>5105</b>	<b>5594</b>	<b>489</b>

The major changes in the two submissions are:

- Legal Panel: Reduction of £xx
- Market Design: Increase of £xx. This resource has now been budgeted full time until the 31 March 2018 rather than released at the end of March 2017
- Testing Manager: Increase of £xx. This is a new costs line.
- Programme assurance: Increase of £xx. Phase 1 assurance increased by £xx and a provision of £xx has been provided for in Phase 2.
- Workflow and Document Management: Reduction of £xx
- ICP Portal: Increase of £xx: New cost line.



## 4. Detailed Analysis and Conclusions

Based on the written information provided and the verbal update by NIE Networks on the 6 February Gemserv started the next stage of more detailed analysis. This section provides commentary on that assessment together with conclusions and recommendations. Gemserv have also requested additional information that is detailed in Appendix 2.

### 4.1 Competitive tendering

NIE Networks has provided Gemserv with documents explaining the procurement activities undertaken to secure specialist external resources. No review of the procurement processes was undertaken, but sufficient information has been reviewed to confirm, wherever it was possible, that external resources have been sourced at competitive prices. These include long term umbrella contracts such as the managed services agreement and the NIE Networks legal panel.

### 4.2 Actual cost expenditure up to 31 December 2016

The reported actual expenditure up to 31 December 2016 was £1,614k. Gemserv did not consider it cost effective to perform a full audit of these costs other than gain confirmation from NIE Networks that they were all based on actual expenditure and included no accruals or other estimates. This approach was agreed with the UR. Gemserv did review each cost line and has no reason to consider these costs to be incorrect or had not been incurred.

Our opinion is these costs are all suitable to be considered for cost recovery and have been included in the cost review below.

### 4.3 External Resource

#### 4.3.1 Project Delivery Support, Neueda: £xx

Neueda were contracted by NIE Networks to provide Project Office consultancy services via a framework agreement. The tender provided for 5 grades of consultants with daily rates between £xx and £xx. These rates benchmark well for similar consultancy work in Northern Ireland. Another consultancy company also has a similar framework agreement but as Neueda rates are more competitive they have provided all the required resources to date.

The actual costs for the 12 months up to 31 December 2016 were £xx and NIEN are forecasting costs of £xx for the remaining 15 month period. The detailed spreadsheet indicates that 6 Consultancy roles will be performed by Neueda. These are:

- 1 Project Manager full time
- 2 Business Analysts full time
- 1 Senior Business Analysts full time
- 1 Scrum Master/Project Manager full time
- 1 Change expert/Training Lead full time from June 2017

**Gemserv's conclusions and recommendations:** The Neueda team are at the core of the programme and will have built up considerable expertise by the end of phase 1. NIE Networks was asked to explain why the roles had not been profiled<sup>1</sup> as the programme

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<sup>1</sup> The changes in types and volumes of consultancy required as the programme requirements change.

needs change with progressive stages of work. NIE Networks indicated that the team would be able to support the testing, training and cutover processes. Gemserv sympathises with this view provided these consultants are fully adaptable to the changing needs. The project has invested heavily in these resources and their experience will be valuable in the testing and transfer of knowledge to the business as usual teams. These points have been taken into account when recommending adjustments to the training and communication cost line.

Using the NIE Networks 'BTB budget spreadsheet' Gemserv calculates the total costs for using these resources for the period 1 January 2017 until the 31 March 2018 to be £xx whereas the NIEN submitted budget for the same period is £xx. As the cost of the Change expert/Training Lead (£xx) should be allocated to Communications and Training cost line the revised amount is calculated to be £xx. Together with the actual costs for the period up to 31 December 2016 (£xx) the revised cost line amount is £xx. Taking into account the above points Gemserv considers the sum of £xx should be considered by the UR for cost recovery.

#### 4.3.2 Legal Panel: Addleshaw Goddard (£xx)

Addleshaw Goddard is contracted by NIE Networks under the legal panel arrangements and has been used extensively during phase 1 to provide advice on the legal elements for the introduction of competition in connections. We understand that this work included advice on legal issues with SONI regarding the revisions required to the Transmission Interface Agreement (TIA). NIE Networks have reported that the legal costs for phase 1 were £xx and have provided for £xx in phase 2.

**Gemserv's conclusions and recommendations:** Gemserv understands that NIE needed legal advice in many areas regarding competition in connections during phase 1. It is understood this included advice about competition legislation, revised connection agreements and the TIA. The legal work carried out during phase 1 should have provided the strategic outline for all connections and only detailed differences between >5M and <5MW connections will need legal opinion and help during phase 2. Gemserv considers the phase 2 work will be more process rather than design, or legal principles. This could be carried out by more junior legal staff and we consider the legal support costs should be substantially less. With these points in mind Gemserv consider that a provision sum of £xx should be considered by the UR for cost recovery.

#### 4.3.3 Market Design, Garrick Consulting: £xx

Garrick Consulting is a small consultancy organisation specialising in electrical transmission, distribution and competition in connections. NIEN have employed them to provide advice and support on market design and transmission. In the original submission to the UR NIE Networks decided this role was required until March 2017. However, it is now considered in the revised submission this resource is required on a full time basis until the end of March 2018.

**Gemserv's conclusions and recommendations:** Garrick Consulting have a good reputation for expertise in this area and the consultant can be procured at a reasonable cost (£xx). NIE Networks now considers this expertise is required in the development, testing and training required in stage 2 of the project. Gemserv considers this market design role could be useful during system testing and training. Also as with the Neueda project delivery support team continuity can important be an important factor in successful project delivery. On that basis Gemserv considers the additional £xx should be considered by the UR for cost recovery albeit the recommended reduction in the training budget has been considered as part of this new cost line.

#### 4.3.4 Specs & Policies: Mott MacDonald/PB Power; £xx

Gemserv have been informed at the beginning of the project that Mott MacDonald/PB Power were contracted to provide advice on competitive connections. Although a framework agreement is in place it was decided not to continue with any further work.

**Gemserv's conclusions and recommendations:** As this expenditure has already been incurred, is of relatively low value and is not repeated in phase 2 Gemserv did not investigate other than ask NIE Networks to confirm it is bona fide historic expenditure. On that basis Gemserv considers the £xx should be considered by the UR for cost recovery.

#### 4.3.5 Test Manager

The initial budget did not include this role presumably because the proposed Agile development methodology does not require one (although other roles are intended to provide similar expertise). However, NIE Networks has decided a different approach was required for the legacy suite of systems.

**Gemserv's conclusions and recommendations:** Gemserv asked NIE Networks to explain 'why testing management cannot be carried out within the resources allocated to the project office (especially when it includes senior analysts with testing expertise)' and received the following response:

*Existing analysts and internal resources will support the testing effort. The only additional recruit that we intend to employ is a test manager to coordinate testing activities across the IT work streams. The test manager is required specifically to ensure that business processes and systems are tested end to end for JMS, SAP isu and SAP ECC6. As described above, each of these systems will introduce changes, the impact of which will need to be thoroughly tested in a coordinated manner.*

Gemserv's agrees that a more coordinated managed approach to test management is required than is offered by the Agile processes. It is necessary to ensure the changes, to each legacy IT system, are compatible, interfaces are correctly updated and adequate regression testing is performed. It is therefore normal to employ a test manager to coordinate test resources and related products. Gemserv considers this new cost line to be required and should be considered for costs recovery. This additional role should release other programme office team members to support the training activities.

#### 4.3.6 Programme Assurance by PWC: £xx

NIE Networks used PWC for external programme assurance during phase 1 (at a cost of £xx) and wish to use them to independently assure that stage 2 is complete and ready to offer contestable connections to the < 5 MW market. Gemserv have been supplied with a copy of a formal quotation from PWC that provides a fixed price quote of £xx (£xx plus up to £xx expenses).

**Gemserv's conclusions and recommendations:** Some complex programmes find it good practice to obtain an independent opinion about the status of a delivery programme to confirm the full scope has been delivered and the service is ready to go live. This independent advice is often used by the Programme Board to assist in making the go live decisions. Gemserv considers the £xx should be considered by the UR for cost recovery.

Gemserv notes that NIE Networks submission has duplicated the quotation of £xx in the April -Sept 2017 and Oct- Mar 2018 table columns. This has been corrected in the table in the 'Summary' section.

#### 4.3.7 Other Industry Expertise: £xx

Gemserv note that £xx has been expended, before 31 March 2016, on other industry expertise.

**Gemserv's conclusions and recommendations:** As this cost has already been spent, is of relatively low value and is not repeated in phase 2 Gemserv has not investigated other than ask NIE Networks to confirm it is bona fide historic expenditure. On that basis Gemserv considers the £xx should be considered by the UR for cost recovery.

### 4.4 IT Expenditure

#### *Split Quote: £xx*

This proposed Split Quote expenditure was part of a business case that also included Workflow and Document Management. Gemserv has reviewed NIE Networks' detailed business case, dated 18 October 2016, that included both the Split Quote and Workflow and Document Management (see more on this below) that was used for Programme Board approval. The total budget request was for approval to spend up to £xx for both these work packages.

**Gemserv's conclusions and recommendations:** The need to show contestable and non-contestable elements of a connection quotation is beyond doubt and it is reasonable to assume functionality changes are required in systems that were developed prior to this need becoming apparent. Gemserv consider that it would have been more efficient to have included the Market Pricing changes as part of this work package. However, the business case indicates the requirements have been carefully considered and the projected budget provision has been calculated based on these known requirements, albeit Gemserv has not reviewed the service provider quotation. Gemserv considers the £xx should be considered by the UR for cost recovery.

#### 4.4.1 Workflow & Document Management £xx

NIE Networks provided Gemserv with the project brief submitted to the Programme Board for approval. Gemserv has been informed that this work package has been implemented with the outturn similar to the budget of £xx. NIE Networks considered a new workflow and document management system was sensible to

- enable an ICP and/or end customer to submit electronic drawings with their application;
- Integrate with future Customer and ICP self-serve portals (ICP Portal/Sharepoint; and
- Take a phased approach to delivery by function or by Connection job type.

**Gemserv's conclusions and recommendations:** Gemserv considers the additional complexity of competitive connections does require a change to traditional custom and practice and an automated workflow and document management system should assist. It is not clear that a new workflow and document management system is fully justified ed by the introduction of contestable connections, but it should bring wider benefits to the connections business and enable some operational cost savings to be exploited. It may also defer or

reduce similar expenditure during the RP6 price control period. Under the circumstances that competition in connections has triggered the need for this IT package Gemserv considers the £300k should be considered by the UR for cost recovery.

#### 4.4.2 Drawing Package £xx

NIE Networks provided Gemserv with the project brief submitted to the Programme Board for approval. Gemserv has been informed that this work package has been implemented with an outturn of £xx. NIE Networks considered a new drawing package was necessary because:

- Project is relatively independent relying only on outputs from our existing GNIS system, however it may require implementation of the workflow and document management project to reach its full potential;
- Time to deliver is not inclusive of procurement process and is subject to dedicated resource;
- Implementation may result in a temporary dip in normal production volume due to employee training; and
- A phased approach is suggested in terms of features (Base functionality first, followed by enhancements) and implementation (a staged roll out may be easier to manage and be less disruptive to daily operations).

It should also be noted that the proposed drawing package will enable the exchange of drawings electronically with external organisations.

**Gemserv's conclusions and recommendations:** NIE Networks have indicated that an electronic drawing package is presently not in use and traditional methods are still employed. Therefore, NIE Networks considered a new drawing package would bring operational benefits. Gemserv can envisage some of the wider business benefits, with or without contestable connections and can only assume that the new requirement, to exchange drawing electronically, has triggered this need.

As with the new workflow and document management system, a new drawing package should inevitably delay or reduce equivalent expenditure during the RP6 price control period.

Under the assumption that competition in connections has triggered the need for this drawing package (electronic file transfer) Gemserv considers the £xx should be considered by the UR for cost recovery.

#### 4.4.3 Accounting Hierarchy: £xx and Cost Allocation: £xx

Gemserv was provided with a hard copy of the proposals from Capita, the managed service provider, that included making accountancy changes to JMS, SAP ISU, streamserve, SAP ECC6 and SAP BI systems.

**Gemserv's conclusions and recommendations:** The 28 page Capita proposal document looks to be well thought through and indicates a substantive amount of detailed consideration has gone into the high level design. The proposal states that about 1000 days of resources are required at a cost of £xx including the suggested contingency. NIE Networks have requested £xx made up of £xx (Accounting Hierarchy) and £xx (Cost Allocation). Inevitably the contestable and non-contestable assets and costs will need to be separated in NIE Networks accounts and revised processes are required, Therefore Gemserv considers the £xx should be considered by the UR for cost recovery.

#### 4.4.4 Online Payments: £xx

NIE Networks have informed Gemserv that they presently accept payments by cheque and want to include online payments as a replacement for payments by cheque. NIE Networks indicated the business case is based on an improvement in customer service.

**Gemserv's conclusions and recommendations:** Gemserv agrees that enabling all payments to and from NIEN online is a sensible addition that will reduce ongoing costs of processing cheque payments. However, payments to and from NIE Networks are much wider than the connections business and we see this as a corporate change rather than one triggered by competition in connections. On that basis we do not agree that a change to payment methods should be considered for cost recovery as part of the competition in connections project.

#### 4.4.5 Mobile Solution £xx

The Mobile solution was not included in the August 2016 submission to the UR although a budget provision of £xx was included in the revised budget provided to Gemserv. NIE Networks was requested to provide more information and responded '*The mobile solution is included for completeness. The estimate is £xx. The project has not been scoped as yet because of other priorities being delivered by the programme. We believe that mobile technology will help with ensuring compliance with obligations in a competitive market*'.

Gemserv also noted some large provisions were put forward by NIEN as part of the RP6 Price Control.

**Gemserv's conclusions and recommendations:** Gemserv considers a mobile solution, whatever it constitutes (and that is not clear), is not a prerequisite to introduce competition in connections. This type of innovation needs a clear business case to justify the capital expenditure and additional ongoing operational costs. With these points in mind Gemserv cannot recommend this budget provision should be considered for cost recovery as part of the introduction of competition for connections.

#### 4.4.6 Market Pricing; £xx

Gemserv did not understand what the budget provision of £xx was intended to cover. When asked to clarify NIE Networks replied '*Market pricing is to cover delivery of IT solutions that support Competition in Connection charges similar to those applied by GB DNO's. An IT solution is required to estimate these charges and to complete a true-up at job closure*'.

NIEN also stated that they have no detailed proposals yet but will be developed soon. When asked for further information NIE Networks stated: *The business case for workflow covers the JMS resource costs up to circa end July. The business case for finance requirements will take them (Capita) through to November (75 days each from August). However, to complete the tasks required for market pricing we expect that JMS and SAP resources will be required for a further period of 3 or 4 months from November to February/March.*

**Gemserv's conclusions and recommendations:** NIE Networks have not clarified the situation enough for Gemserv to provide an informed opinion especially as other IT packages include some overlap with the potential requirements. However, NIE Networks are sure they need changes to the market pricing system functionality in SAP and JMS. They also believe that the cost estimate is reasonably accurate. Gemserv does not fully understand why this is a standalone work package as changes to SAP do not align well to the Agile development methodology. However, we accept that an additional functionality may be required and the £xx should be considered for cost recovery.

#### 4.4.7 ICP Portal: £xx

As part of phase 1 NIE Networks have developed a website to support contestable connections at a cost of £xx. Furthermore they have plans to provide additional information (e.g. an approved materials list) and file transfer capability as part of phase 2 and have been requested funding for an additional £xx.

**Gemserv's conclusions and recommendations:** The present website seems useful and helpful to ICPs but may need additional features if and when all connections are fully competitive. Presently NIE Networks have not specified the requirements other than to state some potential additional features they would like to incorporate. Using modern methods websites can be developed quickly and efficiently at relatively low cost. There is also a need to limit development to what can be economically justified. Gemserv considers that an allowance of an additional £xx should be adequate to enhance the present site to provide a user friendly website that can provide all the information for ICPs and end users together with file exchange capability. Gemserv suggests that £xx (£xx + £xx) should be considered by the UR for cost recovery.

### 4.5 Miscellaneous

#### 4.5.1 Accommodation

This costs line reports actual expenditure up to the 31 December 2016 of £xx and there is zero provision in the budget as from the 1 January 2017 until project completion.

**Gemserv's conclusions and recommendations:** Because of the cost materiality Gemserv did not seek further clarity about the £xx expenditure and would recommend that this is considered as a reasonable cost for recovery.

#### *Lloyds Accreditation*

NIE Networks reports expenditure of £xx in 2016 (presumably for the >5MW connections) and a budget provision of £xx for 2017/8 for the < 5MW connections.

**Gemserv's conclusions and recommendations:** As part of an ongoing process to introduce competition to the electrical connections market, Lloyds Accreditation operate the National Electricity Registration Scheme (NERS) on behalf of the UK Distribution Network Operators (DNOs). Gemserv understands this is a non-discretionary disbursement and on that basis considers it is suitable for full cost recovery

#### 4.5.2 Communications & Training: £xx

With all employee and external FTEs accounted for elsewhere Gemserv did not understand why a provision of £xx was required and asked NIEN to provide further information. NIEN responded; *Our total expected costs for training and communications is estimated at c.£xx. This includes preparing staff for the transition to a competitive environment, training provision in processes and systems and market design, competition law and licence conditions, etc required to support a fully competitive market. There is a requirement to scope these activities in more detail and this activity has just got underway.*

**Gemserv's conclusions and recommendations:** NIE Networks staff are not being charged to the project the external programme resources and the facilities<sup>2</sup> for training are

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<sup>2</sup> Assumed to be in the Ad hoc off site costs.

covered by separate budget provisions. Gemserv can only assume that all the training costs relate to external training advisors. We have insufficient information to understand the NIE Networks comment that training and communications will cost £xx especially as the latter is normally a project office function.

From the NIE Networks spreadsheet Gemserv understands during 2016 £xx was spent on training (the source is not provided) and £xx on communication consultancy from Lanyon communications. We assume the unnamed external training resource provided guidance about training module development and the production of materials for the >5MW opening to competition.

It is understood that for the >5MW competition in connection implementation not all the connections workforce needed training but for the <5MW connection opening all staff will need to attend training sessions.

Gemserv does not understand if external consultants will be required, or have been budgeted, in 2017/18 to attend all workshops and training sessions but that would seem to be the only way an external budget of £xx could be accommodated. Also much of the training material will have already been developed but will need augmentation and updating to accommodate the system and process changes required for <5MW connections. When training commences, the programme office should be able to accommodate planning, organising and facilitating training sessions. Training leaders could be selected from the 50 plus people that are already employed within the programme.

Without further more detailed information Gemserv cannot support the £xx training provision for the <5MW market opening. We do know that the training and communications external expenditure for the >5MW market opening was £xx and it is reasonable to assume that additional support will be needed to support the development and updating of training materials. Also more training sessions will need to be run. These training sessions could be resourced from the subject matter experts and programme office teams and we do not see the need the need to employ full time training coaches other than the Change expert/Training Lead consultant who is planned to commence work in June 2017.

As we consider any external training facilities will be covered by the ad hoc off site expenses cost line we would suggest the following training budget should be considered for cost recovery:

Item	Allowance (£k)
Actual expenditure for Phase 1	xx
Change expert/Training Lead consultant	xx
Phase 2 other training costs	xx
<b>Total</b>	<b>xx</b>

#### 4.5.3 Ad hoc off-site expenses

Gemserv understands this budget is intended to cover internal and external meetings held outside of NIE Networks' premises. Until December 2016 the actual costs were £xx and NIEN expect to spend an additional £xx. NIEN was asked to provide the basis for the £xx budget and responded: *Actual costs of £xx were incurred for >5MW connections e.g. ICP information day and ad hoc off-site meetings. We anticipate more of these for the <5MW market.*



**Gemserv's conclusions and recommendations:** It would seem sensible to provide a provision for hiring external venues for meetings that will inevitably take place. Gemserv considers the amount to be generous but does not have detailed knowledge of the number of meeting or the costs of hiring or refreshments. We can envisage the need for external venues for some of the 300 connection business employees training sessions and for external meetings. With these points in mind and the actual expenditure in 2016, we would consider the additional £xx provision should be considered for cost recovery.

## 5. Summary of Findings

This section provides a summary of the detailed analysis reported in Section 4. The summary table below provides Gemserv's cost recovery recommendations alongside the NIE Networks submission dated 15 March 2017 and provides subtotals for allocation to the RP5 and RP6 price control periods.

Cost category	RP5 < Oct 2017	RP6 Oct 17 - Mar 18	Gemserv analysis	NIE proposals 15 March 2017
<b>External Resources</b>	<b>£k</b>	<b>£k</b>	<b>£k</b>	<b>£k</b>
Project delivery Support: Neueda	xx	xx	xx	xx
Legal Panel: Addishaw Goddard	xx	xx	xx	xx
Market design and transmission:(G Con)	xx	xx	xx	xx
Specs and Policies: Mott MacDonald	xx	xx	xx	xx
Testing Manager	xx	xx	xx	xx
Programme Assurance: PWC	xx	xx	xx	xx
Other industry Expertise	xx	xx	xx	xx
Sub total	1995.6	596.7	2592.3	2841
<b>IT Expenditure</b>				
Split Quote	xx	xx	xx	xx
Workflow& Document Management	xx	xx	xx	xx
Drawing Packages	xx	xx	xx	xx
Accounting Hierarchy	xx	xx	xx	xx
Cost Allocation	xx	xx	xx	xx
Online Payments	xx	xx	xx	xx
Mobile Solution	xx	xx	xx	xx
Market pricing	xx	xx	xx	xx
ICP Portal	xx	xx	xx	xx
Subtotal	1402	475	1877	2327
<b>Miscellaneous</b>				
Accommodation	xx	xx	xx	xx
Lloyds Accreditation	xx	xx	xx	xx
Communications & training	xx	xx	xx	xx
Ad Hoc off site costs	xx	xx	xx	xx
Subtotal	169	126	295	426
<b>Total External Costs</b>	<b>3566.6</b>	<b>1197.7</b>	<b>4764.3</b>	<b>5594</b>

The above table, and underlying analysis, has been developed using the NIE Networks costing structure as provided in their contestability cost proposals dated the 12 March 2107. Each cost line is not mutually exclusive and have inevitable overlaps and interdependencies. Where Gemserv has recommended changes to individual costs lines these have to be taken into the context of other cost line recommendations.

Some of the suggested cost recovery items such as the Drawing Package and Document & Workflow Management facilities should bring strong connection business benefits that will help to improve business efficiency. These will help to reduce the burden of additional activities related to competition in connections and may defer otherwise necessary capital expenditure during RP6. Where NIE Networks have put forward business improvement proposals that are not directly related to the introduction of competition we have not recommended that they should be considered in the context of this project. For instance the Mobile Solution and Online Payments may be beneficial but have much wider business implications and should be subject to a proven business case with or without funding from the Price Control allowances.

In summary Gemserv considers an allowance of £4,764.3K for external costs should be adequate to introduce competition in electricity connections in Northern Ireland. We consider all the costs are capital expenditure and should be allocated to a 5 year RAB.

## Appendix 1: Initial Request for Information from NIEN

Gemserv has been appointed by the UR to review NIEN's 'Competition in Connections' proposals and I have been provided with the following information:

- NIEN's letter to the UR dated the 14 September 2016 headed 'Competition in Connections';
- The UR's letter to NIE Ltd dated 24 October headed 'Competition in Connections'; and
- Drafting of licence condition 18.

I note from the correspondence that NIE have, or have prepared for, contestability for connections of more than 5MW and plan to complete the preparations for all connections by March 2018. Also from the table in the NIE letter the work is well advanced with about £2m of the £5m proposed budget spent.

### **Project Office**

To bring me up to speed perhaps you would provide the following project documents:

- The Project Initiation Document (PID) as approved by the Project Board
- The original detailed project plan associated with the PID and any subsequent re-plan approved by the Project Board.
- The associated detailed project budget providing information about each resource required by type and by period (weekly or monthly).
- Details of the procurement processes for all external resources.
- All other relevant Project Board papers

### **System and Process Design**

I note £xx is planned to be spent on changes to IT systems. Please provide the following:

- The high level options initially considered by NIE ( e.g. manual, semi manual, automated processes) along with the assumed metrics for each category of connection type.
- The business requirements provided to Capita (or the relevant contractor(s)) to quote for the IT changes , including any options
- All relevant responses from Capita (or the relevant contractor(s))

### **Costs to date**

As mentioned previously the table in your letter would indicate that around £2m would have been spent up to the end of the year. Please provide the following;

- Details of all actual costs incurred to date by period (weekly or monthly)

- LBE for completion of the project
- Project Board papers reporting on period (presumably monthly?) progress and expenditure
- An explanation of any material deviations to the budget.

I am away the last two weeks in January but will be working until the 11<sup>th</sup> so suggest if any further clarity is required we should have a telephone chat before then. If so let me know with suggested times I will do my best to fit in.

Whatever, perhaps you would let me know when this information can be made available as it would be sensible to follow it up with an initial meeting. Looking at my diary for the first 2 weeks in February I have the following options:

Monday 6<sup>th</sup> or Thursday 9th February 2017.

If necessary could probably make the 2<sup>nd</sup> February but that may not give enough time to review the documentation and provide a high level agenda.

## 6. Appendix 2: Further Questions to NIEN with Responses

NIEN representative

It was agreed we would send you questions as we carry out the detailed review of the NIEN submission for cost recovery. I have read all the documentation provided but if I have missed any points in this note please accept my apologies.

In terms of spreadsheets I am mainly working off the costs included in 'cost report Dec 16' and 'CBTP actuals and forecast jan 27.01.17 ver 1' spreadsheets as it is more difficult to cost reconcile with the earlier budget only spreadsheets. I am also working on the presumption that NIE will be submitting a revised proposal to the UR based on the later spreadsheet and that will replace the September 2016 submission.

*Confirmed that NIE networks will submit a revised view of costs. At present we are awaiting confirmation of the costs for development of the financial IT systems required for competition. This will provide an updated view and will be shared with the UR as soon as they are available.*

Another assumption is the >5MW business processes (albeit they are presently performed manually) are the most complex and are being simplified for smaller categories of connections. Therefore market design, competition law concerns, the new business and systems requirements are all at an advanced state of understanding and development.

*Depending on the context of the assumption there are a few points to clarify.*

*Requirements*

*Manual processes designed for the >5MW market will help inform the business systems and process requirements for the <5MW market. However, whilst technical content of smaller connections will be less, the connection process will be similar e.g. splitting costs into Contestable and Non-Contestable charges, provision of Non Contestable and Contestable Offers, ICP design reviews, ICP Inspections and monitoring and adoption of contestable assets through the job lifecycle. We don't expect the processes to be simplified significantly for <5MW jobs. In addition business processes will have to be translated into defined sets of business requirements and systemised for the volumes of <5MW connections. The effort required to define business requirements for an IT solution should not be under-stated – our cost recovery submission reflects the level of effort that we expect to see.*

### *Training and organisational impact*

*A limited number c.30 Connections staff are involved in major projects (>5MW), from a total of c.300. There is reliance on services provided by other directorates to carry out design and construction services for highly complex projects given their potential impact on the network. This means that the majority of Connections employees have not received training in competition law and competitive market design. Training will be required in these aspects as well as new & revised business systems and processes. Roles and responsibilities will also need to be updated to reflect new activities such as design reviews, asset adoption, etc.*

### *Market design*

*Our expectation is that the <5MW market will use the >5MW design as a baseline. However there will be changes required. For example for >5MW connections customers can only request a contestable offer after they have received a non-contestable offer from NIE Networks. This was required due to the manual process for >5MW and current licence obligations. For full market opening it is expected that customers would want to receive the costs for the non-contestable offer and contestable offer at the same time to allow them to make an informed choice. We also expect that the UR will modify our licence conditions in respect of contestability and we will need to understand what those obligations are to ensure they are built into the design for the fully contestable market. Therefore full market opening requires more debate, analysis and market engagement to determine a solution that works for all stakeholders.*

### Clarifications requested

1. Competitive procurement: Your note on 'Appointment of external consultants' was useful. Would you please provide a copy of the PCW proposal(s) for Programme Assurance and an explanation of why NIEN now believe additional work is required?

*Attached PWC proposal for initial quality assurance work.*

*In line with good industry practice, and because of the tight timelines we are operating to, we expect to have quality assurance assessments carried out at regular intervals not least to provide an independent view of how the programme is progressing and to identify any points that need to be addressed. Given the costs incurred to date (£xx) we expect to incur the level of costs set out in the submission (£xx).*

2. External roles: There seems little profiling of roles as the project goes through different stages and the resource needs change? Also in the latter stages new FTEs are

being introduced alongside the existing complement. Perhaps it would be useful to walk through each external FTE role for the period Jan 17 until Dec 17 and again between Jan 18 and March 18 as some of the requested clarifications below reflect this point.

*Yes, agreed that it would be good to talk through the resources and what their roles are on the programme.*

*The programme is running to very tight deadlines and we believe that the current complement of resources will be required right through to programme end. Currently external resources are deployed in project management and business analysis. Our view is that these skills will be required through to the end of the programme, for example business analysts carry out process designs, requirements gathering, market process documentation and will support the testing, implementation and training effort thus bringing a big benefit in terms of continuity throughout the programme.*

*Additional resources will be required for testing and for business readiness. The existing complement will be required to support the testing and business readiness effort as described above. The test manager is required specifically to ensure that business processes and systems are tested end to end for JMS, SAP isu and SAP ECC6. Each of these systems will introduce changes, the impact of which will need to be thoroughly tested in a coordinated manner as they are critical to NIE Networks and, in the case of SAP isu, to the competitive electricity supply market. Similarly business readiness needs to be coordinated so that staff understand the market design, their roles and responsibilities in that market, the systems that they will use, competition law, new licence obligations, etc.*

*Our expectation is that the project will continue for a short period of time beyond go-live to bed in systems & processes, etc. This will be provided by a small core team comprising internal staff only.*

### 3. Programme office

General: The external (manly Neueda consultants) Programme Office FTEs look to be paired by NIEN employees (based on the HL job descriptions). This £xx overhead, complemented by the FTE senior internal team, appears to be out of proportion to the size of the project (representing nearly 30% of the total cost without any employee costs). More detailed points:



*We have purposely kept the requirement for external resources to an absolute minimum. A project of this scale requires skilled external support where internal expertise is not available. There are 5 Neueda consultants assisting the programme. There are 9 FTE Internal resources and we have just recruited 3 internal FTE's to support the testing effort. In addition we have other part-time internal resource engaged in supporting business readiness, communications, training, process design, etc (equivalent to a further 12 FTE's). In addition there is significant senior management time being spent on the programme that is not captured on timesheets. We do not believe that external resource deployment is out of proportion with what is required by the programme given the extent of change that the business is undergoing.*

- Please confirm why testing management cannot be carried out within the resources allocated to the project office (especially when it includes senior analysts with testing expertise).

*Existing analysts and internal resources will support the testing effort. The only additional recruit that we intend to employ is a test manager to coordinate testing activities across the IT work streams. The test manager is required specifically to ensure that business processes and systems are tested end to end for JMS, SAP isu and SAP ECC6. As described above, each of these systems will introduce changes, the impact of which will need to be thoroughly tested in a coordinated manner.*

- Will the business analysts roles change as requirements are based lined

*Yes, the business analysts' roles will change as we progress through the programme as described above. They will carry out process designs, requirements gathering, market process documentation, testing, implementation and training thus bringing a big benefit in terms of continuity throughout the programme.*

4. Market design. What is Garrick Consulting going to do during the extension of their contract to 31 March 2018 as the market design seems to be set?

*We don't believe that the market design has been established for the <5MW market. As we have stated above, our expectation is that the <5MW market will use the >5MW design as a baseline but there will be changes required. Furthermore there is a risk that industry stakeholders could reject a market solution that they have not contributed to through a consultation process. Our view is that it will be important to bring stakeholders along with us so that we implement solutions that work for all stakeholders, not just NIE Networks. Given their knowledge and experience gained from >5MW connections market opening Garrick Consulting is in an excellent position to support delivery of <5MW market opening.*

## 5. Stage 2 External budget for training (£xx)

Please provide further information to support the stage 2 external training budget that seems to be in addition to the expert project office team and internal resources required. I am assuming from the PID etc, that comm's is ongoing and part of the project office role?

*Our total expected costs for training and communications is estimated at c.£xx. This includes preparing staff for the transition to a competitive environment, training provision in processes and systems and market design, competition law and licence conditions, etc required to support a fully competitive market. There is a requirement to scope these activities in more detail and this activity has just got underway.*

## 6. IT costs

Thanks for the business cases for Workflow & Document Management and Drawing Package they were useful and gave a good understanding of the need and benefits. Some of the other delivery packages are less clear to me and hence the following requests for information:

### Mobile solution (£xx)

Why is there a £xx provision for a Mobile solution when it does not seem to be part of the phase 2 scope? If this is necessary could you provide more information about the scope, what is intended to be achieved and the derivation of the cost (the competition in connections supporting information document was useful but does not seem to provide this information

*The mobile solution is included for completeness. The estimate is £xx. The project has not been scoped as yet because of other priorities being delivered by the programme. We believe that mobile technology will help with ensuring compliance with obligations in a competitive market.*

#### ICP portal (£xx)

Is the ICP portal a new innovation or was it just missed off the proposal sent to the UR in Sept 2016. Has it had some form of business case justification? Would you also provide the derivation of the estimated additional cost. I have assuming the present external website was developed under the £xx reported as spent earlier in this financial year.

*The intention was to expand the current ICP portal to enable customers and ICPs to retrieve information relating to material specifications and design policies relevant to the <5MW market. At the time of writing to UR our view was that a more “sophisticated” portal could not be delivered by March 2018. However we have re-assessed the requirement and believe that this can be achieved in the project timescale. Efficient information exchange between NIE Networks and customers/ICPs is imperative, particularly during the early development of contestability. Of particular importance is the ability for ICPs to submit design documentation to NIE Networks for review, in addition to project plans, construction methods, quality assurance approach, monitoring and inspection and requirements for asset adoption. This solution will allow ICPs and end customers to submit and retrieve documents and obtain progress updates relevant to their specific connections.*

#### Market Pricing (£xx)

I am not sure what the actual scope of this item covers (it wasn't listed in the August UR slides) but guess it must overlap with the split quotes etc. Perhaps you may have more information on the scope and the basis of the budget; otherwise perhaps we can discuss when we next meet.

*Market pricing is to cover delivery of IT solutions that support Competition in Connection charges similar to those applied by GB DNO's. An IT solution is required to estimate these charges and to complete a true-up at job closure.*

#### Online payments (£xx)

Can you provide some form of business case to support this need along with a £xx budget (I assume NIEN already accept online payments for other categories of payments).

*All payments to NIE Networks must be by cheque or BACS. There is no online payment facility. The business case is based on the fact that the ability to pay by cheque will be phased out over time and that customer service can be improved.*

#### Cost Allocation and Accounting Hierarchy (£xx)

As there is no detailed information about these changes I would like to see more information about what these changes are doing and why they are necessary. Also, if they are optional, what the business case is.

*These costs are based on estimates from Atos and PA Consulting. We are presently progressing the requirements and will advise UR of the costs as soon as they are available. We will also provide a document detailing why these changes to financial systems are required.*

#### 9. Ad hoc off-site costs

I guess this provision is for external and internal meetings held in commercial venues. Please provide the basis for the £xx budget for the 2017/8 financial year.

*Actual costs of £xx were incurred for >5MW connections e.g. ICP information day and ad hoc off-site meetings. We anticipate more of these for the <5MW market.*

#### 10. Actuals up to 31 December 2016

The relevant spread sheet indicates that £xx has been spent. Can you confirm this is entirely based on actual invoices or are there any significant accruals included? If latter please provide information about these provisions.

*All costs were actually incurred. There are no accruals.*

#### 11. Lloyds Accreditation

I am assuming the sum is for disbursements paid directly to Lloyds. Please revert only if this is incorrect

Next visit

I think it would be useful to earmark a date for the next visit, how would Thursday the 2<sup>nd</sup> March suit you?

Kind regards

Malcolm