THE FUTURE ARRANGEMENTS FOR THE GAS TRANSPORTER CENTRAL AGENT

ANNEX C: FUNDING & CHARGING

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tpa

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1. INTRODUCTION

1.1. Context

In January 2012 Ofgem issued a decision letter where it concluded that a "cooperative" model represents the optimal set of future funding and governance arrangements to support the range of centralised data services currently provided by the GTs appointed agent Xoserve. A consortium of CEPA, TPA Solutions and ESP Consulting has been commissioned by Ofgem to develop options and recommendations for these future arrangements.

1.2. Purpose

The purpose of this supporting annex is to set out in detail aspects of the proposed approach to the future funding of, and charging arrangements, for Xoserve's services, which replaces the current regulatory allowance that the GTs use to fund most of Xoserve's activities. Funding is essentially about who pays for services, whereas charging relates to the manner in which costs are recovered. The scope of the related issues comprises a number of elements: the development of budgets for different activities undertaken by Xoserve (including 'run' and 'development' budgets) and the regulatory oversight of these arrangements; the methodology for allocation of costs to different service lines (and the implications of a high degree of common costs) and mechanisms for cost recovery from industry customers and beneficiaries.

1.3. Process

An initial draft of this paper was discussed with an industry Funding Working Group.[1] Based on feedback from the working group, we have subsequently updated the analysis and reflected this in this final report. Where there were differing views amongst industry participants or differences with CEPA on particular issues (for example, the appropriate charging arrangements for the cost recovery of budgeted costs) we have highlighted these differing views as part of the analysis.

1.4. Approach

The starting point for the initial paper on funding and charging issues was the analysis presented by the CEPA team at the first industry Steering Group meeting in November 2012, which provided initial recommendations as to how the existing regulatory allowance might be replaced, in order to promote more responsive service provision by Xoserve. More widely, this objective would also be supported by, in our view, changing the paradigm within which Xoserve operates.

Whilst Xoserve was established primarily to deliver transporter licence and Code obligations following distribution network sales, we have suggested that any future arrangements should begin with an assessment of the services that it provides to various parties. This involves considering

[1] The industry Funding Working Group comprised representatives from Shippers, Gas Distribution Network operators (GDNs), National Grid Gas Transmission, Ofgem and the CEPA led consortium.

Xoserve primarily as a central services provider to the industry of critical data, information and IT services which can support system operation and the competitive wholesale and retail gas markets. This involves moving away from the primary purpose of the company being to act as the GTs' appointed agent, responsible for delivering certain of their regulatory obligations, to being in its own right, an empowered central service provider to the industry as a whole.

Consistent with this, the focus of this annex is on how the approach to funding of / charging for Xoserve's services could be structured in such a way as to improve the responsiveness of such a central services provider, by addressing issues specific to Xoserve as well as how those funding and paying for such services might help shape service delivery more efficiently. The questions that are addressed through this paper are as follows:

- What should be the key features of more cooperative funding and charging arrangements for the service provider?
- How does the proposed funding approach meet our proposed objectives and principles, such as flexibility and transparency?
- What should be the role of the regulator in future funding arrangements? What might appropriate regulatory oversight involve?
- How should risks be allocated between parties and incentives aligned to encourage efficient behaviour?
- What are the most appropriate ways to recover Xoserve's costs from different industry participants?

The proposed arrangements have been developed to meet Ofgem's objectives for a cooperative model where decisions about future provision of services will rest with the users of those services and the costs of such services can be recovered from them more directly.

1.5. Document structure

The sections which follow set out:

- key objectives and principles to underpin any future funding and charging arrangements under a cooperative model (Section 2);
- the overall features of the proposed funding and charging model and how funding for different types of costs would be determined (Section 3);
- discussion of the issues, our assessment of the proposed charging and funding model and key areas for industry consultation (Section 4); and
- our conclusions (Section 5).

A series of appendices provide supporting material, including:

- how the proposed model might be applied in practice if Xoserve's existing ABC methodology were used to support the funding mechanism;
- the application of our proposed funding and charging model to major projects (purely as examples of how the proposed arrangements could work in practice); and
- a brief review of funding mechanisms in place in relevant industry and non-industry comparators.

2. OBJECTIVES AND PRINCIPLES

2.1. Introduction

Historically, Xoserve has largely been funded by the GTs. In turn, the GTs have been provided with a regulatory allowance with which to fund Xoserve, which entitles them to recover the expense of Xoxerve through transportation charges to Shippers. Within this, charges for Xoserve are bundled with other charges for the use of pipes and other transportation services.

Under the ASA, individual GTs fund Xoserve for core services on the basis of agreed percentages of the service provider's cost base, as a way of allocating costs which are largely fixed in nature. It is only with User Pays services that a more sophisticated ABC methodology is used to apportion costs to service-lines, which are then charged either to the GTs (whereby GTs recover these costs from Shippers as excluded services revenue) or Shippers, in the case of non-code user pays services, which are contracted through framework agreements and charged directly to Shippers. The availability of these different ways of dealing with Xoserve's costs has led to much wasted time in arguments over whether particular upgrades or new services should be funded through the regulatory allowance, or by the primary beneficiaries of the service.

As a legacy of this Agency model; however, the vast bulk of Xoserve's cost recovery arrangements neither involves the detailed allocation of costs to different service-lines nor the direct charging of its ultimate customers. Moreover, it is difficult for Shippers to separately identify charges to Xoserve from the costs of other services also provided by the GTs. CEPA has previously argued that these arrangements have contributed to perceptions of a lack of transparency and customer responsiveness by Xoserve, identified by different Shippers and which have driven the current proposed changes. In part this reflects Xoserve's previous history as a cost centre of Transco, but in our view such arrangements are contrary to the transparent and responsive central service provider desired by the industry.

Thus, the overarching objectives of this working paper have been to develop an approach to determining what central service provider activities need to funded, the basis on which these associated costs are allocated and the manner in which they are recovered from customers.

These overall aims can only be achieved by pursuing several secondary objectives and the application of a number of key principles.

2.2. Introducing transparency and flexibility

Limited transparency of costs (how costs and charges relate to budgeted service lines and major projects) and limited funding flexibility (in particular, the difficulties of determining IT investment requirements five to eight years in advance) were two of the key issues which were raised with the current arrangements whereby the GTs are funded for the provision of services by their central agent, Xoserve, through a regulatory allowance.

The objective for this project, subject to establishing alternative means of achieving economically efficient IT operations and investments, is to move away from regulatory allowances and instead to design funding arrangements that promote transparency amongst industry participants and are fit for purpose for the funding of a data, information and IT services company.

2.3. Establishing a robust budgetary process

Assuming the continuation of current core central service provision (as discussed in Annex B), there will always be 'business as usual' or 'run' costs upon which different services and, therefore, stakeholders rely. Various levels of complexity to charging could be adopted for such services but essentially the business will require an annual budget to cover run costs.

In any given year there are then also more variable project-related costs, linked in particular to change management which might cover:

- strategic change and investment;
- more incremental change management; and
- business development.

If these costs are also recovered from a single budget, but are driven by different stakeholder requirements, then many of the same problems (or at least tensions) with the current funding model might arise under a cooperative governance model.

Any future arrangements must, therefore, accommodate these different 'run' and 'demand' based budgetary requirements. Indeed, funding flexibility to deliver change is one of the core requirements of the business and as set out, a concern articulated as regards the current arrangements.

2.4. Applying an appropriate approach to allocating costs

The services which Xoserve provide to the industry rely on data warehousing and storage, data processing, information provision and IT operation and development activities as well as commercial services. The provision of these services incurs:

- *Direct costs* – that can be mapped to the provision of particular services to a particular customer or customer group requiring that service; and
- *Shared costs* – that relate to the provision of a number of services, including the common provision, operation and development of computer systems together with usual shared costs such as accounting, HR and Legal.

There are many ways to allocate shared costs between different services or outputs. Whilst most of Xoserve's costs are allocated on a relatively simplistic basis, in other industries, even where there are many common or shared costs, it is common to allocate costs to service-lines using agreed methodologies such as ABC in a mechanistic manner.

In Appendix A we have provided an illustrative analysis using Xoserve's existing ABC methodology and our own (illustrative) assumptions for allocating shared costs.

We believe this analysis and findings from the Services workstream (see Annex B) confirms that this approach is broadly practicable and will be an important building block for supporting greater transparency from any future funding arrangements of the central service provider.

The principle we have adopted is, therefore, that where direct costs can be clearly attributed to a serviceline they should be, with common costs being allocated using an agreed methodology. As such, the purpose of this exercise is not to determine a precise cost allocation methodology for different types of cost, but rather to agree the principle of such a rules-based approach.

The resulting cost loaded service-lines would then need to be recovered through charging for such services.

2.5. Application of appropriate charging principles

Whilst the proposal is for a pass through of costs (see Section 3), nonetheless it is important that these principles are applied to exert the appropriate disciplines within the model and to achieve the desired objectives set out above. We set out these key principles in the Box 2.1 below, drawing on a number of sources, such as a paper produced jointly by the UK regulators that considered the principles for charging approaches for regulated entities, and the recent consultation on the establishment of funding and charging arrangements for the DCC.[2,3]

Box 2.1: Charging principles

- **Causality** – As far as possible, costs associated with service delivery, should be attributed in accordance with the activities that caused them to be incurred.
- **Objectivity** – where it is necessary to allocate costs across different organisations it should be done on an objective basis and not unduly favour any one company or group of companies.
- **Predictability and Consistency** – where practicable, charges should be predictable for all service users and set consistently, year-on-year, to provide more certainty for service users.
- **Transparency** – the approach should be transparent, giving service users the ability to reconcile their charges with the costs incurred by the entity.
- **Adaptability -** the approach should provide the entity with sufficient flexibility to respond to uncertain demands.
- **Efficiency** - the arrangements should be consistent with the objective of incentivising delivery of services in an economic and efficient manner.

[2] Ofgem, Oftel, Ofwat et al (2001), The role of regulated accounts in regulated industries.

[3] Department of Energy and Climate Change (2011), A consultation on the detailed policy design of the regulatory and commercial framework for DCC.

The application of these principles in practice is not, however, necessarily straightforward.

2.5.1. Determining who pays

Two main aspects of the issue of who pays were discussed at length during the working groups, whether it is those who drive additional costs and / or those who benefit most from service delivery.

A key issue that was discussed through the industry working groups was the advantages and disadvantages of targeting costs on those who drive those costs (the 'causality' principle).

While the benefits of the 'causality' principle were acknowledged by the industry working group, a number of industry participants also highlighted the need to protect against overly complex service provider charging and invoicing arrangements as it was suggested that this would create unnecessary costs for Shippers and suppliers.[4]

The issue of who benefits from a service has been discussed in Annex B.

2.5.2. Direct versus indirect charging for recovery of costs

The advantages and disadvantages of different approaches to charging (including the option of more direct invoicing of core services between the service provider and Shippers compared to the current arrangements) are discussed below as part of Section 3 and 4.

What we would highlight at this stage is that a part of Ofgem's January decision letter on future funding and governance arrangements for Xoserve was that decisions about the future provision of data services should rest the users of those services, but that the costs of such services should also be recovered from them more directly.

We have as a result retained the option of more direct charging arrangements as part of the discussion and assessment of different approaches.

2.5.3. Predictability and transparency

As with the GTs transportation charges, industry participant groups also noted that where practicable, service provider charges should be predictable for all service users and set consistently, year-on-year, to provide more certainty for service users.

2.6. Summary

This section has set out the core objectives and principles that we have considered as part of the development of the building blocks of different options for future funding and charging arrangements for the central service provider.

[4] For example, through resulting changes to IT and billing processes.

As with any set of principles, alternative suggestions can be made, and there will often be trade-offs between them when faced with the specific challenges posed when attempting to develop funding arrangements for the central service provider.

3. PROPOSED FUNDING AND CHARGING ARRANGEMENTS

In this section we set out our proposals for future funding and charging arrangements, based on the assumption that the current largely price-controlled, GT regulatory allowance approach to funding being replaced by a budgetary cost pass through arrangement. This includes a discussion of the overall features of our proposed funding and charging model and then specific issues around different elements of this approach.

When we refer to funding this is about who pays for services, whereas charging relates to the manner in which costs are recovered. With regards funding, this also is separate from financing which refers to how the central service provider finances its operational and capital expenditure through debt and equity (discussed as part of our governance paper).

3.1. Regulatory control

As part of the governance paper, we have developed different bases for cooperative governance arrangements for the central service provider going forward (see Annex D):

- Under what we have termed the 'light' cooperative model, there would be minimal change to the current arrangements; that is, Xoserve would continue to be owned and controlled by the GTs.
- Under the 'full' cooperative model, however, control of the central service provider (Xoserve) would rest with the wider industry (that is, not just the GTs).

Ofgem has indicated that it wishes to impose a regulatory regime that removes it from the process of periodically determining outputs and has stated that it wishes to remove Xoserve's costs from the regulated price controls of the GTs where possible. Instead, Xoserve costs would broadly be allowed as a pass through, subject to certain protections.

Our governance paper (Annex D) discusses what regulatory controls should remain, and it is suggested that these should comprise some form of oversight of the annual budget and step in powers, the latter to be used only *in extremis*.

This principle (that is, relatively light regulatory oversight with funding arrangements largely based around the pass through of budgeted costs) is, however, in our opinion, more consistent with governance arrangements where control (and performance risk) of the central service provider rests with the wider industry to help facilitate negotiation and agreement on budgeted costs.

It is, therefore, for discussion whether lighter regulatory oversight and controls, in particular the removal of regulatory allowances for central service provider costs, can be made a feature of the 'light' cooperative arrangements, where the GTs would retain control and financing responsibilities for the provision of services, or only the 'full' cooperative model.

From initial feedback at the industry working groups, we understand that Ofgem would be likely to have concerns with such an arrangement for the light cooperative model. For now, we have

assumed no decision has been taken on this issue as yet and have, therefore, sought to identify how the arrangements could be made to work under both 'light' and 'full' cooperative models.

3.2. Approach to budgeting

The starting point for funding and charging arrangements is the development of a budget. Our core funding proposal is that an *ex ante* budget would be agreed and would underpin revised charging arrangements:

- In the 'light' cooperative model, the process might be that the Board (i.e. the GTs) agreed the budget, considering when doing so views expressed by the Shipper Advisory Board.
- In the 'full' cooperative model, the budget would be agreed by a Board comprising both Shipper and GT members and would be put to an annual meeting for approval.

The budget would be in the public domain to ensure total transparency. This would be driven by industry requirements. The *ex-ante* budget would include:

- An annual budget for *business run costs* – for example, the day to day delivery and provision of data and information services.
- A *change management* budget to accommodate day to day engagement and diagnostic services to facilitate industry change (e.g. UNC modification development work including impact assessments up to the point of modification approval).
- A *demand / development budget* that reflects major projects envisaged as in various states of development within the year. This budget would be supported by a longer term plan for the business.

We propose that the budget, while structured around these categories, would be built up from individual service categories to illustrate the costs that are involved in delivering those services. This will require a basis for the allocation of shared costs.

How this would be translated into a set of service provider charges is discussed below in Section 3.4 as various approaches have been proposed.

3.2.1. Budgeting process

We envisage a fairly standard budget process, that is initial draft budgets are prepared by the management of the central service provider, circulated as appropriate for review and comment, refined and then presented to the Board which will scrutinise and challenge as appropriate.

Within the budget we would expect priorities to be identified and proposals made for specific items of expenditure. We also suggest that the budget pack includes a paper analysing changes from last year's actual and this year's forecast, again a standard approach. We then envisage different drivers for different elements of the budget as follows:

- The 'run' budget should be relatively easy to forecast. It will be based on current levels of performance together with the impact of any modification proposals approved during the year, and those impacts should also be known as they will have been set out in the relevant impact assessment associated with the proposals. If appropriate, performance efficiency improvements could also be incorporated.

- The 'change management' budget would be demand-led and could be based on recent experience. For example, if the current list of outstanding and as yet unfunded modification proposals is extensive, that would argue for an increase over last year. The shorter the outstanding list, the less the case for an increase. We note that in suggesting this that there is the possibility of participants gaming this budget in the sense of putting forward proposals partly to block off funding for other proposals, but we consider that such behaviour would be a matter for the Board to monitor and if appropriate add specific rules to discourage such behaviour.

- The 'demand / development' budget would also be demand-led, in this case driven by known and new major projects. Such projects should be costed on the basis of total outlay to 'Go Live', broken down into annual amounts, the relevant year of which would go into the overall annual budget. We anticipate most change year to year in this category, as new requirements are introduced, possibly some are dropped, others are delivered, others again see changes in scope and/or costs or simply costs moved between years. Taking Project Nexus as an example, we understand that the current estimate is £20m; that cost may change as the relevant modification proposals, including presumably both overall and individual impact assessments, are approved. Each year up to final delivery, the demand / development budget would contain one or more line items relating to Nexus, reflecting the then best estimate of costs to completion, broken down by year. Appendix C provides examples of how demand/development arrangements might work for a sample of major projects including Nexus and major Gemini change.

3.2.2. Cost management and incentives

Cost management

The necessary encouragement towards cost efficiency is best exercised by careful scrutiny of the budget and the changes from previous years.

The report accompanying the annual budget should facilitate that scrutiny by providing relevant information on cost trends, key factors influencing input costs and so forth. Board members should be in a position to consider this against the same trends in their own IT departments, to improve their scrutiny.

Different views will be expressed by different Board members and it is possible that there will not be consensus over the proposed budget. In our governance paper we suggest methods of resolving deadlock which could be used, amongst other things, to ensure that a budget was agreed.

Such a process might leave one or more parties concerned that their interests were not properly reflected in the budget, so we consider that it would be appropriate for some ability to appeal to Ofgem, but only on substantive issues regarding the ability of the central service provider to fulfil its contractual or Code obligations within the proposed budget.

If the appeal was upheld, Ofgem would need appropriate powers to be able to direct budget modifications accordingly.

Incentivising efficiency

More widely, if regulatory controls are to be relaxed from the current position and if the Ofgem oversight powers are not to become an annual approval of the budget, which would have to involve significant interaction and a move away from a light touch, then there need to be some measures to ensure that the central service provider is encouraged or incentivised to act in as efficient a manner as possible.

We consider this issue separately in relation to budgeted costs and then to variations from the budget. As regards variations from the budget, there are close interactions with our proposals on governance and, in particular, the core project principle that performance risk allocation should be aligned with those who control the central service provider.

We recognise that this approach has the potential to leave inefficiencies already present unchallenged, because they become embedded into the starting point, but we note that:

- The level of Xoserve costs and any perceived inefficiency in those costs has not been raised by participants, either in our recent engagement or in our earlier work.
- The comparison of central agent costs against similar costs within participant organisations provides an approximate benchmark.
- Greater transparency of costs of themselves should enable users to determine if there are any inefficiencies in the existing cost structure.
- Perhaps not on an annual basis, the Board may choose occasionally to ask for an external review of operating costs, particularly if it considered that recent cost trends were not in line with relevant comparators. Such a review could be undertaken to align with say regulatory price reviews within the GT community.

An important part, particularly of demand / development budgets, will also be agreement on the appropriate level of contingency. While some level of contingency is required for large IT change projects, there is a risk that if not controlled properly, contingency allowances act to dampen incentives for cost control and efficiency.

We consider this issue further as part of the discussion on variations against budget below and our assessment in Section 4.

3.2.3. Dealing with variations against Budget

There are two principal sources for variations against budget. The first covers a variety of risks to the budgeted costs and the second relates to agreed changes to the budget.

Any under or over recovery against budget would be a matter for the central service provider and rules would be developed to determine who bears what risk. These risks are discussed in our governance paper (Annex D).

We identified several different types of risk and these are set out Table 3.1, together with our proposals on who should bear such risks.

Table 3.1: Risk allocation

Risk	**Borne by ...**
Cost overrun	Parties that control Xoserve
Bespoke services underutilised	Users through contract terms
Financing costs increase	Parties that finance (control) Xoserve
Participant Failure	1. Parties that control Xoserve
	2. All participants
Systems Failure	Parties that control Xoserve

Source: CEPA, TPA and ESP

In terms of incentives to maintain cost efficiency, the key consideration is what happens to the various risks once borne by a particular party:

- If user groups request changes to the requirements for core services (for example, linked to delivery of a major project) but then subsequently change those requirements, they will be responsible for funding the agreed ex ante budget for the contracted service requirements. Market risk is therefore borne by service users.
- If a user contracts for bespoke services, and then does not utilise those services as anticipated and/or contracted, the associated costs should fall to the user. These are individual costs, which in the main, are not spread across the entirety of that user group, and if passed through to customers then all else being equal the user's tariffs should be that much higher than equivalent tariffs of competitors. Whilst we recognise that the amounts involved are likely to be minimal, we suggest that this creates a discipline amongst users to control such costs. Thus, as with core services, this market risk is allocated to specific users commissioning the additional services, rather than the central service provider.
- If credit arrangements are robust but a participant still fails, then it may be appropriate for all participants to share in the associated costs. This provides a powerful incentive for the industry generally to focus on credit matters.
- The remaining risks, which fall to the parties that control Xoserve, can be considered as performance risks. There are several ways that these may be treated, none of which are perfect:

- Xoserve could immediately pass the costs through in its charges (see Section 3.4), and the participants can then pass them through to customers. It is difficult to see what incentives there are to manage costs tightly in this model.
- Xoserve can pass the costs through in its charges, but participants are not allowed to pass them through to customers. Whilst this might appear to create the appropriate incentives to contain costs there are several practical difficulties. In particular, we would expect GTs to argue that this discriminates against them, as in practice Shippers can pass through costs which are imposed on them as a group. Whilst Shippers will respond that customers are sensitive to tariff increases, it is likely that they have some ability to recover such costs, whereas GTs have none. If so, then GTs are likely to demand a greater share in the governance of Xoserve, on the basis that they are more exposed to performance risk.
- Xoserve is not allowed to pass through the costs in its charges and they remain on its balance sheet as unrecovered. We suggest that this may be an appropriate way forward in a cooperative model. This option is discussed further below.
- Xoserve is subjected to some form of regulatory control in relation to its charges. We do not consider that this is essentially different from any of the above options, as the key consideration is what to do with any unrecovered costs once the regulatory control has been applied.

We suggest that there is a disconnect between a properly cooperative model and the application of traditional regulatory price controls in an industry where some, but not all, of the participants are price controlled. Whilst customer price sensitivity is an issue, we argue that the group that is not subject to regulatory price controls, the Shippers, has more ability to pass on cost variations than do the group to whom such controls apply, the GTs.

We therefore suggest that, if the cooperative model is to be adopted, a different approach to regulation has to be found.

The alternative, to leave the risk with those subject to price controls, appears to us to undermine the cooperative model, as it is reasonable for such parties in these circumstances to demand a disproportionate degree of control.

Our starting point for the different approach is, therefore, to consider reputational risk as opposed to financial risk. We suggest that circumstances are created whereby the recovery of cost variations is seen to be a failure by the central service provider, which would encourage its owners to want to manage its costs appropriately to avoid such a failure.

We propose the following for consideration:

- As noted above, any cost variation within the central service provider is not passed through in its charges, which are therefore based on its budget, but are carried forward and held on its balance sheet, creating a financing cost.

- If the trend of adverse variations continues, the amount held on the balance sheet increases. At some point, triggered say by a threshold being exceeded, those who control the central service provider are required to fund the deficit.
- Such a funding could only be agreed in an Annual or Special Meeting of all members of the company and would of itself trigger a letter from Ofgem regarding future controls and clarification on budgeting overspends.[5]
- In the event that a deficit needed to be funded in such a way this would however, still be treated as a pass-through costs; the letter from Ofgem would create a reputational incentive for this event to be avoided.

We suggest that such a process would create circumstances that both management and owners would seek to avoid, which ought to ensure a sufficient degree of oversight by both.

If this proposal is adopted, further consideration is needed of how any deficit below the threshold for refinancing is funded. This may be possible simply through working capital management, if the amount is small, or through drawing on reserves if any have been established.

The other area of cost variation is agreed changes to the budget. Such changes should be allowed only in carefully defined circumstances, to stop them being used to deal with other forms of cost variations. Those circumstances might include:

- A change of scope for systems due to the introduction of approved modification proposals whose costs were not in the annual budget.
- A drawdown, using approved change control procedures, of an element of a previously agreed contingency amount – this would probably apply only to major projects.

We would expect that effective management and control of these arrangements would be enforced through the governance of the central service provider.

3.2.4. Summary

Table 3.2 summarises the key features of our proposed budgeting model.

[5] The analogy which was used in the industry working group arrangements is that the threshold which triggers the letter to Ofgem would operate to a similar principle as the Governor of the Bank of England having to write to the Chancellor of the Exchequer to explain an event where the inflation target is missed.

Table 3.2: High-level summary of proposed funding model

Element	Description
Features of the budgeting model	
Regulatory control	• Have some oversight of the annual budget. Step in powers in extremis. • Generally allow pass through of costs for GTs subject to certain protections.
Funding methodology	• Charges are based on an ex-ante budget. • This budget is determined by all parties in a full cooperative model, or has a Shipper Advisory Board to give its views on the budget in a retained GT control and ownership model.
Budget pots	• Costs are split into budgets for 'run' costs, change management costs and demand/ development for larger projects.
Variations from budget	• Allocated to parties that control Xoserve. • Cost variations would be held on the balance sheet and would need to be funded by participants in the event the amount of such costs over time breached pre-agreed limits. • The objective of this approach, by triggering a letter to the regulator, is to strengthen reputational incentives on management and those who control Xoserve.

Source: CEPA, TPA and ESP

3.3. Cost allocation, charging and invoicing

Having established budgets based on service lines, the next issue is how particular costs should be recovered. Following feedback from the industry working and steering groups, there appear to be two options that could be adopted here.

3.3.1. Option 1 – Transportation charges

The first option would largely involve a continuation of the current arrangements whereby the majority of the central service provider's costs are recovered indirectly through the GTs transportation charges which are then invoiced to Shippers (except incurred costs would now be a pass-through under the GTs price control arrangements).

This would mean that the central service provider would continue to be funded by the GTs but the costs are ultimately recovered from Shippers according to their use of system and the GTs respective charging methodologies. The costs would then ultimately be passed through to the end-consumer by Shippers. This would mean that the service provider costs would continue to be only a small percentage of the GTs transportation charges.

Table 3.3 summarises the key features of the transportation charging model.

Table 3.3: High-level summary of Transportation charging model (Option 1)

Element	Description
Cost allocation and charging	
Service and user group cost allocation	• According to the principles of the GTs transportation charging methodologies.
Charging for recovery of central service provider costs	• Costs are recovered indirectly from Shippers through the GTs transportation charges.
Invoicing methodology	
Indirect invoicing through transportation charges	• Current invoicing process. Xoserve invoice the GTs and the GTs invoice Shippers for transportation charges.

Source: CEPA, TPA and ESP

3.3.2. Option 2 – Service charges

The alternative (what we have termed Option 2) would be to develop more cost reflective charging arrangements by service line costs. Within this model there would be different options for allocating and invoicing charges either directly to Shippers and GTs or indirectly by utilising existing Xoserve and GT invoicing processes.

We describe the features of the service charging model as follows:

- allocating costs to users;
- charging/aggregation; and
- invoicing.

Allocating costs to users

The benefit of a cost reflective charging approach is there is greater capacity to target costs on the particular user groups who drive the central service provider's costs. This is consistent with the 'causality' or 'user pays' principle discussed in Section 2.

Whilst one of the concerns may be that this "bottom-up" methodology of calculating charges (but potentially with aggregated invoicing) may lead to similar problems as the current GT Agent User Pays arrangements, we believe this is mitigated for a number of reasons:

- the tension between User Pays charges and fixed regulatory allowances would no longer be in place as costs are a pass through for all user groups; and
- cost allocation to user groups and individual participants would be according to prescribed mechanical formulas built up for individual service lines, projects and beneficiary principles, rather than through regular negotiations.

For each of the budgeting elements we propose that this would work as follows.

Run costs

We propose that run costs would be allocated to user groups based on calculated shares of total run costs (see Section 3.4 below). As discussed in Section 2, this would be according to an agreed formula whereby the agreed primary GT or Shipper beneficiary groups would be charged in the first instance for different service line costs.

The calculation would include all direct costs and allocated costs, as discussed in Section 3.3, using an ABC methodology approved by the Board. Within user groups (see Section 3.4), different cost drivers would then be used to set individual charges for users; such drivers could include volume of gas shipped, number of metered supply points and so on. In Appendix A, we set out a simple (illustrative) table showing how the various cost lines that comprise the 'run' budget could be developed into a set of charges by following this approach.

Change management budget

The change management budget would be spread across all participants using a simple formula, for example the proportion of Xoserve's run costs paid by each participant in the previous year. Other approaches are possible, but as we do not anticipate this budget being particularly large, it may not be important exactly how these costs are shared, as long as they are broadly proportionate to overall use of services (to avoid either large or small users suffering undue discrimination). It may be argued that if Shippers submit the majority of change requests to be raised, they should pay most of these costs, but as they will be a pass through for GTs, this may not matter.

Demand/development budget

The demand / development budget would be based on major projects. In the paper on governance issues we suggest (in the case of the full cooperative model) that User Groups are established and that these would be a principal source of proposals for major projects.[6]

We propose that each such project be allocated to relevant users and its costs would then be charged only to those users according to an agreed cost driver; if User Groups are the principal source of such projects, this would facilitate such an allocation.

Alternatively, to reduce administration costs, it would be possible to charge this budget on the same basis as the change management budget, given that such costs are a pass through for GTs, but as the costs for individual projects could be significant, for example Nexus is costed at around £20m, this may not be acceptable to some parties and could be argued to lead to cross subsidies.

[6] The composition of user groups is for discussion. In the governance paper we suggest two, Shippers and Gas Transporters.

Charging / aggregation

Our proposal is that having categorised central service providers services and activities and allocated costs (Appendix A demonstrating how this might work for business run costs), the next stage in the service charging model would be to structure charges to recover these costs.

This might differ by service line and major projects to reflect different cost drivers. For example, some service charges might be structured according to market share by supply point, while others might be by say commodity gas. This is illustrated in Figure 3.1 below.

Figure 3.1: Structuring charges under a service charging model

Categories	Services	Total costs	Basis of allocation	Charge
Shippers	Service 1	[ ]	Supply points	£ per supply point
	Service 2	[ ]	Gas shipped	£ per therm
	Service 3	[ ]	Supply points	etc.
GDNs	Service 1	[ ]	Supply points	
	Service 2	[ ]	Supply points	
	Service 3	[ ]	Supply points	
NTS	Service 1	[ ]	Supply points	
	Service 2	[ ]	Supply points	
	Service 3	[ ]	Supply points	

Source: CEPA, TPA and ESP

There was, however, a general preference from industry participants at the working groups for aggregated charges as opposed to arrangements, for example, where charges would be broken down by service line (as illustrated above).

This might involve a similar calculation (internally within Xoserve) as illustrated in Figure 3.1, however, for the purposes of producing an invoice, both Shippers and GTs would receive one bulk invoice from the central service provider.

Direct versus indirect invoicing

To be consistent with the principle of aggregated charges, once individual costs for service lines, major projects etc., had been calculated within Xoserve, and then allocated to user groups and participants within those user groups, we propose these be aggregated into a single monthly invoice. This would mean that each Shipper and GT, for example, would receive one bulk invoice per month, either directly or indirectly.

There a two main approaches to invoicing these aggregated charges:

- One approach is that charges could be directly levied as calculated, that is Xoserve would send (monthly) invoices to Transporters and Shippers. The mechanics of this approach would be dependent upon the contractual framework ultimately adopted. We have termed this 'direct invoicing'.

- The alternative would be to develop more cost reflective charges for core Xoserve services and apply the existing user pays service mechanism for cost recovery. Under this arrangement the GTs would levy charges, and pass these directly back to Xoserve. We have termed this 'indirect charging'.

Summary of the service charging model

Table 3.4 summarises the key features of the service charging model.

Table 3.4: High-level summary of Service charging model (Option 2)

Element	Description
Cost allocation and charging	
Application of an agreed methodology	• Different budgetary costs need to be attributed to service lines using an agreed methodology to avoid lengthy discussion over cost allocation.
Charging users	• Principles of causality should be applied where clear, but only where material, again to avoid pro-longed discussions over de minimus costs. • Primary GT or Shipper beneficiary groups should be charged in the first instance. • Charges should be allocated within groups on an appropriate allocation basis. • Charges to individual users should be on an aggregated basis.
Invoicing methodology (options)	
Indirect invoicing through cost reflective service provider charges	• Cost reflective charges levied by GTs and passed directly to Xoserve. This would utilise the existing user pays mechanisms for invoicing.
Direct invoicing through cost reflective service provider charges	• Charges directly levied as calculated, that is Xoserve would send (monthly) invoices to Transporters and Shippers. These would be one single aggregated invoice per customer.

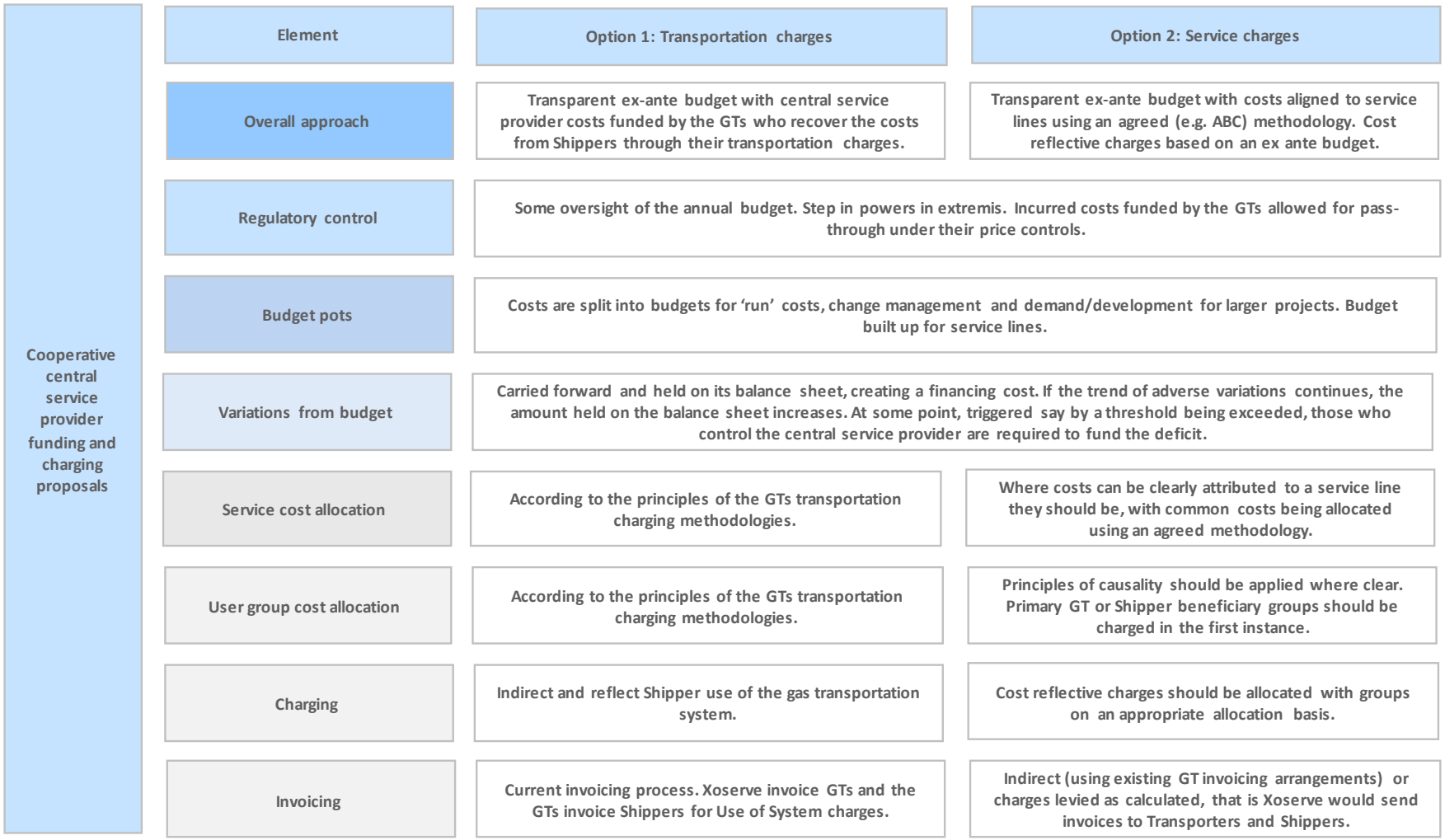
Source: CEPA, TPA and ESP

We provide our consultant views on the relative merits of the transportation and service charging models as part of our assessment in Section 4.

3.4. Summary of model and options

In this section we have set out our proposals for future funding and charging arrangements. This includes a discussion of the overall features of our proposed funding and charging model and then specific issues around different elements of this approach. Key features of our proposed arrangements are summarised in the figure below.

Figure 3.3: Proposed funding arrangements and options



Source: CEPA, TPA and ESP

4. KEY ISSUES AND ASSESSMENT

4.1. Discussion

Under all our governance models (see Annex D) we propose that this should be coupled with a significant increase in the level of transparency over matters such as costs and associated charges. Our core proposal is that an *ex ante* budget would be agreed and would underpin revised charging arrangements and that the budget would be built around costs for ongoing business, change management and major projects, as described in Section 3.

We propose that the budget would be built up from individual service categories to illustrate the costs that are involved in delivering those services. This will require a basis for the allocation of shared costs.

As discussed in Section 3, our preferred approach for the treatment of under and over recoveries of budgeted costs (i.e. variations against the ex ante budget) is that these should be held on the balance sheet of the central service provider and would need to be funded by those parties that control Xoserve when this exceeds a defined threshold.

There are several issues regarding this proposed model, in particular that it creates:

- an incentive to overstate costs in the budget, to create headroom for variations;
- pressure to release contingency funds to deal with cost overruns rather than genuine scope variations;
- pressure to adopt a profit motive for the central service provider, so as to provide a buffer to deal with unanticipated events; and
- potentially harsh penalties for relatively minor variations that will occur in the ordinary run of business.

There is no doubt that the proposed arrangements do create an incentive to overstate costs in budgets. The measures that we have proposed are designed in part to guard against this and include:

- assessments of cost trends, which ought to enable any excessive padding to be determined;
- the ability of Board members to compare such cost trends against their own experiences of IT costs; and
- the ability of the Board either to appoint independent experts as members, with skills say in IT and finance, or to procure such specialist skills on a case by case basis.

The variant to each of the governance models to contract out services, also provides a mechanism to potentially apply competitive pressures to costs. This could be extended (or even required by Ofgem) if there were concerns of gross inefficiency.[7]

Another mechanism for promoting cost efficiency, linked to the approach suggested for managing budget variations, would be for GTs and Shippers to write contracts with the central service provider's management to reward them for meeting financial and performance targets as defined through the budgeting process.[8]

We do accept however, that there is a risk of minor padding occurring, but we think that this is an issue for budgets generally and not our proposals in particular. Another potential mitigating factor is that Shippers should have some incentive to minimise the costs of the central service provider for the following reasons:

- we might expect them to run the central service provider in the same way as other parts of their business (although the costs would be common to all Shippers);
- to the extent that they have fixed contract positions, such contracts might also provide financial incentives to minimise cost.

We also note that the view that a view that Shippers will bear down on cost is supported by their observed behaviour in recent price review processes, where they have invested significant resources in reducing network costs (like Xoserve, a common cost).

There is also a risk of 'raids' on contingencies to offset cost overruns. We do not see this risk as significant if there are appropriate change control processes in place, in which case changes would only be authorised where specific and identifiable drivers for such change had been accepted. If needed, it would also be possible to ring-fence individual major project costs so that any variations were not available for offset elsewhere within the central service provider. Such an approach requires further consideration, however, as it could itself create perverse incentives regarding such project budgeting.

We suggest that the central service provider should not be a for profit organisation. To be clear, we interpret the term profit in this context as working towards earning a surplus for distribution to members. We see nothing wrong with the central service provider planning some sort of surplus to provide a buffer against unanticipated events, as long as it was set at a modest level so as not to create such a large fund as to minimise other incentives to control costs. We do not think that the proposals create harsh incentives in relation to minor matters. We have suggested a threshold over which a refunding would be required, but that should be set at a level that would not capture relatively minor annual variances, which will occur. As the threshold is cumulative, it should allow

[7] We also note that two-thirds of Xoserve's cost base are contracted out under current arrangements.

[8] Our review of comparator organisations (see Annex A) notes, for example, the Management Incentive Plan (MIP) that is in place for Network Rail (a Company Limited by Guarantee (CLG)) to incentivise the achievement of both annual and long-term objectives.

headroom for variances in the normal course of business and as noted above, a modest surplus might also be introduced, to act as a further buffer.

As discussed in Section 3, we have concerns (as shared with Ofgem) with a proposal where the funding arrangements under the 'light' cooperative governance model would be subject to GT pass through arrangements.

While such an arrangement could be made to work from a practicability perspective, we find it hard to justify the principle of an arrangement where GTs retain sole control of the service provider, but the resulting costs are subject to price control pass through arrangements.

This conclusion would suggest that regulatory allowances for GT Agent services would need to be retained under the 'light' cooperative model. However, largely retaining the current arrangements (albeit with changes to corporate governance) would also not be without issue:

- retaining regulatory allowances has the disadvantage (as identified in our previous report) of retaining eight year price control arrangements without the flexibility to manage changing outputs and therefore funding requirements; and
- it also creates a risk of retaining a funding arrangement which industry participant groups and Ofgem have identified as not fit for purpose for a data and IT services company with a critical role in the delivery of key industry change programmes.

As is brought out in our main report and the more detailed paper on governance arrangements, we do, therefore, question whether the 'light' cooperative model is internally consistent with the principles and objectives for future cooperative arrangements.

Based on feedback from the industry working groups, it is clear that there are differing views amongst industry participants of the appropriate charging and invoicing arrangements for the cost recovery of budgeted central service provider costs, some preferring direct charges from Xoserve, others through the GTs transportation charges as currently.

A number of industry participants (in particular, Shippers) are in favour of charges being levied as now, that is the majority of Xoserve costs are met by transporters who then pass them through to Shippers through transportation charges. This has the advantage of being relatively simple to implement (for example, it may not require changes to existing contractual arrangements) and has little additional costs for Shippers (for instance, from resulting changes to IT and billing processes).

The main issue with this approach, as already discussed, is that central service provider costs largely remain a small percentage of total GT transportation charges. Although somewhat addressed through a more transparent budgeting process, it may be argued that incentives are weakened for Shippers (and GTs) to control costs effectively, if there was only very limited targeting of the costs for particular services and major projects to the relevant user groups.[9] While this is the case with the current arrangements, strong efficiency incentives are created by fixed regulatory allowances.

[9] With costs being only a small pass through element of both Shipper and GT costs.

The benefit of a more direct charging and invoicing approach, as compared to a transportation charging arrangement or utilisation of the indirect user pays invoicing mechanism, is there would be a more natural customer link to all those to whom Xoserve provides services.

In contrast, as highlighted within our paper on legal frameworks (Annex E)) by recovering costs through transportation charges, this continues with the current indirect contractual and customer relationship between the central service provider.

The implementation costs may, however, be greater with a more direct invoicing approach than the option of retention of GT transportation charging arrangements:

- in the industry working groups Shippers suggested there could be material costs to implement changes within their own IT and billing processes; and
- in a more direct charging world, it may make sense to include Shippers (as well as GTs) as ASA counterparties.

Evidence of the cost materiality from resulting changes in Shipper IT and billing processes from a more direct charging arrangement should be sought from the industry through the consultation.

We recognise that there are pros and cons with both approaches. From a first principles perspective however, we suggest a cost reflective charging model is the more optimal approach and we consider this to be more consistent with Ofgem's January decision letter.

We would note that a potential practicable way forward may be to introduce new arrangements by adopting a transportation charging cost recovery route, however, in the medium to longer term a transition is made to a more cost reflective and/or direct contractual and invoicing arrangement as discussed further as part of Annex E, which explores the legal framework supporting the new arrangements.

In addition, if the service charging model was preferred and a move to this more cost reflective pricing arrangements altered the aggregate amount that individual Shippers pay in any significant degree, it may also be appropriate to introduce say a two or three year glide path to transition between the current and new charging bases.

4.2. Criteria assessment

Based on the above analysis, the table below discusses the suggested funding model in terms of the defined criteria for funding and charging (see Box 2.1). Our assessment is differentiated according to the two charging and invoicing options set out in Section 3.

Table 4.3: Assessing the funding model

Principle	Option 1: Transportation charges	Option 2: Service charges
Causality	Charging incidence and structures will reflect use of gas networks rather than central service provider data services.	The difficulty in allocating benefits to different groups means that there is a trade-off between causality and objectivity.
Objectivity	This will be clearer when precise cost allocation methodologies for different budgets are developed.	This will be clearer when precise cost allocation methodologies for different budgets are developed. Having the allocation of different budgets being done by ABC or in proportion to the use of system between groups, should however lead to an objective model.
Predictability & consistency	Central service provider costs continue to be a small percentage of use of system charges therefore predictability less of an issue.	Clear rules over cost allocation will be beneficial for both predictability and consistency. Predictability likely to be more important to Shippers than for Option 1 given costs would be recovered separately from transportation charges.
	Having charges based on ex-ante budgets rather than actual costs will mean greater predictability.	
Transparency	Having the budget in the public domain and a greater role for shippers are positive steps here.	
Adaptability	The splitting of the budget into different pots and the inclusivity of the budget setting process should mean that this model is adaptable to changes in the industry.	
Efficiency	Risks in this model are much more aligned with control. This gives the correct incentives, but approach means that there may be the incentive to overestimate costs. Regulatory and reporting protections would be in place to ensure that this does not happen.	

Source: CEPA, TPA and ESP

4.3. Transitioning issues

Ofgem has decided to roll forward the current Xoserve funding arrangements into 2013/14 (the initial year of RIIO-GD1 and RIIO-T1) with any new arrangements then expected to apply from 2014/15. This regulatory allowance for 2013/14 includes initial funding for Project Nexus.

The decision to apply the RIIO regulatory allowance for the forthcoming financial year should mean that the interim arrangements are robust for 2013/14. Full implementation of our proposals could then apply from 2014/15. We set out proposals both for the regular setting of the annual budget and how that for 2013/14 should be tackled in Appendix D.

5. CONCLUSIONS

This supporting annex has set out the building blocks of a cooperative funding and charging model for the delivery of central data and information services in the gas industry. This has included funding principles, the issues created by joint common costs, links to governance (specifically control) and services issues, how budgets might be set (including 'run' and 'development' budgets) and regulatory oversight of the funding arrangements.

Our main conclusions are as follows. As regards the overall features of our preferred funding and charging model we have proposed that:

- An annual ex-ante budget would be agreed (including run, change management and development budgets) which would underpin revised charging arrangements.
- Budgeted cost would be a pass-through. The budget would be built up from service categories involving an allocation of shared costs.
- Non-budgeted cost overruns would be financed initially through working capital and held on the balance sheet. Once a pre-agreed threshold was breached, the industry would be required to fund the deficit. Such funding would be allowed for pass through, but would trigger an Ofgem management letter.

The proposed approach in the full cooperative model is to have a budget agreed by the Board and presented at an all industry participant meeting for approval. In the case of the light cooperative model, the process would instead be that the Board (that is, the GTs) agreed the budget, considering when doing so views expressed by the Shipper Advisory Board.

We do, however, have major concerns (as shared with Ofgem) with a proposal where the funding arrangements under the 'light' cooperative governance model would be subject to GT pass through arrangements. While such an arrangement could be made to work, we find it hard to justify the principle of an arrangement whereby GTs retain sole control of the service provider, but the resulting costs are subject to pass through arrangements.

There are different views amongst the industry of the appropriate charging arrangements for the cost recovery of budgeted central service provider costs, some preferring direct charges from Xoserve, others through GTs transportation charges, largely as now. From a first principles perspective our recommendation is that a cost reflective charging model is a more optimal approach and we consider this to be far more consistent with Ofgem's January decision letter with associated cost causality/targeting benefits.

We do, however, recognise that such an approach, and/or a move to direct invoicing may increase costs and complexity for industry participants and ultimately final consumers. Therefore, the materiality of those costs needs to be identified so that they can be weighed against the benefits of alternative approaches. We would suggest, therefore, that this issue (along with the options for charging arrangements more generally) be made a key question for industry consultation.

APPENDIX A: APPLICATION OF PROPOSED FUNDING MODEL TO 'RUN' COSTS

A.1. Introduction

This appendix applies Xoserve's existing activity base costing methodology to provide an initial analysis of how costs might allocated / mapped to particular services and stakeholder groups.

A.2. Activity based costing

Xoserve currently use an activity base costing (ABC) methodology to allocate costs of direct employee and non-employee costs and bought in services. We have used this activity base costing methodology to undertake an initial analysis of how costs might map to different services.

This is a first attempt and further work would be required to build the allocation model as described in subsections below.

A.2.1 Reporting basis

The operating cost information used in the analysis is in 2010/11 prices. Information is provided on Core and User Pays services. It is reflective of costs incurred by the Central Agent rather than charges recovered from GTs and Shippers.

Core services operating costs are in respect of:

- the day to day delivery of ASA Core Services;
- projects undertaken to sustain and modify the delivery of ASA Core Services[10]; and
- the delivery of non-ASA services.

User pays operating costs are in respect of:

- the day to day delivery of Code ASA User Pays Services;
- the day to day delivery of non-Code ASA User Pays Services; and
- incremental expenditure to implement new User Pays Services.

Operating costs include both Direct Xoserve costs (e.g. employee costs) and Bought In Costs (e.g. IS Support Services, M Number Service and property costs).

A.2.2 Core operating costs

Table A1 below shows that Core Services operating costs were £27.3m in 2010/11 (a total of £32.4m after inclusion of core services project costs and non-ASA service costs).

[10] These project costs are revenue project costs only; capital costs are reported elsewhere in the RRP.

Table A1: Core services operating costs (£000's)

Core service line	Service line	Sub-total	%	Total
1A - Provide and maintain a supply point register	Manage supply point register	2,031	6.3%	6,010
	Provide query management	3,343	10.3%	
	Record, submit data in compliance with UNC	637	2.0%	
1B - Recording & calculating transportation volumes	Metered volume & quantity	724	2.2%	1,506
	Annual quantity, DM supply point capacity and off-take rate reviews	782	2.4%	
1C - Provision of transportation and balancing invoices	NTS Cap, LDZ Cap, Commodity, Rec, Adhoc adjustment and balancing Invoices	6,263	19.3%	6,263
1D - Energy Balancing	Credit Risk management & debt Collection	722	2.2%	722
1E - Other SPA services	User admission & termination	134	0.4%	1,372
	Connected system exit points	518	1.6%	
	NExA Supply Meter Points	-	-	
	Must reads	60	0.2%	
	Generation of a supply meter point reference number	659	2.0%	
1F - Demand Estimation services	Demand Estimation	868	2.7%	868
2 - Provision of services in relation to obligations under GT licence	Provision of supply point information services and other services required to be provided under condition of the GT licence	1,658	5.1%	1,658
3 - Other services	UK link services	290	0.9%	3,053
	Provision of user reports and information	1,985	6.1%	
	Network operator and user relationship management	778	2.4%	
	Data flows to network operators	-	-	
4 - AT Link & RGTA system services	AT Link & RGTA system services	5,806	17.9%	5,806
Sub-total			**84.1%**	**27,258**
Core services project costs[11]		5,155	15.9%	5,155
Total			**100%**	**32,412**

Source: Xoserve RRP

[11] Including change budget, infrastructure upgrades, business improvements, exit reform, system refresh and rewrites and non-ASA activities.

A.2.3 User pays operating costs

Table A2 below shows that User Pays operating costs were £3.1m in 2010/11 (£3.5m if user pays project costs are included).

Table A2: User Pays operating costs (£000's)

User pays service line	Total (£000's)
User pays operating costs	3,134
User pays project costs	342
Total	**3,475**

Source: Xoserve RRP

A.2.3 Annual budget

We would expect a similar analysis to be developed for annual 'run' budget under our proposed funding arrangements. The budget would be in the public domain to ensure total transparency and based on current levels of performance together with the impact of any modification proposals approved during the year.

A.3. Analysis of run costs allocated to services and primary beneficiaries

Applying Xoserve's existing ABC methodology indicates that about 52% of operating 'run' costs are directly attributable to the individual service lines and the remaining 48% have to be allocated, as they arise from shared systems and processes.

Applying this ABC methodology and the principle that the primary user of a service should fund that service, our analysis suggests that around 57% of run costs might be recovered from Shippers, while 43% of run costs might be recovered from the GTs.

Figure A1 (overleaf) illustrates Xoserve services, the primary beneficiaries of those services and the business run costs allocated to those services under Xoserve's ABC methodology.

Figure A2 then shows service categories, their associated contribution to business run costs and our analysis of who could be the principal funding party of each service area (based on a primary beneficiary principle).

As noted in the main section of the paper, this is purely an illustrative analysis and we recognise that Xoserve's ABC methodology, our approach for allocating shared costs and application of primary beneficiary principles, would need to be revisited to develop it into a robust model.

Having identified categorised services and activities and allocated costs to particular industry participant groups, the next stage would be to develop those costs into a set of central service provider charges.

Figure A1: Stakeholders, service lines and business run costs

Note 1: User Pays services shown in white as actual beneficiary of each such service aligns with payment

Note 2: No shipper, GDN or NTS is impacted by 1E.8

Source: CEPA, TPA and ESP analysis of Xoserve RRP data

Figure A2: Stakeholders and service lines

Xoserve to shippers		000's	Percentage
1A:1	Manage Supply Point Registration	1,016	3%
1A:2	Provide Query Management	3,343	11%
1A:3a	Record/Submit Data in Compliance with UNC	637	2%
1B:1	Metered Volume and Quantity	724	2%
1B:2	AQ, DM Supply Point Capacity and Offtake Rate	782	3%
1C:1	Balancing invoices	1,566	5%
1D:1	Energy balancing	722	2%
1E:7	Shipper agreed reads	-	0%
1E:8	Provision of information to registered metering applic	-	0%
1F:1	Demand estimation	868	3%
3.1	UK Link services	290	1%
3.2	Provision of User Reports and Information	993	3%
3.3	Network Op and User Relationship Mgt	389	1%
4.1	Gemini system services	2,903	10%
5.1	User Pays Code Services	716	2%
6.1	User Pays Non-Code Services	2,418	8%
Direct contribution to Xoserve "run" costs		**17,366**	**57%**

Xoserve to Transmission		000's	Percentage
1C:1	Transportation Invoices	939	3%
1E:1	User Administration and Termination	27	0%
1E:2	Connected System Exit Points	518	2%
2.1	Gas Transport Licence Services	332	1%
3.2	Provision of User Reports and Information	199	1%
3.4	Data Flows to Network Operators	-	0%
4.1	Gemini System Services	581	2%
Direct contribution to Xoserve "run" costs		**2,595**	**9%**
Xoserve to Distribution		**000's**	**Percentage**
1A:1	Manage Supply Point Registration	1,016	3%
1A:3b	Facilitate DN Interruption Auction	-	0%
1C:1	Transportation Invoices	3,758	12%
1E:1	User Administration and Termination	107	0%
1E:3	NExA Supply Meter Points	-	0%
1E:5	Generation of Supply Point Meter Reference No.	659	2%
1E:6	Emergency contact information	-	0%
2.1	Gas Transporter Licence Services	1,326	4%
3.2	Provision of User Reports and Information	794	3%
3.3	Network Op and User Relationship Mgt	311	1%
3.4	Data flows and services to network operators	-	0%
4.1	Gemini System services	2,322	8%
Direct contribution to Xoserve "run" costs		**10,294**	**34%**

Source: CEPA, TPA and ESP analysis based on Xoserve RRP data

A.3. Structuring charges

As discussed in Section 3, under the services charging model, our proposal is that having categorised central service providers services and activities and allocated costs (the above provides an illustration of how this might work for business run costs), the next stage in the funding model would be to structure service provider charges to recover these costs.

This might differ by service line to reflect cost drivers. For example, some service charges might be structured according to market share by supply point, while others might be by say commodity gas. This is illustrated in Figure A3 below.

Figure A3: Structuring charges

Categories	Services	Total costs	Basis of allocation	Charge
Shippers	Service 1	[ ]	Supply points	£ per supply point
	Service 2	[ ]	Gas shipped	£ per therm
	Service 3	[ ]	Supply points	etc.
GDNs	Service 1	[ ]	Supply points	
	Service 2	[ ]	Supply points	
	Service 3	[ ]	Supply points	
NTS	Service 1	[ ]	Supply points	
	Service 2	[ ]	Supply points	
	Service 3	[ ]	Supply points	

Source: CEPA, TPA and ESP

As discussed in Section 3, there was, however, a general preference from industry participant groups for aggregated charges as opposed to arrangements, for example, where charges would be broken down by service line (as illustrated above).

This might involve a similar calculation (internally within Xoserve) as illustrated in Figure A3. However, for the purposes of producing a monthly invoice, both Shippers and GTs would receive one bulk invoice per month from the central service provider.

Greater industry transparency over service level costs would then be provided through the annual budgeting process.

APPENDIX B: COMPARATOR FUNDING ARRANGEMENTS

Challenges	Xoserve	Elexon	MRASco	SPAA	DCC
Cost recovery	Costs can be recovered through price control mechanism, additional costs incurred through User Pays recovered directly.	Costs recovered through monthly charges issued to all BSC parties. In cases where capital expenditure require, the way in which the costs are recovered are determined via the contract between Elexon and the respective IT service provider.	Issues a direct charge on a quarterly basis to all users of the service to recover what are defined as 'reasonably' incurred costs. The annual budget is annual budget is approved by the MRA Forum, which comprises of all parties to the MRA	Issues a direct charge on a quarterly basis to all users of the service to recover all reasonably incurred costs. There are also provisions to allow for alternative funding models to be developed to fund project costs e.g. equal share, on a case by case basis.	May be able to recover costs associated with licenced activities through a cost-pass-through mechanism Capital costs recovered through amortised service charges levied over the term of the contracts
Charging methodology	Costs allocated through Use of System charging methodology and User Pays arrangements – specified in Agency Charging Statement.	Each year the charges for Elexon are published by the BSC Panel. Around 65% of costs are recovered based on a funding share calculation. The remaining costs are recovered through a series of fixed charges.	Total costs are aggregated and the split between suppliers and distributors. All Shippers and distributors with less than 750,000 Registered Metering Points are charged in relation to the number of meters. Remaining costs are split evenly between the businesses with over 750,000 Registered Metering Points.	Costs are allocated across all parties based on a simple formula that looks at the number of supply points that each user has.	Initial proposals are for allocation of costs based on recovered through a combination of fixed charges and a volumetric element potentially related to the volume of data transferred, which could be differentiated by time and day; and, depending on the available technology, a charge for the number of data transfers (effectively the frequency of meter data access).

Source: CEPA, TPA and ESP

APPENDIX C: MAJOR PROJECTS

C.1. Introduction

This appendix considers how major projects would be funded under our proposed approach, under which the demand/ development budget would be generally based on major projects. The ex-ante budget for major projects would continue to be a pass-through and costed on the basis of total outlay to 'Go Live', broken down into annual amounts, the relevant year of which would go into the overall annual budget. Cost variations on these major projects would be held on the balance sheet until a threshold value is reached.

The proposed establishment of User Groups may be a principal source of proposals for major projects, whose costs can be recovered only from its relevant users or to allocate this budget using a simple formula as per the change management budget. This would then be part of the annual charges which are disaggregated into monthly invoices from the central service provider. This annex sets out a process for the life cycle of major projects and then considers the examples of Project Nexus and European third European energy package.

C.2. Process

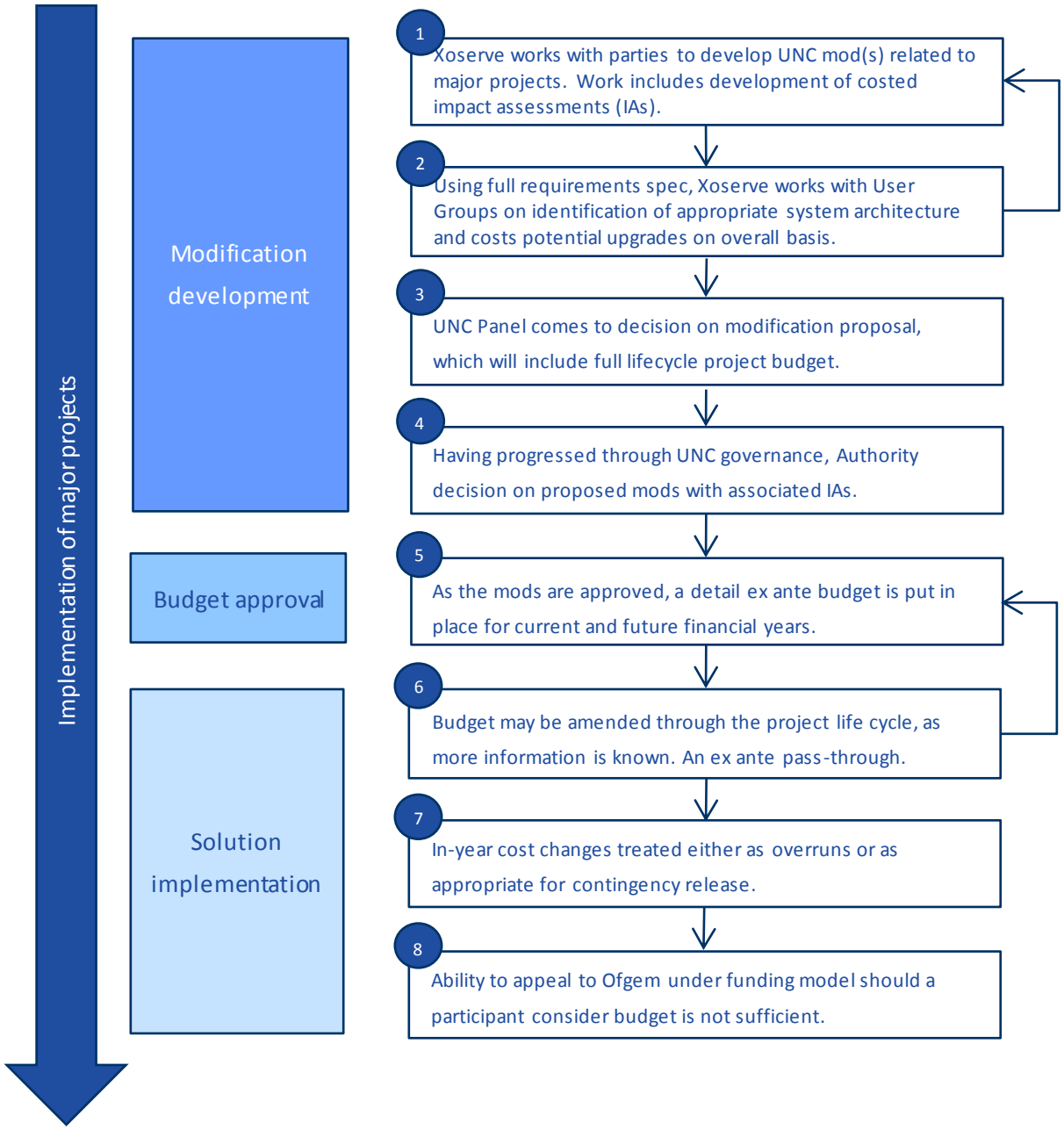
There will be two phases to this process; up until the approval of a modification proposal, and after the modification proposal is agreed upon. Prior to approval, Xoserve will work with the relevant parties on a modification, including developing costed impact assessments (IAs) and include the appropriate amount in the annual budget. It is up to the industry to then decide what level of contingency to approve and the budgets are submitted to the industry for approval.

Once the modification proposal is agreed, there will be a detailed budget in place for the project life cycle and this budget, with appropriate contingency levels, will be broken down by financial year. The budget will be submitted each year for approval and this may be amended through the project life cycle as more information becomes known. Different methods of control will be used depending on the project.

The result of this funding model for major projects should mean that industry participants are de-risked due to the pass through of the ex-ante budget, assuming that charges are predictable for Shippers. These arrangements should also offer wider stakeholder involvement, more transparency and greater flexibility around cost, and the ability to deliver change. The presence of User Groups should allow interested stakeholders to influence delivery of major projects and change.

Figure C1 steps through the process envisaged for major projects.

Figure C1: Development of change process



Source: CEPA, TPA and ESP

C.3. Case Studies

There are a range of major projects that can be considered and the purpose of using case studies is to test the robustness of models we have presented. The first of these case studies is Project Nexus, which presents an opportunity for the UNC business processes to evolve as part of the general upgrades and refresh of the UK Link systems. This project has had business development

documents developed for each topic area and modifications seek to implement part of the requirements identified under Project Nexus.

Xoserve funding for Nexus modifications development would be part of the change management budget agreed by participants for the period and identified at the start of the year. Options for delivery would be costed to the appropriate level of detail, with a set level of transparency. In terms of funding, the costs could be recovered upfront or amortised in a set way (e.g. via a service provider or through a Central Agent loan to match the economic life of the asset). This decision will be for those who control the Central Agent.

In the case of EU driven changes to Gemini, the modification development would again be part of the change management budget agreed amongst participants. It may be possible that the second step of the process above may be quickly skipped over if the legislation imposes a set way in which this is to be done. An NTS-led User Group would still consider option development from a delivery perspective in this phase. In terms of funding, as a primarily transmission driven project, annual costs might be allocated within this User Group according to appropriate cost drivers, but the agreed ex-ante budget is a pass through for all participants. This cost recovery could come via gas transmission use of system charges or alternatively the budget may be recovered on the same basis as the annual change management budget, although this would involve part direct recovery of costs from Shippers.

APPENDIX D: BUDGETING PROCESSES

D.1. Annual Budget Process

As discussed in the main part of this paper, we suggested the following key principles with regard to the annual budget for the central service provider:

- an *ex ante* budget would be developed and agreed, first by the Board and then by some form of annual meeting open to all participants. The budget would have three principal categories:
    - an annual budget for business run costs – for example, the day to day delivery and provision of data and information services;
    - a change management budget to accommodate day to day engagement and diagnostic services to facilitate industry change (e.g. UNC modification development work including impact assessments);
    - a demand / development budget that reflects projects envisaged within the year and a longer business plan for the business.
- The run costs budget would be built from service lines and would include total costs for each line, such costs being built from directly apportioned costs and an allocation of shared costs. Once established, the annual budget would be built from current levels of performance together with the impact of any modification proposals approved during the year, and those impacts should also be known as they will have been set out in the relevant impact assessment associated with the proposals.
- The change management budget would be built from known modification activity together with an estimate of further activity in the coming year.
- The demand / development budget would be built from three sources:
    - annual amounts for major projects derived from approved modifications together with any proposed changes to those annual amounts;
    - an estimate of what forthcoming projects are likely to be approved during the year and the in-year costs of such projects following approval;
    - the in-year costs of major projects (Nexus would be an example here) whose pre-approval costs are substantial and worth separate consideration from what might be termed the more run of the mill modifications costed in the change management budget.
- A fourth category of costs can be considered for inclusion in the budget, namely in-year costs that were not included in the budget, could not reasonably have been forecast and were not as a result of any management or other failures on the part of the central service

provider. It is important that this category is not used to gloss over mistakes, but there are likely to be circumstances where such costs are appropriate for inclusion, for example if the regulator required a particular change that had not previously been identified. In such cases, the costs would count for pass through and would be treated in much the same way as correction factors in regulated price controls.

- The budget would be used to set the bases for charges for services, as follows:
    - Run costs would be allocated to user groups based on calculated shares of total run costs. The calculation would include all direct costs and allocated costs, using a methodology such as Activity Based Costing that had been approved by the Board. Within user groups, different cost drivers would be used to set individual charges for users; such drivers could include volume of gas shipped, number of metered supply points and so on.
    - The change management budget would be spread across all participants using a simple formula, for example the proportion of Xoserve's run costs paid by each participant in the previous year. Other approaches are possible, but as we do not anticipate this budget being particularly large, it may not be important exactly how these costs are shared, as long as they are broadly proportionate to overall use of services (to avoid either large or small users suffering undue discrimination). It may be argued that if Shippers submit the majority of change requests to be raised, they should pay most of these costs, but as they will be a pass through for GTs, this may not matter.
    - The demand / development budget would be based on major projects. In the working paper on Governance issues we suggest that User Groups are established within the Cooperative Model and we suggest that these would be a principal source of proposals for major projects. We propose that each such project be allocated to relevant users and its costs would then be charged only to those users; if User Groups are the principal source of such projects, this would facilitate such an allocation.

  The budget would include indicative charges for its various elements, based on the above principles, for example it could show the cost per meter point of a service line where that was the cost driver, the costs of change management say per £100k of Xoserve expenditure and the costs of major projects based on whatever cost drivers are agreed for each of these.

- Because there is a large element of shared costs within the central service provider, it will be necessary to build on the existing Activity Based Costing approach that Xoserve currently use. Given that different participants will have different views regarding cost allocation, it would be appropriate for a budget group to be established to consider first the principles by which shared costs should be allocated and then the allocation algorithms based on those principles.

- Once developed and agreed by participants, the budget would be in the public domain to ensure total transparency.

Because full pass through will be permitted, these arrangements should not create incentives for GTs to hold back in ways that Shippers claim has happened in the past, especially given that potentially significant spends need to be considered for major projects such as Nexus and perhaps EU driven changes to Gemini. Full pass through should also mitigate disputes over cost allocations.

Within the budget we would expect priorities to be identified and proposals made for specific items of expenditure. We also suggest that the budget pack includes a paper analysing changes from last year's actual and this year's forecast, again a standard approach.

D.2 Process for 2013/14

There is insufficient time for the process described in D.1 above to be applied to the budget for 2013/14. It is not necessary in the immediate short term, as Ofgem have given approval for the first year costs in Xoserve's RIIO submission, so a budget and associated cost recovery arrangements are in place. Nevertheless we suggest it would be appropriate to begin implementation of the new arrangements sooner rather than later, so that the 2014/15 budget is not starting from a blank sheet.

Given that the 2013/14 budget has already been established through the RIIO process, we propose that in the period prior to April 2014:

- Xoserve publish that submission to all participants.
- A budget working group is established. Its immediate remit would be to determine whether any additions to the 2013/14 RIIO figures would have been required, for example to deal with change management.
- That group would also consider whether Project Nexus funding was appropriate, together with any other major project spend.

As and when appropriate in 2013/14, work can begin on establishing a basis for the 2014/15 budget. To do this we suggest that the budget working group first tackle service line and cost allocation issues, and then apply its deliberations to recasting the 2013/14 budget into a revised format consistent with our proposals.

Through a process of circulation and perhaps iteration, a recast budget can be used both to monitor progress in the latter part of 2013/14 and then act as the basis for the first full application of our proposals in 2014/15.

If this approach is adopted then the revised Board of Xoserve, possibly acting in a shadow capacity to begin with, can take charge of the process once it has been established.