

**PROJECT NEXUS**

**Development of Requirements**

**PROJECT BRIEF**

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**BASELINED**

**V 3.0**

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## Project Nexus Development of Requirements Project Brief

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### About this document

xoserve is planning a major systems investment programme, and has consulted to define the scope of service requirements, which is expected to feed into design work. The consultation documentation to define the scope, including all responses and the Conclusions document, is available at [www.xoserve.com](http://www.xoserve.com). The Consultation Conclusions, published on 5<sup>th</sup> March 2009, included proposals for a Requirements Definition Phase (RDP) comprising 'preparation' and 'development of requirements' stages.

The Conclusions document stated:

"The implications of future decisions on smart metering market models for the scope of agency services are unknown at present. As and when these implications become clear, it may be appropriate to review our planning assumption. We will work closely with the industry to keep abreast of developments to ensure that Project Nexus is appropriately positioned and to minimise the risk of rework."

Through the preparation stage of the RDP, our work with the industry, in particular advice from the Project Nexus Advisory Group (PNAG), has led to greater definition of how the 'data management' topics should be progressed and a review of the originally agreed plan for the series of UNC Topic Work Groups, recognising that a range of topics or aspects thereof may be within the scope of, or significantly influenced by, the Smart Metering Implementation Programme (SMIP) under the auspices of DECC/Ofgem.

This document describes the approach to the Development of Requirements Stage. The document includes a planned timetable for progressing topic work groups under the auspices of the Project Nexus UNC Workstream (PNUNC). The document outlines xoserve's internal governance and the anticipated interaction with the SMIP.

The roles of the Project Nexus Advisory Group (PNAG) the Project Nexus UNC Workstream (PNUNC) are outlined to give clarity on their delineation.

xoserve's Project Nexus Project Board is responsible for sign off of this document. Given that formal governance arrangements exist within which requirements are developed and modified and that industry stakeholders' commitment is essential to the development of requirements, xoserve's Project Board place high importance on input from industry stakeholders to the Brief.

Should in the future the scope, the timetable and/or governance structure as stated in this document be changed then this document will be amended to reflect the agreed changes. The Project Nexus Development of Requirements Project Brief will be reviewed on an ongoing basis and updated as appropriate – no more frequently than every three months, unless there are major changes which warrant an urgent update.

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## 1 Version Control

Version	Status	Date	Author(s)	Summary of Changes
1.0	Final Draft	22/10/09	xoserve	N/A
1.1	Draft	02/11/09	xoserve	Updated with comments from Project Nexus UNC Workstream meeting on 30 <sup>th</sup> October 2009. For internal xoserve review and approval.
2.0	Final Draft	11/11/09	xoserve	Version issued to PNUNC with updated comments from Project Nexus UNC Workstream meeting on 30 <sup>th</sup> October 2009.
2.1	Draft	25/11/09	xoserve	Interim version amended to reflect Project Nexus UNC Workstream discussions from 23 <sup>rd</sup> November 2009 and 14 <sup>th</sup> December 2009. Also included are amendments as a result of comments from PNAG members and PNAG discussions on 30 <sup>th</sup> October 2009. Information from DECC's Consultation Conclusion – Implementation Programme included Version for internal xoserve review/approval only. V3.0 will be issued to the industry as an approved version of Version 2.3.
2.2	Draft	20/01/10	xoserve	Amended to include updates from PNAG (14/01/10) and PNUNC (18/01/10)
2.3	Final Draft	10/02/10	xoserve	Updated to include comments/amendments from the Project Executive.
3.0	Baselined	24/02/10	xoserve	Updated to include Project Board comments and approval

## 2 Purpose of Document

The purpose of this document is to describe the purpose and planned approach to the 'Development of Requirements Stage' of the Requirements Definition Phase of Project Nexus in order to ensure that all stakeholders understand and have the opportunity to influence the approach, so that stakeholder engagement is maximised and requirements base-lined as efficiently as possible.

The proposed approach takes into consideration the industry discussions during the Preparation Stage, in particular discussions in the Project Nexus Advisory Group (PNAG), regarding the potential interaction with the Smart Metering Implementation Programme under the auspices of DECC/Ofgem.

The document explains the matters that it is planned will be progressed immediately under UNC governance and those matters on which stakeholders have agreed to defer discussion pending clarity regarding the scope of the Smart Metering Implementation Programme (SMIP) and/or the outcome of discussions under the SMIP. It also explains how the UNC governance processes are assumed to interact with the SMIP.

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The approach will be reviewed on an ongoing basis to maximise the opportunity for stakeholders to understand plans and to continue to provide advice and support throughout the Requirements Definition Phase.

### 3 Background and Summary

The planning options for requirements definition available to the industry were discussed at the Project Nexus Advisory Group (PNAG) on the 5<sup>th</sup> October 2009. (The planning options were described in the Project Nexus Planning Options paper and Hybrid Option presentation which can be found on the website [http://www.xoserve.co.uk/nexus\\_home.asp](http://www.xoserve.co.uk/nexus_home.asp)).

At that meeting PNAG supported adoption of the 'hybrid' approach. This approach is described in more detail in section 6. In summary, the approach would involve development under UNC governance of:

- for all supply points, principles for topics that primarily relate to UNC rules around demand attribution and reconciliation; and
- detailed requirements for sites expected to be fitted with AMR, rather than Smart equipment

Acknowledging that industry roles and responsibilities have potential to change as part of the establishment of a Central Communications Provider to support the rollout of Smart Metering these UNC discussions are not planned to consider detailed process requirements; however, the resulting principles would be available to the SMIP, which may result in taking some activities off that programme's critical path.

It is planned that the development of requirements other than those identified above will only be progressed under UNC governance if and when there is a clear understanding of the scope of the SMIP, on the basis that development of these other requirements may be within the scope of, or heavily dependent upon, the SMIP.

DECC/Ofgem's work and plans with respect to the SMIP will continue to be closely monitored and following the definition of scope of that programme (assumed to be the Prospectus at the end of the SMIP Phase 1), the scope of work and plans for requirements definition under UNC governance will be assessed.

It is assumed that the outputs from the UNC Topic Work Groups and the SMIP will together enable the full definition of xoserve future service.

The contents of V2.0 of this paper in particular the proposed timeline and Topic Workgroup timetable were the basis for the xoserve presentation at the Project Nexus UNC Workstream (PNUNC) scoping meetings on the 23<sup>rd</sup> November and 14<sup>th</sup> December 2009. These meetings concentrated on the scope and number of workshops for the Principle Topics and AMR Detailed Requirements. The Topic Workgroups and timetable

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are discussed in more detail in sections 9 and 12. At the time of writing, the Principle Topic Workgroup timetable has been ratified by PNUNC, but the AMR Detailed Requirements timetable has not been fully ratified. This will be confirmed at the PNUNC meeting on the 16<sup>th</sup> February when the AMR Topic Workgroup ToR are discussed. The AMR proposed timetable, being reviewed by PNUNC members, has been included under Section 12 and Appendix B.

Following the Scoping Phase of Project Nexus, an Initial Requirements Register (IRR) was compiled, identifying all the topics that respondents to the Consultation had raised. To assist the debate on the scope of the development of Requirements Stage and to aid the individual topic workgroups, xoserve has produced an amended Project Nexus IRR which has been made available to the industry (<http://www.gasgovernance.co.uk/nexus/231109>). The amended IRR identifies:

- Those entries which are candidates for the 'Principle' Topic Workgroups;
- Those entries which are candidates for the 'Detailed AMR Requirements' Workgroups; and
- Those requirements that would be satisfied with the recently approved Daily Metering Elective Modification 224 – 'Facilitating the use of AMR in the Daily Metered Elective Regime'

The IRR will be kept up to date throughout the Requirements Definition Phase to trace those topics raised in the Scoping Phase and to reflect any industry agreed changes. These changes will be managed by xoserve's and PNUNC's change management processes.

## 4 Project Nexus Development of Requirements Stage Objectives

### 4.1 Drivers

The age of the UK-Link systems is the main driver for Project Nexus, as referenced in the initial Consultation [http://www.xoserve.co.uk/nexus\\_home.asp](http://www.xoserve.co.uk/nexus_home.asp). The anticipated investment in UK Link has presented the opportunity for the industry to review business rules including the rationalisation of processes where relevant and to consider future customer-driven developments/new services.

### 4.2 Objectives

The objective of Project Nexus overall is to define industry requirements for xoserve's services and realisation of the vision:

1. Delivery of services sustained at required levels and standards for period from 2013 on fully supported systems
2. Costs to deliver services lower than they would have been without the investment
3. Value of the investment maximised (balance of costs and benefits)

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4. xoserve processes and systems rationalised and streamlined resulting in reduced risk and improved service quality
5. Future change anticipated and incorporated, allowed for or at least not precluded
6. Improved lifecycle for implementing subsequent change
7. Stakeholder requirements addressed
8. Expected benefits of funding parties realised

The Development of Requirements Stage of the project is a vital step in developing an understanding of the services for which xoserve will need a capability to deliver.

In particular, discussions with industry stakeholders in advance of entering any Design Phase are critical to realising items 5, 7 and 8 above vision.

## 5 Project Nexus Requirements Definition Phase Scope

The table below sets out the key topics that were identified from the Project Nexus Scoping Phase Consultation together with likely industry governance frameworks as included in the Consultation Conclusions published in March 2009.

Category	Topic	Industry Framework
Within prevailing scope of agency services	<ul style="list-style-type: none"> <li>• Supplier Switching (Dual Fuel, Bulk Transfer)</li> <li>• Market Differentiation</li> <li>• Connection &amp; Registration</li> <li>• Increased Reads for Energy Allocation, Balancing and Transportation Charging</li> <li>• Reconciliation</li> <li>• AQ Management</li> <li>• Volume Capture</li> <li>• Invoicing Rules</li> <li>• Treatment of Retrospective Updates</li> </ul>	Uniform Network Code
Outside prevailing scope of agency services	• iGT Services	iGT Uniform Network Code and potentially iGT / GT licence
	• Data Management	No formal framework at present

Initial requirements associated with these topics as identified in industry participants' Consultation responses were included in an Initial Requirements Register ([http://www.xoserve.co.uk/nexus\\_home.asp](http://www.xoserve.co.uk/nexus_home.asp)).

It has subsequently been suggested by PNAG that development of iGT requirements is dependent on the outcome of the iGT UNC modification (Single Gas Transporter Agency). This modification will form the framework for funding and governance for the implementation of a 'Single Gas Transporter Agency'. Since the last version of this document (V2.0) the iGT modification proposal iGTRP008 (Single Gas Transporter

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Agency) has been withdrawn by the sponsor as it was considered that this did not fully reflect the current situation regarding Smart metering. However, the sponsor may raise another iGT UNC Proposal once there is a clearer definition of the scope of the SMIP.

It was proposed in the Consultation Conclusions that the initial data management workshops would include a consideration of how the scope and nature of a Central Data Store for Smart Meters might impact supply point data management arrangements. Following PNAG discussions in the Preparation Stage it has been agreed that there is a high likelihood that these considerations will be within the scope of the SMIP. In drafting the approach and plans for the Requirements Development Stage it has therefore been assumed that the SMIP will be key to defining data management arrangements. As a result an assumption has been made that analysis only of relevant data management activities outside the anticipated scope of the SMIP ('residual data management activities') will need to be considered and developed under UNC governance. The proposed approach includes how these activities could be progressed, recognising the importance of ongoing interaction between the programmes. This was discussed at the PNUNC scoping meeting on the 23<sup>rd</sup> November 2009. The conclusions of which can be found in Section 9. In summary it was agreed that the 'residual data management requirements' would be revisited once the scope of the SMIP had been defined (assumed to be in the SMIP Phase 1 – Definition of Prospectus – Summer 2010).

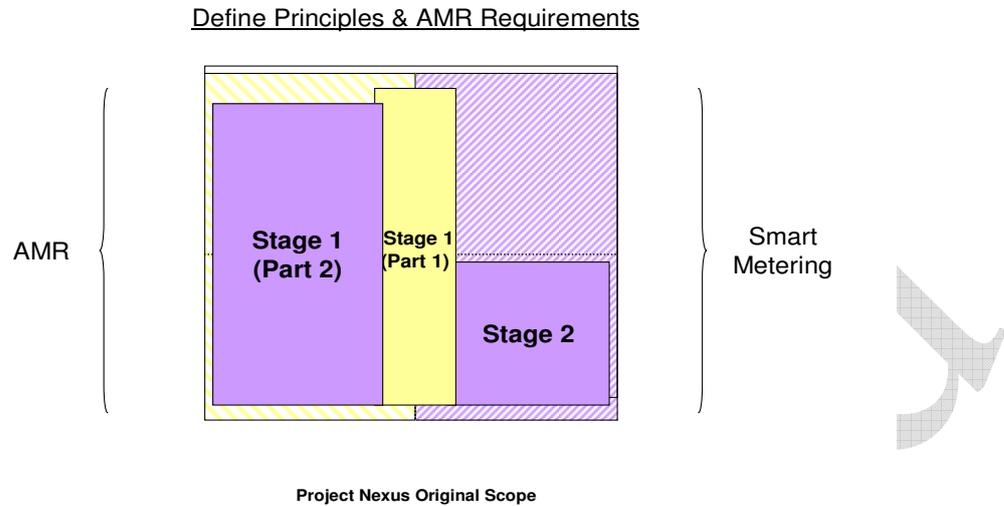
## 6 Approach for topics to be progressed under UNC governance

The approach for those topics to be discussed under UNC governance is the 'hybrid' approach, which was supported by PNAG and, for the elements falling under UNC governance, ratified by PNUNC on 30<sup>th</sup> October 2009. The hybrid approach is a combination of planning options (a) and (b) as described in the PNAG Planning Options Paper, September 2009 ([http://www.xoserve.co.uk/nexus\\_home.asp](http://www.xoserve.co.uk/nexus_home.asp)). The hybrid approach is based on defining a range of principles associated primarily with demand attribution, consumption and reconciliation related topics for all supply points and in parallel defining the detailed business rules and processes associated only with sites that will have AMR equipment and not Smart meters.

The initial work conducted under the auspices of UNC governance is referred to as 'Stage 1', with any work following the definition of scope for the SMIP (assumed to be the SMIP Prospectus at the end of SMIP Phase 1 – Summer 2010) being 'Stage 2'. As clarity is delivered from the SMIP, the plan will need to be reviewed and amended accordingly.

The following diagram illustrates the two stages of collating the requirements:

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Please note that the above diagram has not been drawn to scale.

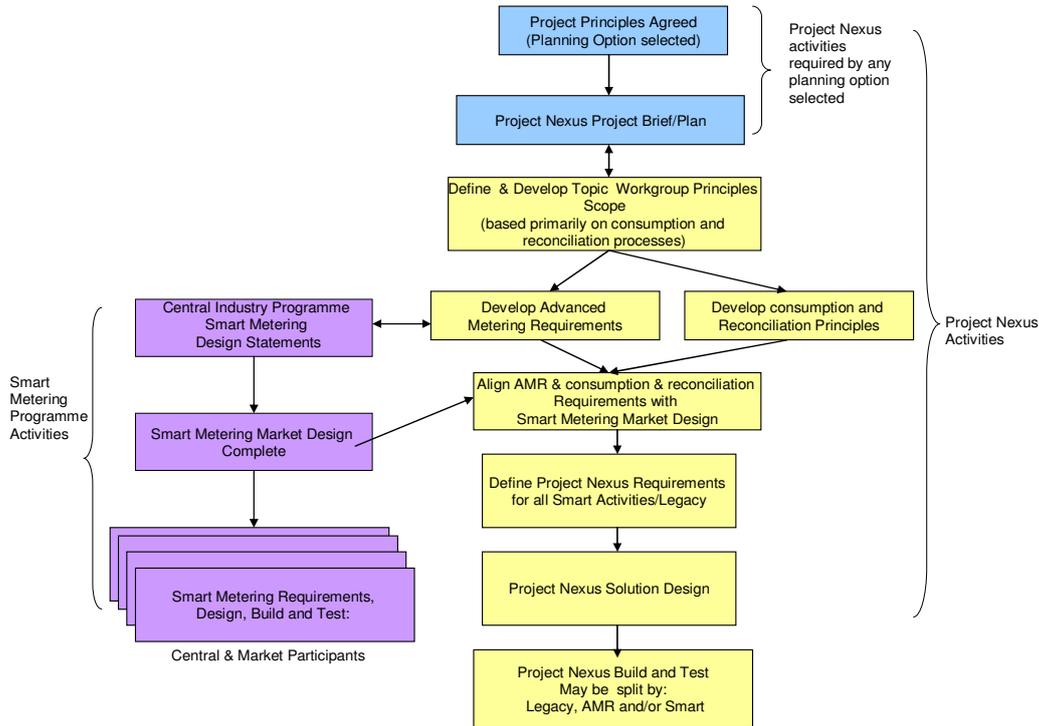
Stage 1 of the Development of Requirements would be to define the detailed requirements to satisfy the principles on a range of topics relating to all supply points followed by the relevant AMR detailed requirements. (Part 1 – Definition of Principle High-level Business Rules/Requirements; Part 2 –Definition of AMR Detailed Requirements). A list of the initial topic areas is discussed in more detail together with the PNUNC decisions and conclusions under section 9.1.

Several checkpoints are planned throughout the Stage to ensure alignment, no gaps or duplication with or between the deliverables from the SMIP. The approach supported by PNAG and illustrated below shows that there would be a continual interaction between the SMIP and Project Nexus UNC Workstream developments. This is because both projects could provide input to the each other. However, as described in the Project Principles (section 7) it is intended that the development work conducted under UNC governance would not cover areas that it is currently assumed may be within the scope of the SMIP. It is acknowledged that existing UNC and licence arrangements could be superseded by decisions taken within the SMIP.

To complete the Requirements Definition Phase, Stage 2 would be conducted following decisions regarding the scope of the Central Communications Provider, assumed to be part of Phase 1 of the SMIP – Delivery of the Prospectus in summer 2010.

The following diagram presented at PNAG on 5<sup>th</sup> October 2009 illustrates the assumed relationship between the SMIP and the Project Nexus UNC Workstream and Topic Work Groups.

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## 7 Project Principles

The following are project principles that Project Nexus will adhere to:

- The primary purpose of the Development of Requirements Stage is to minimise the risk of xoserve and the industry making inefficient investments in systems; either building in unnecessary flexibility or scalability and/or developing inadequately flexible systems.
- Any drivers for investment in UK Link separate to new business requirements will be monitored by xoserve on an ongoing basis. The objective is to have concluded Requirements Definition in sufficient time to minimise the need for 'tactical' investments that do not demonstrably align to future service requirements.
- The definition of requirements should be informed by an understanding of requirements for the market as a whole to minimise the risk of xoserve's and the industry's investments being inefficient and to enable the overall impact on systems to be assessed for design, build and test.
- The proposed activity to be undertaken to assimilate AMR requirements in parallel with the development of high level principles for consumption and reconciliation activities, should be combined with a consolidated market view before design, build and test.
- Stakeholder engagement in requirements development work is dependent on the SMIP. It is expected that interim central industry milestones will deliver incremental certainty on Smart metering market design, allowing progress to be made in the full development of requirements

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- Development work within the UNC framework will not foreclose any option for the Smart Metering design work being conducted under the SMIP.
- The scope of the SMIP should be closely monitored to understand the interdependencies between it and the work being conducted under UNC governance, to determine if, for example, Project Nexus should be one of the market readiness streams of the SMIP or if there are Project Nexus dependencies upon that programme.
- If the SMIP identifies dependencies on Project Nexus, there may need to be an assessment of the appropriateness and feasibility of phased design work to de-risk the overall risk of market readiness for Smart metering.
- Investment of industry effort, in the development and capture of requirements and principles, should be optimised.
- Should any UNC topic area be unable to progress to its conclusion because it is dependent on a decision/outcome from the SMIP, it will be registered within the PNUNC governance and work will be suspended until that decision/action is made available from the SMIP. The dependency will be registered with the SMIP.

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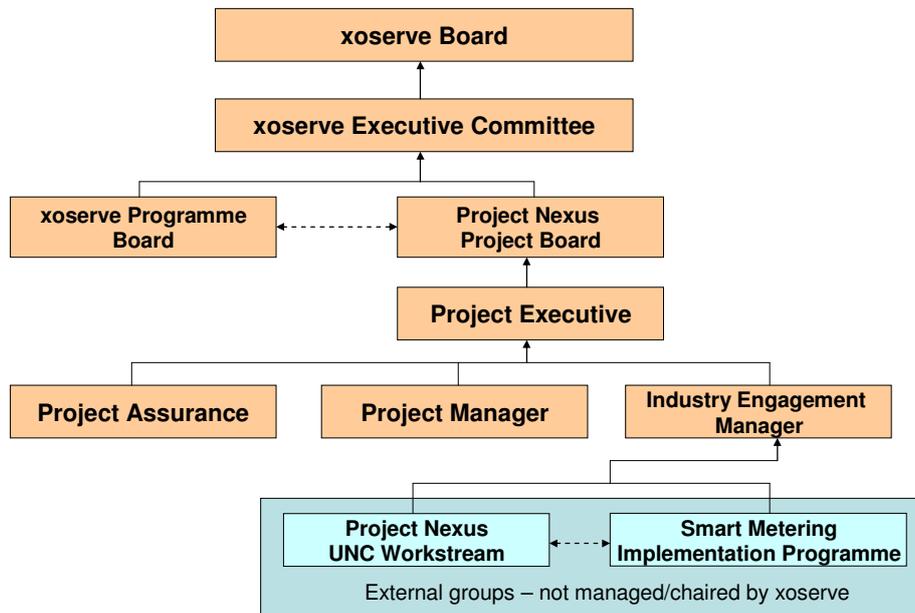
In particular, PNAG has no decision making powers and cannot fetter the discretion of PNUNC. The aspiration is that having obtained advice on approach from PNAG, discussions within PNUNC regarding the approach to defining requirements should be more likely to reach early consensus.

The ToR for PNAG can be found at [http://www.xoserve.co.uk/nexus\\_PNAG.asp](http://www.xoserve.co.uk/nexus_PNAG.asp) and for PNUNC at <http://www.gasgovernance.co.uk/nexus>.

It is assumed that governance arrangements for the SMIP will enable a two-way interaction between the UNC and iGT UNC frameworks and the SMIP. This interaction will allow information to flow between the two projects in respect of:

- Alignment of relevant Project Nexus requirements and plans as and when the information becomes available from the SMIP ;
- Relevant UNC conclusions to be passed to the SMIP. This may assist the SMIP activities and remove some of them from their critical path.

### 8.2 xoserve Internal Governance & Project Structure



Project Nexus is internally governed by the modified xoserve Prince2 process that has been implemented within xoserve. Standard templates and processes, including change management are being used to ensure that the project is managed in a controlled and auditable manner. Risk, Issue, Assumption, and Quality procedures have been established and are operational for the project.

## Project Nexus Development of Requirements Project Brief

### 8.2.1 Project Nexus – Development of Requirements Project Brief

xoserve's Project Nexus Project Board is responsible for sign off of this document. Given that formal governance arrangements exist within which requirements are developed and modified and that industry stakeholders' commitment is essential to the development of requirements, xoserve's Project Board place high importance on input from industry stakeholders to the Brief.

Should in the future the scope, the timetable and/or governance structure as stated in this document be changed then this document will be amended to reflect the agreed changes. The Project Nexus Development of Requirements Project Brief will be reviewed on an ongoing basis and updated as appropriate – no more frequently than every three months, unless there are major changes which warrant an urgent update.

## 9 Terms of Reference (PNUNC & Topic Workgroups)

### 9.1 Scope

As described in the approach above, the proposal, is that a range of principles for all supply points and detailed requirements for AMR supply points be developed in parallel.

PNUNC was asked to:

- Agree the proposed scope and approach
- Agree the proposed Project Plan and workshop timetable

Discussions took place at PNUNC on the 30<sup>th</sup> October, 23<sup>rd</sup> November, 14<sup>th</sup> December 2009 and 18<sup>th</sup> January 2010 to agree the scope of both the principle and AMR detailed topic workgroups. The decisions and conclusions are shown in more detail in the sections below.

Sections 9.1.1 and 9.1.2 provided the input to the initial scoping workshops. In addition xoserve prepared a proposed 'Project Nexus Principle Setting – Scoping and Preparation Meetings' document which showed the aims and objectives and the inputs and the outputs of the scoping meetings. It also included further details of the suggested Principle Topic Workgroups and the matters to be resolved, assumptions, dependencies, scope of the discussions, outline methodology and xoserve's assessment and rationale for the likely workload associated with each workgroup. This information was used to discuss and agree the scope and number of workshops. (This information can be found at <http://www.gasgovernance.co.uk/nexus/301009>). At the time of writing the workshop plan for the AMR Detailed Requirements has not been fully ratified, this will be the subject of a further debate at PNUNC on the 16<sup>th</sup> February 2010 when the AMR ToR are discussed and agreed.

#### 9.1.1 Topics for which principles should be developed

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The table below shows the topics where principles could be progressed under UNC governance with a low risk of a significant amount of rework being required under the SMIP. The table includes the rationale for why the identified area of work is unlikely to require significant rework under the SMIP. A more detailed rationale for inclusion together with the logical order of progression and the number of required workshops was contained within the 'Project Nexus Principle Setting – Scoping and Preparation Meetings' document (<http://www.gasgovernance.co.uk/nexus/231109>).

The PNUNC 'principle' scoping meeting on the 23<sup>rd</sup> November 2009 used the list below as an initial view for agreeing the principle topics. There was also consideration on how the topics could be grouped, with a view to enhancing the coordination between related topics and reducing the number of workgroup meetings.

The table below shows the initial list together with the PNUNC decision/outcome.

Work Area, Description	Rationale for inclusion	PNUNC Decision 23/11/09
<p><b>Market Differentiation</b> Set principles for whether the services to the gas market are differentiated, and if so, how (which attributes). Sets guidance for future Topic discussions. NB Initial meetings of the Market Differentiation Topic Workgroup have taken place. A Topic Workgroup report has been drawn up and ratified by PNUNC.</p>	<p>Principles not affected by Smart metering market model. A large number of consultation responses suggest a considerable interest in review in this area.</p>	<p>This should be part of a 'sweep-up' towards the end of the phase during Stage 2.</p>
<p><b>New connections for Advanced Metering sites</b> Define the principles for the connection and first registration. The objective being to reduce the number and duration of Shipperless sites.</p>	<p>This has the potential to diverge for AMR and DM sites away from Smart Metered sites, due to the different industry players and technologies. The principles could be progressed for AMR and DM sites.</p>	<p>This was not included in the 'principle scope' discussion as it is AMR Specific. It was included in the PNUNC AMR Scoping Definition on 14/12/09.</p>
<p><b>Supply Point Administration - Switching Timescales.</b> Understand any constraints/issues surrounding the ability to change the current supplier switching timescales which would assist in defining the principles. Understand the appetite for change of switching timescales.</p>	<p>Understanding the principles and drivers will be of value whether the detailed processes ultimately are developed under the auspices of the SMIP or directly under UNC governance. The output from the discussion could be fed into the SMIP if it is relevant to that programme.</p>	<p>This was discussed but it was suggested that this topic is too closely related to Smart Metering and therefore it should not be pursued at this moment in time. It will be revisited once the scope of the SMIP CCP is known.</p>
<p><b>'Annual Quantity' Review principles</b> Review principles for setting Annual Quantity (or alternative data item).</p>	<p>Rules around the determination of AQ can be defined irrespective of whether the associated Meter Point has AMR or Smart Metering equipment installed.</p>	<p>It was agreed that this could be progressed. The planned number of workshops agreed was 3.</p>

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Work Area, Description	Rationale for inclusion	PNUNC Decision 23/11/09
<p><b>Allocation</b> Review high-level principles for utilising daily demand data. Review the feasibility and desirability of daily or within day balancing for sites which are currently NDM, but which are expected to have 'DM' capability in future.</p>	<p>The industry needs to take an early view of its intentions, regardless of responsibilities for data management.</p>	<p>It was agreed that this could be progressed. The planned number of workshops agreed was 4. It was also agreed that the scope of the allocations topic workgroup should cover all Supply Points, including DMs.</p>
<p><b>Reconciliation of Smaller Supply Points</b> Dependent on the outcome of the allocation discussion, review the reconciliation treatment of smaller supply points</p>	<p>Whilst detailed data flows cannot be determined, this decision is not dependent on market design, and may actually expedite future discussions, by helping to clarify the uses of reads from smart meters.</p>	<p>It was agreed that this could be progressed. The planned number of workshops agreed was 3. It was also agreed that the scope of the reconciliation topic workgroup should cover all Supply Points. Therefore, this group will be described as 'Reconciliation'.</p>
<p><b>Reconciliation of consumption data from AMR equipment to metered consumption (AMR Drift)</b> Review the rules and processes for dealing with drift between AMR and the physical meter.</p>	<p>This is not an issue for integrated smart meters, therefore needs to be progressed separately for the AMR population.</p>	<p>This was deferred to the AMR PNUNC Detailed Requirements Scoping meeting 14/12/09.</p>
<p><b>Retrospective updates</b> Review principles for amending historical data items and whether this triggers transportation / energy balancing billing adjustments, and what validations are applied to those amendments.</p>	<p>This principle can then be applied to all markets regardless of metering market design or data flow arrangements</p>	<p>It was agreed that this should be progressed, but as the scope of this topic is small it could be done as part of a PNUNC Workstream meeting, towards the end of the Principle Topic Workgroup timetable.</p>
<p><b>'Residual' Data Management Topics</b> These are the data management topics that have not been progressed at this stage due to their potential dependency on the SMIP, but which are not in fact included in the scope of the SMIP. Dependent on the smart metering programme scope, examples may include ownership and custodianship of critical industry data, as well as quality assurance of data.</p>	<p>There were a large number of similar consultation responses in this area, and the arrangements for management of AMR data may diverge from Smart if discrete industry models are established. The scope definition is dependent on the SMIP scope.</p>	<p>This was briefly discussed but it was suggested that this topic is too closely related to Smart Metering and at present it is not known what the scope of the Smart metering data management arrangements will be. It was therefore agreed that this should not be pursued at this stage. It will be revisited once the scope of the SMIP CCP is known, assumed to be at the end of the SMIP Phase 1 – Prospectus.</p>

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'Residual' Data Management areas were not included in the 'Project Planning Options Paper' but were discussed at PNAG as an activity that needs to be considered. However, as stated above the 'Residual' Data Management Topic Workgroup will not be progressed until the scope of the Smart metering data management arrangements are understood, assumed to be part of the SMIP Phase 1 – Prospectus.

In the 'Project Nexus Planning Options Paper' iGT Services had been included in the list above, however, the subject does not fit under the PNUNC governance and has therefore been moved from this section and placed under section 10.

In summary, therefore, the following Principle Topic Workgroups will be initially progressed under UNC governance in Stage 1- Part 1:

- Allocation
- Annual Quantity
- Reconciliation and
- Retrospective Updates

xoserve and the Joint Office prepared a proposed workgroup timetable based on the above agreement. This was ratified by PNUNC on the 14<sup>th</sup> December with one minor amendment. The timetable has been included in Appendix B and has been reflected in the project plan in Section 12.

Terms of Reference for each of the above Topic Workgroups have been prepared and were approved by PNUNC with minor amendments on the 18<sup>th</sup> January 2010. These ToR can be found on the Joint Office web-site. (<http://www.gasgovernance.co.uk/nexus/160210>).

Where appropriate transitional arrangements will also be considered. This was described in more detail in the 'Project Nexus Principle Setting – Scoping and Preparation Meetings' document and has been included in the proposed individual workgroup ToRs.

### 9.1.2 Initial AMR Subject Areas

The following list is based on the consultation responses which formed the Initial Requirements Register (IRR). The list was also included in the 'PNAG – Project Planning Options Draft V1.0 (September 2009).

- New Connections (Moved from Principle Topic List as per PNUNC agreement on 23<sup>rd</sup> November 2009)
- Volume Capture/Meter Reading
- Annual Quantity/Allocation
- SPA (including Supply Point Switching)

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- Invoicing
- Reconciliation (including AMR drift) (Originally presented as a Principle Topic Workgroup)
- Retrospective Updates
- Non-Functional Requirements
- Market Differentiation (Sweep Up)

The approach to collate the AMR detailed requirements was supported by PNAG and endorsed by PNUNC on 14<sup>th</sup> and 18<sup>th</sup> January 2010 respectively. This is based on defining the requirements over and above the Daily Metering Elective (DME) regime. The topic areas described above will be used as a checklist to ensure that all relevant areas contained within the IRR have been considered. This approach has the advantage that it may better utilise resources and accelerate progress on defining and capturing the requirements. PNUNC on the 18<sup>th</sup> January 2010 agreed to commence the AMR Topic Workgroup on the 31<sup>st</sup> March 2010 for 10 workshops with a meeting planned every two weeks based on the previous PNUNC agreement.

In addition to the original IRR entries the group agreed that 'DM Unbundling' should also be included in the workshop discussions.

xoserve has developed a draft ToR based on the PNUNC discussions (18<sup>th</sup> January 2010) for the workgroup and worked with the Joint Office in the development of the detailed timetable. The draft ToR and timetable are to be discussed at PNUNC on the 16<sup>th</sup> February 2010. The proposed timetable has been reflected in the project plan in section 12. It also included in Appendix B.

For the avoidance of doubt although this approach will accelerate the definition and capturing of the requirements any solution arising from the collation cannot commence until alignment with the scope of the SMIP has taken place. This is presently assumed to be at the end of SMIP Phase 1 – Prospectus.

The history and the rationale for the change in approach in defining the AMR requirements is described in Appendix A.

Legacy and transitional arrangements will also be considered under the topic work area and will be included in the draft Terms of Reference.

### **9.2 Out of Scope**

Due either to the working assumption that the scope of the SMIP will include or significantly influence requirements or because they are matters for the iGT UNC, the following are not currently in scope of the UNC Workstream:

## Project Nexus Development of Requirements Project Brief

- The definition of processes and responsibilities for the management of data associated with sites with Smart metering;
- The legacy and transitional data management arrangements that would fall under the Smart Metering category;
- Any rules which are covered under iGT UNC governance.

## 10 iGT SPA

### 10.1 Scope

It is assumed that iGT SPA requirements will be defined through a combination of iGT UNC governance and the SMIP. It has therefore not been included in the project timeline, as part of Stage 1.

### 10.2 Proposed Milestones

The following dates are planning assumptions and are dependent on industry debates. They have not been ratified/endorsed by iGT UNC.

iGT Milestones	Description	Ratification by whom?	Date of Ratification	Impact on Project Nexus
iGT Responsibilities clarified	Clarity on industry responsibilities for iGT services.	iGT UNC	Sept 2010	Will define the scope, timescales and governance process which will enable the industry to commence collating requirements.
Commencement of Project Nexus iGT UNC Workstream	Assumption is that this will be formed under iGT UNC governance subject to the above milestone. It may be that the initial workstream concentrates on the principles as iGT services may be impacted by Smart Metering	iGT UNC	Sept 2010	Provision of industry resources. Inclusion of the workstream activities within the overall plan. Assumption that this will be part of SMIP and therefore the scope of what needs to be developed by Project Nexus will be borne from Phase 1 Prospectus.
iGT Service Project Nexus Requirements Captured	This may have to be carried out in two phases, one to define the principles and the second to collate the detailed requirements.	iGT UNC	Feb 2011	Feed into the Project Nexus plan in order that iGT requirements can be aligned with Smart metering and progressed through the Project Nexus life-cycle.

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### 11 Smart Metering Implementation Programme (SMIP)

The activities planned to be conducted under the auspices of the Project Nexus UNC Workstream have been progressed on the assumption that there is low likelihood that they will be affected by the SMIP and that they may complement that programme.

It is assumed that the SMIP will be an important programme in defining requirements for Project Nexus, to this end the project will endeavour to work closely with the SMIP, initially during Phase 1 (Development of the Prospectus, due summer 2010) in order to understand and capture any requirements arising from the SMIP, including any requirement to support the implementation of the business model for Smart Metering rollout. As and when more detailed plans are communicated from the SMIP their impact will be reflected in this section and the project plan will also be updated to reflect the additional information.

#### 11.1 Key Milestones

This section shows the key SMIP milestones where known and assumptions where not known. It also describes against each milestone their assumed relevance to the Project Nexus Requirements Definition Phase. As and when more information becomes available from the SMIP this section will be updated together with the project plan.

SMIP Milestones	Description	Ratification by whom?	Milestone	Impact on Project Nexus
DECC/Ofgem-Phase 1 - Prospectus	Statement of Design Requirements. Arrangements for commercial and regulatory framework. Phasing & Timetable for Smart Metering introduction. Programme Plan for remaining phases	Ratified on 2 <sup>nd</sup> December (Towards a Smarter Future – Government Response to the Consultation on Electricity and Gas Smart Metering)	Summer 2010 (Planning assumption 30/09/10)	This information will be the main driver for the scoping definition of Stage 2 activities. (An assumption has been made that there will be enough information in the Prospectus to define the scope for Stage 2.) It will also drive the alignment of any PNUNC activities that have been carried out under Stage 1. This is a 'hard' project dependency.

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<p>DECC/Ofgem – Phase 2 – Detailed Design</p>	<p>Detailed Design. - Functional Specifications - Commercial arrangements</p> <ul style="list-style-type: none"> <li>• Meter Functionality</li> <li>• Telecommunications</li> <li>• IT Systems</li> <li>• Access &amp; Security Arrangements</li> </ul> <p>- Procurement</p>	<p>Ratified on 2<sup>nd</sup> December (Towards a Smarter Future – Government Response to the Consultation on Electricity and Gas Smart Metering)</p>	<p>Summer 2012 (Planning assumption 30/09/12)</p>	<p>This will be the final alignment between detailed requirements captured under UNC and iGT governance with those captured under the SMIP. This will be the final check before entering into solution design.</p> <p>This is a 'hard' project dependency.</p> <p>For planning purposes it has not been assumed that there will be phased release of the relevant deliverables. Should this assumption change then the plan will be updated accordingly.</p>
<p>DECC/Ofgem – Phase 3 – Implementation Design</p>	<p>Build of relevant systems.  Integration Testing  Roll out of central and energy company systems  Consumer awareness</p>	<p>Phase ratified on 2<sup>nd</sup> December but no end-date specified. (Towards a Smarter Future – Government Response to the Consultation on Electricity and Gas Smart Metering)</p>	<p>No known end-date</p>	<p>No impact on Project Nexus – Requirements Definition Phase</p>

## 12 Project Plan

This section sets out the high-level plan to progress requirements definition for the within-scope topics. It also identifies dependencies and sets out a detailed planned timetable for UNC workshops. Sections 12.6 and 12.7 explain the rationale for the number of workshops and the effort required by the industry to achieve the relevant output as agreed by PNUNC.

Section 12.1 shows the anticipated time-line for the implementation of Project Nexus and describes some of the associated issues surrounding the development of an overall project plan.

Section 12.2 shows the Development of Requirements Stage, covering Stages 1 (Parts 1 & 2) and 2. It also describes the dependencies and interactions across the Topic Principle and AMR detailed requirement groups. Also included are the expected SMIP and iGT UNC dependencies as described in section 12.3.

The plan shows an end-date for the Requirements Definition Phase of November 2012. This is due to the dependencies on the SMIP deliverables. However, should the relevant deliverables become available earlier in the SMIP Phase 2 (Detailed Design) then the Project Nexus RDP phase may be completed earlier than November 2012.

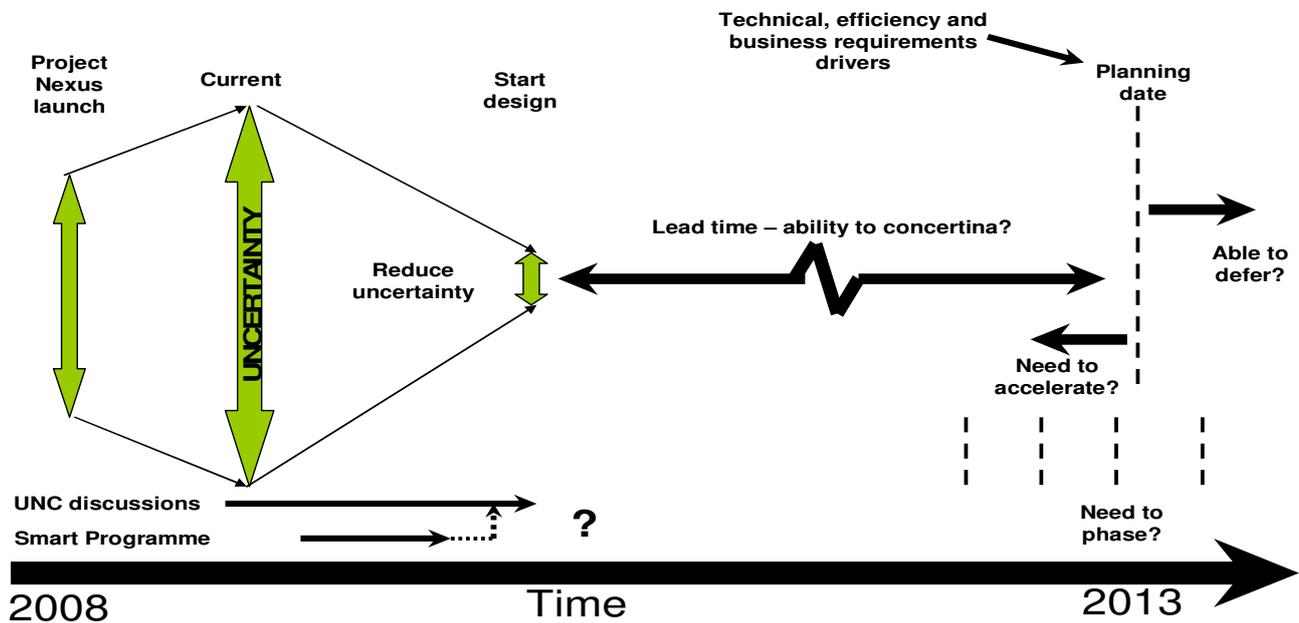
The assumed end date for the RDP is later than originally planned. The purpose of the Project Nexus RDP is to minimise the risk of inefficient investment in systems, however xserve will monitor its system requirements on an ongoing basis and if necessary will progress changes in advance of full definition of industry requirements.

### **12.1 Project Nexus Implementation Plan**

The diagram below describes the process that Project Nexus needs to follow in order to establish a more detailed implementation plan. As stated previously the original planning date for the delivery of Project Nexus was 2013. There is now an increased degree of uncertainty as to the future requirements which will need to be delivered by xserve. This is primarily due to uncertainty associated with the SMIP.

xserve plans to be as flexible as possible in its design, build, test and implementation phases. As the uncertainty of requirements decreases it will become more viable to produce a full project plan. As more information becomes available from the SMIP it is anticipated that a full end-end system development plan will be produced, potentially as part of an industry Smart Metering readiness plan. In the meanwhile, Project Nexus planning has focused on the Requirements Definition Phase (RDP).

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## 12.2 Gantt Chart/Timeline (Development of Requirements)

The high-level plan includes the SMIP milestones, as is currently known (January 2010). Section 12.3 describes the milestones and the assumptions surrounding the milestones together with the dependencies on the relevant Project Nexus activities. As and when any further detail is obtained from the SMIP then the plan and its dependencies will be updated.

The Gantt chart reflects the interdependencies across the Principle Topics and AMR detailed requirement topics as agreed by PNUNC on the 14<sup>th</sup> December 2009. The following schematic shows these relationships in more detail. For clarity it shows the subject matter areas under the AMR Detailed Requirements.



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ID	Task Name	Duration	Start	Finish	Timeline											
					2010				2011				2012			
					Half	1st Half	2nd Half	Half	1st Half	2nd Half	1st Half	2nd Half	Half	1st Half	2nd Half	
1	<b>Requirements Definition Phase</b>	<b>1157 days</b>	<b>Mon 23/11/09</b>	<b>Wed 30/04/14</b>	[Gantt bar spanning from 23/11/09 to 30/04/14]											
2	<b>External Dependencies</b>	<b>955 days</b>	<b>Wed 01/09/10</b>	<b>Wed 30/04/14</b>	[Gantt bar spanning from 01/09/10 to 30/04/14]											
3	<b>Smart Metering (SMIP)</b>	<b>934 days</b>	<b>Thu 30/09/10</b>	<b>Wed 30/04/14</b>	[Gantt bar spanning from 30/09/10 to 30/04/14]											
4	Phase I - Prospectus	0 days	Thu 30/09/10	Thu 30/09/10	[Task bar at 30/09/10]											
5	Phase II - Detailed Design	0 days	Mon 01/10/10	Mon 01/10/10	[Task bar at 01/10/10]											
6	Phase III - Build & Implementation Complete	0 days	Wed 30/04/14	Wed 30/04/14	[Task bar at 30/04/14]											
7	<b>SMIP Interim Checkpoint Milestones</b>	<b>262 days</b>	<b>Thu 31/03/11</b>	<b>Mon 02/04/12</b>	[Gantt bar spanning from 31/03/11 to 02/04/12]											
8	Phase II - Interim Checkpoint 1	0 days	Thu 31/03/11	Thu 31/03/11	[Task bar at 31/03/11]											
9	Phase II - Interim Checkpoint 2	0 days	Fri 30/09/11	Fri 30/09/11	[Task bar at 30/09/11]											
10	Phase II - Interim Checkpoint	0 days	Mon 02/04/12	Mon 02/04/12	[Task bar at 02/04/12]											
11	<b>iGT UNC</b>	<b>0 days</b>	<b>Wed 01/09/10</b>	<b>Wed 01/09/10</b>	[Task bar at 01/09/10]											
12	iGT Responsibilities Clarified	0 days	Wed 01/09/10	Wed 01/09/10	[Task bar at 01/09/10]											
13	<b>Stage 1</b>	<b>231 days</b>	<b>Mon 23/11/09</b>	<b>Mon 11/10/10</b>	[Gantt bar spanning from 23/11/09 to 11/10/10]											
14	<b>Part 1 - Principles</b>	<b>122 days</b>	<b>Mon 23/11/09</b>	<b>Tue 11/05/10</b>	[Gantt bar spanning from 23/11/09 to 11/05/10]											
15	Scoping	1 day	Mon 23/11/09	Mon 23/11/09	[Task bar at 23/11/09]											
17	Topic Workgroups	83 days	Fri 15/01/10	Tue 11/05/10	[Gantt bar spanning from 15/01/10 to 11/05/10]											
18	Allocation	29 days	Fri 15/01/10	Wed 24/02/10	[Gantt bar spanning from 15/01/10 to 24/02/10]											
19	Allocation 1	1 day	Fri 15/01/10	Fri 15/01/10	[Task bar at 15/01/10]											
20	Allocation 2	1 day	Fri 29/01/10	Fri 29/01/10	[Task bar at 29/01/10]											
21	Allocation 3	1 day	Mon 08/02/10	Mon 08/02/10	[Task bar at 08/02/10]											
22	Allocation 4	1 day	Wed 24/02/10	Wed 24/02/10	[Task bar at 24/02/10]											
23	Annual Quantity	29 days	Tue 09/03/10	Fri 16/04/10	[Gantt bar spanning from 09/03/10 to 16/04/10]											
24	AQ 1	1 day	Tue 09/03/10	Tue 09/03/10	[Task bar at 09/03/10]											
25	AQ 2	1 day	Mon 29/03/10	Mon 29/03/10	[Task bar at 29/03/10]											
26	AQ 3	1 day	Fri 16/04/10	Fri 16/04/10	[Task bar at 16/04/10]											
27	Reconciliation	30 days	Wed 17/03/10	Tue 27/04/10	[Gantt bar spanning from 17/03/10 to 27/04/10]											
28	Rec 1	1 day	Wed 17/03/10	Wed 17/03/10	[Task bar at 17/03/10]											
29	Rec 2	1 day	Mon 29/03/10	Mon 29/03/10	[Task bar at 29/03/10]											
30	Rec 3	1 day	Tue 27/04/10	Tue 27/04/10	[Task bar at 27/04/10]											
31	Retrospective Updates	1 day	Tue 11/05/10	Tue 11/05/10	[Task bar at 11/05/10]											
32	Retro 1 (PNUNC Workstream)	1 day	Tue 11/05/10	Tue 11/05/10	[Task bar at 11/05/10]											
33	<b>Part 2 - AMR Detailed Requirements</b>	<b>177 days</b>	<b>Mon 14/12/09</b>	<b>Tue 17/08/10</b>	[Gantt bar spanning from 14/12/09 to 17/08/10]											
34	Scoping	1 day	Mon 14/12/09	Mon 14/12/09	[Task bar at 14/12/09]											
35	Scoping Workshop	1 day	Mon 14/12/09	Mon 14/12/09	[Task bar at 14/12/09]											
36	Topic Workgroups	100 days	Wed 31/03/10	Tue 17/08/10	[Gantt bar spanning from 31/03/10 to 17/08/10]											
37	'DME+' Workshops	100 days	Wed 31/03/10	Tue 17/08/10	[Gantt bar spanning from 31/03/10 to 17/08/10]											
38	Workshop 1	1 day	Wed 31/03/10	Wed 31/03/10	[Task bar at 31/03/10]											
39	Workshop 2	1 day	Tue 20/04/10	Tue 20/04/10	[Task bar at 20/04/10]											
40	Workshop 3	1 day	Wed 12/05/10	Wed 12/05/10	[Task bar at 12/05/10]											
41	Workshop 4	1 day	Wed 26/05/10	Wed 26/05/10	[Task bar at 26/05/10]											
42	Workshop 5	1 day	Wed 09/06/10	Wed 09/06/10	[Task bar at 09/06/10]											
43	Workshop 6	1 day	Tue 22/06/10	Tue 22/06/10	[Task bar at 22/06/10]											
44	Workshop 7	1 day	Wed 07/07/10	Wed 07/07/10	[Task bar at 07/07/10]											
45	Workshop 8	1 day	Tue 20/07/10	Tue 20/07/10	[Task bar at 20/07/10]											
46	Workshop 9	1 day	Wed 04/08/10	Wed 04/08/10	[Task bar at 04/08/10]											
47	Workshop 10	1 day	Tue 17/08/10	Tue 17/08/10	[Task bar at 17/08/10]											
48	<b>Smart Metering Alignment - Phase 1</b>	<b>8 days</b>	<b>Thu 30/09/10</b>	<b>Mon 11/10/10</b>	[Gantt bar spanning from 30/09/10 to 11/10/10]											
49	SMP Prospectus with Project Nexus Stage 1	8 days	Thu 30/09/10	Mon 11/10/10	[Gantt bar spanning from 30/09/10 to 11/10/10]											
50																
51	<b>Stage 2</b>	<b>394 days</b>	<b>Tue 12/10/10</b>	<b>Fri 13/04/12</b>	[Gantt bar spanning from 12/10/10 to 13/04/12]											
52	Definition of remaining scope of Project Nexus	5 days	Tue 12/10/10	Mon 18/10/10	[Gantt bar spanning from 12/10/10 to 18/10/10]											
53	<b>Scoping Workshops - Timetable &amp; Order</b>	<b>389 days</b>	<b>Tue 19/10/10</b>	<b>Fri 13/04/12</b>	[Gantt bar spanning from 19/10/10 to 13/04/12]											
54	<b>Stage 2 Workshops</b>	<b>180 days</b>	<b>Tue 19/10/10</b>	<b>Mon 27/06/11</b>	[Gantt bar spanning from 19/10/10 to 27/06/11]											
55	Rem aining Workshops	100 days	Tue 19/10/10	Mon 07/03/11	[Gantt bar spanning from 19/10/10 to 07/03/11]											
56	iGT Requirements	60 days	Tue 14/12/10	Mon 07/03/11	[Gantt bar spanning from 14/12/10 to 07/03/11]											
57	Non-functional Requirements	40 days	Tue 08/03/11	Mon 02/05/11	[Gantt bar spanning from 08/03/11 to 02/05/11]											
58	Market Differentiation Sweep-Up	40 days	Tue 03/05/11	Mon 27/06/11	[Gantt bar spanning from 03/05/11 to 27/06/11]											
59	<b>Interim SMIP Checkpoints</b>	<b>272 days</b>	<b>Thu 31/03/11</b>	<b>Fri 13/04/12</b>	[Gantt bar spanning from 31/03/11 to 13/04/12]											
60	Checkpoint 1	10 days	Thu 31/03/11	Wed 13/04/11	[Gantt bar spanning from 31/03/11 to 13/04/11]											
61	Checkpoint 2	10 days	Fri 30/09/11	Thu 13/10/11	[Gantt bar spanning from 30/09/11 to 13/10/11]											
62	Checkpoint 3	10 days	Mon 02/04/12	Fri 13/04/12	[Gantt bar spanning from 02/04/12 to 13/04/12]											
63																
64	<b>Final Requirements Definition Phase</b>	<b>150 days</b>	<b>Mon 16/04/12</b>	<b>Fri 09/11/12</b>	[Gantt bar spanning from 16/04/12 to 09/11/12]											
65	Collation & Review of Project Nexus Requirements	30 days	Mon 16/04/12	Fri 25/05/12	[Gantt bar spanning from 16/04/12 to 25/05/12]											
66	Final Smart Metering Alignment	10 days	Mon 01/10/11	Fri 12/10/11	[Gantt bar spanning from 01/10/11 to 12/10/11]											
67	Final Review & Approval of Project Nexus Requirements	20 days	Mon 15/10/11	Fri 09/11/11	[Gantt bar spanning from 15/10/11 to 09/11/11]											
68	<b>Project Nexus Requirements Captured</b>	<b>0 days</b>	<b>Fri 09/11/12</b>	<b>Fri 09/11/12</b>	[Task bar at 09/11/12]											

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### 12.3 External Dependencies

#### 12.3.1 Smart Metering

This section shows the key Smart Metering Implementation Programme milestones where known and describes any assumptions where not known. It also describes against each milestone their relevance on Project Nexus. As and when more information becomes available from SMIP this section will be updated together with the project plan.

SMIP Milestones	Description	Ratification by whom?	Milestone	Impact on Project Nexus
DECC/Ofgem-Phase 1 - Prospectus	<p>Statement of Design Requirements.</p> <p>Arrangements for commercial and regulatory framework.</p> <p>Phasing &amp; Timetable for Smart Metering introduction.</p> <p>Programme Plan for remaining phases</p>	Ratified on 2 <sup>nd</sup> December (Towards a Smarter Future – Government Response to the Consultation on Electricity and Gas Smart Metering)	Summer 2010 (Planning assumption 30/09/10)	<p>This information will be the main driver for the scoping definition of Stage 2 activities. (An assumption has been made that there will be enough information in the Prospectus to define the scope for Stage 2.)</p> <p>It will also drive the alignment of any PNUNC activities that have been carried out under Stage 1. This is a 'hard' project dependency.</p>
DECC/Ofgem – Phase 2 – Detailed Design	<p>Detailed Design.</p> <ul style="list-style-type: none"> <li>- Functional Specifications</li> <li>- Commercial arrangements <ul style="list-style-type: none"> <li>• Meter Functionality</li> <li>• Telecommunications</li> <li>• IT Systems</li> <li>• Access &amp; Security Arrangements</li> </ul> </li> <li>- Procurement</li> </ul>	Ratified on 2 <sup>nd</sup> December (Towards a Smarter Future – Government Response to the Consultation on Electricity and Gas Smart Metering)	Summer 2012 (Planning assumption 30/09/12)	<p>This will be the final alignment between detailed requirements captured under UNC and iGT governance with those captured under the SMIP. This will be the final check before entering into solution design.</p> <p>This is a 'hard' project dependency.</p> <p>For planning purposes it has not been assumed that there will be phased release of the relevant deliverables. Should this assumption change then the plan will be updated accordingly.</p>

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DECC/Ofgem – Phase 3 – Implementation Design	Build of relevant systems. Integration Testing Roll out of central and energy company systems Consumer awareness	Phase ratified on 2 <sup>nd</sup> December but no end-date specified. (Towards a Smarter Future – Government Response to the Consultation on Electricity and Gas Smart Metering)	No known end-date	No impact on Project Nexus – Requirements Definition Phase
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In addition to the above the project plan includes interim milestones. These are planning assumptions which have not been ratified by either Ofgem and/or DECC. Their main purpose is to ensure that there are regular checkpoints so that a more rigorous alignment between the output and activities within the UNC and iGT are carried out. This will lessen the task primarily at the end of Stage 2 and will reduce the risk of any UNC/iGT UNC rework as a result of activities not totally complementing the Smart Metering Implementation Programme. The table below show these interim milestones:

Suggested SMIP Milestone	Date	Rationale for Inclusion
Phase II – Interim Milestone 1	31/03/11	At a minimum this will be a checkpoint for carrying out an alignment exercise
Phase II – Interim Milestone 2	30/09/11	At a minimum this will be a checkpoint for carrying out an alignment exercise
Phase II – Interim Milestone 3	02/04/12	At a minimum this will be a checkpoint for carrying out an alignment exercise

### 12.3.2 iGT

The following dates are planning assumptions and are dependent on industry debates. They have not been ratified/endorsed by iGT UNC.

iGT Milestones	Description	Ratification by whom?	Date of Ratification	Impact on Project Nexus
iGT Responsibilities clarified	Clarity on industry responsibilities for iGT services.	iGT UNC	Sept 2010	Will define the scope, timescales and governance process which will enable the industry to commence collating requirements.
Commencement of Project Nexus iGT UNC Workstream	Assumption is that this will be formed under iGT UNC governance subject to the above milestone. It may be that the initial workstream concentrates on the principles as iGT services may be impacted by Smart Metering	iGT UNC	Sept 2010	Provision of industry resources. Inclusion of the workstream activities within the overall plan. Assumption that this will be part of SMIP and therefore the scope of what needs to be developed by Project Nexus will be borne from Phase 1 Prospectus.

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iGT Service Project Nexus Requirements Captured	This may have to be carried out in two phases, one to define the principles and the second to collate the detailed requirements.	iGT UNC	Feb 2011	Feed into the Project Nexus plan in order that iGT requirements can be aligned with Smart metering and progressed through the Project Nexus life-cycle.
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### 12.4 Assumptions

The following is not necessarily a comprehensive list.

	Assumption Description	Ratification		
		Who	What	When
1	There will be sufficient detail in the SMIP – Phase 1 Prospectus to define the scope for Project Nexus Stage 2.	DECC/Ofgem	Plan	Ongoing
2	All industry interested parties fully engage in the process of capturing and agreeing high-level principles.	PNAG/PNUNC	Agreement to this approach	Jan 2010
3	High-level principles will be fed into the Smart Metering Market Design Process.	PNAG/PNUNC	Agreement to this approach	April 2010
		Smart Metering Implementation Programme	Agreement to this approach	April 2010
4	The SMIP will inform the Stage 1 development of requirements process as and when this information becomes available.	Smart Metering Implementation Programme	SMIP Phase 1	from Jan 2010
5	Industry stakeholders will be able to support UNC, iGT UNC and the SMIP simultaneously.	PNAG/PNUNC	Agreement to participation	from Jan 2010
6	AMR 'population' is not included in the first phases of Smart Metering Market Design, making it viable to pursue AMR business rules and processes.	Smart Metering Implementation Programme	SMIP Phase 1	Summer 2010
7	The meter population will be classified as Smart, AMR or DM.	Smart Metering Implementation Programme	SMIP Phase 1	Summer 2010
8	Detailed Smart Metering market Design will be available before the end of the Requirement Definition Phase allowing alignment/consistency check to take place.	Smart Metering Implementation Programme	SMIP Phase 2	Summer 2012
9	Note: The Stage 2 Project activities have been based on the planning assumption that the anticipated CCP model is based on Model C.	Smart Metering Implementation Programme	SMIP Phase 1	Summer 2010
10	Industry agreement will be reached on the UNC Topic Workgroup planned timeline at the PNUNC Scoping workshops.	PNUNC	Topic Workgroup Plan	Dec 2009

### 12.5 Risks

The following is not necessarily a comprehensive list.

	Description
1	There is a risk that the Smart Metering Milestones may change which may mean that the dependent

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	plans will need to realign which may cause a delay to any end-dates.
2	The assumption that all meters cannot be classified as Smart, AMR or DM. This could lead to confusion and rework.
3	Not all AMR Shipper/Supplier community contribute to workshops leading to an incomplete set of requirements and the added risk that alternate modifications are raised.
4	The first phases of Smart Metering Design could include the AMR population thus creating rework within the industry. Or there is not sufficient clarity on the distinction between Smart and AMR.
5	There is a risk that the dependencies outside the control of the project may put at risk the ability to deliver AMR required solutions for 2014.
6	There is a risk that the Detailed Smart Metering Design (Phase 2) will not be available before the end of the Requirements Definition Phase which will either cause a delay in the development of AMR services or lead to an inconsistent approach to AMR and Smart Metering.
7	There is a risk that whilst capturing requirements for AMR only, the discussion may start to encroach on matters to be covered by the SMIP.
8	The industry will not be able to support simultaneously both UNC work groups and the SMIP leading to either an incomplete set of requirements or a delay in the collation of the AMR requirements and high-level principles.
9	There is a risk that the SMIP is unable to 'drip-feed' deliverables/information into the Project Nexus Stage 1 process which could lead to a lengthier alignment to Smart Metering scope (SMIP Phase 1 – Prospectus) at the end of the stage. This could also lead to rework.
10	The lead time between reaching agreement and commencement of Smart Metering Design could be extended causing potential rework as the industry has moved on.
11	There is a risk that the approach adopted may lead to a position of delayed delivery of requirements because of the dependency with the SMIP, leading to inefficient use of expenditure and non-delivery of customer requirements.
12	There is a risk that the approach may not fully engage with all interested parties leading to a number of alternate UNC Modifications being raised which could cause rework and/or delay to the finalisation of the principles and requirements.
13	The Stage 2 activities, the non-AMR requirements that have not been included under the SMIP have a planning assumption that this is based on the Model C CCP definition. If this assumption changes then there may be additional PNUNC work which could cause rework and a delay in concluding RDP.
14	There is a risk that there will not be sufficient detail in the SMIP - Prospectus – Phase 1 to define the scope for Project Nexus second Stage of the Development of Requirements. This could lead to a delay in the completion of requirements definition.

### 12.6 UNC Topic Workshop Timetable

Appendix B shows the currently planned dates of the UNC workshops. The Stage 1- Part 1 Principle Topic dates were ratified by PNUNC on the 14<sup>th</sup> December 2009 and are now on the Joint Office Website. The Stage 1- Part 2 workshops as shown in Appendix B is a proposal based on discussions held at PNUNC on the 14<sup>th</sup> December 2009 and 18<sup>th</sup> January and will be ratified in the AMR Detailed Requirements ToR for discussion at PNUNC on the 16<sup>th</sup> February 2010. Wherever possible consideration has been made to try to avoid days that have already been allocated to other industry meetings.

### 12.7 Industry Effort

This section shows the number of planned workshops required to complete the requirements definition approach as described earlier. It also includes the proposed AMR Detailed Workshops. Where appropriate it will also contain the rationale behind the number of workshops.

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Currently (as of January 2010) there is agreement on the number of workshops required to define the high-level rules for Stage 1 – Part 1 (Principle Topics). Although the scope for Stage 1 – Part 2 (AMR Detailed Requirements) has been discussed at PNUNC (14<sup>th</sup> December 2009) and the detailed timetable discussed at PNUNC on the 18<sup>th</sup> January 2010, it has not been fully ratified. This will take place on the 16<sup>th</sup> February 2010 when the AMR Detailed Requirements ToR is discussed and agreed.

Wherever possible the plan has been developed to ensure efficiencies. As discussed in the sections above several dependencies across the topic workgroups have been identified so that rework is kept to a minimum. In general the one day workgroups have been spaced at approximately fortnightly intervals, as agreed by PNUNC on 23<sup>rd</sup> November 2009.

This section does not take into account any direct involvement with the SMIP. Currently there is no detail for the development/industry engagement with the SMIP, as and when this information becomes available it will be incorporated into this section.

Stage 1 – Part 1 – Principle Topics		
Principle Topic Area	No. of Workshops	Time Span
Allocation	4	15/01/10 - 24/02/10
Annual Quantity	3	09/03/10 - 16/04/10
Reconciliation	3	17/03/10 – 27/04/10
Retrospective Updates	0.5	11/05/10
<b>Sub-Total</b>	<b>10.5</b>	

Stage 1 – Part 2 – AMR Detailed Requirements			
AMR Detailed Topic Area	No. of Workshops	Rationale	Time Span
Additional DME requirements	10	Initial starting point in order to understand present DME requirements. List, describe any additional requirements together with their relating issues/problems. Document detailed business rules and 'To Be' processes. More information will be available in the ToR, to be discussed at PNUNC on the 16 <sup>th</sup> February 2010.	31/03/10 – 10/08/10
<b>Sub-Total</b>	<b>10</b>		

## 13 Funding

Funding parties will need to be established as UNC modification proposals are developed. The proposed funding methodology is a mandatory item in each UNC modification proposal.

This section will be developed as the discussion in PNUNC progresses.

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### 14 Project Nexus Requirements Definition Phase Deliverables & Pre-requisites

The scope of Project Nexus Requirements Definition Phase is the collation of industry requirements as discussed in the above sections including the interface with the SMIP. The table below shows the outputs of the Phase and indicates the currently assumed dependency on the SMIP (Rules, processes, data, changes in obligations, changes in contractual relationships, relevant changes in legislation) before the commencement of xoserve's logical solution design. The current assumption is that this will be available at the end of the SMIP Phase 2 (Detailed Design).

Phase	Deliverable(s)	Industry Pre-requisites
Requirement Definition Phase	Business Requirements Document <ul style="list-style-type: none"> <li>• Level 3 'To be processes'</li> <li>• Business Rules</li> <li>• Drafted UNC Modifications</li> <li>• Logical Data Model</li> </ul>	<ul style="list-style-type: none"> <li>• Initial Requirements Register</li> <li>• Current Level 3 Process Maps</li> </ul>
Design	Logical & Physical Design	<ul style="list-style-type: none"> <li>• Business Requirements Document aligned with Smart metering market design</li> <li>• Industry Business Readiness Plan (this includes Smart metering)</li> </ul>

### 15 Stakeholders

This section details stakeholders and their involvement in this phase of Project Nexus. A Stakeholder Communication Plan has been developed to identify all key stakeholders in the project, define parties who may be impacted by the project and provide awareness of the project to parties who have an interest, but who are not directly impacted by the project.

The engagement of the majority of stakeholders and their involvement in this Phase of Project Nexus will be achieved through the governance arrangements outlined in previous sections, namely; the Project Nexus UNC Workstream (PNUNC), the iGT UNC (for iGT SPA) and the SMIP under the auspices of DECC/Ofgem.

A further industry body, the Project Nexus Advisory Group (PNAG) consisting of representatives from a cross section of the gas industry, has been established to provide support and advice to xoserve in the management of the Requirements Definition activities. In addition, xoserve updates this group on progress with the Project as well as raises any significant risks and issues. The group has representation from

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shippers, GTs (distribution and transmission), the Joint Office of Gas Transporters, iGTs, Ofgem and xoserve and acts as a senior stakeholder voice.

Additional to the arrangements outlined above, further stakeholder engagement regarding Project Nexus is achieved through a variety of industry meetings/committees and existing xoserve communication channels, the main ones of which are summarised in the table below.

Theme	Involved/Interested Parties & Key Stakeholders							Method	Frequency
	Shippers	Networks	iGTs	Industry Groups eg ERA, ICOSS	Regulatory / governance Bodies eg Ofgem, Joint Office	Large End Consumers	Gov. Bodies eg DECC		
PNAG	✓	✓	✓	✓	✓	✗	✗	Meetings Reports External website	Monthly Ad-hoc As required
PNUNC	✓	✓	✗	✗	✓	✓	✗	Meetings Joint Office website Topic Workgroups	Monthly Ad-hoc As required
Shipper e-News	✓	✓	✗	✗	✓	✓	✓	Newsletter	Quarterly
Project Nexus Newsletter	✓	✓	✓	✓	✓	✓	✓	Newsletter	Quarterly
Distribution UNC Workstream	✓	✓	✗	✓	✓	✗	✓	Meetings	Monthly
UK Link Committee	✓	✓	✗	✗	✓	✗	✗	Meetings	Monthly
xoserve 1-2-1 Stakeholder Meetings	✓	✓	✓	✓	✓	✗	✓	Meetings Reports Briefings	As required As required As required
External website	✓	✓	✓	✓	✓	✓	✓	Knowledge sharing updates	As required
Emails	✓	✓	✓	✓	✓	✗	✓	Knowledge sharing updates	As required
Smart Metering Implementation Programme	✓	✓	✓	✓	✓	✓	✓	Meetings	TBC
Gas Customer Forum	✗	✓	✗	✗	✓	✓	✗		

## 16 Appendices

### A – History of Defining AMR Detailed Requirements Approach

The table below shows the 9 proposed Topic Workgroups as originally described together with the PNUNC decision on the 14<sup>th</sup> December 2009.

AMR Proposed Topic Workgroup Area	PNUNC Decision 14 <sup>th</sup> December 2009
New Connections for Advanced Metering sites	Not to be progressed at this stage. To be considered as a principle once other relevant industry discussions are reaching their conclusion.
Volume Capture/Meter Reading	Agreed to be progressed
Annual Quantity/Allocation	Agreed to be progressed
SPA (including Supply Point Switching)	Agreed to be progressed
Invoicing	Agreed to be progressed
Reconciliation (including AMR drift) (Originally presented as a Principle Topic Workgroup)	Agreed to be progressed
Retrospective Updates	Agreed to be progressed
Non-Functional Requirements	Not discussed. But could be considered as a Stage 2 topic workgroup.
Market Differentiation (Sweep Up)	To be considered as part of Stage 2

For planning purposes PNUNC suggested that there should initially be 8 workshops for each of the agreed AMR Topic Workgroup. After the meeting xoserve revisited the number of workshops and used the rationale for small, medium and large topic areas as previously discussed at PNUNC. Consequently the proposed number of workshops was reduced from 48 to 37.

However, since the meeting on the 14<sup>th</sup> December, xoserve reworked the approach for defining the AMR requirements, primarily driven by clarity on the proposals for the non-domestic sector as described in DECC's Consultation Conclusion paper Section 4. Analysis carried out by xoserve in December 2009 shows that in this category described in the DECC paper under section 4 that the number of supply points (including DM & Unique Sites, but excluding NTS) impacted is approximately 31,400 which equates to approximately 55,600 meter points and represents 38% of the throughput of gas. These numbers equate to the minimum number of supply points that would attract AMR equipment. It does not include the supply points that would fall into the exception criteria as described in DECC's response, primarily in the area of supply points where AMR equipment is currently fitted or being fitted. This number is presently unknown. However, due the relatively few supply points that would fall into this AMR category (although a high percentage of gas throughput) xoserve revisited the approach for the AMR Detailed Workshops. A holistic approach was developed based on capturing additional requirements for the AMR sector over and above those identified for Daily Elective Metering

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(DME – presently planned for implementation towards the end of 2010). The proposal is that this approach would reduce even further the number of AMR detailed workshops to approximately 10, although this could be changed should the Topic Workgroup decide more meetings are required. This approach also has the advantage that it may better utilise resources and accelerate progress on defining and capturing the AMR detailed requirements. The proposal shows commencement of the workshops in line with the original proposal, ie April. This is because of the dependency on the Principle Topic Workgroups.

This change in approach for the AMR detailed requirements workshops was presented to PNAG on the 14<sup>th</sup> January 2010 and was well supported. The approach was then discussed at PNUNC on the 18<sup>th</sup> January 2010 and was accepted, although there was some concern on whether this approach would ensure that all the relevant requirements were captured. In addition the group agreed that 'DM Unbundling' should also be included in the workshop discussions. At the time of writing (January 2010) a new draft ToR is being developed for discussion and ratification at PNUNC on the 16<sup>th</sup> February 2010 which will reflect the agreement at PNUNC.

For the avoidance of doubt although this approach will accelerate the definition and capturing of the requirements any solution arising from the collation cannot commence until alignment with the scope of the SMIP has taken place. This is presently assumed to be at the end of SMIP Phase 1 – Prospectus.

PNUNC agreed that the first AMR Topic Workgroup could commence on the 31<sup>st</sup> March 2010, with a workshop planned every two weeks based on the previous PNUNC agreement. This will also be reflected in the AMR Detailed ToR. Appendix B shows the AMR Detailed Requirements timetable and has also been included in the project plan in Section 12.

For completeness the table above although reflects the discussions and agreement reached at PNUNC on the 14<sup>th</sup> December. This is information that could be used as a checklist within the AMR Topic Workgroup to help ensure that all areas have been considered.

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## B - Topic Workgroup Timetables

### Stage 1 – Part 1 – Principle Topic Workgroups

ID	Task Name	Duration	Start	Finish	2010	
					1st Half	
					Qtr 1	Qtr 2
18	<b>Allocation</b>	<b>29 days</b>	<b>Fri 15/01/10</b>	<b>Wed 24/02/10</b>	■	
19	Allocation 1	1 day	Fri 15/01/10	Fri 15/01/10		
20	Allocation 2	1 day	Fri 29/01/10	Fri 29/01/10		
21	Allocation 3	1 day	Mon 08/02/10	Mon 08/02/10		
22	Allocation 4	1 day	Wed 24/02/10	Wed 24/02/10		
23	<b>Annual Quantity</b>	<b>29 days</b>	<b>Tue 09/03/10</b>	<b>Fri 16/04/10</b>	■	
24	AQ 1	1 day	Tue 09/03/10	Tue 09/03/10		
25	AQ 2	1 day	Mon 29/03/10	Mon 29/03/10		
26	AQ 3	1 day	Fri 16/04/10	Fri 16/04/10		
27	<b>Reconciliation</b>	<b>30 days</b>	<b>Wed 17/03/10</b>	<b>Tue 27/04/10</b>	■	
28	Rec 1	1 day	Wed 17/03/10	Wed 17/03/10		
29	Rec 2	1 day	Mon 29/03/10	Mon 29/03/10		
30	Rec 3	1 day	Tue 27/04/10	Tue 27/04/10		
31	<b>Retrospective Updates</b>	<b>1 day</b>	<b>Tue 11/05/10</b>	<b>Tue 11/05/10</b>	■	
32	Retro 1 (PNUNC Workstream)	1 day	Tue 11/05/10	Tue 11/05/10		

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## Stage 1 – Part 2 – AMR Detailed Requirements Topic Workgroups

(NB these dates have not yet been ratified by PNUNC. To be discussed at PNUNC on the 16<sup>th</sup> February 2010)

ID	Task Name	Duration	Start	Finish	2010			
					Half	1st Half		2nd Half
					Qtr 4	Qtr 1	Qtr 2	Qtr 3
33	<b>Part 2 - AMR Detailed Requirements</b>	<b>177 days</b>	<b>Mon 14/12/09</b>	<b>Tue 17/08/10</b>				
34	<b>Scoping</b>	<b>1 day</b>	<b>Mon 14/12/09</b>	<b>Mon 14/12/09</b>				
35	Scoping Workshop	1 day	Mon 14/12/09	Mon 14/12/09				
36	<b>Topic Workgroups</b>	<b>100 days</b>	<b>Wed 31/03/10</b>	<b>Tue 17/08/10</b>				
37	<b>'DME+' Workshops</b>	<b>100 days</b>	<b>Wed 31/03/10</b>	<b>Tue 17/08/10</b>				
38	Workshop 1	1 day	Wed 31/03/10	Wed 31/03/10				
39	Workshop 2	1 day	Tue 20/04/10	Tue 20/04/10				
40	Workshop 3	1 day	Wed 12/05/10	Wed 12/05/10				
41	Workshop 4	1 day	Wed 26/05/10	Wed 26/05/10				
42	Workshop 5	1 day	Wed 09/06/10	Wed 09/06/10				
43	Workshop 6	1 day	Tue 22/06/10	Tue 22/06/10				
44	Workshop 7	1 day	Wed 07/07/10	Wed 07/07/10				
45	Workshop 8	1 day	Tue 20/07/10	Tue 20/07/10				
46	Workshop 9	1 day	Wed 04/08/10	Wed 04/08/10				
47	Workshop 10	1 day	Tue 17/08/10	Tue 17/08/10				

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