Project Nexus

Retrospective adjustments for assets and supply points ('RAASP') – options analysis

Draft for review and feedback from the PNSG and wider market, with the objective of further developing the structure and content based on this feedback.

Version 1.0

3rd September 2015

Table of Contents

Executive summary

The Nexus go-live date has been re-planned to 1st October 2016. The Project Nexus Steering Group is committed to the implementation of the full suite of Nexus functionality, including the delivery of Retrospective Adjustments for Assets and Supply Points ('RAASP') and Unique Sites ('US').

However, it is recognised that the implementation of RAASP in particular carries higher risks than other aspects of the programme. With this in mind, for reasons of prudent management, on 1st July 2015, the Project Nexus Steering Group ('PNSG') asked PwC as Project Assurance/Manager to provide analysis which could support a potential future decision to de-scope all or part of the RAASP functionality[1].   The publication of this paper does not imply that there will be any future need to de-scope the functionality of the Nexus implementation.

During the 1st September PNSG meeting, it was suggested that a Waters Wye report on the nature and frequency of historical meter errors might provide additional information to inform the options analysis. We will review this report and, if appropriate, update the analysis set out below. Similarly, we will consider any further data that can inform this analysis.

Summary findings

The analysis of options gathered input from a range of sources including Shippers, Ofgem and Xoserve in order to understand the key benefits of RAASP, as well as assessing the potential costs or missed benefits associated with any delay to the implementation of RAASP functionality. The analysis focuses on three key options, as outlined below:

(The below data is based on analysis of data received from Xoserve and Ofgem, with supporting assumptions as detailed in the supporting sections of this document)

Option	Cost / benefit erosion	Risk factors
Option 1: In line with the agreed Project Nexus Implementation Plan, 'Core' and RAASP are delivered in a single release. This is the preferred market option. The option assumes that, the need to accommodate RAASP functionality delays the implementation of the 'Core' solution by six months.	• The estimated cost to the market of a further six month delay from 1st October 2016 in order to keep core and RAASP together is between **£13m to £19m**. • This cost of delay does not include the missed benefits of delivering 'Core' to the industry.	• The completion of RAASP design, build and test to the current market plan for Nexus. • The inherent complexity and customisation involved in the RAASP solution.
Option 2: 'Core' functionality is delivered 1st October 2016, but RAASP would be supported by manual workarounds in advance of a delivery of the RAASP functionality following stabilisation of 'Core' (a delay of six months). Note that there is currently no plan or commitment from Xoserve to delivery or support a RAASP work-around. Requirements for this workaround are not defined in the event that RAASP is decoupled from core.	• The cost of supporting manual work around of RAASP processes is estimated at between **£3.6m and £9.1m for a six month period** before the RAASP functionality is delivered. • There is no erosion of benefit to consider, as 'Core' Nexus processes go-live as planned.	• The volume of manual work required to work around RAASP is based on assumptions around the likely volume of transactions. • Stabilising 'Core' whilst supporting a manual workaround may result in challenges in achieving SLAs for RAASP queries.

---

[1] Although, in principle, it would also be possible to de-scope US functionality, it has been determined by the Baringa RAASP and US risk review that US functionality is of lower delivery risk and will be included in the 'Core' delivery from Xoserve on 1st October 2016.

Option	Cost / benefit erosion	Risk factors
Option 3: 'Core' is delivered in October 2016, with RAASP functionality and processes delivered separately six months later. However, RAASP would not be supported by manual workarounds.	• The cost and missed benefit of delaying RAASP entirely is estimated at between **£1.7m and £2.8m over a six month period**. • This is a combination of estimating the missed benefits of RAASP and the additional development cost of RAASP over this time period.	• Any delay of RAASP processes and functionality may leave the market unable to deal with the expected increase in RAASP queries as a result of the Smart Meter Implementation Programme or other market initiatives. • Unaddressed meter errors could place a financial burden on shippers.

- RAASP is not supported by a well-defined and tangible business case. As such, this impact assessment collates the best available data *in lieu* of better data that may exist in the market. We encourage parties to come forward with firm data that may challenge or confirm the conclusions we have reached.

- Based on the feedback received via the PwC Assurance Hub and our subsequent discussions with participants, there is a strong market preference that the 'Core' solution and RAASP are delivered together in a single release to minimise disruption to the organisations (**option 1**). However, this only holds true if 'Core' and RAASP can be delivered in line with the revised go live date of 1st October 2016. Clearly, this scenario will maximise the benefit delivery and minimise the costs to the market.

- Based on historical data and the current LSP process, it is likely that a manual workaround could feasibly support the delivery of RAASP business processes if the technical delivery of the RAASP functionality is delivered in a subsequent release (**option 2**). However, our analysis supporting this conclusion is estimated based on some assumptions regarding the likely level of RAASP transactions that may need to be processed. Ideally, further analysis is required to more robustly quantify the likely volume of RAASP transactions that may arise and mitigate the risk that participants will be unable to support these workarounds. It is also important to note that Xoserve have not committed or planned to deliver a work around of this nature.

- The weakness in the identification of the tangible benefits of RAASP is demonstrated by the relative difference in costs and lost benefit between manually working around RAASP (**option 2**) and delaying RAASP entirely (**option 3**). This suggests that the cost of manually working around RAASP may outweigh the tangible benefit delivered. However, the qualitative feedback we have received is that RAASP will play a key role in helping smaller organisations to avoid negative cash flow positions and bring wider intangible benefits from enhanced data quality.

Background and approach to this impact assessment

Background

Following the PNSG meeting on 1st July 2015, PwC were asked to provide analysis which could support a potential future decision to de-scope all or part of the RAASP functionality from the 1st October 2016 Nexus go-live.

Although the Nexus go-live date has been re-baselined to the 1st October 2016 and the PNSG remains committed to the implementation of the full suite of Nexus functionality, the delivery of RAASP remains uncertain at this time. This is because:

- A focus on delivering the 'Core' solution has delayed the opportunity for Xoserve to free-up subject matter experts and development staff required to complete the rigorous detailed design of RAASP. Without completing detailed design, it is difficult to confidently plan the amount of time required for design, build and test of this functionality; and

- The delivery of RAASP will require a level of customisation from SAP IS-U. This is an area of functionality that other organisations have found to be inherently more challenging to implement successfully.

With these facts in mind, and for reasons of prudent management, the Project Nexus Steering Group asked PwC as Project Assurance/Manager to provide analysis which could support a potential future decision to de-scope all or part of the RAASP functionality.   The publication of this paper does not imply that there will be any future need to de-scope the functionality of the Nexus implementation.

Based on the separate risk assessment conducted on the RAASP / US high-level design during July 2015, the 3rd August PNSG agreed that Unique Sites functionality is of lower delivery risk and it will be included in the 'core' delivery on 1st October 2106. Therefore, options to de-scope US functionality have been removed from this document.

Approach

We have taken the following approach in completing this options analysis:

- Clarify the benefits associated to RAASP– we reviewed the benefits documentation produced by Xoserve and Ofgem. This was overlaid with feedback obtained from market participants to understand and quantify the target benefits attached to RAASP;

- Identify the key risks associated with the delivery of RAASP functionality – in parallel with this exercise, Baringa, PwC and Xoserve have been examining the key risks to the Xoserve delivery of this functionality. We have summarised the risks in this paper as not to replicate the output of the parallel review;

- Determine the feasible options for RAASP delivery – assess the relative benefits and risks associated with them. There three options identified were:

  Option 1: Core (including US) and RAASP delivered in a single release. The need to accommodate RAASP functionality delays the implementation of the 'Core' solution by six months.;
  Option 2: Core (including US) delivered in October 2016 with RAASP business processes introduced after a six-month delay. Prior to the implementation of RAASP functionality, RAASP will be supported by manual workarounds; and
  Option 3: 'Core' (including US) delivered in October 2016 with RAASP business processes and technical solution delivered at a deferred date in the future which is yet to be determined. Under this option there would be no manual workaround for RAASP functionality.

- Where possible, we substantiated the three options above via consultation and data analysis. We requested data from a number of organisations to support the statements made in this document. This included:

- Working with Shippers to determine if they can provide appropriate data from their systems to estimate the quantity of likely RAASP queries that may be raised. Data received to date is limited to:

  1. The volumes of meter exchanges where the **replaced meter asset detail did not match the system records**. This was provided by one Shipper – however, they were unable to identify the financial or settlements impact of the meter asset data errors discovered during the meter exchange.

  2. The Smart Metering Implementation Programme ('SMIP') figures for Q1 2015 were obtained from https://www.gov.uk/government/statistics/statistical-release-and-data-smart-meters-great-britain-quarter-1-2015. This showed that 200,000 Smart meter installations were made during this period. There is an industry assumption that the SMIP programme will increase the requirement for RAASP adjustments, as historic meter asset errors are identified during the installation process, making this data relevant to the analysis. Our assumptions around the use of this data in the analysis are defined in the 'cost of options' section below.

- Xoserve data detailing the number of update files received during the period July 2014 to June 2015, recording when shippers request a change to existing meter asset data. For example, changes to the number of dials or the installation dates. As such, these represent an estimation of the number of errors that may be resolved by the RAASP process following Nexus go-live. These changes may or may not drive a financial adjustment, but nonetheless reflect retrospective data changes on meter asset information.

During the 1st September PNSG meeting, it was suggested that a Waters Wye report on the nature and frequency of historical meter errors might provide additional information to inform the options analysis. We will review this report and, if appropriate, update the analysis set out in this document.

Affected stakeholders

The stakeholders affected by RAASP are:

- Shippers:
  - 'Big 6' / large mixed portfolio, likely to be key users and beneficiaries of RAASP;
  - Industrial & Commercial ('I&C'), likely to be impacted to some extent by RAASP; and
  - Challenger / small shipper, likely to be key users and beneficiaries of RAASP.
- Xoserve, who are critical to the delivery of the central hub solution for RAASP.
- Gas Transporters ('GTs') and independent Gas Transporters ('iGTs') – marginally impacted, but are likely to issue more accurate transportation invoices as a result.
- Energy suppliers (as distinct from shippers), likely to be key beneficiaries of RAASP.
- Customers, who may see smoother change of supplier process as a result of fewer data quality issues in the SSP market.

Each stakeholder has been considered in assessing the impacts and risks in this assessment.

Analysis of options

The impacts that are expected should RAASP not be delivered with Core on the revised go-live date (1st October 2016) are summarised in **table 1** below.

MOD434 previously attempted to quantify the benefits associated with RAASP (and US). The only quantifiable benefit that could be determined was related to the benefit associated to addressing meter read errors, which is outside of RAASP and will be delivered in 'core', at **£2 million per annum**.

Our assessment has encountered similar limitations in obtaining suitable data to support the impact assessment and quantifying these benefits has proven to be challenging due to the fact that in the current market, the processes supporting Small Supply Points ('SSP') are operated at an aggregated level and data is not readily available to appropriately quantify the impacts.

It is also important to note that participant data cleansing activity and 'getting it right first time' mitigates / reduces the need for RAASP transactions to be processed post the 1st October 2016 go-live date. RAASP is not a substitute for a party's ownership and accountability for the quality of its data submitted into UK Link.

Due to the limitation in business case and available data, all the impacts have not been fully quantified or monetised so the 'size of the expected impact' column represents our views of the potential materiality of the impact across the Market.

Table 1 – Summary of expected impacts

Option	Key Expected impact		Expected net impact	Size of expected impact
Material **5**	**4**	**3**	**2**	**Immaterial** **1**
Option 3	**Continuation of poor data quality in the Small Supply Point ('SSP') register, should RAASP not be delivered.** • The primary impact of introducing RAASP is the improvement of SSP data quality. This includes more accurate information relating to attributes such as; conversion factor, the read factor, the address or if there are data loggers or AMR equipment attached. • This is more important as Nexus introduces SSP reconciliation. There has been limited quantification of this benefit other than that stated in the approach section. Currently, the industry believes that the quality of meter asset data is sub-optimal, but the lack of SSP reconciliation and the relative imprecision (compared with the electricity market) in the current allocation process may mask this. • There is little quantification or measurement of the current data quality level. Therefore, the absolute scale and impact of the current data quality errors is unknown. The potential volume and impact of SSP meter asset errors requires estimation based on assumptions. • The number of RAASP adjustments is expected by the industry to increase during UK SMIP. Meter installations and exchanges are seen as		Negative	**2**

	opportunities to both identify historic errors relating to the dumb meter being replaced, whilst also introducing new errors related to the installed meter asset. Both are likely to require retrospective adjustments to correct.		
Option 2 and 3	**Delivery of RAASP and Core in separate releases introduces additional risks and challenges for the market** • The majority of participants are in favour of a single release of Nexus functionality on the 1st October 2016.This is primarily due to the increased complexity, testing, release management and disruption caused by multiple releases. • Extending the programme will result in increased costs for Xoserve, Shippers, iGTs and GTs.	Negative	**2**
Option 2	**The additional effort to deliver a manual workaround to support RAASP processing until a technical solution can be deployed** • A manual workaround would require Xoserve to make manual corrections to their databases and raise corrective invoices to cover consumption or transportation costs. • Xoserve report that the manual correction of LSP data errors currently requires between **1 and 3 hours**, depending on the complexity of the error and the sites concerned. • If the assumption is made that **1%** of SSPs require a manual asset data correction, this would affect approximately **250,000** SSPs across the market. • Assuming that SSP manual data correction will take the same amount of Xoserve processing time as LSP corrections, this suggests that between **250,000 and 750,000 hours** of Xoserve time will be required to support the workaround. This would be accompanied by additional effort required by shippers and iGTs to potentially align their systems, dependent on where the error lies. • The volume of transactions that may result has not been established and this uncertainty increases the risk to pursuing this option. • In mitigation, MOD 152 gives a four year period for market participants to apply retrospective adjustments. In our view, this gives adequate time for a technical solution to be delivered for RAASP or for an enduring work around to be developed and implemented.	Negative	**2**
Option 1 and 2	**The design of the RAASP solution is not aligned with approaches adopted in other markets and organisations** • US energy suppliers using SAP use a 'clearing house' process to triage potential adjustments before routing to discrete business processes to apply within SAP.	Negative	**1**

- The design does not adequately consider the validation and approval of proposed changes. For example, how will adjustments to a previous supplier's data be approved / governed?

- The proposed solution of using a large custom table to capture RAASP transactions and then process could hinder system performance.

- The industry were engaged over 15 months ago to help determine the scope of RAASP. Since then, requirements have evolved but these have not been captured by Xoserve and there is thus a risk that the internal requirements may not represent what the industry need from the solution. There have been examples where the industry have identified valid scenarios which Xoserve have not included in scope for RAASP and would need to be incorporated.

- The delays in 'Core' UAT have prevented key SMEs from commencing development work on RAASP.

- Design phase was originally scheduled for 8 weeks, this needs to be doubled in order to be realistic. This can only be achieved if design starts a month earlier in September.

In mitigation to the above, Xoserve will commence detailed design for RAASP on 1st September 2015. The PNSG will monitor the progression of RAASP design, build and test against specific milestones in order to build confidence that RAASP is capable of delivery in the required timeline.

Material				**Immaterial**
5	**4**	**3**	**2**	**1**

Cost, benefit and risk – supporting analysis

Estimated and analysis of costs associated with the three options

Based on the determined options and available data, we have assessed the relative costs in the table below.

We have assumed that the delay to the implementation of 'Core' functionality assumed in **option 1** results in additional "project cost" for Xoserve and market participants and delays the delivery of the anticipated benefits.

The analysis of the impact of **option 2** is based on the estimated cost of operating manual workarounds for RAASP. The estimates have been based on two approaches – the first, based on an estimated 5% error rate arising from the SMIP implementation; and the second, based on the current volume of update files received by Xoserve. Again, we encourage the industry to provide data that will help strengthen or confirm this estimation and the assumptions that we have made. The reader should be clear that there is currently no commitment from Xoserve to provide such a work around for RAASP.

The analysis of the impact of **option 3** is based on estimates of the likely volume and impact of material supply point and asset data objects that would not be corrected in the market if the RAASP processes where not delivered for a period of six months. Again, we encourage industry data that will help strengthen or confirm this estimation and the assumptions that we have made.

Table 2 – Cost of options

(The analysis below is based on data received from Ofgem and Xoserve. Cost data is based on data and assumptions made by PwC and Ofgem and requires validation by Xoserve)

Option	Cost	Risk factors and key assumptions
Option 1: 'Core' and RAASP delivered in a single release. The cost is an estimate of the 'dis-benefit' the market may experience if 'all together' is delayed.	*Low Estimate* • Cost of Xoserve overrun - £1m per month • Cost of Industry overrun - £3m per month • Aggregate cost of delay - £4m per month • Using an illustrative 6 month delay and a likelihood of 50%, this equates to a cost impact of **£12m.** *Upper Estimate* • Cost of Xoserve overrun - £2m per month • Cost of industry overrun - £4m per month • Aggregate cost of delay - £6m per month • Using an illustrative 6 month delay and a likelihood of 50%, this equates to a cost impact of **£18m.**	• This is based on the available cost and benefit data and some high-level assumptions; and • This analysis does not consider the missed benefits of delivering 'Core' to the industry; • The clear market preference is that 'all together' is preferred.
Option 2: 'Core' delivered in October 2016 with RAASP business processes introduced but supported by manual workarounds. A period of at least 6 months workaround is likely before 'core' is stabilised and the RAASP functionality can be released.	*Low Estimate: £3.6 million* • Smart meter exchange rate of 200,000 per month with an assumed 5% data error rate • Time to correct assumption: 3 hrs • Cost to correct assumption: £20 per hour • Workaround period is 6 months, therefore the total cost of operating manual workaround £3.6m • This estimate does not include any estimated costs arising from additional Xoserve development and / or testing effort. *High Estimate: £9.1 million*	• Xoserve have not committed to delivering a workaround of this nature. • SMIP meter exchange rate is based on Q1 2015 DECC data. • Operating a manual workaround whilst supporting the stabilisation of 'Core' may introduce resource (system and people) challenges in delivering RAASP within 6 months of 'Core' • Resource challenges in supporting the stabilisation of 'Core' may result in an inability to achieve SLA's on RAASP queries. As a result there organisations may be required to pay transportation invoices without having received reconciliation. This may introduce cash flow challenges for some organisations.

	• Average monthly asset update requests currently received by Xoserve (July 2014 – June 2015) is 102,000 • Assumption that 25% will trigger a RAASP query / transaction. Other assumptions as above • Xoserve cost of operating manual workaround £9.1m	
Option 3: 'Core' delivered in October 2016 with RAASP processes and technical solution delivered at an appropriate date.	*Low Estimate:* **£1.7 million** • Average monthly asset update requests (July 2014 – June 2015) – 102,000 • Assume 7.5% would trigger a RAASP transaction of sufficient materiality or impact to raise • Assume an average financial network invoice correction of £50 (based on ca. 10% of an overall customer gas bill) • Assumed delay of six months before RAASP is operational. This equates to a total 'lost' benefit from not correcting gross errors to shippers of £3.4 million. • These corrections will not be 'one way' and there will be netting across the market. Therefore, we assume that an offset will be received by shippers and we have used an illustrative assumption of a 50% netting. • This results in an assumed 'net' impact across the market of **£1.7m**. *High Estimate:* **£2.8m** • Average monthly asset update requests (July 2014 – June 2015) – 102,000 • Assume 12.5% would trigger a RAASP query of sufficient materiality or impact to raise • Average financial correction of £75 per supply point (based on ca. 15% of an overall customer gas bill) • Assumed delay of six months before RAASP is operational • This equates to a total 'lost' benefit from not correcting gross errors to shippers of **£5.7mm**. • Assuming the same normalisation / netting assumption of 50%, this gives a net impact of **£2.8m**.	• This is based on historic update file volumes. Market initiatives such as UK SMIP or next day switching may result a result in a higher volume of retrospective amendments that cannot be made.

Key assumptions made in the cost analysis

- The likelihood of the need to delay 'Core' in order to deliver a single release is 50%, but may increase given the milestones implemented to build confidence. The confidence level is based on the progress towards detailed RAASP design completion and the customised nature of the solution.

- The cost to correct a SSP RAASP will be similar to a LSP correction at £20/hour taking up to 3 hours.

- **Option 3** does not require a manual workaround however the net financial cost to Shippers in unknown as the information cannot be provided.

RAASP benefits analysis

The primary objective of introducing a RAASP solution is to create a single supply point register consisting of reliable and accurate data. This is critical in order to support industry wide processes, such as the introduction of Small Supply Point reconciliation, incorporation of iGTs and accurate gas allocation.

The benefits associated with RAASP:

Table 3 below shows a benefit analysis for RAASP. These benefits have been interpreted from documentation review, feedback from the Nexus Portal and meetings with Ofgem, Xoserve and key users.

Each benefit has also been assessed against 4 impact areas:

- **Process efficiency** – where the benefit is associated with automation or better data quality to enable industry processes to operate quicker and more accurately;
- **Data quality** – where the benefit is associated with improving the data held on the supply point register. Often this provides these provide the foundation for other benefits to be realised;
- **Customer experience –** where the benefit is experienced by the customer and realised in more accurate billing or more timely correction of errors; and
- **Settlement / gas allocation accuracy** – where the benefit is associated with improving the market wide settlement process allowing organisations to manage cost and improve the accuracy of contract pricing.

Table 3– RAASP Benefit analysis:

Stakeholder affected	Benefit description	Materiality	Benefit Area			
			Process efficiency	Data quality	Customer Experience	Settlement accuracy
Xoserve	Improved accuracy and quality of data held on supply point register. This will enable Xoserve to: • Provide accurate information to incumbent shipper in the transfer of ownership / change of supplier process; and • Ensure accurate energy allocation and transportation charges.	**2**		✓	✓	✓
Xoserve	Allows for the introduction of controlled process with rules for data updates and retrospective amendments. The new processes should enable the introduction of verification logic to be applied to adjustments and create a clear audit trail.	**0**	✓	✓		
Xoserve	The new solution allows Xoserve visibility of amendments across the industry and supports reporting of statistics by scenario or shipper. This will identify 'hot spots' of poor data quality or where industry / participant processes require improvement.	**0**	✓			
Xoserve	The legacy CMS systems are decommissioned, therefore avoiding costs.	**1**	✓			

Stakeholders	Description	Score				
Shippers GT's/iGTs Consumer	Supports automated cost correction capabilities across the industry allowing organisations to better manage cost and customer pricing. Specifically this relates to the ability to retrospectively: – Update supply point details i.e. the conversion factor; – Update the meter asset details i.e. add information about data loggers or automatic meter reading equipment; and, – Supply point address details which may alter the transportation charging rate.	**2**			✓	✓
Shippers GT's/iGTs Consumer	Reduction in the volume of adjustments altogether given that the new process will drive data quality improvements and thus reduce the need for adjustments to be made to correct data.	**1**	✓			
Shippers GT's/iGTs Consumer	Close alignment of settlement and billing data which will help manage shipper / supplier unbilled position. Removal of some of the uncertainty in revenue reporting currently experienced by energy suppliers.	**2**		✓	✓	
Shippers GT's/iGTs Consumer	Reliable data held in a single supply point register will support faster and more accurate quotations to customers.	**1**			✓	
Shippers GT's/iGTs Consumer	Supports 'next day switching' incentive which allows customers to change supplier faster and more efficiently.	**0**			✓	
Shippers GT's/iGTs Consumer	More reliable and accurate data will support the SMART metering roll out and the successful introduction of next day switching	**0**	✓	✓	✓	✓

- RAASP provides more tangible benefits in managing AQ, invoicing, customer reconciliation, and general data consistency and accuracy. However, the only monetary estimated benefit is associated with meter read reconciliation at **£2 million,** which is to be delivered as part of core.

- The introduction of the ability to update meter asset, supply point and address detail does not have a quantifiable benefit calculated as it is deemed too difficult to calculate accurately at present. This is due to the availability of sufficiently detailed data and the belief that the current levels of error may not be reflective of future levels. This is especially the case when considering a fully integrated Nexus environment and the SMART metering roll out;

- Benefits of RAASP are limited by the fact that Shippers can only request amendments for time period when the supply point was in their ownership. For periods outside of this, any retrospective amendments will be managed in a similar manner as to the current processes;

- Once the Nexus solution is introduced and there is a fully integrated system supporting the industry and the SMART metering programme is in full flight RAASP will become significantly more important. This dependency should be considered when deciding to de-couple the RAASP functionality; and

- RAASP primarily benefits participants with a portfolio consisting of a high volume of small supply points.

Key assumptions made in the benefits analysis

- The ability to retrospectively amend incorrect meter readings is being delivered as part of 'Core' functionality;

- Financial adjustments will be automatically processed with the new solution and, where they relate to the current shipper, charges will be processed for the next available invoice. Any financial adjustments for a previous shipper will need to be requested separately and will only be processed if an update has been carried out;

- The primary beneficiary of RAASP functionality is for shippers and suppliers that have a majority of their portfolio comprising of Small Supply Points; and

- The benefits relate to improvements in data quality and enhancements to business processes. They do not consider any benefit or dis-benefit of organisations adjusting their technical solution or preparing their business users should RAASP be decoupled from their Project Nexus implementation.

Further assessment of the impact of a manual RAASP workaround

Option 2 would see the business processes associated with RAASP implemented without the technical solution to fully support them. Manual workarounds would be required for both Xoserve and Shippers to support this.

Below we assess the workarounds that would be required if RAASP functionality is decoupled from 'Core' across effort/cost, technology and benefits. We have applied the below RAG ratings:

🔴 = Significant effort to implement or impact on benefit realisation

🟡 = Manageable additional effort, but full solution not implemented, nor the full benefits realised

🟢 = Minimal impact – solution integrity is retained and benefits can be realised.

RAASP workaround impact assessment

Party	Workaround process change description	Effort / risk impact	Max. duration	Identified risks
Xoserve	Work around by adjusting Contact Management System ('CMS', Xoserve system) to deal with large settlement data quality issues and to create required interfaces / manual processes to SAP. This requirement is not currently defined in the project This would involve increased workload to Xoserve during the period that resource is likely to be strained post 1st October go-live. There is no plan or commitment from Xoserve to provide such as workaround in the event that RAASP is decoupled.	🔴	12 months	Roll out of SMART metering may increase the volume of meter asset and address reconciliations required. As a result any manual workaround may become unrealistic.
Xoserve	Transportation invoices are manually adjusted at the 'back end' by Xoserve to correct known SSP errors above a certain threshold.	🔴	TBC	Roll out of SMART metering may increase the volume of meter asset and address reconciliations required. As a result any manual workaround may become unrealistic.
Shipper	In order to manage retrospective asset updates and supply meter point updates, shippers would need to continue with the current practice of raising a query through the Contact Management System ('CMS') to correct the asset information, consumption and costs.	🟡		Roll out of smart metering may increase the volume of meter asset and address reconciliations required. As a result any manual workaround may become unrealistic. Should the volume of queries become unmanageable there is a risk that Shippers will be required to pay transportation invoices without a prompt

	Although this will require a manual process, feedback to date indicates that this is a viable workaround that would deliver the intended benefits of RAASP. It would likely be focused on the errors that have a material impact. Similar to Xoserve, this would likely increase the work load faced by shippers during the period that resource may be strained following go-live.		reconciliation. This may affect the cash flow of certain organisations.
Shipper Xoserve	To overcome the challenges of decoupling RAASP form 'Core' Shippers and potentially Xoserve will need to consider alternative approaches to releasing the technical solution (technical release options): • Promote technical code to production in a dormant state; or • Remove technical code from the solution to be promoted to production environments.	TBC	Dormant code may be inadvertently activated if sufficient controls are not enforced. This may result in data being created in error and a high degree of manual correction Decoupling technical solution may destabilise 'Core' and enforce additional test phases.