



XRN5014: Facilitating HyDeploy2 Live Pilot

High Level System Solution
Impact Assessment

Change Overview

XRN5014 : Facilitating HyDeploy2 Live Pilot

Northern Gas Networks (NGN) and Cadent are working in partnership on the HyDeploy2 Live Pilot Project to blend up to 20 vol% (6% by energy) hydrogen into isolated areas on each of their networks. This Innovation Project is entering Phase 2 which will involve two pilots on small sections in the NGN network and then Cadent's network. As a Distribution Network, NGN (and Cadent) requires Xoserve to ensure all Supply Meter Points included within the Live Pilot ('Pilot') are readily identifiable and have processes and controls in place that protect these sites from being adversely impacted for the duration of the pilot.

NGN requires Xoserve to ensure:

- Gas Shippers and Suppliers have visibility of the MPRNs included within the Pilot
- Parties understand what processes are in place to protect inappropriate Aqs from being calculated
- Any Meter Readings received with a Reading Date within this period are handled in such a way that they do not adversely impact the energy profile of these sites during the Pilot, and in the future once the Pilot has concluded
- Consideration of the Switching processes, as those MPRNs remain eligible to competition and remain capable of transferring ownership
- All MPRNs are monitored throughout the Pilot to review performance and manage any unforeseen issues that may arise

Solution (Single, in two parts)

1

Manage settlement impacts to the Sites identified for HyDeploy2 Live Pilot with use of AQ Backstop

2

Introduction of a new MPRN 'Trial Indicator'

Part 1 - High Level Impact Assessment

1

PART 1: Manage settlement impacts to the MPRNs identified for HyDeploy2 Live Pilot with use of existing AQ Backstop Date

SAP ISU:

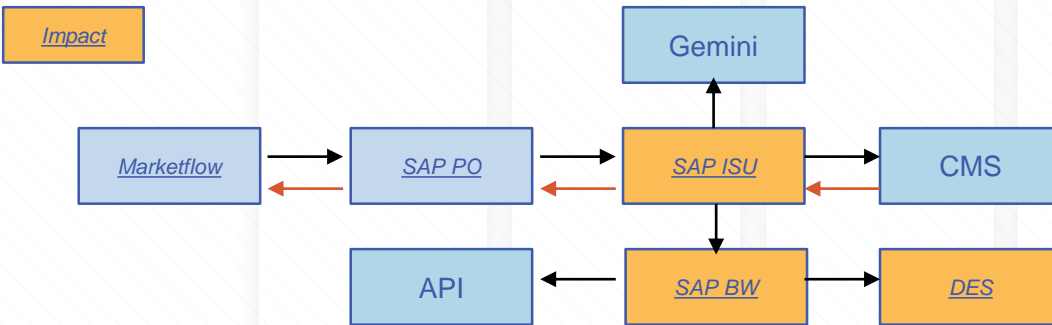
- New SAP Screen to set/amend this existing AQ Backstop Date in bulk by the authorised user (This can set/amend the start date only)
- The AQ Backstop Date will not allow the AQ calculation for period of 9 months, authorised user to extend the AQ Backstop during the Pilot period when appropriate
- Detailed analysis required during detailed design to ensure no impacts to existing processes due to re-use of existing flag
- Bill block to be put on the sites manually(through existing transaction) to avoid settlement impacts.

SAP BW:

- Changes to the existing reports to include the flag details along with Trial Indicator and dates(Appox.10 reports considered for modification)

DES: New Indicator to be extracted from BW and displayed on DES screen.

Impacted Systems



Assumptions

- No change to the file formats to send this flag separately
- No impact to NRL, NNL and portfolio files due to manual update of the existing AQ Backstop date
- Class 1-2 sites are out of scope for NGN Pilot
- Xoserve will extend MPRN AQ Backstop when necessary
- Market Trials/costs are not considered
- New reporting requirements achieved through DDP mechanism by Xoserve Data team
- Formula Year is a snapshot of the AQ value on the 1st Dec, so this update will still happen to HyDeploy2 Pilot MPRNs
- AQ Correction will be accepted for these MPRNs
- No impacts to switching processes
- No impacts on the read processing and reconciliation logic. Any incorrect energy calculated during the Pilot is expected to be corrected via Consumption Adjustment
- Any data cleansing costs are not considered
- Ongoing Pilot business support costs are not considered

Overall Impact

High

Release Type

Major

High Level Cost Estimate

confidential to customer

Part 1 - System Impact Assessment

	Reports (BW/BO)	Conversion	Enhancements
System Component:	SAP BW/BO	DES Screen	SAP ISU
Impacted Process Areas:	Existing Reports to Shippers/Suppliers	DES Portal	SPA
Complexity Level (per RICEFW item):	Medium	Medium	Medium
Change Description:	<ul style="list-style-type: none"> BW code changes to provide this data to DES proxies Approx. 10 reports to be modified. exact nos. to be identified during DD 	<ul style="list-style-type: none"> Modify existing proxy to display the new indicator Data permission matrix to be finalised in DD 	<ul style="list-style-type: none"> New SAP Screen to set/amend this indicator in bulk Manual extension of flag if required post 9 months Bill block the sites through existing transactions and monitor for any updates

	BW	DES	ISU
Test Data Prep Complexity:	Medium	Low	Medium
Unit and Sys Test Complexity:	Medium	Medium	High
Pen Test Impact:	N	N	N
Regression Testing Coverage:	Medium	Medium	High
Performance Test Impact:	Y	N	N
Market Trials:	N	N	N
UAT Complexity:	High	Medium	High

Part 1 - Process Impact Assessment

Process Area	Complexity	File Formats	Exceptions	External Screens	Batch Jobs	Performance Test?
SPA	H	N	N	Y	N	N
Metering (Reads)	n/a / H / M / L	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N
Reconciliation	n/a / H / M / L	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N
Invoicing – Capacity	n/a / H / M / L	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N
Invoicing – Commodity	n/a / H / M / L	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N
Invoicing – Amendment	n/a / H / M / L	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N
Invoicing – Other	n/a / H / M / L	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N
Rolling AQ	n/a / H / M / L	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N
Formula Year AQ	n/a / H / M / L	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N
RGMA	n/a / H / M / L	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N
DSC Service	n/a / H / M / L	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N
Other (Specify)	n/a / H / M / L	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N

Part 2 - High Level Impact Assessment

PART 2

Introduction of a new MPRN 'Trial Indicator'

SAP ISU:

- Trial Indicator : Configuration new installation fact in order to store the new indicator at MPRN level.
- New SAP Screen to set/remove/amend this indicator in bulk along with fields to set 'From' and 'To' Date by the authorised user
- Changes to code to ensure that if the this Trial Indicator is set, site is excluded from Monthly AQ calc and Winter Consumption calculation
- Changes to code to ensure these sites are excluded from billing for the duration of a trial unless a Consumption Adjustment is received

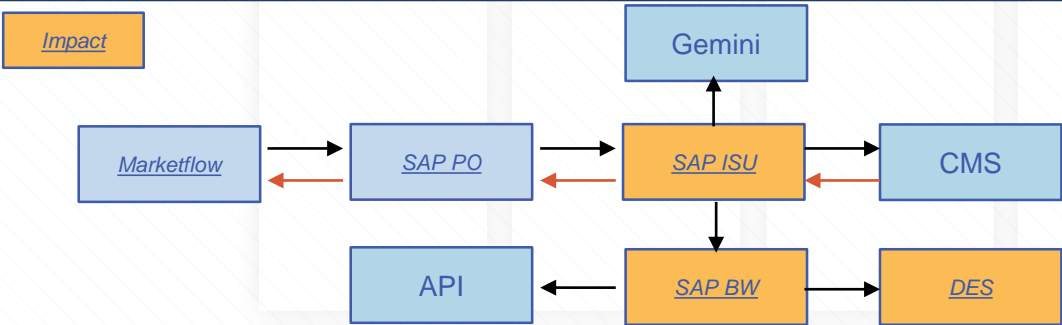
SAP BW :

- New Trial Indicator to be extracted to SAP BW along with start & end date.
- Changes to the existing reports to include the Trial Indicator details along with dates(Appox.10 reports considered for modification)

DES :

- New Trial Indicator to be extracted from BW and displayed on DES screen along with start & end date.

Impacted Systems



Assumptions

- No change to the file formats to include this new indicator
- Class 1-2 MPRNs are out of scope (for NGN Pilot)
- Market Trial costs are out-of-scope
- New reporting requirements to be achieved through Network DDP mechanism by Xoserve Data team
- Formula Year is a snapshot of the AQ value on the 1st Dec, so this update will still happen to HyDeploy2 MPRNs
- AQ correction will be accepted for these MPRNs
- Portal can be considered for new screen enhancement if DNs want to set/remove/amend Trial indicator directly via screen (Efforts not considered here)
- No impacts to switching processes
- No impacts on the read processing and reconciliation logic. Any incorrect energy calculated during the Pilot is expected to be corrected via Consumption Adjustment
- Data cleansing costs not considered

Overall Impact	Release Type	High Level Cost Estimate
High	Major	60,000 to 70,000 GBP

Part 2 - System Impact Assessment

	Reports (BW/BO)	Conversion	Enhancements
System Component:	SAP BW/BO	DES Screen	SAP ISU
Impacted Process Areas:	Existing Reports to Shippers/Suppliers	DES Portal	SPA, AQ Calc & Billing
Complexity Level (per RICEFW item):	Medium	Medium	High
Change Description:	<ul style="list-style-type: none"> Changes to existing DSO to extract new indicator and additional data items BW code changes to provide this data to DES proxies Approx. 10 reports to be modified. exact nos. to be identified during DD 	<ul style="list-style-type: none"> Modify existing proxy to display the new indicator Data permission matrix to be finalised in DD 	<ul style="list-style-type: none"> Introduction of New installation fact New SAP Screen to set/remove/amend this indicator in bulk Code changes in AQ process to ensure these sites are excluded from Monthly AQ calc and WC calc. Code changes to ensure these sites are excluded from billing for the duration of the trial unless the CA is received

	BW	DES	ISU
Test Data Prep Complexity:	Medium	Low	Medium
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Pen Test Impact:	N	N	N
Regression Testing Coverage:	Medium	Medium	High
Performance Test Impact:	Y	N	N
Market Trials:	N	N	N
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Reconciliation	n/a / H / M / L	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N
Invoicing – Capacity	n/a / H / M / L	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N
Invoicing – Commodity	n/a / H / M / L	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N
Invoicing – Amendment	M	N	N	N	N	N
Invoicing – Other	n/a / H / M / L	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N
Rolling AQ	M	N	N	N	N	N
Formula Year AQ	n/a / H / M / L	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N
RGMA	n/a / H / M / L	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N
DSC Service	n/a / H / M / L	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N
Other (Specify)	n/a / H / M / L	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N	n/a / Y / N