



XRN5091 - Deferral of creation of Class change reads at transfer of ownership

High Level System Solution
Impact Assessment

Change Overview

XRN5091 - Deferral of creation of Class change reads at transfer of ownership

This change seeks to retain the Opening Meter Reading window regardless of whether the Change of Shipper event coincides with a Class change so that the Shipper is able to provide an Opening Meter Reading up until D+10. The Opening Meter Read, where there has been a Class Change, has to be for D. A further requirement is that the CDSP does not issue the class change read to the shipper on D where the class change is on the transfer day.

Presently, following an accepted class change request the CDSP will issue an estimated read on the effective date of the class change. This is to support downstream processes in closing off the outgoing class period, allowing processes such as allocation and billing to run successfully. During a shipper's ownership this does not present an issue as the class change timing is within their control and the estimated read issued can be replaced using the appropriate read file. However, where the class change occurs on the same effective date as a Change of Shipper (CoS) the class change read is issued immediately and closes the opening read window. This prevents a valid opening read from the incoming shipper being accepted. It should be noted that a replacement opening read would be processed however a replacement opening read has to be agreed with the outgoing Shipper/Supplier.

The likelihood of this scenario occurring has increased following the change in the AUG factors in October 2019 and resultant increase in the number of class 3 sites as, where shippers gain meter points, generally speaking, as class 4 the transfer will result in an unseen class change and the issuing of the class change estimated read.

Solution Options

- 1 Change SAP ISU to remove requirement to generate read at class change event coinciding with Change of Shipper event
- 2 Generate and issue Class Change estimated read on D date but keep transfer read window open
- 3 Generate Class Change estimate read, set as inactive and do not issue estimated read to Shippers

Option 1 - High Level Impact Assessment

1 - Change SAP to remove requirement to generate read at class change event coincident with Change of Shipper

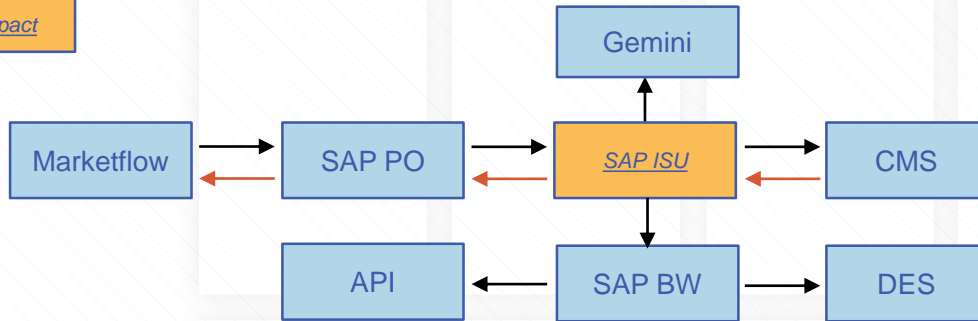
This solution is to make the Shipper transfer read estimation window consistent for both Shipper transfer with class change and Shipper transfer only scenarios i.e. Transfer read will be estimated on D+11 in absence of opening read received from Shippers post which MBR will be issued.

SAP ISU:

- Changes in the Confirmation workflow to add another step post device activity, class change and read estimation, to reverse the meter reads and open the meter read orders for receiving opening reads along with re-opening transfer read window until D+10.
- Ensure MBR file is not triggered for Class change estimate reads.
- Code changes to LDZ change read program for LDZ change from D-1 to D+10
- Code changes to UMR & UBR read upload program to ensure the Shipper transfer est. logic is inline for Shipper transfer with class change on D+10
- Extensive regression testing is required due to the nature of change to ensure non-opening read validations, RGMA file flows with/without reads, NDM reconciliation inline to existing Shipper transfer estimation logic.

Impacted Systems

Impact



Assumptions

- This estimate is based on very high-level analysis, based on the discussion for requirement and solution, the stated efforts may change.
- Class change received via the Supply Point Amendment (SPC) file is out of scope.
- Business rules for transfer read estimation window remain the same for Shipper transfer with or without class change.
- Data Cleansing not required for the Class change read estimates
- Any transition impacts of this change to be detailed during design phase.
- Market trials costs not considered as part of this estimate.

Overall Impact	Release Type	High Level Cost Estimate
Large	Major	£120K – £200K

Option 1 - System Impact Assessment

	Interface	Enhancements	Workflow	Data Migration
System Component:	N/A	SAP ISU	SAP ISU	N/A
Impacted Process Areas:	N/A	Read Estimation	Confirmation Workflow	N/A
Complexity Level (per RICEFW item):	N/A	High	High	N/A
Change Description:	N/A	<ul style="list-style-type: none"> Code changes to UMR read upload program Code changes to UBR read upload program LDZ change read upload program 	<ul style="list-style-type: none"> Code change to Confirmation workflow to reverse the estimated read and open the MRO again Step to delete entries from read staging tables Add a step to open a transfer read window for Class change scenarios inline to Shipper transfer 	N/A

	ISU	PO/Marketflow	BW	API
Test Data Prep Complexity:	High	Low	N/A	N/A
Unit and Sys Test Complexity:	High	Low	N/A	N/A
Pen Test Impact:	N/A	N/A	N/A	N/A
Regression Testing Coverage:	High	Low	N/A	N/A
Performance Test Impact:	Y	N	N/A	N/A
Market Trials:	N	N	N/A	N/A
UAT Complexity:	High	Low	N/A	N/A

Option 1 - Process Impact Assessment

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

Option 2 - High Level Impact Assessment

2 - Generate and issue Class Change estimated read on D date but keep transfer read window open

This solution is to generate and issue Class Change estimate read on Shipper transfer date but keep the transfer read window open. I.e. allow an O read to be processed and replace the class change estimate if the class change estimate is the read active for transfer date. MBR will be sent on Class Change effective date, inline with existing BAU process.

SAP ISU:

- Changes in the Confirmation workflow to add a step after read estimation to open transfer read window until D+10. In absence of read from Shipper, this step will be completed without read update.
- Code changes to UMR & UBR read upload programs to accept 'O' read for the Shipper transfer with class change scenario and update the existing MRO with read received from Shipper.
- Code change to issue URN to old and new post receipt of 'O' read for Shipper transfer with class change
- Logic to validate opening read so that it can only be received for confirmation effective date, else reject the request. Rejection code to be confirmed during detailed design phase. No changes existing rules for replacement reads processing scenarios.

Impacted Systems			Assumptions
<p>The diagram illustrates the system architecture and data flow. SAP ISU is the central component, highlighted in orange, and is impacted by this change. It has bidirectional data flow with SAP PO and CMS. SAP ISU also interacts with Gemini, SAP BW, and API. SAP PO is connected to Marketflow. SAP BW is connected to DES. Red arrows indicate bidirectional flow between SAP PO and SAP ISU, and between SAP ISU and CMS.</p>			<ul style="list-style-type: none"> • This estimate is based on very high-level analysis. • Class change received via the Supply Point Amendment (SPC) file is out of scope. • Business rules for transfer read estimation window remain the same for Shipper transfer with or without class change. • Any transition impacts of this change to be detailed during design phase. • Market trials costs not considered as part of this estimate.
Overall Impact	Release Type	High Level Cost Estimate	
Large	Major	£120K – £200K	

Option 2 - System Impact Assessment

	Interface	Enhancements	Workflow	Data Migration
System Component:	N/A	SAP ISU	SAP ISU	N/A
Impacted Process Areas:	N/A	Read Estimation	Confirmation Workflow	N/A
Complexity Level (per RICEFW item):	N/A	High	Medium	N/A
Change Description:	N/A	<ul style="list-style-type: none"> Code changes to UMR read upload program Code changes to UBR read upload program URN file trigger changes 	<ul style="list-style-type: none"> Confirmation workflow to add a step after read estimation to open transfer read window until D+10 Add a step to close the transfer window on D+11 in absence of O read from Shippers 	N/A

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

Option 2 - Process Impact Assessment

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

Option 3 - High Level Impact Assessment

3 - Generate Class Change estimate read, set as inactive and do not issue estimated read to Shippers

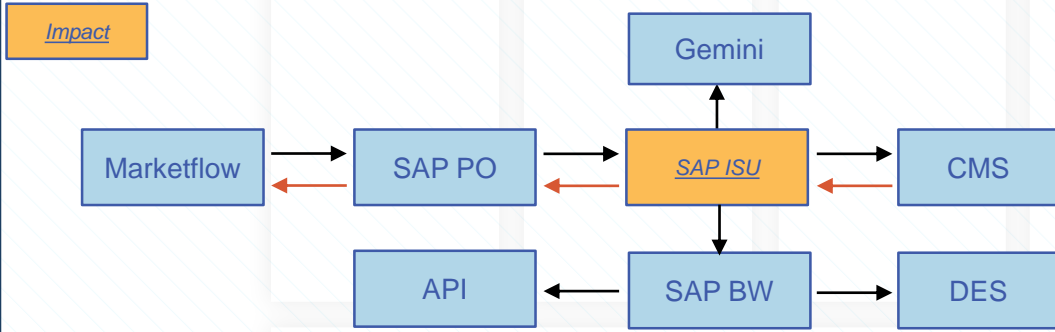
This solution is to generate Class Change estimate read on Shipper transfer date but mark it as 'Inactive', keep transfer read window open and MBR should not be triggered on D day. Estimated read marked as 'Inactive' on D will be marked back as Active on D+11 in absence of opening read received from Shippers via workflow and MBR will be issued on D+11.

SAP ISU:

- Changes in the Confirmation workflow to add step to mark class change estimate read as Inactive and then open the transfer read estimation window.
- In absence of opening read, the workflow will mark the read as 'Active' on D+11 day or re-estimate in case of subsequent non opening reads received..
- Addition of new custom profile status for Class 3 inactive reads and code changes to common method used for SPA, AQ, RGMA to check last actual for addition new status for class 3 sites. As this common method is used across multiple processes, testing efforts are high.
- Code changes to LDZ change read program for LDZ change from D-1 to D+10
- Code changes to UMR & UBR read upload program to ensure the Shipper transfer est. logic is inline for Shipper transfer with class change on D+10
- Extensive regression testing is required due to the nature of change to ensure non-opening read validations, RGMA file flows with/without reads, NDM reconciliation inline with existing Shipper transfer estimation logic.

Impacted Systems

Assumptions



- This estimate is based on very high-level analysis and may change.
- Class change received via the Supply Point Amendment (SPC) file is out of scope.
- Business rules for transfer read estimation window remain same for Shipper transfer with or without class change.
- Data Cleansing not required for the Class change read estimates.
- Any transition impacts of this change to be detailed during design phase.
- Market trials costs not considered as part of this estimate.

Overall Impact	Release Type	High Level Cost Estimate
X-Large	Major	£175K - £250K

Option 3 - System Impact Assessment

	Interface	Enhancements	Workflow	Data Migration
System Component:	N/A	SAP ISU	SAP ISU	N/A
Impacted Process Areas:	N/A	Read Estimation	Confirmation Workflow	N/A
Complexity Level (per RICEFW item):	N/A	High	High	N/A
Change Description:	N/A	<ul style="list-style-type: none"> • New Profile status for Class 3 reads, Inactive • Change to common method for Status check to include this status for Last read validations • LDZ change read upload program for Class change estimate on D+11 • Code change to UMR read upload program for Class change reads • Code changes to UBR read upload program 	<ul style="list-style-type: none"> • Code change to Confirmation workflow to mark the read as Inactive • Open the MRO again with Transfer read estimation window • Step to mark read as active on D+11, in absence of opening read from Shippers 	N/A

	ISU	PO/Marketflow	BW	API
Test Data Prep Complexity:	High	Low	N/A	N/A
Unit and Sys Test Complexity:	High	Low	N/A	N/A
Pen Test Impact:	N/A	N/A	N/A	N/A
Regression Testing Coverage:	High	Low	N/A	N/A
Performance Test Impact:	Y	N	N/A	N/A
Market Trials:	N	N	N/A	N/A
UAT Complexity:	High	Low	N/A	N/A

Option 3 - Process Impact Assessment

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