



**MOD0700 - Extraordinary DSG**  
**27<sup>th</sup> August 2019**

# AUGE Set new weighting factors for UIG

## UIG Factor Relative Weights Over Time

2017-18  2018-19  2019-20

EUC Band	Class 1	Class 2	Class 3	Class 4	EUC Band	Class 1	Class 2	Class 3	Class 4	EUC Band	Class 1	Class 2	Class 3	Class 4
1	0.18	52.39	52.43	111.94	1	0.17	43.06	46.41	94.64	1	0.2	4.07	24.23	163.68
2	0.18	51.6	51.5	115.73	2	0.17	43.06	46.41	109.77	2	0.2	4.07	15.33	110.79
3	0.18	53.16	53.11	114.52	3	0.17	43.06	44.06	107.52	3	0.2	4.07	10.2	17.92
4	0.18	54.94	55.05	54.25	4	0.17	43.06	43.6	43.76	4	0.2	3.89	7.71	12.51
5	0.18	54.82	55.13	59.18	5	0.17	43.06	46.06	43.2	5	0.2	3.5	6.75	7.87
6	0.18	50.69	51.14	54.23	6	0.17	44.54	46.06	42.65	6	0.2	2.86	6.2	4.31
7	0.18	40.41	40.89	39.5	7	0.17	32.41	46.06	42.33	7	0.2	1.96	4.93	2.14
8	0.18	21.87	22.19	18.53	8	0.17	4.38	33.4	42.24	8	0.2	0.78	1.82	1.7
9	0.18	0.18	0.18	0.18	9	0.17	0.17	0.17	0.17	9	0.2	0.2	0.2	0.2

**The 2019-20 step change appears to be the tipping point and triggered Shippers to plan significant migration into Class 3**

Extract from Class 3 Supply Point Migration Workshop:

<https://www.xoserve.com/news/class-3-supply-point-migration-workshop-actions-and-next-steps/>

# Impact of weighting factors

- A significant number of class 4 sites in EUC1 and EUC2 that could potentially benefit from moving to a class 3 product.
- Increase in class changes prior to the effective date of change.
- Class 3 sites are daily read and therefore could increase the number of daily reads.
- This could impact UK Link and it's ability to process the reads.

# MOD0700

- MOD0700 has been introduced to look at implementing changes to minimise impact of mass migration of EUC 1 Supply Points into Class 3 product, specifically:
  - Number of class changes processed
  - Number of reads being processed through to read validation

# Scope of MOD700 Requirements

Modifications required to existing PAR reports (Read Submission and Read Validation)

Reporting

Class Change  
(SPC File)

Read Submission

New "Batch" Process

Read  
Staging

Read  
Selection

Read Validation

Reconciliation  
Billing  
ASP/AML

D+10 Rule

Significant  
Change

Moderate  
Change

No  
Change

- Significant Increase in number of expected class changes processed through SPC file
- To monitor and limit the number of class changes

- Significant increase in read submissions
  - UNC changes to specify weekly (7 day) or less batch submissions of reads.

- To reduce the number of reads submitted that are processed through to read validation
- Specifically limiting 1 read per Shipper Batch to move through to read validation and down stream processing

# Class Change - SPC File

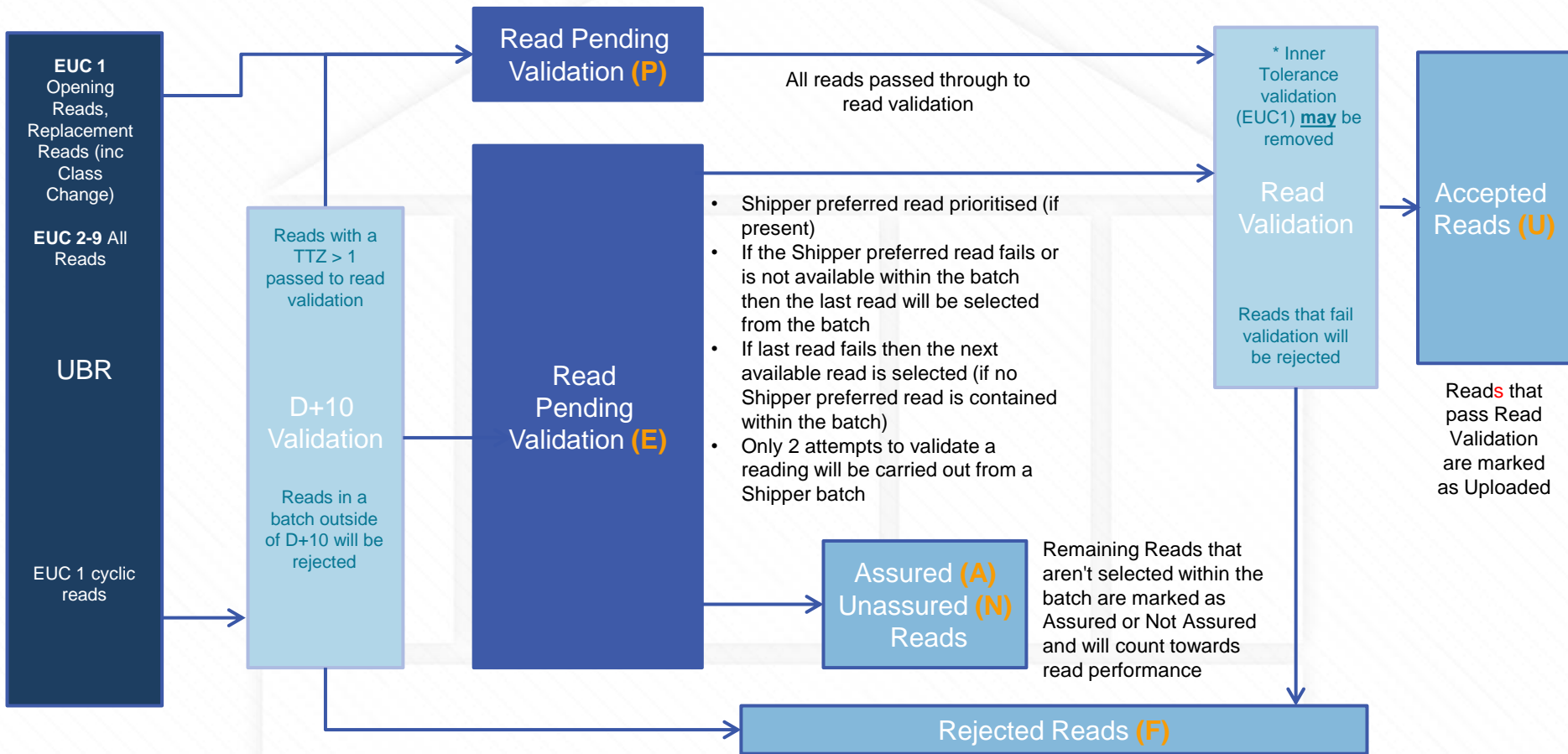
SPC File		
Record Type	RT_S34_MRF_AND_BATCH_FREQ_CHANGE_REQUEST	1000 Record Limit
	RT_S35_CANCEL_MRF_AND_BATCH_FREQ_CHANGE_REQ	1000 Record Limit
	RT_S36_SMP_CAPACITY_CHANGE_REQ	1000 Record Limit
	RT_S37_CANCEL_SMP_CAPACITY_CHG	1000 Record Limit
	<b>RT_C38_CLASS_CHANGE</b>	1000 Record Limit
	RT_C39_CLASS_CHANGE_CANCELLATION	1000 Record Limit
	RT_U80_NTS_OPT_RATE_CHANGE	1000 Record Limit
	RT_U81_NTS_OPT_RATE_CANCEL	1000 Record Limit

- The above provides a view of the SPC file structure
- Each record type has a limit of 1000 records, meaning the maximum number of records within a single SPC file is 8,000 if all allowable record were utilised (FIL000018)
- Vast majority of records contained within a BAU SPC file are C38's (Class Change)
- SPC file max processing capacity is currently set at 26,000 within the UK Link IS Service Definition document

# How to Determine SPC Limit?

- The method for defining the limit is not yet confirmed but will need to take into consideration the following:
  - Processing of SPC files for non class change activities (so not effected by MOD700)
  - Max number of SPC files that can be processed through AMT and SAP ISU
  - Customer forecasts for class changes currently being provided to Customer Advocates, 2 way communication regarding peak system times will also take place
- Please also note:
  - Files that pass AMT validation but result in breach of allocation shall be rejected back to the submitting Shipper, however the mechanism for this has not yet been agreed (Email or UK Link Communication (IX))
  - Likely that SPC max submissions within the UK Link IS Service Definition document will be increased, however this has not yet been agreed

# Read Submission to Read Validation Overview





# Scenario 1a: First Read Accepted (No Shipper Preferred Read)

Read  
Submission

Read Staging  
Area



Shipper  
Submits  
Batch of  
Reads

## Step 1: D+10 check

Reads older than D+10  
Rejected and set to "F", other  
reads are marked as "E"



## Step 2: Read Selection

No Shipper preferred read present so latest  
read is selected for Read Validation step



## Step 3: Read Validation

Selected read passes Read Validation and  
set to "U" for further processing into UKL, all  
other reads within the batch set to "A"



F = Rejected  
E = Pending for Upload  
U = Uploaded/Accepted  
A = Assured  
N = Not assured

# Scenario 1b: Shipper Preferred Read Accepted

Read  
Submission

Read Staging  
Area



UBR

Shipper  
Submits  
Batch of  
Reads

## Step 1: D+10 check

Reads older than D+10  
Rejected and set to "F", other  
reads are marked as "E"



## Step 2: Read Selection

Shipper preferred read is selected for Read  
Validation step



## Step 3: Read Validation

Selected read passes Read Validation and  
set to "U" for further processing into UKL, all  
other reads within the batch set to "A"



F = Rejected

E = Pending for Upload

U = Uploaded/Accepted

A = Assured

N = Not assured

# Scenario 2a: First Read Failed, Second Read Accepted

Read  
Submission

Read Staging  
Area



Shipper  
Submits  
Batch of  
Reads

## Step 1: D+10 check

Reads older than D+10  
Rejected and set to "F", other  
reads are marked as "E"



## Step 2: Read Selection

No Shipper preferred read present so latest  
read is selected for Read Validation step



## Step 3: Read Validation

Selected read fails Read Validation "F", next read  
passes and is set to "U" for further processing into  
UKL, all other reads within the batch set to "A"



F = Rejected  
E = Pending for Upload  
U = Uploaded/Accepted  
A = Assured  
N = Not assured

# Scenario 2b: First Read Failed (Shipper Preferred), Second Read Accepted

Read  
Submission

Read Staging  
Area



Shipper  
Submits  
Batch of  
Reads

## Step 1: D+10 check

Reads older than D+10  
Rejected and set to "F", other  
reads are marked as "E"



## Step 2: Read Selection

Shipper preferred read is selected for Read  
Validation step



## Step 3: Read Validation

Selected read fails Read Validation "F", next read  
passes and is set to "U" for further processing into  
UKL, all other reads within the batch set to "A"



F = Rejected  
E = Pending for Upload  
U = Uploaded/Accepted  
A = Assured  
N = Not assured

# Scenario 3: Both Selected Reads Fail

Read  
Submission

Read Staging  
Area



Shipper  
Submits  
Batch of  
Reads

## Step 1: D+10 check

Reads older than D+10  
Rejected and set to "F", other  
reads are marked as "E"



## Step 2: Read Selection

Shipper preferred read or latest read (where  
no preferred read is present/specified) is  
selected for Read Validation step



## Step 3: Read Validation

Selected reads fail Read Validation and are set to  
"F", no further reads are considered for processing  
into UKL, all other reads within the batch set to "N"



F = Rejected  
E = Pending for Upload  
U = Uploaded/Accepted  
A = Assured  
N = Not assured

# Scenario 4: Both Selected Reads Fail, Batch Re-Submitted, Read Accepted

Read  
Submission

Read Staging  
Area



Shipper Re-  
Submits  
Batch of  
Reads (D+3)

## Step 1: D+10 check

Reads older than D+10  
Rejected and set to "F", other  
reads are marked as "E"



## Step 2: Read Selection

Shipper preferred read or latest read (where  
no preferred read is present/specified) is  
selected for Read Validation step



## Step 3: Read Validation

Selected reads fail Read Validation and are set to  
"F", no further reads are considered for processing  
into UKL, all other reads within the batch set to "N"



F = Rejected  
E = Pending for Upload  
U = Uploaded/Accepted  
A = Assured  
N = Not assured

# Class Change Scenario

## Class 4

## Shipper Class Change

## Class 3

- Shipper submits a Class 4 reading via UMR File

- CDSP estimates a read for the date of Class Change Effective Date (as per BAU)
- Shipper submits 7 day batch and are processed within rules of MOD700 (estimate stands, read on the class change effective date set to assured)
- Shipper submits Replacement Read to replace the Opening Reading
- Replacement Read processed outside of MOD700 as priority



R = Replacement Read  
F = Rejected  
E = Pending for Upload  
U = Uploaded/Accepted  
A = Assured  
N = Not assured

# Shipper Transfer Scenario

Shipper Transfer  
Effective Date

- Outgoing Shipper submits 7 day batch

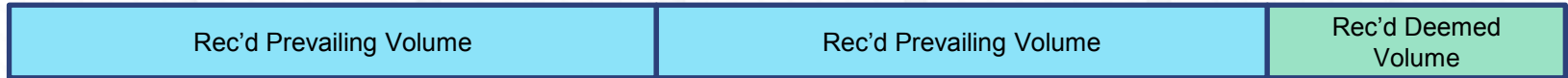
- Incoming Shipper submits 7 day batch that includes a Read marked as Opening Reading
- Incoming Shipper submits 7 day batch that does not include a Read marked as Opening Reading and uploaded
- Additional read within the Shipper batch accepted and uploaded
- Read within the Shipper batch accepted and uploaded (Shipper Preferred Read or last read MOD700) and is used as Transfer Read
- Uploaded read used to estimate the Shipper Transfer Effective Date read)



R = Replacement Read  
F = Rejected  
E = Pending for Upload  
U = Uploaded/Accepted  
A = Assured  
N = Not assured



# Check to Check Scenario



Check to Check Reconciliation will be based on the prevailing volume where a Cyclic Read has been received, however where the read which matches the Check read has been marked as Assured or None Assured then this period will be based on Allocated Volumes. This follows normal processing when a Cyclic Read has not been provided for the same date as the Check Read (Check Reads can be submitted up to M+10)

Once a Check Read has been processed, the Deemed profile is set and cannot be amended and this may not follow actual offtake for the days covered

U = Uploaded/Accepted  
A = Assured  
CR = Check Read



**MOD0700 - DSG**  
**2<sup>nd</sup> September 2019**

# Class Change - SPC File

SPC File		
Record Type	RT_S34_MRF_AND_BATCH_FREQ_CHANGE_REQUEST	1000 Record Limit
	RT_S35_CANCEL_MRF_AND_BATCH_FREQ_CHANGE_REQ	1000 Record Limit
	RT_S36_SMP_CAPACITY_CHANGE_REQ	1000 Record Limit
	RT_S37_CANCEL_SMP_CAPACITY_CHG	1000 Record Limit
	<b>RT_C38_CLASS_CHANGE</b>	1000 Record Limit
	RT_C39_CLASS_CHANGE_CANCELLATION	1000 Record Limit
	RT_U80_NTS_OPT_RATE_CHANGE	1000 Record Limit
	RT_U81_NTS_OPT_RATE_CANCEL	1000 Record Limit

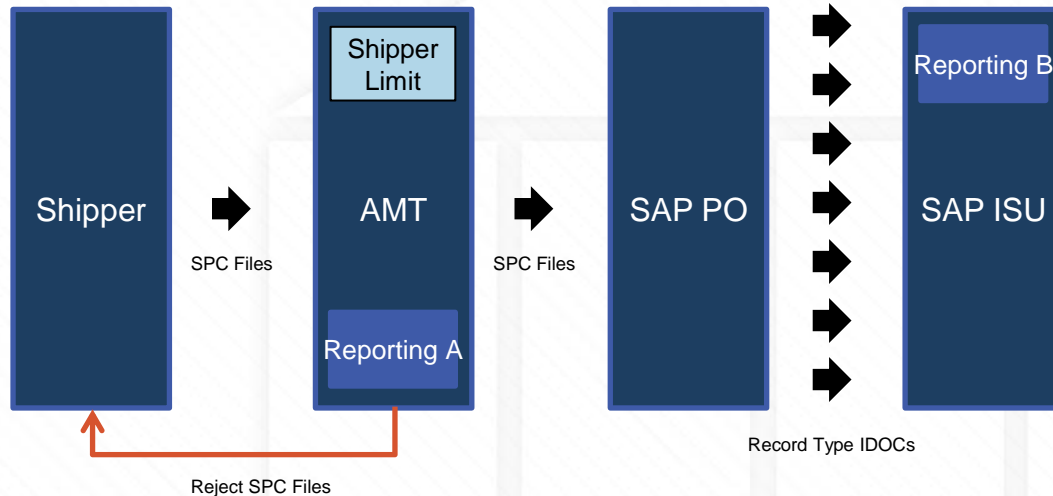
- The above provides a view of the SPC file structure
- Each record type has a limit of 1000 records, meaning the maximum number of records within a single SPC file is 8,000 if all allowable record were utilised (FIL000018)
- Vast majority of records contained within a BAU SPC file are C38's (Class Change)
- SPC file max processing capacity is currently set at 26,000 within the UK Link IS Service Definition document

# Options Considered

#	Options	Comments
1	Set a shipper limit on SPC files (e.g. 5 files into AMT per shipper, per day)	<ul style="list-style-type: none"><li>• Provides control over the number of SPC files being submitted.</li><li>• Relatively simple build and can be delivered within project timescales.</li><li>• Minimal impact to AMT performance.</li></ul>
2	Set a shipper limit on SPC – Class Change Records (e.g. 1,000 records into AMT per shipper, per day)	<ul style="list-style-type: none"><li>• Provides control over the number of SPC records being submitted.</li><li>• Complex build that could not be achieved within project timescales</li><li>• Greater cost and performance requirements for AMT for an interim solution.</li></ul>
3	Leave as-is and monitor through customer engagement.	<ul style="list-style-type: none"><li>• Option relies entirely on forecasts being provided.</li><li>• CDSP has no current technical capability to reject files and would require manual intervention with email rejections.</li></ul>

The approach is to proceed with option 1.

# Option 1: Shipper Limit SPC Files



- Modification in AMT to set a limit per shipper for the number of SPC files.
- If a file is sent above the SPC limit it may be rejected using the proposed file rejection code FIL000018.
- As an exception files may be rejected via email.
- Xoserve will have the capability to report on number of files sent and records received in AMT & SAP ISU.

# Rejection Codes

ID	Rejection Description
FIL00010	File contains no records
FIL00011	Record contains incorrectly formatted data
FIL00012	Records are not in the expected order
FIL00013	Organisation Id on the Header cannot be found
FIL00014	Organisation Id on the Header does not match the Sender's Id in the File Name
FIL00015	File Type on the Header is not the same as that in the File Name
FIL00016	Generation Number on the Header is not the same as that in File Name
FIL00017	A file with this Generation Number has already been received and successfully processed
FIL00018	A physical count of the Detail Records in the File does not match that held in the count field on the Trailer
FIL00019	Invalid Record Type found
FIL00023	Generation number in filename is not numeric
FIL00024	Invalid sub-record transaction type for high-level record transaction type
FIL00020	No Valid Message - File contains incorrectly formatted records
FIL00124	File rejected and will not be processed