

# TRANSLATION GUIDE

ISO 20022/Bacs

VERSION 1.1 | 29 Nov 2017

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# 1 DOCUMENT INFORMATION

## 1.1 VERSION HISTORY

VERSION	DATE	DESCRIPTION
V1.0	04 Jan 2017	Version for publication. The main changes are the rewording of certain sections in chapters 1 & 2.
V1.1	29 Nov 2017	[1] Includes recalls and reversals. [2] Attribute translation guide sections have been removed as they are superseded by the accompanying Translation Specification.

## 1.2 DOCUMENT REVIEWERS

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Action: P – Producer; C – Contributor; R – Reviewer; A - Authoriser; I - Information only

## 1.3 COPYRIGHT STATEMENT

All rights reserved.

The copyright in this document is owned by Bacs Payment Schemes Limited (Bacs). All material, concepts and ideas detailed in this document are confidential to Bacs. This document shall not be used, disclosed or copied in whole or in part for any purposes unless specifically approved by Bacs.

## 2 INTRODUCTION

### 2.1 BACKGROUND

Bacs' role is to own, develop, enhance and preserve the integrity of automated payments and payment related services. It promotes access, efficiency, innovation and best practice in payments and payment related services in the interests of all users of automated payments services. Bacs has been maintaining the integrity of payment related services since 1968, and is committed to ensuring that access to its products meets tomorrow's demands.

Bacs payments messages use a proprietary format known as Standard 18 which comprises both a record structure and a field structure within those records. Defined length fields predetermine the information that can be provided within the payment. This message format supports Bacs' highly efficient bulk overnight payment processing. Other historic Bacs product differentiators include:

- Direct access to the scheme for payment originators (as opposed to via a payment service provider [PSP])
- A processing model that assumes a successful outcome and provides messaging services (aka A-Services) for exception processing e.g. to notify originators of returns (ARUCS, ARUDD) and changed account details (AWACS, ADDACS)
- The ability to recall both individual payments and payment groups.
- The creation of one debit and multiple credits by Bacs DC, and vice versa for DD, which facilitates reconciliation (of returned/rejected items) by exception.

ISO 20022 is the international messaging standard of choice in the payments industry and is being used increasingly in the UK. ISO 20022 is more than simply a message format. It is a business process supported by the exchange of standardised messages which are derived from a data dictionary of standard data components. The Payment Strategy Forum (PSF) has the desire for the whole UK payments eco-system to adopt ISO 20022 end to end to align with global standards and provide the basis for modernisation.

Bacs' stated aim is to adopt ISO 20022 standards where it is appropriate, and a suitable business case can be made.

Recognising these factors, Bacs sees value in providing guidance for organisations that wish to access Bacs services using an ISO 20022 message interface. This document achieves that by providing the framework for translation between Standard 18 and ISO 20022 message formats. The translation described within this document has been jointly defined by Bacs, VocaLink and Payments UK Standards. This document assumes a familiarity with Bacs processes and message flows.

### 2.2 DOCUMENT PURPOSE

The purpose of this document is to describe how Bacs services in their current form can be used by organisations (payment originators, aggregators and PSPs) that use ISO 20022 for their payments processes. To achieve this purpose a translation is required. This document acts as the guide to that translation and should be considered as best practice for organisations implementing their own

translations. An accompanying ISO 20022/Bacs translation pack [Ref 06] that consists of both message and attribute level mappings, and accompanying schemas, is provided on the Bacs web site.

In addition to this translation guide and the accompanying translation pack, usage and/or implementation of the translation requires reference to the Bacs documentation set.

Bacs recognises that some organisations, for example those with international customers, will already have developed their own translations in this space, and welcomes dialogue with interested parties to harmonise best practice. Please contact us at: [access@bacs.co.uk](mailto:access@bacs.co.uk)

## 2.3 DOCUMENT STRUCTURE

The remainder of this document is structured as follows:

- Chapter 3 provides an overview of the Bacs payments process
- Chapter 4 describes translation considerations
- Chapter 5 outlines Standard 18 file structures and data
- Chapters 6 to 8 address the translation of payments process messages
- Chapter 9 addresses the translation of AUDDIS process messages
- Chapter 10 addresses the translation of AWACS and ADDACS process messages
- Appendix A is a catalogue of the Bacs message flows
- Appendix B highlights how the Bacs transaction codes map to the message flows described within this document
- Appendix C is both a glossary terms and also deciphers all acronyms used within this document.

## 2.4 SCOPE

### 2.4.1 IN SCOPE

A principle behind the translation described in this document is that it can be implemented with no changes to the business as usual (BAU) Bacs service.

All of the in scope Bacs messages are listed in Appendix A.

To achieve a pragmatic, fit for purpose translation without over-complicating the solution, the following are in scope:

- The input into Bacs via a translation from ISO 20022 of:
  - Bacs Direct Credits with a transaction code of 99 (Direct Credit).
  - Direct Debits with a transaction code of 17 (Direct Debit – regular collection).
- Single file submissions (sfs)
- Input file submissions with a single:
  - Day section (i.e. single processing day [spd], which may be future dated), and
  - Account section.

## 2.4.2 OUT OF SCOPE

Whilst this translation guide has been provided and published by Bacs, Bacs has no plan or business case to implement its own version of this translation (or elements of it) for general usage.

To avoid overburdening the translation with avoidable legacy constructs, the following are designed to be out of scope:

- Optional ISO 20022 attributes that are not supported by Bacs
- The input into Bacs via a translation from ISO 20022 of:
  - Bacs Direct Credits with transaction codes other than 99 (Direct Credit).
  - Direct Debits with transaction codes other than 17 (Direct Debit – regular collection).
  - Intervention instructions (e.g. extraction, re-input, amend date and reversal), which will continue to be supported by the Payment Exception Management (PEM) service (see [Ref 05]).
- Multifile submissions (mfs) i.e. A submission of payments for more than one service user will be achieved by separate single file submissions (sfs).
- Input file submissions with more than one:
  - Day section (i.e. Multiprocessing day [mpd] is out of scope)
  - Account section
- The DDIC (Direct Debit Indemnity Claim) process, because it is a predominantly manual process that is not considered to justify message translation
- The input and output of credit card items (E1 and E2) and the translation of output Standard 29 files.
- The input and output of Automated Teller Records (07). These transactions are no longer processed by Bacs.
- Unused/legacy payment types e.g. credit card debits and refunds, and ATM collections.

## 2.5 REFERENCED DOCUMENTS

REF	TITLE	PRODUCED BY	VERSION	DATE
01	Bacs Service Functional Specification	VocaLink	1.20	03 Mar 2016
02	Bacs Electronic Funds Transfer, File Structures (PN5011)	VocaLink	3.10	03 Oct 2016
03	Bacs Messaging File Structures (PN7871)	VocaLink	1.80	03 Oct 2016
04	Bacs Service XML Specification and Advices from Messaging Engine and Payment Engine (PN6336)	VocaLink	3.0	07 May 2015
05	Bacs Members Guide Volume 4 - Processing Management	VocaLink	2.90	05 Jul 2017
06	ISO 20022/Bacs Translation Specification & schemas	Bacs	Latest	

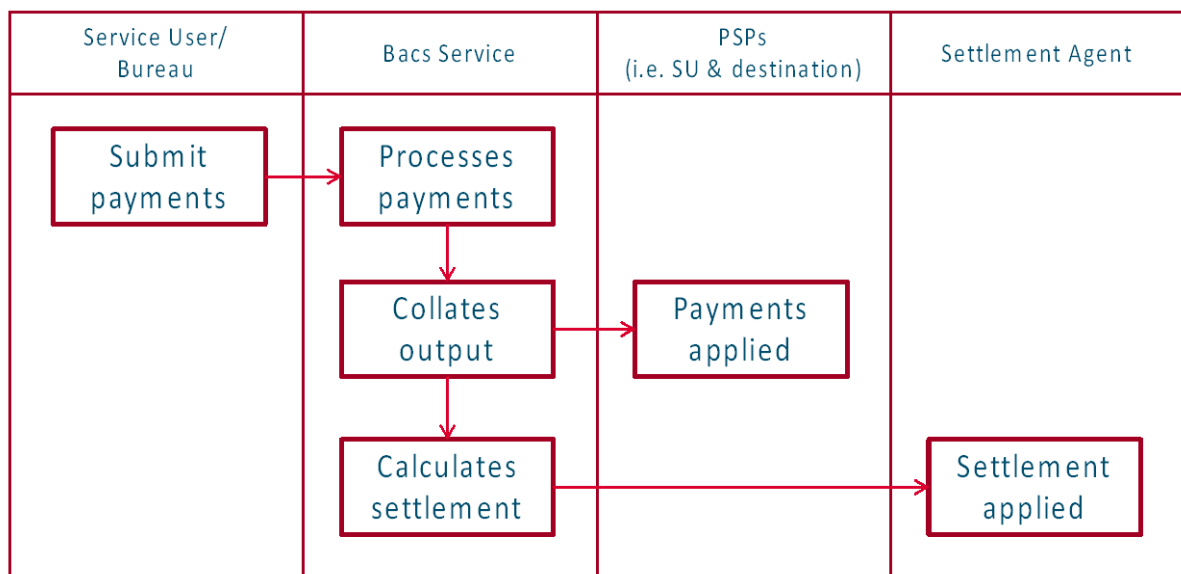
### 3 BACS OVERVIEW

#### 3.1 INTRODUCTION

This chapter provides an overview of Bacs payment process messaging. Bacs non-payment message flows are covered later in this document.

#### 3.2 HIGH LEVEL PAYMENTS PROCESS

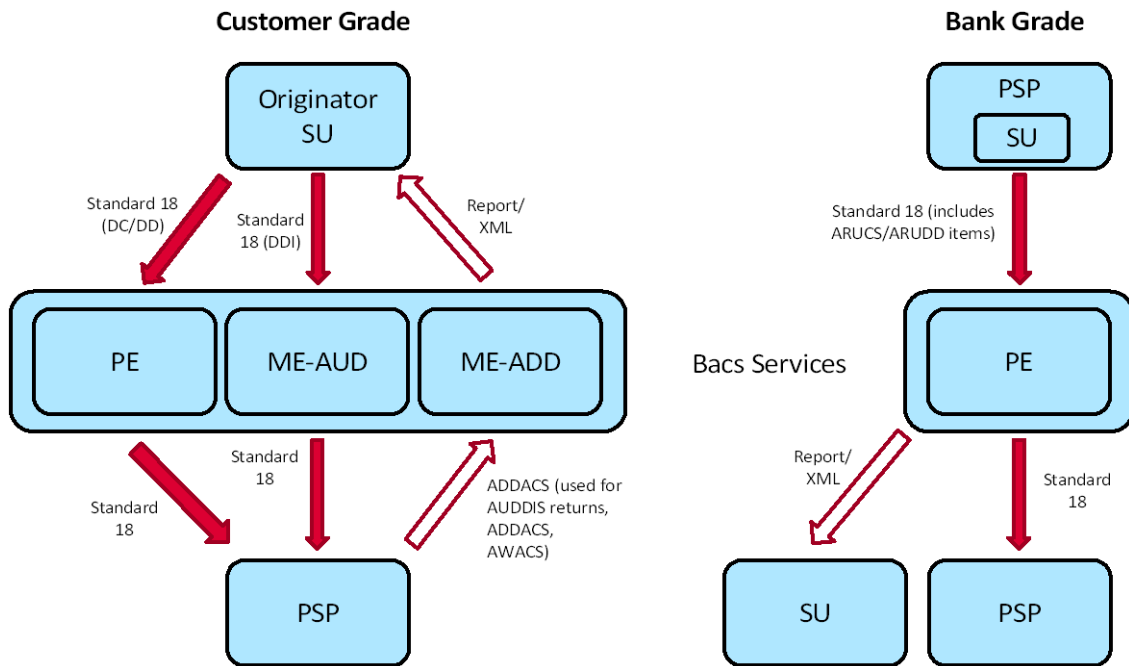
A high level view of the clearing and settlement of payments in the Bacs service is shown below.



#### 3.3 BACS PROCESS MESSAGES

In addition to Standard 18 messages, certain Bacs processes rely on Bacs reports which are also available in XML format. There is also an ADDACS format. The diagram below shows the message flow formats of customer and bank grade transactions.





The table below lists the Bacs message flows and indicates the message format. The numbering used in this table is used throughout this document to reference these message flows.

TRANSLATION GUIDE

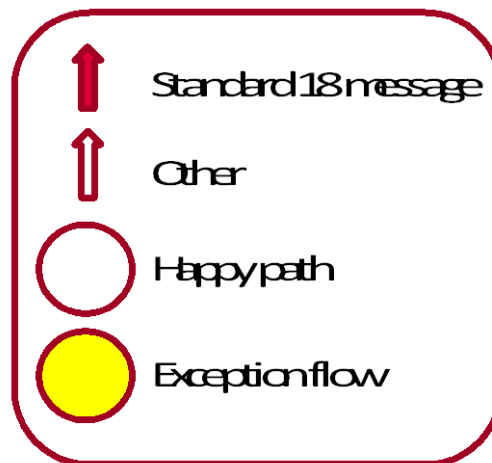
ISO 20022/Bacs

FLOW	NO	BACS MESSAGE	DIRECTION	MSG FORMAT	FROM	TO	
Payment	1a	Direct credits	ISO>Bacs	Standard 18	SU	Bacs	
Payment	1b	Direct debits	ISO>Bacs	Standard 18	SU	Bacs	
Payment	2	Customer grade Input report	Bacs>ISO	Report/XML	Bacs	SU	
Payment	3a	Cleared credits	Bacs>ISO	Standard 18	Bacs	Dest PSP	
Payment	3b	Cleared debits	Bacs>ISO	Standard 18	Bacs	Dest PSP	
Payment	3c	Credit contras	Bacs>ISO	Standard 18	Bacs	SU PSP	
Payment	3d	Debit contras	Bacs>ISO	Standard 18	Bacs	SU PSP	
Payment	3e	Cleared credit reversals	Bacs>ISO	Standard 18	Bacs	SU PSP	
Payment	3f	Cleared debit reversals	Bacs>ISO	Standard 18	Bacs	SU PSP	
Payment	4a	Bank grade credit returns (ARUCS items)	ISO>Bacs	Standard 18	Dest PSP	Bacs	
Payment	4b	Bank grade debit returns (ARUDD items)	ISO>Bacs	Standard 18	Dest PSP	Bacs	
Payment	4c	Credit recalls	ISO>Bacs	Standard 18	Dest PSP	Bacs	
Payment	5a	Bank grade Input report	Bacs>ISO	Report/XML	Bacs	Dest PSP	
Payment	5b	Credit return contras	Bacs>ISO	Standard 18	Bacs	Dest PSP	
Payment	5c	Debit return contras	Bacs>ISO	Standard 18	Bacs	Dest PSP	
Payment	6a	Cleared credit returns	Bacs>ISO	Standard 18	Bacs	SU PSP	
Payment	6b	Unapplied credit notifications (ARUCS report)	Bacs>ISO	Report/XML	Bacs	SU	
Payment	6c	Cleared debit returns	Bacs>ISO	Standard 18	Bacs	SU PSP	
Payment	6d	Unapplied debit notifications (ARUDD report)	Bacs>ISO	Report/XML	Bacs	SU	
Payment	6e	Cleared credit recalls	Bacs>ISO	Standard 18	Bacs	SU PSP	
AWACS	1a	(see Payment 1a)					
AWACS	3a	(see Payment 3a)					
AWACS	4d	AWACS	ISO>Bacs	AWACS over ADDACS	Dest PSP	Bacs	
AWACS	6f	AWACS	Bacs>ISO	Report/XML	Bacs	SU	
ADDACS	1b	(see Payment 1b)					
ADDACS	3b	(see Payment 3b)					
ADDACS	4e	DDI cancellations	ISO>Bacs	ADDACS	Dest PSP	Bacs	
ADDACS	4f	DDI amendments	ISO>Bacs	ADDACS	Dest PSP	Bacs	
ADDACS	6g	DDI cancellations	Bacs>ISO	Report/XML	Bacs	SU	
ADDACS	6h	DDI amendments	Bacs>ISO	Report/XML	Bacs	SU	

The contents of this table are repeated in Appendix A with the addition of:

- Mapping to ISO 20022 messages
- References to Bacs documentation.

Within the diagrams in this document the following convention has been adopted:

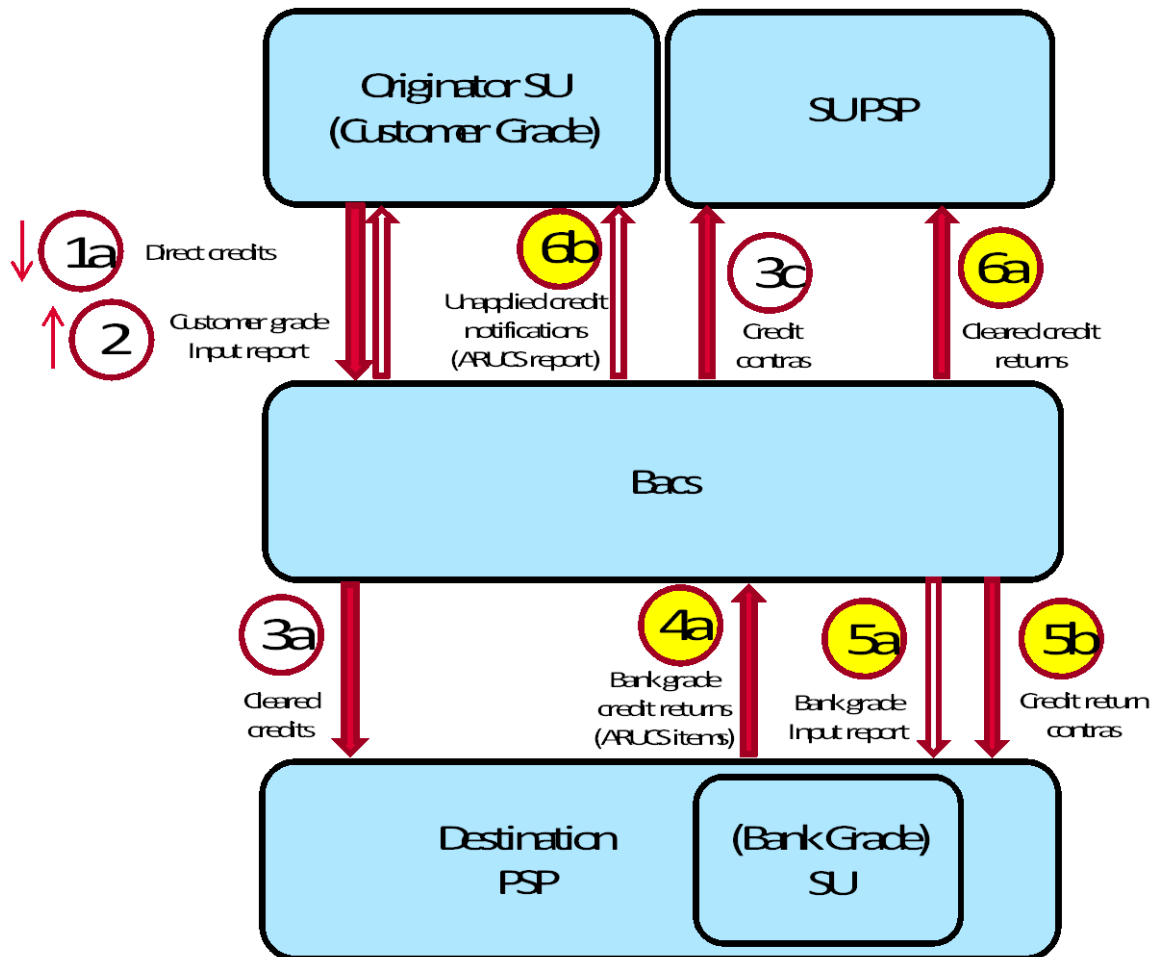


The two diagrams that follow depict the message flows between payment originators, Bacs, and PSPs for the clearing of Bacs Direct Credit (DC) and Direct Debit (DD) payments, respectively.

In the diagrams below, Destination PSP refers to the destination of the cleared output message (as opposed to the flow of funds, for example, in a DD collection scenario). For credits, the destination PSP is the PSP that holds the payee's bank account. For direct debits, the destination PSP is the PSP that holds the payer's bank account.

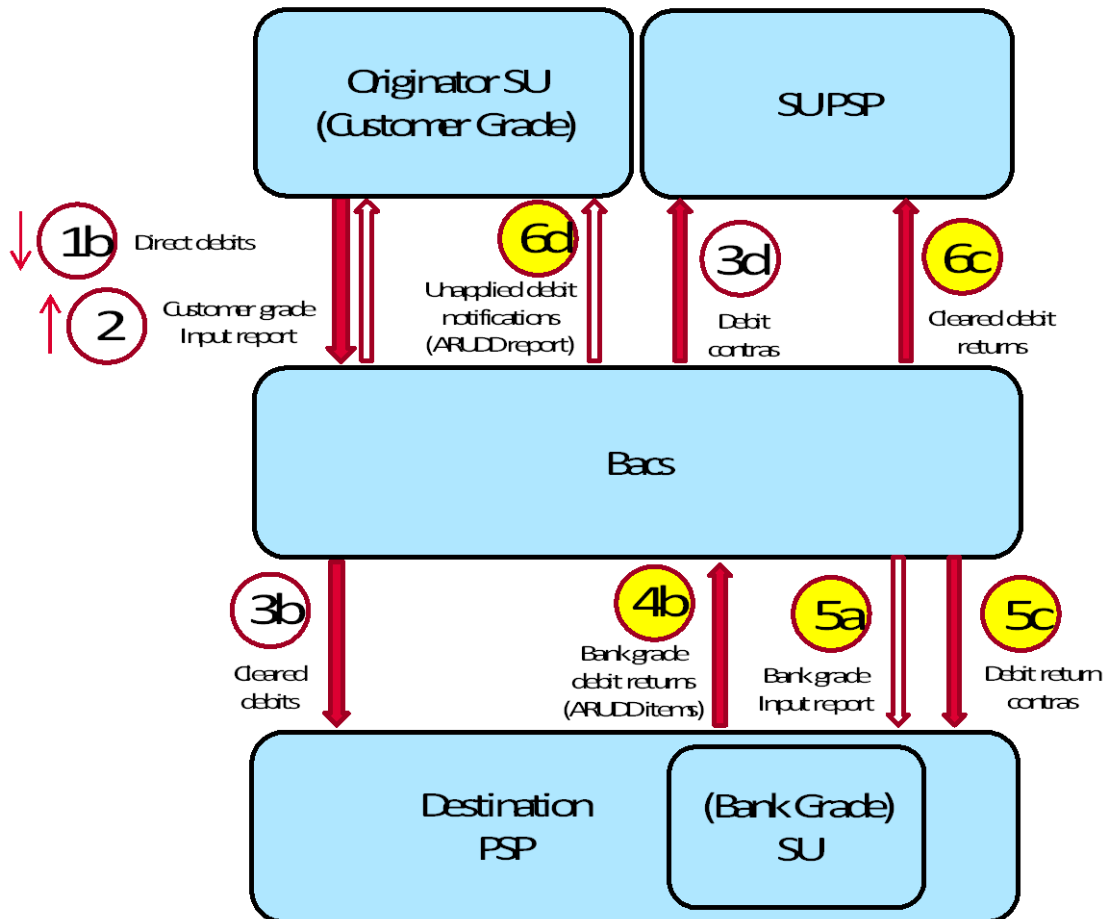
### 3.4 BACS DC MESSAGE FLOW

The diagram below highlights the message flows of a Bacs Direct Credit scenario. These flows are explored in more detail in later chapters within this document.



### 3.5 DD MESSAGE FLOW

The diagram below highlights the message flows of a Direct Debit collection scenario. These flows are explored in more detail in later chapters within this document.



### 3.6 ADDITIONAL INFORMATION

The Bacs service processes transactions in sterling. The currency in all value messages will therefore be "GBP".

## 4 TRANSLATION CONSIDERATIONS

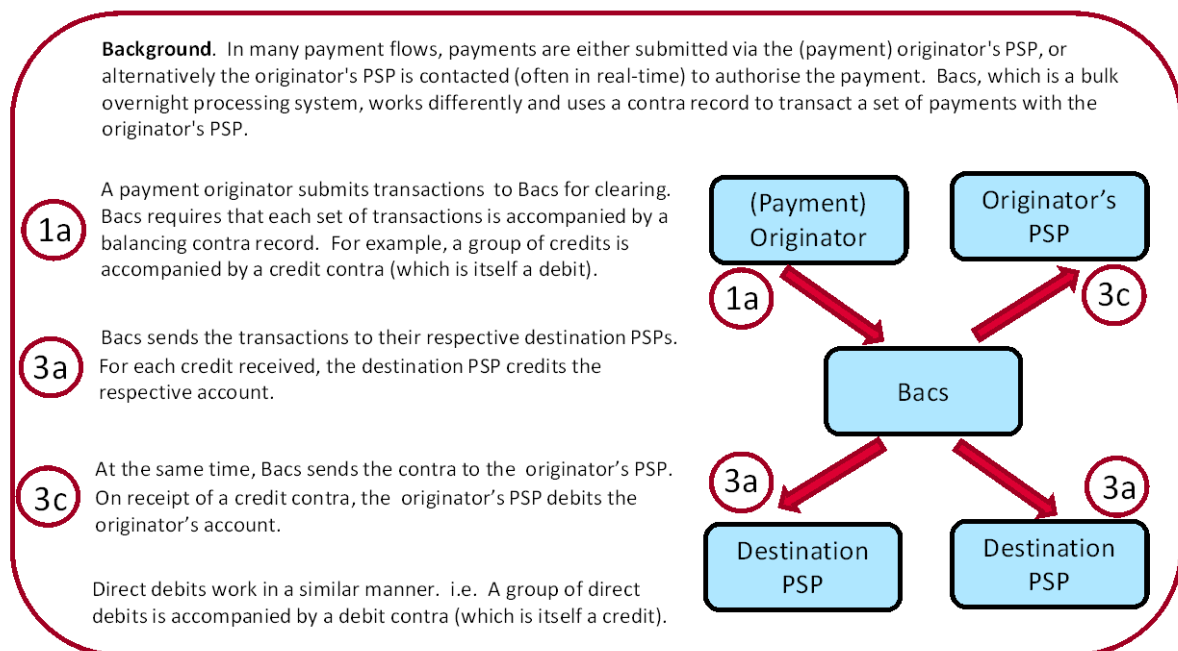
### 4.1 INTRODUCTION

Key translation considerations to be considered are as follows:

- Contrás
- End to end item identification
- Further optional ISO 20022 message content
- Mandatory fields
- Bacs character set.

### 4.2 CONTRAS

Bacs is probably unique in its use of contrás. A contra transaction is essentially a transaction summing a set of direct debits (a debit contra) or a set of direct credits (a credit contra), and is applied to the originator's account. It is a consequence of the Bacs Direct Corporate Access (DCA) model, and was designed at a time before networks were available for general purpose data exchange. The originator of the batch of payments provides both "sides" of the payment process for central processing.



This translation guide assumes that contrás will be generated in the translation layer.

A contra looks similar to an ordinary payment, but its purpose and processing rules differ (for example, a contra cannot be declined or returned). A contra has service user's reference (field 10) set to "CONTRA" on input and "BACS" on output. Credit contrás are debits that with a transaction

code (field 04) of “17”, mapped to pacs.003. Debit contras are credits with a transaction code of “99”, mapped to pacs.008.

The originating and destination account details of contras are always the same. For customer grade contras the (originating and destination) account details are those of the originator. For bank grade contras the (originating and destination) account details are those of the PSP’s suspense account.

In cases where the contra amount is too great for the amount field (Field 8, see Input fields in the next chapter), multiple contras are required.

### **4.3 END TO END ITEM IDENTIFICATION**

ISO 20022 items have end to end item identifiers. The intended usage of the end-to-end identification is for reconciliation or to link tasks relating to the transaction. Bacs does not have a direct equivalent, and there is no Bacs message field that could be used/re-purposed to pass such an end to end item identifier through the clearing process.

There is a need for related transactions on the return leg to be linked back to the originating transaction. This must be achieved in the translation layer. It is anticipated that the translation layer will retain the end to end item identifier of the inward flows, and subsequently populate the end to end item identifier on corresponding/returning outward flows. The latter will be achieved by matching the (original) originating and destination account details, the amount and the service user’s reference.

The originator’s end to end item reference number will typically only be known to the destination PSP in scenarios where the two parties in question use the same translation layer implementation. Where the originator’s end to end item identifier is not known to the destination PSP, consideration should be given to any processes that may require transactions to be traceable/identifiable throughout the lifecycle, for example, when dealing with customer enquiries.

### **4.4 FURTHER OPTIONAL ISO 20022 MESSAGE CONTENT**

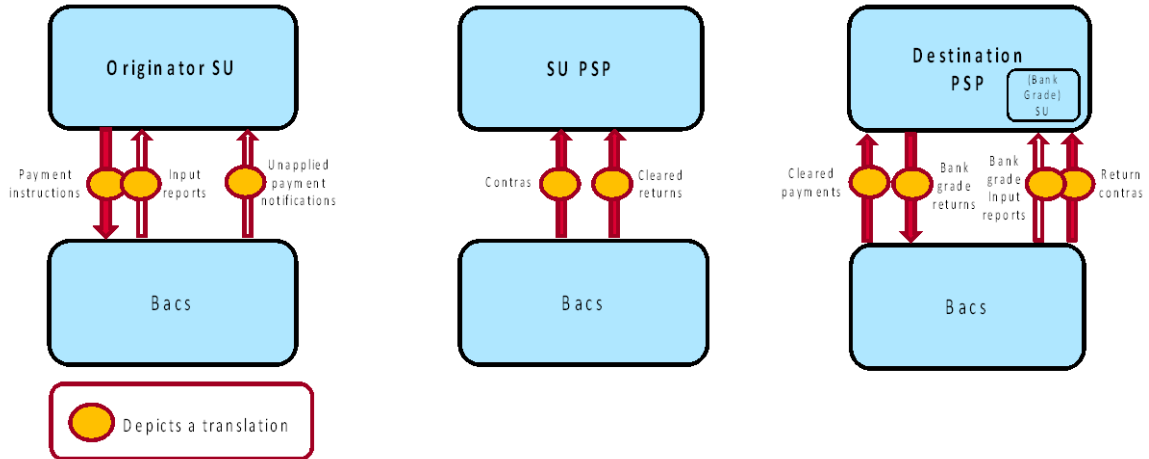
Bacs messages predetermine the information that can be passed. Extended message content (for example, remittance details over and above service user’s reference) cannot therefore be passed through Bacs to a destination PSP.

### **4.5 BACS MANDATORY FIELDS**

Certain Bacs message flows require mandatory fields to be passed that may not typically be available in the corresponding ISO 20022 message. An example is the AWACS message (see chapter 8) from the destination PSP to Bacs that requires the Bacs processing date and amount of the original item. This will be achieved by extending the ISO 20022 message using the Supplementary Data construct.

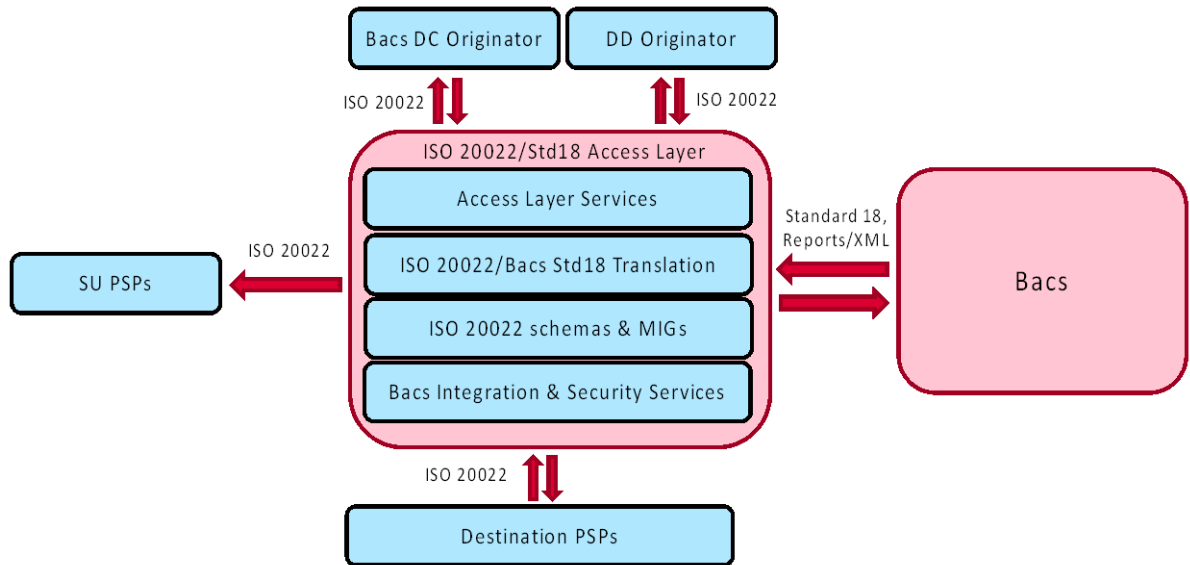
### 4.6 IMPLEMENTATION SCOPE

Each organisation implementing a translation layer can determine which messages they wish to translate e.g. they could choose to translate all or a subset of the Standard 18 messages, whilst using existing Bacs reports/XML for the operation of remaining processes. The picture below shows the interaction with Bacs of the key stakeholders in the payments process.



### 4.7 TRANSLATION LAYER RESPONSIBILITIES

A representation of responsibilities of a translation layer is shown below.



Key responsibilities of a translation layer are described in the table below.



RESPONSIBILITY	JUSTIFICATION
Creation of credit/debit contras (see Contras, above)	Contras are not used in the ISO 20022 model but are required by Bacs
Tracking the flow of individual items throughout the end to end process	Otherwise the linkage of payment items risks being lost between the ISO 20022 message flows and Bacs
Retention of details (for the duration of respective processes) relating to an item that is identified by an end to end item identifier (e.g. the mapping between end to end item identifier and originating and destination account details, amount and SU reference) that support ISO 20022 message flows but are not always available, when required, in existing Bacs message flows	To support reconciliation or to link tasks relating to the transaction
Validation of ISO 20022 inputs using standard ISO 20022 status messages	Mandatory requirement for the technical validation of input messages
Provision of an audit trail of translated messages	Operational requirement for interface integrity
Security/integration with Bacs	Operational requirement for interface integrity

The routing of files to and from Bacs is achieved by BAU mechanisms and depends on the recipient's channel and configuration. Banks use ETS (Enhanced Transmission Service) or STS (SWIFTNet Transmission Service). Service users who submit directly use Bacstel-IP. (The Department of Work & Pensions [DWP] is an exception in that it has access to a bank grade channel.) Unattended report collection is also an output mechanism.

The management of which PSPs and originators require their messages to be translated to ISO 20022 will in principle be achieved through existing Bacs channels and routing mechanisms including unattended report collection.

## 4.8 BACS CHARACTER SET & CONVENTIONS

In Standard 18, only the following characters are allowed:

- A–Z (Alpha characters upper case only)
- 0–9 (Numeric characters)
- . (Full stop)
- & (Ampersand)
- / (Slash)
- - (Hyphen)
- Blank space

The Bacs character set does not allow lower case alphabetic characters. When a lower case alpha character is input into Bacs, it is converted to a blank space. If lower case characters are included within the fields being mapped to Standard 18 fields 9 to 11 (service user's name, service user's reference and destination account name, respectively), the translation will convert these to upper case.

Bacs will publish schemas to facilitate mapping to Standard 18. The schemas will validate data type and any defined data formatting/pattern.

Bacs Standard 18 amount fields are the amount in pence. The translation will map between the Standard 18 format and the respective ISO 20022 amount format.

## 4.9 DATE MAPPING

Standard 18 date fields are typically in the format bYYDDD where b is a blank space, YY is the last two digits of the year, DDD is Julian date with preceding zeros if necessary e.g. 5 January 2004 is "04005". Julian dates run sequentially starting from 1 January as 001 and finishing on 31 December as 365 (or 366 in a leap year).

ISO date fields have the following format: YYYY-MM-DD

In ISO 20022, the "execution" date of a payment equates to the "value" date. Bacs operates a 3 day clearing cycle. Bacs payment files contain processing date (in the user header label 1 [UHL1]). In the 3 day clearing cycle, the customer receives value one working day after this processing date. The translation will manage the conversion of the value date, known in ISO 20022 as the execution or settlement date and Bacs processing date. A consideration for the originator is that the Bacs payment file must be submitted (on the "entry" date which is at least) two working days in advance of the value date. The 3 (working) day cycle effectively consists of (three consecutive working days) the entry date, the processing date and the value date. The Time element of an ISO 20022 Date Time field is not mapped to Bacs.

## 4.10 MAPPING TO ISO 20022 GROUP HEADER MESSAGE IDENTIFICATION

### 4.10.1 INTRODUCTION

Message Identification is a mandatory field in every ISO 20022 Group Header. The following three patterns are used, respectively, to generate a unique ISO 20022 Group Header Message Identification by means of concatenating appropriate Bacs fields:

- Bacs output
- Bacs Input report
- (Other) Bacs report

### 4.10.2 BACS OUTPUT

CONCATENATED FIELDS	SIZE	ADDITIONAL INFORMATION
Value date	8	See section 4.9 (Date mapping); format YYYYMMDD
Bank code	3	UHL1
Stream number	2	UHL1
File section number	4	HDR1

CONCATENATED FIELDS	SIZE	ADDITIONAL INFORMATION
ISO message suffix	3	e.g. 004 (for pacs.004)
Credit Debit Indicator	4	CRDT or DBIT (required to achieve uniqueness for, for example, pacs.007)

#### 4.10.3 BACS INPUT REPORT

CONCATENATED FIELDS	SIZE	ADDITIONAL INFORMATION
Value date	8	See section 4.9 (Date mapping); format YYYYMMDD
Originator SUN	6	
Submission reference number	20	

#### 4.10.4 (OTHER) BACS REPORT

CONCATENATED FIELDS	SIZE	ADDITIONAL INFORMATION
Report generation date	8	format YYYYMMDD
Originator SUN	6	
Report sequence number	20	Where one exists

## 5 STANDARD 18 TRANSLATION – FILE STRUCTURES & DATA

### 5.1 INTRODUCTION

This chapter describes both the Bacs Standard 18 input and output file structures and data, and the fundamental mapping between Standard 18 data and ISO 20022 constructs.

### 5.2 INPUT FIELDS

A representation of Bacs Standard 18 fields input into both credit and debit payment instructions is provided below.

FIELD	NAME	NOTE
01	destination sorting code	
02	destination account number	
03	destination account type	Not used
04	transaction code	
05	originating sorting code	
06	originating account number	
07	free format	For Bacs salary payments contains a cross-reference (generated by an HMRC hashing algorithm) that links to the employer's PAYE (Pay As You Earn) RTI (Real Time Information) return to HMRC. For returns contains the return reason code.
08	amount in pence	
09	service user's name	Will be set to spaces for bank grade contras in this translation
10	service user's reference	ISO 20022 has both an Instruction Identification and a Transaction Identification. This translation maps the SU reference to Instruction Identification i.e. intended as an end to end (as opposed to a transitory) reference
11	destination account name	Payer's account name for a DDI

### 5.3 SUBMISSION STRUCTURE

The input structure of a Standard 18 payment submission is provided below.

CATEGORY	ITEM	DESCRIPTION	FURTHER INFORMATION
Headers	VOL1	Volume header label 1	Includes submitter SUN e.g. bureau number
	HDR1	Header label 1	Includes originator SUN
	HDR2	Header label 2	
Trailers	UHL1	User header label 1	Includes processing date, currency code
	Input items		Payment instructions or DDIs
	EOF1	End of file label 1	Repeats information in HDR1
	EOF2	End of file label 2	Repeats information in HDR2
	UTL1	User trailer label 1	Includes value totals and counts

Payment instructions must be grouped into input file submissions each with a single day and account section where:

- Day section is all payment instructions in a payment file that have the same processing date
- Account section is all customer grade payment instructions in a day section that have the same originating account details. For bank grade service users, all items in a day section form a single account section.

To simplify the translation, constraints on each ISO 20022 submission of a group of payments (that will translate to a Bacs input file) will be that:

- Each submission must be limited to one Day section (known as single processing day [spd]) and one Account section of either only credits or only debits. This will be defined as a validation rule within the translation layer.
- Each submission must be for a single service user number (known as single file submission [sfs]). Where a submitter (e.g. a bureau) submits for many service users, this must be achieved with single file submissions where VOL1 owner identification identifies the submitter and HDR1 service user number identifies the service user.

## 5.4 OUTPUT FIELDS

The Bacs transaction processing service prepares items for output where they have not been rejected during processing. The original item is output with some additional information.

FIELD	NAME	NOTE
12	error code/indicator	See error codes in PN5011 [Ref 02]
13	originator's authorised identifying number	Originator SUN. The service user number in the payment file (HDR1 field 3 characters 6 to 11) in which this payment instruction was originally input to Bacs.
14	Bacs output reference number	See PN5011 [Ref 02]
15	originator's AUDDIS status	See PN5011 [Ref 02]

## 5.5 OUTPUT STRUCTURE

Throughout each processing day, the Bacs service outputs a "daily run" to Standard 18 output stream containing both credit and debit value items for that stream.

These data records are all for the current processing day. The following shows the structure of the output.

CATEGORY	ITEM	DESCRIPTION	FURTHER INFORMATION
Headers	VOL1	Volume header label 1	
	HDR1	Header label 1	Includes sequential file section number
	HDR2	Header label 2	
	UHL1	User header label 1	
	Output items		Payment instructions or DDIs
Trailers	EOF1/EOV1	End of file or volume label 1	If last file of day EOF, else EOVS
	EOF2/EOV2	End of file or volume label 2	If last file of day EOF, else EOVS
	UTL1	User trailer label 1	Contains counts and value totals for both credits and debits

## 5.6 ATTRIBUTE MAPPING

A representation of the translation between the Standard 18 payment fields for Bacs Direct Credits and Direct Debits and ISO 20022 attributes is shown in the table below.

A Bacs Direct Credit:

- Debits the account of a PSP that sponsors the originating service user
- Credits a Bacs (reachable) destination.

A Direct Debit:

- Credits the account of a PSP that sponsors the originating service user
- Debits a Bacs (reachable) destination.

ISO 20022 Message Element	For Bacs Direct Credits	For Direct Debits
Payment Identification		
Transaction Identification	Bacs output reference number, Field 14	Bacs output reference number, Field 14
Payment Type Information		
Local Instrument/ Proprietary	transaction code, Field 04	transaction code, Field 04
Debtor		
Identification	HDR1 SUN & originator's authorised identifying number, Field 13	
Debtor Account		
Identification		
Other/ Identification	originating account number, Field 06	destination account number, Field 02
Name	service user's name, Field 09	destination account name, Field 11
Debtor Agent		
Financial Institution Identification		
Clearing System Member Identification		
Member Identification	originating sort code, Field 05	destination sorting code, Field 01
Creditor Agent		
Financial Institution Identification		
Clearing System Member Identification		
Member Identification	destination sorting code, Field 01	originating sort code, Field 05
Creditor		
Identification		HDR1 SUN & originator's authorised identifying number, Field 13
Creditor Account		
Identification		
Other/ Identification	destination account number, Field 02	originating account number, Field 06
Name	destination account name, Field 11	service user's name, Field 09
Regulatory Reporting		
Details/ Information	free format, Field 07	free format, Field 07
Amount		
Instructed Amount (pain)	amount in pence, Field 08	amount in pence, Field 08
Interbank Settlement Amount (pacs)	amount in pence, Field 08	amount in pence, Field 08
Remittance Information		
Structured		
Creditor Reference Information		
Reference	service user's reference, Field 10	service user's reference, Field 10

## 5.7 FIELDS 9 AND 11

The table below shows how Standard 18 input fields 9 and 11 are populated in different message types. This information (excepting the Comment field) is taken from the Bacs Electronic Funds Transfer, File Structures (PN5011) [Ref 02].

MESSAGE TYPE	FIELD 9	FIELD 11	COMMENT
	CHARACTER POSITIONS 47 - 64	CHARACTER POSITIONS 83 - 100	
Customer grade credit (1a)	service user's name	destination account name	
Customer grade debit (1b)	service user's name	destination account name	
Customer DDI (1)	originator's name	payer's account name	
Customer grade contra (1a/b)	narrative	originating account name	Field 9 – Set to spaces in this translation Field 11 - Same as destination account name
Bank grade credit return (ARUCS) (4a)	payee's account name	originator's account name, originator's service user number	originator = SU of original transaction i.e. for a return, destination (payee) and originating account details (of the original transaction) are switched around
Bank grade debit return (ARUDD) (4b)	payer's name	originator's account name, originator's service user number	originator = SU of original transaction i.e. for a return, destination (payer) and originating account details (of the original transaction) are switched around
Bank grade credit	service user's name	destination account name	Same as customer grade
Bank grade debit	service user's name	destination account name	Same as customer grade
Bank grade DDI	originator's name	payer's account name	Same as customer grade
Bank grade contra (4a/b/c)	narrative	originating account name	Field 9 – Set to spaces in this translation Field 11 - Same as destination account name
Bank grade credit recall (4c)	originator's name	destination account name	Copy of original credit i.e. for a recall, destination and originating account details are not switched around
Bank grade DDI	originator's name	payer's account name	



## 6 CUSTOMER GRADE PAYMENTS – INPUT

### 6.1 INTRODUCTION

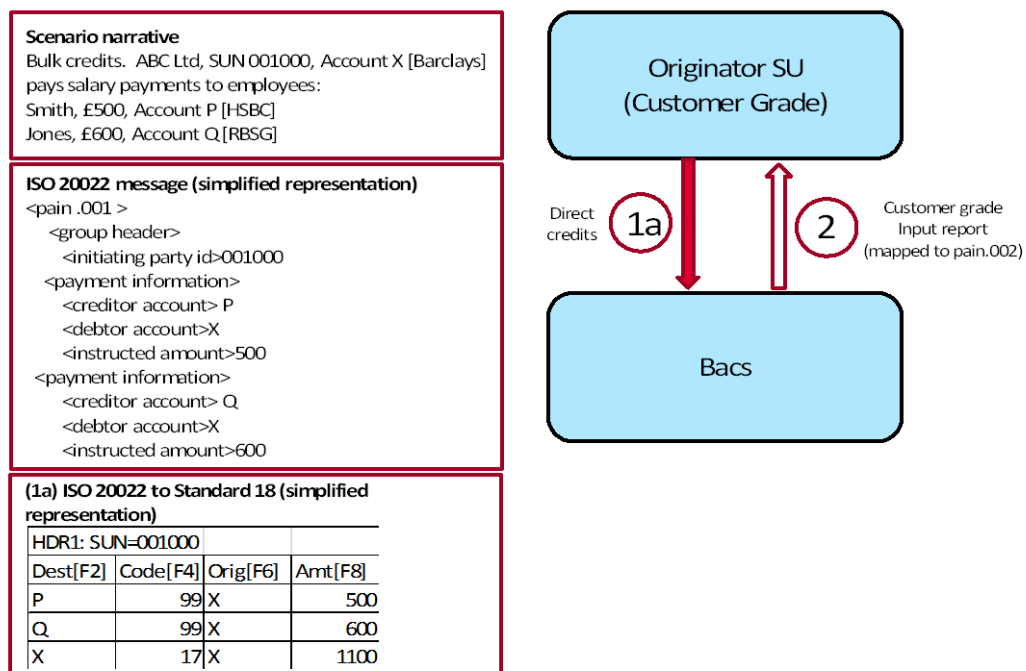
This chapter describes relevant aspects of the Bacs functionality and the translation considerations for the following flows from the Bacs DC and DD message flow diagrams in Chapter 3:

FLOW	NO	BACS MESSAGE	ISO 20022	DIRECTION	BAU DELIVERY	FROM	TO
Payment	1a	Direct credits	pain.001	ISO>Bacs	Standard 18	SU	Bacs
Payment	1b	Direct debits	pain.008	ISO>Bacs	Standard 18	SU	Bacs
Payment	2	Customer grade Input report	pain.002	Bacs>ISO	Report/XML	Bacs	SU

### 6.2 REPRESENTATION

#### 6.2.1 DURING DAY 1

The diagram below represents the intraday customer grade origination of Bacs Direct Credits.



### 6.3 CONSIDERATIONS

#### 6.3.1 INPUT FILES

Credits and debits are input in separate ISO 20022 pain.001 and pain.008 files respectively.

### 6.3.2 INPUT VALIDATION OUTCOMES

For each submission the outcomes of the Bacs input validation is provided on an Input report. The SLA for the provision of the Input report is 4 hours from submission.

Each payment instruction/item is subject to input validation which can result in one of the following outcomes:

- Accepted – For the purposes of this translation, this means “Accepted by Bacs” because the item may still be returned by the destination PSP
- Amended – certain exceptions cause an item to be amended. The destination and/or originating account details may be amended if they are invalid. For example, if the originating account details of a direct credit item are invalid, they are amended to be the service user’s main account details.
- Returned – certain exceptions cause an item to be returned to the originating account. If the item is returned, the destination and originating account details are switched so that the payment is returned to the originator.
- Rejected – certain exceptions cause an item to be rejected. For example, if the transaction code is not allowed on the originating account. Rejected items are not output. Where value items are rejected, the service may generate adjustment items to ensure that the account section still balances.

Adjustment items are created in the following circumstances:

- An adjustment item is created for each rejected value item, unless all items are rejected, in which case an aggregate adjustment item is created
- An account section does not balance – and if after adjustment items are created for rejected items, an account section still does not balance, an aggregate adjustment item is created to balance the account section. N.B. This scenario can only occur where there is more than one account section, and therefore falls outside the scope of the translation described within this guide.

For customer grade, an adjustment item replaces the destination account details of the rejected item with the originating account details from the item. The value of the adjustment item is the same as the rejected item.

Where all payment instructions in an account section are rejected, an aggregate adjustment item is created so the account section still balances. The service user’s reference (field 10) of an aggregate adjustment item is ADJUSTMENT ENTRY.

The ISO 20022 process does not support adjustments or scheme returns, but does support accepting payments with amendment.

The item level outcomes are mapped to pain.002 PaymentInformationStatus as follows:

STD18	ISO 20022 CODE	ISO 20022 NAME	COMMENT
Accepted	ACTC	AcceptedTechnicalValidation	
Amended	ACWC	AcceptedWithChange	
Returned	RTRN	Returned	New proprietary value (required by Bacs)
Rejected	RJCT	Rejected	
Adjustment			Not explicitly mapped. Derivable from rejected items

The group level outcome is mapped to pain.002 GroupStatus as follows:

STD18	ISO 20022 CODE	ISO 20022 NAME	COMMENT
No direct equivalent	ACSP	AcceptedSettlementInProgress	If every item is ACTC
No direct equivalent	RJCT	Rejected	If every item is RJCT
No direct equivalent	ACWC	AcceptedWithChange	If neither ACSP or RJCT

### 6.3.3 ADDITIONAL INFORMATION

The originating account details on all customer or government grade items (including contras) must be an account nominated for the service user. (If they are not, the Bacs processing service substitutes the main account details.)

By setting a service user to government grade, the scheme member is authorising the Bacs service to amend the destination account of every credit contra that the service user originates to a central government funding account. This amendment is performed by the Bacs processing service. It is not reported on the service user's Input report.

Redirections (i.e. where Bacs alters the destination account details of a payment) are also not reported on the Input report.

## 7 PAYMENTS - OUTPUT

### 7.1 INTRODUCTION

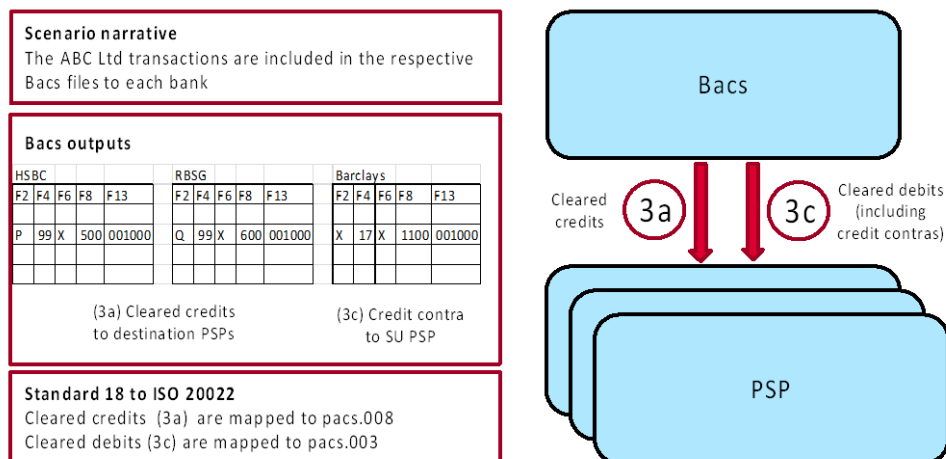
This chapter describes relevant aspects of the Bacs functionality and the translation considerations for the following flows from the Bacs DC and DD message flow diagrams in Chapter 3:

FLOW	NO	BACS MESSAGE	ISO 20022	DIRECTION	BAU DELIVERY	FROM	TO
Payment	3a	Cleared credits	pacs.008	Bacs>ISO	Standard 18	Bacs	Dest PSP
Payment	3b	Cleared debits	pacs.003	Bacs>ISO	Standard 18	Bacs	Dest PSP
Payment	3c	Credit contras	pacs.003	Bacs>ISO	Standard 18	Bacs	SU PSP
Payment	3d	Debit contras	pacs.008	Bacs>ISO	Standard 18	Bacs	SU PSP
Payment	3e	Credit reversals	pacs.007	Bacs>ISO	Standard 18	Bacs	SU PSP
Payment	3f	Debit reversals	pacs.007	Bacs>ISO	Standard 18	Bacs	SU PSP

### 7.2 REPRESENTATION

#### 7.2.1 END OF DAY 1

The diagram below represents the end of day 1 payment flow for the customer grade origination of Bacs Direct Credits.



### 7.3 CONSIDERATIONS

#### 7.3.1 SEPARATION OF OUTPUT

In Bacs output to PSPs cleared credits and debits are output “side by side” (i.e. within in the same files) with contras, returns and reversals. This translation splits these into separate ISO 20022 messages. This is primarily achieved using the Bacs transaction code but also using service user’s

reference, error code and work code. How this mapping/separation is achieved is shown in Appendix B.

### 7.3.2 REVERSALS

A reversal is a type of intervention instruction that can be triggered by the SU PSP from the PEM service and which generates output from Bacs that must be appropriately processed by the destination PSP. This mechanism is typically used on day 2 of the processing cycle.

There are two types of reversal. They are signalled to the output recipient, respectively, with the following error code in field 12 of the Standard 18 payment item record:

- Q - Reversal
- R - SDR (Same day reversal).

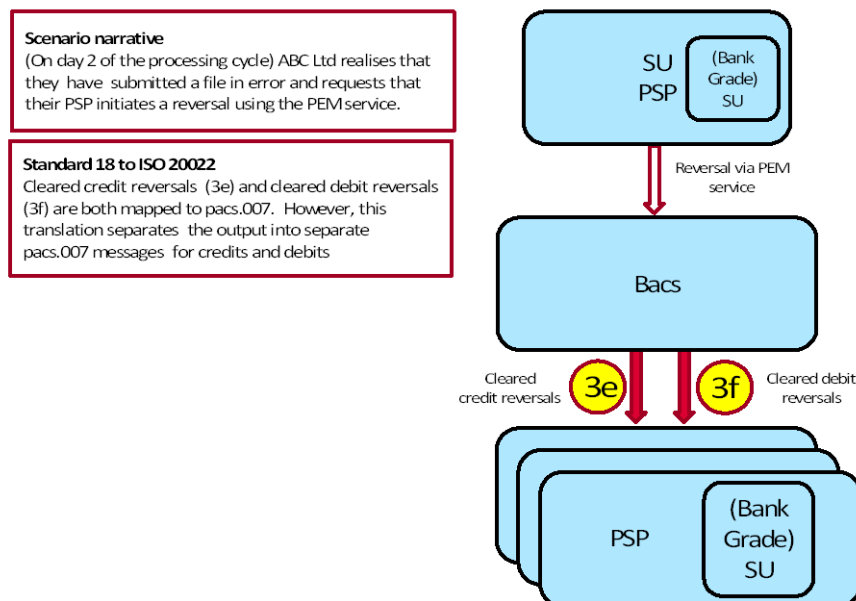
Both credits and debits can be reversed in this manner. A reversal item contains all the item details as they were in the original transaction, with the exception of the transaction code. The transaction code is changed:

- For credits, from a credit transaction to a 17
- For debits, from a debit transaction to a 99.

Same day reversals are held in PEM and submitted in the last file of the day i.e. EOF (to allow for a further change of mind i.e. for the same day reversals to be extracted from PEM if required).

The output recipient of a same day reversal is expected to match the original item with the extraction instruction and not apply either instruction to its customer's account.

Refer to the Bacs Service Functional Specification [Ref 01] and Bacs Processing Management guide [Ref 05] for more information.



## 8 BANK GRADE TRANSACTIONS (INCLUDING RETURNS)

### 8.1 INTRODUCTION

This chapter describes relevant aspects of the Bacs functionality and the translation considerations for bank grade transactions including the following flows from the Bacs DC and DD message flow diagrams in Chapter 3:

FLOW	NO	BACS MESSAGE	ISO 20022	DIRECTION	BAU DELIVERY	FROM	TO
Payment	4a	Bank grade credit returns (ARUCS items)	pac.004	ISO>Bacs	Standard 18	Dest PSP	Bacs
Payment	4b	Bank grade debit returns (ARUDD items)	pac.004	ISO>Bacs	Standard 18	Dest PSP	Bacs
Payment	4c	Credit recalls	pac.007	ISO>Bacs	Standard 18	Dest PSP	Bacs
Payment	5a	Bank grade Input report	pac.002	Bacs>ISO	Report/XML	Bacs	Dest PSP
Payment	5b	Credit return contras	pac.003	Bacs>ISO	Standard 18	Bacs	Dest PSP
Payment	5c	Debit return contras	pac.008	Bacs>ISO	Standard 18	Bacs	Dest PSP
Payment	6a	Cleared credit returns	pac.004	Bacs>ISO	Standard 18	Bacs	SU PSP
Payment	6b	Unapplied credit notifications (ARUCS report)	camt.054	Bacs>ISO	Report/XML	Bacs	SU
Payment	6c	Cleared debit returns	pac.004	Bacs>ISO	Standard 18	Bacs	SU PSP
Payment	6d	Unapplied debit notifications (ARUDD report)	camt.054	Bacs>ISO	Report/XML	Bacs	SU
Payment	6e	Cleared credit recalls	pac.007	Bacs>ISO	Standard 18	Bacs	SU PSP

## 8.2 REPRESENTATION

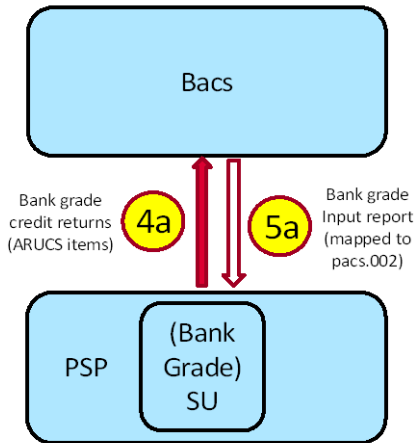
### 8.2.1 DURING DAY 2

**Scenario narrative**  
 The £500 to Smith, Account P is returned (account holder deceased)  
 Another unrelated credit for £200 from account C to D is also returned by the same PSP [HSBC] within the same file..  
 HSBC's: bank grade SUN is 900000;  
 HSBC's suspense account is S

**ISO 20022 to Standard 18**  
 The bank grade credit returns (4a) are provided in pacs.004 and mapped to Standard 18

**(4a) Standard 18 bank grade credit returns**

HDR1: SUN=900000			
Dest[F2]	Code[F4]	Orig[F6]	Amt[F8]
X	RA	P	500
D	RA	C	200
S	17	S	700 (Contra)



### 8.2.2 END OF DAY 2

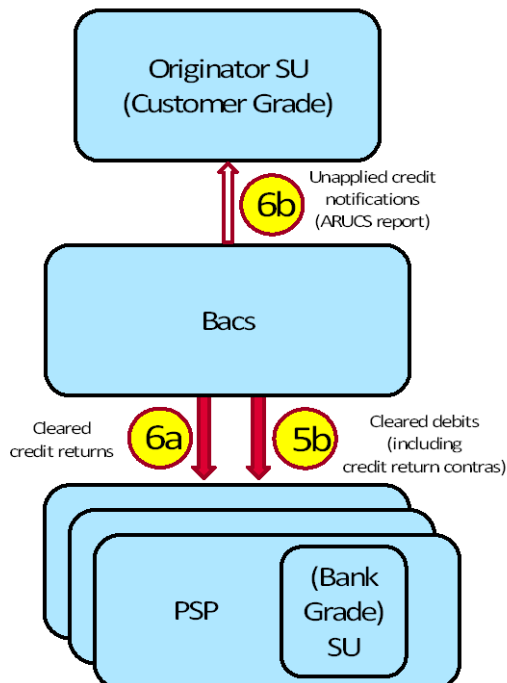
**Scenario narrative**  
 The ABC Ltd transactions are included in the respective Bacs files to each bank

**Bacs outputs**

Bardays				Other				HSBC						
F2	F4	F6	F8	F13	F2	F4	F6	F8	F13	F2	F4	F6	F8	F13
P	RA	X	500	900000	C	RA	D	200	900000	S	17	S	700	900000

(6a) Credit returns to SU PSPs      (5b) Credit return contra to destination PSP

**Standard 18 to ISO 20022**  
 Cleared credit returns (6a) are mapped to pacs.004  
 Cleared debits (5b) are mapped to pacs.003  
 Unapplied credit notifications (ARUCS report) (6b) are mapped to camt.054



## 8.3 CONSIDERATIONS

### 8.3.1 REGULAR BANK GRADE CREDITS AND DEBITS

Bank grade service users can originate regular credit and debit items. The originating account details of a bank grade transaction must be a nominated account registered for the service user.

These regular credit and debit item flows are functionally equivalent to the customer grade credit and debit flows 1a/b and 2 (described earlier in this document).

### 8.3.2 RETURNS

If a credit cannot be applied to the destination account at the receiving PSP (e.g. account frozen), the PSP will typically book it to a suspense account. The PSP will then create a credit return (ARUCS) file in which the contra will debit the suspense account and the individual return credits will re-credit the originators account.

Similarly, if a direct debit cannot be applied at the receiving PSP (e.g. no funds), the PSP will typically book it to a suspense account. The PSP will then create a debit return (ARUDD) file in which the contra will credit the suspense account and the individual return debits will re-debit the originators account.

ARUCS and ARUDD transactions are originated by bank grade service users.

This translation requires that credit and debit returns are submitted in separate files.

A return payment instruction is based on the original payment instruction that is being returned:

- The destination account details and the originating details are switched around. This has the effect of returning the payment to where it originated from
- The transaction code changes to identify it as a return transaction
- A reason code is included to identify why the payment instruction is being returned
- The service user number of the service user that originated the original payment instruction is included (in Field 11b).

The Bank grade Input report (flow 5a) is the same in structure and attribute translation to the Customer grade Input report (flow 2). A difference is that the Customer grade Input report is mapped to pain.002 whilst the Bank grade input report is mapped to pacs.002.

For bank grade, an adjustment item replaces the destination account details of the rejected item with the main account details of the bank grade service user. The value of the adjustment item is the same as the rejected item.

### 8.3.3 AUTOMATED RECALLS

Automated recall is the process followed when a service user needs to prevent a credit payment instruction from being applied to a destination account. A debit cannot be recalled.



The automated recall process is initiated by a bank submitting an automated recall payment instruction to the Bacs transaction processing service on behalf of a service user. Automated recall payment instructions can only be submitted on day 1 of the original credit item’s processing cycle.

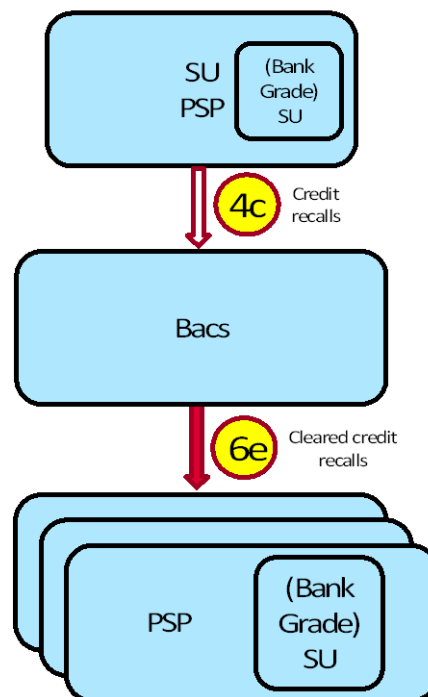
The destination bank must match an automated recall item to the original credit item. The bank must ensure that either the payment instruction (the original credit nor the automated recall item) is not applied to the destination account, or the bank must apply both payment instructions to the account at the same time.

An automated recall payment instruction is a copy of the original item including the transaction code of 99 (even though the automated recall is actually a debit transaction) and an error code of S. The file that the automated recall payment instruction is sent in, identifies that the instructions are automated recalls rather than regular credits (by setting the UHL1 work code to "5 RECALLS"). Automated recalls are counted as debits in UTL1 and are balanced by a debit contra (that is, a credit item).

(There is a manual recall process where the bank that owns the originating account contacts the destination bank in order to intervene manually to prevent the payment instruction being applied to its customer’s account before a specified deadline. This process does not use Bacs messages and is therefore outside the scope of this document.)

**Scenario narrative**  
 (On day 1 of the processing cycle) ABC Ltd realises that they have submitted a credit file in error and requests that their PSP initiates an automated recall.

**Standard 18 to ISO 20022**  
 Cleared credit recalls (6e) are mapped to pacs.007 as a debit.

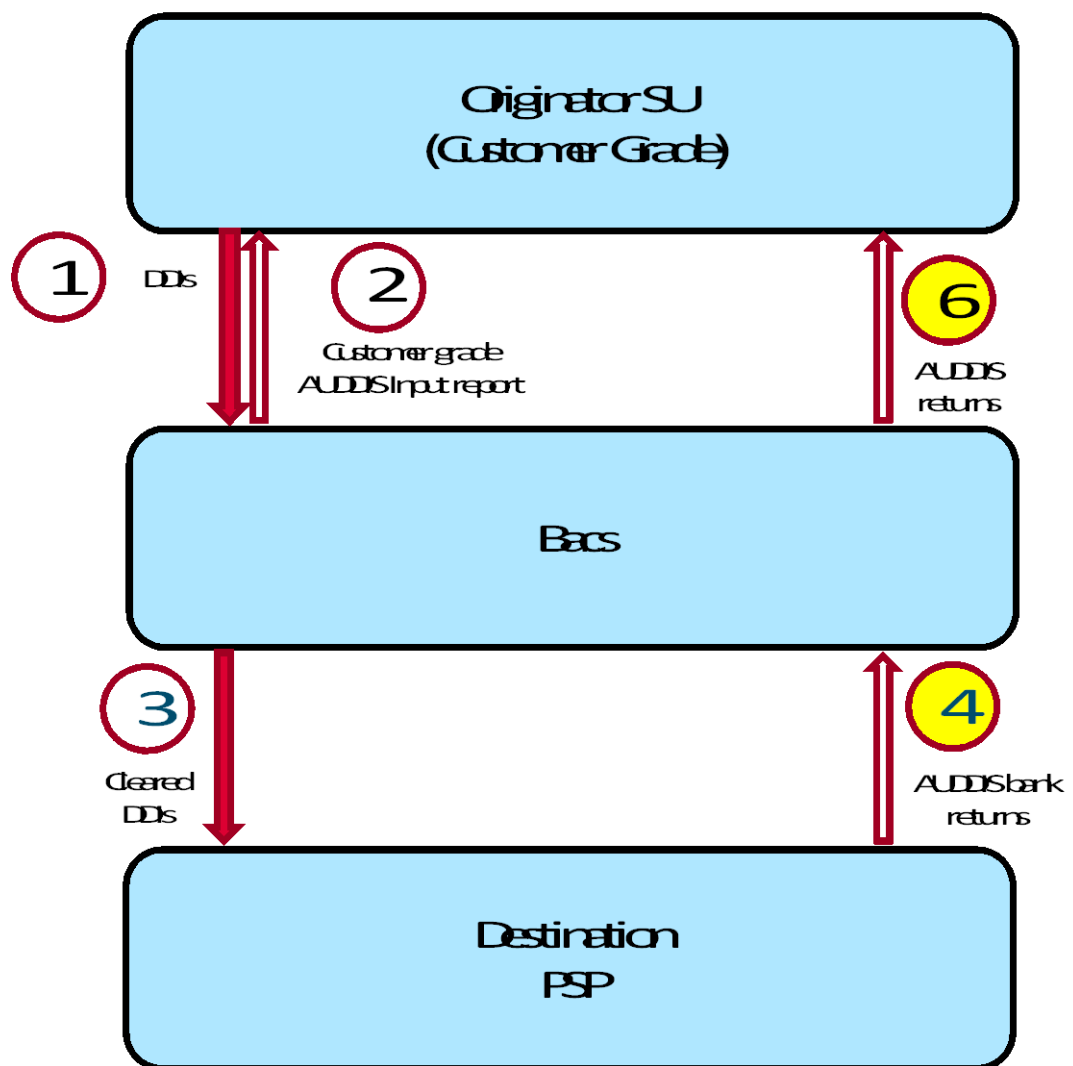


## 9 AUDDIS

### 9.1 OVERVIEW

This chapter describes the Bacs functionality and the translation considerations for the Automated Direct Debit Instructions Service (AUDDIS). AUDDIS is the service that enables service users to electronically send Direct Debit Instructions (DDIs) to the payer bank via the Bacs service.

From a Bacs perspective the AUDDIS message flow is similar to the payment message flows.



The mappings between Bacs and ISO 20022 are shown below.

FLOW	NO	BACS MESSAGE	ISO 20022	DIRECTION	BAU DELIVERY	FROM	TO
AUDDIS	1	DDIs	pain.009	ISO>Bacs	Standard 18	SU	Bacs
AUDDIS	2	Customer grade AUDDIS Input report	pain.012	Bacs>ISO	Report/XML	Bacs	SU
AUDDIS	3	Cleared DDIs	pain.009	Bacs>ISO	Standard 18	Bacs	Dest PSP
AUDDIS	4	AUDDIS bank returns	pain.012	ISO>Bacs	AUDDIS	Dest PSP	Bacs
AUDDIS	6	AUDDIS returns	pain.012	Bacs>ISO	Report/XML	Bacs	SU

## 9.2 CONSIDERATIONS

### 9.2.1 DDI DIFFERENCES TO PAYMENTS

The work code in UHL1 distinguishes between the AUDDIS run and the daily (payments) run. This distinction may also be determined by the filename or web service metadata depending on the implementation of the destination PSP's interface with Bacs.

Some notable differences between the AUDDIS message flow and the payment message flows are:

- Amount in pence (field 8) is always zero
- Transaction code (field 4) is either 0N, 0S or 0C. This will be mapped from pain.009 Mandate/Reason/Proprietary
- Service user's reference (field 10) will contain the DDI core reference. This will be mapped from pain.009 Mandate/Mandate Request Identification
- An AUDDIS transaction may be rejected by input validation but it will never be returned or amended
- Free format (field 7) is not used
- Error code/indicator (Field 12) is not used
- AUDDIS submissions into Bacs do not have an Account section. Account sections are required only for clearing.
- DDIs files are output by Bacs at the end of the day.
- PEM considerations do not apply to DDIs. For example, a DDI cannot be reversed.

### 9.2.2 ISO 20022 MESSAGE SELECTION

pain.009 (Mandate Initiation Request) and pain.012 (Mandate Acceptance Report) have been selected for flows 3 (cleared DDIs from Bacs to Destination PSP) and 4 (AUDDIS bank returns from Destination PSP to Bacs) because there is no equivalent pacs messages that cater for mandates.

## 10 OTHER MESSAGING FLOWS

### 10.1 OVERVIEW

In addition to AUDDIS (see previous chapter), the Bacs Messaging service supports the processing of the:

- Advice of Wrong Account for Automated Credits Service (AWACS)
- Advice of Direct Debit Amendments and Cancellations Service (ADDACS).

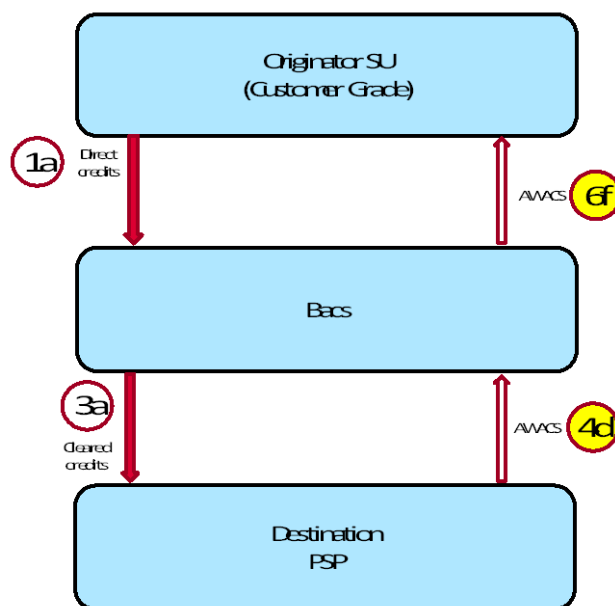
### 10.2 AWACS

AWACS provides a service user with the correct destination account details to use for future credit payment instructions. The service is used where a credit payment instruction has been amended in order for it to be applied to the correct destination.

There are three variations of the AWACS service, as follows:

SERVICE	GENERATED BY	DESCRIPTION
A	PSP	PSP amends credit instruction and generates AWACS (1a, 3a, 4d, 6f)
B	Bacs	A subset of Bacs sort code redirection (aka branch redirection) (1a, 3a, 6f)
C	Bacs	Major account redirection (MAR) and CASS (1a, 3a, 6f)

A representation of the message flow is shown below.



The mappings between Bacs and ISO 20022 are shown below.

FLOW	NO	BACS MESSAGE	ISO 20022	DIRECTION	BAU DELIVERY	FROM	TO
AWACS	1a	(see Payment 1a)					
AWACS	3a	(see Payment 3a)					
AWACS	4d	AWACS	acmt.022	ISO>Bacs	AWACS	Dest PSP	Bacs
AWACS	6f	AWACS	acmt.022	Bacs>ISO	Report/XML	Bacs	SU

### 10.3 ADDACS

ADDACS is used by banks to notify service users that a DDI has been amended or cancelled.

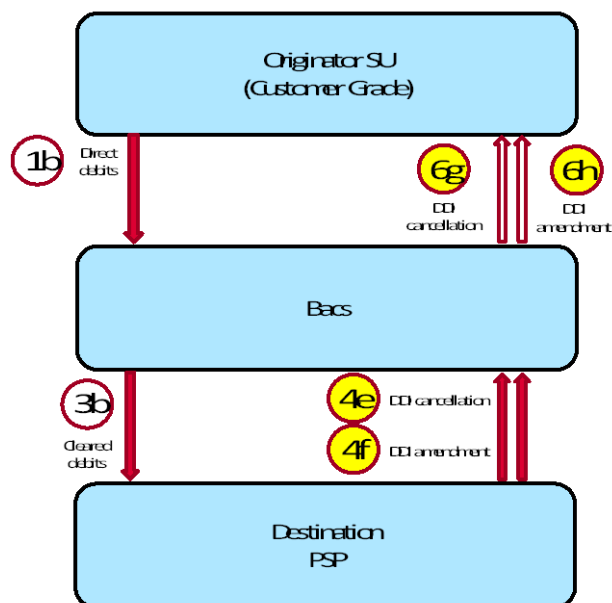
An ADDACS advice can be used in the following cases:

- Customer makes a change to a DDI (cancels the DDI or moves their account within the same bank). If this occurs, the customer’s bank generates and sends an ADDACS advice (4e/f, 6g/h).
- Customer moves their account to a new bank. If this occurs, the customer’s new bank generates and sends an ADDACS advice (4f, 6h).
- Paying bank cancels DDI in customer’s account and generates and sends an ADDACS advice (4d, 6g).

Both the Bacs and CASS services also generate ADDACS advices in redirection scenarios (1b, 3b, 6g).

Bacs does not provide a response to the DDI amendment and cancellation requests.

A representation of the message flow is shown below.



The mappings between Bacs and ISO 20022 are shown below.

FLOW	NO	BACS MESSAGE	ISO 20022	DIRECTION	BAU DELIVERY	FROM	TO
ADDACS	1b	(see Payment 1b)					
ADDACS	3b	(see Payment 3b)					
ADDACS	4e	DDI cancellations	pain.011	ISO>Bacs	ADDACS	Dest PSP	Bacs
ADDACS	4f	DDI amendments	pain.010	ISO>Bacs	ADDACS	Dest PSP	Bacs
ADDACS	6g	DDI cancellations	pain.011	Bacs>ISO	Report/XML	Bacs	SU
ADDACS	6h	DDI amendments	pain.010	Bacs>ISO	Report/XML	Bacs	SU

## A. MESSAGE FLOW CATALOGUE

FLOW	NO	BACS MESSAGE	ISO 20022	ISO 20022 MESSAGE NAME	BACS REFERENCE DOC	REF	DIRECTION	BAU DELIVERY	FROM	TO
Payment	1a	Direct credits	pain.001	Customer Credit Transfer Initiation	PN5011 (2.5.1)	02	ISO>Bacs	Standard 18	SU	Bacs
Payment	1b	Direct debits	pain.008	Customer Direct Debit Initiation	PN5011 (2.5.1)	02	ISO>Bacs	Standard 18	SU	Bacs
Payment	2	Customer grade Input report	pain.002	Customer Payment Status Report	PN6336 (5.3)	04	Bacs>ISO	Report/XML	Bacs	SU
Payment	3a	Cleared credits	pacs.008	FI To FI Customer Credit Transfer	PN5011 (3.3)	02	Bacs>ISO	Standard 18	Bacs	Dest PSP
Payment	3b	Cleared debits	pacs.003	FI To FI Customer Direct Debit	PN5011 (3.3)	02	Bacs>ISO	Standard 18	Bacs	Dest PSP
Payment	3c	Credit contras	pacs.003	FI To FI Customer Direct Debit	PN5011 (3.3)	02	Bacs>ISO	Standard 18	Bacs	SU PSP
Payment	3d	Debit contras	pacs.008	FI To FI Customer Credit Transfer	PN5011 (3.3)	02	Bacs>ISO	Standard 18	Bacs	SU PSP
Payment	3e	Cleared credit reversals	pacs.007	FI to FI Payment Reversal	PN5011 (3.3.1)	02	Bacs>ISO	Standard 18	Bacs	SU PSP
Payment	3f	Cleared debit reversals	pacs.007	FI to FI Payment Reversal	PN5011 (3.3.1)	02	Bacs>ISO	Standard 18	Bacs	SU PSP
Payment	4a	Bank grade credit returns (ARUCS items)	pacs.004	Payment Return	PN5011 (2.6.7)	02	ISO>Bacs	Standard 18	Dest PSP	Bacs
Payment	4b	Bank grade debit returns (ARUDD items)	pacs.004	Payment Return	PN5011 (2.6.6)	02	ISO>Bacs	Standard 18	Dest PSP	Bacs
Payment	4c	Credit recalls	pacs.007	FI to FI Payment Reversal	PN5011 (2.6.4)	02	ISO>Bacs	Standard 18	Dest PSP	Bacs
Payment	5a	Bank grade Input report	pacs.002	FI To FI Payment Status Report	PN6336 (5.3)	04	Bacs>ISO	Report/XML	Bacs	Dest PSP
Payment	5b	Credit return contras	pacs.003	FI To FI Customer Direct Debit	PN5011 (3.3)	02	Bacs>ISO	Standard 18	Bacs	Dest PSP
Payment	5c	Debit return contras	pacs.008	FI To FI Customer Credit Transfer	PN5011 (3.3)	02	Bacs>ISO	Standard 18	Bacs	Dest PSP
Payment	6a	Cleared credit returns	pacs.004	Payment Return	PN5011 (3.3)	02	Bacs>ISO	Standard 18	Bacs	SU PSP
Payment	6b	Unapplied credit notifications (ARUCS report)	camt.054	Credit/Debit Notification	PN6336 (4.7)	04	Bacs>ISO	Report/XML	Bacs	SU
Payment	6c	Cleared debit returns	pacs.004	Payment Return	PN5011 (3.3)	02	Bacs>ISO	Standard 18	Bacs	SU PSP

TRANSLATION GUIDE

ISO 20022/Bacs

FLOW	NO	BACS MESSAGE	ISO 20022	ISO 20022 MESSAGE NAME	BACS REFERENCE DOC	REF	DIRECTION	BAU DELIVERY	FROM	TO
Payment	6d	Unapplied debit notifications (ARUDD report)	camt.054	Credit/Debit Notification	PN6336 (4.8)	04	Bacs>ISO	Report/XML	Bacs	SU
Payment	6e	Cleared credit recalls	pacs.007	FI to FI Payment Reversal	PN5011 (3.3.1)	02	Bacs>ISO	Standard 18	Bacs	SU PSP
AUDDIS	1	DDIs	pain.009	Mandate Initiation Request	PN5011 (2.5.2)	02	ISO>Bacs	Standard 18	SU	Bacs
AUDDIS	2	Customer grade AUDDIS Input report	pain.012	Mandate Acceptance Report	PN6336 (5.3)	04	Bacs>ISO	Report/XML	Bacs	SU
AUDDIS	3	Cleared DDIs	pain.009	Mandate Initiation Request	PN5011 (3.3)	02	Bacs>ISO	Standard 18	Bacs	Dest PSP
AUDDIS	4	AUDDIS bank returns	pain.012	Mandate Acceptance Report	PN7871 (3.4)	03	ISO>Bacs	AUDDIS over ADDACS	Dest PSP	Bacs
AUDDIS	6	AUDDIS returns	pain.012	Mandate Acceptance Report	PN6336 (4.3)	04	Bacs>ISO	Report/XML	Bacs	SU
AWACS	1a	(see Payment 1a)								
AWACS	3a	(see Payment 3a)								
AWACS	4d	AWACS	acmt.022	Identification Modification Advice	PN7871 (3.5)	03	ISO>Bacs	AWACS over ADDACS	Dest PSP	Bacs
AWACS	6f	AWACS	acmt.022	Identification Modification Advice	PN6336 (4.4)	04	Bacs>ISO	Report/XML	Bacs	SU
ADDACS	1b	(see Payment 1b)								
ADDACS	3b	(see Payment 3b)								
ADDACS	4e	DDI cancellations	pain.011	Mandate Cancellation Request	PN7871 (3.3)	03	ISO>Bacs	ADDACS	Dest PSP	Bacs
ADDACS	4f	DDI amendments	pain.010	Mandate Amendment Request	PN7871 (3.3)	03	ISO>Bacs	ADDACS	Dest PSP	Bacs
ADDACS	6g	DDI cancellations	pain.011	Mandate Cancellation Request	PN6336 (4.2)	04	Bacs>ISO	Report/XML	Bacs	SU
ADDACS	6h	DDI amendments	pain.010	Mandate Amendment Request	PN6336 (4.2)	04	Bacs>ISO	Report/XML	Bacs	SU



## B.BACS OUTPUT - TRANSACTION CODE TO MESSAGE MAPPING

PAYMENT INSTRUCTION TYPE	CR/ DR	USER GRADE	TXN CODE (FIELD 4)	UHL1 WORK CODE	SU'S REF (FIELD 10)	ERROR CODE (FIELD 12)	MESSAGE FLOW CATALOGUE - MESSAGE TYPE	MAPPED TO	FLOW
Direct Credit	CR	All	99				Cleared credits	pacs.008	3a
Credit Reversal	DR	All	17			Q	Cleared credit reversal	pacs.007	3e
Same Day Credit Reversal	DR	All	17			R	Cleared credit reversal	pacs.007	3e
Credit Recall	DR	Bank	99	5 RECALLS		S	Cleared credit recall	pacs.007	6e
Settlement Credit	CR	Bank	86				Cleared credits	pacs.008	3a
Return of Unapplied Credit	CR	Bank	RA				Bank grade credit returns (ARUCS items)	pacs.004	6a
Credit Contra (incl. Credit Return Contra)	DR	All	17		BACS		Credit contras	pacs.003	3c, 5b
Direct Debit – First Collection	DR	All	01				Cleared debits	pacs.003	3b
Direct Debit – Regular Collection	DR	All	17				Cleared debits	pacs.003	3b
Direct Debit – Re-Presented	DR	All	18				Cleared debits	pacs.003	3b
Direct Debit – Final Collection	DR	All	19				Cleared debits	pacs.003	3b
Return of Unpaid DD – First Collection	DR	Bank	U1				Bank grade debit returns (ARUDD items)	pacs.004	6c
Return of Unpaid DD – Regular Collection	DR	Bank	U7				Bank grade debit returns (ARUDD items)	pacs.004	6c
Return of Unpaid DD – Re-Presented	DR	Bank	U8				Bank grade debit returns (ARUDD items)	pacs.004	6c
Return of Unpaid DD – Final Collection	DR	Bank	U9				Bank grade debit returns (ARUDD items)	pacs.004	6c
Debit Reversal	CR	All	99			Q	Cleared debit reversal	pacs.007	3f

TRANSLATION GUIDE

ISO 20022/Bacs

PAYMENT INSTRUCTION TYPE	CR/ DR	USER GRADE	TXN CODE (FIELD 4)	UHL1 WORK CODE	SU'S REF (FIELD 10)	ERROR CODE (FIELD 12)	MESSAGE FLOW CATALOGUE - MESSAGE TYPE	MAPPED TO	FLOW
Same Day Debit Reversal	CR	All	99			R	Cleared debit reversal	pacs.007	3f
Automated Teller Collection	DR	Bank	07				Cleared debits	pacs.003	3b
Debit Contra (incl. Debit Return Contra)	CR	All	99		BACS		Debit contras	pacs.008	3d, 5c
Credit Recall Contra	CR	Bank	99	5 RECALLS	BACS		Cleared credits	pacs.008	5c
Interest Payment	CR	All	Z4				Cleared credits	pacs.008	3a
Dividend Payment	CR	All	Z5				Cleared credits	pacs.008	3a

## C. GLOSSARY

TERM	DESCRIPTION
Account Management (acmt)	ISO 20022 business area. ISO 20022 organises financial message definitions into business areas i.e. well recognised functional domains in the industry. These business areas are uniquely identified by four character codes called business area codes. (See also pain, pacs & camt.)
Automated Direct Debit Amendment and Cancellation Service (ADDACS)	Bacs service used to automate the process for paying banks to inform organisations of changes to Direct Debit Instructions.
Aggregator	An organisation that provides one or more PSPs with technical access to one or more payment systems
Also known as (aka)	Synonym, alternative label or name
Automated Direct Debit Instruction Service (AUDDIS)	The Bacs service that enables Direct Debit Instructions (DDI) to be electronically setup (by a ON transaction), cancelled (by a OC transaction), and changed (by OC/ON pairs) at PSPs by service users. (It removes the need for paper to be passed from the service user to the PSP.)
Automated Return of Unapplied Credit Service (ARUCS)	Bacs message service that notifies payment originators of credit returns
Automated Return of Unpaid Direct Debits (ARUDD)	Bacs message service that notifies payment originators of Direct Debit returns
Automated teller machine (ATM)	A device that enables customers to withdraw cash from their accounts and/or access other services
Automated Direct Debit Instruction Service (AUDDIS)	The Bacs service that enables Direct Debit Instructions (DDI) to be electronically setup (by a ON transaction), cancelled (by a OC transaction), and changed (by OC/ON pairs) at PSPs by service users. (It removes the need for paper to be passed from the service user to the PSP.)
Advice of Wrong Account for Credits Service (AWACS)	A service that provides a service user with the correct destination account details to use for future credit payment instructions where a credit payment instruction has been amended in order for it to be applied to the correct destination.
Bacs approved bureau	An organisation that sends payments to Bacs on behalf of another organisation
Bacs Direct Credit (DC)	The Bacs scheme by which an organisation makes payments in bulk to individual bank accounts e.g. paying salaries
(Bacs) Direct Debit (DD)	The Bacs scheme by which an organisation collects pre-notified payments in bulk from individual payers' bank accounts e.g. utility bills
(Bacs) Direct Debit Instruction	An authority provided by a customer authorising their PSP to pay Direct Debits collected from their account. The DDI is sent by the service user to the payer's PSP electronically using AUDDIS (for AUDDIS service users) or by paper (for non-

TERM	DESCRIPTION
	AUDDIS service users).
Bacs Service User	A company, group of companies, charity etc. that is sponsored to use one or more Bacs services
Business as usual (BAU)	The normal execution of operations within an organisation
Bank-to-Customer Cash Management (camt)	ISO 20022 business area. (See also pain, pacs and acmt.)
Current Account Switch Service (CASS)	A free to use service that lets consumers and small businesses switch their current account from one participating bank or building society to another. It has been designed to be simple, reliable and stress-free and is backed by the Current Account Switch Guarantee.
Contra	A contra balances one or more credit payment instructions or debit payment instructions in an account section. Credits and debits must be balanced separately.
Direct Corporate Access (DCA)	Facility for the bulk submission of payments in files by corporates (or bureaux on behalf of a corporates) directly to the central infrastructure
Direct Debit Indemnity Claim (DDIC)	Used by paying banks to advise DD service users of any claims made against their DD collections. The service also manages the settlement of these claims.
Direct Debit Instruction (DDI)	An authority provided by a customer authorising their PSP to pay Direct Debits collected from their account. The DDI is sent by the service user to the payer's PSP electronically using AUDDIS (for AUDDIS service users) or by paper (for non-AUDDIS service users).
ISO 20022	An international standard for the development of financial messages
Major account redirection (MAR)	A Bacs facility that utilises AWACS Service C for the automated redirection of credits
Messaging Engine – ADDACS (ME-ADD)	The ADDACS messaging engine component of Bacs central infrastructure
Messaging Engine – AUDDIS (ME-AUD)	The AUDDIS messaging engine component of the Bacs central infrastructure
Multifile submission (mfs)	A submission of payments and/or DDIs for more than one service user
Multiprocessing day (mpd)	A submission of payments all for more than one processing days
Paper DDI	A paper DDI is completed and physically signed by the payer then lodged by the service user with the paying bank, typically by non-AUDDIS. For a non-AUDDIS DDI, where authorisation is subsequently challenged, indemnity liability resides with the paying bank. (For AUDDIS this liability resides with the service user.)
Paperless DDI	The DDI is completed electronically, or over the telephone, then lodged under AUDDIS
Payments Clearing and Settlement (pacs)	ISO 20022 business area. (See also pain, acmt and camt.)

TERM	DESCRIPTION
Payments Initiation (pain)	ISO 20022 business area. (See also pacs, acmt and camt.)
Payment Engine (PE)	Payment engine component of Bacs central infrastructure
Payment Exception Management (PEM)	Bacs toolset used for the management of referrals and intervention instructions
Payments Strategy Forum (PSF)	A forum set up by UK's Payment Systems Regulator that comprises a wide range of industry stakeholders tasked with developing and agreeing strategic priorities for the long-term development of payment systems in the UK.
Payment Service Provider (PSP)	An organisation that provides payment services to their customers typically including making payments and enabling money to be paid into and withdrawn from an account
Scheme	A set of rules and technical standards for making payments
Service level agreement (SLA)	A contract between a service provider and a service user that defines the expected level of service
Single file submission (sfs)	A submission of payments and/or DDIs for a single service user
Single processing day (spd)	A submission of payments all for a single processing day
Standard 18	The Bacs standard file/record format used by the Direct Debit and Bacs Direct Credit schemes
Service user (SU)	User of a payment service
Service user number (SUN)	A unique reference allocated to organisations authorised to use a service. In the context of Bacs, the SUN is a six digit number.
User Header Label (UHL)	A Standard 18 file header record format
User Trailer Label (UTL)	A Standard 18 file trailer record format
eXtensible Mark-up Language (XML)	A language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable