



Extended ISCD Specification (XML)

VERSION HISTORY

Version	Date	Details
1.00	19 September 2006	Baselined document released.
1.11	11 July 1007	Document branding updated to VocaLink.
1.20	18 September 2008	Baseline version following removal of CHAPS Euro.
1.30	19 February 2009	Clarification of the reporting of bank office service closures.
1.40	26 April 2013	Update to the business description of the ToDDaSO4 field. This change is effective from the start of the Account Switching service. Change to the description of option 5 of the PrintIndicator field.
1.50	8 May 2013	Removed references to the UKCD.
1.60	15 May 2013	Description of SupervisoryBody updated to refer to PRA/FCA rather than FSA.
1.70	18 January 2017	Re-branded document.
1.71	15 May 2017	<ul style="list-style-type: none"> • Sections 1.1, 2.1, 2.2, 3.2: Changed references to C&CCC service to ICS service. • Section 1.1: Replaced the reference to Payments Council with Bacs. • Section 2.2: Updated descriptions of the ICS service XML tags/attributes. • Section 3.2: Updated mapping for DebitAgencySortCode with Switch Participant. • General: Re-branded document.
1.80	7 July 2017	Baselined version.

Guide information

Reference: MNOS2298 (PN 7931)

Version 1.80

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CONTENTS

1	INTRODUCTION	4
1.1	ABOUT THIS GUIDE.....	4
2	EXTENDED ISCD CONTENTS	5
2.1	TAG INFORMATION	5
2.2	CONTENTS.....	6
3	CONVERTING XML TO HERITAGE	12
3.1	FIELD DIFFERENCES	12
3.1.1	Address differences.....	12
3.1.2	Telephone differences.....	12
3.1.3	Other differences.....	12
3.2	FIELD MAPPING	13
3.2.1	Transformation details	18

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1 INTRODUCTION

The extended industry sorting code directory (EISCD) is a database of information about all the bank/building society branches and bank offices that participate in one or more of the UK clearings systems:

- Bacs - Bulk electronic credit and debit clearing
- CHAPS Sterling - High value, same day sterling payment clearing
- ICS (Image Clearing System) - Cheque and Credit Clearing for United Kingdom
- Faster Payments Service - near real-time electronic credit clearing.

The regular ISCD does not contain information on the Faster Payments service.

The extended ISCD is maintained and supplied by Vocalink Limited on behalf of the banking industry under contract to Bacs that owns the copyright on the information.

This document relates to the XML extract of the EISCD that is available to customers for download from the Bacs payment services website.

***NOTE:** There are several members of the CHAPS clearing schemes that are not based in the UK. Details of some of their non-UK based branches are also held on the extended ISCD.*

1.1 ABOUT THIS GUIDE

This specification provides information on the XML extract of the EISCD that is available to customers for download from the Bacs payment services website.

For information about the extended ISCD service, the benefits and uses, and the service and billing arrangements please refer to www.vocalink.com/eiscd.

2 EXTENDED ISCD CONTENTS

This section describes the business contents of the extended ISCD XML extract. For details of the size, format and structure of the data, see the XML schema: `Extended_ISCD_Extract_Schema`; `Global_Schema`. For copies of these schemas contact the service desk.

The schema version date is contained within the schema, and you should always ensure you are using the latest version.

The extract has approximately 20,000 records and the XML file is approximately 55 megabytes. When the extract is downloaded from the Bacs payment services website, it is compressed in a zip file that is approximately 1.5 megabytes. The extract displays all tags in the hierarchy. In the case of an empty field, the data is shown with empty tags.

2.1 TAG INFORMATION

The service names are as follows:

- BACSServiceOffice
- FPSServiceOffice
- CHAPSSterling
- CHAPSEuro
- ICS

The following details the different tags that show the participation of an office within a clearing:

- When an office has never been in a service it has a tag of `<servicenameNull>`.
- When an office has previously been open in a service but has now closed it has a tag of `<servicenameClosed>`.
- When an office is open in a service it has a tag of `<servicename>`. However, future dated closures effect the services differently. A bank office in:
 - Bacs with a closure date in the future has a tag of `<servicenameClosed>`. Therefore, a bank office that currently participates in the Bacs service has a tag of either:
 - `<BacsServiceOffice>`, or `<BacsServiceOfficeClosed>` with a future closure date.
 - CHAPS Sterling or ICS with a closure date in the future does not show that closure date until the date is reached. Therefore, a bank office in CHAPS Sterling or ICS has a tag of `<servicename>` until any closure date is reached.
 - FPS with a closure date in the future has a tag of `<servicename>` until the closure date is reached when the tag changes to `<servicenameClosed>`.

2.2 CONTENTS

XML tag/attribute	Details of contents
Bank	
AbbreviatedBankName	The short name of the owning bank.
BankName	The full name of the owning bank.
BankCode	The bank code of owning bank. This code is allocated by Vocalink.
SupervisoryBody	The supervisory body: <ul style="list-style-type: none"> • A - PRA/FCA • B - Other financial authorities • C - Jersey, Guernsey or Isle of Man • D - Other.
Bank office	
SortCode	The sorting code of the bank office. All bank offices that participate in Bacs, CHAPS Sterling, ICS and Faster Payments service have a sorting code. There may be several bank offices with the same sorting code; one main with one or more sub-bank offices. These are distinguished by a unique suffix.
BICBank	These two fields make up the Bank Identifier Code (BIC) for the bank office.
BICBranch	
Suffix	The subbank office sorting code suffix. A sorting code can have multiple sub-bank offices each identified by a suffix unique for the sorting code.
BankOfficeTitle	The short bank office title. Title appears, for example, on cheque books.
NCBCountryCode	The national clearing bank country code. For bank offices that are Target NCBs, it is the ISO country code for the country the bank office is the NCB for.
DeletedDate	The date the bank office will be removed from the ISCD as it no longer participates in any UK clearing; only populated if the date is migrated.
DateLastChanged	The date the bank office was last amended, including the amendment, closure or removal of its participation from any of the clearings.
PrintIndicator	It is 0 to 5.
Bacs service	
Status	Bacs service status: <ul style="list-style-type: none"> • M - The bank office of a Bacs scheme member; accepts Bacs payments • A - The bank office of a sponsored institution in Bacs; accepts Bacs payments • N - The bank office either does not participate in Bacs or has a future dated closure. <p><i>NOTE: If the office has a future dated closure it will have a status of N.</i></p>

XML tag/attribute	Details of contents
Toddaso4	<p>This flag is used to identify whether the bank office participates in the Account Switching service:</p> <ul style="list-style-type: none"> • Y - The bank office supports full and partial account switches • N - The bank office supports partial account switches • null- The Bank office does not support account switches.
DateLastChanged	<p>The date that the details of the bank office's participation in the Bacs clearing was amended.</p> <p><i>NOTE: Closure of the Bacs service is not considered an amendment for the purpose of this field.</i></p>
DateClosed	<p>The date from which the bank office will no longer participate in the Bacs service.</p>
RedirectionFromFlag	<p>If set to R, the bank office is set as the redirection sorting code of another bank office(s).</p>
RedirectionToSortCode	<p>If the output from the Bacs service for this bank office is to be redirected, this field contains the sorting code to which payments are redirected.</p>
SettlementBank	<p>The bank code of the Bacs scheme member that settles the output from the Bacs clearing for this bank office.</p>
SettlementSection	<p>The data used for Bacs output and settlement.</p>
SettlementSubSection	
HandlingBank	<p>The bank code of the Bacs scheme member that handles the output from the Bacs clearing for this bank office.</p>
HandlingBankStream	<p>The data used for Bacs output.</p>
AccountNumbersFlag	<p>Account numbered flag:</p> <ul style="list-style-type: none"> • Y - The bank office has transferable account numbers On redirection, due to branch closure, the account number is not set to zero. • N - The bank office does not have transferable account numbers On redirection, due to branch closure, the account number is set to zero.
DDIVoucherFlag	<p>The Direct Debit Instruction (DDI) voucher flag:</p> <ul style="list-style-type: none"> • Y - The bank office cannot accept output of electronic DDIs; it requires printed vouchers • N - The bank office can accept output of electronic DDIs; it does not require printed vouchers.
TransactionGroupCode	<p>The disallowed transactions code. It specifies that the bank office cannot accept a particular transaction type:</p> <ul style="list-style-type: none"> • DR - Direct Debits (transaction codes 01, 17, 18, 19) • CR - Credits (99) • CU - Claims for unpaid cheques (13) • BS - Interest payments (Z4) • DV - Dividend payments (Z5) • AU - Direct Debit Instructions (0N, 0C, 0S).

XML tag/attribute	Details of contents
CHAPS Sterling service	
ReturnIndicator	If set to R , the bank office is the office to which returned CHAPS Sterling payments should be sent.
Status	<p>The CHAPS Sterling service status:</p> <ul style="list-style-type: none"> • D - The bank office is a direct office that accepts CHAPS Sterling payments • I - The bank office is an indirect office that accepts CHAPS Sterling payments • N - The bank office does not participate in CHAPS Sterling; does not accept CHAPS Sterling payments. <p><i>NOTE: If the office is set to close at a date in the future it will have a status of D or I until that date is reached.</i></p>
DateLastChanged	<p>The date that the details of the bank office's participation in the CHAPS Sterling clearing was amended.</p> <p><i>NOTE: Removal of the bank office's participation in CHAPS Sterling is not considered an amendment for the purpose of this field.</i></p>
DateClosed	The date the bank office closed in the CHAPS Sterling service.
CHAPSSterlingID	The CHAPS code of the CHAPS Sterling scheme member that settles the CHAPS Sterling payments for this bank office.
RoutingBICBank	The direct BIC to which CHAPS Sterling payments for this bank office should be routed.
RoutingBICBranch	
CHAPS Euro service (service no longer available)	
Status	The CHAPS Euro service status is N .
DateLastChanged	These fields are null.
DateClosed	
RoutingBICBank	
RoutingBICBranch	
CHAPSEuroID	
ReturnIndicator	
RTGSIndicatorTargetStatus	
ICS service	

XML tag/attribute	Details of contents
Status	<p>The ICS service status:</p> <ul style="list-style-type: none"> • M - The bank office of an ICS Settlement and Switch Participant • F - The bank office of an Indirect Participant • D - The bank office of a Settlement Participant (that is not a Switch Participant) • N - The bank office does not participate in ICS (see field DateClosed). <p><i>NOTE: If the office is set to close at a date in the future it will have a status of M, F or D until that date is reached.</i></p>
DateLastChanged	<p>The date that the details of the bank office's participation in ICS was amended.</p> <p><i>NOTE: Removal of the bank office's participation in ICS is not considered an amendment for the purpose of this field.</i></p>
DateClosed	<p>The date the bank office closed in ICS.</p>
SettlementBank	<p>The bank code of the ICS Participant that settles the ICS output for this bank office. For ICS Settlement & Switch Participants and ICS Settlement Participants, this is the same as field 9.</p> <p>For Indirect Participants in ICS this is the bank code of one of the ICS Settlement Participants.</p>
DebitAgencySortCode	<p>The bank code of the ICS Switch Participant that processes the ICS output for this bank office, filled to 6 characters with leading zeros.</p> <p><i>NOTE: Since the tag name for this field has not been changed, the field is still referred to as DebitAgencySortCode. However, the value in this field refers to Switch Participant bank code.</i></p>
ReturnIndicator	<p>This field is null.</p>
GBNIndicator	<p>This field is alphanumeric.</p> <p>For ICS purposes, this field identifies whether or not an office processes cheques (Request to Pay message) on Northern Ireland specific bank holidays.</p> <ul style="list-style-type: none"> • (NI) - Does not process Request to Pay messages on Northern Ireland specific bank holidays • (GB) - Processes Request to Pay messages on Northern Ireland specific bank holidays
Faster Payments service	
Status	<p>The FPS service status:</p> <ul style="list-style-type: none"> • M - The bank office of FPS scheme member; accepts FPS payments • A - The bank office of FPS agency bank; accepts FPS payments • N - The bank office does not accept FPS payments. <p><i>NOTE: If the office has a future dated closure it will have a status of M or A until that date is reached.</i></p>
DateLastChanged	<p>The date that the details of the bank office's participation in the FPS clearing was amended.</p>
DateClosed	<p>The date the bank office has been to set to close in the FPS service.</p>
RedirectionFromFlag	<p>If set to R, the bank office is set as the redirection sorting code of another bank office(s).</p>

XML tag/attribute	Details of contents
RedirectionToSortCode	If the output from the FPS service for this bank office is to be redirected, this field contains the sorting code to which payments are redirected.
SettlementBankConnection	The two-digit connectivity code (01) of the FPS scheme member that settles the output from the FPS clearing for this bank office.
SettlementBankCode	The four-digit bank code of the FPS scheme member that settles the output from the FPS clearing for this bank office.
HandlingBankConnection	<p>The two-digit connectivity code of the FPS scheme member that handles the output from the FPS clearing for this bank office. Either:</p> <ul style="list-style-type: none"> • 01 - FPS member • 02 - Direct agency • 04 - Responding third party beneficiary • 05 - Nonresponding third party beneficiary.
HandlingBankCode	The bank code of the FPS member, agency or third party beneficiary that the Faster Payments routed payment will be sent to.
AccountNumbersFlag	<p>The account numbered flag:</p> <ul style="list-style-type: none"> • Y - The bank office has transferable account numbers. On redirection, due to branch closure, the account number is not set to zero. • N - The bank office does not transferable account numbers. On redirection, due to branch closure, the account number is set to zero.
AgencyType	<p>The agency type can be either:</p> <ul style="list-style-type: none"> • D - The bank office is a direct agency FPS payment requests are sent directly to the agency • I - The bank office is an indirect agency FPS payment requests are sent via an intermediary bank. The intermediary bank can be either an FPS member or a direct agency.
Other bank office information	
BankOfficeType	<p>The bank office type indicator:</p> <ul style="list-style-type: none"> • M - The bank office is a main bank office • S - The bank office is a subbank office; bank office has the same sorting code as a main bank office but also has a subbank office suffix • L B - The bank office is a linked bank office; bank office is linked to a main bank office with a different sorting code.
MainBankOfficeSortCode	If bank office type is L , this is the sorting code of the main bank office this bank office is linked to.
MajorLocation	Major and minor locations associated to the bank office.
MinorLocation	
OfficeOrPlaceName	The bank office/place name.
SecondEntryIndicator	The second entry indicator. It is 1 or 2.

XML tag/attribute	Details of contents	
OfficeOrPlaceNameSecond	The bank office/place name (second entry).	
OfficeTitle	The full bank office title.	
AddresseeName	The address details of the bank office.	
PostalName		
AddressLine1		
AddressLine2		
CityOrTown		
AreaOrCounty		
PostCodeOutcode		
PostCodeIncode		
ZipCode		
Country		
InternationalPrefix		The telephone number of the bank office.
Std		
Number		
InternationalPrefix	The fax number of the bank office.	
Std		
Number		

3 CONVERTING XML TO HERITAGE

This section details how to map fields in order to convert the XML extract to a flat file. It also details what data transformation may be required.

For the purposes of this section “XML” refers to the extended ISCD extract in XML format, and “heritage” refers to the ISCD as a tab delimited file.

3.1 FIELD DIFFERENCES

The following describes the fields that differ between the XML and heritage formats.

3.1.1 Address differences

In XML, the address is made up of 10 fields; in heritage it is 8 fields. The two new fields are: ZipCode. Country. For details of how to use these fields when creating a heritage format, see “Transformation details” on page 18.

In XML the first four lines of the address have been truncated from 35 to 33 characters.

3.1.2 Telephone differences

In XML, telephone numbers are made up of 3 fields; in heritage there are 2 fields. The new field is InternationalPrefix. For details of how to use this field when creating a heritage format, see “Transformation details” on page 18.

In XML there is an additional telephone number.

3.1.3 Other differences

The following differences also exist between the two formats:

- In XML, the fields are not necessarily in the same order as those in heritage
- In XML, there is a new field, Toddaso4
- In XML, BankName is one field; in heritage it is split into two fields
- In XML BankOfficeFullTitle is one field; in heritage it is split into three fields
- In XML the TransactionGroupCode (that shows disallowed transactions relating to the Bacs service) is a tag that can be used zero or multiple times to show the disallowed transactions; in heritage there are 7 fields (and 3 spare), one for each transaction code.

NOTE: PR and spare fields do not have XML tags.

3.2 FIELD MAPPING

In the following table:

- The element column specifies the XML element that encloses the relevant source tag. Each Bank element contains a number of BankOffice elements. Only relevant elements are shown
- The source tag column specifies the elements containing the relevant data; attributes are marked with an @. Note that some elements generate more than one field in heritage
- The no. (len) column shows the field number and length (in brackets) in heritage. The length specifies the length to which the field should be padded or truncated following transformation
- The field description columns shows the field description as used in heritage
- The transformation column indicates how the data from XML must be transformed to create data in heritage format. For the key to entries in this column, see "Transformation details" on page 18.

XML extract		Heritage extract		
Element	Source tag	No. (len)	Field description	Transformation for output
BankOffice	@SortCode	1 (6)	Sorting code	
BankOffice	@BicBank	2 (8)	BIC bank	
BankOffice	@BicBranch	3 (3)	BIC branch	
BankOffice	@Suffix	4 (2)	Subbranch suffix	
BankOffice	BankOfficeTitle	5 (27)	Short branch title	
Bank	AbbreviatedBankName	6 (20)	Owning bank name	
Bank	BankName	7 (35)	Full owning bank name 1	substr(BankName,1,35)
Bank	BankName	8 (35)	Full owning bank name 2	substr(BankName,36,35)
Bank	@BankCode	9 (4)	Owning bank code	
BankOffice	NCBCountryCode	10 (2)	NCB country code (ISO)	
Bank	SupervisoryBody	11 (1)	Supervisory body	
BankOffice	DeletedDate	12 (10)	Deleted date	Date
BankOffice	DateLastChanged	13 (20)	Date of last change	Date
BankOffice	PrintIndicator	14 (1)	Print indicator	

XML extract		Heritage extract		
Element	Source tag	No. (len)	Field description	Transformation for output
BACSServiceOffice	Status	15 (1)	Bacs status	
BACSServiceOffice	DateLastChanged	16 (10)	Date of last change	Date
BACSServiceOffice	DateClosed	17 (10)	Date closed in Bacs clearing	Date
BACSServiceOffice	RedirectionFromFlag	18 (1)	Redirection from flag	
BACSServiceOffice	RedirectionToSortCode	19 (6)	Redirection to sorting code	
BACSServiceOffice	SettlementBank	20 (4)	Bacs settlement bank code	
BACSServiceOffice	SettlementSection	21 (2)	Settlement section	
BACSServiceOffice	SettlementSubSection	22 (2)	Settlement subsection	
Stream	@HandlingBank	23 (4)	Handling bank code	
Stream	@HandlingBankStream	24 (2)	Handling bank stream	
BACSServiceOffice	AccountNumbersFlag	25 (1)	Account numbers	
BACSServiceOffice	DDIVoucherFlag	26 (1)	DDI voucher flag	
DisallowedTransactions	TransactionGroupCode	27 (2)	DR	Use code or null (note, PR is no longer used)
DisallowedTransactions	TransactionGroupCode	28 (2)	CR	
DisallowedTransactions	TransactionGroupCode	29 (2)	CU	
DisallowedTransactions	TransactionGroupCode	30 (2)	PR	
DisallowedTransactions	TransactionGroupCode	31 (2)	BS	
DisallowedTransactions	TransactionGroupCode	32 (2)	DV	
DisallowedTransactions	TransactionGroupCode	33 (2)	AU	
Not applicable	Not applicable	34 (2)	Spare	null

XML extract		Heritage extract		
Element	Source tag	No. (len)	Field description	Transformation for output
Not applicable	Not applicable	35 (2)	Spare	null
Not applicable	Not applicable	36 (2)	Spare	null
Not applicable	Not applicable	37 (2)	Spare	null
CHAPSSterling	ReturnIndicator	38 (1)	Return indicator	
CHAPSSterling	Status	39 (1)	CHAPS Sterling status	
CHAPSSterling	DateLastChanged	40 (10)	Date of last change	Date
CHAPSSterling	DateClosed	41 (10)	Date closed	Date
CHAPSSterling	CHAPSSterlingID	42 (3)	Settlement bank CHAPS code	
CHAPSSterling	RoutingBICBank	43 (8)	Routing BIC bank	
CHAPSSterling	RoutingBICBranch	44 (3)	Routing BIC branch	
CHAPSEuro	Status	45 (1)	CHAPS Euro status	
CHAPSEuro	DateLastChanged	46 (10)	Date of last change	The CHAPS Euro service is no longer in use. The status will be N and the other fields will be null.
CHAPSEuro	DateClosed	47 (10)	Date closed	
CHAPSEuro	RoutingBICBank	48 (8)	Routing BIC bank	
CHAPSEuro	RoutingBICBranch	49 (3)	Routing BIC branch	
CHAPSEuro	CHAPSEuroID	50 (3)	Settlement bank CHAPS code	
CHAPSEuro	ReturnIndicator	51 (1)	Return indicator	
CHAPSEuro	RTGSIndicatorTarget Status	52 (5)	RTGS indicator / Target status	
Not applicable	Not applicable	53 (20)	Spare	null
ICS	Status	54 (1)	ICS status	
ICS	DateLastChanged	55 (10)	Date of last change	Date
ICS	DateClosed	56 (10)	Date closed	Date

XML extract		Heritage extract		
Element	Source tag	No. (len)	Field description	Transformation for output
ICS	SettlementBank	57 (4)	Settlement bank code	SettlementBank padded on the right with blanks
ICS	DebitAgencySortCode	58 (6)	Switch Participant	
ICS	ReturnIndicator	59 (1)	Return indicator	
ICS	GBNIIndicator	60 (20)	GB/NI indicator	
FPSERVICEOFFICE	Status	61 (1)	Faster Payments status	
FPSERVICEOFFICE	DateLastChanged	62 (10)	Date of last change	Date
FPSERVICEOFFICE	DateClosed	63 (10)	Date closed	Date
FPSERVICEOFFICE	RedirectionFromFlag	64 (1)	Redirection from flag	
FPSERVICEOFFICE	RedirectionToSortCode	65 (6)	Redirection to sorting code	
FPSERVICEOFFICE	SettlementBankConnection	66 (2)	FPS settlement bank - connectivity code	
Not applicable	Not applicable	67 (1)	Spare	null
FPSERVICEOFFICE	SettlementBankCode	68 (4)	FPS settlement bank - bank code	
FPSERVICEOFFICE	HandlingBankConnection	69 (2)	FPS handling bank - connectivity code	
Not applicable	Not applicable	70 (1)	Spare	null
FPSERVICEOFFICE	HandlingBankCode	71 (4)	FPS handling bank - bank code	
FPSERVICEOFFICE	AccountNumbersFlag	72 (1)	Account numbers	
FPSERVICEOFFICE	AgencyType	73 (1)	Agency type	
Not applicable	Not applicable	74 (1)	Spare	null
BANKOFFICE	BankOfficeType	75 (1)	Branch type indicator	
BANKOFFICE	MainBankOfficeSortCode	76 (6)	Main branch sorting code	

XML extract		Heritage extract		
Element	Source tag	No. (len)	Field description	Transformation for output
BankOffice	MajorLocation	77 (30)	Major location	
BankOffice	MinorLocation	78 (30)	Minor location	
BankOffice	OfficeOrPlaceName	79 (35)	Branch/place name	
BankOffice	SecondEntryIndicator	80 (1)	Second entry indicator	
BankOffice	OfficeOrPlaceNameSecond	81 (35)	Branch name second entry	
BankOffice	OfficeTitle	82 (35)	Full branch title 1	substr(BankOfficeFullTitle,1,35)
BankOffice	OfficeTitle	83 (35)	Full branch title 2	substr(BankOfficeFullTitle,36,35)
BankOffice	OfficeTitle	84 (35)	Full branch title 3	substr(BankOfficeFullTitle,71,35)
Address	AddresseeName	85 (35)	Address line 1	
Address	PostalName	86 (35)	Address line 2	
Address	AddressLine1	87 (35)	Address line 3	
Address	AddressLine2	88 (35)	Address line 4	
Address	Country, CityOrTown, AreaOrCounty, ZipCode	89 (30)	Address town	Town
Address	AreaOrCounty, Country	90 (30)	Address county	County
Address	PostCodeOutcode	91 (4)	Postcode major	
Address	PostCodeIncode	92 (4)	Postcode minor	rpad(PostCodeIncode,4, '')
Telephone	InternationalPrefix, Std	93 (10)	Telephone area code	Telephone code
Telephone	Number	94 (8)	Telephone number	substr(Number,1,8)

XML extract		Heritage extract		
Element	Source tag	No. (len)	Field description	Transformation for output
Telephone2	InternationalPrefix, Std	95 (10)	Second telephone area code	Telephone code
Telephone2	Number	96 (8)	Second telephone number	substr(Number,1,8)

3.2.1 Transformation details

Transformation	Description
<<blank>>	Do not transform the data. Pad the data on the right with blanks or truncate to the output length.
Null	Do not output a value. Insert the field separator tab character.
Use code or null	If there is a matching code in the element DisallowedTransactions use the code, otherwise set the code to null.
Date	Reverse the date format and replace each hyphen with a slash. Change yyyy-mm-dd to dd/mm/yyyy
substr(tag,pos,len)	Extract a substring from the value of the tag , starting at position pos for len characters.
rpad(tag,len,'')	Pad the value of the tag on the right with blanks to a length of len characters.
Town	Output field as follows: <pre> If Country is UNITED KINGDOM use CityOrTown padded to 30 characters else remove trailing blanks from CityOrTown and append a space append the AreaOrCounty take first 19 characters of result and append a space append first 10 characters of ZipCode end if </pre> Return the first 30 characters of the result. The result may contain slightly different data, for exampl, additional blank spaces.
County	If the address country is "UNITED KINGDOM" output the AreaOrCounty padded to 30 characters; otherwise, output the Country padded to 30 characters.

Transformation	Description
Telephone code	<p>Output field as follows:</p> <pre> If no InternationalPrefix use Std else if combined number of digits is less than 10 combine the trimmed InternationalPrefix, a space and Std else combine the trimmed InternationalPrefix and Std end if end if </pre> <p>Return the result padded to the right with blanks to 10 characters.</p> <p>Note: "trimmed" means blanks on the right of the field are removed.</p>