ECMS - Triparty Collateral Management (ISO 15022 format)

Client Test Guide

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Contents

1 Introduction

1.1 ECMS overview and impact on triparty collateral management for Deutsche Bundesbank and Banque Centrale de Luxembourg pledge

The European Central Bank (ECB) introduces the Eurosystem Collateral Management System (ECMS) to unify the management of collateral of National Central Banks across the Eurozone. Standardisation of collateral management in the Eurozone will advance the liquidity and automation potential.

This single Back-Office system will replace the 20 local collateral management systems of the National Central Banks (NCBs) which have adopted Euro currency.

Clearstream clients using the triparty services for pledge to Deutsche Bundesbank and to Banque Centrale du Luxembourg will be affected by the ECMS go live on 18 November 2024.

The impacts are the decommissioning of Xemac and the migration to Xact application during the go-live weekend. As a result, triparty collateral management will be handled via Xact application or via MT527 in accordance with Clearstreams Triparty Collateral Management Service (CmaX) Connectivity Guide. Also, new pledge accounts are required in T2S (requirement of ECB). No usage of CBF-i collateral accounts in creation is possible after the migration. Furthermore, securities sub-accounts will be linked to a Bundesbank DCA cash account, or a Banque Centrale du Luxembourg DCA cash account respectively. The consequence is a new process for corporate action proceeds handling as defined by ECMS/SCoRE. Coupon proceeds from pledged papers are initially paid to Bundesbank/BCL DCA and upon green light retroceded to a client DCA account on T2S.

Triparty Collateral Management (CmaX) Connectivity Guide link:

[cmaxctyg.pdf (clearstream.com)](cmaxctyg.pdf)

To ease the transition for the affected clients Clearstream is offering triparty testing during the period from 1 July 2024 to 20 September 2024.

1.2   Structure and content of this document

This client test guide describes the necessary scope and general framework for organising, preparing and executing the client testing for Triparty Collateral Management resulting from the implementation of the ECMS platform. The purpose of this document is to ensure a smooth and efficient go-live for these enhancements in November 2024. It provides a common understanding and commitment of all involved stakeholders for the testing scope, testing execution, testing timeframe, and the test environment setup.

Furthermore, this guide describes how Clearstream Banking organises the testing of client-specific impacts linked to the ECMS implementation, by making the Clearstream Banking testing environments available to clients. This guide intends to provide clients with the testing requirements and guidance throughout the test execution. Clearstream Banking designed test cases that will be executed during the testing period.

Following the introduction and general topics in Chapter 1:

- Chapter 2 summarises the key information related to the client testing.
- Chapter 3 describes the scope of the client testing and specifies the ECMS functionality subject to this testing.
- Chapter 4 outlines information related to Clearstream Banking and technical connectivity setup.
- Chapter 5 provides the test calendar, the test cases, and the pass criteria for each of the test cases.
- Chapter 6 provides Clearstream Banking contact details.
- Appendix includes additional information regarding Xact application tutorials, links to relevant client documentation and Swift templates for triparty instructions.

2 Key information

The table below summarises the key information relating to the testing: Triparty Collateral Management.

Test Cycles	Cycle 1 08/07/2024-19/07/2024 Cycle 2 26/08/2024 – 06/09/2024
Availability of the IMS23/OCCT Test Environment	Monday 09:00 - 17:00 CEST Tuesday 09:00 - 17:00 CEST Wednesday 09:00 - 17:00 CEST Thursday 09:00 - 17:00 CEST Friday 09:00 - 12:00 CEST Saturday Not available. Sunday Not available.
Scope	The aim of this client testing phase is: • To ensure connectivity and a functional message exchange between Clearstream Banking and its clients for Triparty Collateral Management in the context of ECMS. • To support client readiness resulting from the migration from Xemac to Xact application.
Test connectivity	No change regarding ISO 15022 connectivity
Connectivity channels	Xact via Swift Xact via File Transfer Xact Web Portal For more information please refer to below link: **ClearstreamXact testing environment**
Participation	Optional, but recommended
Subscription	Please complete the test registration form available on the Clearstream Banking ECMS / SCoRE implementation web page and send it by email to ECMS.Programme@clearstream.com.
Subscription deadline	31 May 2024

3 Client testing scope

Clearstream Banking defined a client testing scope to validate the changes for clients resulting from the go-live of ECMS affecting the current processes for pledge to Bundesbank and to Banque Centrale du Luxembourg.

In addition, on the day of the ECMS go-live, Xemac application will be decommissioned and collateral pledge to Deutsche Bundesbank and to Banque Centrale du Luxembourg will be handled through Xact application or via MT527[1] going forward. This guide aims to support clients with the migration from Xemac to Xact application.

This section provides the Triparty Collateral Management functionalities within the scope of the ECMS Programme that will be part of the Client Testing.

- Increase of a triparty transaction
- Decrease of a triparty transaction
- Revaluation of a triparty transaction
- Coupon payment / retrocession
- Cancellation of a triparty transaction
- Unilateral removal process
- Automatic collateral substitution due to ineligibility
- Closure of a triparty transaction
- Collateral reporting: regression/existing functionality

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[1] Some fields in the MT527 for triparty instructions in CmaX/Xact do not correspond to the MT527 used for Xemac. For more information, please consult the CmaX Connectivity Guide available on the Clearstream website.

4   Preparation for testing environments

Clients will be able to communicate with Clearstream via the following connectivity channels:

- Xact via Swift
- Xact Web Portal
- Xact via File Transfer

Even if clients will send their triparty instructions via Swift or File Transfer, access to Xact Web Portal will be provided for the test environment to assure access to reporting.

For a successful participation in the client testing, account(s) and connectivity settings must be in place. Please contact the Connectivity Test Support team (connect-test@clearstream.com) if:

- The account(s) and connectivity settings in the Xact Portal test environment need to be verified.
- The client requires new connectivity or a new account in the Xact Portal test environment.
- Setup requirements related to client testing are missing.

Clearstream will assure that sufficient fictive positions are available on the source account(s) as well as events are created for specified ISINs to test the system behaviour linked to corporate actions and coupon payments.

In general, the settings used in the testing environment shall not deviate from production. If clients decide differently, they are requested to reconfirm the settings in the testing environment and are requested to consider the risk that is imposed by executing test cases with deviating static data.

The default language of the reports transmitted in the testing environment is English. Clients cannot change these settings in the test environment.

4.1   Test environment - Connectivity via Xact Web Portal (U2A)

Clients can perform the entire testing via Xact Web Portal.

The Xact U2A connectivity setup from the previous testing periods stored in CBL test environment will be reused. To ensure a proper instruction maintenance via Xact Web Portal, clients are requested to check if testers have sufficient access and the necessary user rights as well as checking account connectivity settings.

Please contact the Connectivity Test Support team (connecttest@clearstream.com) if connectivity settings in the test environment need to be enriched for the client testing.

4.2   Test environment - Connectivity via Swift (A2A)

For the message exchange via the Swift network, Swift requires the use of Test BICs as technical sender and receiver address within the testing environment. The Test BIC of the testing client must be registered with the Swift network. If clients wish to participate via a Test BIC for the first time, they should allow some time for the preparation of the technical setup by Swift, RMA key exchange and connectivity tests.

BICs used in production are different to the ones provided in the test environment. Clients are requested to check account connectivity settings.

For triparty testing only the below test BIC for instructions towards Clearstream must be used in the header of the MT527 message.

Triparty Instructions	
Test BIC	ZYAILUL0XXX
Channel	Swift

The testing will take place in Swift Release 2023 mode.

4.3 Test environment - Connectivity via File Transfer

If clients wish to test via File Transfer, they need to get in touch with the Connectivity Test Support team (connecttest@clearstream.com).

The test server for this purpose is:

OneClearstream   https://oneclearstreamtest.cdinternet.com 194.36.230.9

For more detailed information please consult the Clearstream file transfer connectivity solutions document, following below link:

https://www.clearstream.com/resource/blob/1312314/7f7f5105da163294591930be8686a4fe/cdifiletransfer-data.pdf

4.4 Test Reporting:

Triparty reports scheduled in the testing environment cannot be received via email or file transfer. This functionality is only available in production. Reports need to be downloaded in Xact.

Clients can choose what reports they require from the list below.

Setup	
Report types	**Triparty Collateral reporting:** MT558 - Triparty Collateral Status and Processing Advice **Exposure reports** Triparty Collateral Management Daily Exposure Report - PDF Triparty Collateral Management Daily Exposure Report - TXT Swift MT569 Triparty Collateral and Exposure Statement
Frequency Delivery channel	As scheduled Swift Xact Web Portal File Transfer only for MT569

MT54X and MT536 will be set up for all clints by default.

5 Client testing and test calendar

The testing phase is consisting of connectivity testing, guided testing, and free testing periods.

The different testing phases are indicated in below calendar. Calendar weeks 27 and 34 are reserved for connectivity testing only. Please do not book any instructions during those weeks. During calendar week 33 the test environment will be down and therefore not available for any testing.

Test Calendar:

W27	W28	W29	W30	W31	W32
01/07/2024 - 05/07/2024	08/07/2024 - 12/07/2024	15/07/2024 - 19/07/2024	22/07/2024 - 26/07/2024	29/07/2024 - 02/08/2024	05/08/2024 - 09/08/2024
connectivity testing only	guided testing Cycle 1 Group A	guided testing Cycle 1 Group B	free testing (limited support)	free testing (limited support)	free testing (limited support)

W33	W34	W35	W36	W37	W38
12/08/2024 - 16/08/2024	19/08/2024 - 23/08/2024	26/08/2024 - 30/08/2024	02/09/2024 - 06/09/2024	09/09/2024 - 12/09/2024	16/09/2024 - 20/09/2024
DOWNTIME	connectivity testing only	guided testing Cycle 2 Group A	guided testing Cycle 2 Group B	free testing (limited support)	free testing (limited support)

Connectivity testing: Clients make sure that their selected connectivity channel is valid and required reports are set up in Xact.

Guided testing: Clients test all test cases described in Chapter 5.2. In case of any issues or questions, support will be provided in a timely manner.

Free testing: Clients can test freely the test cases which are not indicted as "guided". In case of issues or questions, support will be provided on best effort basis only.

Clients are strongly encouraged to validate their system access during the first testing week (W27) before the guided test cycle starts. No testing beyond connectivity must be carried out during this first week to avoid any risks to undermining the guided testing.

For the guided testing, both cycles consist of two groups A and B. Each group shall test all test cases during four consecutive business days.

Clients will be informed to which group they are assigned to shortly after the registration deadline.

The test cases (TC) must be followed in the foreseen order. Testing must begin on a Monday and is expected to finish on a Thursday. On Fridays, the testing environment is open until noon. Friday morning is reserved for contingency, in cases where the seven test cases could not be successfully finalised within the first four days of a testing week. Please do not use the guided testing weeks for free testing.

Ideally, the participating clients need to identify all issues, if any, during the first testing cycle and report them to ECMS.Programme@clearstream.com for all problems that are related to Clearstream functionality.

If a test case cannot be tested successfully on the designated test day, please contact
ECMS.Programme@clearstream.com. Clearstream will support and advise, if a reorganisation of the test cases is possible to catch up and still test successfully within the same testing week. The analysis will be done case by case.

Client queries directly related to the test cases will be handled as timely as possible during the guided testing cycles, or, depending on the complexity and volume as soon as practical shortly after the guided testing cycle at the latest.

If all test cases have been tested and the pass criteria have been satisfied, a re-testing (participation in Cycle 2) is not needed.

For cases where clients were not able to achieve the expected testing results for all the seven testing cases during the first testing cycle, the second testing cycle is foreseen to re-test.

To ensure that the expected results can be obtained during the second test cycle, all issues occurred during the first test cycle need to be addressed clearly and resolved. As the test cases are built up on another, all tests need to be repeated, even if some may have tested successfully during the first test cycle.

Note: For some test cases, clients need ECMS confirmation or the intervention of a tester from Clearstream: More information regarding the affected TCs is detailed in Chapter 5.3 Pass criteria for the test cases.

5.1   Test Calendar for guided testing

In the table below the testing dates for the two guided testing groups A and B are indicated together with the ISINs that need to be allocated as collateral at least one day before the test case day. Otherwise, the associated test cases cannot be tested. Please respect the timelines and stay within your assigned group during the full period.

Cycle 1

Group	Dates	ISIN CA with event (TC 02)	ISIN with interest payment (TC 04)	ISIN for CR exclusion (TC06)
A	08/07/2024 - 12/07/2024	AT0000A0DXC2	FI4000148630	EU000A1G0DE2
B	15/07/2024 - 19/07/2024	XS1385146920	AT0000383864	DE0001143469

Cycle 2

Group	Dates	ISIN CA with event (TC 02)	ISIN with interest payment (TC 04)	ISIN for CR exclusion (TC06)
A	26/08/2024 - 30/08/024	PTOTVMOE0000	FI4000037635	EU000A1G0DE2
B	02/09/2024 - 06/09/2024	NL0011819040	AT0000A0VRQ6	DE0001143469

5.2   Test Cases

All test cases can be found in below table. The test cases must be executed in the indicated order and on the dedicated testing day.

Test Cases							
Day	**Test Description**	**Number**	**Test Steps**	**Client Instruction**	**ECMS Action**	**Client Instruction Status**	**Expected Test Results**
Day 1	Client instructs an increase of the triparty transaction	TC 01	Client instructs an increase of the triparty transaction (via Swift or Xact)	PADJ (Swift) Change Principal (Xact)	-	NMAT (Swift) Unmatched (Xact)	Reporting shows full collateralisation of transaction amount
			System automatically matches instruction	-	ECMS instructs an increase of the triparty transaction	TREA (Swift) Released (Xact)	
			Transaction is fully collateralised	-	-	AOLF (Swift) Settled (Xact)	
			Client receives Collateral Reporting	-	-	-	
Day 2	Substitution generated due to Corporate Action (guided)	TC 02	*System communicates Ineligibility Periods for Corporate Actions*	-	-	-	Collateral report indicates that ISIN subject to CA event is not used as collateral
			System generates a substitution and sends out Report on Flows to ECMS	-	-	-	
			Client receives Collateral Reporting	-	-	-	
Day 2	Client instructs a decrease of the triparty transaction	TC 03	Client instructs a decrease of the triparty transaction (via Swift or Xact)	PADJ (Swift) Change Principal (Xact)	-	NMAT (Swift) Unmatched (Xact)	Updated collateral reporting indicates new exposure. Collateral excess released from collateral account
			ECMS sends matching transaction decrease	-	ECMS instructs a decrease of the triparty transaction	TREA (Swift) Released (Xact)	
			Transaction is fully collateralised	-	-	AOLF (Swift) Settled (Xact)	
			Client receives Collateral Reporting	-	-	-	
Day 3	System generates a coupon payment on collateralised position (guided)	TC 04	*System pays a coupon on Collateralised Position to NCBs DCA A/C*	-	-	-	Cash proceeds are transferred on the clients cash account Client received MT566
			ECMS sends Debit Authorisation to Clearstream		ECMS instructs Clearstream to debit its DCA and credit the Collateral Giver	-	
			Clearstream processes retrocession	-	-	-	
			Client receives reporting for retrocession processing	-	-	-	
Day 4	Client instructs a Cancelation of Triparty Instruction (guided)	TC 05	Client instructs a decrease of the triparty transaction (via Swift or Xact)	PADJ (Swift) Change Principal (Xact)	-	NMAT (Swift) Unmatched (Xact)	No changes in transaction amount and collateral No pending instructions No changes in reporting
			ECMS does **not** send matching transaction decrease	-	-	-	
			Client instructs cancellation request (via Swift or Xact)	CANC (Swift) Cancel Instruction (Xact)	-	CAND (Swift) Cancelled (Xact)	
			Client receives Collateral Reporting	-	-	-	
			System generates a substitution and sends out Report on Flows to ECMS	-	-	-	

Test Cases

Day	Test Description	Number	Test Steps	Client Instruction	ECMS Action	Client Instruction Status	Expected Test Results
Day 4	ECMS Send a Unilateral Exclusion Request (guided)	TC 06	ECMS communicates which security is to be excluded on given transaction	-	ECMS instructs the Unilateral Exclusion Request	-	Eligibility report shows the excluded ISIN as ineligible
			System generates a substitution and sends out Report on Flows to ECMS	-	-	-	
			Client receives Collateral Reporting	-	-	-	
Day 4	Client instructs a Closure of a Triparty Transaction	TC 07	Client instructs a Closure of a Triparty Transaction	TERM (Swift) Change Closing Date (Xact)	-	NMAT (Swift) Unmatched (Xact)	Transaction amount changes to 0. Collateral is fully released. Reporting stats 0 exposure and 0 collateral in use .
			ECMS sends matching Closure of Triparty Transaction	-	ECMS instructs a closure of the triparty transaction	TREA (Swift) Released (Xact)	
			Client receives Collateral Reporting	-	-	-	

5.3   Pass criteria for the test cases

Test case 01: Client instructs an increase of the triparty transaction:

TC 01 passed if

- the new exposure amount has increased, and the exposure is fully covered.
- the increase is correctly reflected in ECMS (the test result is to be confirmed with the NCBs).
- Collateral reporting was generated and contains correct information.

Important Note: To prepare for TC 02, TC 04, and TC 06, please make sure the indicated ISINs stated in the test calendar are allocated as collateral. If the ISINs were not allocated by the system automatically, please allocate the ISINs manually and withdraw any other ISIN from your collateral account to remove the collateral excess, or alternatively, please advise ECMS.Programme@clearstream.com to do this operation on your behalf.

Test case 02: (Guided) Substitution generated due to Corporate Action

TC 02 passed if

- the ISIN linked to the upcoming Corporate Action event has been fully replaced by another eligible ISIN from the clients' source account.
- Collateral reporting was generated and contains correct information.

Test case 03: Client instructs a decrease of the triparty transaction

TC 03 passed if

- the new exposure amount has decreased, and the collateral is returned accordingly.
- the decrease is correctly reflected in ECMS (the test result is to be confirmed with the NCBs).
- Collateral reporting was generated and contains correct information.

Test case 04: (Guided) generates a coupon payment on collateralised position

TC 04 passed if

- the client received a (MT566) Corporate Action Confirmation (if scheduled) which indicates the retrocession payment to the clients' cash account and the cash proceeds are transferred to the clients cash account. This test case will be performed by Clearstream. Clients only need to check the related reporting.

Test case 05: (Guided) Client instructs a Cancelation of Triparty Instruction

TC 05 passed if

- the clients unmatched transaction instruction is in status "cancelled" and no change to the exposure amount or reporting has occurred.

Test case 06 (Guided) ECMS Send a Unilateral Exclusion Request

TC 06 passed if

- the Eligibility report shows the ISIN excluded by the Collateral Receiver as ineligible as collateral. This test case will be performed by ECMS. Clients only need to check the related reporting.

Test case 07 Client instructs a Closure of a Triparty Transaction

TC 07 passed if

- the exposure is successfully closed, and all collateral excess is released from the collateral account to the source account.
- the closure is correctly reflected in ECMS (the test result is to be confirmed with the NCBs).
- Collateral reporting was generated and contains correct information.

If the pass criteria for a test case is not met, the test case is considered as failed.

6 Contacts

The ECMS Programme Readiness team at Clearstream Banking will answer your questions regarding the Clearstream Banking environment used for client test execution and necessary setup requirements. In addition, they will handle any queries regarding the ECMS Triparty Collateral Management implementation in general.

All issues encountered by clients with Clearstream Banking related to Clearstream functionality during the testing should be reported to the same e-mail address below. For this reason, Clearstream Banking asks its clients to use the Issue Declaration Form which is also published on the Clearstream Banking ECMS web page. Clearstream Banking will collect all raised items, analyse them, and revert to clients in a timely manner.

ECMS Programme Business Readiness team

Email: ECMS.Programme@clearstream.com

For pure ECMS related issues, please liaise with your NCB directly.

Appendix

A collection of relevant supportive information for the various test cases is provided in the Appendix of this document.

To support clients not familiar with the Xact, links to video tutorials, client documentation related to reporting and income proceeds as well as Swift templates for triparty instructions can be found below.

Xact Web Portal Collateral Management tutorials

Xact user tutorials are available via below link.

[Xact Web Portal Collateral Management tutorials (clearstream.com)](#)

Below videos are relevant for this client testing.

- How to adjust Principal exposure amount on TCMS exposure (TC01, TC03)
- How to release pending instructions (TC01, TC03, TC05,TC07)
- How to set closing date (TC07)
- How to perform an Eligibility check (TC02, TC06)
- CmaX reports in Xact Web Portal (useful for all test cases)
- Standard reports in Xact Web Portal (TC04)

Please note that there has been an update of the Xact menu in the meantime. The view of the menu in the videos does not correspond to the updated view in the testing and production environment. In order to rule out any confusion, please see the current menu below. All menu items remain available.

Example: CmaX reports can be found though "Collateral Management - My Activities""Reports", same as described in the related tutorial video. The only difference is the different menu interface.

Reporting

All relevant information regarding reporting can be found in the Connectivity Guide.

- For all available reports please refer to our Connectivity Guide (below link)
- Chapter 3 (CmaX reporting):
  https://www.clearstream.com/resource/blob/1318472/414254f9c9bc3cba45ff10e8bf9206d3/cmax-connectivity-guide-data.pdf
- Link to related Clearstream webpage:
  https://www.clearstream.com/clearstream-en/securities-services/connectivity-1-/a22020-2976346

Note: Exposure coverage details can be viewed on the exposure reports and on the summary reports.

Income proceeds

Income proceeds can be verified via receipt of the related MT56x messages. For more information, please refer to below link:

https://www.clearstream.com/clearstream-en/securities-services/asset-services/reporting

Swift Message templates for triparty instructions

Principal Adjustment (Increase/decrease)

Data Type	ISO 15002 Field	Field Value
Sender's Message Reference	:20C::SEME//	(Client Unique Ref]
Client Instruction Reference	:20C::CLCI//	(Instruction Unique Ref]
Client Trade Reference	:20C::SCTR//	(Transaction Unique Ref]
Function of Message	:23G:NEWM	
Value date	:98A::EXRQ//	(YYYYMMDD)
Instruction type indicator	:22H::CINT//	(PADJ)
Service type indicator	:22H::COLA//	(CBCO)
Party role indicator	:22H::REPR//	(PROV)
Eligibility basket ID	:13B::ELIG//	(Basket ID)
Your identification	:95P::PTYA//	[Client's BIC8]
	:95P::PTYB//	[NCB's BIC8]
Collateral account at Clearstream	:95R::TRAG/CEDE/	(Collateral Account]
Closing date	:98B::TERM//	(OPEN)
Transaction currency and amount	:19A::TRAA//	(Transaction Amount)

Termination

Data Type	ISO 15002 Field	Field Value
Sender's Message Reference	:20C::SEME//	(Client Unique Ref]
Client Instruction Reference	:20C::CLCI//	(Instruction Unique Ref]
Client Trade Reference	:20C::SCTR//	(Transaction Unique Ref]
Function of Message	:23G:NEWM	
Value date	:98A::EXRQ//	(YYYYMMDD)
Instruction type indicator	:22H::CINT//	(TERM)
Service type indicator	:22H::COLA//	(CBCO)
Party role indicator	:22H::REPR//	(PROV)
Eligibility basket ID	:13B::ELIG//	(Basket ID)
Your identification	:95P::PTYA//	[Client's BIC8]
Counterparty identification	:95P::PTYB//	[NCB's BIC8]
Collateral account at Clearstream	:95R::TRAG/CEDE/	(Collateral Account]
New Closing date	:98A::TERM//	(YYYYMMDD)
Transaction currency and amount	:19A::TRAA//	(Transaction Amount)

Cancellation

Data Type	ISO 15002 Field	Field Value
Sender's Message Reference	:20C::SEME//	(Client Unique Ref]
Client Instruction Reference	:20C::CLCI//	(Instruction Unique Ref]
Client Trade Reference	:20C::SCTR//	(Transaction Unique Ref]
Function of Message	:23G:CANC	
Value date	:98A::EXRQ//	(YYYYMMDD)
Instruction type indicator	:22H::CINT//	(TERM)
Service type indicator	:22H::COLA//	(CBCO)
Party role indicator	:22H::REPR//	(PROV)
Eligibility basket ID	:13B::ELIG//	(Basket ID)
Your identification	:95P::PTYA//	[Client's BIC8]
Counterparty identification	:95P::PTYB//	[NCB's BIC8]
Collateral account at Clearstream	:95R::TRAG/CEDE/	(Collateral Account)
Link to message to be cancelled	20C::PREV//	(Client Unique Ref of the message to be cancelled]
New Closing date	:98A::TERM//	(YYYYMMDD)
Transaction currency and amount	:19A::TRAA//	(Transaction Amount)