DEUTSCHE BÖRSE

XONTRO®

Xetra Release 9.0

Introduction "Xetra Frankfurt 2" for structured products

Differences to XONTRO

(English version)

Abstract

This document describes the differences implemented within the XONTRO processing, which have become necessary for the smooth integration of the SAKI order routing facilities for the new trading platform for structured products, "Xetra Frankfurt 2", as compared to the traditional order routing to XONTRO Frankfurt Floor via SAKI. The differences in the XONTRO Trade processing of trades arising from Xetra Frankfurt 2 platform are also described. – This document will be distributed to the public; it will be available in German and English.

Keywords

XONTRO, SAKI, Xetra, Xetra Frankfurt 2, Xentric Order für Xetra Frankfurt 2, Order, Trade, Order Execution, Order Modification, Order Deletion, Order Confirmation, OTC Trade, Contract Note, Schlussnote, Trade Enrichment, Settlement

Table of contents

Page

1 Introduction

Within the framework of a joint venture set up between the Swiss Exchange (SWX) and Deutsche Börse Group (DBAG), which had been contracted on January 1st, 2007, it is planned to merge the two currently existing, distinctive trading platforms for the so called “structured products” – one within the DBAG and one within the SWX – into one new common platform. This new common trading platform for structured products is currently being realized as a new (technical) instance based upon the Xetra trading system architecture currently being operated by Deutsche Börse Group; its new name will be “Xetra Frankfurt 2”, and production launch is scheduled for April 28th, 2008. Beginning with this date, and with respect to all “on-exchange” trades executed for structured products, all instruments within the structured products segment, and currently being traded either within “Xetra Frankfurt 1” or XONTRO FWB Floor, will then be shifted onto the new trading platform “Xetra Frankfurt 2”. The inclusion of the Swiss structured products currently being traded at the SWX platform into the new “Xetra Frankfurt 2” platform is scheduled to be launched for 2009. – The “off-exchange”, i.e. not order-based, trades for structured products will further on be allowed to be executed within XONTRO (and on Xetra Frankfurt 1).

Access to “Xetra Frankfurt 2“ will be granted to all FWB trading members who, at present, have access for trading to either Xetra Frankfurt 1 or XONTRO FWB Floor (or both). As a technical interface between the participants and the Xetra Frankfurt 2 system, asides from the “VALUES API” interface, the so called “System connection for banks” (“SAKI”) will be available, too. In order to gain access to Xetra Frankfurt 2, both interfaces are subject to some modifications. This document describes the changes to be implemented on the SAKI for Xetra Frankfurt 2 access.

The description in this document is to a large extent set up **functionally**. Further details about the technical implementation of the rules described here, as well as to the correct usage of the Message Types employed for Xetra Frankfurt 2, may be derived from the “Technical Connection for Financial Institutes”, as well as from the “S.W.I.F.T. Message formats for contract notes, trade confirmations and CCP trades in XONTRO Trade” documents, for both of which new versions have been issued lately.

2 List of abbreviations and terms used in this document

3270 dialog / emulation	Dialog connection between participant and trading system via an IBM 3270 terminal emulation programme (e.g. as a PC application on a work station)
AKV	“Auslands-Kassen-Verein“ (Type of custody)
BC..	Descriptor of a terminal transaction within the 3270 dialog
BI	“bankintern” / “member internal“ (A type of order reference)
CASCADE	Settlement system for domestic (GS-type-custody) securities at CBF
CBF	Clearstream Banking Frankfurt
CCP	Central Counter-Party (At Eurex Clearing AG)
Creation	Settlement system for foreign (AKV-type-custody) instruments at CBF
DBAG	Deutsche Börse AG, Deutsche Börse Group
EDF	Until now: Code for “Exchange location Frankfurt Floor“ In the future: Common exchange location code für “Frankfurt Floor“ and “Xetra Frankfurt 2“
EK-Neu	“Engagement-Kontrolle Neu“ (Exposure control system operated bei DBAG)
FIXOFF	Message code für “Suspension of price fixing“ (Event notification from Xetra / Xetra Frankfurt 2 to SAKI)
FIXON	Message code für “Withdrawal of price fixing suspension“ (Event notification from Xetra / Xetra Frankfurt 2 to SAKI)
FWB	“Frankfurter Wertpapier-Börse“, Frankfurt Stock Exchange
GS	“Giro-Sammel-Verwahrung“ (Type of custody)
HUM	“Handel unter Maklern“ (“Trading among intermediaries” on the Frankfurt Floor)
ISIN	International Securities Identification Number
KUSTA	Customer database owned by CBF; partially shared by XONTRO
LION	“Lieferliste Online“ (CBF functionality)
MT	(S.W.I.F.T.) Message Type
MT500	Buy order (Message type in SAKI)
MT501	Sell order (Message type in SAKI)
MT512	Contract note (Message type in contract notes data carrier)
MT519	Order execution confirmation (Message type in SAKI)
MT551	Event notification (Message type in SAKI)
MT595	Order modification or order deletion (Message type in SAKI)
MT596	Response message from system (Message type in SAKI)

MT598	Contract notes heading or trailing message (Message type in contract notes data carrier); or: message for individual application (e.g. along with logon procedure at SAKI)
OTC Trade	Over The Counter Trade (Direct trade between banks)
PÜEV	“Platz-Überschreitender Effekten-Verkehr“ (Securities’ transaction between more than one German exchange location)
S.W.I.F.T.	“Society for Worldwide Interchange of Financial Transactions”; system for message interchange between financial institutes, labelled after the company bearing the same name
SAKI	German abbreviation for “System connection for financial institutes”
SAM	German abbreviation for “System connection for intermediaries“
Schlussnote	Contract note; document sent to banks as a confirmation of a securities’ transaction; functionally similar to “trade confirmation“ in Xetra
SIMA	German exchange-owned system for integrated market surveillance
StatistiX	DBAG-owned system for statistical evaluations of securities’ transactions
structured products	Umbrella term for those instruments selected to be traded on “Xetra Frankfurt 2” (i.e. certificates, warrants, …)
SWX	Swiss Exchange
T	Trade Date (Contraction date of a securities’ transaction)
TRICE	Label for the German “§9“ / reporting functionality within DBAG
VALUES API	Virtual Access Link Using Exchange Services – Application Programming Interface (standard interface for Xetra and Eurex)
WM	“Wertpapier-Mitteilungen” (German central publication agent for securities’ notices)
WPR	“Wert-Papier-Rechnung“ (Type of custody)
WSS	“Wertpapier Service System“ (securities’ database, owned by DBAG, based upon WM data)
XEBAT	Message code for “End Xetra / Xetra Frankfurt 2 order routing at particpant’s level” (Event notification from Xetra / Xetra Frankfurt 2 to SAKI)
Xentric Order for Xetra Frankfurt 2	Descriptor for the bi-directional interface between SAKI and Xetra Frankfurt 2
Xetra	eXchange Electronic TRAding System (electronic trading system of DBAG/FWB)
Xetra Frankfurt 2	Descriptor for the new Xetra-based trading platform for structured products
XONTRO	Descriptor for the EDP system used at the German floor trading exchanges for the intermediary-based exchange and OTC trading
XONTRO Order	Order management and price fixing subsystem of XONTRO
XONTRO Trade	Trade management and trade enrichment subsystem of XONTRO

3 Functional differences

3.1 Basic changes

Along with the transfer of the structured products listed at FWB onto Xetra Frankfurt 2, for XONTRO participants the access to this system will only be possible via the so called “System connection for banks” (SAKI) in the future. Access via the XONTRO 3270 dialog will not be supported any longer. By means of the takeover of the structured products into the electronic trading system Xetra Frankfurt 2, the access via the so called “System connection for intermediaries” (SAM) will become obsolete. Those functionalities necessary for the specialists will be integrated into the Xetra VALUES API interface.

Illustrated in simplicity, **today**, along with the order entry, the banks are given the following options:

System	via 3270 dialog	via SAKI	Comment
XONTRO Frankfurt (“EDF” resp. “130“)	supported	supported	---
Xetra (“EDE“ resp. “194“)	not supported	supported	---

Along with the Xetra Frankfurt 2 launch, this classification scheme will be extended so that:

1. orders determined for Xetra Frankfurt 2 may (as for Xetra Frankfurt 1) likewise only be entered via SAKI and not via the 3270 dialog,
2. orders determined for Xetra Frankfurt 2 must, however, still contain the exchange location “Frankfurt“ (“EDF“ resp. “130“).

In the future, the assignment of an order entered via SAKI and containing the exchange location code for “Frankfurt” (“EDF” or “130”) to the correct target system (XONTRO Frankfurt Floor or Xetra Frankfurt 2) will be done using the ISIN as an additional clue: Every instrument listed at Frankfurt Floor or Xetra Frankfurt 2 will, **in the future**, unambiguously be assigned to only one of these two trading locations:

System	via 3270 dialog	via SAKI	Comment
XONTRO Frankfurt (“EDF resp. “130“)	supported	supported	Assignment is done using the ISIN as an additional clue, and the exchange location included
Xetra (“EDE” resp. “194“)	not supported	supported	no changes
Xetra Frankfurt 2 (“EDF“ resp. “130“)	not supported	supported	Assignment is done using the ISIN as an additional clue, and the exchange location included

This leads to the conclusion that, in the future, along with **all** order-related messages that are sent via SAKI to the exchange location “EDF” resp. “130”, the ISIN **always** has to be included as a **mandatory** attribute into the message – i.e. including with orders that are to be sent to the XONTRO Frankfurt Floor! For order entries, as well as for order-related messages determined for the exchange location “EDE”/”194”, this rule has been mandatory for the past already; for order modifications or order deletions determined for the exchange location “130”/”EDF”, however, the ISIN inclusion has not yet been mandatory.

One further important change consists of the fact that, for orders routed onto Xetra Frankfurt 2 (and with the exchange location “130“ or “EDF“ included), the “open order stock” will be managed within Xetra Frankfurt 2 exclusively in the future. The reporting for own orders will be done via the existing Xetra reports. The retrieval of the order history from within XONTRO will not be possible any longer for these orders in the future. Likewise, the “open order lists” resp. SAKI messages generated by XONTRO during the end-of-day-batch will not contain open orders routed to Xetra Frankfurt 2.

In what follows below, further aspects will be listed briefly, in which changes along with trading on Xetra Frankfurt 2 – as compared to trading in structured products on XONTRO Frankfurt Floor – may occur. These aspects will be treated in detail in the following chapters of this document:

- As a basic rule, orders for Xetra Frankfurt 2 may chosen to be sent by the participant either via the Xetra VALUES API interface, or via SAKI; Xetra delivers trades and order execution confirmations generally back to all member nodes; response messages, however, are only sent back to the sender
- Within XONTRO, orders and messages determined for Xetra Fankfurt 2 may only be entered by banks and only via SAKI; the system connection for intermediaries (SAM), as well as the dialog interface via a 3270 terminal emulation – for banks as well as for intermediaries – may not be used for XONTRO order routing onto Xetra Frankfurt 2 any longer; the 3270 functionality will then not be availabe any longer – not even as a backup scenario for the order routing by banks
- The exchange location code for Xetra Frankfurt 2 will be “Frankfurt”/”EDF”/”130”; the identification of an instrument, as defined by its ISIN, as “traded on Xetra Frankfurt 2” will be made by evaluating the appropriate WM resp. WSS field; the assignment is unambiguous
- In order to be enabled to send own orders to Xetra Frankfurt 2, a bank must be admitted as a trading member for Xetra Frankfurt 2
- Orders for Xetra Frankfurt 2 may be entered via SAKI beginning as early as presently (i.e. beginning at 02:30 a.m.); these orders will, however, temporarily be buffered and then be forwarded onto the Xetra Frankfurt 2 back end beginning at 07:30 a.m.
- The trading hours – i.e. the times at which price fixings may occur in Xetra Frankfurt 2 – are set from 09:00 a.m. until 08:00 p.m. (similar as for XONTRO Frankfurt Floor); afterwards, a post trading phase follows, which runs from 08:00 a.m. until 08:30 p.m. (as in XONTRO)
- The SAKI interface accepts all order types presently allowed for Xetra and for Xetra Frankfurt 2; it then forwards them to the respective back end
- Orders entered for Xetra Frankfurt 2 will have a maximum validity of 90 days

- In contrast to XONTRO, orders entered for Xetra Frankfurt 2 will **not** be deleted by the end-of-year-batch, but rather by the time the order validity, as specified by the order issuer, has been reached
- In contrast to XONTRO, for Xetra Frankfurt 2 the SAKI participant will receive an order deletion message using the format MT595, in case the order has expired
- "On-behalf-orders", i.e. orders along with the execution of which an additional OTC trade arises, at which the order issuer is swapped onto the other side of the trade, as compared to the original order, will no longer be allowed in Xetra Frankfurt 2 [1]
- Within Xetra Frankfurt 2, the order may be executed either within the "Issuer model" or within the "Specialist model"; the allocation to either of the two market models occurs according to the instrument issuer's specification, whereby each ISIN will be allocated to exactly one market model
- For as long as the order has been entered, but not yet executed in Xetra Frankfurt 2, the order may via SAKI be deleted or – in some attributes – be modified; if the modification results in a change of the price-time-priority of the order (e.g. along with limit changes), then the order will be assigned a new system order reference number
- With the exceptions of the events "XEBAT" (End of Xetra Frankfurt 2 order routing at participant's level), "FIXOF" (Suspension of price fixing) and "FIXON" (Withdrawal of price fixing suspension) there will be no event notifications transmitted from Xetra Frankfurt 2 onto SAKI
- After an order has been executed at Xetra Frankfurt 2, the resulting trade may be "cancelled" by Xetra Frankfurt 2 Market Supervision after a consultation with the participant and up to 2 hours after the trade has been contracted ("Mistrade" regulation for Xetra)
- "Next day cancellations" can only be achieved by means of entering a "trade reversal" (buy and sell side swapped); this entry can be done by either the participant(s) or Market Supervision; in this case, both trades will be settled
- Within the on-exchange trading for structured products on Xetra Frankfurt 2, there will be no online-fees-calculation – such as, e.g., brokerage – being offered
- There will be no more "*Aufgaben*" (pending trades), no more price differences, and no more "trading amongst specialists" (similar to "HUM" in XONTRO)
- Banks will, however, still be offerred the option to enter OTC trades for structured products in XONTRO – via SAKI as well as via the 3270 dialog; these "XONTRO OTC trades in structured products" will, however, with no exception be flagged as "off-exchange" trades; they will as before be executed in XONTRO and afterwards be forwarded to LION and CASCADE for settlement; cancellations and trade reversals of these OTC trades entered into XONTRO will further on be allowed in XONTRO, according to the terms and conditions valid today
- Likewise, "broker-mediated trade entries" – entered by intermediaries via 3270 dialog as well as via SAM – will still be allowed in XONTRO; these trades will also be labelled "off-exchange";

[1] Orders in structured products entered for XONTRO exchange locations unequal to Frankfurt may, however, still contain "on-behalf-conterparties" – including counterparties from the Frankfurt Floor

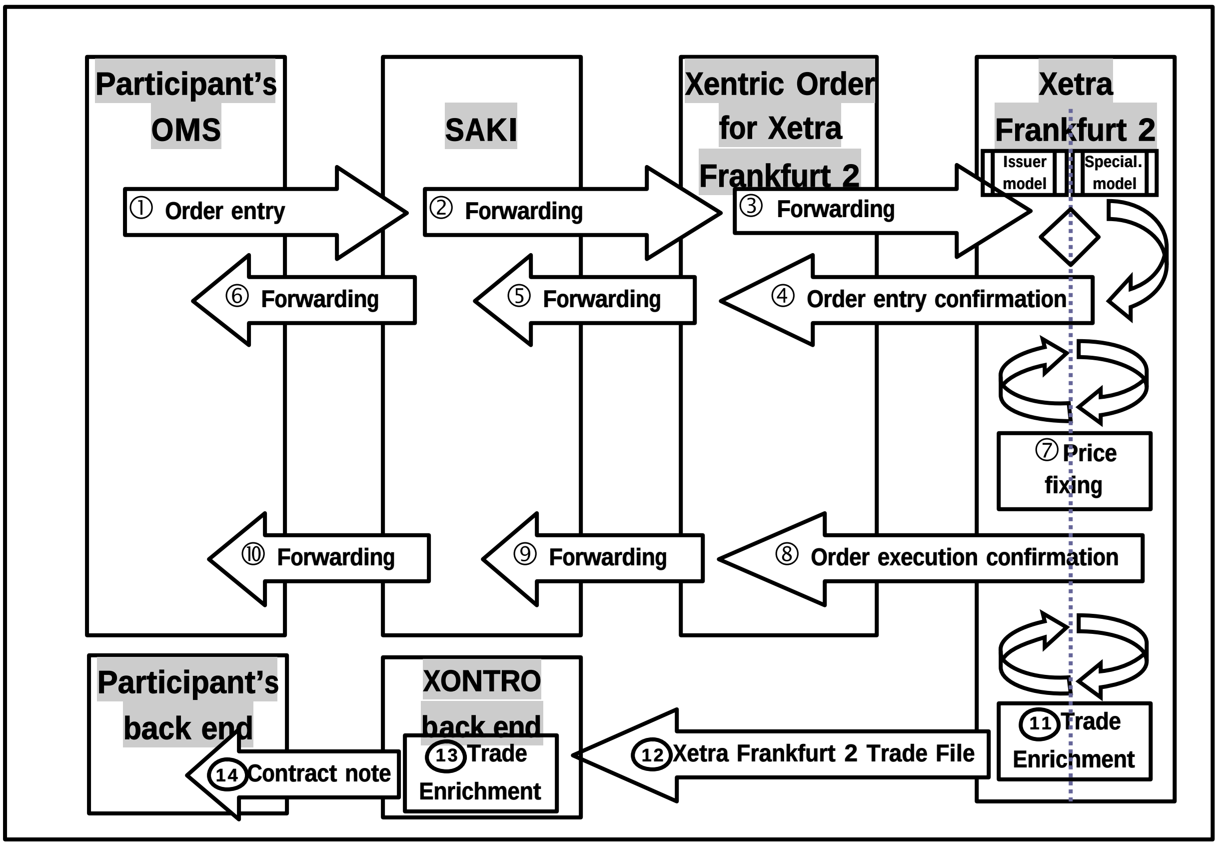
they will also not be forwarded onto Xetra Frankfurt 2, but rather "executed" in XONTRO and then forwarded onto LION for settlement

- In Xetra Frankfurt 2, the executed orders will be subject to a (primary) trade enrichment; likewise, XONTRO Trade applies a (secondary) trade enrichment upon these trades; within this step, some additional WSS- and KUSTA-fields relevant for CBF will be added; besides, the exchange locations for issuer, buyer and seller will be identified, and the custody type will be changed from "AKV" to "WPR" if necessary
- For **all** [2] trades contracted in Xetra Frankfurt 2 XONTRO will generate "trading" contract notes, which will be online-retrievable via 3270 dialog by the participant from the following morning on; they may be transferred from XONTRO Trade onto the participant's site via file transfer using the S.W.I.F.T. format MT512 if desired by the participant; separate "Xetra Frankfurt 2 order contract notes", as well as "Contract notes for the clearing member", are not in scope
- The distribution of the contract notes data carrier for Xetra Frankfurt 2 trades will most likely occur at about 09:45 p.m. – the distribution of the last floor contract notes data carrier normally occurs before 09:00 p.m. at present
- The data supply for the remaining downstream systems (e.g. TRICE) with the Xetra Frankfurt 2 trade data by XONTRO Trade is scheduled to occur likewise as for the NON CCP trades from Xetra Frankfurt 1 at present

3.2 Overview

The basic workflow between the participants and Xetra Frankfurt 2 for structured products' trades may be depicted graphically as shown below:

[2] With no regards as to whether having been transmitted via SAKI or via Xetra VALUES API



3.2.1 *Order routing*

The general workflow along with the order routing procedures between the SAKI participants and Xetra Frankfurt 2 may be summarized as follows:

- Orders determined for Xetra Frankfurt 2 may be transferred via SAKI during the same time periods as orders determined for XONTRO Frankfurt Floor; orders entered for the Xetra Frankfurt 2 back end before 07:30 a.m will be temporarily buffered within SAKI; after 07:30 a.m., these messages will be forwarded onto Xetra Frankfurt 2; in this case, the participant initially receives a preliminary order entry confirmation; after the order has been handed over to Xetra Frakfurt 2, the participant receives a final order entry confirmation
- SAKI forwards the message onto the new Xentric Order application ("Xentric Order for Xetra Frankfurt 2") and from there onto Xetra Frankfurt 2; the criterion for the forwarding onto Xetra Frankfurt 2 is the ISIN (resp. the WM entry "trading location = Xetra Frankfurt 2")
- The following order types are allowed for both the Xetra Frankfurt 2 "issuer model" or "specialist model":
  - Market orders
  - Limit orders

    - Stop market orders
    - Stop limit orders

- Orders entered for Xetra Frankfurt 2 may have a maximum validity of 90 days; the order validity check will be done within Xetra Frankfurt 2
- After the order has been entered into Xetra Frankfurt 2, the back end system will send back an order entry confirmation via "Xentric Order for Xetra Frankfurt 2" and via SAKI to the participant, using the familiar format MT596; the order reference number issued by the system has the Xetra format (consecutive 13-digit number) and not the XONTRO format ("YYMMDD1234567")
- After the order has been fully or partially executed within Xetra Frankfurt 2, the system re-delivers an order execution confirmation, using the familiar format MT519
- If – e.g. due to the fact that the order book is "frozen" within the specialist's model – the order cannot be executed immediately, then Xetra Frankfurt 2 sends a preliminary reception receipt (using the MT596 format) back to the customer; after the price fixing procedure has been terminated, or after the order book has been "un-frozen" again, the system issues a final order entry confirmation using the format MT596
- In case of a partial execution there will only then be a new message issued, covering the remaining amount not yet having been executed, if this remaining amount has in fact been executed – or if the order expires (e.g. because of validity date limitation), along with the corresponding order deletion message (new feature at Xetra Frankfurt 2)
- The above said applies for order modifications and order deletions correspondingly
- The attribute "lastUpdateDat" ("Versionsnummer" in German) will be filled in the response messages sent from system to bank, where it may occur – i.e. within the MT500, MT501, MT519, MT595 and MT596

3.2.2 *Trade enrichment*

- After the order excution a primary trade enrichment procces is performed within Xetra Frankfurt 2, in which the executed Xetra Frankfurt 2 order will be enriched by some additional attributes (e.g. trade number, counterparty for the trade, ...) and eventually inserted into a "Xetra Frankfurt 2 trade stock"; since the exchange location of the trade number is still "Frankfurt" (130), a defined subset of trade numbers was reserved for Xetra Frankfurt 2 within the "Frankfurt" trade numbers' cycle
- The following processing will then be done in analogy to the Xetra NON CCP trades' processing as hitherto:
    - All trades derived from Xetra Frankfurt 2 will be transferred from Xetra Frankfurt 2 to XONTRO Trade and then to LION, and from there further on to CASCADE for settlement (likewise as for the proceedings up until now for NON CCP trades from Xetra Frankfurt 1)
    - Within XONTRO, trade contract notes will be generated for all Xetra Frankfurt 2 trades, wich may be retrieved online using the 3270 dialog from the next trading day on

- There will be a separate new “retrieval group“ (“Abruf-Gruppe“) for the Xetra Frankfurt 2 contract notes online retrieval using the XONTRO 3270 dialog
- If the participant desires so, “Xetra Frankfurt 2 contract notes” may also be transferred onto his site – in analogy to the procedure used up to now for the Xetra Frankfurt 1 trades – via file transfer (e.g. using CONNECT:DIRECT), applying the S.W.I.F.T. format MT512 (as a separate file transfer using new transfer jobs)
- Likewise and similarly to the procession hitherto for Xetra NON CCP trades, the information from Xetra Frankfurt 2 trades will also be forwarded onto TRICE, EK-Neu, and StatistiX

3.3 Messages and queries from bank to system

3.3.1 Order entries via SAKI (MT500/501)

The formal set up of an order using the format MT500/501, which is determind for trading in structured products (using either the issuer's or the specialist's model), complies to an order which is to be sent to the Frankfurt Floor, except for a few peculiarities. These special features are listed below:

- In field 32L, line 2, “130“ is to be entered as the exchange location
- In field 32L, line 2, the “recipient of the order“ as well as the “trading restriction“ must not be filled for Xetra Frankfurt 2 orders
- In field 23, some of the transaction codes (“GV-Codes”) valid for XONTRO are no longer allowed for Xetra Frankfurt 2 (e.g. “121“)
- Stop limit order entries are allowed for Xetra Frankfurt 2
- Entries of “FK“, “IC“, “ML“ und “IB“ orders are not allowed for Xetra Frankfurt 2 – as well as for XONTRO
- In case “unambiguousness of bank internal (member internal) order number“ was demanded by the customer, then “Xentric Order for Xetra Frankfurt 2” will perform an “unambiguousness check” on a daily basis; in this case, orders for Xetra Frankfurt 2 and having a bank internal order number already having been used “today” will be rejected
- The “A/P-flag“ in tag 23 (“account type“ with Xetra) may, along with Xetra orders, basically contain all values allowed for Xetra – i.e. asides from “A1” and “P1”, also “M1”, “I1”, “L1”, “Q1” and “E1”; the Xetra Frankfurt 2 back end, however, only accepts “A1” or “P1” as valid values for the issuer's or the specialist's model
- “On-behalf orders“ (i.e. fields 83C or 71D filled) are not allowed for Xetra Frankfurt 2 orders

3.3.2 Order modifications and order deletions (MT595)

In SAKI, order deletions and order modifications are transmitted using the MT595. Please keep in mind that, along with the introduction of Xetra Frankfurt 2, the rules for the set up of these message types that are to be sent to XONTRO will change, too: In tag 79, the ISIN of the instrument traded must now be included for **XONTRO** order modifications and order deletions, too. Moreover, along with the S.W.I.F.T. rules and regulations, in tag 79 the 2nd line (security short description) must also be filled. In addition, the attribute “lastUpdateDat” (“Versionsnummer”), if available, should also be included into field F:79:35B, 3rd line, along with order changes or order deletions to be sent to Xetra Frankfurt 2.

Further special features:

- In case the Xetra Frankfurt 2 order modification results in a change of the price-time-priority of the order (e.g. along with limit changes), Xetra Frankfurt 2 (in contrast to XONTRO!) issues a new system order reference number for the order; this new order reference is given back in field 76 in the MT596 of the system response
- Along with the modification of a stop limit order for Xetra Frankfurt 2, the same additional rules and regulations already valid for a Xetra stop limit order modification apply (cf. Technical connection for financial institutes document)
- As for Xetra up to now, order modifications for Xetra Frankfurt 2 orders are still only permitted for those attributes labelled changeable in Xetra (i.e. limit, stop limit, validity date, bank internal order number, text field)
- If a Xetra Frankfurt 2 order is deleted by the system – i.e. because of validity date expiration – then, in contrast to XONTRO, the system will transmit another MT595 to the bank, indicating the appropriate deletion message
- If a stop order has been triggered into a valid (market or limit) order because the stop limit was reached, then this transition is reported by the system to the participant via a MT595, too; the field “lastUpdateDat” (“Versionsnummer”) is filled, too, in this case

3.3.3 *Order state retrieval*

The procedure hitherto available for the exchange location “130“, whereby a participant, using the 3270 terminal dialog, could gain an overview over the (“up to date” as well as “historic”) state of an order, will not be available for Xetra Frankfurt 2 orders, because there will be no “order stock” in XONTRO for Xetra Frankfurt 2 orders any longer. Therefore, queries about the current order state (entered? executed? deleted?) for Xetra Frankfurt 2 orders are no longe possible in XONTRO.

3.3.4 *Open order list*

Likewise, there will not be an “Open order stock“ or an “Open order list“ for Xetra Frankfurt 2 orders via SAKI. Such a list of Xetra Frankfurt 2 orders still open at a specified day or date may in the future be derived via the Xetra VALUES API or via the corresponding Xetra reports.

3.3.5 *File historical messages*

The SAKI participant has, however, still left the option to receive the “File historical messages“ from the system. This file contains all messages sent to the customer from SAKI on the previous business day.

3.4 Messages from system to bank

3.4.1 Protocol of orders entered via a VALUES API front end (MT500/501)

If an order meant for Xetra Frankfurt 2 was entered via a VALUES-based front end application – similar to an order entry via a 3270 terminal –, then, in certain cases, a re-transmission of the order entry from Xetra Frankfurt 2 back to the SAKI participant is initiated, if the customer owns a SAKI connection for Xetra Frankfurt 2, too. In this case, in tag 35B, 3rd line, the field "lastUpdateDat" ("Versionsnummer") is always filled. This timestamp should then be used along with any further order modifications. Note: This order entry protocol via SAKI is initiated only in those cases where the order entry via the Xetra VALUES API was done using the corresponding order routing trade subgroup as defined by Xentric Order ("emergency procedure").

3.4.2 Protocol of order deletions or order modifications entered via a VALUES API front end (MT595)

If an order meant for Xetra Frankfurt 2 was modified or deleted via a VALUES-based front end application, then, in certain cases, a re-transmission of the order entry from Xetra Frankfurt 2 back to the SAKI participant is initiated, if the customer owns a SAKI connection for Xetra Frankfurt 2, too, using the format MT595 (cf. also the comments in chapter 3.4.1). This is likewise true for order modifications or order deletions which have been entered "on behalf" for the trader (e.g. by Xetra Frankfurt 2 Market Supervision).

3.4.3 Order execution confirmations (MT519)

The confirmations for executed orders issued by Xetra Frankfurt 2 onto SAKI comply to those ones as hitherto created by XONTRO, with respect to their format and contents.

Special features with Xetra Frankfurt 2:

- Field 23: Stock exchange internal identifier is always filled with "BS" (on-exchange)
- Field 31P: Stock exchange location = 130 (Frankfurt)
- Field 31P: Trading restriction = XT (as for all Xetra trades)
- Field 31P: Time of execution: "HHMMSS**00**" (as for all Xetra trades)
- Field 35P, 3rd line: lastUpdateDat ("Versionsnummer") is always filled
- Even in the specialist's model, for orders having been executed in Xetra Frankfurt 2, the specialist's identification will not be re-delivered in field 31P; this field will remain [Null], as for all Xetra trades
- As for Xetra Frankfurt 1, there will be no price notations for Xetra Frankfurt 2; therefore, this field in tag 31P remains empty for Xetra Frankfurt 2 executions

- Since there will be no accrued interests delivered back to SAKI from Xetra Frankfurt 2 on the occasion of structured products having a percentage quotation, in tag 31P the field "Interest days" (also) remains empty [3]

3.4.4 *Other responses (MT596)*

In addition, the remaining response messages generated by Xetra Frankfurt 2 and forwarded to the SAKI customer using the format MT596 – e.g. order entry confirmations or acknowledgements of order modifications or order deletions – comply to the responses generated by Xetra, too.

Special features with Xetra Frankfurt 2:

- Along with order modifications which result in a change of the price-time-priority of the order, Xetra Frankfurt 2 issues – as Xetra does – a new "system" order number; this new one will be delivered in field 76; the old order number can then be retrieved in tag 20.
- Along with a successful order entry or order modification, Xetra Frankfurt 2 transfers the current "lastUpdateDat" ("Versionsnummer") in field 76, 2nd line. This version number should then be used for further order modifications.

3.4.5 *Event notifications (MT551)*

Other than XONTRO, Xetra Frankfurt 2 will transmit two (or three) event notifications onto the SAKI customers using the MT551:

- The indicator XEBAT ("End of Xetra Frankfurt 2 / ExchangeLocation130 order routing at participant's level"); as hitherto already for Xetra
- The two instrument-related event keys "FIXOF" ("Suspension of price fixing") or "FIXON" ("Withdrawal of price fixing suspension"), along with the suspension (e.g. along with knock out products) or resumption of the trade for one given ISIN on Xetra Frankfurt 2

Except for the "technical-related" (Indicator group "TECH" in tag 35B, 1st line) events, no other event notifications will be transmitted.

3.4.6 *Error messages*

At present, no new, XONTRO-specific, error messages (error codes "BC…") are planned to be set up for Xetra Frankfurt 2. Those Xetra error messages (error codes "X…") generated by Xetra Frankfurt 2 along with the message check at the Xetra Frankfurt 2 back end may be retrieved from the current version of the "Xetra Frankfurt 2 – Xetra VALUES API Programming Version"; those error messages having the error codes "XK…" or "XA…" will be described in the "Technical Connection for Financial Institutes"; therefore, these error code groups are not explicitly listed in this document. The error codes generated along with the message decryption, with the formal crude check, and with the authorization

[3] Within the trade confirmations delivered from Xetra Frankfurt 2, as well as within the contract notes generated by XONTRO for Xetra Frankfurt 2 trades, the accrued interests are shown

check (security, logon) comply to the XONTRO error codes delivered so far. It is the SAKI participant's responsibility to check if his application(s) will be capable to adequately process new, Xetra Frankfurt 2 specific, Xetra error messages, which may be fed back to him by the Xetra Frankfurt 2 back end via SAKI.

3.5 Unambiguousness of bank internal order references for Xetra Frankfurt 2

For XONTRO participants, it may be specified at CBF account level if the bank (member) internal order reference number must be unambiguous, or if not. For Xetra Frankfurt 2 this uniqueness check will be performed by Xentric Order for Xetra Frankfurt 2. Thereby, the initial configuration will be taken over from the XONTRO/KUSTA settings. Thus, the unambiguousness of the bank internal order number may be granted within Xetra Frankfurt 2 (resp. Xentric Order), and on an intraday level. Comparisons with bank internal order numbers from previous business days are not possible. Besides, there will be no plausibility checks across the two trading facilities listed under the "exchange location code 130" – XONTRO Frankfurt Floor and Xetra Frankfurt 2. Therefore, it is possible that, even if the demand for unanbiguousness of the bank internal order number be stated, the identical bank internal order reference may be present twice, once in XONTRO Frankfurt and once in Xetra Frankfurt 2.

3.6 "Cancellations" of Xetra Frankfurt 2 trades

After a trade has been matched in Xetra Frankfurt 2, it may – in contrast to XONTRO – only be "cancelled" by Xetra Frankfurt 2 Market Supervision and not by the participants themselves. The procedure to be applied in this case corresponds to the present "mistrade" regulation already known from Xetra: The Market Supervision team being in charge of Xetra Frankfurt 2 should be contacted by the participant two hours after the trade has been contracted the latest; Market Supervision should be asked to "remove" the trade from the trading platform. If the trade deletion occurs on the same day the trade was matched, then the trade will not be settled by CBF. If the trade deletion is to occur on the day following the trade day, then the original trade will normally be settled on T+2 and the "trade reversal" will be settled on the following business day, with buy side and sell side swapped. Therefore, generally speaking, there will be no more "classic" cancellation contract notes for Xetra Frankfurt 2 – neither for "same day cancellations" nor for "next day cancellations". Accrued interests that might have been calculated along with these trades will not automatically be re-calculated. – It may be pointed out that, even if the original trade had been executed within the "specialist's model" in Xetra Frankfurt 2, the specialist himself also has no rights to "cancel" the trade.

3.7 OTC entries by banks in structured products in XONTRO Frankfurt

OTC (aka "Direct trade") entries by banks will further on as of now be allowed for structured products in XONTRO; these OTC trades can be executed within one exchange location or across two exchange locations ("PÜEV" trade). In contrast to the rules valid at present, these trades may no longer be flagged as "on-exchange" trades if executed on the Frankfurt Floor. In other words: These trades will always be flagged as "off-exchange" trades; the "indicator exchange related" may not be changed from "AB" (default) to "BS" in the future. – All other addenda hitherto allowed along with OTC trade entries in XONTRO – such as brokerage, charges, and provisions – will still be allowed for OTC entries in structured products on XONTRO Frankfurt Floor.[4]

It may be noted that XONTRO OTC trades entered by banks via SAKI for structured products, too, will **not** be forwarded onto Xetra Frankfurt 2; they will rather remain in XONTRO, be executed there regularly, and forwarded onto LION for settlement in the evening. These trades may be cancelled as hitherto until up to 03:00 p.m. on the following day by one of the counterparties, and they may be reversed in XONTRO by one of the counterparties on the following day after the cancellation period has ceased.

3.8 Brokers' trade entries in structured products in XONTRO Frankfurt

In addition, trade entries done by brokers for structured products are further on allowed as before on XONTRO Frankfurt. This is true for trade entries by brokers using the 3270 dialog via the function codes BCEM GE and PE, the display and the processing of open "HUM" positions in BCEM HM, the cancellation or reversal of existing trades in BCEM ST and SN, the deletion of "open pending trades" ("Aufgaben") via BCEM LO after the cancellation period has ended; the processing and matching of open *Aufgaben* using the transaction BCBA, the online display of the broker's diary using the function BCEM MT – thus basically for all XONTRO Trade functions available so far – as well as for all corresponding requests available within the system connection for brokers (SAM). The two essential modifications within the brokers' functionalities, as opposed to today's rules, are:

- Trades in structured products entered by brokers in XONTRO may not have an order reference any longer
- These trades must all be flagged as "off-exchange", i.e. in analogy to the OTC trades entered by banks, the change of the default "exchange" flag from "AB" to "BS" will not be possible on any of the brokers' trade entries along with XONTRO trades in structures products any longer [5]

Similar to the OTC trade entries by banks, these trade will also not be forwarded to Xetra Frankfurt 2, but will remain in the XONTRO trade (resp. *Aufgaben*) stock; they may be cancelled or reversed within the regular time limits, and they will be forwarded onto LION at the end of the trading day, in order to be setteld by CASCADE (for GS custody type securities) or Creation (for AKV custody type securities).

3.9 Trade documentation / Trade enrichment for trades in structured products

For those trades having been contracted on Xetra Frankfurt 2, Xetra Frankfurt 2 will generate a trade number. Since the two trade number components "exchange location" and "business date" are

[4] The limitations outlined above will only be valid for XONTRO OTC trade entries in structured products using the exchange location = "Frankfurt"; on the remaining exchange locations, all entries hitherto allowed will still be valid with no exceptions.

[5] ditto

identical for trades contracted on either XONTRO Frankfurt or Xetra Frankfurt 2, the 7-digit "consecutive number" component of the trade number for Xetra Frankfurt 2 trades will be taken from a separate array not being used by XONTRO; this array comprises the numbers "9,600,000 ... 9,999,999".

The remaining processing and documentation steps for Xetra Frankfurt 2 trades, within the downstream systems as well as via the Xetra VALUS API interface, will occur outside of XONTRO and are thus out of scope of this document. – The processing steps listed below will, however, still be performed by XONTRO Trade for Xetra Frankfurt 2 trades, too:

- Delivery of a Xetra Frankfurt 2 trade file (including the order references) onto XONTRO, during the Xetra Frankfurt 2 end of day batch
- (Secondary) trade enrichment of the Xetra Frankfurt 2 trades by XONTRO Trade
- Generation of trade contract notes for all Xetra Frankfurt 2 trades
- Disposition of the Xetra Frankfurt 2 trades into the so called "daily trade stock for banks" within XONTRO; therewith granting the opportunity for an online retrieval of the contract notes via the 3270 dialog to the participants, beginning from the following trading day
- Transmission of Xetra Frankfurt 2 contract notes via file transfer – using the MT512 format, or as a print file – for those customers who vote for this option
- For the test and simulation environment IMS27: Option to receive contract notes for trades generated from within the Xetra Frankfurt 2 simulation back end, via internet download (DBAG internet host file service) by the participants
- Forwarding of the Xetra Frankfurt 2 trades from Xetra Frankfurt 2 onto LION for settlement
- Forwarding of some Xetra Frankfurt 2 trade data onto some further downstream systems:
  - TRICE
  - StatistiX
  - EK-Neu

The services listed above will still be carried out by XONTRO Trade for Xetra Frankfurt 2 trades, too, **with no respect as to whether the Xetra Frankfurt 2 orders had been entered via SAKI or via Xetra VALUES API**. – Those changes having become necessary by these requirements within XONTRO will be decribed functionally within the chapters yet to follow.

3.9.1 Recall of Xetra Frankfurt 2 trades in structured products using the XONTRO online dialog

Beginning with the morning after the transmission of the Xetra Frankfurt 2 trade data onto XONTRO was done, these trades may be retrieved online as "contract notes" via the 3270 dialog transaction BCAG for five days. There will be a new "retrieval group" ("Abruf-Gruppe") available, by means of which only the Xetra Frankfurt 2 trades may then be selected for viewing or online printing. Using this view, then, aside from the contract notes, the (bank internal or system) order references may be recalled, too.

3.9.2 Contract notes data carrier for Xetra Frankfurt 2 trades in structured products

Since, for Xetra trades, all contract notes file transfers from XONTRO Trade to the customers are being carried out only once per trading day at present, this rhythm will be retained for Xetra Frankfurt 2 contract notes as well.

Because "orders contract notes" can, if at all, only be created along with CCP trades for Xetra participants, and because the trades to be generated on Xetra Frankfurt 2 will – until further notice – always be considered NON CCP trades, there will be no order contract notes generated for Xetra Frankfurt 2.

The delivery of the trade contract notes for Xetra Frankfurt 2 trades from XONTRO Trade may take place by the following two options:

3.9.2.1 Xetra Frankfurt 2 contract notes (incl. order references) using the MT512 format

The transfer will be set up for those customers who will apply for this service, once daily. The transmission will occur using a new, separate file transfer job, but utilizing the same parameters as for the Xetra Frankfurt 1 contract notes file transfer. This means that the customer will only then receive a Xetra Frankfurt 2 contract notes data file if the "Xetra" parameter is set to "X" within the XONTRO processing control (transaction BCIN BV page 3). Regardless of whether the trading participant is active in Xetra Frankfurt 1 only, or in Xetra Frankfurt 2 only, or in both platforms, they will then always receive two contract notes files, one of which may then eventually always be "empty". The two additional flags "Ordernummer" (order number) and "Incl. Filialen" (including branches), which are also relevant for Xetra, will be evaluated, too, along with the reception of these two files.

For the Xetra Frankfurt 2 trades there will be four new "record types" within tag 23 (transaction type); these are:

Record type	Contract note description
113	Buy – Xetra Frankfurt 2
123	Sell – Xetra Frankfurt 2
213	Buy – Xetra Frankfurt 2 OTC
223	Sell – Xetra Frankfurt 2 OTC

Further special features:

- For the new Xetra Frankfurt 2 contract notes data carrier, a new specific identifier "XONTRO-SDTW", as well as specific OSNs, will be assigned for the header set MT598
- The field "Exchange location" will be filled with "130" ("Frankfurt")
- The field "originator" in tag 72, 1st line, will be filled with constant character string "7540"
- In contrast to Xetra Frankfurt 1, there will be no record type "Xetra Best"
- Xetra Frankfurt 2 contract notes will contain no information about brokerage, price differences, or any other pricing or fees parameters

- In analogy to Xetra, the “System order reference“ will be prefixed with “XET”, not with “DWZ”
- There will be no real time contract notes to be distributed via SAKI, because Xetra Frankfurt 2 delivers the trade file not before the end-of-day-batch onto XONTRO

3.9.2.2 Printed contract notes lists

The “printed” contract notes list files distribution will be set up for those customers who may want to take use of this service, only daily, in analogy to the Xetra Frankfurt 1 “printed” contract notes lists; since there is only one common parameter for all contract notes, there will be no new parameter necessary for Xetra Frankfurt 2; the Xetra Frankfurt 2 contract notes will just be included into the existing transfer process.

3.9.3 Forwarding of Xetra Frankfurt 2 trades in structured products onto downstream systems

1. **Clearing and settlement (LION, CASCADE)**: The forwarding of the Xetra Frankfurt 2 trades onto the CBF settlement systems will be carried out similar to the present proceeding for NON CCP trades from Xetra Frankfurt 1: All Xetra Frankfurt 2 trades will be transferred from XONTRO to LION and thence to CASCADE for settlement; the CCP will not act as a “central counterparty” for these trades.
2. **Further downstream systems**: Aside from the forwarding onto CBF, XONTRO Trade also supplies some further downstream systems with the trade data from Xetra Frankfurt 2:
    - **EK-Neu**: Since, in a first step, all Xetra Frankfurt 2 trades will be considered NON CCP trades, XONTRO Trade supplies EK-Neu with the relevant trade data, too
    - **TRICE/§9**: TRICE will be suppied with the similar information from all Xetra Frankfurt 2 trades, using the same familiar format as hitherto
    - **StatistiX**: Information from all Xetra Frankfurt 2 trades will be forwarded onto StatistiX, using the same familiar format, too

3.9.4 Process continuation of structured products’ trades having been entered into XONTRO

As having been laid out in chapters 3.7 und 3.8 already, off-exchange trade entries for structured products will continue to be allowed in XONTRO for banks and intermediaries further on. All of these trades will be considered NON CCP trades. Therefore, for these trades, the trade post processing and forwarding onto the downstream systems will occur in the same fashion as for the proceedings valid for trades entered into XONTRO now:

- These trades will not be forwarded onto the Eurex Clearing AG back end, but rather to LION and from there to CASCADE (or Creation) for settlement
- Likewise, the trade data from these trades will be passed onto the related downstream systems EK-Neu, TRICE and StatistiX, for the purposes of exposure control, reporting, and for statistical evaluations
- In contrast to trades coming from Xetra Frankfurt 1 or Xetra Frankfurt 2, these XONTRO trades in structured products will, in addition, also be forwarded to SIMA

- Price differences and brokerages resulting from these XONTRO trades will further on be balanced via CBF (application "KV-Geld"); therefore, the participants should still regard and evaluate the corresponding XONTRO and CBF reports (price differences report and brokerage report) in the future

The above said is likewise valid for all other types of trades (e.g. cancellations, "*Aufgaben*" (pending trades), and *Aufgabe* closures), that might also arise from these off-exchange trade entries for structured products in XONTRO.