Detailed Specifications to the Market Models

(Xetra® T7 - Release 7.0)

TABLE OF CONTENTS

1. Introduction

The document on hand provides information about the organization of trading in Xetra® T7 on Wiener Börse. The market models for the trading procedures "Continuous Trading", "Auction" and "Continuous Auction" in Xetra® T7 are based on the General Terms and Conditions of Wiener Börse AG are described in a separate document. Furthermore, the market segmentation of Wiener Börse, the design of the Specialist & Market Maker model etc. can be found in separate documents on www.wienerborse.at.

Wiener Börse AG uses Xetra® (Exchange Electronic Trading) since November 5th, 1999. Xetra® is a fully electronic trading system for trading on the cash market (equities, bonds and structured products).

As of July 31st, 2017, a part of the cash market trading (equities and ETFs) of Wiener Börse was migrated to the modern trading architecture Xetra® T7. Since January 28th, 2019, all bonds, certificates and warrants on Wiener Börse are tradable on Xetra® T7. The current version of Xetra® T7 (Release 7.0) was introduced on Wiener Börse on December 3rd, 2018.

The following market segments can be traded on the trading system Xetra® T7 of Wiener Börse:

- equity market.at
- bond market.at
- structured products.at

2. Trading procedures

In Xetra® T7 are the following trading procedures available:

- Continuous Trading with Auctions (CT)
- Auction (AU)
- Continuous Auction (CA)

2.1. Trading procedure Continuous Trading with Auctions

In the following market segments of Wiener Börse, the trading procedure Continuous Trading with Auctions is offered:

equity market.at
■ prime market
■ standard market
■ direct market plus
■ direct market
■ global market

Figure 1: Market segment equity market.at trading procedure CT

bond market.at
■ public sector
■ corporates prime
■ corporates standard
■ financial sector

Figure 2: Market segment bond market.at trading procedure CT

structured products.at
■ exchange traded funds

Figure 3: Market segment structured products.at trading procedure CT

2.2. Trading procedure Auction

In the following market segments of Wiener Börse, the trading procedure Auction is offered:

equity market.at
■ standard market
■ direct market plus
■ direct market

Figure 4: Market segment equity market.at trading procedure AU

bond market.at
■ public sector
■ corporates prime
■ corporates standard
■ financial sector
■ performance linked bonds

Figure 5: Market segment bond market.at trading procedure AU

structured products.at
■ certificates
■ warrants
■ exchange traded funds

Figure 6: Market segment structured products.at trading procedure AU

2.3. Trading procedure Continuous Auction

In the following market segments of Wiener Börse, the trading procedure Continuous Auction is offered:

equity market.at
■ n. a.

Figure 7: Market segment equity market.at trading procedure CA

bond market.at
■ financial sector

Figure 8: Market segment bond market.at trading procedure CA

structured products.at
■ certificates
■ warrants

Figure 9: Market segment structured products.at trading procedure CA

3. Market Groups

A large number of instruments is available for trading in Xetra® T7. The allocation of these instruments to individual traders is organized by allocating market groups/product assignment groups (PAG) to individual user groups. Changes in instruments and the switching of instruments among market groups are disseminated in a timely manner through the Xetra® T7 newsboard to all participants.

3.1. Market Groups in equity market.at

equity market.at			
Market Group	Market	Description	Trading procedure
ATX	RM	**prime market** - stocks included in the ATX (ATX-stocks)	CT
CTP	RM	**prime market** - stocks	CT
CTD	RM	**standard market** - stocks	CT
AOD	RM	**standard market** - stocks	AU
AOF	RM	**standard market** – foreign stocks	AU
DIPC	MTF	**direct market plus** - stocks	CT
DIPA	MTF	**direct market plus** - stocks	AU
DIMC	MTF	**direct market** - stocks	CT
DIMA	MTF	**direct market** - stocks	AU
GMC1	MTF	**global market** (US) - foreign stocks	CT
GMC2	MTF	**global market** (GER) - foreign stocks	CT
GMC3	MTF	**global market** (INTL) - foreign stocks	CT
RM = Regulated Market			

Figure 10: Xetra® T7 Market Groups for equity market.at

3.2. Market Groups in bond market.at

bond market.at			
Market Group	Market	Description	Trading procedure
government bonds			
BRPC	RM/MTF	Public Bonds Regulated	CT
GOVB	RM/MTF	Government bonds	AU
GTB	RM/MTF	Federal Treasury Bills	AU
GSTR	RM/MTF	Federal Government Interest	AU
corporate bonds, foreign bonds financial/public			
BRCT	RM	Bonds Regulated	CT
BMCT	MTF	Bonds MTF	CT
BRCO	RM	Corporate Bonds Regulated	AU
BMCO	MTF	Corporate Bonds MTF	AU
BM25	RM	Foreign Banks Regulated	AU
BR25	MTF	Foreign Banks MTF	AU
financial sector			
BR01	RM	Banks Regulated	AU
BM01	MTF	Banks MTF	AU
BR03	RM	Banks Regulated	AU
BM03	MTF	Banks MTF	AU
BR05	RM	Banks Regulated	AU
BM05	MTF	Banks MTF	AU

BR07	RM	Banks Regulated	AU
BM07	MTF	Banks MTF	AU
BR09	RM	Banks Regulated	AU
BM09	MTF	Banks MTF	AU
BR11	RM	Banks Regulated	AU
BM11	MTF	Banks MTF	AU
BR13	RM	Banks Regulated	AU
BM13	MTF	Banks MTF	AU
BR15	RM	Banks Regulated	AU
BM15	MTF	Banks MTF	AU
mortgage banks			
BR17	RM	Mortgage Bank Bonds Regulated	AU
BM17	MTF	Mortgage Bank Bonds MTF	AU
BR19	RM	Mortgage Bank Bonds Regulated	AU
BR21	RM	Mortgage Bank Bonds Regulated	AU
BR23	RM	Mortgage Bank Bonds Regulated	AU
bonds (unit quotation)			
BRST	RM	Bonds Regulated (UNIT)	AU
BMST	MTF	Bonds MTF (UNIT)	AU
bonds			

BRCA	RM	Bonds Regulated	CA
BMCA	MTF	Bonds Regulated	CA
bonds NON-CCP			
BRNC	RM	"Non-CCP-eligible" Bonds Regulated	AU
BMNC	MTF	"Non-CCP-eligible" Bonds MTF	AU
SRNC	RM	"Non-CCP-eligible" Bonds Regulated (UNIT)	AU
SMNC	MTF	"Non-CCP-eligible" Bonds MTF (UNIT)	AU
RM = Regulated Market			

Figure 11: Xetra® T7 Market Groups for bond market.at

3.3. Market Groups in structured products.at

structured products.at			
Market Group	Market	Description	Trading procedure
certificates & warrants			
CRAO	RM	Certificates, Warrants Regulated	AU
CMAO	MTF	Certificates, Warrants MTF	AU
CRNU	RM	Certificates, Warrants Regulated (NON-CCP)	AU
CMNU	MTF	Certificates, Warrants MTF (NON-CCP)	AU
CRPA	RM	Certificates Regulated (PERCENT)	AU
CMPA	MTF	Certificates MTF (PERCENT)	AU
CRNP	RM	Certificates Regulated (NON-CCP+PERCENT)	AU
CMNP	MTF	Certificates Regulated (MTF+PERCENT)	AU
CERA	RM	Certificates, Warrants EGB Regulated AUT Underlyings (UNIT+PERCENT)	CA
CEMA	MTF	Certificates, Warrants EGB MTF AUT Underlyings (UNIT+PERCENT)	CA
CERD	RM	Certificates, Warrants EGB Regulated DEU Underlyings (UNIT+PERCENT)	CA

CEMD	MTF	Certificates, Warrants EGB MTF DEU Underlyings (UNIT+PERCENT)	CA
CERO	RM	Certificates, Warrants EGB Regulated INT Underlyings (UNIT+PERCENT)	CA
CEMO	MTF	Certificates, Warrants EGB MTF INT Underlyings (UNIT+PERCENT)	CA
CCRA	RM	Certificates, Warrants RCB Regulated AUT Underlyings (UNIT+PERCENT)	CA
CCMA	MTF	Certificates, Warrants RCB MTF AUT Underlyings (UNIT+PERCENT)	CA
CCRD	RM	Certificates, Warrants RCB Regulated DEU Underlyings (UNIT+PERCENT)	CA
CCMD	MTF	Certificates, Warrants RCB MTF DEU Underlyings (UNIT+PERCENT)	CA
CCRO	RM	Certificates, Warrants RCB Regulated INT Underlyings (UNIT+PERCENT)	CA
CCMO	MTF	Certificates, Warrants RCB MTF INT Underlyings (UNIT+PERCENT)	CA
exchange traded funds			
ETF	RM/MTF	passively managed investment funds	CT
ETF2	MTF	passively managed investment funds	CT
FOAO	RM/MTF	passively managed investment funds	AU
RM = Regulated Market			

Figure 12: Xetra® T7 Market Groups for structured products.at

4. Trading phases

A trading day in Xetra® T7 is basically divided into three phases:

- pre-trading
- trading phase
- post Trading

These phases are decisive for all products. Depending on the trading procedure different

- Product States or
- Instrument States

are available which identify the sequence of individual product states and instrument phases.

4.1. Product- and instrument states in Continuous Trading with Auctions

The following diagram shows the sequence of product states and the related instrument states for trading model Continuous Trading with Auctions:
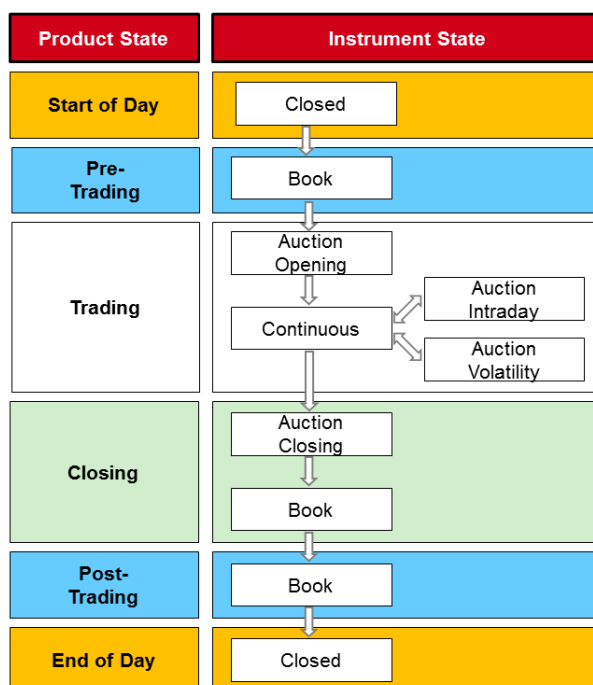
Figure 13: Product and Instrument States in trading procedure CT

◼ **Start of Day**

The product state Start of Day represents the time before activity starts. Members have no access to the order book in this product state.

All instruments are in the instrument state Closed. During this state no access to the order book is available and no public market data is published by the exchange.

The Start of Day phase is followed by the Pre-Trading phase.

◼ **Pre-Trading**

The product state Pre-Trading occurs before trading starts. It is typically a time where traders may maintain their orders prior to the start of trading. No matching occurs in this phase.

Instruments are in the instrument state Book. In the instrument state Book no public market data is published by the exchange.

With the end of Pre-Trading the trading phase starts.

◼ **Trading**

The product state Trading represents the trading phase. The standard procedure for the product state Trading is that after an opening auction call phase, the instruments are in the trading phase Continuous, possibly interrupted by volatility auctions or intraday auctions.

For each instrument the phase Trading begins with the auction call phase. This state represents the auction call phase of all types of auctions, i.e. Opening Auction, Intraday Auction, Closing Auction and Volatility Auction. At the end of an auction instrument state, an order book uncrossing may occur, potentially resulting in an auction matching. After the opening auction the instrument state switches to Continuous. The instrument state Continuous is the state where continuous matching of orders and quotes take place. During this state the order book is also open, i.e. price and quantity information is published by the exchange.Order and quote maintenance is possible while the instrument state is Continuous.

The instrument state Continuous can be interrupted by auction call phases. This can happen when a scheduled auction phase starts or when a volatility interruption is triggered.

Auction call phases based on a volatility interruption are characterized by a special volatility indicator, which will be published to the market. A volatility interruption can also be triggered at the end of an auction call phase. In this case the auction call phase will be extended and the volatility indicator is published. During such a phase the same level of order and quote maintenance, execution and availability of public market data is given as for any other auction call phase.

The product state Trading ends with the start of the scheduled Closing Auction.

■ **Closing**

The product state closing is the phase between Trading and Post-Trading. It covers the time between the end of continuous trading and the end of the closing auction.

The product state Closing ends automatically when there is no more running auction in any of the product's instruments. The end of the product state closing marks the moment when trades can no longer occur for the affected product for the rest of the day.

Instruments switch to the state Auction when Closing begins. At the end of this closing auction the order book will be uncrossed with the result of a price determination or – for ETFs only – with an auction price without turnover. Afterwards the instrument state changes to Book. In both phases order and quote maintenance is supported.

During the instrument state Auction the order book is open, i.e. price and quantity information is published by the exchange.. In the Book phase the order book is completely closed.

■ **Post-Trading**

The product state Post-Trading terminates the trading session of a business day. It is typically a time where traders can maintain their orders in preparation of the next trading day. No matching occurs in this phase.

Instruments are in the instrument state Book. No market data is distributed.

■ **End of Day**

The product state End of Day represents the time that is reserved for the end-of-day processing and housekeeping measures by the exchange. Members have no access to the order book in this product state.

All instruments are in the instrument state Closed. No market data will be published during this state.

4.2. Product- and instrument states in Auction

In the trading procedure Auction the sequence of product states is quite similar to the sequence for the trading model Continuous Trading with Auctions, i.e. the trading day starts with the product state "Start of Day" followed by the "Pre-Trading", "Trading" and "Post-Trading" state and ends with the product state "End of Day".

Figure 14: Product and Instrument States in trading procedure AU

The trading states of the One Auction trading model mainly differ in the instrument states from the Continuous Trading with Auctions trading model, i.e. with the start of the product state "Trading" the instrument state is Book until the scheduled intraday auction call phase is triggered.

In the instrument state Auction orders and quotes can be maintained. During this state the order book is open, i.e. price and quantity information is published by the exchange.

No trading occurs until the end of the auction call phase when an order book uncrossing may occur, resulting in an auction matching or in an extension of the auction call phase due to a volatility interruption. In both cases the market will be informed by the exchange.

After the instrument state Auction the instrument state is Book, order and quote maintenance is possible but no market data is disseminated.

Since the One Auction trading model consists of one intraday auction only the trading phase will be terminated by the scheduled start of the product state "Post-Trading". The instruments remain unchanged in Book.

The trading day ends with the product state End of Day. Members have no access to the order book in this product state.

All instruments are in the instrument state Closed. Customers cannot access the order book and no market data will be published during this state.

4.3. Product- and instrument states in Continuous Auction

In the trading procedure Continuous Auction the sequence of product states is quite similar to the sequence for the trading model Auction, i.e. the trading day starts with the product state "Start of Day" followed by the "Pre-Trading", "Trading" and "Post-Trading" state and ends with the product state "End of Day".
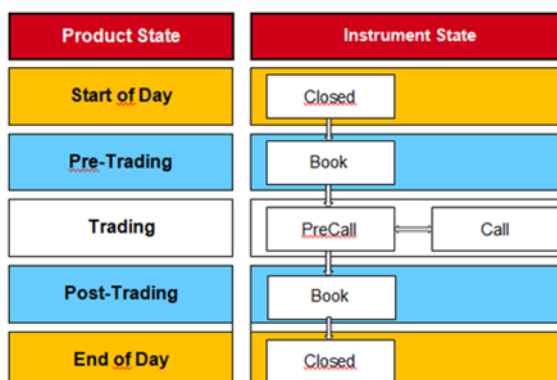

Figure 15: Product and Instrument States in trading procedure AU

The trading procedure "Continuous Auction" differs mainly in the instrument phases from the trading procedure "Auction".

■ **Start of Day**

The product state Start of Day represents the time before activity starts. Members have no access to the order book in this product state.

All instruments are in the instrument state Closed. During this state no access to the order book is available and no public market data is published by the exchange.

The Start of Day phase is followed by the Pre-Trading phase.

■ **Pre-Trading**

The product state Pre-Trading occurs before trading starts. It is typically a time where traders may maintain their orders prior to the start of trading. No matching occurs in this phase.

Instruments are in the instrument state Book. In the instrument state Book public market data is partlxy published by the exchange (only quotes are visible).

With the end of Pre-Trading the trading phase starts.

■ **Trading**

The product state Trading represents the trading phase.

The instruments are in the "pre-call" phase. During this instrument status the order book is open, public market data (price information) are published and orders / quotes can be entered, changed or deleted. If the issuer is in the order book with a quote in the "pre-call" phase and an order is placed on it, a price determination is made, provided that the amount of the aforementioned quote is sufficient. If the quantity of the order exceeds the quantity of the quote, a change to the instrument status "call" occurs and after a certain time a partial execution occurs up to the existing quantity of the quote and the remaining quantity remains in the order book and in the instrument status call.

If there is a crossed order book without a quota of the issuer, a change to the instrument status "call" occurs. Only by entering a "matching quote" with a sufficient quantity does a price determination take place and the change to the instrument status "Pre-Call" is carried out.

The product state Trading ends with the start of post-trading.

■ **Post-Trading**

The product state Post-Trading terminates the trading session of a business day. It is typically a time where traders can maintain their orders in preparation of the next trading day. No matching occurs in this phase.

Instruments are in the instrument state Book. No market data is distributed.

■ **End of Day**

The product state End of Day represents the time that is reserved for the end-of-day processing and housekeeping measures by the exchange. Members have no access to the order book in this product state.

All instruments are in the instrument state Closed. No market data will be published during this state.

4.4. Extraordinary States

■ **Delete**

The instrument state "DEL" (Delete) indicates that the instrument has exceeded its last trading date and is therefore scheduled for deletion.

■ **Holiday**

The product state Holiday applies to products that are not open for trading on that day, even though the exchange is open. Members have no access to the order book for a product that is in the product state Holiday.

All instruments are in the instrument state Closed.

■ **Halt**

Market Supervision may halt the market if it judges that market conditions or technical conditions impair the integrity of the market. In such a case, a product will be set to the product state Halt. In the product state Halt, no matching occurs and order book access is restricted.

When a product is set to Halt all non-persistent orders/quotes are getting deleted by Xetra® T7 and all instruments are set to the instrument state closed.

■ **Suspend**

The status „Suspend" It is only available for a specific instrument and can be set any time independently of the product state.

When the instrument state qualifier is set to Suspend by Market Operations, the instrument state is changed to "suspended" and all orders and quotes in the order book will be deleted. In case the order book is not empty, a broadcast message of type "Instrument Suspension" is sent to all sessions indicating that orders and quotes have been deleted.

5. Trading calendar, Trading hours and Auction Plans

The trading calendar, the trading hours as well as detailed information on times and durations eg of the opening are described in this section.

5.1. Trading calendar

Trading on the cash market of Wiener Börse is possible from Mondays to Fridays. The following holidays are non-trading days:

2019		
Monday	01.01.	New Year
Friday	19.04.	Good Friday
Monday	22.04.	Easter Monday
Wednesday	01.05.	Labour Day
Monday	10.06.	Whit Monday
Tuesday	24.12.	Christmas Eve
Wednesday	25.12.	Christmas Day
Thursday	26.12.	St. Stephen's Day
Tuesday	31.12.	Exchange Holiday

Figure 16: Trading calendar and Settlement calendar 2019 of Wiener Börse

All non-trading days are non-settlement days. The applicable trading calendar with all information on the exchange holidays is available on the website of Wiener Börse (www.wienerborse.at)

5.2. Trading hours

The (stock exchange) trading hours for the trading procedures Continuous Trading with Auctions, Auction and Continuous Auction are individually regulated and may vary depending on the market segment.

5.2.1. Trading hours for equity market.at

For stocks (including shares represented by certificates) and other equity securities (such as participation certificates, participation rights, UCITS shares, etc.), the following trading hours apply in the trading procedures Continuous Trading with Auctions and Auction.

For equities in market group ATX differing auction trading hours are applicable on settlement days and non-settlement days,

	Pre-Trading	Opening Auction	Continuous Trading	Intraday Auction	Continuous Trading	Closing Auction	Post-Trading
ATX	08:00 – 08:55	08:55 - 09:00[1]		12:00 - 12:03[1]		17:30 - 17:33[1]	17:33 - 17:45
ATX (Settl. Day)	08:00 – 08:55	08:55 - 09:00[1]		12:00 - 12:05[1]		17:30 - 17:33[1]	17:33 - 17:45
CTP, CTD DIPC, DIMC	08:00 – 08:55	08:55 - 09:04[1]		12:00 - 12:03[1]		17:30 - 17:34[1]	17:34 - 17:45
GMC1 GMC2 GMC3	08:00 – 08:55	08:55 - 09:02[1]		-		17:30 - 17:32[1]	17:32 - 17:45

[1] earliest end (random end within 30 seconds after planned end of the call phase)

	Pre-Trading	Auction	Post-Trading
AOD, AOF DIPA, DIMA	08:00 – 12:30	12:30 - 13:30[1]	13:30 – 17:45

[1] earliest end (random end within 30 seconds after planned end of the call phase)

Figure 17: Trading hours in market segment equity market.at

5.2.2. Trading hours for bond market.at

Trading hours for bonds in the trading procedures Continuous Trading with Auctions, Auction and Continuous Auction:

	Pre-Trading	Opening Auction	Continuous Trading	Intraday Auction	Continuous Trading	Closing Auction	Post-Trading
BRCT BMCT BRPC	08:00 – 08:55	08:55 - 09:05[1]		-		17:25 - 17:30[1]	17:30 - 17:45

[1] earliest end (random end within 30 seconds after planned end of the call phase)

	Pre-Trading	Auction	Post-Trading
GTB GSTR	Pre-Trading 08:00 – 11:30	Auction 11:30 - 11:40[1]	Post-Trading 11:45 – 17:45
GOVB	Pre-Trading 08:00 – 11:30	Auction 11:30 - 11:45[1]	Post-Trading 11:45 – 17:45
BRCO BR25	Pre-Trading 08:00 – 11:45	Auction 11:45 - 12:45[1]	Post-Trading 12:45 – 17:45
BR01-BR23 BRST	Pre-Trading 08:00 – 11:50	Auction 11:50 – 13:00[1]	Post-Trading 13:00 – 17:45
BMCO BM25	Pre-Trading 08:00 – 13:05	Auction 13:05 – 14:00[1]	Post-Trading 14:00 – 17:45
BM01-BM17 BMST	Pre-Trading 08:00 – 13:05	Auction 13:05 – 14:15[1]	Post-Trading 14:15 – 17:45

[1] earliest end (random end within 30 seconds after planned end of the call phase)

Figure 18: Trading hours in market segment bond market.at (1)

	Pre-Trading	Continuous Auction 09:15 – 17:30	Post-Trading
BRCA BMCA	Pre-Trading 08:00 – 09:15	Auction 1 - Auction 2 ------------ Auction n	Post-Trading 17:30 – 17:45

Figure 19: Trading hours in market segment bond market.at (2)

	Pre-Trading	Auction	Post-Trading
BRNC, BMNC SRNC, SMNC	Pre-Trading 08:00 – 11:50	Auction 11:50 – 12:45[1]	Post-Trading 12:45 – 17:45

[1] earliest end (random end within 30 seconds after planned end of the call phase)

Figure 20: Trading hours in market segment bond market.at (3)

5.2.3. Trading hours for structured products.at

Trading hours for certificats and warrants in the trading procedures Continuous Auction and Auction:

CERA, CEMA CERD, CEMD CERO, CEMO CCRA, CCMA CCRD, CCMD CCRO, CCMO	**Pre-Trading** 08:00 – 09:15	**Continuous Auction** 09:15 – 17:30				**Post-Trading** 17:30 – 17:45
		Auction 1	**Auction 2**	- - - - - - - -	**Auction n**	

CRAI, CMAO CRNU, CMNU CRPA, CMPA CRNP, CMNP	**Pre-Trading** 08:00 – 12:30	**Auction** 12:30 - 13:30[1]	**Post-Trading** 13:30 – 17:45

[1] earliest end (random end within 30 seconds after planned end of the call phase)
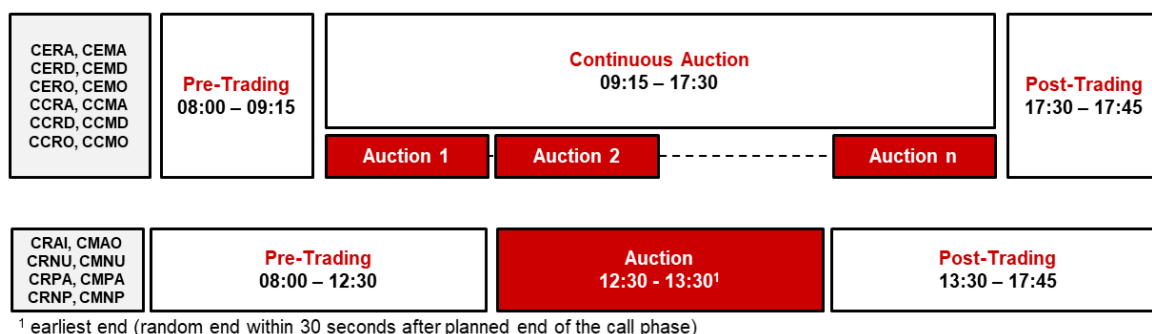
Figure 21: Trading hours for certificates and warrants

Trading hours for ETFs in the trading procedures Continuous Trading with Auctions and Auction:

	Pre-Trading	**Opening Auction**	Continuous Trading	**Intraday Auction**	Continuous Trading	**Closing Auction**	**Post-Trading**
ETF, ETF2	08:00 – 08:55	08:55 - 09:04[1]		-		17:30 - 17:32[1]	17:32 - 17:45

[1] earliest end (random end within 30 seconds after planned end of the call phase)

FOAO	**Pre-Trading** 08:00 – 12:30	**Auction** 12:30 - 13:30[1]	**Post-Trading** 13:30 – 17:45

[1] earliest end (random end within 30 seconds after planned end of the call phase)

Figure 22: Trading hours for Exchange Traded Funds

5.3. Auction plans

The auction plans per Market Group are shown below for each market segment.

5.3.1. Auction plans for equity market.at

■ Auction plan for market group **ATX** (Non-Settlement Day):

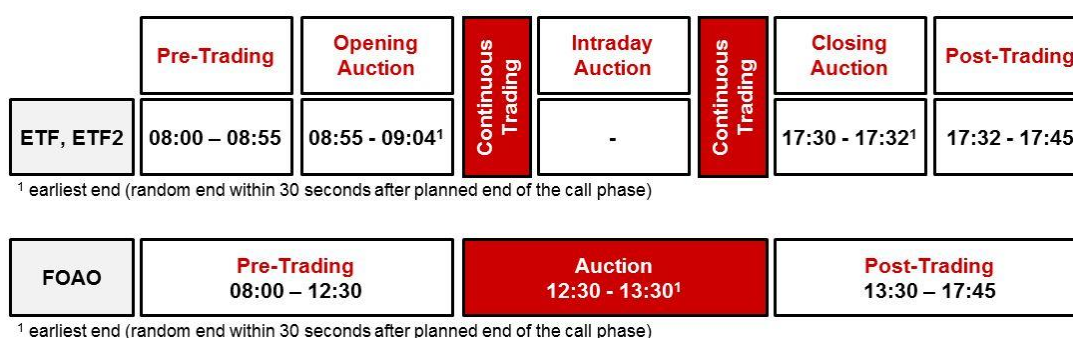| Pre-Trading	Main Trading									Post-Trading
	Opening Auction		Continuous Trading	Intraday Auction		Continuous Trading	Closing Auction			
08:00 – 08:55	Call[1] 5 mins	PD[3] max. 30 sec	09:00[2] - 12:00	Call[1] 3 mins	PD[3] max. 30 sec	12:03[2] - 17:30	Call[1] 3 mins	PD[3] max. 30 sec		17:33[2] - 17:45

[1] random end | [2] earliest begin | PD[3] = price determination

■ Auction plan for market group **ATX** (Settlement Day):

Pre-Trading	Main Trading									Post-Trading
	Opening Auction		Continuous Trading	Intraday Auction		Continuous Trading	Closing Auction			
08:00 – 08:55	Call[1] 5 mins	PD[3] max. 30 sec	09:00[2] - 12:00	Call[1] 5 mins	PD[3] max. 30 sec	12:05[2] - 17:30	Call[1] 3 mins	PD[3] max. 30 sec		17:33[2] - 17:45

[1] random end | [2] earliest begin | PD[3] = price determination

■ Auction plan for market group **CTP, CTD, DIPC** and **DIMC**:

Pre-Trading	Main Trading									Post-Trading
	Opening Auction		Continuous Trading	Intraday Auction		Continuous Trading	Closing Auction			
08:00 – 08:55	Call[1] 9 mins	PD[3] max. 30 sec	09:04[2] - 12:00	Call[1] 3 mins	PD[3] max. 30 sec	12:03[2] - 17:30	Call[1] 4 mins	PD[3] max. 30 sec		17:34[2] - 17:45

[1] random end | [2] earliest begin | PD[3] = price determination

■ Auction plan for market group **GMC1, GMC2** and **GMC3**:

Pre-Trading	Main Trading					Post-Trading
	Opening Auction		Continuous Trading	Closing Auction		
08:00 – 08:55	Call[1] 7 mins	PD[3] max. 30 sec	09:02[2] - 17:30	Call[1] 2 mins	PD[3] max. 30 sec	17:32[2] - 17:45

[1] random end | [2] earliest begin | PD[3] = price determination

■ Auction plan for market group **AOD, AOF, DIPA** and **DIMA**:

Pre-Trading	Main Trading		Post-Trading
	Auction		
08:00 – 12:30	Call[1] 60 mins	PD[3] max. 30 sec	13:30[2] - 17:45

[1] random end | [2] earliest begin | PD[3] = price determination

5.3.2. Auction plans for bond market.at

■ Auction plan for instrument groups **BRCT, BMCT** und **BRPC**:

Pre-Trading	Opening Auction		Main Trading	Closing Auction		Post-Trading
			Continuous Trading			
08:00 – 09:00	Call[1] 5 mins	PD[3] max. 30 sec	09:05[2] - 17:25	Call[1] 5 mins	PD[3] max. 30 sec	17:30[2] - 17:45

[1] random end | [2] earliest begin | PD[3] = price determination

■ Auction plan for instrument groups **GTB** and **GSTR**:

Pre-Trading	Main Trading		Post-Trading
	Auction		
08:00 – 11:30	Call[1] 10 mins	PD[3] max. 30 sec	11:40[2] - 17:45

[1] random end | [2] earliest begin | PD[3] = price determination

■ Auction plan for instrument group **GOVB**:

Pre-Trading	Main Trading		Post-Trading
	Auction		
08:00 – 11:30	Call[1] 15 mins	PD[3] max. 30 sec	11:45[2] - 17:45

[1] random end | [2] earliest begin | PD[3] = price determination

■ Auction plan for instrument group **BRCO** and **BR25**:

Main Trading		
Pre-Trading	Auction	Post-Trading
08:00 – 11:50	Call[1] 55 mins	PD[3] max. 30 sec	12:45[2] - 17:45

[1] random end | [2] earliest begin | PD[3] = price determination

■ Auction plan for instrument groups **BR01 – BR23** and **BRST**:

Main Trading		
Pre-Trading	Auction	Post-Trading
08:00 – 11:50	Call[1] 70 mins	PD[3] max. 30 sec	13:00[2] - 17:45

[1] random end | [2] earliest begin | PD[3] = price determination

■ Auction plan for instrument group **BMCO** and **BM25**:

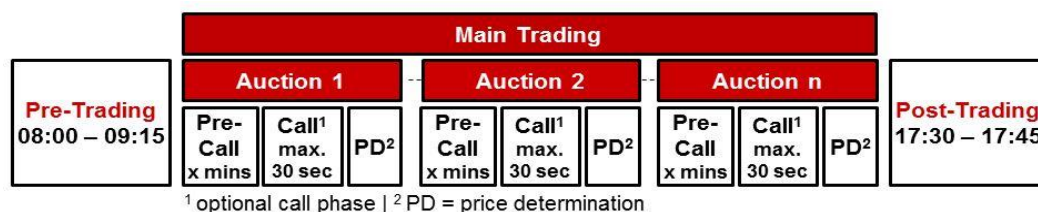| Main Trading		
Pre-Trading	Auction	Post-Trading
08:00 – 13:05	Call[1] 55 mins	PD[3] max. 30 sec	14:00[2] - 17:45

[1] random end | [2] earliest begin | PD[3] = price determination

■ Auction plan for instrument groups **BM01 – BM17** and **BMST**:

Main Trading		
Pre-Trading	Auction	Post-Trading
08:00 – 13:05	Call[1] 70 mins	PD[3] max. 30 sec	14:15[2] - 17:45

[1] random end | [2] earliest begin | PD[3] = price determination

■ Auction plan for instrument group **BRCA** and **BMCA**:

	Main Trading									
	Auction 1			--	Auction 2			Auction n		
Pre-Trading 08:00 – 09:15	Pre-Call x mins	Call[1] max. 30 sec	PD[2]		Pre-Call x mins	Call[1] max. 30 sec	PD[2]	Pre-Call x mins	Call[1] max. 30 sec	PD[2]	Post-Trading 17:30 – 17:45

[1] optional call phase | [2] PD = price determination

■ Auction plan for instrument groups **BNCA, BNCS, SNCA** und **SNCS**:

	Main Trading		
Pre-Trading	**Auction**		**Post-Trading**
08:00 – 11:50	Call[1] 55 mins	PD[3] max. 30 sec	12:45[2] - 17:45

[1] random end | [2] earliest begin | PD[3] = price determination

5.3.3. Auction plans for structured products.at

■ Auction plan for instrument groups **CERA, CEMA, CERD, CEMD, CERO, CEMO, CCRA, CCMA, CCRD, CCMD, CCRO** and **CCMO**:

	Haupthandel									
	Auktion 1			--	Auktion 2			Auktion n		
Vorhandel 08:00 – 09:15	Vor-aufruf x mins	Aufruf[1] max. 30 sec	PE[2]		Vor-aufruf x mins	Aufruf[1] max. 30 sec	PE[2]	Vor-aufruf x mins	Aufruf[1] max. 30 sec	PE[2]	Nachhandel 17:30 – 17:45

[1] optionale Aufrufphase | [2] PE = Preisermittlung

■ Auction plan for market groups **ETF** and **ETF2**:

	Main Trading					
Pre-Trading	**Opening Auction**		**Continuous Trading**	**Closing Auction**		**Post-Trading**
08:00 – 08:55	Call[1] 9 mins	PD[3] max. 30 sec	09:04[2] - 17:30	Call[1] 2 mins	PD[3] max. 30 sec	17:32[2] - 17:45

[1] random end | [2] earliest begin | PD[3] = price determination

■ Auction plan for market group **FOAO, CRAO, CMAO, CRNU,CMNU, CRPA,CMPA, CRNP** and **CMNP**:

	Main Trading		
Pre-Trading	**Auction**		**Post-Trading**
08:00 – 12:30	Call[1] 60 mins	PD[3] max. 30 sec	13:30[2] - 17:45

[1] random end | [2] earliest begin | PD[3] = price determination

6. Volatility Interruption

Xetra® T7 offers for the trading procedures „Continuous Trading with Auctions" and „ Auction" th e safeguard mechanism "Volatility Interruption".

6.1. Volatility corridors

The values of the dynamic as well as the static volatility corridor are determined for each instrument individually by Wiener Börse.

The volatility corridors are constantly reviewed and can be adapted at any time. The exact values of the volatility corridors are not published by Wiener Börse but are reported to the Austrian Financial Market Authority (FMA).

6.2. Duration of the Volatility Interruption for equities

The duration of a volatility interruption may vary by market segment and market group.

6.2.1. Duration of the Volatility Interruption in equity market.at

equity market.at		
Market Group	Trading procedure	Duration Vola-Break
ATX	CT	2 mins.
CTP	CT	2 mins.
CTD	CT	2 mins.
AOD	AU	5 mins.
AOF	AU	5 mins.
DIPC	CT	2 mins.
DIPA	AU	5 mins.
DIMC	CT	2 mins.
DIMA	AU	5 mins.
GMC1	CT	2 mins.
GMC2	CT	2 mins.
GMC3	CT	2 mins.

Figure 23: Duration of volatility interruptions in equity market.at

6.2.2. Duration of the Volatility Interruption in bond market.at

bond market.at		
Market Group	Trading procedure	Duration Vola-Break
BRPC	CT	2 mins.
GOVB	AU	15 mins.
GTB	AU	15 mins.
GSTR	AU	15 mins.
BRCT	CT	2 mins.
BMCT	CT	2 mins.
BRCO	AU	15 mins.
BR25	AU	15 mins.
BMCO	AU	15 mins.
BM25	AU	15 mins.
BR01	AU	15 mins.
BM01	AU	15 mins.
BR03	AU	15 mins.
BM03	AU	15 mins.
BR05	AU	15 mins.
BM05	AU	15 mins.
BR07	AU	15 mins.
BM07	AU	15 mins.
BR09	AU	15 mins.
BM09	AU	15 mins.
BR11	AU	15 mins.
BM11	AU	15 mins.
BR13	AU	15 mins.
BM13	AU	15 mins.
BR15	AU	15 mins.
BM15	AU	15 mins.
BR17	AU	15 mins.
BM17	AU	15 mins.
BR19	AU	15 mins.
BR21	AU	15 mins.
BR23	AU	15 mins.
BRST	AU	15 mins.
BMST	AU	15 mins.
BRCA	CA	n.a.
BMCA	CA	n.a.

BRNC	AU	15 mins.
BMNC	AU	15 mins.
SRNC	AU	15 mins.
SMNC	AU	15 mins.

Figure 24: Duration of volatility interruptions in bond market.at

6.2.3. Duration of the Volatility Interruption in structured produts.at

structured products.at		
Market Group	Trading procedure	Duration Vola-Break
CRAO	AU	5 mins.
CMAO	AU	5 mins.
CRNU	AU	5 mins.
CMNU	AU	5 mns.
CRPA	AU	5 mins.
CMPA	AU	5 mins.
CRNP	AU	5 mins.
CMNP	AU	5 mins.
CERA	CA	n.a.
CEMA	CA	n.a.
CERD	CA	n.a.
CEMD	CA	n.a.
CERO	CA	n.a.
CEMO	CA	n.a.
CCRA	CA	n.a.
CCMA	CA	n.a.
CCRD	CA	n.a.
CCMD	CA	n.a.
CCRO	CA	n.a.
CCMO	CA	n.a.
ETF	CT	2 mins.
ETF2	CT	2 mins.
FOAO	AU	5 mins.

Figure 25: Duration of volatility interruptions in structured products.at

7. Pre-Trade Controls

In addition to the safeguard mechanism "volatility interruption" Xetra® T7 offers the following pre-trade controls on instrument-level:

- Price Collar Check
- Maximum Order Volume
- Maximum Order Value

If the specified limits are exceeded, Xetra® prevents acceptance of the entered order. This is done by appropriate alerts in Xetra®. Regardless of the pre-trade controls in Xetra® T7, each trading member has the option to set his own pre-trade checks or order limits.

The following Pre-Trade Control parameters were agreed with the Austrian Financial Market Authority (FMA):

Asset Class / Segment	Maximum Order Volume (Order Volume $_{max}$)[1]	Maximum Order Value (Order Value $_{max}$)[1]
Equities ATX Five	= Number of listed shares * FFF * 0,5 %	= Order Volume $_{max}$ * Last Price (RP) on due date (€)
Equities ATX (excl. ATX Five)	= Number of listed shares * FFF * 1 %	= Order Volume $_{max}$ * Last Price (RP) on due date (€)
Equities ATX Prime (excl. ATX)	= Number of listed shares * FFF * 3 %	= Order Volume $_{max}$ * Last Price (RP) on due date (€)
Equities and equity-like products (excl. ATX Prime, Global Market)	$= \dfrac{\text{Order Value } max}{\text{Last Price (RP) on due date (€)}}$	1.000.000 €
Equities Global Market	$= \dfrac{\text{Order Value } max}{\text{Last Price (RP) on due date (€)}}$	500.000 €
ETFs, ETCs and ETNs	$= \dfrac{\text{Order Value } max}{\text{Last Price (RP) on due date (€)}}$	500.000 €
Certificates, Warrants	$= \dfrac{\text{Order Value } max}{\text{Last Price (RP) on due date (€)}}$	500.000 €
Bonds (unit-quotation)	$= \dfrac{\text{Order Value } max}{\text{Last Price (RP) on due date (€)}}$	5.000.000 €
Bonds (%-quotation)	Nominal value 1.000.000 | Minimum Nominal Value	5.000.000 €

[1] Conversion into € on due date based on ECB-reference rate
RP = Referenceprice \| **FFF** = Free Float Factor

Figure 26: Overview Pre-Trade Controls parameter

The "free float factor" (FFF) for Prime Market shares (including ATX Five and ATX) is reviewed quarterly (March, June, September and December). The FFF, as well as the price of Prime Market shares (including ATX Five and ATX) at the due date (= closing price on the quarterly expiration day), is used to determine the Maximum Order Value and Maximum Order Volume. With regard to the price at due date, the same applies to all remaining asset classes / segments. The parameters are adjusted in Xetra® T7 with effect Wednesday after the quarterly expiration day.

7.1. Price Collar Check

The Price Collars (Price Reasonability Check) prevents orders/quotes with a too large price difference to a reference price from entering the order book. The price collar check requirement is covered by the "price reasonability check" functionality in Xetra® which is linked to the corridors for the volatility interruptions (on the level for each security).

7.2. Maximum Order Volume

A validation of the maximum order volume prevents the entry of orders with a too high quantity in the order book. The maximum order volume is determined by the exchange operating company per instrument, reviewed on an ongoing basis and adjusted if necessary.

The order quantity of a new order or a modified order is checked against the maximum order volume. If the order volume entered exceeds the predefined, maximum order volume, the order is rejected by the trading system.

Unhindered, each trading member can define a maximum order volume per trader. Successful placement of an order must comply with the values predefined by the exchange operating company and the trading member.

7.3. Maximum Order Value

A validation of the maximum order value prevents the entry of orders with a too high value in the order book.

The order value of a new order or a modified order is checked against the maximum order value. If the order value entered exceeds the predefined, maximum order value, the order is rejected by the trading system.

The maximum order value is determined by the exchange operating company per instrument, reviewed on an ongoing basis and adjusted if necessary.

Unhindered, each trading member can define a maximum order value per trader. Successful placement of an order must comply with the values predefined by the exchange operating company and the trading member.

8. Order-to-Trade-Ratio (OTR)

The order-to-trade ratio (OTR) describes the relation between entering, modifying and deleting orders / quotes and executed transactions. MiFID II requires exchange operating companies (trading venues) to calculate the ratio of orders/quotes to transactions (OTRs) effectively entered into the trading system by each trading member at the level of each financial instrument in two ways:

■ Calculation of number-based OTR

$$OTR_{no} = \frac{Total\ number\ of\ orders\ \&\ quotes}{Total\ number\ of\ transactions + Floor} - 1$$

Figure 27: Formula for the calculation of the number-based OTR

■ Calculation of volume-based OTR

$$OTR_{vol} = \frac{Total\ volume\ of\ orders\ \&\ quotes}{Total\ volume\ of\ transactions + Floor} - 1$$

Figure 28: Formula for the calculation of the volume-based OTR

Both OTRs must be calculated on a daily basis for each financial instrument per trading member.

8.1. Parameter for the number-based OTR

The predefined maximum number-based OTR parameters are set by asset class, segment and account type:

Asset Class	Segment	Limit MM[1]	Limit I[2]	Limit A[3]	Limit P[4]
Equities	Austrian Market	100.000	n.a	5.000	30.000
	Global Market	500.000	n.a.	10.000	50.000
ETFs		500.000	n.a.	10.000	50.000
Bonds		100.000	10.000	50	50
Certificates & Warrants		n.a.	150.000	50	50
[1]Account "Market Maker"	[2]Account "Issuer"	[3]Account "Agent"	[4]Account "Proprietary"			

Figure 29: Overview number-based OTR parameters

8.2. Parameter for the volume-based OTR

The predefined maximum volume-based OTR parameters are set by asset class, segment and account type:

Asset Class	Segment	Limit MM[1]	Limit I[2]	Limit A[3]	Limit P[4]
Equities	Austrian Market	1.000.000	n.a	100.000	100.000
	Global Market	1.000.000	n.a.	100.000	100.000
ETFs		1.000.000	n.a.	100.000	100.000
Bonds		1.500.000	1.500.000	100.000	100.000
Certificates & Warrants		n.a.	1.000.000	100.000	100.000
[1]Account "Market Maker" | [2]Account "Issuer" | [3]Account "Agent" | [4]Account "Proprietary"					

Figure 30: Overview volume based OTR parameters

Compliance with OTR provisions needs to be achieved by members per day and per instrument and is monitored by the Vienna Stock Exchange. A breach in a financial instrument occurs when at least one of the two OTRs exceeds the maximum permissible value (max OTR). In the event of a breach, the Vienna Stock Exchange raises an "excess usage fee" from the affected trading member.

The OTR parameters are reviewed semi-annually by the exchange operating company and – after clearance with the Austrian Financial Market Authority - adjusted if necessary. Any adaptation will be communicated and published in a timely manner.

9. Orders

An order is the instruction to buy or sell a certain amount of a specific instrument. Orders of all sizes may be traded through Xetra® T7 as the minimum trading lot has been defined as one for all segments except bonds. In bond trading, the minimum trading lot corresponds to the smallest tradable unit. The smallest tradable unit depends on the minimum denomination of the specific security (for example EUR 1,000).

9.1. Minimum Order sizes

The minimum order size in Xetra® T7 for equities and Exchange Traded Funds can be found in the table below.

Minimum order sizes	
■ stocks	1 Stück
■ participation certificates	1 Stück
■ profit-sharing rights	1 Stück
■ UCITS shares	1 Stück
■ Exchange Traded Funds (ETFs)	1 Stück

Figure 31: Minimum order sizes for equities and ETFs

The minimum order sizes in Xetra⊗ Classic for bonds, certificates and warrants can be found in the table below. The smallest tradable unit is one share. The smallest tradable unit for bonds (percentage quotation) and certificates (percentage quotation) depends on the minimum denominations of the respective instrument (e.g. EUR 1,000; ATS 10,000).

Minimum order sizes	
■ government bonds	depending on the minimum denomination
■ federal treasury bills	depending on the minimum denomination
■ federal medium-term notes	depending on the minimum denomination
■ government interest-only and principal-only strips	depending on the minimum denomination
■ corporate bonds	depending on the minimum denomination
■ bank bonds	depending on the minimum denomination
■ certificates (unit quotation)	1 unit
■ certificates (percentage quotation)	depending on the minimum denomination
■ warrants	1 unit

Figure 32: Minimum order sizes for bond, certificates and warrants

The possible tick sizes are described in the next section.

9.2. Tick Size

The tick size is the smallest possible price change (price interval) of an instrument.

9.2.1. Tick Size for equities and ETFs

The following table shows the predefined tick sizes for trading

- shares
- ETFs (having as sole underlying equities or a basket of equities) and
- depository receipts:

Price Ranges	LB1	LB2	LB3	LB4	LB5	LB6	LB11
0 ≤ price < 0.1	0.0005	0.0002	0.0001	0.0001	0.0001	0.0001	0.001
0.1 ≤ price < 0.2	0.001	0.0005	0.0002	0.0001	0.0001	0.0001	0.001
0.2 ≤ price < 0.5	0.002	0.001	0.0005	0.0002	0.0001	0.0001	0.001
0.5 ≤ price < 1	0.005	0.002	0.001	0.0005	0.0002	0.0001	0.001
1 ≤ price < 2	0.01	0.005	0.002	0.001	0.0005	0.0002	0.01
2 ≤ price < 5	0.02	0.01	0.005	0.002	0.001	0.0005	0.01
5 ≤ price < 10	0.05	0.02	0.01	0.005	0.002	0.001	0.01
10 ≤ price < 20	0.1	0.05	0.02	0.01	0.005	0.002	0.01
20 ≤ price < 50	0.2	0.1	0.05	0.02	0.01	0.005	0.01
50 ≤ price < 100	0.5	0.2	0.1	0.05	0.02	0.01	0.01
100 ≤ price < 200	1	0.5	0.2	0.1	0.05	0.02	0.01
200 ≤ price < 500	2	1	0.5	0.2	0.1	0.05	0.01
500 ≤ price < 1.000	5	2	1	0.5	0.2	0.1	0.01
1.000 ≤ price < 2.000	10	5	2	1	0.5	0.2	0.01
2.000 ≤ price < 5.000	20	10	5	2	1	0.5	0.01
5.000 ≤ price < 10.000	50	20	10	5	2	1	0.01
10.000 ≤ price < 20.000	100	50	20	10	5	2	0.01
20.000 ≤ price < 50.000	200	100	50	20	10	5	0.01
50.000 ≤ price	500	200	100	50	20	10	0.01

LB = liquidity bands
LB1: 0 ≤ Ø daily number of transactions < 10
LB2: 10 ≤ Ø daily number of transactions < 80
LB3: 80 ≤ Ø daily number of transactions < 600
LB4: 600 ≤ Ø daily number of transactions < 2000
LB5: 2000 ≤ Ø daily number of transactions < 9000
LB6: 9000 ≤ Ø daily number of transactions
LB11: All shares, depositary receipts and ETFs whose home market is outside the European Union and not in Switzerland

Figure 33: Tick size for equities and ETFs

Tick size applies based on the assigned band (Liquidity Band 1-6 or 11) and considering the price range

9.2.2. Tick Size for bonds, certificates and warrants

The following table shows the predefined tick sizes for bonds, certificates and warrants:

Tick Sizes	
■ bonds (percentage quotation) ■ certificates (percentage quotation) ■ floater ■ zerobonds	**0,01** percentage point
■ bonds (unit quotation) ■ certificates (unit quotation) ■ warrants	Price > EUR 1 → **0,01** Price ≤ EUR 1 → **0,001**

Figure 34: Tick size for bonds, certificates and warrants

9.3. Order Profiles

In Xetra® T7, different from trading methods, order profiles are provided. The respective order profiles specify which order types are offered per market segment and trading procedure.

9.3.1. Order-Profile in equity market.at

equity market.at							
Trading procedure	Market Order	Limit Order	Stop Market Order	Stop Limit Order	Iceberg Order	Trailing Stop Order	One-cancels-the-other Order
CT	x	x	x	x	x	x	x
AU	x	x	x	x	-	-	-
CA	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Figure 35: Order profile for market segment equity market.at

9.3.2. Order-Profile bond market.at

bond market.at							
Trading procedure	Market Order	Limit Order	Stop Market Order	Stop Limit Order	Iceberg Order	Trailing Stop Order	One-cancels-the-other Order
CT	x	x	x	x	-	-	-
AU	x	x	x	x	-	-	-
CA	x	x	x	x	-	-	-

Figure 36: Order profile for market segment bond market.at

9.3.3. Order-Profile in structured products.at

structured products.at							
Trading procedure	Market Order	Limit Order	Stop Market Order	Stop Limit Order	Iceberg Order	Trailing Stop Order	One-cancels-the-other Order
CT	x	x	x	x	-	-	-
AU	x	x	x	x	-	-	-
CA	x	x	x	x	-	-	-

Figure 37: Order profile for market segment structured products.at

9.4. Details about Order Types

The following describes how the Stop Order works in the CT, AU and CA trading procedures as well as the Iceberg order.

9.4.1. Stop Order in Continuous Trading with Auctions and Auction

To support trading strategies, two different types of stop orders are available in Xetra® T7 that are activated after a predefined price level (stop limit) is reached.

A Stop Market Order — When the stop limit is reached (or exceeded for stop buy orders or falls below it for stop sell orders), the stop order is automatically placed in the order book as a market order (In the case of a stop limit order a limit order) and may be executed immediately.

For entering stop orders, the following information must be observed.

- ■ If the instrument is in „Instrument States"
    - ■ Auction Opening
    - ■ Auction Intraday
    - ■ Auction Volatility
    - ■ Auction Closing
    - ■ Continuous

and on the respective order book side (on which the stop order shall be placed) limit orders are in the orderbook, then the stop limit must be lower than the best (lowest) limit for this security when entering a stop loss order (sale). In the case of a stop buy order, the stop limit must be higher than the best (highest) limit for this instrument in the system.

If there are no limit orders on the respective order book side, the stop limit can be set for each value. If an instrument is in the "instrument state" "book", no check is performed and the stop limit can be set at any value.

9.4.2. Stop Order in Continuous Auction

To support trading strategies, two different types of stop orders are available in Xetra® T7 that are activated after a predefined price level (stop limit) is reached.

A Stop Market Order — When the stop limit is reached (or exceeded for stop buy orders or falls below it for stop sell orders), the stop order is automatically placed in the order book as a market order (In the case of a stop limit order a limit order) and may be executed immediately.

For entering stop orders, the following information must be observed.

- ■ If the instrument is in „Instrument States"
  - ■ Pre-Call
  - ■ Call

and on the respective order book side (on which the stop order shall be placed) limit orders are in the orderbook, then the stop limit must be lower than the best (lowest) limit for this security when entering a stop loss order (sale). In the case of a stop buy order, the stop limit must be higher than the best (highest) limit for this instrument in the system.

If there are no limit orders on the respective order book side, the stop limit can be set for each value. If an instrument is in the "instrument state" "book", no check is performed and the stop limit can be set at any value.

9.4.3. Iceberg Order

With this order type (in Xetra® T7), the entry of an order volume with a precise definition of which part (peak size) of the total volume is to be visible in the order book is made possible.

This type of order permits the input of large order sizes into the order book during continuous trading without the market being given insight into the overall volume.
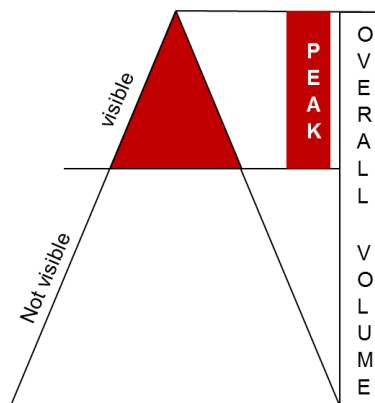
Figure 38: Iceberg Order

Wiener Börse determines the total volume of the order (minimum overall volume) as well as the minimum peak size for all visible parts of the order, whereby the last visible part of the order can also be smaller than the fixed minimum peak volume.

For instruments traded in Xetra® T7 trading procedure Continuous Trading the minimum peak size is EURO 1.000 and the minimum overall volume is EURO 10.000; furthermore the volume of the peak size must be at least 5 % of the overall volume.

10. Corporate actions - Treatment of orders

The handling of orders for corporate actions on Wiener Börse is described in this section.

10.1. Corporate actions – equity market.at

Wiener Börse proceeds as follows in the event of corporate actions (eg dividend payments):

Corporate actions		
Action	Result	Orderbook deletion
■ dividends ■ subscription rights ■ capital increases ■ etc.	cancellation of the order book on the day prior to the ex- day	yes

Figure 39: Handling of corporate actions in Xetra® T7

Note: Participants are informed in due time of any such actions and are responsible for the reentry of the orders.

10.2. Corporate actions – bond market.at

Wiener Börse AG proceeds as follows in the event changes in terms of listed bonds:

Corporate actions		
Action	Result	Orderbook deletion
■ Interest payment	No adjustments	no
■ Interest adjustment (Floater)	Trade suspension on Coupon-day	yes
■ Change in terms	Trade suspension on Coupon-day	yes
■ Difficulties on issuer's part (eg repayment difficulties)	Trade suspension	yes
■ Amortisation by instalments	Trade suspension on instalment day	yes
■ Redemption	Last trading day 3 trading days prior to maturity date	yes

Figure 40: Handling of corporate actions in Xetra® T7

Note: Participants are informed in due time of any such actions and are responsible for the reentry of the orders.

10.3. Corporate actions – structured products.at

Wiener Börse proceeds as follows in the event of corporate actions (eg dividend payments) for exchange traded funds (ETFs):

Corporate actions		
Action	Result	Orderbook deletion
■ dividends ■ etc.	cancellation of the order book on the day prior to the ex- day	yes

Figure 41: Handling of corporate actions in Xetra® T7

10.3.1. Knock Out

As soon as the underlying of the leverage certificate crosses the knock-out threshold, the member having applied must inform the exchange immediately.

After receiving the information, the instrument is suspended from trading. Due to the suspension of trading, all open orders in the trading system are automatically cancelled. The instrument remains suspended until the last day of trading (= the trading day after the day of the knock-out); it is not possible to enter orders.

The ISIN, the instrument's name, the time of the knock-out, the repurchase price, the last day of trading, the payout day and the point in time the instrument was suspended are disseminated via the news window of the trading system.

10.3.2. Sold Out

If the liquidity provider (issuer) has sold his entire available quantity of a structured product, it is "sold-out" and the liquidity provider has to inform the stock exchange immediately. The stock exchange then puts the instrument in the "Sold-Out" status. As a result, the issuer quote is deleted, while all orders in the order book remain active. Furthermore, trading participants will be informed about the event with a message in the Xetra® T7 Newsboard.

For the duration of the sold-out, liquidity provider (issuer) can enter quotes only with a quantity on the buy side, while the amount on the sales side must be zero.

Once the liquidity provider (issuer) again has a sufficient amount, the "Sold-Out" status can be canceled by the stock exchange.

11. Handling of new issues and deletions

The following chapter describes the treatment of new issues and deletions.

11.1. Listing and Admission

In the case of new issues (equities, structured products or bonds), the Marketplace Department of the exchange operating company allocates the security to the corresponding instrument group. As of the time of the such allocation up until the first day of trading, the security is marked as being in the status "ADD". In this stage, orders cannot be entered for such securities.

The first reference price is the price which Wiener Börse receives from the applicant bank or from the issuer.

11.2. Delistings and revocation of admissions

Upon the close of the last trading day, a security's status is to "Delete". All orders in this security are cancelled and new orders can no longer be entered. For reasons related to settlement procedures, the security remains in the system marked as "DEL" until the end of the following month (at the longest).

11.3. subscription rights and new shares

Both subscription rights and new shares with their own ISIN are traded as independent instruments through Xetra[®] T7.

12. Mistrade Rules

Wiener Börse is entitled to cancel (reverse) trades that have been made due to an erroneously incorrectly entered order / quote in order to maintain fair and orderly market conditions.

In this context - depending on the market segment - defined procedures must be observed.

12.1. Mistrade rule – equity market.at

The exchange operating company has the right to void trades in equities in the Third Market concluded in the trading procedure continuous trading which have been executed due to an order (quotes) being entered incorrectly by mistake into the terminal connected to the trading system if this serves to maintain fair and orderly trading market conditions when

- the price of the incorrectly entered order deviates substantially and obviously from the prevailing market price of the equity at the time the trade is concluded, and

- the exchange member who has made the mistake immediately raises the objection that the order (quote) was entered erroneously into the terminal connected to the trading system.

In this context, the following procedure is observed:

- The exchange member who has committed such an error must raise the objection to the erroneous order placement immediately but at the latest one hour following the mistrade and before 5:40 p.m. on the respective trading day, informing the exchange operating company by phone and sending the objection by fax. The exchange operating company shall immediately announce this objection by displaying it in the trading system.

- The exchange operating company will request an exchange member who has assumed a market making obligation for the equity affected by the mistrade to state the last traded price in EUR at an liquid trading place for the time of conclusion of the trade.

- A substantial price deviation from usual market prices is assumed for the trade concluded when the deviation is greater than 5 %.

- The reversal of a trade whose price deviates substantially from prevailing market prices is determined by the exchange operating company and the exchange members involved in the trade are immediately

informed by the exchange operating company. The exchange operating company cancels the trades underlying the transaction thus determined.

12.2. Mistrade rule – bond market.at

The exchange operating company has the right to void trades in debt securities concluded in the trading procedure continuous trading which have been executed due to an order (quotes) being entered incorrectly by mistake (mistrade) into the terminal connected to the trading system if this is necessary to maintain fair and orderly trading market conditions when

■ the price of a trade concluded based on an incorrectly entered order deviates substantially from the prevailing market price at the time the trade is executed, and

■ the exchange member who has made the mistake immediately raises the objection stating that it entered the order (quote) erroneously into the terminal connected to the trading system.

In this context, the following procedure must be followed:

■ The exchange member who has committed such an error must raise the objection of erroneous order entry (mistrade) immediately but at the latest within one hour of the execution of the trade and in any case before 5.40 p.m. of the trading day concerned after informing the exchange operating company by telephone and sending the objection in writing by fax or by e-mail. The exchange operating company shall immediately announce this notification of a mistrade by displaying it in the trading system.

Immediately afterwards, the exchange operating company determines the prevailing market price by the following means:

■ The exchange operating company will request the exchange members who have assumed market making obligations for the debt security affected by the mistrade and who were not involved in the transaction to state a theoretical price for the time of conclusion of the trade; the prevailing market price is derived from the arithmetic mean of these theoretical prices, with the highest and the lowest theoretical prices being left out of consideration.

■ If the prevailing market price cannot be determined by the aforementioned procedure, the exchange operating company will request all market makers who trade in debt securities included in the trading procedure continuous trading and who were not involved in the transaction concerned to state a theoretical price for the time of the conclusion of the transaction; the arithmetic mean of these theoretical prices results in the prevailing market price.

■ If the prevailing market price cannot be determined by the aforementioned procedure, the exchange operating company will request three exchange members who trade in debt securities included in the trading procedure continuous trading and who were not involved in the transaction concerned to state a theoretical price for the time of the conclusion of the transaction; the arithmetic mean of these theoretical prices results in the prevailing market price.

A substantial deviation from prevailing market prices shall be deemed given for a trade executed when one of the following deviations from prevailing markets prices is ascertained:

■ in the case of a remaining time to maturity equal to or shorter than 2.5 years, the deviation is more than 75 basis points

■ in the case of a remaining time to maturity greater than 2.5 years and shorter or equal to 6.5 years, the deviation is more than 100 basis points

■ in the case of a remaining time to maturity greater than 6.5 years and shorter than 10.5 years, the deviation is more than 150 basis points

■ in the case of a remaining time to maturity greater than 10.5 years, the deviation is more than 200 basis points

In the case of debt securities with variable interest, the remaining time to maturity will be determined in the period until the next interest rate adjustment date.

The suspension of a trade whose price deviates substantially from prevailing market prices is determined by the exchange operating company who then immediately notifies the exchange members who are party to the trade. The exchange operating company cancels the trades underlying the transaction thus determined.

12.3. Mistrade rule – structured products.at

In this market segment there are two different mistrade rules in place. One for Certificates and Warrants, and one for Exchange Traded Funds (ETFs).

12.3.1.   Mistrade rule for Certificates and Warrants

The exchange operating company has the right to void trades in participation certificates and warrants if it is necessary for the maintenance of fair and orderly market conditions in the event that

■ The price determined for a trade deviates substantially and obviously from prevailing market prices at the time the trade was concluded and

■ Either the market-making exchange member or an exchange member involved in the trade immediately raises this objection.

In this context, the following procedure is observed:

■ The exchange member requesting the reversal of a trade must submit the objection in writing by telefax to the exchange operating company immediately but at the latest one hour following the mistrade and before 5:40 p.m. on the respective trading day in the instrument concerned after announcing the transmission by telephone. The exchange operating company shall immediately announce this objection by displaying it in the trading system.

■ After this notification, the exchange operating company shall immediately determine the prevailing market price by requesting the market-making exchange member for the instrument concerned to name a theoretical price based on recognized price models for the instrument concerned for the point in time of conclusion of the trade.

■ A substantial deviation from prevailing market prices is said to be given for a trade concluded in the event that

■ the deviation is more than 10% in the case of a leverage certificate (knock out certificate) and warrants, or, if the trade is concluded at a price below EUR 1 and the deviation is greater than EUR 0.10, and

- in the case of all other participation certificates, if the deviation is greater than 3%, or, if the trade is concluede at a price of below EUR 1 and the deviation is greater than EUR 0.03.

- The reversal of a trade whose price deviates substantially from prevailing market prices is determined by the exchange operating company; the exchange members who are party to the trade are immediately informed of this by the exchange operating company. The exchange operating company cancels the trades underlying the transaction thus determined.

12.3.2. Mistrade rule for Exchange Traded Funds

The exchange operating company has the right to void trades in passively managed investment funds concluded in the trading procedure continuous trading which have been executed due to an order (quotes) being entered incorrectly by mistake into the terminal connected to the trading system if this serves to maintain fair and orderly trading market conditions when

- the price of the incorrectly entered order deviates substantially and obviously from the prevailing market price of the investment fund at the time the trade is concluded, and

- the exchange member who has made the mistake immediately raises the objection that the order (quote) was entered erroneously into the terminal connected to the trading system.

In this context, the following procedure is observed:

- The exchange member who has committed such an error must raise the objection to the erroneous order placement immediately but at the latest one hour following the mistrade and before 5:40 p.m. on the respective trading day, informing the exchange operating company by phone and sending the objection by fax. The exchange operating company shall immediately announce this objection by displaying it in the trading system.

- The exchange operating company immediately after receiving the notification, calculates the prevailing market price of the investment fund at the time of trade conclusion by computing the indicative net asset value of the investment fund at the time of conclusion of the trade based on the erroneous order placement through a recognized data vendor. If no indicative net asset value is accessible, the last available net asset value is considered.

- A substantial price deviation from usual market prices is assumed for the trade concluded when the deviation is greater than 3 %.

- The reversal of a trade whose price deviates substantially from prevailing market prices is determined by the exchange operating company and the exchange members involved in the trade are immediately informed by the exchange operating company. The exchange operating company cancels the trades underlying the transaction thus determined.

13. Emergency Procedure

The exchange operating company shall be authorized to interrupt trading for the purpose of fixing technical problems; trading shall be interrupted in any case under the following circumstances:

a) If orderly trading is not possible due to technical problems in the central system;

b) If participation in trading is restricted or hindered, especially due to technical disruptions for a critical number of exchange members; the critical number of members shall be deemed to have been reached if the members concerned jointly accounted for 50% of the trading volume in shares in the preceding calendar month.

The following emergency procedure was agreed with the trading participants:

Issue	Trading System	Settlement Price Auction
Major problems Xetra® trading system	Trading is interrupted (HALT)	Settlement day: auction will be postponed (if the remaining time allows)
Problems on participants' side (trading volume* ≥ 50%)	Trading is interrupted (HALT)	Settlement day: auction will be postponed (if the remaining time allows)
Problems on participants' side (trading volume* < 50%)	Remains open	Is held according to schedule

* The trading volume according to the monthly Xetra® member trading volume statistics of the previous month.

Figure 42: Emergency procedure

13.1. Major problems in Xetra® T7

If central problems arise in the Xetra® T7, the following procedure should be followed:

■ Trading on the cash market (Xetra® T7) will be interrupted until further notice → Market Halt

■ All existing persistant orders in Xetra® T7 will remain in the orderbook

■ All existing non-persistant orders/quotes in Xetra® T7 will be deleted automatically

■ During the Market Halt existing orders/quotes may not be modified or deleted in Xetra® T7 and entry of new orders/quotes is not possible

■ Market Maker/Specialist-obligations are suspended for the period.

13.2. Problems on participants' side (trading volume* ≥ 50%)

■ Trading on the cash market (Xetra® T7) will be interrupted until further notice → Market Halt

■ All existing persistant orders in Xetra® T7 will remain in the orderbook

■ All existing non-persistant orders/quotes in Xetra® T7 will be deleted automatically

- During the Market Halt existing orders/quotes may not be modified or deleted in Xetra® T7 and entry of new orders/quotes is not possible
- Market Maker/Specialist-obligations are suspended for the period of the Market Halt

13.3. Problems on participants' side (trading volume* < 50%)

- Trading on the cash market (Xetra® T7) will NOT be interrupted
- The exchange operating company provides the service „on-behalf-of-trading" (OBOT) for trading participants affected by the technical problems

13.4. Restart of Trading

- information in time about the restart of trading (Xetra® T7 - newsboard)
- It is the exchange operating company's decision for which instruments trading will be restarted on the relevant trading day

13.5. On-behalf-of-Trading (OBOT)

- Will be provided by the exchange operating company up to the extent of its organisational capacity
- Trading participants may place/delete their orders via telephone (call functional Xetra® T7 Helpdesk - all calls are tape recorded)
- OBOT-orders/deletions will be processed in the order of their arrival
- Trading participants are obliged to submit all OBOT-orders/deletions in writing, using and sending the signed prescribed standard forms to the functional Xetra® T7 Helpdesk immediately, at the latest at the close of trading

14. News & Xetra® T7 Newsboard

Important and relevant information for traders will be announced in the Xetra® T7-newsboard and can be accessed there.

The Xetra® T7-newsboard is available in real time both in the Xetra® T7 trading system and on the website of Wiener Börse (https://www.wienerborse.at/en/trading/xetra-newsboard/).

In case of emergencies and other extraordinary situations, information can also be provided via other information channels Wiener Börse.

15. Contact

For any <u>functional</u> questions you may have, please contact the

■ Trading Helpdesk of Wiener Börse (trading@wienerborse.at / +43 1 53165 500).

For any <u>technical</u> questions you may have, please contact the

■ IT Helpdesk of Wiener Börse (it_helpdesk@wienerborse.at / +43 1 53165 170) or the
■ Customer Technical Support of Deutsche Börse AG (cts@deutsche-boerse.com).

Table of figures

Disclaimer

The information in this document is provided exclusively for information purposes. It does not constitute any legal or investment advice. Wiener Börse AG does not assume any liability for the completeness or correctness of the information in this document. Therefore, no one should rely on the information contained herein. Wiener Börse AG does not assume liability for any damages that may arise due to actions taken on account of the use of this document.

Should parts or individual phrases in this disclaimer fail to comply with applicable law or no longer comply or fail to be fully in line with the law, the contents and the validity of the remaining parts of the document shall remain unaffected.