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# T7® Release 12.1

Instrument Reference Data Guide April 2024 for WBAG and Partner Exchanges

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# **1** Abbreviations

Please find a list of all the abbreviations used in the document.

WBAG	Vienna Stock Exchange ('Wiener Börse AG')
PSE	Prague Stock Exchange
BSE	Budapest Stock Exchange
ZSE	Zagreb Stock Exchange
LJSE	Ljubljana Stock Exchange
CSV	Comma-separated-values
ETF	Exchange Traded Funds
ETN	Exchange Traded Notes
EoD	End-of-Day
MIC	Market Identifier Code
RDF	Reference Data File
RDI	Reference Data Interface
T7®	Trading System developed by Deutsche Boerse Group

# 2 Introduction

This document provides an overview about the T7® Release 12.1 instrument reference and static data for Xetra® Vienna, Prague, Budapest, Zagreb and Ljbuljana Participants. Manuals and guides mentioned in this document are available for download in the Closed User Group 'CUG Members & 3rd Parties' of our website.

#### https://www.wienerborse.at/en/trading/cug-members-3rd-parties/.

Please watch the CUG section for technical circulars and T7® Release 12.1 documentation updates. You can register for access to our CUG via email to <u>xetra@wienerborse.at</u>

#### Any relevant changes to previous version highlighted yellow.

The following documents provide additional information to complement this manual. They are available via <a href="https://www.xetra.com/xetra-de/technologie/t7/system-dokumentation/release12-1">https://www.xetra.com/xetra-de/technologie/t7/system-dokumentation/release12-1</a>.

- T7 Market Model for the Trading Venue Xetra
- T7 Functional and Interface Overview
- T7 Functional Reference
- T7 Cash Markets Participant and User Maintenance Manual

#### The following document is available via

https://www.wienerborse.at/handel/cug-mitglieder-3rd-parties/technische-dokumentation/

T7 Market Data & Reference Data Interfaces – Manual

# 3 Instrument reference data

T7® for Cash Market offers instrument reference data via the **T7® RDI** and in file form as compressed **T7® RDF** via the WBAG Report Server. Note that the delivery of T7® RDF is not free of charge compared to T7® RDI. Please get in contact with our Market Data Sales Team (+43 1 53165 288, <u>mds@wienerborse.at</u>) if you are interested in provision of T7® RDF.

Beside instrument reference data csv files will be generated which contain static information for each instrument. Static information like order profiles and trading schedules are expected to change only rarely. Major changes of the static files will be communicated in advance with sufficient lead-time.

# 3.1 Reference Data Interface (T7® RDI)

This interface provides message based products' and instruments' reference data which are available for trading on T7®. For more information, please refer to 'T7 12.1 Market and Reference Data Interfaces Manual' in the CUG section on the path

Technical Documentation > Xetra® T7 12.1

# 3.2 WBAG Report Server (T7® RDF)

On the WBAG Report Server T7® Reference Data Files (T7® RDF) are available in FIXML and CSV layout. The files contain static information for all tradable instruments on a market for a respective business day. To get access to the WBAG Report Server please read the 'WBAG Report Server Access Guide' which is available in the CUG section on the path

Technical Documentation > Xetra® T7 12.1

More information about T7® RDF can be found in chapter 4 of this guide.

### 3.3 Public website

A reduced set of instrument reference data for all traded companies at Xetra<sup>®</sup> Vienna is provided on our website:

https://www.wienerborse.at/en/issuers/shares/companies-list/

# 4 Reference Data File (RDF)

Participants with low bandwidth connections may retrieve Start-of-Day reference data in a file based format. This initial T7® RDF is available in two specifications (FIXML and CSV layout) containing all tradable instruments defined on the exchange at the beginning of the current business day. It is generated once per day via 'snapshot' after the T7® EoD processing, i.e. prior to the daily T7® 'Start-of-Day' processing. For Vienna and Partner Exchanges Cash Market no incremental updates of these files take place during the day.

### 4.1 RDF in XML format

The Reference Data File provides instrument reference data in FIXML format. Product reference data and instrument reference data are provided in one file. The file format of the Start-Of-Day files looks as follows:

<@@><report name><member id><business date><mic><file set identifier><nnn>.XML

with

- @@ (length 2): environment number, i.e. 68 for production, 69 for simulation
  report name (length 8): always FILRDF01
  member id (length 5): always PUBLI
  business date (length 8): format 'YYYYMMDD'
  mic (length 4): MIC of the market, e.g. XVIE, XBUD, XLJU, XPRA, XZAG
  file set identifier (length 5): remains constant for all files belonging to the same set
- nnn (length 3): sequence number 000-999

To shrink down files size, the XML file is zipped.

Example for T7® reference data files for 'Start-Of-Day' in production:

 File name on WBAG Report Server:
 68FILRDF01PUBLI20181203XVIE.XML.ZIP

 Time of delivery:
 daily after T7® EoD processing (until 01:00 CET the latest in production on the following trading day) with instrument data valid for next business day

Note: Each market has its own file (the file name contains the MIC for market reference).

In case of a failover scenario, the file on WBAG Report Server may be overwritten by a new version of the RDF in XML format. As intraday changes of static information for cash market instruments takes place rarely, no impact for participants trading systems is expected by this measure.

# 4.2 File record layout (XML)

T7® provides a customized FIXML schema via a set of xsd files. They can be found under the link "T7 12.1 Market Reference Data Interfaces XML FAST Templates FIXML Schema Files" in the CUG section of WBAG's webpage. Click the path:

Technical Documentation > Xetra® T7 12.1

Open the folder 'rdd/ RDDFixmlSchema.zip' and e.g. the file fixml-fields-base-5-0-SP2\_.xsd.

The following table provides a mapping between FIXML attributes (used in RDF) and FIX fields (used in RDI). *SecDef* refers to the instrument snapshot message, *SecDefUpd* refers to the instrument incremental message, *MktDef* refers to the product snapshot message and *SecStat* refers to the Variance Futures Status, the Total Return Futures Status and the *Trade At Reference Price Status* messages.

The initial file ('snapshot') includes all four message types while the incremental file contains only the *SecDefUpd* and *SecStat* messages.

FIXML attributes of the T7® RDF occur in the same sequence as FIX fields of the T7® RDI.

**Note**: The following list of FIXML attributes covers reference data from the Cash Market as well as from the Derivatives Market (note any Derivatives Markets specific fields are still available in the list although Vienna SE and its Partner Exchanges only run Cash Market on Xetra<sup>®</sup>). Please be aware that the 'snapshot' RDF will only comprise a subset of all FIXML attributes.

FIXML Attribute	FIX Field Name	FIX Tag / Group	Repeating	FIX Messages
AcrdColtnPrm	AccruedCollectionParameter	28885		SecStat
AcrdPmtPrm	AccruedPaymentParameter	28884		SecStat
AID	SecurityAlt	Group	Y	SecDef, SecDefUpd
AltID	SecurityAltID	455		SecDef, SecDefUpd
AltIDSrc	SecurityAltIDSource	456		SecDef, SecDefUpd
AnnlCIndrDays	AnnualCalendarDays	28881		SecStat
AnnlTrdgBizDays	AnnualTradingBusinessDays	2584		SecStat
ARMVM	ARMVM	2591		SecStat
AssetTyp	AssetType	1940		SecDef, SecDefUpd
AssetSubTyp	AssetSubType	29831		SecDef, SecDefUpd
AuctTyp	AuctionType	1803		MktDef
AuctTypRule	AuctionTypeRules	Group	Y	MktDef

FIXML Attribute	FIX Field Name	FIX Tag / Group	Repeating	FIX Messages
BaseTrdgRules	BaseTradingRules	Group	Ν	MktDef, SecDef, SecDefUpd
BizDayTyp	BusinessDayType	2581		SecStat
CalcMeth	CalculationMethod	2592		SecStat
Ссу	Currency	15		MktDef, SecDef
CFI	CFICode	461		SecDef, SecDefUpd
ClrPxOfst	ClearingPriceOffset	2582		SecStat
ClrPxPrm	ClearingPriceParameters	Group	Y	SecStat
ClsdBkInd	ClosedBookIndicator	28874		MktDef
CntrctGenNum	ContractGenerationNumber	25034		SecDef, SecDefUpd
CntrctDt	ContractDate	30866		SecDef, SecDefUpd
CntrctMY	ContractMonthYear	32340		SecDef, SecDefUpd
CpnDayCnt	AccruedInterestCalculationMethod	1950		SecDef
CpnPmt	CouponPaymentDate	224		SecDef
CpnRt	CouponRate	223		SecDef
CurColtnPrm	CurrentCollectionParameter	28885		SecStat
CurPmtPrm	CurrentPaymentParameter	28883		SecStat
DecaySplit	DecaySplit	25144		MktDef
Desc	SecurityDesc	107		SecDef, SecDefUpd
DiscFctr	DiscountFactor	1592		SecStat
DpstTyp	DepositType	28890		SecDef, SecDefUpd
Dt	EventDate	866		SecDef, SecDefUpd
EfctvBizDt	EffectiveBusinessDate	2400		MktDef
EndPxRng	EndPriceRange	2552		MktDef
EndTickPxRng	EndTickPriceRange	1207		MktDef
EventTyp	EventType	865		SecDef, SecDefUpd
Evnt	Events	Group	Y	SecDef, SecDefUpd
Exch	SecurityExchange	207		SecDef, SecDefUpd
Exch	UnderlyingSecurityExchange	30308		MktDef
ExerStyle	ExerciseStyle	1194		SecDef, SecDefUpd
FastMktInd	FastMarketIndicator	2447		MktDef
FastMktPctg	FastMarketPercentage	2557		MktDef
FlatIndicator	FlatIndicator	<mark>25170</mark>		SecDef
FlexProdElig	FlexProductEligibilityIndicator	1242		MktDef

FIXML Attribute	FIX Field Name	FIX Tag / Group	Repeating	FIX Messages
FlexProdEligCmplx	FlexProductEligibilityComplex	2561		MktDef
FlexProdEligs	FlexRules	Group	Y	MktDef
ID	InstrumentPartyID	1019		MktDef, SecDef, SecDefUpd, SecStat
ID	LegSecurityID	602		MktDef, SecDef, SecDefUpd, SecStat
ID	RelatedMarketSegmentID	2546		MktDef, SecDef, SecDefUpd, SecStat
ID	SecurityID	48		MktDef, SecDef, SecDefUpd, SecStat
ID	UnderlyingSecurityID	30309		MktDef, SecDef, SecDefUpd, SecStat
ImpldMktInd	ImpliedMarketIndicator	1144		SecDef, SecDefUpd
InstrAttrib	InstrumentAttributes	Group	Y	SecDef, SecDefUpd
Instrmt	Instrument	Group	Ν	SecDef, SecDefUpd
InstrmtAuctTyp	InstrumentAuctionType	31803		SecDef
InstrmtExt	InstrumentExtension	Group	Ν	SecDef, SecDefUpd
InstrmtScope	InstrumentScopes	Group	Y	MktDef
Issr	Issuer	<mark>106</mark>		SecDef
IssuCtry	CountryOflssue	<mark>470</mark>		<mark>SecDef</mark>
Issued	<mark>IssueDate</mark>	<mark>225</mark>		<mark>SecDef</mark>
Leg	InstrmtLegGrp	Group	Y	SecDef, SecDefUpd
LowExerPxOptnInd	LowExercisePriceOptionIndicator	2574		SecDef,SecDefUpd
MarketSegmentDesc	MarketSegmentDesc	1396		MktDef
MaxOfstRFQExpireTm	MaxOffsetRFQExpireTime	30126		MktDef
MatDt	MaturityDate	541		SecDef, SecDefUpd
MDBkTyp	MDBookType	1021		MktDef
MDFeedTyp	MDFeedType	1022		MktDef
MDFeedTyps	Feeds	Group	Y	MktDef
MDRcvryTmIntvl	MDRecoveryTimeInterval	2565		MktDef
MinBidSz	MinBidSize	647		MktDef, SecDef, SecDefUpd
MinOfrSz	MinOfferSize	648		MktDef, SecDef, SecDefUpd
MinPxIncr	MinPriceIncrement	969		SecDef, SecDefUpd
MinPxIncrAmt	MinPriceIncrementAmount	1146		SecDef, SecDefUpd
MinPxIncrClr	MinPriceIncrementClearing	28888		SecDef, SecDefUpd
MinTradeVol	MinTradeVol	<mark>562</mark>		SecDef
MktDepth	MarketDepth	264		MktDef
MktDepthTmIntvl	MarketDepthTimeInterval	2563		MktDef

FIXML Attribute	FIX Field Name	FIX Tag / Group	Repeating	FIX Messages
MktID	MarketID	1301		MktDef
MktImbalInd	MarketImbalanceIndicator	28875		MktDef
MktSeg	MarketSegment	7703		MktDef
MktSegGrp	MarketSegmentGrp	Group	Y	SecDef, SecDefUpd
MktSegID	MarketSegmentID	1300		MktDef, SecDef, SecDefUpd, SecStat
MktSegStat	MarketSegmentStatus	2542		MktDef
MktSegSubTyp	MarketSegmentSubType	2544		MktDef
MktSegTyp	MarketSegmentType	2543		MktDef
MlegModel	MultilegModel	1377		SecDef, SecDefUpd
MMY	MaturityMonthYear	200		SecDef, SecDefUpd
MtchAlgo	MatchAlgorithm	1142		MktDef
MtchRules	MatchRules	Group	Y	MktDef
MtchRuleProdCmplx	MatchRuleProductComplex	2569		MktDef
MtchTyp	MatchType	574		MktDef
Mult	ContractMultiplier	231		SecDef, SecDefUpd
NegDur	NegotiationDuration	31629		MktDef
NxtEfctvBizDt	NextEffectiveBusinessDate	28871		MktDef
OfstSTPEfctvTm	OffsetSTPEffectiveTime	30168		MktDef
Oper	InstrumentScopeOperator	1535		MktDef
OptAt	OptAttribute	206		SecDef, SecDefUpd
OrigStrkPx	OrigStrikePrice	2578		SecDef, SecDefUpd
OvrNiteIntRt	OvernightInterestRate	2590		SecStat
ParentMktSegmID	ParentMktSegmID	1325		MktDef
PartID	PartitionID	5948		MktDef
PostTrdAnon	PostTradeAnonymity	28876		SecDef, SecDefUpd
PrevClsPx	UnderlyingPrevClosePx	28843		MktDef
PrevCpnPmt	PreviousCouponPaymentDate	<mark>28895</mark>		SecDef
PriSetPx	PriorSettlPrice	734		SecDef, SecDefUpd, SecStat
ProdCmplx	ProductComplex	1227		SecDef, SecDefUpd
Pty	InstrumentParties	Group	Y	SecDef, SecDefUpd
PutCall	PutOrCall	201		SecDef, SecDefUpd
Px	LegPrice	566		SecDef, SecDefUpd
PxPrcsn	InstrumentPricePrecision	2576		SecDef,SecDefUpd
PxRngPctg	PriceRangePercentage	2554		MktDef

FIXML Attribute	FIX Field Name	FIX Tag / Group	Repeating	FIX Messages
PxRngProdCmplx	PriceRangeProductComplex	2555		MktDef
PxRngRuleID	PriceRangeRuleID	2556		MktDef, SecDef, SecDefUpd
PxRngRules	PriceRangeRules	Group	Y	MktDef, SecDef, SecDefUpd
PxRngValu	PriceRangeValue	2553		MktDef
РхТур	PriceType	423		SecDef, SecDefUpd
Qual	InstrumentPartyRoleQualifier	2378		SecDef, SecDefUpd
QuotEndTm	QuotingEndTime	<mark>30345</mark>		SecDef
QuotSideInd	QuoteSideIndicator	<mark>2559</mark>		MktDef
QuotSideModelTyp	QuoteSideModelType	<mark>28898</mark>		MktDef
QuotStartTm	QuotingStartTime	<mark>30341</mark>		SecDef
QuotSzRules	QuoteSizeRules	Group	Y	MktDef, SecDef, SecDefUpd
R	InstrumentPartyRole	1051		SecDef, SecDefUpd
RatioQty	LegRatioQty	623		SecDef, SecDefUpd
RefTickTbIID	RefTickTableID	1787		SecDef, SecDefUpd
RelatedMktSeg	RelatedMarketSegments	Group	Y	MktDef
ReltdClsPx	RelatedClosePrice	2589		SecStat
RemCIndrDays	RemainingCalendarDays	28880		SecStat
RelNdxVal	RelatedIndexValue	28882		SecStat
RFR	RiskFreeRate	1190		SecStat
Rltnshp	MarketSegmentsRelationship	2547		MktDef
RIzdVarnc	RealizedVariance	2587		SecStat
RoundLot	RoundLot	<mark>561</mark>		SecDef
SecSubTyp	InstrumentScopeSecuritySubType	<mark>1548</mark>	N	MktDef
SecTrdgRules	SecurityTradingRules	Group	Ν	SecDef, SecDefUpd
SecTyp	InstrumentScopeSecurityType	1547		MktDef
SecTyp	LegSecurityType	609		SecDef, SecDefUpd
SecTyp	SecurityType	167 <sup>1</sup>		SecDef, SecDefUpd, SecStat
<mark>SesID</mark>	<b>TradingSessionID</b>	<mark>336</mark>		SecDef, SecDefUpd
<mark>SesSub</mark>	TradingSessionSubID	<mark>625</mark>		SecDef, SecDefUpd
SetPx	ClearingSettlPrice	2528		SecStat
SetPx	SettlPrice	730		SecStat
SettlBizDays	SettlBusinessDays	28878		SecDef
SettlCcy	SettlCurrency	120		SecDef
SettlMeth	SettlMethod	1193		SecDef,SecDefUpd

<sup>&</sup>lt;sup>1</sup> New values for T7 8.0: SR – Subscription Right and FUN - Investment Funds T7® RELEASE 12.1 INSTRUMENT REFERENCE DATA GUIDE – APRIL 2023

FIXML Attribute	FIX Field Name	FIX Tag / Group	Repeating	FIX Messages
SettlSubMeth	SettlSubMethod	2579		SecDef,SecDefUpd
Side	LegSide	624		SecDef, SecDefUpd
Src	InstrumentPartyIDSource	1050		SecDef, SecDefUpd
Src	LegSecurityIDSource	603		SecDef, SecDefUpd
Src	SecurityIDSource	22		SecDef, SecDefUpd, SecStat
Src	UnderlyingSecurityIDSource	30305		MktDef
StartPxRng	StartPriceRange	2551		MktDef
StartTickPxRng	StartTickPriceRange	1206		MktDef
Status	SecurityStatus	965		SecDef, SecDefUpd
StdVarnc	StandardVariance	2588		SecStat
StrkPx	StrikePrice	202		SecDef, SecDefUpd
StrkPxPrcsn	StrikePricePrecision	2577		SecDef,SecDefUpd
SubTyp	SecuritySubType	762		SecDef, SecDefUpd
SvcLctnID1	PrimaryServiceLocationID	2567		MktDef
SvcLctnID2	SecondaryServiceLocationID	2568		MktDef
SvcLctnSubID1	PrimaryServiceLocationSubID	28591		MktDef
SvcLctnSubID2	SecondaryServiceLocationSubID	28593		MktDef
Sym	LegSymbol	600		MktDef
Sym	MarketSegmentSymbol	7177		MktDef
Sym	Symbol	55		MktDef, SecDef, SecDefUpd
Sym	UnderlyingSymbol	30311		MktDef
TickIncr	TickIncrement	1208		MktDef
TickRuleID	TickRuleID	28887		MktDef
TickRuleProdCmplx	TickRuleProductComplex	2571		MktDef
TickRules	TickRules	Group	Y	MktDef
TotTrdgBizDays	TotalTradingBusinessDays	2585		SecStat
TrdgBizDays	TradingBusinessDays	2586		SecStat
TdrgSesRules	TradingSessionRules	Group	Y	SecDef, SecDefUpd
TrdType	TrdType	<mark>828</mark>		MktDef
TxnTm	TransactTime	60		SecDef, SecDefUpd
Тур	InstrAttribType	871		SecDef, SecDefUpd
<mark>ULSym</mark>	UnderlyingSymbol	<mark>311</mark>		SecDef
Undly	Underlying	Group	Ν	MktDef
UOM	UnitOfMeasure	996		SecDef, SecDefUpd
UpdActn	SecurityUpdateAction	980		SecDefUpd

FIXML Attribute	FIX Field Name	FIX Tag / Group	Repeating	FIX Messages
USApprvl	USApproval	39543		MktDef
<mark>USFirmFlag</mark>	USFirmFlag	<mark>9543</mark>	ł	<mark>MktDef</mark>
Val	InstrAttribValue	872		SecDef, SecDefUpd
ValMeth	ValuationMethod	1197		SecDef,SecDefUpd
VegaMult	VegaMultiplier	2583		SecStat
Vol	Volatility	1188		SecStat
WarrantTyp	WarrantType	30762		SecDef

### 4.3 RDF after a failover or restart of T7® RDI

The so called "file set identifier" changes after a restart or failover of the T7® RDI. The file set identifier always sequentially increments within a day, allowing for easy identification of the most recently created file set of RDF. During a failover or restart, an application must detect the creation of a new file set and rebuild its reference data based on the new file set.

#### Example:

Start-Of-Day file **after** failover: 68FILRDF01PUBLI20170516XVIE**CZLC0**000.XML First intraday updated file **after** failover: 68FILRDF01PUBLI20170516XVIE**CZLC0**001.XML Second intraday updated file **after** failover: 68FILRDF01PUBLI20170516XVIE**CZLC0**002.XML...

In case of a T7® RDI failover, a new initial reference file is generated by DBAG with a new file set identifier and is delivered to WBAG. This file contains all incremental messages disseminated during the day, i.e. the entire history.

If T7® RDI needs to be restarted by the exchange, a new initial reference file is generated by DBAG with a new file set identifier. This file contains not the entire history of incremental messages.

WBAG will decide on case-by-case basis if these new reference data files will be provided intraday to members and vendors as intraday changes of static information for cash market instruments takes place rarely. In normal cases no impact for participants trading systems is expected if usage of Start of Day file is continued. If necessary WBAG will inform members and vendors via usual communication channels about provision of updated RDF on WBAG Report Server.

Consequently, applications using a sftp process need to process the following loop:

- Find the newest Start-Of-Day file.
- Apply all updates newer than the Start-Of-Day file.
- Detect the creation of a new file set.

# 4.4 Reduced RDF in CSV format

In addition to the instrument reference data file in FIXML format T7® provides a reduced RDF in CSV format. The file name follows the pattern:

#### T7\_<MIC>\_<env>\_TRADABLE\_INSTRUMENTS\_<business date>.CSV

with:

•	MIC (length 4):	MIC of the market, e.g. XVIE for Vienna
•	env (length 4):	environment, i.e. 'PROD' for production, 'SIMU' for simulation
•	business date (length 8):	format 'YYYYMMDD'
•	Example (production):	T7_XVIE_PROD_TRADABLE_INSTRUMENTS_20170725.CSV
•	Time of delivery:	daily after T7 EoD processing (app. 19:00 CET in production)

The file is created in accordance with the following specifications:

File extension	CSV
Fields delimiter	; (semicolon)
Decimal symbol	. (point)
Digit grouping symbols (thousands separator)	, (comma)

**Please note**: When importing the file into a tool like, e.g. MS Excel or Access, you have to make sure that the decimal character is configured accordingly, either in the tool itself or in the operation system, e.g. the Regional Settings in Windows.

# 4.5 File record layout (CSV)

All fields listed below are sorted in the same order as shown in the instrument file. All data is provided in string format (Alphanumeric) delimited by semicolon.

Line 1 provides the MIC of the market, e.g. Market: XVIE

Line 2 provides the date of the last update of the file, e.g. Date Last Update: 03.12.2018.

Line 3 provides the column names listed below.

The instrument reference data starts with line 4:

Sequence Number	Field name	Description
1	Product Status	This field indicates whether the instrument is already tradable in T7. Published = Instrument is not tradable on T7 Active = Instrument is tradable on T7
2	Instrument Status	Active = Instrument is tradable on T7 Instrument Status Active = Instrument is tradable on T7 Pending deletion = Instrument will be deleted after a retention period
3	Instrument	Instrument description
4	ISIN	ISIN of the instrument
5	Product ID	System generated identifier unique per market. Products usually provide access to instruments within the market that share common attributes such as market model and schedules.
6	Instrument ID	System generated identifier unique per market. Former "Isix" Note, that in case of product relation of 1:n (e.g. for ETPs) more than one Instrument ID may refer to the same Product ID
7	WKN	Wertpapierkennnummer
8	Mnemonic	Instrument mnemonic
9	MIC Code	MIC Code of the market
10	CCP eligible Code	Indicator whether instrument is CCP eligible: Y = Instrument is CCP eligible N = Instrument is not CCP eligible
11	Trading Model Type	Trading Model Types: Continuous = Continuous Trading with Auctions ScheduledIntradayAuction = One Auction AnyAuction = Multiple Auction ContinuousAuctionIssuer = Continuous Auction with Market Maker ContinuousAuctionSpecialist = Continuous Auction with Specialist (used for FirstPlace Wiener Börse)

Sequence Number	Field name	Description
12	Product Assignment Group	Product Assignment Group, e.g. ATX.
13	Product Assignment Group Description	Description of the Product Assignment Group.
14	Designated Sponsor Member ID	DS Member ID. For more than one DS, Member IDs are separated with "#", the Member ID of the delegated member is separated with "*" at the end of the field.
15	Designated Sponsor	DS Member long name. For more than one DS, members' long names are separated with "#", the members' long name of the delegated member is separated with "*" at the end of the field.
16	Price Range Value	Maximum allowable quote spread (absolute value). Conditionally provided if Price Range Percentage is absent.
17	Price Range Percentage	Maximum allowable quote spread (percentage value). Conditionally provided if Price Range Value is absent.
18	Minimum Quote Size	Market Making Parameter: Minimum Quote Size.
19	Instrument Type	Instrument type: CS = Common Stock / Equity ETF = Exchange Traded Funds ETN = Exchange Traded Notes ETC = Exchange Traded Commodities OTHER = Other BOND = Bond WAR = Warrant SR = Subscription Rights FUN = Investment Funds DA = DIGITAL ASSET
20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58	Tick Size (1-20)	A tick size represents a limit price/range step. Twenty different tick sizes are possible for an instrument.
21	Upper Price Limit Max	Maximum price for that instrument. Upper price limit max represents a limit range for which a tick size applies.
23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59	Upper Price Limit (2-20)	Upper Price Limit represents a limit range for which a tick size applies. There is a total of twenty possible for an instrument.
60	Number of Decimal Digits	Displayed decimals

Sequence Number	Field name	Description
61	Unit of Quotation	The unit in which an instrument is quoted/stated when buying or selling, e.g. shares (number of items).
62	Market Segment	This field indicates the type of Market Admission, e.g. Open Market, Regulated Market.
63	Market Segment Supplement	This field indicates the market segment supplement, e.g. VIE for WBAG Exchange Traded Funds.
64	Clearing Location	Identifier for the location at which trades are cleared.
65	Primary Market MIC Code	Market Identifier Code (ISO 10383) of the "home market", where the first IPO took place.
66	Reporting Market	Market Identifier Code (ISO 10383) required for reporting to supervisory authority.
67	Settlement Period	This field indicates the number of business days from trade execution after which settlement is to be effected.
68	Settlement Currency	Currency used for settlement
69	Closed Book Indicator	Indicates whether the Order book is closed during auction trading.
70	Market Imbalance Indicator	Controls if during auction call/ volatility interruption/ extended volatility interruption phase a surplus (side and volume) at the indicative price (if crossed order book) or the best bid/ best ask limit and quantity (if uncrossed order book) is displayed to the market.
71	CUM/ EX Indicator	CUM/ EX Indicator: 'C' = Cum Capital Adjustment or Dividend: Last trading day before a Capital Adjustment or Dividend. Orders will be deleted for the next trading day. 'E' = Ex Capital Adjustment or Dividend: First trading day after Capital Adjustment or Dividend. Open orders have been deleted before start of day.
72	Minimum Iceberg Total Volume	Minimum Iceberg Total Volume
73	Minimum Iceberg Display Volume	Minimum Iceberg Display Volume (Peak)
74	EMDI Incremental A - Unnetted	Incremental address for EMDI Unnetted multicast stream A.
75	EMDI Incremental A – Unnetted Port	EMDI Port address A for EMDI Unnetted.
76	EMDI Incremental B – Unnetted	Incremental address for EMDI Unnetted multicast stream B.
77	EMDI Incremental B – Unnetted Port	Port address B for EMDI Unnetted.
78	EMDI Snapshot A – Unnetted	Snapshot address for EMDI Unnetted multicast stream A.
79	EMDI Snapshot A – Unnetted Port	EMDI Port address A for EMDI Unnetted.
80	EMDI Snapshot B – Unnetted	Snapshot address for EMDI Unnetted multicast stream B.

Sequence Number	Field name	Description
81	EMDI Snapshot B – Unnetted Port	EMDI Port address B for EMDI Unnetted.
82	EMDI Market Depth – Unnetted	Market depth for EMDI Unnetted.
83	EMDI Snapshot Recovery Time Interval - Unnetted	Recovery interval (duration of one cycle).
84	EMDI Address A - Netted	Incremental address for EMDI Netted multicast stream A.
85	EMDI Port A – Netted	Port address A for EMDI Netted.
86	EMDI Address B - Netted	Incremental address for EMDI Netted multicast stream B.
87	EMDI Port B – Netted	Port address B for EMDI Netted.
88	EMDI Market Depth – Netted	Market depth for EMDI Netted.
89	EMDI Market Depth Time Interval - Netted	Netting interval for low bandwidth feeds (0=no netting).
90	EMDI Recovery Time Interval - Netted	Recovery interval (duration of one cycle).
91	EOBI Incremental A	Address A for EOBI Incremental multicast stream (Order by Order).
92	EOBI Incremental Port A	Port address A for EOBI Incremental.
93	EOBI Incremental B	Address B for EOBI Incremental multicast stream.
94	EOBI Incremental Port B	Port address B for EOBI Incremental.
95	EOBI Snapshot A	Address A for EOBI Snapshot multicast stream.
96	EOBI Snapshot Port A	Port address A for EOBI Snapshot multicast stream.
97	EOBI Snapshot B	Address B for EOBI Snapshot multicast stream.
98	EOBI Snapshot Port B	Port address B for EOBI Snapshot multicast stream.
99	Market Maker Member ID	MemberID of the Xetra member admitted as a Market Maker according to MiFID II/MiFIR regulations. For more than one MkM., MemberIDs are separated with "#".
100	Market Maker	Long name of the Xetra member admitted as a Market Maker according to MiFID II/MiFIR regulations. For more than one Market Maker, members' long names are separated with "#".
101	Regulatory Liquid Instrument	Indicates shares and exchange traded funds for which there is a liquid market as classified by the regulator. Regulatory Liquid Instrument can be 'Y' or 'N'
102	Pre-Trade LIS Value	n/a (default '0.00000000') (This value is used as Minimum Execution Volume of the hidden part of a Volume Discovery Order. Furthermore, this value is the minimum trade volume of TES Type LIS.)
103	Partition ID	Partition ID for WBAG is '81', XBUD is '85', XLJU is '86', XPRA is '87', XZAG is '88'
104	Multi CCP-eligible	This field indicates whether instrument is available for multiple CCP.

Sequence Number	Field name	Description
		Y = Instrument is multiple CCP eligible N = Instrument is not multiple CCP eligible Please note, that intraday change of this indicator will be communicated via news board messages.
105	Tick Size Band	Tick Size Band information, e.g. in order to identify which ESMA tick size table apply for that instrument. Respective tick sizes are provided in the columns 20-59.
106	Security Sub Type	ld of the short name of the Bond and Warrant sub- classification. (Please refer to chapter 5.7 Security Sub Types)
107	Issue Date	The date on which a security was issued.
108	Underlying	The code of the underlying of a warrant or a bond instrument
109	Maturity Date	Maturity Date of the bond or warrant
110	Flat Indicator	<ul> <li>Indicator if accrued interest calculation and pool factor is taken into account, e.g. there is no accrued interest for flat bonds. Possible values are: <ul> <li>NO_FLAT: Accrued interest calculation and pool factoring enabled</li> <li>FLAT: No accrued interest calculation, but pool factoring enabled</li> <li>XFLAT: No accrued interest calculation and no pool factoring enabled</li> </ul> </li> </ul>
111	Coupon Rate	Coupon rate of the bond. Note, that intraday change of the Coupon rate will be published on the next Business Day.
112	Previous Coupon Payment Date	The date of the previous coupon payment
113	Next Coupon Payment Date	The date for the next Coupon payment
114	Pool Factor	Current Pool Factor value.
115	Indexation Coefficient	Coefficient factor of an inflation-linked bond.
116	Accrued Interest Calculation Method	This field indicates the accrued interest calculation method of a bond. Following values according to FIX convention: <ul> <li>1 = 30/360</li> <li>3 = 30/360M</li> <li>6 = Act/360</li> <li>7 = Act/365 (Fixed)</li> <li>8 = Act/Act (AFB)</li> <li>9 = Act/Act (ICMA)</li> <li>11 = Act/Act (ISDA)</li> <li>14 = Act/365L</li> </ul>
117	Country Of Issue	<ul> <li>ISO Country code. The calculated accrued interest rate is rounded to the 12th decimal, except for the following country codes:</li> <li>FR 9th decimal</li> </ul>

Sequence Number	Field name	Description		
		<ul> <li>IT 7th decimal</li> <li>PL 7th decimal</li> <li>HU 7th decimal</li> </ul>		
118	Minimum Tradable Unit	This field indicates the Minimum Tradable Unit for a given instrument.		
119	In-Subscription	Indicator for subscription trading (primary market) "Y" = instrument in subscription trading		
120	Strike Price	Strike Price of the warrant		
121	Minimum Order Quantity	This field indicates the Minimum Order Quantity for a given instrument.		
122	Off-Book Reporting Market	Market Identifier Code (ISO 10383) required for reporting of Off-Book trades.		
123	Instrument Auction Type	Auction Type relevant in Continuous Auction with Specialist: Valid values: 0 = no value 1 = Single Auction 2 = Special Auction		
124	Specialist Member ID	Five-digit member ID of the Specialist.		
125	Specialist	Name of the Specialist		
126	Liquidity Provider User Group	This field contains the three-digit user group of the Liquidity Provider (also known as Quote Provider)		
127	Specialist User Group	This field contains the three-digit user group of the Specialist.		
128	Quoting Period Start	Quoting period start time in Continuous Auction with Specialist. Time format: HH:MM:SS		
129	Quoting Period End	Quoting period end time in Continuous Auction with Specialist. Time format: HH:MM:SS		
130	Currency	Trading currency of the instrument		
131	Warrant Type	Warrant Type with following valid values: 1 = OTHER 2 = CALL 3 = PUT 4 = RANGE 5 = CERTIFICATE		
132	First Trading Date	First day of trading.		
133	Last Trading Date	Last day of trading.		
134	Deposit Type	Type of depository.		
135	Single Sided Quote Support	0 – SSQ not allowed 1 – SSQ On entry allowed 2 – SSQ Supported		
136	Liquidity Class	Utilization at WBAG: still t.b.d.		

Sequence Number	Field name	Description
		<ul> <li>Utilization at DBAG: For the determination of quote parameters for Designated Sponsors and regulated Market Makers, each equity Is assigned to a liquidity class 1 up to 4 depending on the XLM data. Valid Values: 1 – 4:</li> <li>1-3: Equities out of liquidity class 1 up to 3 need a Designated Sponsor to be traded on Xetra.</li> <li>4: Equities of liquidity class 4 are High Liquids and can be traded without the support of a Designated Sponsor.</li> <li>Liquidity Class assignment is updated monthly.</li> </ul>
137	Cover Indicator	1 = intraday cover 2 = longterm cover 3 = activated cover
138	VolatilityCorridorOpeningAuction	Reference to the Volatility Corridor Table assigned for the opening auction.
139	VolatilityCorridorIntradayAuction	Reference to the Volatility Corridor Table assigned for the intraday auction.
140	VolatilityCorridorClosingAuction	Reference to the Volatility Corridor Table assigned for the closing auction.
141	VolatilityCorridorContinuous	Reference to the Volatility Corridor Table assigned for continuous trading.
142	disableOnBookTrading	This field indicated whether the product is eligible for on- book trading.
<mark>143</mark>	Maximum Order Quantity	This field contains the maximum quantity of a regular order or quote, which is allowed to be traded in a given instrument
<mark>144</mark>	Maximum Order Value	This field contains the maximum value of a regular order or quote, which is allowed to be traded in a given instrument

# 5 Static reference data

In order to reduce static data traffic of message based streams (e.g. RDI) reference data that rarely changes like order profiles or trading schedules will only be provided via static csv-files on the WBAG Report Server. Major changes of the static files will be communicated in advance with sufficient lead-time. Besides of major changes the files need to be processed whenever a new instrument is added to the market Xetra<sup>®</sup> on T7®.

The files contain order profiles (e.g. Limit Order allowed) and trading schedules assigned to each instrument traded on the T7® platform as well as files for the descriptions of the Market Segment Supplements an instrument is assigned to.

The static files will be available on the WBAG Report Server as a zip-file. The file name will follow the pattern

<MIC\_environmentnr><name><reportID><memberID><business date><MIC>.CSV

with:

• MIC\_environmentnr: i.e. 68 for production and 69 for simulation name: always FIL . reportID: always RDF02 memberID: always PUBLI business date: format 'YYYYMMDD' MIC: MIC of the market, e.g. XVIE, XBUL, XLJU, XPRA, XZAG Example (simulation): 69FILRDF02PUBLI20170516XVIE.CSV.ZIP Example (production): 68FILRDF02PUBLI20170725XVIE.CSV.ZIP Time of delivery: daily after T7® EoD processing (app. 01:00 CET next day in production)

Note every according zip file may hold empty csv files. This happens if the according T7 function is not available for the specific exchange.

### 5.1 Formatting of the files

Each csv-file will follow basic format rules. Every data record will be in one line, fields separated by the delimiter ';' (semicolon). If a field is empty because it is optional and has no value, only the delimiter will be written into the csv-file. The first row in the csv-file contains the column headers.

The file name follows the pattern

# 5.2 Order Profile

T7® for Xetra<sup>®</sup> categorizes orders according to order profiles. The exchange defines these order profiles and enables or disables them for individual instruments. An additional table is provided that gives the assignment of order profiles per instrument type (Order Profile Assignment Table).

The file name has the pattern <YYYYMMDD>\_orderProfiles.csv

For additional information please refer to the order profiles chapter of the T7 Functional Reference document.

Field	Description
OrderProfileId	Id of the Order Profile.
Full Name	Name of the Order Profile, e.g. Limit.
Regular	Indicator, which defines whether the order type is a Regular Order (Limit + Market Order).
Stop	Indicator whether Stop Orders are allowed.
TSO	Indicates whether Trailing Stop Order is allowed.
000	Indicates whether One-Cancels-the-Other Order is allowed.
Iceberg	Indicates whether Iceberg order is allowed
Limit	Indicates whether a limit order can be entered for the order profile.
Market	Indicates whether market order can be entered for the order profile.
OAO	Trading of the order is restricted to Opening Auction only.
AOO	Trading of the order is restricted to Auction only.
CAO	Trading of the order is restricted to Closing Auction only.
BOC	Execution restriction Book-or-cancel is allowed.
IAO	Trading of the order is restricted to Intraday Auction only.
IOC	Execution restriction Immediate-or-cancel is allowed.
FOK	Execution restriction Fill-or-kill is allowed.
GFD	Validity of the order is Good-For-Day.
GTD/GTC	Validity of the order is Good-Till-Date.

The order profile table for WBAG and Partner Exchanges includes the following attributes:

OrderProfileId	Full Name	Regular	Stop	TSO	000	Iceberg	Limit	Market	OAO	AOO	CAO	BOC	IAO	IOC	FOK	GFD	GTD/GTC
37	Regular Limit Order	Y	N	Ν	N	Ν	Y	Ν	N	N	Ν	N	Y	Y	Y	Y	Y
38	Regular Market Order	Y	N	N	N	N	N	Y	N	N	N	N	N	Y	Y	Y	Y

The layout of the order profile will be as follows (example values):

### 5.3 Order Profile Assignment

The following file lists the order profiles assigned to each instrument. For additional information please refer to the document 'Xetra® T7 – detailed specifications to the market models': <a href="https://www.wienerborse.at/uploads/u/cms/files/trading/xetra-t7-detailed-specifications-market-models.pdf">https://www.wienerborse.at/uploads/u/cms/files/trading/xetra-t7-detailed-specifications-market-models.pdf</a>

The file name has the pattern <YYYYMMDD>\_orderProfileAssignment.csv

The order profile assignments table includes the following fields:

Field	Description	
Mnemonic	Mnemonic of the instrument	
ISIN	ISIN of the instrument	
InstrumentId	Id of the instrument	
OrderProfileId	Id of the order profile	

The layout of the order profile is as following (example values):

Mnemonic	ISIN	InstrumentId	OrderProfileId
RBI	AT0000606306	2570909	37
RBI	AT0000606306	2570909	38
FLU	AT00000VIE62	2570984	37
FLU	AT00000VIE62	2570984	38

### 5.4 Trading Schedules

This file lists the trading schedules defined for all Xetra<sup>®</sup> instruments. The reference to the instruments is possible via the identifier 'standardSchedule'.

#### The file name is <rpre><pre

The trading schedule file includes following fields:

Field	Description
standardSchedule	Name of the trading schedule
event	Name of the event, e.g. Start Of Day
time	Time of the event

Only schedules for current business day (vs trading holiday) will be displayed.

The participants' file looks like as follows (example values):

standardSchedule	Event	Time
SCHED_ATX_FULL_XVIE	Commit Opening Auction	09:00:00
SCHED_AUCTION ONLY_FULL_XVIE	Move Product To Post Trading	16:00:00
SCHED_COL_ETF_FULL_VIE	Move Product To Trading	08:55:00
SCHED_CTP_MIDC_CTD_FULL_VIE	Commit Intraday Auction	12:03:00
SCHED_GMC_FULL_VIE	Commit Closing Auction	17:32:05
SCHED_GOVB_FULL_XVIE	Move Product To End Of Day	17:45:05

### 5.5 Trading Schedule Assignment

The file Trading Schedule Assignment lists for all Xetra<sup>®</sup> instruments the assigned trading schedule the instrument is following.

The file name has the pattern <YYYYMMDD>\_tradingScheduleAssignment.csv

The file includes the fields as below:

Field	Description
InstrumentId	InstrumentId of an instrument
standardSchedule	Name of the trading schedule

The standardSchedule denotes the schedule that is valid for the instrument's current business day. The layout of the file is as follows (example values):

InstrumentId	standardSchedule
2570890	SCHED_ATX_FULL_XVIE
3085572	SCHED_AUCTION ONLY_FULL_XVIE

# 5.6 Market Segment and Market Segment Supplement

This file lists the identifiers for the Market Segments and the Market Segment Supplements in order to provide descriptions for them. The file contains all Market Segments and Market Segment Supplements of the market XVIE.

The file name uses the following pattern

The file includes following fields:

Field	Description
Content type	Market Segment or Market Segment Supplement
Identifier	Identifier of the Market Segment and Market Segment Supplement
Description	Name of the Market Segment and Market Segment Supplement

Content type Identifier Description 437 WBAG – Dritter Markt (MTF) Market Segment Market Segment 931 WBAG – Amtlicher Handel FPWB - FirstPlace WB Market Segment WB1 WBAG Corporate Sector Bonds Market Segment Supplement VIK VIB Market Segment Supplement WBAG Financial Sector Bonds Market Segment Supplement VIG WBAG Public Sector Bonds Market Segment Supplement VIZ WBAG Certificates Market Segment Supplement VIL WBAG Performance Linked Bonds Market Segment Supplement VIW WBAG Warrants Market Segment Supplement VIJ WBAG Corporates Prime Market Segment Supplement VIF WBAG Global Market Market Segment Supplement VIS WBAG Standard Market Continuous VIP Market Segment Supplement WBAG Prime Market WBAG ETFs Market Segment Supplement VIE WBAG Direct Market Market Segment Supplement VIQ Market Segment Supplement VIR WBAG Direct Market Plus VIC WBAG Standard Market Auction Market Segment Supplement

The layout and content of the file for **WBAG** is as follows:

The layout and content of the file for **Prague SE** is as follows:

Content type	ldentifier	Description
Market Segment	735	PSE OFFICIAL MARKET
Market Segment	736	PSE MTF
Market Segment	738	PSE FREE MARKET
Market Segment Supplement	PRB	PSE FINANCIAL BONDS AUCTION
Market Segment Supplement	PRC	PSE STANDARD MARKET AUCTION
Market Segment Supplement	PRD	PSE OTHER DEBT SEC. AUCTION
Market Segment Supplement	PRE	PSE ETFS

Content type	ldentifier	Description
Market Segment Supplement	PRG	PSE PUBLIC BONDS AUCTION
Market Segment Supplement	PRF	PSE OTHER DEBT SEC. MTF
Market Segment Supplement	PRK	PSE CORPORATE BONDS AUCTION
Market Segment Supplement	PRL	PSE CORPORATE BONDS CONT.
Market Segment Supplement	PRM	PSE FREE MARKET CONT.
Market Segment Supplement	PRN	PSE START MARKET AUCTION
Market Segment Supplement	PRO	PSE FREE MARKET CONT. AUCTION
Market Segment Supplement	PRP	PSE PRIME MARKET
Market Segment Supplement	PRS	PSE STANDARD MARKET CONT.
Market Segment Supplement	PRW	PSE WARRANTS
Market Segment Supplement	PRX	PSE QUALIFIED INVESTOR FUNDS
Market Segment Supplement	PRY	PSE COLLECTIVE INVESTMENT FUNDS
Market Segment Supplement	PRZ	PSE CERTIFICATES

The layout and content of the file for  $\ensuremath{\textbf{Budapest SE}}$  is as follows:

Content type	Identifier	Description
Market Segment	271	BSE Xbond
Market Segment	60	BSE MTF Market
Market Segment	318	BSE Budapest Stock Exchange
Market Segment	930	BSE Xtend
Market Segment Supplement	BUA	BSE BETa Market Equities
Market Segment Supplement	BUB	BSE Corporate bonds NONHUF
Market Segment Supplement	BUC	BSE Corporate Bonds
Market Segment Supplement	BUD	BSETurbo Certificates NONHUF
Market Segment Supplement	BUE	BSE ETFs
Market Segment Supplement	BUF	BSE Investment Notes
Market Segment Supplement	BUG	BSE Government Bonds
Market Segment Supplement	BUH	BSE Investment Notes NONHUF
Market Segment Supplement	BUI	BSE Investment Certificates

Content type	Identifier	Description
Market Segment Supplement	BUJ	BSE Xtend
Market Segment Supplement	BUK	BSE Turbo Certificates
Market Segment Supplement	BUL	BSE BETa Market ETF
Market Segment Supplement	BUM	BSE Mortgage Bonds
Market Segment Supplement	BUN	BSE Compensation Note
Market Segment Supplement	BUO	BSE Inv Certificates NONHUF
Market Segment Supplement	BUP	BSE Equities Prime
Market Segment Supplement	BUR	BSE Mortgage Bonds NONHUF
Market Segment Supplement	BUS	BSE Equities Standard
Market Segment Supplement	BUT	BSE Equities T
Market Segment Supplement	BUU	BSE Bonus Certificates
Market Segment Supplement	BUV	BSE Equities Prime NONHUF
Market Segment Supplement	BUW	BSE Equities Standard NONHUF
Market Segment Supplement	BUX	BSE Structured Bonds
Market Segment Supplement	BUY	Decategorised Equities
Market Segment Supplement	BUZ	BSE Xbond Corporate Bonds

The layout and content of the file for  $\ensuremath{\textbf{Zagreb SE}}$  is as follows:

Content type	Identifier	Description
Market Segment	987	ZSE MTF Market
Market Segment	986	ZSE Regualted Market
Market Segment	906	ZSE SME Market
Market Segment Supplement	ZAX	ZSE MTF-X
Market Segment Supplement	ZAF	ZSE MTF-Fortis
Market Segment Supplement	ZAA	ZSE MTF-Alter
Market Segment Supplement	ZAS	ZSE Progress Market
Market Segment Supplement	ZAR	ZSE Regular Market
Market Segment Supplement	ZAP	ZSE Prime Market
Market Segment Supplement	ZAO	ZSE Official Market

The layout and content of the file for Ljubljana SE is as follows:

Content type	ldentifier	Description
Market Segment	568	LJSE OFFICIAL MARKET
Market Segment	569	LJSE MTF
Market Segment Supplement	LJA	LJSE PRIME MARKET
Market Segment Supplement	LJB	LJSE STANDARD MARKET
Market Segment Supplement	LJC	LJSE ENTRY MARKET
Market Segment Supplement	LJD	LJSE BONDS
Market Segment Supplement	LJE	LJSE FUND MARKET
Market Segment Supplement	LJG	LJSE CLOSED END FUND SHARES
Market Segment Supplement	LJH	LJSE CERTIFICATES
Market Segment Supplement	LJJ	LJSE WARRANTS
Market Segment Supplement	LJK	LJSE RIGHTS
Market Segment Supplement	LJL	LJSE T-BILLS
Market Segment Supplement	LJM	LJSE SHORT-TERM DEBT
Market Segment Supplement	LJN	LJSE ENTER ADVANCED
Market Segment Supplement	LJO	LJSE ENTER BASIC
Market Segment Supplement	LJP	LJSE ENTER BONDS
Market Segment Supplement	LJQ	LJSE ENTER COM. PAPERS
Market Segment Supplement	LJR	LJSE PROGRESS EQUITY
Market Segment Supplement	LJS	LJSE PROGRESS BONDS
Market Segment Supplement	LJT	LJSE PROGRESS COM.PAPERS

# 5.7 Security Sub Types

This file contains the list of IDs used in the column "Security Sub Type" in the published csv file described in chapter 4.5 with the corresponding descriptions. Note all available values are for non-equities only.

The file name has the pattern

The file includes the fields as below:

Field	Description
SecurityType	Security Type (Instrument Type)
SecuritySubTypeId	Numeric identifier of the Bond and Warrant Type published in the column "Security Sub Type".
Name	Short name of the Bond and Warrant sub-classification.
Description	Description of the Bond and Warrant sub-classification.

The layout and content of the file is as follows – each exchange may use a subset of all possible values, the actual file per exchange only holds used entries:

securityType	SecuritySubTypeId	Name	Description
BOND	1	STANDARD_BOND	Standard Bond
BOND	3	FEDERAL_NOTES	Federal Notes
BOND	6	FLOATER	Floater
BOND	7	STRIP	Strip
BOND	8	ZEROBOND	Zero Bond
BOND	14	BONUS_CERTIFICATE	Bonus Certificate
BOND	15	CASH_OR_SHARE_CERTIFICATE	Cash or Share Certificate
BOND	17	EXPRESS_CERTIFICATE	Express Certificate
BOND	18	GUARANTEE_CERTIFICATE	Guarantee Certificate
WARRANT	13	BASKET_CERTIFICATE	Basket Certificate
WARRANT	14	BONUS_CERTIFICATE	Bonus Certificate
WARRANT	15	CASH_OR_SHARE_CERTIFICATE	Cash or Share Certificate
WARRANT	16	DISCOUNT_CERTIFICATE	Discount Certificate
WARRANT	17	EXPRESS_CERTIFICATE	Express Certificate
WARRANT	18	GUARANTEE_CERTIFICATE	Guarantee Certificate
WARRANT	19	INDEX_CERTIFICATE	Index Certificate
WARRANT	20	KNOCK_OUT_CERTIFICATE	Knock out Certificate
WARRANT	21	OTHER_CERTIFICATE	Other Certificate
EQUITY	24	INVESTMENT_CERTIFICATE	Investment Certificate
WARRANT	26	COVERED_CALL_WARRANT	Covered Call Warrant
WARRANT	27	COVERED_PUT_WARRANT	Covered Put Warrant
WARRANT	28	OTHER_WARRANT	Other Warrant

### 5.8 TES Profile

This file contains the assignments of each product to TES Types LIS and OTC.

The file name has the pattern

The file includes the fields as below:

Field	Description
ProductSymbol	Symbol of the product. For products with 1:1 relation the ISIN and for products with 1:n relation (e.g. ETP product) the name of the product will be provided
ТЕЅТуре	TES Types LIS and OTC: LIS = Large In Scale OTC = Over The Counter
BrokerAllowed	This flag defines whether TES Profile allows entry, modification and deletion of TES trades by the user role TES Broker. <sup>2</sup>
MaxParticipants	Description of the Bond and Warrant sub-classification.
PriceValidationRule	Description of the Bond and Warrant sub-classification.

The layout of the file is as follows (example values):

Mnemonic	ISIN	InstrumentId	OrderProfileId		PriceValidationRule
ProductSymbol	TESType	BrokerAllowed	MaxParticipants		NO_PRICE_VAL
SI0002101648	LIS	YES		2	NO_PRICE_VAL
SI0002101887	LIS	YES		2	NO_PRICE_VAL

<sup>&</sup>lt;sup>2</sup> For more information about TES roles, please refer to Xetra<sup>®</sup> T7 – Participant and User Maintenance Manual. T7® RELEASE 12.1

# **5.9 Volatility Corridors**

This file contains the valid volatility corridors used in the ACE volatility model.

The file name will have the pattern **<YYYYMMDD>\_volatilityCorridorTables.csv**.

Please note that neither Wiener Börse nor Wiener Börse Partner Exchanges have introduced ACE volatility model so far. Subsequently, for our markets, these files are available but empty.

Field	Description
ID	ID of the volatility table used as reference in the fields 140-143.
VolatilityCorridorTableName	Descriptive name of the volatility table .
InitialDynamicVolatilityPercentage	The initial dynamic volatility percentage.
staticVolatilityPercentage	The static volatility percentage.
Percentage	The percentage of the associated volatility corridor.
Duration	The duration of the associated volatility corridor in milliseconds (without a random end)
Market	The market for which it is defined

The layout of the file is as follows (example values):

ID	Volatility Corridor Table Name	Initial Dynamic Volatility Percentage	Static Volatility Percentage	Percentage	Duration	Market
1	VCT_OA_1	2.0000	5.0000	3.0000	300000	XETR
1	VCT_OA_1	2.0000	5.0000	5.0000	300000	XETR
1	VCT_OA_1	2.0000	5.0000	10.0000	300000	XETR
2	VCT_OA_2	1.5000	5.0000	2.0000	300000	XETR

# 6 Change Log

Date	Version	Description
26.02.2020		Chapter 4.5 – Added to field 19 Instrument Type:
		SR = Subscription Rights
		FUN = Investment Funds
10.09.2020		Chapter 4.5 File record layout (CSV) Class added (field 138)
06.09.2021		Chapter 4.5 File record layout (CSV) Cover indicator (field 139) and Volatility Corridors (fields 140 – 143) added
		New chapter 5.8 Volatility Corridors added
		Chapter 6 Migration PEX to T7 deleted
		Change Log before 2020 deleted
28.04.2022		Chapter 4.5 File record layout (CSV) new Instrument Type "DA = DIGITAL ASSET" (existing field 19) and disableOnBookTrading (new field 144) added
31.08.2022		Chapter 4.5 File record layout (CSV) Removal of Issuer Mnemonic (108) and changed description of BEST eligible (103) to empty field, because BEST trading is obsolete.
11.04.2023		Chapter 4.5 File record layout (CSV) Removal of BEST eligible (103).
12.09.2023	T7® 12.0	Chapter 4.1 Elimination of <file identifier="" set=""><nnn> and clarification of file naming, provision time and failover handling</nnn></file>
		Chapter 4.3 Clarification RDF after failover or restart of T7® RDI
		Chapter 4.4 Update of provision time
		Chapter 4.5 Update of various field descriptions
		Chapter 5.0 Update of provision time
		Chapter 5.2 Removal of Volume Discovery Order
		Chapter 5.2 Link to detailed specifications
		Chapter 5.3 Market Segment FirstPlace WB added
		Chapter 5.6 Update of Market Segment and Market Segment Supplement codes
15.11.2023	T7® 12.0	Chapter 4.1 Correction of Elimination of <file identifier="" set=""><nnn></nnn></file>
09.04.2024	T7® 12.0	Chapter 4.1 Correction of RDF File provision time (XML format)
<mark>12.04.2024</mark>	.04.2024 T7® 12.1 Chapter 4.2 Update of fields in File record lay	
		Chapter 4.5 File record layout (CSV) Issue with item numbers resolved, 143 / Maximum Order Quantity and 144 / Maximum Order Value added