

Attribute	Type	Condition	Description
msisdn	Max35Text	Conditional	An alias to access a payment account via a registered mobile phone number.
other	Other Type	Conditional	<p>In cases where the criteria listed above (IBAN, BBAN,MSISDN) are not provided to identify the account (e.g. a securities account), the ASPSP shall support delivery of a proprietary ID of the respective account that uniquely identifies the account for this ASPSP. This ID will be delivered within the "other" structure.</p> <p>In this case, the ASPSP specifically shall support consent establishment for an account identified by its proprietary ID.</p> <p><b>Remark:</b> An ASPSP does not have to support the "other" element for (regular payment) accounts.</p>
currency	Currency Code	Optional	ISO 4217 Alpha 3 currency code
cashAccountType	Cash Account Type	Optional, if supported by API provider.	<p>ExternalCashAccountType1Code from ISO 20022. Might be extended by an additional code to indicate securities accounts. A global definition of a code for securities accounts is intentionally not provided by this document.</p> <p>The API provider may restrict the accepted values further (e.g. only "SVGS" and "CACC" may be supported).</p> <p>The TPP includes this element, if the account reference may identify several accounts of different types, but the TPP only requests access to a specific type (e.g. card accounts).</p>

Attribute	Type	Condition	Description
			<p>If the cashAccountType is not present, it indicates the cashAccountType</p> <ul style="list-style-type: none"> <li>• "Card Account" in case of the account identification being provided as a maskedPan or a pan and</li> <li>• "Current Account" (CACC) otherwise.</li> </ul>

### 6.1.3 Balance

In the context of securities, balances are used to represent an estimation of the securities account's total value. As the value of single financial instruments and therefore the sum of all such values is constantly changing, the estimation does particularly depend on the time of its creation. Therefore, it is strongly recommended (and in some instances mandated) to include the new element referenceDateTime.

**Remark:** This definition is following ISO20022 logic for defining balance types.

Attribute	Type	Condition	Description
balanceAmount	Amount	Mandatory	
balanceType	Balance Type	Mandatory	On the usage of balanceType, see section 6.1.3.1.
creditLimitIncluded	Boolean	Optional	<p>A flag indicating if the credit limit of the corresponding account is included in the calculation of the balance, where applicable.</p> <p>Not used for balances of securities accounts.</p>
lastChangeDateTime	ISODateTime	Optional	This data element might be used to indicate e.g. with the expected or booked balance that no action is known on the account, which is not yet booked.
referenceDate	ISODate	{Or- Optional	indicates the date of the balance

Attribute	Type	Condition	Description
referenceDateTime	ISODateTime	Or – Optional	indicates the date and time of the balance. Mandated, if balance Type = interimAvailable.
lastCommitted Transaction	Max35Text	Optional	entryReference of the last committed transaction to support the TPP in identifying whether all PSU transactions are already known.

### 6.1.3.1 Usage of Balance and Balance Type

The used balance type is restricted to the balancesTypes not marked in grey. balanceTypes marked in grey do not apply to securities.

**Remark:** This definition is following ISO20022 logic for defining balance types.

Type	Description
closingBooked	<p>Balance of the account at the end of the pre-agreed account reporting period. It is the sum of the opening booked balance at the beginning of the period and all entries booked to the account during the pre-agreed account reporting period.</p> <p>For card-accounts, this is composed of</p> <ul style="list-style-type: none"> <li>invoiced, but not yet paid entries</li> </ul> <p>For securities accounts: estimation based in the last fully finished trading date as interpreted by the ASPSP.</p>
expected	<p>Balance composed of booked entries and pending items known at the time of calculation, which projects the end of day balance if everything is booked on the account and no other entry is posted.</p> <p>For card accounts, this is composed of</p> <ul style="list-style-type: none"> <li>invoiced, but not yet paid entries,</li> <li>not yet invoiced but already booked entries and</li> <li>pending items (not yet booked)</li> </ul>

Type	Description
openingBooked	Book balance of the account at the beginning of the account reporting period. It always equals the closing book balance from the previous report.
interimAvailable	Available balance calculated in the course of the account servicer's business day, at the time specified, and subject to further changes during the business day. The interim balance is calculated on the basis of booked credit and debit items during the calculation time/period specified.  For securities accounts, an intermediate estimation of the amounts value. If a balance with type "interimAvailable" is used, it must indicate the date and time of the evaluation in field referenceDateTime.
interimBooked	Balance calculated in the course of the account servicer's business day, at the time specified, and subject to further changes during the business day. The interim balance is calculated on the basis of booked credit and debit items during the calculation time/period specified.
forwardAvailable	Forward available balance of money that is at the disposal of the account owner on the date specified.
nonInvoiced	Only for card accounts, to be defined yet.

### 6.1.4 Links

In addition to the already defined links ([XS2A-IG], cp. 14.6), the following link shall be supported:

Attribute	Type	Condition	Description
securitiesAccount	href Type	Optional	A link to the resource providing the details of one securitiesAccount.
positions	href Type	Optional	A link to the resource providing the list of positions of one securitiesAccount.
orders	href Type	Optional	A link to the resource providing the list of orders of one securitiesAccount.

Attribute	Type	Condition	Description
orderDetails	href Type	Optional	A link to the resource providing details of one specific order.

## 6.2 New Data Types

### 6.2.1 Other Type

The "other" type is defined in the same way as in [XS2A-DOM-IG]:

Attribute	Type	Condition	Description
identification	Max35Text	Mandatory	
schemeName Code	Code	{Or - Optional	An entry provided by an external ISO code list
schemeName Proprietary	Max35Text	Or – Optional}	A scheme name defined in a proprietary way.
issuer	Max35Text	Optional	Issuer of the identification

### 6.2.2 Evaluated Amount

This data structure represents an evaluated amount (without indicating the method of evaluation) when an unambiguous balance cannot be provided, but an evaluation, e.g. the total value of a securities deposit:

Attribute	Type	Condition	Description
amount	Amount	mandatory	Amount that is evaluated
evaluationDateTime	ISODateTime	{Or	Date / date and time of the evaluation.
evaluationDate	ISODate	Or}	

### 6.2.3 Securities Position

This data structure represents one position within a securities account:

Attribute	Type	Condition	Description
financialInstrument	Financial Instrument	Mandatory	Financial Instrument that is contained in this position.
unitsNumber	Number	{Or	Nominal or numeric quantification of the financial instrument within this position, negative values for short positions.
unitsNominal	Amount	Or}	
externalIdentifier	Max35Text	Optional	Name or identifier with an intrinsic meaning for the PSU to be displayed.
safekeepingPlace	BICFI	Optional	BIC of the place where the securities are safe-kept, physically or notionally.
safekeepingCountry	Country Code	Optional	Country where the securities are safe-kept.
balanceType	SecuritiesBalanceType_1_2_11_12_CodeSecuritiesBalanceType_1_2_11_12_Code	Optional	<p>Specifies the nature of the securities or investment fund balance.</p> <p>Type of balance in case of multiple positions for the same financial instrument for further distinction.</p> <p>Remark: In consequence, several positions</p>

Attribute	Type	Condition	Description
			with the same financial instrument may occur in the same position list, having different values of balanceType".
averageBuyingPrice	Amount	Optional	Average buying price of the position excluding any fees or taxes.
averageSellingPrice	Amount	Optional	Average selling price of the position, e.g. in case of a short position Price excluding any fees or taxes.
totalBuyingPrice	Amount	Optional	In case of bonds, an average buying price does not make sense. Therefore, the total buying price excluding any fees or taxes can be displayed instead.
estimatedCurrentValue	Evaluated Amount	Optional	Estimated value of the position and timestamp of the estimation.
accruedInterest	Accrued Interest	Optional	Accrued interest by the position.
currencyExchange	Array of Report Exchange Rate	Optional	The ASPSP might include exchange rates e.g. if the security is denoted in another currency

Attribute	Type	Condition	Description
			than the account itself.
details	Max500Text	Optional	Additional details to the position.

## 6.2.4 Financial Instrument

This data structure represents financial instrument.

Attribute	Type	Condition	Description
isin	ISIN	{Or	ISIN of the financial Instrument.
other	Other Financial Instrument Identification	Or}	If an ISIN is not available, the ASPSP may instead include an identification by other means.
name	Max70Text	Optional	Name of the financial instrument.
normalisedPrice	Evaluated Price	Optional	Price per unit of the financial instrument in case of a price amount. Percentage price otherwise.  If used in the context of a transaction, the price here shall indicate the applied price (without fees) for the trade.

**Remark:** Publicly available information on the financial instrument like interests (e.g. in the case of bonds), various dates (maturity date, issue date,..) or details on options will not be supported in the data model. However, individual markets might extend the definition, for example to meet certain regulatory requirements.

## 6.2.5 Other Financial Instrument Identification

This data structure represents the identification of a financial instrument by means other than ISIN.



Attribute	Type	Condition	Description
identification	Max35Text	Mandatory	Identification of a security.
suffix	Max16Text	Optional	Identifies the suffix of the security identification.
typeCode	ExternalFinancialInstrumentIdentificationType1Code	{Or	Unique and unambiguous identification source, as assigned via a pre-determined code list.
typeProprietary	Max35Text	Or}	

### 6.2.6 Evaluated Price

This data structure represents an evaluated price (e.g. of a security) when an unambiguous balance cannot be provided, but an evaluation, e.g. the total value of a securities deposit

Attribute	Type	Condition	Description
amount	Amount	{Or	If the price is evaluated as an amount, amount of the price in its respective currency
percentage	String	Or}	
priceDateTime	ISODatetime	{Or	Date / date and time of the evaluation of this price.
priceDate	ISODate	Or}	
priceType	TypeOfPrice17Code	Optional	Type of the price

Attribute	Type	Condition	Description
sourceOfPrice	Source of Price	Optional	Indicates the source of the respective price
description	Max500Text	Optional	Additional description of the source of price. E.g., if the source of price indicates a local market, the ASPSP can include the local market's name in this field.
exchangeRates	Array of Report Exchange Rate	Optional	Relevant exchange rates for the determined price

**Remark:** An additional "valuation" substructure as in openWealth (<https://openwealth-portal.apps.ndgit.com/#/apis/16/67>) is not supported

### 6.2.7 Accrued Interest

Represents the accrued interest by a securities position:

Attribute	Type	Condition	Description
daysAccrued	number	Optional	Specifies the number of days used for calculating the accrued interest amount.
amounts	Array of Amount	Optional	Amount of the accrued interest. Each item represents the same monetary value in different currencies, e.g. account currency, currency of the security's denomination.

### 6.2.8 Securities Transaction

Represents a securities transaction.

**Remark:** Bank Transaction Code is missing in the following definition intentionally. To the current understanding, the Bank Transaction Code is specifically designed for cash movements (and not for the movement of securities).

Attribute	Type	Condition	Description
transactionId	String	Optional	Can be used as access-ID in the API, where more details on a transaction is offered. If this data attribute is provided, this shows that the AIS can get access on more details about this transaction using the Read Securities Transaction Details Request as defined in section 5.5.
entryReference	Max35Text	Optional	Identification of the transaction as used e.g. for reference for deltafunction on application level.
relevantDates	Array of Securities related Date or Time	Mandatory	At least one of the listed date types must be present.
financialInstrument	Financial Instrument	Mandatory	Financial instrument that was transferred within the transaction.
orderId	String	Optional	Resource Id of the order resource that triggered this transaction, if applicable.
unitsNumber	Number	{Or	Nominal or numeric quantification of the financial instrument that has been transferred within this transaction.  Negative values indicate that the respective quantity of the financial instrument has been taken from the securities account, positive values indicate that the quantity has been added.
unitsNominal	Amount	Or}	

Attribute	Type	Condition	Description
transactionTypeCode	TransactionActivityType1Code	{Or	Type of the transaction as code or as a proprietary string. For the code, the following values are supported: <ul style="list-style-type: none"> <li>• <b>BOLE</b> Transaction relates to lending/borrowing.</li> <li>• <b>CLAI</b> Transaction relates to a market claim following a corporate action.</li> <li>• <b>COLL</b> Transaction relates to collateral.</li> <li>• <b>CORP</b> Transaction relates to corporate action.</li> <li>• <b>SETT</b> Transaction relates to settlement and clearing.</li> </ul>
transactionTypeProprietary	Max35Text	Or}	
placeOfTrade	Market Identification	Optional	
amountIncludesFees	Boolean	Optional	Indicates whether the transactionAmount (see below) is including fees.  Default: false
amountIncludesTaxes	Boolean	Optional	Indicates whether the transactionAmount (see below) is including taxes.  Default: false
transactionAmount	Amount	Optional	Transaction amount for the transferred security for the PSU. Potential fees or taxes are reflected as indicated by elements

Attribute	Type	Condition	Description
			<p>"amountIncludesFees" and "amountIncludesTaxes".</p> <p><b>Remark:</b> The price denoted here is the price for the whole lot of securities within this transaction, not for a single item.</p>
relatedFees	Array of Securities related Fee	Optional	<p>Only allowed if amountIncludesFees = true. In that case Details of the fees that have been applied to this transaction (and therefore represent additional costs of the transaction beyond the transactionAmount).</p> <p>Fees with positive amount are debited by the PSU, only in the rare case of a fee credited to the PSU (e.g. in case of a reversal) negative amounts are used.</p>
currencyExchange	Array of Report Exchange Rate	Optional	The ASPSP might include exchange rates e.g. if the transaction has been settled in another currency than the PSU's currency.
reversalIndicator	Boolean	Optional	<p>Indicates whether it is the reversal of a previously reported movement.</p> <p>Default: false</p>
reversedTransactionId	String	Optional	"transactionId" of the reversed transaction, if applicable and supported by the ASPSP.
unitsNumberBeforeTx	Number	{Or - Optional	Nominal or numeric quantification of the financial

Attribute	Type	Condition	Description
unitsNominalBeforeTx	Amount	Or - Optional }	instrument within the primary position before the transaction, negative values for short positions.
unitsNumberAfterTx	Number	{Or - Optional	Nominal or numeric quantification of the financial instrument within the primary position after the transaction, negative values for short positions.
unitsNominalAfterTx	Amount	Or - Optional }	
accruedInterest	Accrued Interest	Optional	accrued interest of the position to make transparent what the PSU really lost within this transaction.
details	Max500Text	Optional	Additional details to the transaction
_links	Links	Optional	<p>The following types of links are supported:</p> <p>"transactionDetails": <b>Single</b> link for retrieving details on this specific transaction. Only applicable, if the ASPSP supports the Read Securities Transaction Details endpoint, see section 5.5.</p>

### 6.2.9 Securities related Date or Time

Attribute	Type	Condition	Description
type	String	Mandatory	<p>Type of the date / date time. The following values are supported:</p> <ul style="list-style-type: none"> <li>• effectiveSettlementDate,</li> <li>• settlementDate,</li> <li>• valueDate,</li> </ul>

Attribute	Type	Condition	Description
			<ul style="list-style-type: none"> <li>performanceDate,</li> <li>bookingDate,</li> <li>transactionDate</li> </ul>
date	ISODate	{Or	
dateAndTime	ISODateTime	Or}	

### 6.2.10 Market Identification

Attribute	Type	Condition	Description
mic	Max4Text	{Or	ISO 10383 code of the market place
market Identifier Proprietary	Max35Text	Or}	Proprietary Identifier of the market place.

### 6.2.11 Source of Price

Attribute	Type	Condition	Description
type	MarketType4Code	mandatory	
mic	Max4Text	{Or - Optional	<p>If the type indicates local Market (Code: "LMAR"), the identification of the market should additionally be included here.</p> <p>Technically, Source of Price is an extension of Market Identification.</p>
market Identifier Proprietary	Max35Text	Or - Optional }	

### 6.2.12 Securities Account Fee

Represents a Fee rule that is applicable to a securities account:

Attribute	Type	Condition	Description
typeCode	Securities Fee Type Code	{Or	Type of the fee as a code.  Might be adjusted in the future based on market experience.
typeProprietary	Max35Text	Or}	Type of the fee as a proprietary string.
feeRules	Array of Securities Account Fee Rule	Mandatory	Array of fee rules. Each rule represents how the amount of the fee is determined either explicitly by stating the amount or implicitly by providing a percentage, minimum and maximum amount.  This array will usually only contain one entry to represent the whole rule. Only in the case of the fee being calculated as a tiered percentage, several entries are included to represent the several tiers of the fee rule.
applicableFrom	ISODate	Optional	First date, when this fee is applicable.  If not present, the fee is applicable starting with the creation of this account / the latest reporting date supported by the ASPSP
applicableTo	ISODate	Optional	Last date, when this fee is applicable.  If not present, the fee is applicable indefinitely.
additionalInformation	Max500Text	Optional	



### 6.2.13 Securities Account Fee Rule

Attribute	Type	Condition	Description
amount	Amount	{Or	Amount of the fee.
percentage	String	Or}	<p>Percentage of the fee.</p> <p>Up to 20 significant figures. The decimal separator is a dot.</p> <p>Trailing zeroes must be truncated. Fee as a percentage</p>
fromBaseAmount	Amount	Optional	<p>To be used for fees where a tiered percentage is used to calculate the fee relative to an implicitly defined base amount (such as a transaction's volume being the base amount for a courtage).</p> <p>The range of one tier is defined as all applicable entities with base amounts X and</p> $\text{fromBaseAmount} \leq X \leq \text{toBaseAmount}$ <p>In any array of fee rules, only one of these entries may be missing the "fromBaseAmount" element (indicating that the rule represented by this entry is used without a lower bound to the base amount) and only one entry may be missing the "toBaseAmount" element (indicating that the rule represented by this entry is</p>
toBaseAmount	Amount	Optional	

Attribute	Type	Condition	Description
			<p>applied without an upper limit to the base amount).</p> <p>In cases, where the fee is not calculated as a tiered percentage, only one entry in array "feeRules" is included. This entry must be missing the subelements "fromBaseAmount" and "toBaseAmount".</p>
minimumAmount	Amount	Optional	Minimum amount of the fee in each billing period / for each billed event, if applicable.
maximumAmount	Amount	Optional	Maximum amount of the fee in each billing / for each billed event period, if applicable.

#### 6.2.14 Securities related Fee

Attribute	Type	Condition	Description
typeCode	Securities Fee Type Code	{Or	
typeProprietary	Max35Text	Or}	
amount	Amount	Mandatory	
_links	Links	Optional	<p>Links to resources, where the ASPSP can provide additional information on the fee, e.g. an overview on the general fee rules of the underlying securities account.</p> <p>Currently, no specific href types are defined in this context.</p>

### 6.2.15 Securities Order

Represents a securities order.

**Remark:** Fees and taxes are not included in the order.

Attribute	Type	Condition	Description
orderId	String	Optional	Can be used as access-ID in the API, where more details on an order is offered. If this data attribute is provided, this shows that the AIS can get access on more details about this transaction using the Read Securities Transaction Details Request as defined in section 5.7.  <b>Remark:</b> In anticipation of future services where orders might be placed or revoked via the openFinance API, the orderId should be defined in a way that it will also identify an order in the case of a placement / cancellation, if the ASPSP intends to support those use cases, as well.
side	Securities Order Side	Mandatory	Type of transaction that is associated with this order.
financialInstrument	Financial Instrument	Mandatory	Financial instrument the order refers to.
unitsNumber Order	Number	{Or	Nominal or numeric quantification of the financial instrument that is ordered.
unitsNominal Order	Amount	Or}	
unitsNumber Display	Number	{Or – Optional	

Attribute	Type	Condition	Description
unitsNominal Display	Amount	Or - Optional}	Nominal or numeric quantification of the order that shall be displayed.
placeOfTrade	Market Identification	Optional	
limitPrice Amount	Amount	{Or- Optional	Limit price displayed either as an amount or a percentage rate (decimal separator: ".")
limitPrice Percent	String	Or – Optional}	
stopPriceAmount	Amount	{Or- Optional	Stop price displayed either as an amount or a percentage rate (decimal separator: ".")
stopPrice Percent	String	Or – Optional}	
tradingSessionIndicator	Trading Session Type Code	Optional	
typesOfOrder	Array of Type of Order Code	Optional	One or more Codes to indicate characteristics of the order.
timeInForce	Order Time Limit Code	Optional	If the order is restricted by a time limit, the type time limit is indicated by a value of the corresponding code set.
expiryDate	ISODate	{Or - Optional	Date, when the order expires, if applicable.
expiryDateTime	ISODateTime	Or – Optional}	Date and time, when the order expires, if applicable.
relatedCashAccount	Account Reference	Optional	If the execution of this order implies the transfer of money, cash account to be affected by this transfer from the PSU's side.
orderSplit	Boolean	Optional	Value true indicates that this order is the result of an order

Attribute	Type	Condition	Description
			split. Missing values indicate "false".
orderModifiable	Boolean	Optional	Value true indicates that this order can (still) be modified. Missing values indicate "false".
orderStatus	Order Status Code	Mandatory	
details	Max500Text	Optional	Additional details to the position
_links	Links	Optional	<p>The following types of links are supported:</p> <p>"relatedOrders": An <b>array</b> of links to request order details of related orders (e.g. other orders that originated from the same order split as this order). Only applicable, if the ASPSP supports the Read Securities Order Details endpoint, see section 5.7.</p> <p>"relatedTransactions": An <b>array</b> of links to request securities transaction details of transactions that resulted from this order. Only applicable, if the ASPSP supports the Read Securities Transaction Details endpoint (see section 5.5).</p> <p>"orderDetails": <b>Single</b> link for retrieving details on this specific order. Only applicable, if the ASPSP supports the Read Securities</p>

Attribute	Type	Condition	Description
			Order Details endpoint, see section 5.7.

## 7 Primitive data types

New data types

### 7.1 ISIN

ISIN as defined in ISO20022 (ISINIdentifier).

**Definition:** International Securities Identification Number (ISIN). A numbering system designed by the United Nation's International Organisation for Standardisation (ISO). The ISIN is composed of a 2-character prefix representing the country of issue, followed by the national security number (if one exists), and a check digit. Each country has a national numbering agency that assigns ISIN numbers for securities in that country.

**Format:** String

**Pattern:** [A-Z0-9]{12,12}

### 7.2 Trading Session Type Code

Code set to identify the "type of a trading session, in which an order shall be executed. Possible values:

- **auctions** Orders that are traded in regularly occurring auctions: orders are accumulated and executed on the basis of defined algorithms.
- **continuous** Orders that are executed directly against each other as they hit the marketplace.

### 7.3 Securities Order Side

Code set to identify the "side" / intended action for the respective order. Possible values:

- **buy**
- **sell**
- **subscription**
- **redemption**

## 7.4 Type of Order Code

Code set to indicate characteristics of an order.

- **allOrNone** A round-lot market or limit-price order which must be executed in its entirety or not at all; unlike 'fill or kill', these orders are not cancelled if not executed as soon as received.
- **buyContraShortExempt** Order to buy contra short exempt.
- **buyContraShort:** Order to buy contra short.
- **buyMinus:** Order to buy at a price lower than the current market price. This is an order to buy a stated amount of a financial instrument provided that its price is not higher than the last sale if the last sale was a minus or zero minus tick, not higher than the last sale minus the minimum fractional change in the stock if the last sale was a plus or zero plus tick. The price limit indicates the highest price at which the order can be executed.
- **carefully:** Order that is not to be executed as a whole because it may disturb the price.
- **combinationOrder** Order that is linked to another order to buy or sell and must be executed as a unit, both or none, or cancelled as a unit.
- **discretionary:** Order where the executing broker or investment manager decides on the quantity or price.
- **doNotIncrease** Limit order to buy or stop order to sell or stop limit order that is not to be increased in shares on the ex-dividend date as a result of a stock dividend or distribution.
- **doNotReduce** Limit order to buy or stop order to sell, or stop-limit order to sell that is not to be reduced in price by the amount of an ordinary cash dividend. Applies only to ordinary stock dividends; should be reduced for other distributions.
- **icebergOrder** Type of limit order whose overall quantity is not transparent to the market. Rather, only a client-defined part of the order is shown to the market (the 'tip of the iceberg'). Upon execution of the first 'tip' (that is partial execution to the client while for the market it does not appear to be a 'partial') the system releases the next 'tip' of the same size to the market until the 'iceberg' has been melted down successfully. Different from a usual care order.
- **limitWith** Order to be executed at a limit price, with a round-lot (or board-lot) sales; valid only for odd lot orders.
- **limitWithout** Order to be executed at a limit price, without a round-lot (or board-lot) sales; valid only for odd lot orders.
- **limitOrder** Order to buy at the indicated price limit or lower or an order to sell at the indicated limit price or higher.
- **atMarket** Order to buy or sell a specified amount of a financial instrument at the quoted market price or better.
- **marketNotHeld** Order to buy or sell a specified amount of a financial instrument at the quoted market price or better with some discretion on the price limit.
- **marketToLimitOrder** Type of order that couples the high possibility of execution (Market Order) with a protection against unwanted price fluctuations (Limit Order).

- **marketUntilTouched** Order to buy or sell a specified amount of a financial instrument at the quoted market price or better with some discretion on the price limit.
- **notHeld** Order that may be executed in partials or outside the hours of the exchange or other exchange rules.
- **orderLie** Order that is related to another order where the second order may be cancelled without cancelling the first. Normally, the sell order must be executed before the buy order.
- **stopLimit** Stop order to buy (sell) that becomes a limit order at the limit price when the financial instrument trades at or above (below) the stop price after the order is submitted.
- **stopOrder** Order to buy that becomes a market order when the financial instrument trades at or above the stop price after the order is submitted or an order to sell which becomes a market order when the financial instrument trades at or below the stop price.
- **stopLoss** Order to sell that sets the sell price below the market price.
- **sellPlus** Order to sell a stated amount provided that the price is not lower than the last sale price if the last sale was a plus or zero plus tick and not lower than the last sale minus the minimum fractional change in the financial instrument if the last sale was a minus or zero minus tick.
- **sellShortExempt** Order to sell short which is exempt from short-sale rules.
- **sellShort** Order to sell a financial instrument that the seller does not own; a sale effected by delivering a financial instrument borrowed by or for the account of the seller.

## 7.5 Order Time Limit Code

Code set to identify the time an order shall be in force. Possible values:

- day,
- goodTillCancel,
- atTheOpening,
- immediateOrCancel,
- fillOrKill,
- fillAndKill,
- goodTillCrossing,
- goodTillDate,
- atTheClose,
- goodThroughCrossing,
- atCrossing,
- goodForTime,
- goodForAuction,
- goodForMonth

## 7.6 Order Status Code

Code set to identify the status of an order:



- **unknown** the status of this order can currently not be determined
- **new** Outstanding order with no executions
- **partiallyFilled** Outstanding order with executions and remaining quantity
- **filled** Order completely filled, no remaining quantity
- **doneForDay** Order not, or partially, filled; no further executions forthcoming for the trading day
- **canceled** Cancelled order with or without executions
- **replaced** Cancelled order due to a replacement with or without executions
- **pendingCancel** Order with a request for cancellation pending. Does not indicate that the order has been cancelled.
- **stopped** Order has been stopped at the exchange. Used when guaranteeing or protecting a price and quantity
- **rejected** Order has been rejected by sell-side (broker, exchange, ECN). NOTE: An order can be rejected subsequent to order acknowledgment, i.e. an order can pass from New to Rejected status.
- **suspended** Order has been placed in suspended state at the request of the client.
- **pendingNew** Order has been received by sell-side's (broker, exchange, ECN) system but not yet accepted for execution.
- **calculated** Order has been completed for the day (either filled or done for day). Commission or currency settlement details have been calculated
- **expired** Order has been cancelled in broker's system due to time in force instructions.
- **acceptedForBidding** Order has been received and is being evaluated for pricing.
- **pendingReplace** Order with an Order Cancel/Replace Request pending.

## 7.7 Securities Fee Type Code

Initially, the following codes are defined to indicate different fee types in the context of Securities transactions. Please note, that these codes are not based on an ISO code list and might be changed in later versions of this document:

- transactionFee
- brokerageFee
- managementFee
- courtage
- custodyFee
- exchangeFee
- thirdPartyFee
- otherFee

## 8 Referenced ISO Codes

In addition to the ISO Codes already referred to in [XS2A-IG], the following Codes from the ISO-20022 standard are adopted:

- MarketType4Code
- TypeOfPrice17Code
- TransactionActivityType1Code
- ExternalFinancialInstrumentIdentificationType1Code

For Balance Type, SecuritiesBalanceType\_1\_2\_11\_12\_Code is defined as the code list, containing all codes from ISO 20022 code lists

- SecuritiesBalanceType1Code (see [ISO20022\_IF])
- SecuritiesBalanceType2Code (see [ISO20022\_IF])
- SecuritiesBalanceType11Code (see [ISO20022\_SR])
- SecuritiesBalanceType12Code (see [ISO20022\_SR])

## 9 References

- [XS2A-OR] NextGenPSD2 XS2A Framework, Operational Rules, The Berlin Group Joint Initiative on a PSD2 Compliant XS2A Interface, version 1.3, published 21 December 2018
- [XS2A-IG] NextGenPSD2 XS2A Framework, Implementation Guidelines, The Berlin Group Joint Initiative on a PSD2 Compliant XS2A Interface, version 1.3.12, published 01 July 2022
- [XS2A-DOM-IG] NextGenPSD2 XS2A Framework Domestic PIS and AIS Definitions, Implementation Guidelines, The Berlin Group Joint Initiative on a PSD2 Compliant XS2A Interface, version 1.3.11, published 24 September 2021.
- [EBA-RTS] Commission Delegated Regulation (EU) 2018/389 of 27 November 2017 supplementing Directive 2015/2366 of the European Parliament and of the Council with regard to Regulatory Technical Standards for Strong Customer Authentication and Common and Secure Open Standards of Communication, C(2017) 7782 final, published 13 March 2018
- [eIDAS] Regulation (EU) No 910/2014 of the European Parliament and of the Council on Electronic Identification and Trust Services for Electronic Transactions in the Internal Market, 23 July 2014, published 28 August 2014
- [PSD2] Directive (EU) 2015/2366 of the European Parliament and of the Council on payment services in the internal market, published 23 December 2015
- [ISO20022\_SR] ISO 20022, Message Definition Report - Part 2 Settlement And Reconciliation - ISO – Maintenance 2019 – 2020, February 2020
- [ISO20022\_IF] ISO 20022, Message Definition Report - Part 2 Investment Funds, February 2020

## Annex A Best Practices for Converting Codes from ISO 15022 Messages

Currently, a widely used format for displaying security related information is ISO15022, particularly:

- MT502 to display orders
- MT535 to display holdings
- MT536 to display securities transactions



### Annex A.1. Mapping of Securities Balance Codes

Most of the values of the Qualifier of an MT535 messages field 93a (compare <https://www.iso20022.org/15022/uhb/mt535-43-field-93a.htm>) are also valid values of the SecuritiesBalanceType\_1\_2\_11\_12\_Code. They can therefore be transferred to element balanceType without any conversion. Only for the following values, a conversion is necessary:

Code MT535	Description	SecuritiesBalanceType_1_2_11_12_Code	Description
AGGR	Aggregate	Not used, the security balance code is only used for individual positions in the context of the document at hand.	
NAVL	Not Available Balance	BLOK	

### Annex A.2. Mapping Of TransactionActivityType1Code

The values of TransactionActivityType1Code are identical to the values of the transaction indicator of MT536: (38) Field 22a: Indicator (<https://www.iso20022.org/15022/uhb/mt536-38-field-22a.htm>). They can therefore be transferred without further conversion.

### Annex A.3. Mapping of MarketType4Code

The values of MarketType4Code are identical to the values of the source of price code used in MT536: (25) Field 94B: Place: Source of Price (<https://www.iso20022.org/15022/uhb/mt536-25-field-94b.htm>) and in MT535: (39) Field 94B (<https://www.iso20022.org/15022/uhb/mt535-39-field-94b.htm>). They can therefore be transferred without further conversion. For Security Orders (MT502) no corresponding information exists. The missing information in orders is no blocker for serving the interface, as the sourceOfPrice is only used as an optional element within this framework.

### Annex A.4. Mapping of TypeOfPrice17Code

The values of TypeOfPrice17Code cover the values of the qualifier in field "price" (90a) of MT535 (see <https://www.iso20022.org/15022/uhb/mt535-46-field-90a.htm>) and MT536 (see <https://www.iso20022.org/15022/uhb/mt536-24-field-90a.htm>) messages. They can therefore be transferred without further conversion. For Security Orders (MT502) no corresponding

information exists. The missing information in orders is no blocker for serving the interface, as the priceType is only used as an optional within this framework.

#### **Annex A.5. Mapping of ExternalFinancialInstrumentIdentificationType1Code**

No specific fields are defined in MT messages to represent financial instrument identification other than ISIN. The field shall be filled according to the local conditions of usage.

#### **Annex A.6. Mapping of Trading Session Type Code**

Trading Session Type Code can be derived from the **Trading Session Indicator** of an MT502 message (see <https://www.iso20022.org/15022/uhb/mt502-18-field-22a.htm>). The mapping can be done in a straightforward fashion as shown in the following table:

<b>Code MT502</b>	<b>Description</b>	<b>Trading Session Type Code</b>
AUCT	Auctions	auctions
CONT	Continuous	continuous

#### **Annex A.7. Mapping of Securities Order Side**

Securities Order Side can, on principle, be derived from the Buy/Sell Indicator of an MT502 message (see <https://www.iso20022.org/15022/uhb/mt502-18-field-22a.htm>). However, currently not all of the MT502 indicators are reflected in the Securities Order Side code list.

Informative: List of MT502 Buy/Sell Indicator values:

<b>Code MT502</b>	<b>Description</b>	<b>Securities Order Side</b>
BUYI	Buy	buy
CROF	Cross From	[not supported]
CROT	Cross To	[not supported]
DIVR	Reinvestment of Dividend Order	[not supported]
FPOO	FPO Order	[not supported]

Code MT502	Description	Securities Order Side
IPOO	IPO Order	[not supported]
IPPO	IPP Order	[not supported]
REDM	Redemption	redemption
SELL	Sell	sell
SUBS	Subscription	subscription
SWIF	Switch From	[not supported]
SWIT	Switch To	[not supported]

#### Annex A.8. Mapping of Type of Order Code

Type of Order Code can be derived from the **Type of Order Indicator** of an MT502 message (see <https://www.iso20022.org/15022/uhb/mt502-18-field-22a.htm>). The mapping can be done in a straightforward fashion as shown in the following table:

Code MT502	Description	Type of Order Code
ALNO	All or None	allOrNone
BCSE	Buy Contra Short Exempt	buyContraShortExempt
BCSH	Buy Contra Short	buyContraShort
BMIN	Buy Minus	buyMinus:
CARE	Carefully	carefully
COMB	Combination Order	combinationOrder
DISC	Discretionary	discretionary
DNIN	Do Not Increase	doNotIncrease
DNRE	Do Not Reduce	doNotReduce
ICEB	Iceberg Order	icebergOrder
LIWI	Limit With	limitWith

Code MT502	Description	Type of Order Code
LIWO	Limit Without	limitWithout
LMTO	Limit Order	limitOrder
MAKT	At Market	atMarket
MANH	Market Not Held	marketNotHeld
MTLO	Market to Limit Order	marketToLimitOrder
MUTO	Market Until Touched	marketUntilTouched
NOHE	Not Held	notHeld
ORLI	Order Lie	orderLie
SLOS	Stop Loss	stopLoss
SPLU	Sell Plus	sellPlus
STLI	Stop Limit	stopLimit
STOP	Stop Order	stopOrder
SSEX	Sell Short Exempt	sellShortExempt
SSHO	Sell Short	sellShort

### Annex A.9. Mapping of Order Time Limit Code

Order Time Limit Code can be derived from the **Time Limit Indicator** of an MT502 message (see <https://www.iso20022.org/15022/uhb/mt502-18-field-22a.htm>). The mapping can be done in a straightforward fashion as shown in the following table:

Code MT502	Description	Order Time Limit Code
CLOS	At the Closing	atTheClose,
FAKI	Fill and Kill	fillAndKill
FIKI	Fill or Kill	fillOrKill,
GDAY	Good for the Day	day

Code MT502	Description	Order Time Limit Code
GTCA	Good until Cancelled	goodTillCancel
GTHD	Good through Date	goodTillDate
GTMO	Good for the Month	goodForMonth
GTNM	Good until the End of Next Month	goodTillDate (+ specification of the end of next month in expiryDateTime)
GTXO	Good till Crossed	goodTillCrossing,
IOCA	Immediate or Cancel	immediateOrCancel,
OPEN	At the Opening	atTheOpening,
-	-	goodThroughCrossing,
-	-	atCrossing
-	-	goodForTime
-	-	goodForAuction,

### Annex A.10. Mapping of Order Status Code

As the order Status is not part of an MT502 message, no mapping can be provided.