

Elasticia Instrument Schema

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This document describes the Elasticia instrument XML schema.

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Contents

1. Introduction	1
1.1. Scope	1
1.2. Conventions	1
1.3. Forward Compatibility	1
2. Instrument	1
2.1. Basic Fields	1
2.2. Equity Fields	3
2.3. Derivative Fields	3
2.4. Fixed Income Fields	4

1. Introduction

New products and instrument types have been exploding over the last decades, and the importance to classify and correctly identify their nature has become an important aspect of trading. Nordic Growth Market (NGM) see it as the exchanges' responsibility to provide full, correct and easy to understand information to the market.

A classification of instruments has been created to provide a united description and explanation of instruments. This will give clients and integrators a very clear cut interface and understanding of instruments without any ambiguities. We intend to follow European standards, conventions and trends, especially those set by the European Structured Investment Products Association (EUSIPA) with the aim to create an as easy as possible description and transparency in our products.

1.1. Scope

This document lists and explains all instrument elements and their structure for the instrument schema. It should provide a human, and non-technical, readable format to the Elasticia Instrument Schema.

For a technical description and structure of the instruments we refer to the Instrument Schema XSD (XML Schema Definition).

1.2. Conventions

An instrument may have nested child attributes and elements. Nested elements are enclosed in angle brackets (<>), while nested attributes are prefixed with @. Values that are of enumerated types have a list of valid enumeration values enclosed in quotes ("").

<element> Element.

@attribute Attribute.

"value" Enumerated value.

For example, the following XML:

```
<item size="small"><name>Dice</name></item>
```

could be documented as:

- **@size** The size of the item.
 - **"small"** Small is smaller than medium.
 - **"medium"** Medium is the average size.
 - **"large"** Large is larger than medium.
- **<name>** The name of the item.

1.3. Forward Compatibility

This instrument schema is forward compatible, which means that new attributes, elements and enumeration values may be added in the future without breaking a consumer (client/recipient) that is only aware of an older version of the instrument schema. This is true as long as the major version of the instrument schema is not changed. For example, a consumer that knows how to interpret instruments from schema 2.0 can still consume a newer instrument from schema 2.1, just ignoring added attributes, elements and enumeration values.

2. Instrument

An instrument is expressed using the `instrument` element, together with the relevant fields.

The instrument type can be derived from the CFI Code (`cfi`), the EUSIPA code (`eusipa`) when applicable, and the product name given by the issuer `productName`.

The following sections list the fields of the instrument, grouped at a high level.

Note

Any instrument type may use fields from any number of the groups.

2.1. Basic Fields

- **<identification>** Identification of the instrument.
 - **<instrumentID>** (*optional*) The marketplace assigned identifier.
 - **<symbol>** (*optional*) The short name of the instrument.
 - **<name>** (*optional*) The full (long) name of the instrument.
 - **<isin>** (*optional*) The International Securities Identification Number (ISIN) identifies a security as described in ISO 6166.
 - **<fisin>** (*optional*) The Financial Instrument Short Name (FISN) standard for financial instrument short names as described in ISO 18774.
- **<lastUpdated>** Timestamp when the instrument was last updated.
- **<cfi>** The Classification of Financial Instruments (CFI) classifies the instrument in accordance with ISO 10962:2015.

- **<productName>** *(optional)* Instrument type name given by the issuer (e.g. Knock-Out Warrants might also be called Turbo Warrants).
- **<link>** *(optional repeatable)* Defines a link between a document and an external resource, such as the final terms.
 - **@rel** Specifies the relationship between the current document and the linked document.
 - **"finalterms"** Final terms.
 - **"prospectus"** Prospectus.
 - **"kid"** Key (Investor) Information Document.
 - **"other"** Other.
 - **@href** Specifies the location (URL) of the linked document.
 - **@lang** *(optional)* Specifies the language(s) of the text in the linked document, separated by comma. IETF BCP 47 language tags.
- **<firstTradedDate>** First day of trading in the instrument on this venue.
- **<lastTradedDate>** *(optional)* Day when trading in the instrument ends.
- **<issuer>** *(optional)* Issuers are legally responsible for the obligations of the issue and for reporting financial conditions, material developments and any other operational activities as required by the regulations of their jurisdictions.
 - **<name>** Company name.
 - **<country>** *(optional)* The 2 letter country code as defined in ISO 31662.
 - **<symbol>** *(optional)* Trading system participant identifier or similar.
 - **<lei>** *(optional)* The Legal Entity Identifier (LEI) is a reference code to uniquely identify legally distinct entities that engage in financial transactions and associated reference data as described in ISO 17442.
 - **<bic>** *(optional)* The SWIFT/Bank Identifier Code (BIC) identifies a financial institution as described in ISO 9362.
 - **<vatNumber>** *(optional)* VAT number for identification purposes.
- **<liquidityProvider>** *(optional repeatable)* A broker-dealer firm that accepts the risk of holding a certain number of shares of a particular security in order to facilitate trading in that security. Also known as market maker.
 - **<name>** Company name.
 - **<country>** *(optional)* The 2 letter country code as defined in ISO 31662.
 - **<symbol>** *(optional)* Trading system participant identifier or similar.
 - **<lei>** *(optional)* The Legal Entity Identifier (LEI) is a reference code to uniquely identify legally distinct entities that engage in financial transactions and associated reference data as described in ISO 17442.
- **<bic>** *(optional)* The SWIFT/Bank Identifier Code (BIC) identifies a financial institution as described in ISO 9362.
- **<vatNumber>** *(optional)* VAT number for identification purposes.
- **<arranger>** *(optional)* An arranger is a provider of funds in the syndication of a debt. They are entitled to syndicate the loan or bond issue.
 - **<name>** Company name.
 - **<country>** *(optional)* The 2 letter country code as defined in ISO 31662.
 - **<symbol>** *(optional)* Trading system participant identifier or similar.
 - **<lei>** *(optional)* The Legal Entity Identifier (LEI) is a reference code to uniquely identify legally distinct entities that engage in financial transactions and associated reference data as described in ISO 17442.
 - **<bic>** *(optional)* The SWIFT/Bank Identifier Code (BIC) identifies a financial institution as described in ISO 9362.
 - **<vatNumber>** *(optional)* VAT number for identification purposes.
- **<distributor>** *(optional)* A distributor sells and markets the product on behalf of the arranger, who syndicates the loan or bond.
 - **<name>** Company name.
 - **<country>** *(optional)* The 2 letter country code as defined in ISO 31662.
 - **<symbol>** *(optional)* Trading system participant identifier or similar.
 - **<lei>** *(optional)* The Legal Entity Identifier (LEI) is a reference code to uniquely identify legally distinct entities that engage in financial transactions and associated reference data as described in ISO 17442.
 - **<bic>** *(optional)* The SWIFT/Bank Identifier Code (BIC) identifies a financial institution as described in ISO 9362.
 - **<vatNumber>** *(optional)* VAT number for identification purposes.
- **<issuedQuantity>** *(optional)* Generally, IssuedQuantity refers to the issued quantity of the number of units issued. For Equity, issued equity include the stock that a company sells publicly in order to generate capital and the stock given to insiders as part of their compensation packages. IssuedQuantity only refers to the issued quantity of the number of equity issued in this ShareClass. For Rights, Issued quantity of the rights.
- **<aif>** *(optional)* Indicates that the instrument is issued by an Alternative Investment Fund (AIF).
 - **"true"**
 - **"false"** *(default)*
- **<privatePlacement>** *(optional)* Indicates that the instrument is a private placement (or non-public offering).

- **"true"**
- **"false"** (default)
- **<reg871m>** (optional) Defines if instrument is affected by US 871m regulation.
 - **"affected"**
 - **"unaffected"** (default)
- **<marketMakerRequirements>** (optional) Requirements imposed on market makers.
 - **<maxSpread>** (optional) The maximum allowed spread.
 - **<minVolume>** (optional) The minimum allowed volume.
 - **<minValue>** (optional) The minimum allowed value.

2.2. Equity Fields

- **<votingStrength>** (optional) The number of votes one equity gives the holder to vote with.
- **<shareClass>** (optional) Companies that have more than one class of common stock usually identify a given class with alphabetic markers, such as class "A" shares and class "B" shares. Different share classes within the same entity typically confer different rights on their owners.

2.3. Derivative Fields

- **<eusipa>** (optional) The EUSIPA derivative instrument classification.
- **<underlying>** (optional repeatable) The underlying instrument of the derivative instrument.
 - **<identification>** Identification of the underlying instrument.
 - **<instrumentID>** (optional) The marketplace assigned identifier.
 - **<symbol>** (optional) The short name of the instrument.
 - **<name>** (optional) The full (long) name of the instrument.
 - **<isin>** (optional) The International Securities Identification Number (ISIN) identifies a security as described in ISO 6166.
 - **<fisn>** (optional) The Financial Instrument Short Name (FISN) standard for financial instrument short names as described in ISO 18774.
- **<category>** (optional)
 - **"equity"**
 - **"index"**
 - **"commodity"**
 - **"currency"**
 - **"interestrate"**
 - **"crypto"**

- **"other"**
- **<subCategory>** (optional) Sub category, e.g. BRENT OIL or GOLD.
- **<referenceMarket>** (optional repeatable)
 - **<mic>** (optional) The Market Identifier Code (MIC) uniquely identifies a market place as described in ISO 10383.
 - **<name>** (optional) The name of the market place.
- **<weight>** (optional) The relative weight of this underlying compared to the other underlyings in the event of a basket.
- **<intermediateIdentification>** (optional) Identification of any intermediate underlying instrument.
 - **<instrumentID>** (optional) The marketplace assigned identifier.
 - **<symbol>** (optional) The short name of the instrument.
 - **<name>** (optional) The full (long) name of the instrument.
 - **<isin>** (optional) The International Securities Identification Number (ISIN) identifies a security as described in ISO 6166.
 - **<fisn>** (optional) The Financial Instrument Short Name (FISN) standard for financial instrument short names as described in ISO 18774.
- **<direction>** (optional) Direction of the product, i.e. increasing value when the underlying is rising or falling. Different nomenclature is used for different products. Call is equivalent to bull and long. Put is equivalent to bear and short.
 - **"call"** Call (rising).
 - **"put"** Put (falling).
 - **"both"** Both
 - **"other"** Other
- **<maturityDate>** (optional) Day where the final value of the instrument is set.
- **<settlementMethod>** (optional) Type of settlement.
 - **"cash"**
 - **"physical"**
 - **"optional"**
- **<asianTail>** (optional) This method of averaging the level of the underlying protects the investor from sudden and adverse price movements.
 - **@start**
 - **@end**
- **<parity>** (optional) The number of instruments required to control one unit of the underlying asset.
- **<optionType>** (optional) Option exercise type.

- **"EU"** An European option may be exercised only at the expiration date.
- **"AM"** An American option may be exercised at any time before the expiration date.
- **"BE"** A Bermudan option may be exercised at a set number of times.
- **<strikePrice>** (*optional*) The strike price is generally the fixed price at which the owner of e.g. the option or warrant can buy (for call), or sell (for put), the underlying instrument. Also known as financing level when applied to Mini Future.
- **@currency** (*optional*) The 3 letter currency code as defined in ISO 4217 or INDEX for Indexpoints.
- **<issuePrice>** (*optional*) The price at which investors buy the instruments when they are first issued.
- **<issueDate>** (*optional*) Date when the instrument was issued.
- **<nominalValue>** (*optional*) The value, to which, a financial instrument is issued. The nominal value is fixed during the duration of the instrument's lifetime and may therefore differ from the market value of the instrument. The nominal value of a bond is the value which is paid to the bond holder at maturity.
- **@currency** (*optional*) The 3 letter currency code as defined in ISO 4217 or INDEX for Indexpoints.
- **<participationRate>** (*optional*) The amount of leverage, how much the product participate in the underlying. 1 means 100\%.
- **<capitalProtection>** (*optional*) The capital protection as a percentage of the nominal value. 100 means 100\%.
- **<safetyBarrier>** (*optional*) Knock out or safety barrier. Also known as stop-loss level when applied to Mini Future.
- **@currency** (*optional*) The 3 letter currency code as defined in ISO 4217 or INDEX for Indexpoints.
- **<knockOutBuyback>** (*optional*) Tells whether the market maker will offer to buy back the outstanding volume to redemption price when the instrument has been knocked or reached the stop-loss level.
- **"true"**
- **"false"**
- **"30E/360"** 30E/360, also known as 30/360 ICMA, 30S/360, Eurobond basis (ISDA 2006) and Special German.
- **"30E/360_ISDA"** 30E/360 ISDA, also known as Eurobond basis (ISDA 2000) and German.
- **"Act/360"** Actual/360, also known as Act/360, A/360 and French.
- **"Act/364"** Actual/364.
- **"Act/365_Fixed"** Actual/365 Fixed, also known as Act/365 Fixed, A/365 Fixed, A/365F and English.
- **"Act/365.25"** Actual/365.25.
- **"Act/365L"** Actual/365L, also known as ISMA-Year, Actual/365 Leap year.
- **"Act/Act_ICMA"** Actual/Actual ICMA, also known as Actual/Actual, Act/Act ICMA, ISMA-99 and Act/Act ISMA.
- **"Act/Act_ISDA"** Actual/Actual ISDA, also known as Actual/Actual, Act/Act, Actual/365 and Act/365.
- **<interestRate>** (*optional*) Fixed interest rate or margin rate for floating rates. 100 means 100\%.
- **<referenceRate>** (*optional*) Refers to a reference rate, if applicable. E.g. "STIBOR 3M".
- **<rateObservationDays>** (*optional*) Specifies how many days before the coupon period that the coupon rate is determined. Zero means on the coupon payment date of the previous period. Applicable to floating rates.
- **@day** Unit of day.
 - **"calendar"** Calendar day.
 - **"business"** Business day.
- **<businessDayConvention>** (*optional*) The business day convention determines how adjustments to business days are done.
 - **"preceding"** Adjust the date to the preceding day if needed.
 - **"modifiedPreceding"** Adjust the date to the preceding day if needed, without rolling to the previous month.
 - **"following"** Adjusts the date to the following day if needed.
 - **"modifiedFollowing"** Adjusts the date to the following day if needed, without rolling to next month.
 - **"actual"** Actual date is used, even if not a business day. Also known as "none".
- **<settlementDays>** (*optional*) Number of settlement days.
 - **@day** Unit of day.
 - **"calendar"** Calendar day.
 - **"business"** Business day.
- **<recordDays>** (*optional*) Specifies how many days before the coupon payment date the holder must be registered owner to obtain the coupon. Zero means on the coupon payment date.

2.4. Fixed Income Fields

- **<bondPriceType>** (*optional*) Determines whether the bond price includes any accrued interest or not.
 - **"dirty"** The price of a bond is including any accrued interest.
 - **"clean"** The price of a bond is excluding any accrued interest.
- **<dayCount>** (*optional*) The day count convention determines how interest accrues over time.
 - **"30/360_US"** 30/360 US

- **@day** Unit of day.
 - **"calendar"** Calendar day.
 - **"business"** Business day.
- **<referenceIndex>** (*optional*) Refers to an index, if applicable.
 - **@baseValue** Index base value.
- **<firstInterestDate>** (*optional*) Specifies the first date (exclusive) from which the interest is calculated. Also known as the dated date.
- **<firstCouponDate>** (*optional*) The first coupon payment date.
- **<lastCouponDate>** (*optional*) The last coupon payment date.
- **<couponEndOfMonth>** (*optional*) Indicates that coupon payment date is end of month.
- **<couponPeriod>** (*optional*) Period between coupon payments.
 - **@unit** Coupon period unit.
 - **"day"**
 - **"month"**
- **<firstCouponPeriod>** (*optional*) The type of the first coupon period.
 - **"normal"** Normal period.
 - **"short"** Short period.
 - **"long"** Long period.
- **<lastCouponPeriod>** (*optional*) The type of the last coupon period.
 - **"normal"** Normal period.
 - **"short"** Short period.
 - **"long"** Long period.