Nasdaq Nordic and Baltic Implementation Guide

Order Record Keeping
Version 2.3

Effective from September 16, 2022

Date	Version	Description Of Change
2017-05-22	1.0	Initial version
2017-06-15	1.1	Inclusion of Party Role Qualifier field, change to DEA field in INET and change to support six series of short codes
2017-07-05	1.2	Inclusion of the markets Nasdaq Nordic covers with short codes, change of short code value range. Update of Testing and Implementation dates.
2017-08-07	1.3	Update of New Order Entry fields – Investment decision within firm. Deleted "If left blank AND Order Capacity=DEAL Value from 'Execution within Firm' will be used as default"
2017-09-29	1.4	Updated to include validations on order entry
2017-10-19	1.5	Correction to Party Role Qualifier to include "Execution Decision within Firm". Updated to Party Role Qualifier on Order Entry and Validations on Order Entry.
2017-11-12	1.6	NORE added as new long code for reserved short code 3. Note on max integer and exchange configured default short codes in Genium INET. Information on Member Portal user roles and Member Portal URLs. ORK support hours. Usage of dummy codes during go-live transition period. Elaborations on retroactive order corrections, EOD reconciliation and security
2017-12-13	1.7	Minor updates to remove passed deadlines. In the validation table for reserved short codes, 'blank' added as a possible value
2018-06-24	1.8	Update on order capacity's corresponding values for MiFID II trading capacity (Section 6). Removed text on dummy codes and transitional period. Updated links under Section 9, Communication. Change of tense throughout document and various minor adjustments. Added Appendix B on Long Code formats.
2018-09-19	1.9	Formal edits
2020-12-09	2.0	Updated Appendix B, National IDs format table. The change is effective from January 1, 2021.
2021-04-09	2.1	Added table in appendix B from ESMAs Q/A regards of personal IDs per country and formal edits
2022-01-24	2.2	Updated document with information about the Nordic Derivatives Trading System and minor corrections
2022-09-05	2.3	Updated ESMA links and minor corrections.

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1. Disclaimer

This document is based on information currently available. Nasdaq Nordic and Baltics recognizes[1] that not all information is complete and new information can be expected from regulators and therefore all information may be subject to change. This document will discuss order record keeping from Nasdaq Nordic and Baltic's point of view. The document does not intend to constitute legal advice for any client to Nasdaq Nordic and Baltic. It is the responsibility of the Member to comply with the relevant rules and regulations, including but not limited to appropriate Nasdaq Nordic and Baltic's rules and ESMA Guidelines.

2. Summary of order entry requirements

Under MiFIR II[2] Article 25 and RTS 24[3], trading venues are required to keep a database of all order records, for all markets that they operate, for a minimum of five (5) years. Upon request from a Competent Authority, the trading venue has to make this data available in a predefined report format.

Much of the information required to populate this database can be found or derived from reference data or system events. There is however a number of new fields that require input from the member or participant with each new order under MiFID II.

As part of this requirement, Nasdaq Nordic and Baltics collects data from its members, in order to cover the following order record keeping fields:

- **Client Identification Code** (LEI, National ID, 'NONE', 'AGGR', or 'PNAL')
- **Investment decision within firm** (National ID or Algorithm ID)
- **Execution within firm** (National ID, Algorithm ID or 'NORE')
- **Party Role Qualifier** (LEI, National ID or Algorithm ID)
- **Direct Electronic Access** (True or False)*
- **Liquidity provision activity** (True or False)
- **Order capacity/trading capacity**

* Derived from reference data configurations, with option to override in INET and Nordic Derivatives Trading System (NDTS).

3. Scope of Order Record Keeping

Order Record Keeping affects all Nasdaq Nordic and Baltic markets trading on INET,Genium INET and Nordic Derivatives Trading System.

4. Nasdaq Nordic and Baltic Solution

Three of the Order Record Keeping fields may contain sensitive and confidential personal data; therefore, Nasdaq Nordic and Baltic requires members to submit 'short codes' on each order. These fields are Client identification, Execution decision and Investment Decision.

The short codes are created by the members, according to what is stated in section 5.

Nasdaq Nordic and Baltic doesn't validate short codes upon order entry, but expects a short code that has been used a specific trading date, to be mapped up at the latest by end of day, that very same date. This is done in a separate application, **Member Portal**, see further information in section 7.

1 For the purposes of this document "Nasdaq Nordic and Baltic Exchanges" refers to either individually or all together Nasdaq Copenhagen A/S, Nasdaq Helsinki Ltd, Nasdaq Iceland hf., Nasdaq Oslo ASA, Nasdaq Riga AS, Nasdaq Stockholm AB, Nasdaq Tallinn AS and AB Nasdaq Vilnius.

2 Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012

3 COMMISSION DELEGATED REGULATION (EU) 2017/580, of 24 June 2016, supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council with regard to regulatory technical standards for the maintenance of relevant data relating to orders in financial instruments.

5. Order Entry

With the implementation of MiFID II, Nasdaq Nordic and Baltic introduced a number of new Order Entry fields as well as COMMISSION DELEGATED REGULATION (EU) 2017/580, of 24 June 2016, supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council with regard to regulatory technical standards for the maintenance of relevant data relating to orders in financial instruments. updates to existing fields. Update of existing Order Entry field

- Order capacity – 'AOTC', 'DEAL' or 'MTCH'. The values supported for this field remain as specified for each trading system and trading protocol, but are now translated by Nasdaq Nordic and Baltic to the corresponding MiFID II trading capacity value for the purpose of Order Record Keeping, as specified in Section 6. This field is now mandatory to populate for all markets in Genium INET. On INET and Nordic Derivatives Trading System, an empty field will default to 'Agent' ('AOTC').

New Order Entry fields

- Party ID (Short code)+ Party Role
  - Client Identification Code – Short code corresponding to LEI, National ID, 'AGGR' or 'PNAL'. The field becomes mandatory if Order Capacity is AOTC or MTCH. The value 'NONE' is valid if Order Capacity is DEAL.
  - Execution within Firm – Short code corresponding to National ID or algorithm ID or 'NORE'. This field is mandatory.
  - Investment Decision within Firm – Short code corresponding to National ID or algorithm ID. It is mandatory if Order Capacity is DEAL.
- Party Role Qualifier – Field added to further define Party Role
  - LEI (applicable to Client ID only)
  - National ID (applicable to all three types of Party Roles)
  - Algorithm ID (applicable to Investment Decision and Execution within Firm)
  - NONE (applicable only for reserved short codes (0-3). For Genium INET, if no value, or '0 (NONE)', is given as Party Role Qualifier for any other short code, 24 (person) will be set as default value.)

DEA - field auto-populated based on membership configuration (Trader ID Type) and does not need to be entered.

- On INET and Nordic Derivatives Trading System in certain situations, where an order is sent from DMA or SA Trader IDs and the order is considered as a non-DEA order, there is an option to override the default configured DEA field (ex. DEAL orders). Value 1-4 can be used to override DEA.
- On INET and Nordic Derivatives Trading System, note that if the DEA flag is set on order entry, value 5, and the Trader ID is not configured as a DEA account (DMA, SA), the order will be rejected.

Please note that the above field names are aligned with the format by which trading venues will provide data to the Competent Authority. In the actual trading protocols (OMnet, FIX, OUCH), fields may be named differently.

Nasdaq Nordic and Baltic requires the use of short codes on order entry on INET, Genium INET and Nordic Derivatives Trading System. The use of reserved short codes must align with the validations described in section 6.

Note: In the future, Nasdaq Nordic and Baltic will develop functionality in Nordic Workstation and Trading Workstation to simplify manual order entries. This functionality will allow members to create an individual list of 'Aliases', which is easier to remember compared to a short code. This list will then be uploaded in Nordic Workstation or Trading Workstation. Each Alias, an alphanumeric value, will represent a numeric short code, for example:

Short Code Alias 1234567891 JohnSmith

6. Short code system

The short code used must be a 4 byte (232 integer, values between 0 and 4,294,967,295*.

- Reserved Short Codes: the values 0, 1, 2 and 3 are reserved for NONE, AGGR, PNAL, NORE, respectively.**

Nasdaq Nordic and Baltic supports six series of short codes:

1. Client Identification Code - National ID
2. Client Identification Code - LEI
3. Execution within Firm – National ID
4. Execution within Firm – Algo ID
5. Investment Decision within Firm – National ID
6. Investment Decision within Firm – Algo ID

In the mapping to long codes, participants are required to reference each code to one of the six series above and validation against the order is added to the post-trade reconciliation. This means that the same short code numeric value can be used for all six series.

Short code values can be shared between INET, Nordic Derivatives Trading System and Genium INET and they can be assigned a start and end date. Please see Appendix A for a detailed description of Short Codes and Identifiers.

* In Genium INET, the max integer value (4294967295) is used for retrieving a static default short code value, if such value has been configured in the exchange's reference data. Thus, if static default codes are to be used by the Participant, it is not recommended to assign this short code value to an actual long code.

** NORE indicates that the order is instructed by the client of the Participant or by another person from outside the Investment Firm. AGGR indicates aggregated orders. PNAL indicates pending allocations.

7. Validations on order entry

Basic validations according to MiFID II on order entry and trade reports have been introduced in the trading systems as outlined below.

It is important to note that validations will allow orders to be accepted and rejected. They are set up to allow the systems to be as flexible as possible. However, they are not an indication of what is allowed or not under MiFID II; this is a decision to be made by members based on their own flow and business configuration.

Order Entry: Order Capacity and Party Role

The table below shows where the Party Role field is mandatory, based on the order Capacity. If a field is mandatory but not submitted on order entry, the order will be rejected.

Order Capacity	Client Id	Investment Decision	Execution Decision
DEAL	Optional	Mandatory	Mandatory
MTCH	Mandatory	Optional	Mandatory
AOTC	Mandatory	Optional	Mandatory

The following table describes the order capacity's corresponding values for MiFID II trading capacity:

Order Capacity Description	Mifid Ii Trading Capacity
Not allowed for orders	N/A
Agent/Client	AOTC
Principal/Own Account	DEAL
Acting as Market Maker or Specialist	DEAL
Issuer holding	AOTC (or DEAL)*
Issue Price Stabilization	AOTC (or DEAL)*

Order Capacity Description	Mifid Ii Trading Capacity
Riskless principal	MTCH
Agent + liquidity provision	AOTC
Riskless principal + liquidity provision	MTCH

* In INET, Issuer Holding and Issue Prize Stabilization can be used in combination with either 'Agent' or 'Principal' thus supporting both AOTC and DEAL Trading Capacities from June 18, 2018. Please refer to the applicable INET order entry protocol for further information.

Order Entry: Order Capacity and short codes

The following table shows the validation of the short code fields in combination with the Order Capacity field and the Party Role field.

An 'X' indicates where an order will be rejected if the reserved short code is used.

		Short Code				
Party Role (Fix Value)	**Order Capacity**	**Blank Or 0 (None)**	**1 (AGGR)**	**2 (PNAL)**	**3 (NORE)**	**4 Or Greater (Member Assigned Short Code)**
Client (3)	MTCH	X			X	
	AOTC	X			X	
	DEAL				X	
Investment Decision within Firm (122)	MTCH		X	X	X	
	AOTC		X	X	X	
	DEAL	X	X	X	X	
Execution Decision within Firm (12)	MTCH	X	X	X		
	AOTC	X	X	X		
	DEAL	X	X	X		

Examples:

- if the party role 'Client' is left blank and the order capacity is 'AOTC', the order will be rejected.
- if short code '0' is used for the party role 'Client' and with order capacity 'DEAL', the order will not be rejected based on this criterion.

Party Role Qualifier

The following table shows the values allowed for the Party Role Qualifier field, based on the Party Role.

Party Role (Fix Value)	Party Role Qualifier (Fix Value)
Client (3)	Person (24) Entity 23
Investment Decision within Firm (122)	Person (24) Algo (22)
Execution Decision within Firm (12)	Person (24) Algo (22)

Note that a value of '0 (NONE)' is acceptable for the Party Role Qualifier field if a reserved short code is used. If no value, or '0 (NONE)', is given as Party Role Qualifier for any other short code, Genium INET will set 24 (person) as default value. In INET, the value of '0 (NONE)' for Party Role Qualifier cannot be used in association with any other short codes than the reserve short codes.

DEA

DEA field is auto-populated based on membership configuration. If the DEA flag is set on order entry and the user account is not configured as a DEA account (DMA, SA), the order will be rejected.

Genium INET and Nordic Derivatives Trading System On-exchange Trade Reports

On Trade Reports, there are optional fields to record the short codes. There is no validation on these fields.

However, if the short code field is populated, the Party Role Qualifier will become mandatory and will cause a rejection if not filled with a valid value.

8. Uploading of Long Codes

There are three different ways to upload the long codes to the Member Portal:

- **WEB based REST API** – ability to add, edit, and verify mapping details and to get list of unmapped short codes. An API specification is available on Nasdaq Nordic's Technical Information webpages.
- **SFTP file upload** – upload of CSV files with mapping details and retrieval of unmapped short codes. An SFTP Access Guide is available on Nasdaq Nordic's Technical Information webpages along with a CSV file format specification.
- **Member Portal GUI** – ability to view, add, edit, carry out intraday reconciliation and export long code mappings. The GUI includes support of manual file uploads.

Nasdaq Nordic and Baltic facilitates the possibility for members to centralize the administration of short codes. This functionality will help members to upload all short codes via one-access point, regardless if they use Member Portal GUI, CSV-file upload or Rest-API.

The Member Portal Order Record Keeping functionalities are available to any portal user with the Short Code Administrator access role. There is also a Short Code Read Only role. The Member is responsible for creating and maintaining these accesses. The Member Administrator will be able to add/remove user roles to existing accounts, or to create new user accounts directly in the portal. Member Portal Production: https://memberportal.nasdaq.com

Member Portal ORK Test: https://memberportal-ext-test.nasdaq.com

Reconciliation

At any time, the Short Code Administrator has the ability to initiate a real-time reconciliation in the Member Portal GUI by looking in the 'Unmapped Short Codes' view. It is also possible for members to initiate their own reconciliation process intraday via the REST API. Member initiated reconciliations will not trigger any notification emails. The reconciliation reports any missing long codes (identifiers) in the Member Portal for short codes that have been used on order entry.

As part of the daily routines, Nasdaq Nordic and Baltic performs a reconciliation of all short codes used in orders against all entered long code values. Nasdaq Nordic and Baltics then notifies each member of a delta of unmapped short codes if they have not been mapped yet by the member. The end-of-day reconciliation generates a daily email where the number of unmapped short codes is specified per MPID for each Member. The email is distributed to Member Portal users with the Short Code Administrator access role. It is possible for the user to unsubscribe from these emails in the 'User Details' tab, which can be accessed by navigating to the user's personal name in the top right corner.

The deadline for members to have all short codes mapped is the end of the day (Central European Time) during which each short code was first used. Note that values for short codes are required for all orders entered throughout the day. Nasdaq Nordic and Baltic's support desks for Order Record Keeping are available until 19.30 CET. Members may also submit mappings outside of these operating hours; however, Nasdaq Nordic cannot guarantee availability of the systems outside of the core operating hours.

Testing and implementation

Testing of short code management for Order Record Keeping is conducted in a separate test environment of the Member Portal.Access to the test environment can be requested through the regular Production Member Portal.

For API access, dedicated users are required and can be requested separately through the Member Portal. In addition to username and password, a numeric token code – unique for each user account – is also required for establishing an API session. Instructions for how to obtain the token code will be given by Nasdaq Nordic and Baltic together with the user account details.

For more information on how to use the Member Portal API, please consult the NMP Short Code Management API Manual which is available on Nasdaq Nordic's webpage for Order Record Keeping.

Nasdaq Nordic and Baltic expects new members to test long code uploading before they start trading on markets operated by Nasdaq Nordic and Baltic. Nasdaq Nordic and Baltic also recommends new members to carry out bulk upload of long codes in production before trading commences.

9. Other considerations

Process to fix errors with short codes and long codes

Short codes and other ORK order fields

For executed orders where the short code, or other submitted ORK data, is incorrect, it is possible for members to request corrections. Nasdaq Nordic and Baltic will process the request and apply the changes to the executed order. This process will make it possible to make changes to multiple orders with one request. Please note that order corrections will be subject to the same order validations as are applied for the matching system. Applied changes may be marked as a "correction" in Nasdaq Nordic and Baltic's ORK database along with the original value. Retroactive corrections of order data may be subject to administrative fees. For further information, please contact our Trading Operations desk (tradingoperations@nasdaq.com).

Long codes

For any short code, it is possible to correct the corresponding long code through the Member Portal.

Confidentiality of information

With the implementation of Order Record Keeping, confidential personal client information is sent and received over an interface separate from the order interface.

The Nasdaq Nordic and Baltic Member Portal is accessed via username/password and two factor authentication (2FA). Access to the REST API and file transfer is subject to similar levels of authentication.

The Member Portal database is encrypted. All traffic to/from the Member Portal web services go through HTTPS, but the actual data content is delivered in a readable format.

The permission to administrate short codes is assigned to a separate User Role in Member Portal, meaning that the member can themselves decide who, within the member firm, should have access to the data.

The confidential client information will only be released to National Competent Authorities upon request.

10. Communication

Nasdaq Nordic and Baltic uses several different sources of communication towards its members and participants.

Technical information

http://business.nasdaq.com/trade/trade-management/technical-information/

Valuable information about our marketplace, products and services, including protocol specifications for the trading APIs. Members and participants can also sign up for IT Notices here.

Questions and more information

More information is available on Nasdaq Nordic and Baltic's webpage for Order Record Keeping: http://business.nasdaq.com/mifid-II/order-record-keeping.html

Short Code Administration in the Member Portal

Nasdaq Member Portal Short Code Management API Manual

Nasdaq Member Portal Short Code Management CSV File Format Specification

Member Portal SFTP Access Guide

For questions regarding order record keeping, market participants can contact Nasdaq Nordic and Baltics at:

Cash Equity members operator@nasdaq.com

Equity Derivatives, Fixed Income and Commodities members TradingOperations@nasdaq.com

Appendix A:

ORK Short Codes & Identifiers - Concept Description

A Short Code is defined by its numerical value (4 byte integer), in combination with the associated **Exchange, MPID,** and **Code Type.** These attributes together form the unique 'key' of the Short Code. There are six different Code Types **(Client-Person, Client-Entity, ExecutionDecisionMaker-Algo, ExecutionDecisionMaker-Person, InvestorDecisionMaker-Algo, InvestorDecisionMaker-Person), meaning that for a given Participant (MPID),** six series of Short Code numerical values are to be administrated.

An **Identifier** is a Short Code that has been mapped to a **Long Code (National ID, LEI or Algo ID)** from a specified **Begin Date.** It's also possible to assign an End Date to an Identifier in order to specify the validity time of the Identifier. The shortest validity time for an identifier is one day, i.e. the Identifier has the same Begin Date and End Date. If an End Date is not assigned, the Identifier is assumed to be valid for eternity.

Short Codes included in submitted orders and quotes will be stored in Nasdaq Nordic and Baltic's Order Record Keeping (ORK) database. When an ORK report is to be created for a National Competent Authority (NCA), the order data will be enriched with the Long Code that matches the unique combination of Exchange, MPID, Code Type and **Used Date** for any given order event within the date range for the requested report.

Multiple Short Codes can be mapped to the same Long Code, but Identifiers with the same Short Code cannot overlap in time as a Short Code can of course only correspond to one Long Code for a given date. For more information on Long Code formats, see Appendix B.

Corrections of Long Codes and re-usage of Short Codes

The Long Code of any registered Identifier can potentially be included in an ORK report regardless of the Identifier's validity time since ORK reports could be generated retroactively for passed dates without any restrictions. Thus, a Member that wishes to rectify an incorrect Long Code should update the Long Code value rather than re-mapping the Short Code with a new validity time. The latter action should instead be taken in scenarios where a Short Code is to be re-used.

- **Corrections of Long Codes:** Update existing Identifier by changing the Long Code. (The new Long Code value will be associated with the given Short Code throughout the validity time of the Identifier)
- **Re-usage of Short Codes:** Register new identifier for same Short Code. (Will only be allowed if the validity times don't overlap)

Data consistency and date management

Members are responsible for the accuracy of the Long Code registered in an Identifier at any given time. Nasdaq Nordic and Baltic is required by law to store the data submitted by the Member, for the purpose of ORK, and to make it available to the NCAs on request. In order for Nasdaq Nordic and Baltic to fulfill its legal obligations, Nasdaq Nordic and Baltic must ensure that any used Short Code is mapped to a Long Code value. For this reason, it is not possible to change the Begin Date of a registered Identifier, as that could retroactively create gaps in the ORK report where a previously mapped Short Code is no longer associated with a Long Code. It is possible to change the End Date of an Identifier, but not after the date has passed.

Handling of Unmapped Short Codes

Identifiers can be registered both pre- and post-trade. Nasdaq Nordic will continuously reconcile used Short Codes against registered Identifiers in order to detect any Short Codes for which a Long Code mapping is missing. Each Used Date and Short Code for which there is no matching Long Code will be counted as an **Unmapped Short Code.**

If a used Short Code was not mapped on T, and then used again on T+1, the Participant will have two (2) Unmapped Short Codes (since theoretically, the Short Code could correspond to different Long Codes on T and T+1 respectively – until it has been mapped, only the Member knows).

When registering an Identifier for an Unmapped Short Code, the Begin Date must be set before or same day as Used Date. Thus, if the same Short Code constitutes multiple Unmapped Short Codes (i.e. the Short Code has been used multiple days without any valid mapping), the Member should register the Identifier for the **Unmapped Short Code which has the earliest Used Date logged.** If the validity time of the new Identifier covers also the subsequent Unmapped Short Codes, the Member will then automatically have completed its mappings for the given Short Code. Ideally, Short Codes should never be unmapped for more than one day. Members can also avoid the complexity altogether by only using pre-mapped Short Codes.

Example: Participant 'XYZ' on Exchange 'SE' has two Unmapped Short Codes for the same Short Code Value (123).

The used Short Code was not mapped to a Long Code – neither on January 3 nor on January 4.

Unmapped Short Codes (Result Of Initial Reconciliation)

Code Type	Short Code Value	Short Code Used Date
Client-Person	123	2018-01-03
Client-Person	123	2018-01-04

Scenario A: The Member registers an Identifier for the Short Code with Begin Date 2018-01-03 and with no End Date (alternatively with End Date 2018-01-04 or later).

Result: The Participant will have no Unmapped Short Codes left as the registered Identifier covers all Used Dates for the Short Code in question:

Unmapped Short Codes (Scenario A)

Code Type	Short Code Value	Short Code Used Date
No unmapped Short Codes found!		

Scenario B: The Member registers an Identifier for the Short Code with Begin Date 2018-01-04 and with any or no End Date.

Result: The participant will have one Unmapped Short Code left as the registered Identifier does not cover all Used Dates for the Short Code in question:

Unmapped Short Codes (Scenario B)

Code Type	Short Code Value	Short Code Used Date
Client-Person	123	2018-01-03

Orders populated with erroneous Short Code data

In case an incorrect Short Code value has been submitted at order entry, members may be able to rectify the situation themselves by changing or adding mappings.

For example, if the used Short Code is not assigned to another person/entity, the Member may solve the issue by mapping also the erroneous Short Code to the client or decision maker in question. This is possible since clients and decision makers may be associated with multiple Short Codes.

In another scenario, the Member may have stated an incorrect Code Type for the client, **Person** instead of **Entity,** when entering the order. This too can be solved by the member by simply mapping the Short Code to the applicable LEI code even though the Code Type is not correct. This is possible since there is no other format validation on Long Codes for Persons than a maximum allowed length, and since the Code Type value is not included in the official ORK data that will be provided to Competent Authorities.

However, had the situation been the opposite, i.e. **Entity** was stated instead of **Person,** it would most likely not be possible to solve in the same manner since Long Codes for Entities are validated to ensure they are exactly 20 characters (the LEI code length).

In situations where it is not possible for the Member to resolve the issue themselves by updating Short Code mappings, Members may contact Nasdaq Nordic with a request to amend the order data.

Appendix B:

ORK Long Code Format per Country

If a Short Code represents a natural person (as client or decision maker) or a legal entity (as client), the corresponding Long Code must follow a pre-defined format specified by ESMA. If a Short Code represents an algorithm (as decision maker), the corresponding Long Code does not need to follow any pre-defined format specified by ESMA. However, please note that Nasdaq Nordic only supports codes with a maximum length of 50 characters.

Legal Entities

For legal entities, a 20-character Legal Entity Identifier (LEI) alphanumeric code shall be used in accordance with the global ISO 17442 standards.

Natural Persons

For natural persons, the correct format may vary from country to country, depending on the individual's nationality. The recognized format(s) for a given country is referred to as a National ID. All National IDs shall start with an ISO 3166 country code.

The below table provides an overview of ESMA recognized national identifiers and priority of identification.[4]

ISO 3166 — 1 Alpha 2	Country Name	1st Priority Identifier	2nd Priority Identifier	3rd Priority Identifier
AT	Austria	CONCAT		
BE	Belgium	Belgian National Number (Numéro de registre national — Rijksregisternummer)	CONCAT	
BG	Bulgaria	Bulgarian Personal Number	CONCAT	
CY	Cyprus	National Passport Number	CONCAT	
CZ	Czech Republic	National identification number (Rodné číslo)	Passport Number	CONCAT
DE	Germany	CONCAT		
DK	Denmark	Personal identity code 10 digits alphanumerical: DDMMYYXXXX	CONCAT	
EE	Estonia	Estonian Personal Identification Code (Isikukood)		
ES	Spain	Tax identification number (Código de identificación fiscal)		
FI	Finland	Personal identity code	CONCAT	
FR	France	CONCAT		
GR	Greece	10 DSS digit investor share	CONCAT	
HR	Croatia	Personal Identification Number (OIB — Osobni identifikacijski broj)	CONCAT	
HU	Hungary	CONCAT		
IE	Ireland	CONCAT		
IS	Iceland	Personal Identity Code (Kennitala)		
IT	Italy	Fiscal code (Codice fiscale)		
LI	Liechtenstein	National Passport Number	National Identity Card Number	CONCAT
LT	Lithuania	Personal code (Asmens kodas)	National Passport Number	CONCAT
LU	Luxembourg	CONCAT		
LV	Latvia	Personal code (Personas kods)	CONCAT	
MT	Malta	National Identification Number	National Passport Number	
NL	Netherlands	National Passport Number	National identity card number	CONCAT
NO Norway	11 digit personal id	CONCAT (Foedselsnummer)		
PL	Poland	National Identification Number (PESEL)	Tax Number (Numer identyfikacji podatkowej)	
PT	Portugal	Tax number (Número de Identificação Fiscal)	National Passport Number	CONCAT

4 Annex II of Commission Delegated Regulation (EU) 2017/590. NOTE: Members are responsible for verifying the accuracy of the information and to follow prevailing guidelines and instructions by ESMA. Nasdaq Nordic and Baltic is not responsible for the accuracy of the table and this information could be changed at any time by regulators without necessarily be reflected in this document.

ISO 3166 — 1 Alpha 2	Country Name	1st Priority Identifier	2nd Priority Identifier	3rd Priority Identifier
RO	Romania	National Identification Number (Cod Numeric Personal)	National Passport Number	CONCAT
SE	Sweden	Personal identity number	CONCAT	
SI	Slovenia	Personal Identification Number (EMŠO: Enotna Matična Številka Občana)	CONCAT	
SK	Slovakia	Personal number (Rodné číslo)	National Passport Number	CONCAT
All other countries	**National Passport Number**	**CONCAT**		

CONCAT code should not be used as a default identifier and should never be used for those countries that according to the table in Annex II of Commission Delegated Regulation (EU) 2017/590 have not chosen the CONCAT code as an identifier in any of the three priority possibilities. For instructions on how to construct the CONCAT, please consult ESMA's Guidelines on Transaction reporting, order record keeping and clock synchronization under MiFID II.[5] The below table provides an overview of ESMA recognized national identifiers and correct format: [6]

Country Code	Country Name	National Client Identifier	Format Of The Identifier	Potential Source Of The Information
AT	Austria	CONCAT		
BE	Belgium	Belgian National Number (Numéro de registre national - Rijksregisternummer)	11 numerical digits where the first 6 are the date of birth (YYMMDD), the next 3 are an ordering number (uneven for men, even for women) and the last 2 a check digit.	National ID
		CONCAT		
BG	Bulgaria	Bulgarian Personal Number	It consists of 10 digits. The first 6 are the date of birth (YYMMDD). The next 3 digits have information about the area in Bulgaria and the order of birth, and the ninth digit is even for a boy and odd for a girl. Seventh and eighth are randomly generated according to the city. The tenth digit is a check digit.	Passport, National ID, Driving Licence
		CONCAT		
CY	Cyprus	National Passport Number	The number for passports issued before 13/12/2010 consists of the character 'E' followed by 6 digits i.e E123456. Biometric passports issued after 13/12/2010 have a number that starts with the character 'K', followed by 8 digits. i.e K12345678	The passport is issued by the Civil Registry Department of the Ministry of Interior.
		CONCAT		

5 https://www.esma.europa.eu/sites/default/files/library/2016-1452_guidelines_mifid_ii_transaction_reporting.pdf

6 https://www.esma.europa.eu/sites/default/files/library/esma70-1861941480-56_qas_mifir_data_reporting.pdf (from page 58)

Country Code	Country Name	National Client Identifier	Format Of The Identifier	Potential Source Of The Information
CZ	Czech Republic	National identification number (Rodné číslo)	It is a nine or ten-digit number in the format of YYXXDD/SSSC, where XX=MM (month of birth) for male, i.e. numbers 01-12, and XX=MM+50 (or exceptionally XX=MM+70) for female, i.e. numbers 51-62 (or 71-82). For example, a number 785723 representing the first six digits is assigned to a woman born on 23rd of July 1978. SSS is a serial number distinguishing persons born on the same date and C is a check digit. For people born before January 1st 1954 the number is without this check digit - YYXXDD/SSS (i.e. the nine-digit case). If the national identification number has ten digits, then the tenth (check) digit is the first nine digits modulo 11, unless this modulo is 10. In that case the tenth digit is 0. Therefore, the ten-digit number is usually divisible by 11. It should be noted that the special character "/" is just a separator and should be omitted in transaction reports	It is assigned to a person shortly after birth by the birth registry and does not change throughout the life of a person. It is printed on a birth certificate (paper), national ID card (laminated or plastic card), drivers licence (laminated or plastic card), and possibly other documents.
		Passport Number	It is usually an eight digit number, but it can be longer.	The passport is issued by the Ministry of the Interior of the Czech Republic.
		CONCAT		
DE	Germany	CONCAT		
DK	Denmark	Personal identity code 10 digits alphanumerical: DDMMYYXXXX	The Danish personal ID is called the CPR number. It is 10 digits and does only consist of numbers [0-9]. The first 6 numbers represent the date of birth in "DDMMYY" format.	The CPR number is used for unique personal identification can be found in documents such as passports, health care cards and driver's licenses.
		CONCAT		
EE	Estonia	Estonian Personal Identification Code (Isikukood)	It consists of 11 digits, generally given without any whitespace or other delimiters. The form is GYYMMDDSSSC, where G shows sex and century of birth (odd number male, even number female, 1-2 19th century, 3-4 20th century, 5-6 21st century), SSS is a serial number separating persons born on the same date and C a checksum.	Passport, National ID, Driving license
ES	Spain	Tax identification number (Número 0 Código de identificación fiscal)	Code composed by 9 characters: 8 numbers and a control letter. Letters I, Ñ, O, and U are not used. It looks like 99111222M. Particular cases • L + 7 numbers + control letter for non-resident Spaniards unless they have DNI, where then it would look like as above. • K + 7 numbers + control letter for Spaniards under 14 unless they have DNI, where then it would look like as above.	This code is in the National Identification Card (document nacional de identidad – DNI – or carnet de identidad), but it can also be found in the driving license or the social security card.
FI	Finland	Personal identity code	It consists of eleven characters of the form DDMMYYCZZZQ, where DDMMYY is the date of birth, C the century sign, ZZZ the individual number and Q the control character (checksum). The sign for the century is either + (1800–1899), - (1900–1999), or A (2000– 2099). The individual number ZZZ is odd for males and even for females and for people born in Finland its range is 002-899 (larger numbers may be used in special cases). An example of a valid code is 311280-888Y.	Passport, National ID
		CONCAT		

Country Code	Country Name	National Client Identifier	Format Of The Identifier	Potential Source Of The Information
FR	France	CONCAT		
GR	Greece	10 Dematerialised Securities System (DSS) digit investor share	It consists of 10 digits and it is linked with the personal details of the investor (name, identity number, passport number, tax registration number).	Investor share is the account of the investor in the DSS which is operated by the Central Securities Depository S.A
		CONCAT		
HR	Croatia	Personal Identification Number (OIB – Osobni identifikacijski broj)	OIB consists of 11 digits. 10 digits are chosen randomly and do not contain information related to the holder of OIB. One digit is a control number. OIB is unique, unchangeable and unrepeatable. It is a permanent identification code of every Croatian citizen and legal person with head office in the Republic of Croatia.	Source is National Identity Card or Internet engines but it can also be found on other personal documents.
		CONCAT		
HU	Hungary	CONCAT		
IR	Ireland	CONCAT		
IS	Iceland	Personal Identity Code (Kennitala)	Ten-digit number, where the first six are the date of birth (DDMMYY).	Passport, National ID, Driving Licence
IT	Italy	Fiscal code (Codice fiscale)	The code is unique, widespread and consistent over time and it is a combination of 16 letters and numbers (3 letters for the last name + 3 letters for the name + 5 letters/numbers for the date of birth (with different combinations to distinguish between men and women) + 4 letters/numbers for the place of birth + 1 check letter/number). Example: RSSMRO62B25 E205Y	It can be printed on a paper card (old version) or on the National Health Service magnetic card (newer ones).
LI	Liechten-stein	National Passport Number	The Code is a combination of 1 letter and 5 numbers. For example R00536	Passport
		National Identity Card Number	The Code of the national ID-Card is a combination of 2 letters and 8 numbers. For example ID022143586	The number changes with each renewed ID-Card
		CONCAT		
LT	Lithuania	Personal code (Asmens kodas)	It is 11 digits long. Format GYYMMDDNNNC, where G is the gender (4 or 6 for women; 3 or 5 for men); YYMMDD is the date of birth; NNN - serial number; C - check digit.	Passport, National ID, Driving license
		National Passport Number	Passport or Identity card number - 8 digit number	Passport, National ID
		CONCAT		
LU	Luxem-burg	CONCAT		
LV	Latvia	Personal code (Personas kods)	11 numerical digits of the form DDMMYY-CZZZZ where the first 6 are the date of birth (DDMMYY) and the C is century sign (where the digit "0" is the 19th century, the number "1" - the 20th century, "2" - 21th century). Or 11 numerical digits selected randomly, where the first six digits may be separated from other digits with a hyphen	Identification documents for Republic of Latvia - National ID and/or passport
		CONCAT		

Country Code	Country Name	National Client Identifier	Format Of The Identifier	Potential Source Of The Information
MT	Malta	National Identification Number	8 characters: 7 numerical digits and 1 alphabetic letter (M, G, A, P, L, H, B, Z) Each ID Card has a unique Identity Number, based on a combination of: (a) a sequential registration number in the relevant year; (b) the relevant year number (2 digits), where the year is the year of birth (for Malta-born persons) or year of registration (for nonMalta born persons), and (c) a letter designating the geographic origin of the person. The definition of the letters is given by the Public Registry Department on the registration of a birth A= applicable to Foreigners in possession of an eRes Card B= applicable to Maltese births registered in the 1800+ G= applicable to Gozitan births registered in the 1900+ H= applicable to Gozitan births registered in the 2000+ L= applicable to Maltese births registered in the 2000+ M= applicable to Maltese births registered in the 1900+ P= applicable to Maltese citizens who are unable to obtain their original birth certificate from their country of birth to be registered in Malta. Z= applicable to Gozitan births registered in the 1800+	National ID
		National Passport Number	7 Numerical digits	Civil Registration Directorate
NL	Nether-lands	National Passport Number	9 characters of which: Position 1 and 2: [A-Z] except for "O"; Position 3 - 8: [A-Z] [0-9] except for "O"; Position 9: [0-9].	Dutch National Passport
		National identity card number	9 characters of which: Position 1 and 2: [A-Z] except for "O"; Position 3 - 8: [A-Z] [0-9] except for "O"; Position 9: [0-9]. The character "O" is not allowed while "0" is.	Dutch National ID
		CONCAT		
NO	Norway	11 digit personal id (Foedselsnummer)	The id is 11 digits long, where the first 6 represent birthdate in "ddmmyy" format.	Includes but not limited to: passport, national id card, driving license
		CONCAT		
PL	Poland	National Identification Number (PESEL)	11 NUMERIC. ID for natural persons is assigned to a person shortly after birth by the birth registry and does not change throughout the life of a person.	Birth Certificate, National ID, Driving License
		Tax Number (Numer identyfikacji podatkowej)	10 NUMERIC. It is used by investment firms for the tax identification of a client.	Tax form PIT8 which is sent yearly by an IF on behalf of its client to the tax office.

Country Code	Country Name	National Client Identifier	Format Of The Identifier	Potential Source Of The Information
PT	Portugal	Tax number (Número de Identificação Fiscal)	Code composed by one block of 9 digits (999999999). The first eight digits are sequential and the last one is used as a control: 1 to 3: Personal, 3 is not yet assigned; 45: Natural person. The initial digits "45" correspond to nonresidents citizens that only get in Portuguese territory income subject to withholding at source; 5: legal person required to register in the National People Collective Registry; 6: The agencies of the Central Government, Regional or Local administration; 70, 74 and 75: Used to identify different types of Heritage Indivisible; 71: Collective non-residents subject to withholding at source definitively; 72: Investment Funds; 77: officious allocation of taxable NIF (entities that do not require NIF on the official bodies (RNPC); 78: officious assignment to non-residents covered by the proceeding VAT REFUND; 79: Exceptional rules - created in 98 exclusively to the Mundial Exposition (Expo 98); 8: "sole trader" (no longer used, is no longer valid); 90 and 91: Condos, Irregular Society and undivided inheritances; 98: Non-residents without permanent establishment; 99: Civil societies without legal personality.	
		National Passport Number	The passport of uniform and optical model issued before April 2018 consists of a notebook with 32 pages numbered, identified by one letter and six digits: Position 1: letter [A-Z] and Position 2 - 6: digits [0-9]. The passport of uniform and optical model issued after April 2018 consists of a notebook with 32 (requested by normal travel) or 48 (requested by a frequent travel) pages numbered, identified by two letters and six digits: Position 1-2: letter [A-Z] and Position 3 - 8: digits [0-9].	Portuguese National Passport
		CONCAT		

Country Code	Country Name	National Client Identifier	Format Of The Identifier	Potential Source Of The Information
RO	Romania	National Identification Number (Cod Numeric Personal)	The Romanian National ID (Cod Numeric Personal, CNP) consists of 13 digits and is created by using the gender of the citizen and century (1 digit, 1/3/5/7 for men, 2/4/6/8 for women and 9 for foreign citizens), date of birth (6 digits, YYMMDD), the place of birth (2 digits), followed by a serial number (3 digits) and 1 control digit, at the end. The first digit encodes the person's gender as follows: 2 Male born between 1900 and 1999 2 Female born between 1900 and 1999 3 Male born between 1800 and 1899 4 Female born between 1800 and 1899 5 Male born after 2000 6 Female born after 2000 7 Male, foreign citizen, RO resident 8 Female, foreign citizen, RO resident 9 Foreign citizen	The CNP is a unique identifying number, assigned to each person at birth and is inscribed on Birth Certificate, Identity Card and Driving License.
		National Passport Number	The Romanian Passport Number consists of 9 digits.	Romanian National Passport
		CONCAT		
SE	Sweden	Personal identity number	Personal identity number: 12 digits numerical in the format CCYYMMDDZZZQ CCYYMMDD is the date of birth, ZZZ the individual serial number, and Q is the control character (calculated with Luhn-algoritm). The individual number ZZZ is odd for males and even for females. CC is century, YY year, MM month and DD day. NB! The 12 digits numerical format is used, as the official 10 digits numerical format of the personal identity number includes a separator (YYMMDD-ZZZQ or YYMMDD+ZZZQ if the person has turned 100) which severely complicates data processing and storage.	Personal identity number is used for unique personal identification. This number, in its official 10 digits numerical format (i.e. excluding the CC for century and including a separator), is written on or into various personal documents such as passports, health care cards, and driver's licenses.
		CONCAT		

Country Code	Country Name	National Client Identifier	Format Of The Identifier	Potential Source Of The Information
SI	Slovenia	Personal Identification number (EMŠO: Enotna Matična Številka Občana)	It consists of 13 digits. The first 7 numbers represent the date of birth of the person - DDMMYYY. Digit 8 and 9 represent the number of a register where EMŠO was assigned: 10-19 – Bosnia and Hercegovina (if signed in before 18 February 1999) 20-29 – Montenegro (if signed in before 18 February 1999) 30-39 – Croatia (if signed in before 18 February 1999) 40-49 – Macedonia (if signed in before 18 February 1999) 50-59 – Slovenia (if signed in before 18 February 1999, if later number 50 is used) • 60-69 – (not in use) 70-79 – Serbia (if signed in before 18 February 1999) 80-89 – Autonomous Province of Vojvodina (if signed in before 18 February 1999) 90-99 – Kosovo (if signed in before 18 February 1999)). Digit 10, 11 and 12 are a combination of gender and serial number for persons, born on the same day (000-499 for male and 500-999 for female). Number 13 is a control number and is calculated by a special procedure, defined in Article 4 of the Regulation on the way of assigning the personal identification number (Nos. no. 8/99).	Slovenian Personal Identity Card Slovenian National Passport
		CONCAT		
SK	Slovakia	Personal number (Rodné číslo)	The Personal Number consist of ten digits in the form YYMMDDCCCX. The first part is created from the date of birth (differently for male and female): YY - the last 2 digits of the year of birth; MM - month of birth for male (01 -12), month of birth plus 50 for female (51-62); DD - day of birth; CCC- number distinguishing persons born on the same date; X - check digit. The Person Number must be divisible by 11.	It is printed on a birth certificate (paper), national ID card (laminated or plastic card), drivers licence (laminated or plastic card), and possibly other documents.
		National Passport Number	It is issued in the format XXNNNNNNN. It is a 9-digit unique code where XX are block letters and NNNNNNN are numbers. It has a validity of 10 years.	Citizens can have two passports and this code can only be found on the first one.
		CONCAT		