



ORK  ATHEX
Order Record Keeping

Technical Specifications

Version 1.0

1	Introduction.....	1
1.1	Purpose and intended audience of this document	1
1.2	Scope	1
2	Definitions	1
3	System overview.....	3
3.1	The ATHEX AMP.....	3
3.2	ATHEX Members Portal Services	3
3.3	Authentication - authorization	4
4	Maintenance of mappings and Processing cycles	5
4.1	Details of mappings maintenance	5
4.1.1	Mappings uploading	5
4.1.2	Validity intervals	5
4.1.3	Overlaps and overlap correction	5
4.1.4	Use by ATHEX’s internal Order Record Keeping system and freezing	5
4.1.5	Cancels of mappings.....	6
4.1.6	Updates	6
4.1.7	“Miss”-type mappings and completion of misses	6
4.1.8	Amendments	6
4.2	Processing cycles	7
5	Entry details.....	8
5.1	Data Submission	8
5.2	Submission and status transitions of various types of entries.....	10
5.2.1	Submission and processing of a NEWT entry	10
5.2.2	Submission and processing of an UPDT entry - update of the respective mapping	11
5.2.3	Submission of a CANC entry and cancelation of the respective existing mapping	12
5.2.4	Submission of an AMND entry (after previous NEWT entry)	13
5.3	Submission Data flow	14
5.4	Short/Long mapping table data fields	14
5.5	ATHEX ORK Field References and special notations.....	15
5.6	Some useful examples.....	16
6	Data Exchange Interfaces	17
6.1.1	REST services	17
6.1.2	CSV Files.....	23
6.2	User Interface	23

1 Introduction

1.1 Purpose and intended audience of this document

With the introduction of MiFID II in January 2018, Trading Venues have the obligation to collect and maintain, in a specified format, data relating to all orders and trades in financial instruments which are realized through their systems, for at least five years. These data are identifiers, in the form of Legal Entity Identifiers (LEIs), National IDs, and Algorithm IDs.

To fulfil its MiFID II obligations, ATHEX has added several new fields to OASIS order transactions. Most of these fields are identification codes for legal entities, physical persons and trading algorithms taking part in the process of accepting, submitting and executing an order. However, for performance reasons, Athex, has decided to only support short (numeric) codes in OASIS. Like other Venues, Athex has will support a mapping mechanism of short codes (numeric data types) to long codes (LEIs, National IDs and Algorithm IDs) for the following types:

- Client Identification Code - LEI
- Client Identification Code - National ID
- Investment Decision within Firm – National ID
- Investment Decision within Firm – Algorithm ID
- Execution within Firm – National ID
- Execution within Firm – Algorithm ID
- Non-Executing Broker – LEI

Members will use Short Codes during the trading session and will be required to upload a set of mappings, so that the Short Codes used in a trading session Orders be mapped to the respective Long Codes, as ESMA dictates. This procedure is called Short/Long Mapping process.

1.2 Scope

This document provides the Technical Specification of ORK@ATHEX, which allows Members to upload a mapping of Short Codes to Long Codes, as described above. ORK@ATHEX is addressed to all ATHEX Trading Members, and its use is mandatory for them.

Please notice that the information in this document is subject to change. A future version of this document may be applicable, as early implementations are maturing.

2 Definitions

Acronym	Definitions
AMP	ATHEX Members Portal
APA	Approved Publication Arrangement
ARM	Authorized Reporting Mechanism
ATHEX	ATHEX Exchange
ESMA	European Securities and Markets Authority
HTML	Hyper Text Markup Language
ISO	International Standards Organization
JSON	JavaScript Object Notation
LEI	Legal Entity Identifier
MiFID	Markets in Financial Instruments Directive
OASIS	Integrated Automated Trading System

ORK	Order Record Keeping
REST	REpresentational State Transfer

3 System overview

3.1 The ATHEX AMP

The ATHEX Members Portal (AMP) is a central service point which provides ATHEX Members and other clients with a variety of services. These services are related, but not limited to MIFID II-MIFIR regulatory obligations.

AMP consists of the following:

1. An Authentication-Authorization mechanism, which grants the reporting entities access to AMP and controls access to the different services that AMP offers, according to the corresponding service subscriptions.
2. An Information Exchange Interface, which enables the reporting entities to submit data and monitor the status of their submissions. The Information Exchange Interface supports both an interactive Web UI and a machine-purposed REST API.
3. A Validation Engine, where all submissions are checked with the appropriate validation rules, in order to ensure data validity. Reporting entities are given the means to spot, correct and resubmit invalid data.
4. A Forwarding Engine, which forwards valid submitted data to a Foreign Application, which can be any application external to AMP. In the case of **ORK@ATHEX**, this application is the Internal Order Record Keeping (ORK) system of ATHEX.
5. The Reporting Engine which handles the results from the Foreign Application, and makes them available to the reporting entities.

Users of AMP access all of the above functionality through a single Web UI and/or a set of REST calls. Use of the Web UI and REST is fully equivalent, so a submission can be made through the UI and its status be queried over REST, or vice versa.

3.2 ATHEX Members Portal Services

The following services are provided via AMP:

ORK@ATHEX

This is an obligatory service to the ATHEX Members, to meet the requirements of the MiFID II Order Book Keeping.

APA@ATHEX

The Approved Publication Arrangement (APA)¹ is a person authorized under MiFID II² to provide **the service of publishing trade reports** on behalf of investment firms pursuant to Articles 20 and 21 of MiFIR³.

ARM@ATHEX

Investment Firms which execute transactions must report to their National Competent Authority (NCA) “as quickly as possible” and no later than the close of the following working day, i.e. T+1, using the proper format (ISO 20022 / XML). The NCA forwards them to the European Securities and Markets

¹ MiFID II Directive, article 4(1)(52)

² Directive 2014/65/EU

³ Regulation (EU) No 600/2014

Authority (ESMA), which puts them through the Transaction Reporting Exchange Mechanism (TREM), which allows NCAs from other EU Member States to look at the information.

RDS@ATHEX

By this service, all the static data (baselines) of the traded products will be available to the ATHEXGROUP Members and Data Vendors.

EMIR-TR (TRC)

In response to EMIR, ATHEX Members Portal provides to the EMIR Service subscribers the service to meet the corresponding regulatory obligations

FIRDS@ATHEX

Systemic Internalizers can benefit from ATHEX Members Portal integrated services to fulfill their corresponding regulatory obligations.

This document is the Technical Specification document for the [ORK@ATHEX](#) service. For the rest of the above services, the respective technical documentation is available in separate documents that can be requested from ATHEX.

3.3 Authentication - authorization

Registered [ORK@ATHEX](#) Clients are provided with user-password credentials in order to enter **Web Interface** to upload files or inspect previous submissions status.

These same credentials can be used for uploading and downloading data through REST API interface.

Web interface → FORM Authentication over https

REST API → Basic Authentication over https

An OAuth2.0 authentication scheme for the REST API is being considered as well, however this may not be available in the first release of the service. Other types of authentication-authorization may be provided later.

Credentials for new users can be acquired through the ATHEX Members Support desk. Existing users of the ATHEX Group web site or other services (EMIR TR, Service Desk) can use the same credentials, although they need, too, to contact the ATHEX Members Support desk to obtain proper authorization.



4 Maintenance of mappings and Processing cycles

4.1 Details of mappings maintenance

This chapter describes the details of short/long codes mapping mechanism.

4.1.1 Mappings uploading

Members can maintain a set of Short/Long mappings by uploading triplets of the form (*codeType*, *shortCode*, *longCode*). New such triplets can be uploaded by means of both CSV uploads and REST/JSON queries.

4.1.2 Validity intervals

Each (*codeType*, *shortCode*, *longCode*) triplet is qualified with a validity interval (*validFm*, *validTo*), where *validFm* and *validTo* are dates. The meaning of a tuple (*codeType*, *shortCode*, *longCode*, *validFm*, *validTo*) is that (*codeType*, *shortCode*, *longCode*) is a valid mapping starting from *validFm* and concluding at *validTo* (inclusive).

In the case where *validTo* is left blank, the validity is indefinite, in other words, the mapping is considered valid forever after *validFm* (inclusive). The member can update the mapping later on to “close” the validity interval (see more on updating later on in this chapter).

Indefinite validity mappings allow Members that have static Short/Long mappings in their systems to upload their mappings to ORK@ATHEX and not have to maintain them on a daily basis. Other Members may opt for uploading short-term mappings (even single-day, with *validFm* equal to *validTo*) and update their mappings on a daily basis. ORK@ATHEX allows any of these combinations on a per-mapping basis (i.e., some mappings may have a daily validity interval, others may have a longer one, while still others may have an indefinite mapping).

4.1.3 Overlaps and overlap correction

Overlaps in validity intervals for the same (*codeType*, *shortCode*) pair are not allowed – at any given time, only one mapping may be in effect for a (*codeType*, *shortCode*) pair. An attempt to upload a mapping for a (*codeType*, *shortCode*) pair whose validity interval (*validFm*, *validTo*) overlaps with already-uploaded mapping for the same (*codeType*, *shortCode*) pair will result in a failure and the new mapping will be ignored (the prior mapping will remain in effect).

If a new mapping for this (*codeType*, *shortCode*) pair needs to be specified, the *validFm* of the new mapping must be at least one day after the *validTo* date in effect for that (*codeType*, *shortCode*) pair. Another way to correct the overlap is to update the *validTo* date of the mapping in effect. Even if a blank *validTo* date was specified when the prior mapping was uploaded, the prior mapping can be updated to “close” its *validTo* date (i.e. to assign it a specific end date); then the new mapping can be uploaded successfully, by having its *validFm* date not overlap with the former mappings *validTo* date. Please see more on updating later in this section.

4.1.4 Use by ATHEX’s internal Order Record Keeping system and freezing

At regular times, as specified in the next section “Processing Cycles”, ATHEX’s internal Order Record Keeping system reads the mappings in effect for the current date and uses them to complete the Long Codes in the Order Book.

At any given date, “using” a mapping occurs only if the internal ORK finds an order placed by the Member for that date that carries the same *codeType* and *shortCode*. If the internal ORK does not find any orders for that date, the mapping is not used.

Once used on a certain date, a (*codeType*, *shortCode*) that was found to be in effect for that date is “frozen” for that given date, and cannot be changed any more from that date and backwards (though it can be changed for future dates).

Thus, errors in mappings cannot be fixed using the update mechanism after a mapping has been used; after a mapping that was wrong for any reason is used by the internal ORK, the Member can use the “Amend” mechanism described later in this chapter, in order to fix the error.

4.1.5 Cancels of mappings

A mapping that was never used by ATHEX’s internal ORK system can be canceled, i.e., removed from the list of mappings. Mappings that were used even once (and even if amended later) by the internal ORK cannot be canceled, however they can be updated, as explained right below. The idea is that, if a mapping was used, it becomes part of the ORK historical records and remains there for the retention period of ORK (at least 5 years).

4.1.6 Updates

Under the conditions outlined in this section, mappings can be updated. Two elements of a mapping can be updated: its *longCode* and its *validTo* date.

The *longCode* of a mapping can be updated only if that mapping was never used by the internal ORK. If it was used even once, updating the *longCode* is not possible, since the mapping, including the original *longCode*, has become part of the ORK historical records.

The *validTo* date of any mapping can be updated at any time, whether the mapping has been used by the internal ORK or not. However, the new *validTo* date must obey the following two rules: the new *validTo* date cannot overlap with any other mapping for the same (*codeType*, *shortCode*); and, the new *validTo* date cannot be set to any date prior to the last date when it was used by the internal ORK.

4.1.7 “Miss”-type mappings and completion of misses

At any given date, if the internal ORK finds orders for which there is no mapping in effect, creates a “Miss”-type mapping. The Miss-type mapping inherits *codeType* and *shortCode* from the order found by the internal ORK, however its *longCode* is blank, awaiting from the Member to complete the missing value. The Miss-type mappings can be edited by the Member until T+1. However, after T+1, the Miss-type mappings are “frozen” and cannot be updated anymore. See the next section “Processing cycles” for the details.

4.1.8 Amendments

If a mapping that has been used by the internal ORK for a certain date, it cannot be updated anymore for that date, and an Amendment-type mapping has to be uploaded instead. An Amendment-type mapping is meant to override the contents of the original mapping, however, without the original mapping being removed or overwritten. In other words, both the original mapping and the amendment remain within the ORK system (and the internal ORK).

Amendments are meant as a mechanism for correcting errors and not as a regular order bookkeeping practice. Ideally, Members should not have to use Amendments at all, since all reporting operations should be carried out by adding new and updating existing mappings.

Amendments are the only mechanism for completing a Miss-type mapping after T+1, the reason being that a Miss-type mapping that is not completed by T+1 is considered a violation of the reporting obligations of the Member, and as such, it is equivalent to an error. (Notice that, prior to the end of

T+1, no Amendments are allowed for Miss-type mappings, since these must be updated and not amended.)

An amendment cannot span multiple validity intervals, that is, an amendment can only “amend” a single original mapping. However, an amendment can have a validity interval narrower than the validity interval of the original mapping.

Amendments can be followed by further amendments. The same rule as above regarding the validity intervals applies – a subsequent amendment can narrow further the validity interval of the *original* mapping, but cannot extend beyond that. Multiple amendments for the same date remain with the ORK system and are all at the disposition of any auditing authority. If multiple amendments exist for a given date, the latest amendment for that date is the one that is considered final.

4.2 Processing cycles

Short/Long mapping entries may be uploaded during trading session (intraday). Processing of mappings occurs according to the following cycles.

Cycle 1: Short/long mapping file submission - During the trading day (T+0), until 18:00 (local time).

In this cycle, the following actions take place:

- The effective Short/Long mappings, as they have been formed by new entries and updates, are processed by the internal ORK
- Mappings whose (*codeType, shortCode*) is found in the orders of the trading session are marked as used at date T+0, so that they cannot be updated anymore by the Member for dates prior to, and including, T.
- For all unmapped short codes that are found in the orders of the trading session for T, a Miss-type mapping is generated.

Members must update the unmapped Short codes (Miss-type mappings) with the corresponding Long codes before the beginning of the Cycle 2.

Cycle 2: Short/long mapping fixing - Next trading day (T+1), until 23:00 (local time).

In this cycle, the following actions take place:

- Miss-type mappings that have been updated by the Member are processed in the internal ORK. After processing, Miss-type mappings are marked as used at date T+0, as if they had been uploaded at date T+0.
- Unmapped Short codes found in Cycle 1 and created as Miss-type mappings, if not yet updated by the Member, are “frozen” and cannot be updated anymore.

Amend cycles: at regular time intervals, not related with Cycles 1 and 2, Amend-type mappings are processed by the internal ORK. Amend-type mappings do not overwrite prior mappings, whether regular or Miss-type; instead, they are kept along with the original mapping (or miss), as “correct repetition” records.

5 Entry details

5.1 Data Submission

Data submission can be done either by uploading CSV files at the application’s UI, or via REST calls. In both cases:

- For each submission, a unique identification number (Submission ID) is generated.
- The above Submission ID enables reporting entities to monitor the current status of the corresponding submission. The submission status is called submissionStatus. The submissionStatus indicates the submission’s status in regard to the ATHEX Members Portal processing.

submissionStatus	Description
RCVD	The submission has been received by ATHEX Members Portal.
RJCT	The submission was rejected by ATHEX Members Portal due to syntax or other errors.
PART	The submission was partially accepted by ATHEX Members Portal. In that case some mappings failed passing ATHEX Members Portal’s validations, therefore those mappings are not forwarded to the Foreign Application (in this case the internal ORK). Valid mappings are forwarded to the Foreign Application. It is the responsibility of the reporting entity to correct all invalid mappings and resubmit them to ATHEX Members Portal in a separate submission.
ACPT	All mappings of the current submission have passed ATHEX Members Portal’s validations and will be forwarded to the Foreign Application (internal ORK).

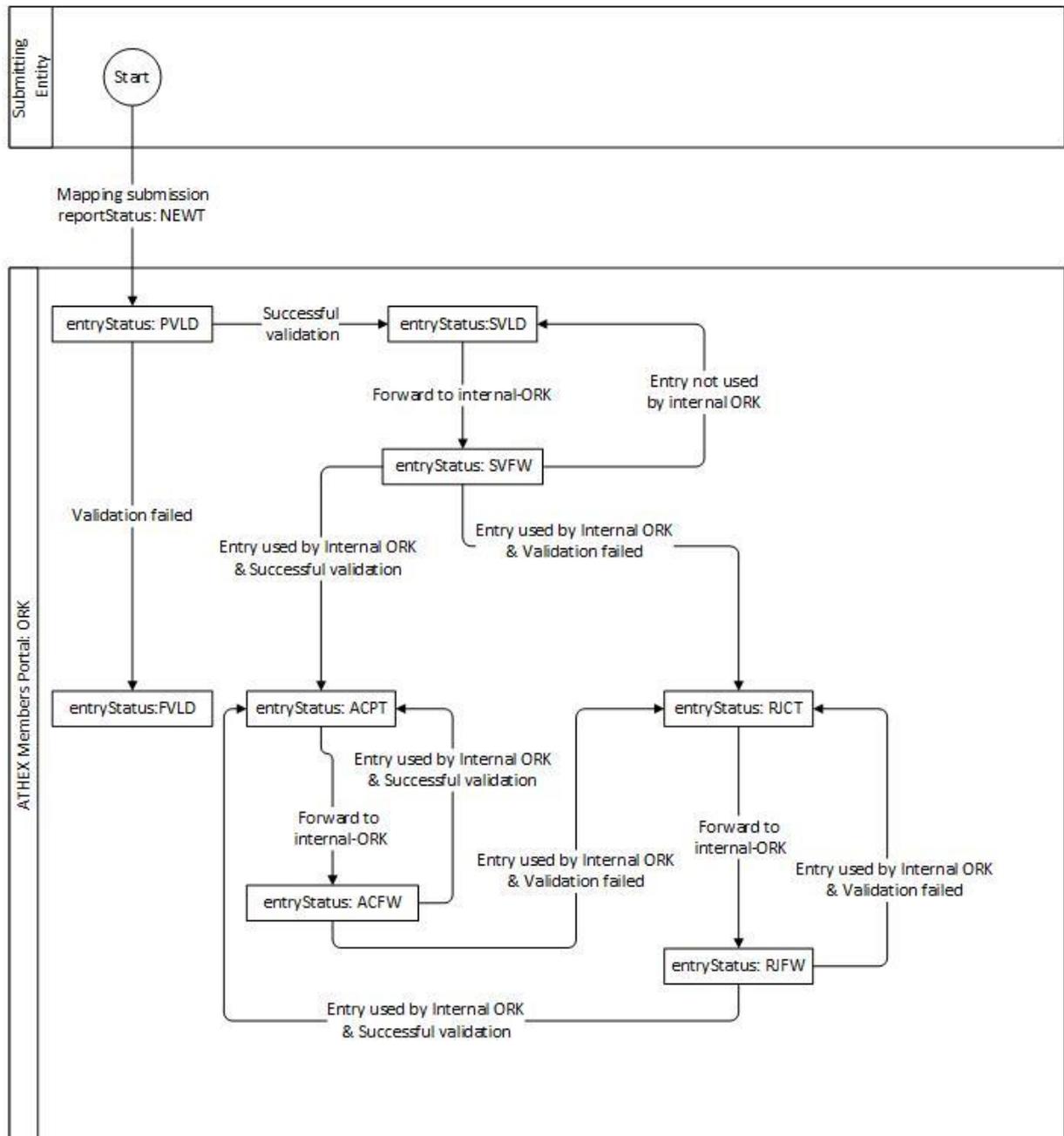
Each submission consists of (at least) one or (typically) more entries. For each entry, an entry identification and an entry status (entryStatus) are defined. Thus reporting entities can easily monitor the status of each entry in a submission. The possible entryStatus values are outlined in the following table:

entryStatus	Description
PVLD	Pending Validation. AMP has not yet validated this entry
SVLD	Successfully Validated. The entry was successfully validated by AMP and will be forwarded to the Foreign Application (internal ORK).
MISS	Missing. Entries of this type are auto-generated by the internal ORK, indicating that this mapping is missing. It is the Reporting Entity’s responsibility to submit a mapping with reportStatus=“UPDT” in order to provide the missing information.
PMIS	Permanent Miss. MISS entries that the Reporting Entity has not updated within the appropriate time frame become Permanent Misses. Permanent Miss entries cannot be corrected with UPDT; only AMND is permitted.
UPDT	Updated. The mapping in this entry has been updated by a newer one as a result of the Reporting Entity sending a newer entry with reportStatus set to “UPDT”.

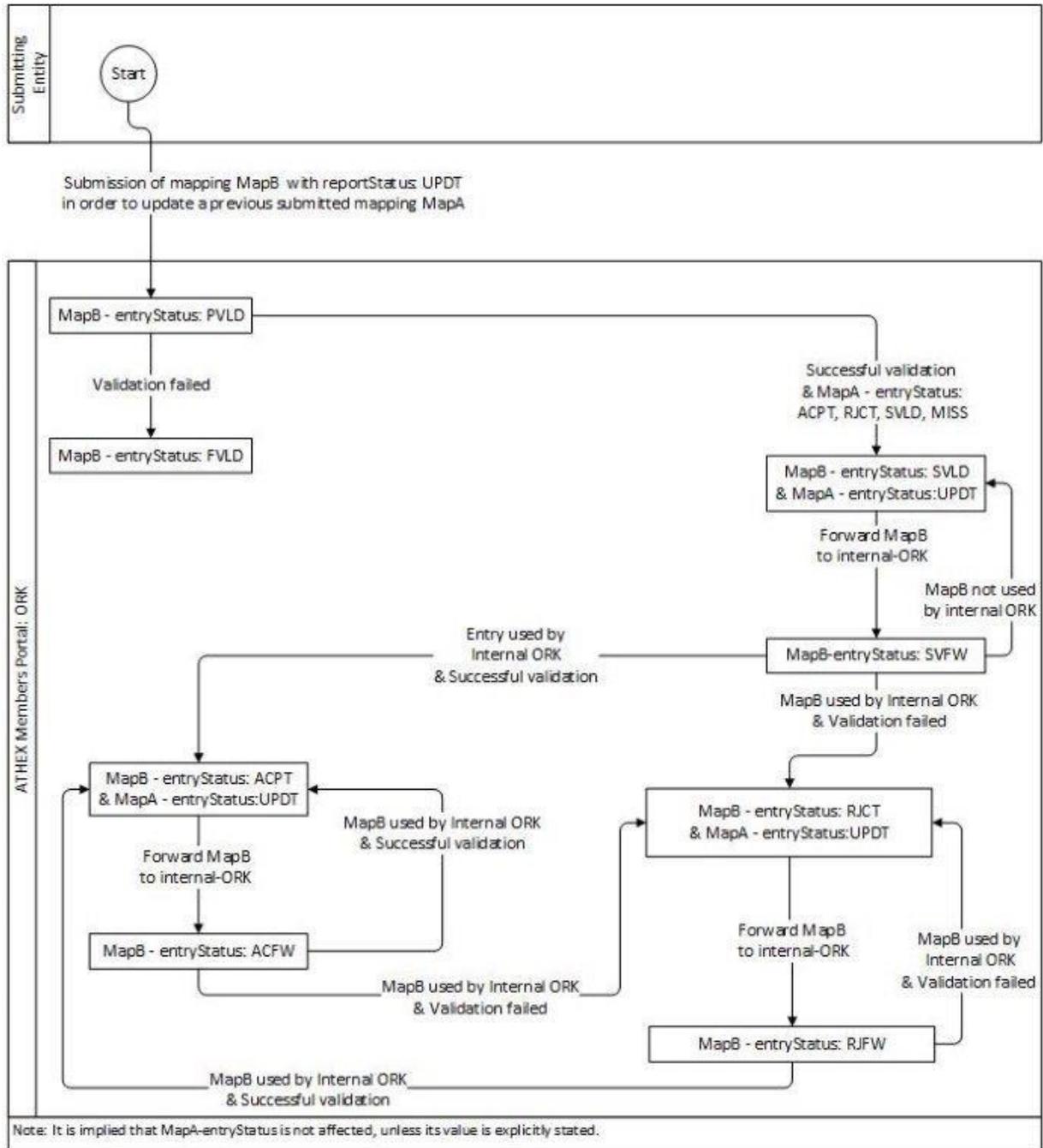
entryStatus	Description
CANC	Canceled. This mapping has been canceled as a result of the Reporting Entity sending a newer entry with reportStatus set to "CANC".
FVLD	Failed Validation. The record has not passed all AMP validations. Details on the cause of the error are found in the entryErrors field. It is the responsibility of the Reporting Entity to correct the error and resubmit the mapping using an entry with reportStatus set to "NEWT".
SVFW	Syntactically Valid and Forwarded. Entries obtain this status when forwarded to the Foreign Application (internal ORK) for the first time. While in this status, the entry remains locked.
ACFW	Accepted and Forwarded. Entries obtain this status when forwarded to the Foreign Application (internal ORK) after a previous cycle when they had been accepted by the Foreign Application (internal ORK). See also "ACPT" below. While in this status, the entry remains locked.
RJFW	Rejected and Forwarded. Entries obtain this status when forwarded to the Foreign Application (internal ORK) after a previous cycle when they had been rejected by the Foreign Application (internal ORK). See also "RJCT" below. While in this status, the entry remains locked.
ACPT	The record has been accepted by the Foreign Application (internal ORK). In this state, the validDate field of the entry shows the last date when this entry was used by the internal ORK. No further UPDT is allowed for the Long code of this entry and no changes in the validTo date are allowed if the new validTo date does not include validDate. Only AMND is permitted in order to denote and fix an error.
RJCT	The record was rejected by the Foreign Application (internal ORK). It is the responsibility of the reporting entity to correct the error and resubmit the record. In this state, the validDate field of the entry shows the last date when this entry was used by the internal ORK. No further UPDT is allowed for the Long code of this entry and no changes in the validTo date are allowed if the new validTo date does not include validDate. Only AMND is permitted in order to denote and fix an error.

5.2 Submission and status transitions of various types of entries

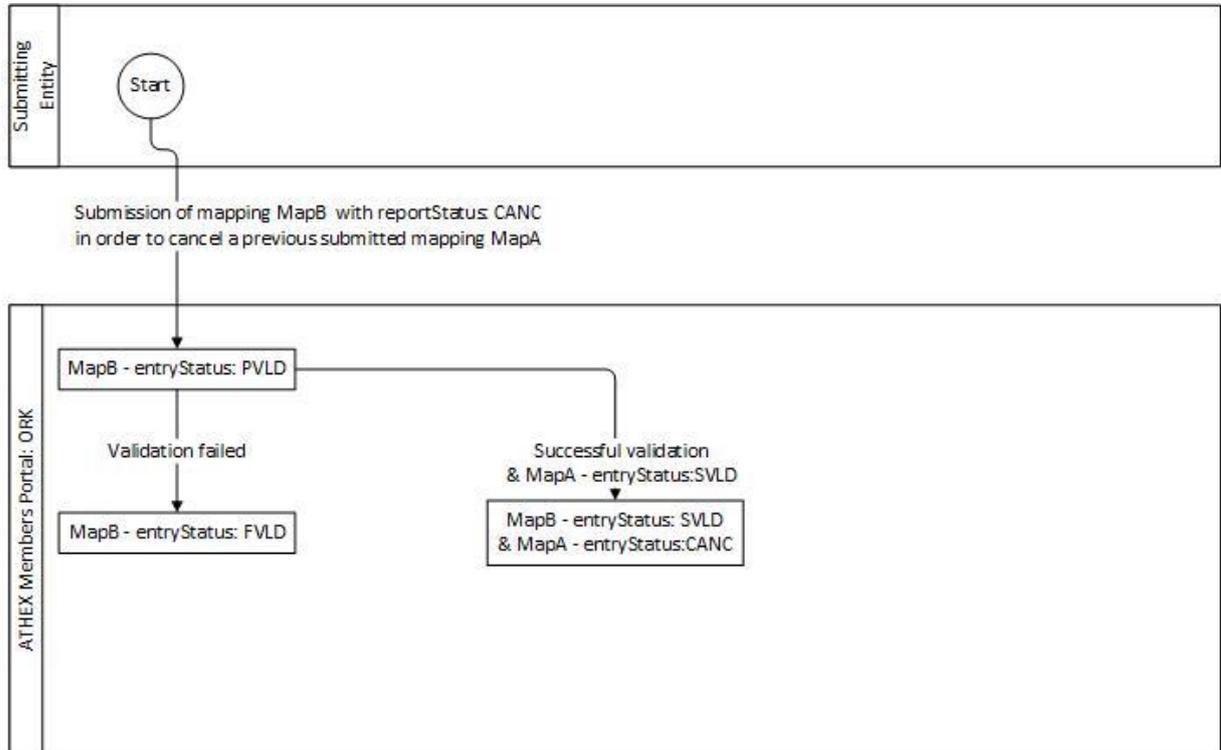
5.2.1 Submission and processing of a NEWT entry



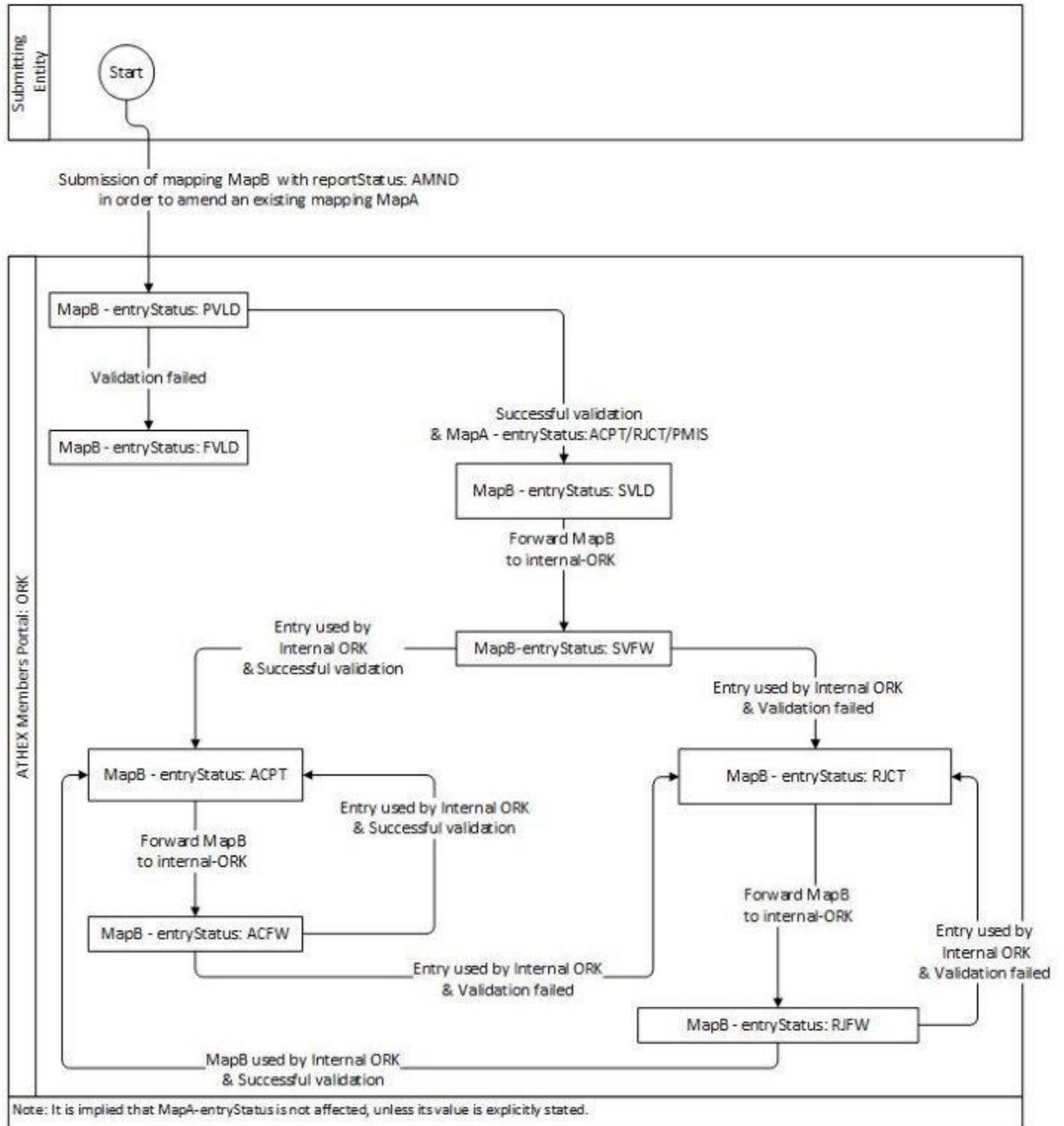
5.2.2 Submission and processing of an UPDT entry - update of the respective mapping



5.2.3 Submission of a CANC entry and cancelation of the respective existing mapping

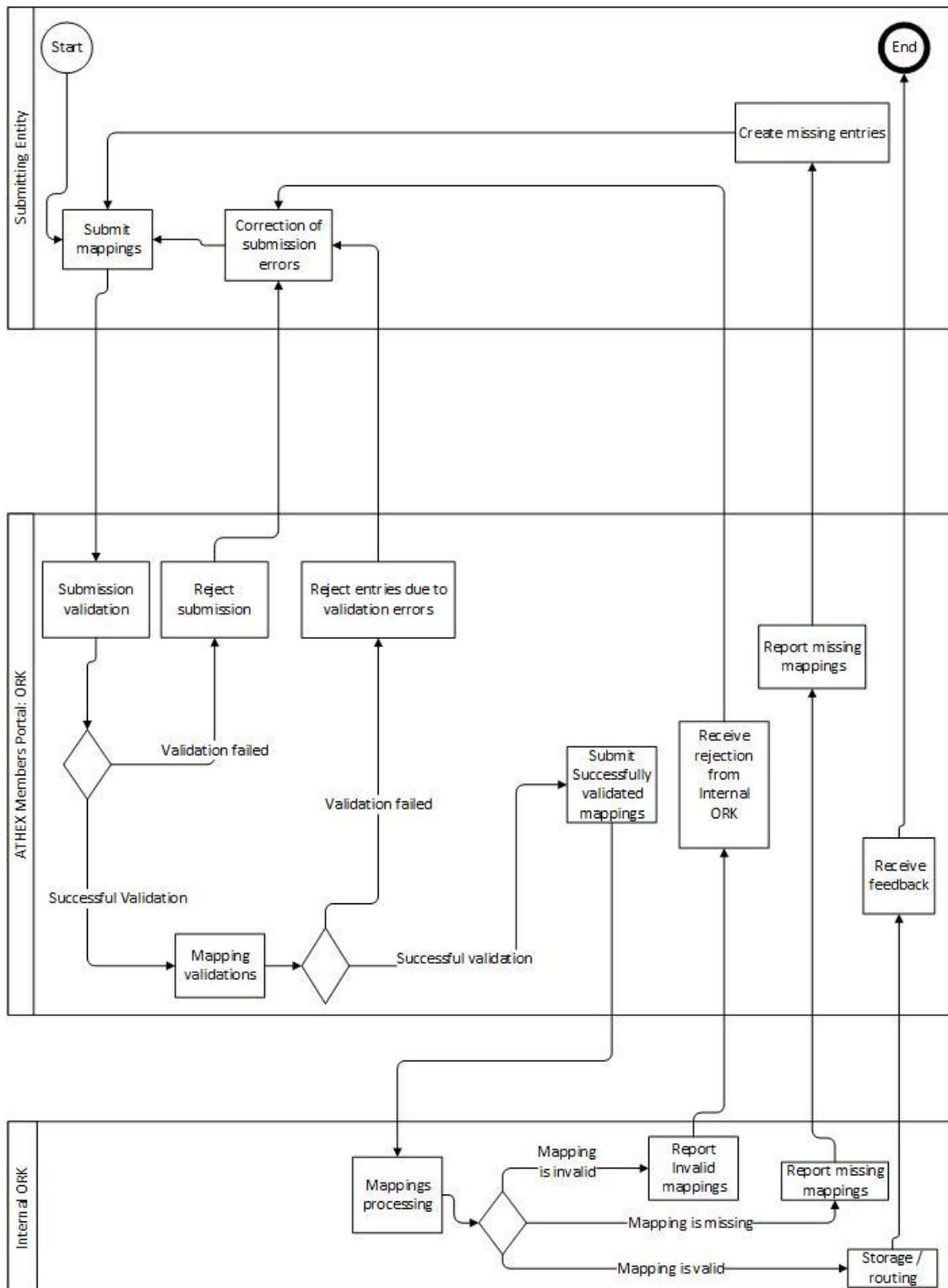


5.2.4 Submission of an AMND entry (after previous NEWT entry)



5.3 Submission Data flow

The diagram below shows the Data flow for a submission in the ORK@ATHEX Service.



5.4 Short/Long mapping table data fields

The following fields are required for the mapping table regarding the translation of Short codes to Long codes.

Field	Values	JSON name	Reference
Entry ID	(system-generated) {INTEGER}	entryId	
Submission ID	(system-generated) {INTEGER}	submissionId	
Entry Status	(system-generated) {ALPHANUM-4}	entryStatus	
Entry Errors	{system-generated} {ALPHANUM-500}	entryErrors	
Report Status	One of 'NEWT', 'UPDT', 'AMND', or 'CANC' {ALPHANUM-4}	reportStatus	[ATHEXORK-1]
Valid From	{DATE} (in YYYYMMDD format)	validFm	[ATHEXORK-3]
Valid To	{DATE} (in YYYYMMDD format)	validTo	[ATHEXORK-4]
Code Type	{INTEGER-1}	codeType	[ATHEXORK-5]
Short Code	{INTEGER}	shortCode	[ATHEXORK-6]
Long Code	{ALHPANUM-50}	longCode	[ATHEXORK-7]
Validity Status	(system-generated) {ALPHANUM-50}	validStatus	
Validity Date	(system-generated) {DATE}	validDate	

5.5 ATHEX ORK Field References and special notations

The following fields are defined in the ATHEX ORK specification.

Reference	Data format	Values
ATHEXORK-1	{ALPHANUM-4}	'NEWT' – New 'UPDT' – Update 'AMND' – Amendment 'CANC' – Cancelation
ATHEXORK-2:	{CHAR-100}	Free text ⁴
ATHEXORK-3	{DATE}	YYYYMMDD
ATHEXORK-4	{DATE}	YYYYMMDD NULL: Valid forever
ATHEXORK-5	{INTEGER-1}	1 - Client Identification Code - LEI 2 - Client Identification Code - National ID 3 - Investment Decision within Firm – National ID 4 - Investment Decision within Firm – Algo ID 5 - Execution within Firm – National ID 6 - Execution within Firm – Algo ID 7 - Non Executing Broker – LEI
ATHEXORK-6	{INTEGER}	Short codes will be of numeric type with values between 0 and 2,147,483,647 (2 ³¹ -1). The values 0, 1, 2 and 3 are reserved for NONE, AGGR, PNAL, and CLIENT respectively. Therefore, valid short codes will be only numbers that are greater than 3 for every code type.
ATHEXORK-7	{ALHPANUM-50}	LEI, National ID or Algorithm ID

⁴ This is reserved for a future version of this Specifications document

5.6 Some useful examples

Example 1: Trading Member with stable mapping data

A trading member whose mappings are static, i.e., do not change over time, can submit mappings of the following form:

REP_STATUS	NEWT
SHORT_CODE	S
LONG_CODE	L
VALID_FM	Current date
VALID_TO	- (NULL)

Short/Long mappings of this type will be valid forever and the Member will be required to submit new ones only when a new Long code (e.g. a new client) is added.

Example 2: Trading Member that creates new mappings daily

A trading member may submit every day the Short/Long mapping file with the mappings that were involved in that day's orders, by uploading data in the following form:

REP_STATUS	NEWT
SHORT_CODE	S
LONG_CODE	L
VALID_FM	Current date
VALID_TO	Current date

The Short/Long mappings will be applicable only for the current trading day. The next day, the Member will have to upload new ones.

Example 3: Completion of a missing mapping

A trading member that has not submitted a mapping for Cycle 1 will have a Miss-type mapping. The member should update the Miss-type mapping by uploading data in the following form:

REP_STATUS	UPDT
SHORT_CODE	S
LONG_CODE	L
VALID_FM	Current date
VALID_TO	Current date

, or even

REP_STATUS	UPDT
SHORT_CODE	S
LONG_CODE	L
VALID_FM	Current date
VALID_TO	- (NULL)

, to denote a mapping that will be valid forever after.

Example 4: Amend a wrong mapping

Supposing that a trading member had uploaded a mapping of the form:

REP_STATUS	NEWT
SHORT_CODE	S
LONG_CODE	L
VALID_FM	D_1
VALID_TO	D_2

, which however is wrong for whatever reason, the member can amend the mapping by uploading at a later date a mapping of the form

REP_STATUS	AMND
SHORT_CODE	S
LONG_CODE	L'
VALID_FM	D_1'
VALID_TO	D_2'

, where $D_1 \leq D_1' \leq D_2' \leq D_2$.

6 Data Exchange Interfaces

ATHEX Members Portal provides two data exchange interfaces.

6.1.1 REST services

A list of all available ATHEX Members Portal REST web services follows.

6.1.1.1 POST-/ork/submit_data

URL: <https://t-ords-1.helex.gr/ords/amp/ork/submissions>

Method: POST

Authentication: Basic WUhZZkw4TlpknOE5rLXcuLg==

Header: Content-Type: application/json

Raw Payload: /tmp/submit-mappings.json

This endpoint is to submit a json containing mappings of any kind (NEWT,CANC, ,UPDT,AMND)

Request: See the json sample bellow:

```
{ "mappings" : [
  {
    "reportStatus" : "NEWT",
    "validFrom" : "20171009",
    "validTo" : "20171009",
    "codeType" : "1",
    "shortCode" : "445566",
    "longCode" : "DRE7863689WEDF98DFG89"
  },

```

```
{
  "reportStatus" : "NEWT",
  "validFrom" : "20171009",
  "validTo" : "",
  "codeType" : "2",
  "shortCode" : "3",
  "longCode" : "PAPADDIMIT23023567"
},
{
  "reportStatus" : "UPDT",
  "validFrom" : "20171009",
  "validTo" : "20171019",
  "codeType" : "2",
  "shortCode" : "5",
  "longCode" : "ELEFThERIA23021953"
},
{
  "reportStatus" : "CANC",
  "validFrom" : "20171009",
  "validTo" : "20171009",
  "codeType" : "2",
  "shortCode" : "6",
  "longCode" : "KOLIPOULO23027893"
},
{
  "reportStatus" : "AMND",
  "validFrom" : "20171001",
  "validTo" : "20171020",
  "codeType" : "2",
  "shortCode" : "4",
  "longCode" : "THEOFILOPO23024551"
}
]
```

}

Response:

HTTP/1.1

200 OK

```
{
  "submission_id" : "1234567890",
  "submission_result" : "Success"
}
```

Notes:

- Submission_id indicates the id of submission to ORK system.
- **submission_id=-1** is returned when failure has occurred. Error is described in
- submission_result.

6.1.1.2 *GET-/ork/getMappings/*

URL: <https://t-ords-1.helex.gr/ords/amp/ork/getMappings/>

Method: GET

Authentication:Basic

Header: Content-Type: application/json

This endpoint is to get a json containing all mappings according to the given parameters.

Parameters

Name	Type	Format	Default value	description
p_submission_id	number	yyyymmdd	null	Retrieves all mappings submitted via the given submission_id
p_entry_status	String	PVLD, SVLD, MISS, PMIS, UPDT, CANC, FVLD, SVFW, ACFW, RJFW, RJCT, ACPT	null	Retrieves all mappings with the given entryStatus
p_report_status	String	NEW, UPDT, CANC	null	Retrieves all mappings with the given reportStatus

Response:

HTTP/1.1

200 OK

```
{
  "items": [
    {
      "submissionId": 3300
      , "CodeType": 1
      , "ShortCode": 445566
      , "LongCode": "DRE7863689WEDF98DFG89"
      , "ValifFrom": "2017-10-09T00:00:00Z"
      , "ValifTo": "2017-10-09T00:00:00Z"
      , "EntStatus": "FVLD"
      , "EntErrors": "validation error: \u0027NEWT\u0027 entry
clashes with existing entry with entry id 1218\n"
      , "ValidStatus": "as"
      , "ValidDate": "2017-10-11T00:00:00Z"
    }
    , {
      "submissionId": 3300
      , "CodeType": 2
      , "ShortCode": 3
      , "LongCode": "PAPADDIMIT23021953"
      , "ValifFrom": "2017-10-09T00:00:00Z"
      , "EntStatus": "FVLD"
      , "EntErrors": "validation error: \u0027NEWT\u0027 entry
clashes with existing entry with entry id 1219\n"
      , "ValidStatus": "as"
      , "ValidDate": "2017-10-11T00:00:00Z"
    }
  ]
  , "hasMore": true
}
```

```

    ,"limit":2
    ,"offset":0
    ,"count":2
    ,"links":[
      {
        "rel":"self"
        ,"href":"https://t-ords-
1.helex.gr/ords/dmztrc/amp/ork/getSubmissions/"
      }
      ,{
        "rel":"first"
        ,"href":"https://t-ords-
1.helex.gr/ords/dmztrc/amp/ork/getSubmissions/"
      }
      ,{
        "rel":"next"
        ,"href":"https://t-ords-
1.helex.gr/ords/dmztrc/amp/ork/getSubmissions/?p_offset=2"
      }
    ]

```

6.1.1.3 GET- /ork/getSubmission/

URL: <https://t-ords-1.helex.gr/ords/amp/ork/getSubmissions/>

Method: GET

Authentication: Basic WUhZZkw4TlpknOE5rLXcuLg==

Header: Content-Type: application/json

This endpoint is to get a json containing all submissions according to the given parameters.

Parameters

Name	Type	Format	Default value	description
p_submission_date	String	yyyymmdd	null	Retrieves all Submissions submitted at the given date

p_submission_status	String	RJCT, ACPT, PART	null	Retrieves all Submissions with the given submission status
---------------------	--------	---------------------	------	--

Request: https://t-ords-1.helex.gr/ords/dmztrc/amp/ork/getSubmissions/?p_limit=2

Response:

HTTP/1.1

200 OK

```
{
  "items": [
    {
      "submissionId": 3299
      , "submissionStatusId": "PART"
      , "submissionTimestamp": "2017-10-11T12:58:16.159477000Z"
    }
    , {
      "submissionId": 3300
      , "submissionStatusId": "RJCT"
      , "submissionTimestamp": "2017-10-11T13:04:47.608573000Z"
    }
  ]
  , "hasMore": true
  , "limit": 2
  , "offset": 0
  , "count": 2
  , "links": [
    {
      "rel": "self"
      , "href": "https://t-ords-
1.helex.gr/ords/dmztrc/amp/ork/getSubmissions/"
    }
  ]
}
```

```

    , {
      "rel": "first"
      , "href": "https://t-ords-
1.helex.gr/ords/dmztrc/amp/ork/getSubmissions/"
    }
    , {
      "rel": "next"
      , "href": "https://t-ords-
1.helex.gr/ords/dmztrc/amp/ork/getSubmissions/?p_offset=2"
    }
  ]
}

```

6.1.2 CSV Files

6.1.2.1 Data Submission via CSV file uploading

See attached files of data submissions examples:

- Submission of a new mapping: ork_submissions_NEWT.csv
- Update of an existing mapping: ork_submissions_UPDT.csv
- Cancelation of an existing mapping: ork_submissions_CANC.csv

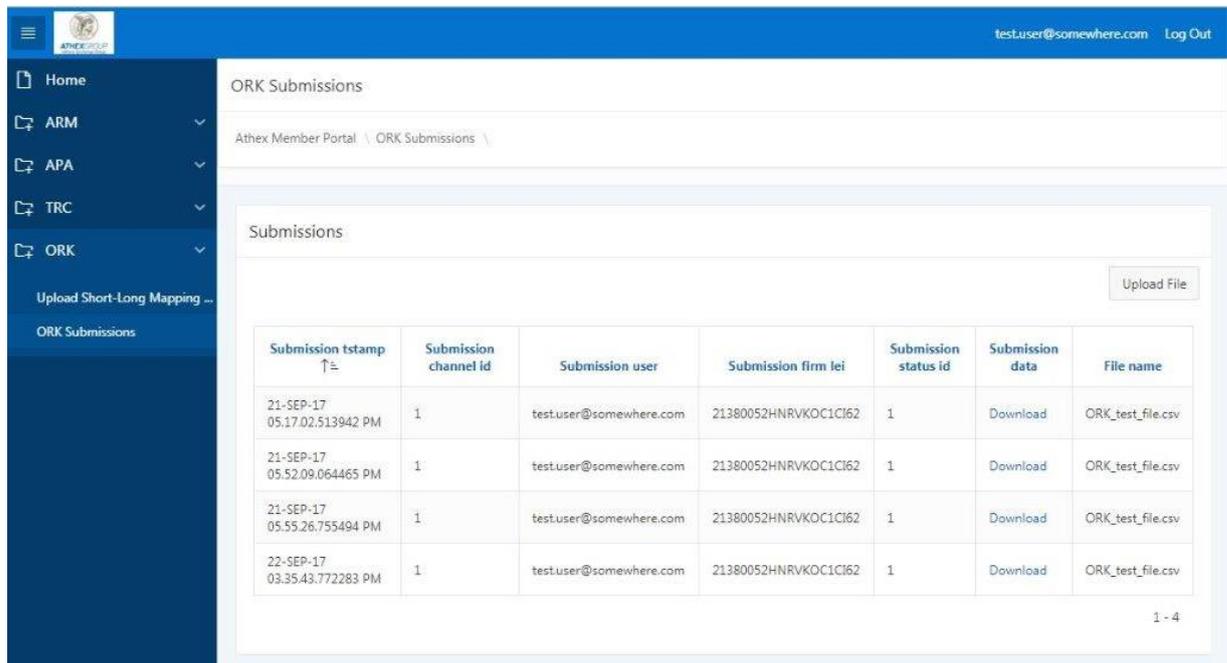
6.1.2.2 Response CSV file

See attached APA-CSV-RESPONSE-FILE-SCHEMA.csv

In response files the first line is reserved to report submission overall status.

6.2 User Interface

For each service provided via ATHEX Members Portal along with the REST web services a graphical user interface will be available as shown below.



test.user@somewhere.com Log Out

Home
ARM
APA
TRC
ORK
Upload Short-Long Mapping ...
ORK Submissions

ORK Submissions

Athex Member Portal \ ORK Submissions \

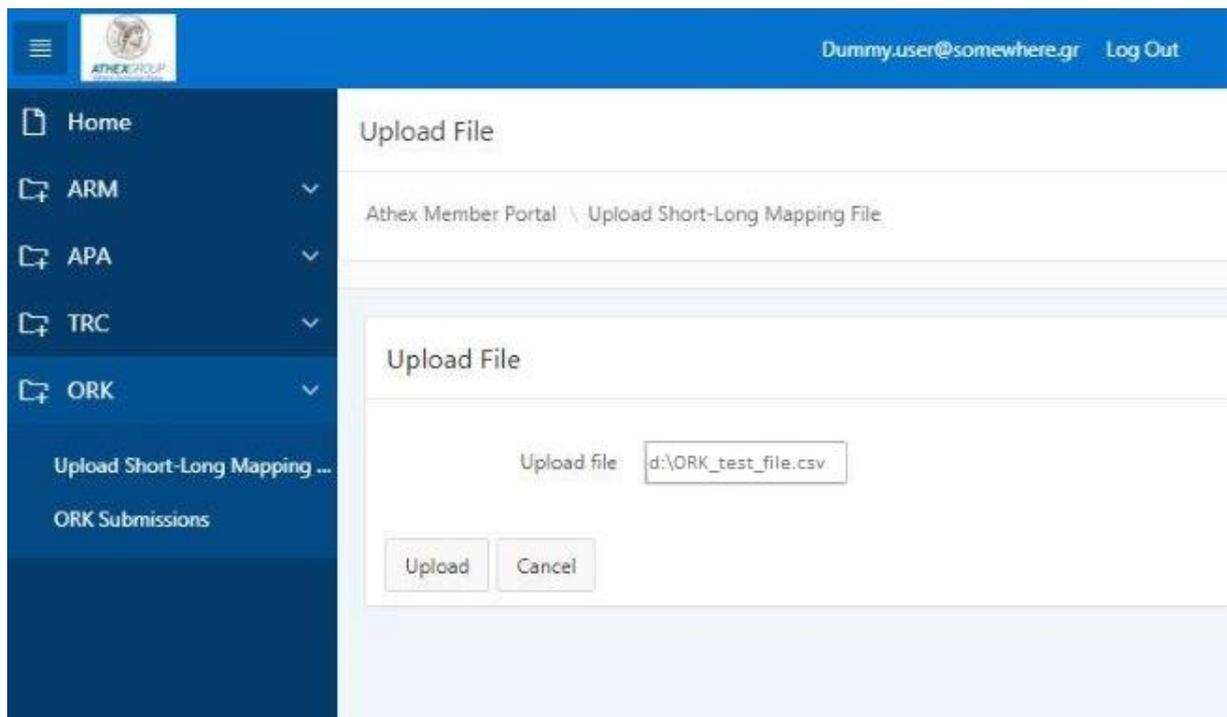
Submissions

Upload File

Submission tstamp ↑	Submission channel id	Submission user	Submission firm lei	Submission status id	Submission data	File name
21-SEP-17 05.17.02.513942 PM	1	test.user@somewhere.com	21380052HNRVKOC1C162	1	Download	ORK_test_file.csv
21-SEP-17 05.52.09.064465 PM	1	test.user@somewhere.com	21380052HNRVKOC1C162	1	Download	ORK_test_file.csv
21-SEP-17 05.55.26.755494 PM	1	test.user@somewhere.com	21380052HNRVKOC1C162	1	Download	ORK_test_file.csv
22-SEP-17 03.35.43.772283 PM	1	test.user@somewhere.com	21380052HNRVKOC1C162	1	Download	ORK_test_file.csv

1 - 4

File report screen of ATHEX Members Portal



Dummy.user@somewhere.gr Log Out

Home
ARM
APA
TRC
ORK
Upload Short-Long Mapping ...
ORK Submissions

Upload File

Athex Member Portal \ Upload Short-Long Mapping File

Upload File

Upload file: d:\ORK_test_file.csv

Upload Cancel

File upload interface of ATHEX Members Portal