EUREX

DEUTSCHE BÖRSE CASH MARKET

Regulatory Reporting Solution for Non-MiFIR members

User Manual

Frankfurt Stock Exchange and Eurex

Version 2.0   12.11.2024

Abstract

This document describes which information the trading participants that are not subject to MiFIR must provide to allow Frankfurt Stock Exchange (FSE) and Eurex to fulfil their MiFIR transaction reporting obligations and how to provide this information.

Document History

Version	Date	Description
1.0	15 Jul 2021	Revised version, ready for release
1.1	11 Aug 2021	New: Separate upload and processing for corrections/cancellations of previous trade dates
1.2	21 Sep 2021	Added description of sample files
1.3	1 Oct 2021	Added a sample of a backup enrichment feedback file
1.4	25 Nov 2021	Corrected CUE upload: file name must include *current* date and be *unzipped*. Added that after an upload the feedback should be awaited before uploading another file. Added that multiple uploads of a file with the same file name will be rejected by CUE.
		Added the columns TRADE_ID (to identify non-CCP cleared transactions) and INFO: EUREX_PRODUCT_ID to the extract, upload, and feedback files.
		Aligned the sample files description for Eurex and Xetra.
		Corrected file name specs for feedback files to upload files.
1.5	Dec 2021	Added that TRADE_ID will always be filled in the extracts and must be filled for uploads of market side-transactions for XETR/XFRA and will be ignored for upload of Eurex market-side transactions.
		Corrected error messages for "short code ## not found" to "ID ## not found" in the sample extract files and added the timestamp in the sample feedback file names.
		Limited upload file sequence numbers from TVUPL001 to TVUPL050 for current uploads and TVUPL500 to TVUPL550 for historical corrections.
1.6	14 Mar 2022	Added complete list of possible file name extensions in case of upload errors in CUE.
		Added information that the file date for upload files must be the next trading date if the current date is not a trading date.
1.66	30 Jun 2022	Updates to this user manual for RRS 1.1
		• Addition of extract error ERR-29.1 at the end of chapter 4.3
		• Updates to Corrections and Cancellations chapter 4.7
		• Addition of historical upload/correction sample file in chapter 5
		For details of the changes of validation rules, see the change log in Trading Venue File Specs.
1.68	30 Aug 2022	Chapter 4.4.3: Clarified ignoring of additional sequence records if the corresponding master record with SEQUENCE_NUM=0 has an error.
1.69	Sep 2022	Correction in chapter 4.4.2 regarding INTC client-side uploads.
		Addition that Byte-Order-Mark is not allowed in upload files (chapter 4.1).
1.7	Jan 2024	Overall document revision and update in line with RRS R.1.2.
1.71	Mar 2024	Corrections concerning validation of multiple buyers/sellers in line with File Specs.
1.8	June 2024	Correction concerning non applicability of default mapping national ID from trader ID in case of TES Trades.
		Removal of redundant information.
1.9	August 2024	Added known limitation with regards to the availability of extract file for historical corrections TVEXT500.
2.0	November 2024	Document revision and update in line with RRS R.1.4.

Table of Contents

1.   Introduction

According to MiFIR (EU Regulation No 600/2014) Article 26(5) the operator of a trading venue must report transactions executed through its systems by firms that are not subject to MiFIR. This requirement applies to business partners of Deutsche Börse Group whose legal residence is outside of the European Economic Area (third country firms) or who are members of the European System of Central Banks and who have one or multiple memberships of its trading venues (in the following referred to as Non-MiFIR business partners/members).

Since not all reportable details of respective transactions are available in the trading system, Frankfurt Stock Exchange (FSE) and Eurex require their Non-MiFIR members to provide the missing data latest by 6 pm CET/CEST on the following trading day.

This User Manual describes the transaction reporting process of the Deutsche Börse Regulatory Reporting Solution (RRS), which enables the Non-MiFIR members to provide the necessary data.

Chapter 2 offers an overview of the reporting process; chapter 3 illustrates the required setup; chapter 4 guides the user through the whole reporting process by illustrating the file structure and content for each file type, the enrichment requirements, and the backup solution adopted by the Trading Venues in case the enrichment by the Member is missing or erroneous, as well as the solution for reporting corrections to existing transactions. Chapter 5 provides a description of the sample files, chapter 6 illustrates the most important limitations in the current release, chapter 7 outlines the testing possibilities, chapter 8 contains the contacts for customer support and chapter 9 concludes the manual with a table of abbreviations and definitions used throughout this document.

The following further documents are available at https://www.eurex.com/ex-en/rules-regs/mifid-mifir

under ‘Reporting’ section or at https://www.xetra.com/xetra-en/newsroom/current-regulatory-topics/mifid-two-and-mifir:

Document	Content
Trading Venue Reporting File Specs	Details of the Venue Extract, Upload and Feedback Files
89TVEXT001ABCLO20210303XEUR.CSV 89TVEXT001ABCLO20210303XETR.CSV	Extract sample files
89TVUPL001ABCLO20210304XEUR.CSV 89TVUPL001ABCLO20210304XETR.CSV	Upload sample files
89TVFBK001ABCLO20210304125959XEUR.CSV 89TVFBK001ABCLO20210304125959XETR.CSV	Feedback sample files
89TVBKU001ABCLO20210304XEUR.CSV 89TVBKU001ABCLO20210304XETR.CSV	Backup enrichment sample files
Information handbook for audit trail, transaction and other regulatory reporting under the MiFID II/ MiFIR regime	General FSE/Eurex information on MiFID II/MiFIR

2. High-level service overview

2.1 Process chart

Chart 1 below illustrates the planned reporting process chain offered by RRS.

Chart 1.Trading Venue Transaction Reporting process
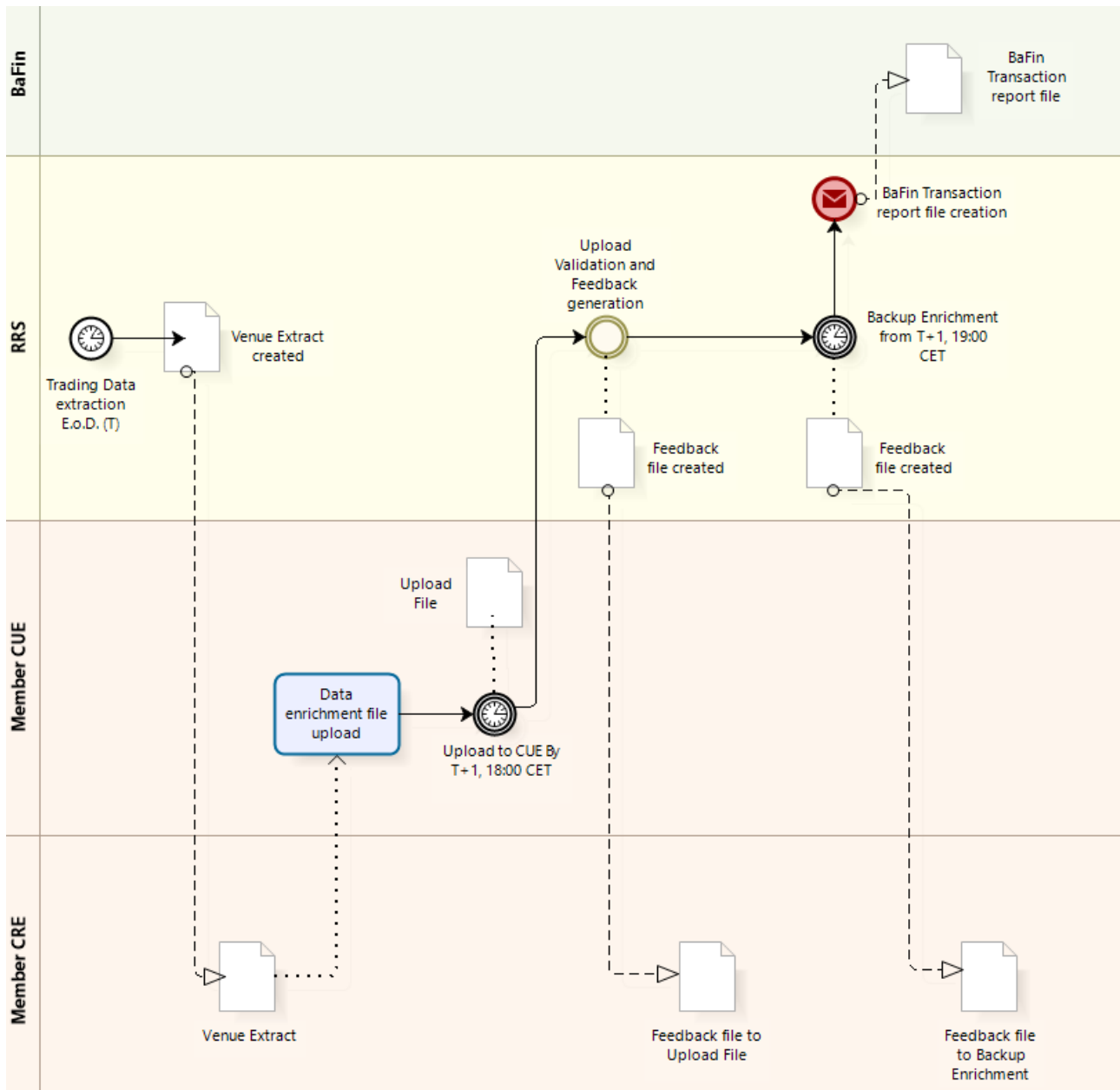
Note: the provided time schedule is the same for both CET and CEST.

2.2 Process description

The functional process for Trading Venue Transaction Reporting consists of the following steps:

i. One-Off: The Non-MiFIR business partner sets up the mifid market for CRE and CUE (see section 3.1);

ii. After the end of every trading day (T), RRS generates a transaction report extract CSV file (Venue Extract) per Non-MiFIR business partner and per operating MIC (XEUR, XETR, XFRA). The extract files are available in the morning of the next calendar day. This means that extracts for Friday transactions will be already available on Saturday;

iii.   RRS provides the Venue Extract files in the Non-MiFIR business partner's "mifid" CRE folder(s) (see section 3.1 below);

iv.   The Non-MiFIR member uploads files with missing transaction report fields per operating MIC (XEUR, XETR, XFRA) via CUE by 6 pm CET/CEST on T+1 (next trading day);

v.   RRS validates Upload File(s) and provides Feedback File(s) via CRE;

vi.   As backup, RRS enriches fields not provided by Non-MiFIR member, starting at 7 pm CET/CEST on T+1;

vii.   RRS provides the Feedback File for Backup enrichment via CRE;

viii.   RRS generates the BaFin transaction report file and delivers it to BaFin.

3. Technical setup

Section 3.1 describes the setup of the connection to the CRE and CUE and the "mifid" folders through which Non-MiFIR members may download and upload the relevant files. Moreover section 3.2 describes the source of specific master data field values (trader ID and short/long codes).

3.1   Setup of Non-MiFIR members

A business partner is the legal entity set up for contracts with Deutsche Börse Group. Such a business partner can have multiple exchange memberships. A Non-MiFIR business partner shall have a directory in CUE and CRE set up with the market "mifid" for at least one of their member IDs.

See also the Common Report Engine and the Common Upload Engine User Guides. These documents are available at:

- Xetra.com -> Technology -> T7 trading Architecture -> System documentation -> Release (current release) -> Reports
- Eurex.com -> Support -> Initiatives & Releases -> T7 Release (current release) -> Reports

For CRE, it is recommended that the Non-MiFIR business partner has the "mifid" market set up for **only one of their member IDs**, since transaction reporting is on legal entity level. Therefore, the Venue Extract and Upload Files cover *all* transaction reports of the Non-MiFIR business partner for any of their member IDs.

If the market "mifid" is set up in CRE for multiple member IDs of the same Non-MiFIR business partner, then the *same*, complete extract of *all* their transactions per venue will be saved in the "mifid" folder of each member ID.

In CUE, the market "mifid" may be equally set for multiple member IDs of the same Non-MiFIR business partner, in which case the Non-MiFIR business partner can upload the transaction reports for all their member IDs in any of their member ID mifid/UPLOAD folders (see CUE directory structure below).

To be able to receive the feedback file in CRE, the market "mifid" must be set up for the same member ID both in CRE and CUE. For practical reasons, the Non-MiFIR business partner should use just one of their member IDs both for uploading transaction files in CUE and downloading them in CRE.

Eurex and Xetra Member Section users with the "Self-Service Certificate Admin" (SSCA) permission can set access rights to the market "mifid" separately. The market "mifid" is visible to Non-MiFIR members admitted to Eurex or Frankfurt Stock Exchange, even if the admission is in status "in process".

The user with SSCA permission can then set up access to the "mifid" folder in the Member Section as follows.

- The User with the SSCA permission logs into the Member Section, enters Technical Connection / Requests & Configuration / Self Service Certificates, and selects "Report Engine User" for CRE or "Upload Engine User" for CUE;
- The User with SSCA permission creates a new user or selects an existing user;
- The User with SSCA permission presses "Add Access" and adds access to the Market "mifid" for one of their member IDs and selects Simulation or Production environment;

Figure 1. Adding Market "mifid" to CRE in Member Section
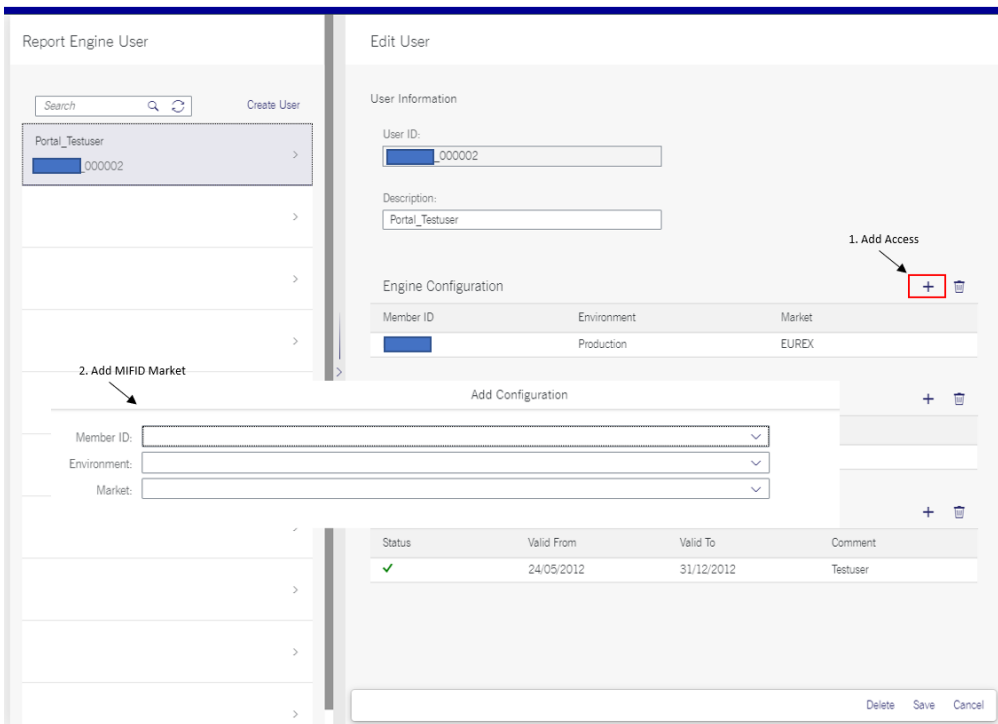
Figure 2. Adding Market "mifid" to CUE in Member Section
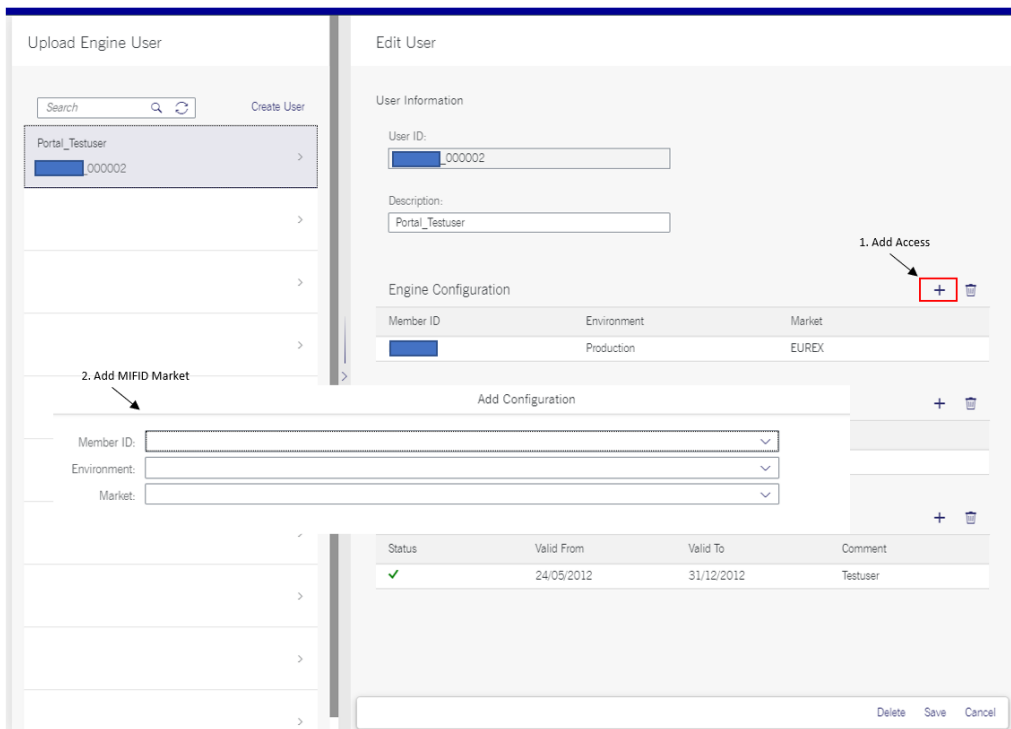
- Adding Certificates:
  - o The User with the SSCA permission clicks on "Add Certificate" and either selects an existing certificate to upload ("Upload Certificate" option) or generates a new certificate via the Member Section wizard ("Generate Certificate" option);

Figure 3. Creating new certificates in CRE
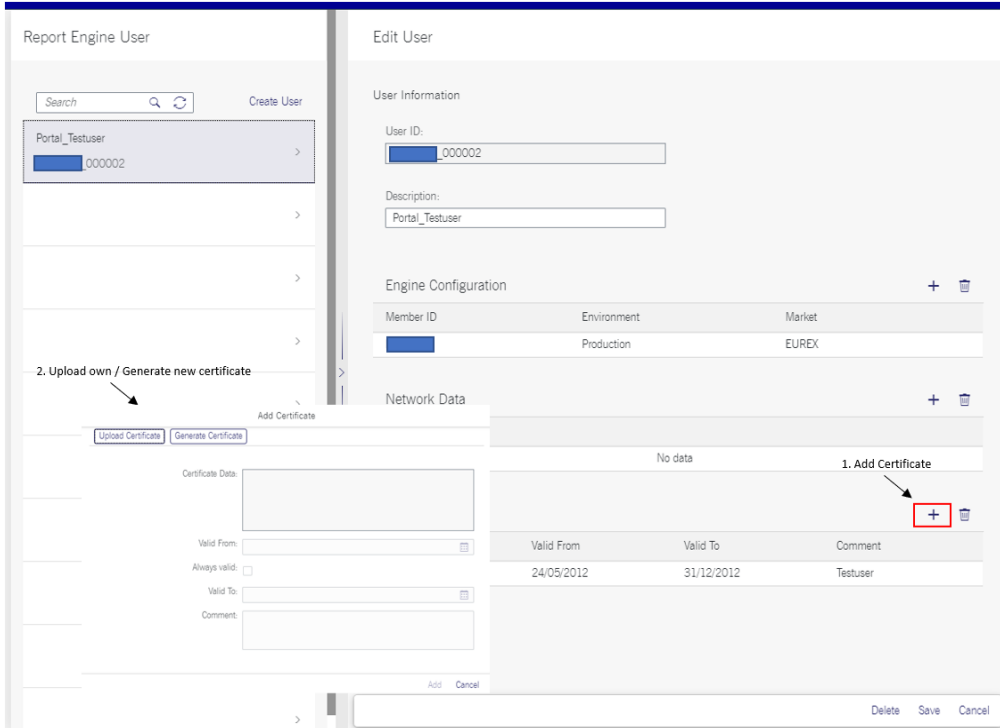
Figure 4. Creating new certificates in CUE

  - o When uploading an existing certificate, the User with SSCA permission can share the same key for both CUE and CRE access and among multiple users as well;
  - o The tasks of the User with SSCA permission are completed at this point.

Adding access for one new user can take up to two business days, while changes to the CUE/CRE set-up are applied overnight for the next day. Once the "mifid" CUE/CRE setup is implemented, the resulting directory structure in CRE will be as follows:

Business Partner e.g., 0001028005

- member ID, e.g., abclo
    - environment production/simulation P/S
        - Market: xetr
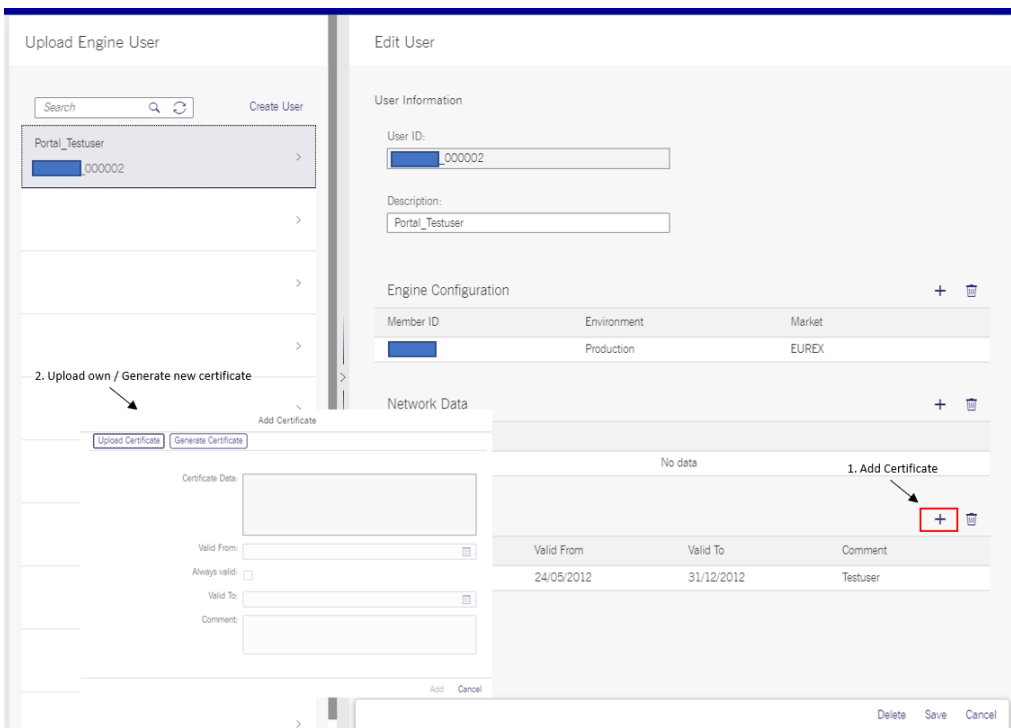   - Business day e.g., 20210322
                - All reports like TR160, TC540, …

        - Market: xeur
            - Business day e.g., 20210322
                - All reports like TR160, TE540, …

        - Market: mifid
            - Business day e.g., 20210322
                - Non-MiFIR reporting Venue Extract file
                - Non-MiFIR reporting Feedback File

        - Market: …

e.g., abclo/P/mifid/20210216/

The directory structure in CUE will be as follows:

Business Partner e.g., 0001028005

- member ID, e.g., abclo
    - environment production/simulation P/S
        - Market: mifid
            - UPLOAD
                - Non-MiFIR reporting Upload File for upload
            - Current day e.g., 20210322
                - Non-MiFIR Upload File after upload on the current day

e.g. abclo/P/mifid/UPLOAD/

3.2   Setup of Trader ID and short/long codes

For the extraction of correct data from the trading system it is essential that the following master data is correctly maintained by the Non-MiFIR Member at the Trading Venue:

- Short and long codes
- Trader ID and corresponding details

For details see "Information handbook for audit trail, transaction and other regulatory reporting under the MIFID II/ MiFIR regime" (ref. in chart. 1 above).

Short codes can be used in the order/quote for fields "Client identification code", "Execution within firm" and "Investment decision within firm". RRS will map the relevant field to the long code that the Member has provided with the short code/long code upload file.

The national ID of a trader shall be used if in the order/quote the "Execution within firm" or the "Investment decision within firm" are not specified and the qualifier fields are set to "human". Therefore, the Member should make sure that trader data are up-to-date and correct in SAP. Please note, that this default mapping solution does not apply for trades entered via Trade Entry Service (TES).

4. Reporting process

This section describes in greater detail the steps of the reporting process (cf.

Chart 1 above).

4.1 File format and structure

The format of all files involved in the reporting process, that is, Venue Extract, Upload File and Feedback Files, is CSV with comma separated values (**not** semicolon). Byte Order Mark (BOM) at the beginning of the file is not permitted. An XML format is not supported.

As decimal point "." is used; the date format is YYYY-MM-DD and date/times are in UTC format. The files display a simple header with only one header row listing the column names, while all other relevant information is already included in the file name.

Although the Venue Extract provides the Buyer and Seller IDs based on the trading capacity and the client ID sourced from the trading system, the member might be required to enrich these fields in the Upload File (see section 4.23). For client IDs referring to natural persons the member must provide first name, surname and date of birth of the client in the Upload File. The supported character set for natural-person names is only one-byte extended ASCII/Windows-1252 code page. Greek and Cyrillic characters shall not be used, and shall instead be transliterated according to the Name Adjustment table in the Trading Venue Reporting File Specs.

4.2 File format

File names. The file naming convention is adapted to the four file types that are produced in the process. The file name is constructed as illustrated in Table 1.

Table 1. File Naming Convention

Field	Meaning	Example
[0-9]{2}	Environment ID	88 Non-MiFIR Transaction Reporting Prod 89 Non-MiFIR Transaction Reporting Sim
[0-9A-Z]{8}	Report Name	TVEXT001
[0-9A-Z]{5}	Member ID	ABCLO
[0-9]{8} YYYYMMDD	Trading Date for Venue Extract and Backup Enrichment Feedback files Current date (if not a trading date, then next trading date considering Eurex or FSE trading calendar) for all other files	20210216
[0-9]{6} HHMMSS	Timestamp (only provided for feedback files to upload files)	125959
[0-9A-Z]{4}	MIC	XEUR, XETR, XFRA
[0-9A-Z]{3}	File type	.CSV.ZIP (all extract and feedback files are compressed ZIP containers)

		.CSV for upload files (unzipped)

Please be aware that the new Environment IDs are 88 for production and 89 for simulation.

For instance, the file name for a Venue Extract in the production environment is 88TVEXT001ABCLO20210216XEUR.CSV.ZIP.

Possible Report Names in addition to the name for Venue Extracts are:

- TVUPL001 (or subsequent numbers up to TVUPL050) for Upload Files
- TVUPL500 (or subsequent numbers up to TVUPL550) for Upload Files for corrections and cancellations of old data
- TVFBK001 (or subsequent numbers) for Feedback Files to Upload Files
- TVBKU001 for Feedback Files after Backup Enrichment
- TVEXT500 for files showing old transaction reports to be corrected (see section 4.7 below). Please not that this file will not be provided with RRS Release 1.4.

Please refer to the Naming Convention overview table in the Trading Venue Reporting File Specs for complete examples of file names.

Please be also aware that on the filesystem (cf. section 3.1 above) the MemberID and the market "mifid" are in lowercase only, whereas the environment and the report name are in upper case only. For instance:

/0001028005/abclo/P/mifid/20210216/88TVEXT001ABCLO20210216XEUR.CSV.ZIP

/0001028005/abclo/S/mifid/20210216/89TVEXT001ABCLO20210216XEUR.CSV.ZIP

File Structure. Please note, that there will be no line count at the end of the file.

Both Venue Extract and Upload File contain the same fields, but some of them are labeled with INFO:[Field name], e.g. INFO:INSTRUMENT_ID. Those fields are included in the file just for information purposes to the Non-MiFIR member. The information provided in these fields with the Venue Extract will be ignored in the Upload File, i.e. "INFO:"-fields can be filled with the values provided in the extract or remain empty. However, the column headings and commas still need to be included in the upload.

Moreover, several ESMA Transaction reporting fields are not relevant or set to a default value for Trading Venue reporting of the DBAG venues, and as such they have been excluded from the Venue Extract as well as from the Upload File, for the sake of clarity. The excluded fields are the following ones:

- Transaction Reference Number (field 2): this field is not necessary to identify a transaction during the enrichment process, since a combination of alternative fields is used (see below). Transaction Reference Number is directly generated by RRS in the Outbound file to BaFIN;
- Order Transmission fields (fields 25-27), since Eurex and FSE do not qualify for Transmission (conditions set in Article 4 of Commission Delegated Regulation (EU) 2017/590 (RTS 22) are not met).
- Up-front payment fields (fields 38-39), not applicable to Eurex and FSE trades;
- Fields specifying the instrument details (Fields 42 to 56), since the instruments traded on Eurex and FSE are listed, and thus have an Instrument ID and no further information is required;
- OTC Post-trade indicator (field 63), since all reportable trades are on-venue (except for client-side transactions for aggregated orders, which are however not independently OTC);
- Derivative Notional Increase/Decrease (field 32) is not applicable;
- SFTR Indicator (field 65) is false by default.

Multiple Buyers or Sellers In case multiple buyers must be reported, buyer data (ID type, ID, first name, surname, date of birth) shall be provided on extra rows together with the same value for field 16A (SELLER_ID_TYPE) and 16 (SELLER_ID), field 3 (TVTIC) and either field E01 (SIDE_TRADE_ID) and E17

(TRADE_ID) or field E02 (INTC_NUM), depending on whether or not the transaction is off-exchange and part of an aggregated order (see 4.4.2 below), as well as an increasing sequence number, but leaving all remaining fields empty, as they are assumed to be identical to the transaction that is referenced with sequence number (SEQUENCE_NUM) "0" (see Upload File sample). The same logic applies to seller data.

Repeatable fields are marked with 'Y' in column "REPEATABLE" in the Trading Venue Reporting File Specs, Sheet "EXTRACT-UPLOAD FIELD LIST". For an example of multiple sellers see upload row 14 in the upload sample file described in chapter 5.2 Upload sample files (cf. also Upload files 89TVUPL001ABCLO20210304XEUR.CSV; 89TVUPL001ABCLO20210304XETR.CSV)

Unique Key Identifier. The Trading Venue Transaction Identification Code (TVTIC, field 3) in association with field E01, Side Trade ID, will be used as unique key identifier for all Eurex transactions. For XFRA and XETR transactions the unique key is the Trading Venue Transaction Identification Code (TVTIC, field 3) in association with fields E01, Side Trade ID and E17, TRADE_ID.

Aggregated client orders (INTC client-side transactions) are identified by TVTIC+INTC number greater than 0. That is the TVTIC shall be filled with the TVTIC of (one of) the market-side execution(s), whereas the Side Trade ID and TRADE_ID shall remain **empty**, and the INTC number (field E02) shall be filled with a sequential number of the client order, which is greater than 0 (see section 4.4.2 below for detailed instructions for reporting INTC transactions).

4.3   Venue Extract provision and key fields

This section describes the process that provides the Non-MiFIR Member with the Venue Extract, as well as the content of the Venue Extract file.

Per operating MIC after the end of the trading day, RRS provides a Venue Extract of all transactions of the trading day by any member ID of a Non-MiFIR Member to each of their member IDs with market "mifid" in CRE.

The Venue Extract is provided in the CRE folder of the member ID under market "mifid" and the respective trading day (cf. section 3.1 above).

The following fields are **not** relevant or have a default value for Eurex transactions:

- Net amount (field 35), it only applies to Bonds, so it is ignored in Eurex Upload Files
- Waiver (field 61) is only relevant for TES transactions, but cannot be modified by the Non-MiFIR Member, so it is only included for information purposes
- Short Selling Indicator (field 62) can only be 'SELL' for Eurex, it is automatically set and cannot be modified by the Non-MiFIR Member
- TRADE_ID (field E17) will be provided in the extract but ignored in the upload since not required to identify Eurex transactions

The following fields are **not** relevant or have a default value for FSE transactions:

- Complex Trade Component ID (field 40): not applicable, so it will be present in the Venue Extract but empty
- Waiver (field 61) is not applicable, so it is included in the Venue Extract but left empty

Commodity Derivative Indicator (field 64) is not applicable to most instruments traded on FSE, so it will be left empty in the Venue Extract. If the instrument traded on FSE has a CFI code requiring a Commodity Derivative Indicator (cf. MAR field 4), as is the case for some mini-futures or mini-warrants on commodities or some mini-warrants on miscellaneous, RRS will provide "FALSE" as default field value in the outbound. Once the Venue Extract is available in the Non-MiFIR Member's CRE "mifid" folder, the Non-MiFIR Member is required to correct any incorrect data and fill in potentially missing information.

The Venue Extract displays different types of fields. In the Trading Venue Reporting File Specs, Sheet "EXTRACT-UPLOAD FIELD LIST" such types are identified with different colours, as Table 2 shows:

Table 2. Field types as described in Trading Venue File Specs

Color Code	
	AUTOMATICALLY FILLED BY TRADING VENUE
	MODIFIABLE BY NON-MIFIR MEMBER
	CONDITIONAL ON INTC_NUM

Grey fields are not modifiable by the Non-MiFIR Member, as they are automatically filled with data that are provided by the Trading System: e.g., field 5 (MIFID Investment Firm), which has 'FALSE' as default value, or field 34 (Price Currency) and field 36 (Venue), which are directly mapped from the trading system. The Non-MiFIR Members shall instead be able to modify white fields, and, if they report the client side of an aggregated order, the yellow fields as well. Such field modifications and enrichment shall be provided in the Member's Upload File (see section 4.4.1 below).

Among the grey fields, the Venue Extract includes fields marked with a "MISSING flag", e.g., MISSING_BUYER, MISSING_SELLER, MISSING_SHORT_SELLING_INDICATOR, to indicate that some mandatory data is missing, when these fields have value 'Y'. For instance, if MISSING_BUYER = 'Y' then Buyer ID and/or Buyer Firstname, Buyer Surname, Buyer Date of Birth must be enriched.

In the Venue Extract, fields containing an ID are derived from the short/long code mapping (please, refer to the Information handbook for audit trail, transaction, and other regulatory reporting under the MiFID II/ MiFIR regime, cf. chart. 1 above). In case no valid ID can be found, the ID_TYPE is set to NULL and the MISSING flag for that field to 'Y'. The ID column may contain an error message e.g., "Invalid LEI XXX" if the LEI uploaded with that short code had expired. For instance, if no Buyer long code is found for a given short code in the short/long code table (see ref. above), then field BUYER_ID_TYPE in the Venue Extract will be set to NULL, BUYER_ID will be "ID ## not found" and MISSING_BUYER will have value 'Y'.

If a transaction is executed on an agent or riskless principal account (MIFIR_TRADING_CAPACITY = 'AOTC' or 'MTCH'), then the members are not allowed to enter the short code of their own LEI as client ID since such transactions must be executed on a proprietary or market maker account. Since the trading system T7 does not block such orders, the RRS extract will fill the BUYER_ID or SELLER ID with "ERR-29.1 in buyer" or "ERR-29.1 in seller", respectively, set BUYER_ID_TYPE or SELLER_ID_TYPE to empty, and the MISSING_BUYER or MISSING_SELLER flag to 'Y'.

The following paragraphs explain under which conditions the MISSING flag is set to 'Y' for the respective fields.

Buyer/Seller

For Buyer and Seller, the MISSING flag (i.e., MISSING_BUYER; MISSING_SELLER) will be present if the short/long code mapping for BUYER/SELLER_ID fails, or if the short/long code mapping successfully returned a valid ID in BUYER_ID or SELLER_ID, but the BUYER/SELLER_ID_TYPE is NATIONAL_ID. In this case the Non-MiFIR Member is expected to enrich buyer/seller data with first name, surname, and date of birth.

Investment Decision within Firm

The MISSING flag for field 57 Investment Decision within Firm, that is, MISSING_INVEST_DEC = 'Y, will be set if field 29, MIFIR_TRADING_CAPACITY has value 'DEAL' but no INVEST_DEC_ID is provided or can be derived from the short/long code mapping.

Execution within Firm

The MISSING flag for field 59, Execution within Firm, that is, MISSING_EXEC_RESP= 'Y', will be set if the EXEC_RESP_ID_TYPE is not 'NORE' and if the EXEC_RESP_ID is empty or cannot be derived from the short/long code mapping.

Short Selling Indicator

The MISSING flag for field 62 Short selling indicator is only possible for transactions executed on XFRA or XETR. It will be set, i.e., MISSING_SHORT_SELLING_INDICATOR= 'Y', if the CFI code of the traded instrument corresponds to a sovereign bond or a share.

Commodity Derivative Indicator

The MISSING flag for field 64 Commodity Derivative Indicator is only set for transactions executed on XEUR and will be present if the traded instrument requires a commodity derivative indicator according to MAR, field 4.

4.4   Non-MiFIR Member File Upload process

This section describes the process of the Non-MiFIR Member providing RRS with one or more Upload File(s) containing enriched or corrected transaction data, if required.

The File Upload process consists of the following steps:

i.   The Non-MiFIR member logs in to CUE with a certificate;

ii.   The Non-MiFIR member uploads a transaction CSV file with file name according to the file name convention defined in section 4.2 above (see also Trading Venue File Specs, Introduction sheet) via sFTP to the folder "mifid/UPLOAD" within their CUE directory. The CUE directory structure is the same as for the CRE, except that the destination folder shall be the "UPLOAD" folder, instead of the Business Date folder;

iii.   CUE checks for newly uploaded files and checks that the file name conforms to the file name convention. An upload is only possible with the date in the file name equal to the current date (if the current date is not a trading date, the next trading date shall be used);

iv.   During processing, CUE changes the file suffix to .CSV_PROCESSING;

v.   CUE will automatically reject multiple uploads with the same name. To have a clear differentiation between upload files the sequence number within the file name must be incremented from 001 to 002, etc;

vi.   CUE moves the file from the UPLOAD folder to the folder "mifid"/YYYYMMDD with YYYYMMDD being the current date (next trading date if current date is not a trading date);

vii.   If the file name is valid, then CUE shares the file with RRS and changes the file suffix from .CSV to ".CSV_UPLOAD_SUCCESSFUL". RRS regularly checks for new uploads to validate;

viii.   If the file name is invalid, then the file is not processed and the file name will be appended with an error message in the business date folder, see section 4.4.3 below;

ix.   A further file for the same venue should only be uploaded after receiving the feedback file. Any further file uploaded before will be ignored.

4.4.1   Fields that must or may be enriched by the Non-MiFIR Member

For a detailed description of all Upload File fields, please see the Trading Venue Reporting File Specs. This section shall only offer a brief overview of the fields that shall be enriched in case of missing information in the Trading System.

The content of the Upload File is as follows:

- Transaction report identification fields (e.g., Report Status, TVTIC, Side Trade ID, Trade ID, INTC number, Sequence number)
- Trade participant and decision maker data (e.g., Buyer data, Seller data, Buyer decision maker data, Seller decision maker data)
- Trade data for INTC client-side transaction reports (e.g., Trade date and time, MiFIR Trading Capacity, Quantity, Price)
- Investment decision within firm data
- Execution within firm data
- Further data (e.g., Short selling indicator, Commodity derivative indicator)

Transaction report identification fields

Report Status (ACTION_TYPE): new transaction reports or updates of previously sent transaction reports shall be marked with ACTION_TYPE = 'NEWT', while 'CANC' is reserved to cancellations of INTC client-side transaction reports. Cancels of old transactions reported with RRH shall be marked with 'CANO', see section 4.7 below.

Trading Venue Transaction Identification Code (TVTIC): This field must always be filled.

Side Trade ID (SIDE_TRADE_ID) shall be filled in all uploads of on-venue transactions as in the extract file and empty in all INTC client-side transactions. See section 4.4.2 below.

Trade ID (TRADE_ID) shall be filled in all uploads of XETR and XFRA transactions and empty in all INTC client-side transactions. It may be either filled or empty in uploads of Eurex transactions and it will be ignored there.

INTC_NUM: The Non-MiFIR Member must fill this field with a sequential number that is greater than 0 for each record of client-side (i.e., off-exchange) transactions of aggregated orders, section 4.4.2 below. For all market transactions this field should be empty or 0.

SEQUENCE_NUM: this field value is always 0 unless multiple buyers or sellers or buyer/seller decision makers are being reported, see section 4.2 above.

Trade participant and decision maker data

Buyer and Seller information is mandatory, therefore related missing information will be flagged in the MISSING_BUYER and/or MISSING_SELLER fields (see section 4.3 above). If the mapping of a client short code to their long code yields incorrect data or no data, the Non-MiFIR Member will be required to enrich the Buyer or Seller ID field with the correct data. In addition, for National IDs the buyer or seller Firstname, surname and date of birth must be provided in the transaction upload.

Note that for transactions executed on MIC XFRA in instruments which are non-CCP eligible, an ESMA working group has revised the earlier decision to report the segment MIC as counterparty. In the MiFIR guidelines (ESMA/2016/1452), section 5.14.1 "Executing a transaction on a Trading Venue in an anonymous order book", Example 30 b the passus "the identity of the acquiring/disposing party was not disclosed at the point of execution" should be interpreted as not disclosed with the trade confirmation. Since the field ctrPtyId contains the counterparty member ID on the trade confirmation report TC 810 (T7 Daily Trade Confirmation), the LEI of this counterparty must be reported.

Buyer/Seller Decision Maker fields (e.g., Buyer/Seller Decision Maker ID, Buyer/Seller Decision Maker Firstname, etc.) can be left empty if the Buyer/Seller is the decision maker. Otherwise, the decision maker ID (and for National IDs also the first name, surname, and date of birth) must be provided.

Investment decision within firm data

Field 57, Investment decision within firm (INVEST_DEC_ID), must be filled for MiFIR Trading Capacity "DEAL" and may be filled otherwise. Such requirement is now also implemented in the trading system (T7) GUI, so the member shall just take care of providing the correct short code or algo code for the Investment ID in the order, when required.

In RRS, this field is also associated to a MISSING flag (see section 4.3 above). The value of field 58, Country of the branch responsible for the person making the investment decision, depends on field 57, please refer to the "UPLOAD VALIDATION RULES" column, sheet "EXTRACT-UPLOAD FIELD LIST" in the Trading Venue Reporting File Specs.

Execution within firm data

Field 59, Execution within firm (EXEC_RESP_ID), shall be filled depending on who is responsible for the execution. If entering orders via T7 GUI, the member can now also provide the Exec ID short code or algo code directly in the order.

This field is also associated to a MISSING Flag (see section 4.3 above). Field 60, Country of the branch supervising the person responsible for the execution, depends on field 59. Please refer to the "UPLOAD VALIDATION RULES" column, sheet "EXTRACT-UPLOAD FIELD LIST" in the Trading Venue Reporting File Specs.

Further data

Since the Upload File format is the same for all Trading Venues, both fields 62, Short Selling Indicator, and 64, Commodity Derivative Indicator, are included.

Eurex Non-MiFIR Members are required to enrich the Commodity Derivative Indicator, depending on the instrument reference data (see section 4.4.3 below for the validation rule applying to this field), whereas the Short Selling Indicator should not be modified. If the Commodity Derivative Indicator must be filled, the MISSING_COMMODITY_DERIV_INDICATOR flag will be set to 'Y'.

On the other hand, FSE Non-MiFIR Members may be required to provide a Short Selling Indicator, whereas the Commodity Derivative Indicator shall be left empty, as it is not applicable to the transactions executed on this Trading Venue (or else is directly enriched by RRS). If the Short Selling Indicator must be filled, the MISSING_SHORT_SELLING_INDICATOR flag will be set to 'Y'.

4.4.2   Reporting of INTC transactions

This section illustrates the RRS logic for reporting aggregated orders.

If the Non-MiFIR Member aggregates multiple client orders into one order on the trading venue, ESMA requires 'INTC' to be set as value for buyer ID or seller ID (depending on whether the aggregated order is executed as a buy or a sell trade, respectively).

According to the ESMA Guidelines, p. 86, 5.23 Grouping Orders: "The aggregate client account ('INTC') should only be used in the circumstances set out in these Guidelines. It should not be used for reporting an order for one client executed in a single execution or for an order for one client executed in multiple executions. Where there is a transfer into the aggregate client account ('INTC') there should be a corresponding transfer out of the aggregate client account within the same business day of the executing entity in the transaction report such that the aggregate client account is flat."

To permit the identification of both sides (i.e., market side and client side) of an aggregated order and verify that the aggregate client account is flat end of day, RRS has introduced the INTC number and the following logic is applied.

The executions of aggregated client orders on the Trading Venue (market side) are included in the Venue Extract file, where either the Buyer ID or the Seller ID is 'INTC', depending on which field contains the long code 'AGGR' for the Client ID short code entered with the order. These transaction reports will have

INTC_NUM = 0 as they are executed on venue, see Field E02 specifications in EXTRACT-UPLOAD FIELD LIST sheet in Trading Venue Reporting File Specs.

In addition to market-side transactions, also the client-side transactions must be reported for aggregated orders. However, client-side transactions are executed off-venue and, as such, their data is not known to the Trading Venues, that is, they are not provided in the Venue Extract. Accordingly, the Non-MiFIR Members are required to report the client-side transactions of aggregated orders in their Upload File. Such transactions must have the following characteristics:

- Field 3, TVTIC, is identical to (one of) the TVTIC(s) for the corresponding market-side execution(s): in case of multiple on-venue executions for the same aggregated order, one of the execution TVTICs must be chosen;
- Fields E01, Side Trade ID and E17, Trade ID which serve to identify on-venue transactions in association with the TVTIC, are left empty;
- Field E02, INTC_NUM, is filled with a (sequential) number > 0. There should be no duplicate INTC_NUM associated to the same TVTIC and the same SEQUENCE_NUMBER;
- Field 41, Instrument ID is identical to the Instrument ID reported in the market-side transaction and derived from the transaction referenced by the TVTIC;
- Field 28, the Trade Date component must be identical to the Trade Date in the market-side report, whereas the time component can be different;
- For INTC-client-side transactions that are related to a market side executed on an XFRA or XETR segment, the Non-MiFIR member is required to enrich field 35, Net Amount, if the traded instrument is a bond. The value of this field must be identical to the market side counterpart;
- As for the value of field 30, Quantity, the sum of transactions in a particular ISIN with buyer id ='INTC' must be equal to the sum of transactions in that ISIN with seller id = 'INTC' in the same Upload File (INTC-volume check, cf. sections 4.4.3 and 6.2);
- Moreover, more than one transaction should be reported for the client side per Instrument ID within an Upload File, otherwise the order cannot be considered aggregated.

RRS will compare the remaining fields based on the TVTIC provided for the client-side transaction report with the corresponding market side transaction.

4.4.3   Transaction upload Validations

After a file is uploaded, the following validations are applied:

File name validation. First, CUE validates the file name. The file name must be constructed according to the CUE guidelines (the same way as for CRE), see section 4.2 above. If the file name does not conform to the requirements, CUE attaches an error message to it, e.g. 89TVUPL001ABCLO20210231XEUR.CSV_**WRONG_UPLOAD_DATE**, saves the file in the respective date folder and does not process the file further.

The following error messages can be extended to the file name:

File extension	Description
_SERVICE_NOT_FOUND	The file name was not using the correct service name TVUPL
_MEMBERID_FAILED	The member ID in the file name did not correspond to the uploading member
_WRONG_UPLOAD_DATE	The date part of the file name is not the current day (the next trading date if the current day is not a trading date)
_XMIC_NOT_FOUND	The MIC code within the file name was not XFRA, XETR or XEUR

_WRONG_FILE_SUFFIX	The file suffix was not .CSV
_WRONG_FILE_TYPE	
_NAMING_CONVENTION_BREACHED	General deviation from the file naming convention
_VERSION_LIMIT_REACHED	If -V01, -V02, etc. is appended to the file name since CUE versioning is not used for RRS
_TIME_LIMIT_BREACHED	If a file was uploaded during the maintenance interval which starts at 23:30

File structure validation. RRS checks that all required column names are included in the upload. These are fields from the field list in the sheet "EXTRACT-UPLOAD FIELD LIST" of the Trading Venue Reporting File Specs where the column "INCLUDED IN FILE" contains 'Y'. Fields with value "INFO" in the column "UPLOAD RELEVANCE" of the field list must also be included but their content will be ignored. The system will check that every row in the Upload File has the number of commas required as in the header row. If any of these conditions is not met, the system will generate an error message that is reported in the Feedback File (see section 4.5 below, and references therein). Furthermore, if there is any record with an invalid format of the key fields TVTIC, SIDE_TRADE_ID, TRADE_ID or INTC_NUM, a corresponding file level error message ERR-F.03, ERR-F.04, ERR-F.05, or ERR-F.07 will be created. In all these cases the whole file will be rejected.

Field format validation. After the file name and file structure validations the system checks every single transaction record. It validates the format of all fields according to the column "FIELD FORMAT" in the sheet "EXTRACT-UPLOAD FIELD LIST" and to the sheet "FORMAT VALIDATIONS" in the Trading Venue Reporting File Specs. If a field format is wrong, the corresponding error or warning will be generated and reported in the Feedback File. If a mandatory field is missing, then an error code with the field number, e.g., 'ERR-01', and the error description 'Mandatory field missing' will be generated.

Field content validation. If a field has a valid format, its content shall be validated according to the validation rules listed in the "UPLOAD VALIDATION RULE" column, cf. references above. If the content is not valid, the related error or warning will be generated (see also section 6.3).

Notice that for upload records with INTC_NUM empty or 0 all uploaded values for the modifiable fields marked in yellow in the "EXTRACT-UPLOAD FIELD LIST" must be the values provided in the Venue Extract. By contrast, field values for transactions in which INTC_NUM is greater than 0 can be set to a different value.

If an upload record has at least one error, it will be rejected by RRS and not processed further. If a record contains no errors and one or more warnings it will be processed, but the Non-MiFIR Member will see the warning message in the Feedback File. If a record is valid without errors or warnings it will obviously be processed.

If a transaction report record with SEQUENCE_NUM=0 has been rejected, all the related records for multiple fields with the same TVTIC, SIDE_TRADE_ID, TRADE_ID, INTC_NUM and higher SEQUENCE_NUMs will be ignored without an additional error message in the Feedback File.   However, if there are specific errors in the sequence records then they will be raised in the Feedback File.

After validation of all transactions **the INTC-volume check is performed** on Upload File level (but see 6.2 below):

RRS will check that for all transactions in the Upload File the sum of QUANTITY with BUYER_ID_TYPE='INTC' equals the sum of QUANTITY with SELLER_ID_TYPE='INTC' per different INSTRUMENT_ID, QUANTITY_NOTATION and QUANTITY_CURRENCY. If the INTC-volume check fails, then a file level error will be generated. The related transactions will however be processed if they are valid.

4.5   Feedback File

The Feedback File structure is documented in the "FEEDBACK FIELD LIST" sheet of the Trading Venue File Specs.

A corresponding Feedback File with the same sequence number in the file name (e.g. TVFBK001 for TVUPL001) is provided for each Upload File within ca. 15 minutes after upload. In addition, the file name of the Feedback File to each Upload contains a timestamp identifier between the date and the MIC code, for processing purposes. The Feedback File is located in the "mifid" subfolder in CRE for the same member ID and trading day as the Upload File in CUE.

Another Feedback File will be created after 19:00 CET/CEST as a result of the Backup Enrichment (see section 4.6 below).

The Report Name in the file name for the Feedback File to the Backup Enrichment is TVBKU (cf. section 4.2 above) and no timestamp identifier is added to the file name in this case.

4.5.1   Feedback File structure overview

The Feedback File (to both Upload File and Backup Enrichment) is in CSV format and its header row is specified in the "FEEDBACK FIELD LIST" of the Trading Venue Reporting File Specs. It contains the same MISSING flags as the Venue Extract, to report an error in case the Non-MiFIR Member failed to upload the missing data or reported incorrect data in their Upload File.

The fields included in the Feedback File can be distinguished as follows:

- Transaction record identification fields such as ACTION_TYPE, TVTIC, SIDE_TRADE_ID, TRADE_ID, INTC_NUM, SEQUENCE_NUM, and UPLOAD_ROW;
- Error description fields such as FIELD_NAME, indicating the field affected by error: ERROR_CODE, ERROR_DESCRIPTION, VALIDATION_RESULT, FEEDBACK_NUM;
- MISSING information flags and UPLOAD_STATUS;
- Informational fields such as EXCHANGE_ORDER_ID, TEXT_FIELD_1, etc.

FEEDBACK_NUM logic. Irrespective of whether a transaction was included in the upload file or not, the feedback file always contains a record with the upload status of each transaction of the trading day. This record has value 0 in the column FEEDBACK_NUM. In the same row, MISSING flags, if any, and UPLOAD STATUS (see below) are provided. Any error codes and error descriptions for the records in the upload file are   provided   in   the   subsequent   rows   of   the   Feedback   File   for   the   same TVTIC+SIDE_TRADE_ID+TRADE_ID/INTC_NUM, where FEEDBACK_NUM>0.

FEEDBACK_NUM starts from 1 for any file level errors.

VALIDATION_RESULT values. This column can have value <empty> (if it corresponds to FEEDBACK_NUM=0), ERR (error), or WAR (warning) after each single validation. If an upload record has at least one ERR in the VALIDATION_RESULT column, then it is rejected.

UPLOAD_STATUS. This field is only filled for FEEDBACK_NUM = 0. The text appearing in this column depends on the value of INTC_NUM. For aggregated client-side transaction reports (i.e. with INTC_NUM > 0), the feed-back provided in UPLOAD_STATUS just states whether a client-side report has been loaded:

(i)   "client side report loaded", i.e. a valid record exists with that TVTIC+INTC_NUMFor all market-side transactions (i.e. with INTC_NUM = empty or 0), the possible values of UPLOAD_STATUS are:

(i)   'no upload needed', if there has been no valid upload for this TVTIC+SIDE_TRADE_ID(+TRADE_ID for XFRA/XETR) and if none of the MISSING_XXX fields in the corresponding extract record was 'Y';

(ii)   'waiting for upload', if at least one of the MISSING_XXX fields is 'Y' and there has been no valid upload;

(iii)   'valid and complete upload', if there has been a valid upload and correspondingly none of the MISSING_XXX fields are 'Y' any longer;

(iv)   'backup enriched', if RRS has executed a backup enrichment (cf. BKU file)

(v)   'invalid LEI', if there has been no valid upload and the extract included IDs which had an invalid LEI due to errors in the short/long code master data and therefore the transaction could not be reported.

Notice that value (ii) will also be provided if data enrichment failed due to an invalid upload record. In cases (ii), (iv) and (v) the Non-MiFIR member is still required to upload a valid transaction report for this market side transaction.

INTC volume check. An error resulting from the INTC volume check is on file and INSTRUMENT_ID level. Accordingly, INSTRUMENT_ID, VALIDATION_RESULT, FEEDBACK_NUM, ERROR_CODE and ERROR_DESCRIPTION are filled, while all other columns are left empty.

4.6   Backup enrichment

RRS performs a Backup Enrichment of transactions with missing information that the Non-MiFIR Member has failed to enrich with a valid upload.

Every trading day at 7 PM CET/CEST, RRS checks which transaction report information should have been added by the member for transaction reports from the previous trading day but is still missing. A Backup Enrichment then takes place to fill missing fields with dummy values. No Backup enrichment shall take place for transactions with invalid LEI, which are just rejected with Upload Status 'invalid LEI', see section 4.4.1 above.

The Backup Enrichment will create a new version of the transaction report that is flagged as source Deutsche Börse.

Even after the Backup Enrichment, the Non-MiFIR Member should submit the required information as soon as possible, since BaFin requires a complete reporting.

In case a member sends correct transaction reports after the Backup enrichment, RRS will create a new version and send this to BaFin after cancelling the original transaction report.

4.7   Support of corrections and cancellations

This section describes the new RRS solution for correcting or cancelling existing transaction records.

In case of necessary corrections by Non-MiFIR Members, RRS may provide an extract of transaction reports to be corrected. This Extract will have a file name that is similar to the usual daily Venue Extract, but the number included in the file name will start with 500, e.g., 89TVEXT**500**ABCLO20210216XEUR.CSV.ZIP (cf. section 4.2 above). The Extract can include data from any trading day although the folder where it is located is the current day. Please note that the extract file "TVEXT500" will not be made available with RRS R 1.4 and until further notice. The non-MiFIR member should review the backup enrichment file to identify transactions that currently require correction.

Due to the large amount of historic data, corrections or cancellations of transaction reports from before the previous trading day have to be sent in a separate upload file also starting with 500 in the file name, e.g. 89TVUPL**500**ABCLO20210216XEUR.CSV.ZIP. Any further upload of historic transaction data on the same date should have an increasing upload number, e.g., UPL501, UPL502… up to UPL550. Such upload files will only be processed once per day in the overnight batch and the corresponding feedback file will therefore be only available the next morning. Please note that such feedback files will not contain status records (FEEDBACK_NUM=0) and will just contain the header row in case all historical uploads were without error.

Corrections or cancellations of transaction reports of the previous trading day can be done with a further normal intra-day upload file (with number in the file name below 500) sent by 18:00 CEST/CEST on T+1 (where T= trading day). Any corrections or cancellations of transaction reports from before the previous trading day included in such an intra-day upload file will be rejected.

For a current limitation on the historical upload functionality see section 6.1 below.

Intraday corrections are possible and the members are recommended to use them to provide valid and complete data by the end of the trading day.

4.7.1   Corrections

Non-MiFIR Members that want to correct existing reports within RRS do not need to differentiate between new transaction reports and updates of existing ones. A specific ACTION_TYPE for corrections no longer exists within RRS (but see below how to correct old transactions reported in RRH).

To correct a previous transaction report, the Non-MiFIR Member shall just send it again with the same TVTIC, Side Trade ID/Trade ID, INTC Number and with ACTION_TYPE = 'NEWT'. RRS will look for the transaction and automatically create a new version replacing the old one. RRS will then cancel the old version at BaFin and send out the new version. This correction process may also apply to INTC client-side transaction reports reported in RRS.

If a transaction previously reported with RRH must be corrected, the Non-MiFIR Member should cancel the old transaction report with Action type 'CANO' (see next chapter) and send the transaction again with Action Type 'NEWT'. This will not work for transactions prior to 24 August 2020. In case you need to correct earlier transaction reports, please contact support.

4.7.2   Cancellations

Except for cancelling old transaction reports done with RRH, the only transaction reports that a Non-MiFIR Member may cancel are INTC client-side transaction reports that should not have been reported. To cancel such a report, the Non-MiFIR Member only needs to send the TVTIC with INTC_NUM > 0, SEQUENCE_NUM=0 and ACTION_TYPE = 'CANC'. RRS will look for the existing transaction. If no transaction is found, or if the TVTIC is only found in association with an INTC_NUM = empty or 0, an error will be generated. Through cancelling the SEQUENCE_NUM=0 parent record, also all SEQUENCE_NUM>0 records belonging to the same parent are functionally cancelled since they cannot exist without the parent.

Cancellations are also possible for transaction reports sent with RRH before the production start of RRS. To cancel an old transaction report, the Member shall send a cancellation message with ACTION_TYPE = 'CANO', the old Customer Transaction ID or Transaction Reference Number in field TVTIC, and SEQUENCE_NUM=0, leaving INTC_NUM empty.

Updates of old RRH transaction reports are not possible: RRH reports must be first cancelled with 'CANO' and then sent again with 'NEWT'.

4.7.3   Availability of old RRH files

The old RRH folders have been available for one month after the RRS production date and have now been archived. If Non-MiFIR members would like to retrieve old response files, they should forward their request via their KAM.

5.   Sample files description

The sample files should be looked at in the order of the process:

1.   On the next morning following the trading day the non-MiFIR business partners receive the extract file with all reportable transactions of the previous trading day:
      89TVEXT001ABCLO20210303XEUR.CSV, 89TVEXT001ABCLO20210303XETR.CSV

2.   Before 6 pm CET/CEST on the next trading day they upload the enriched extract file:
      89TVUPL001ABCLO20210304XEUR.CSV, 89TVUPL001ABCLO20210304XETR.CSV

3.   After the upload they receive a feedback file to the upload:
      89TVFBK001ABCLO20210304125959XEUR.CSV, 89TVFBK001ABCLO20210304125959XETR.CSV

4. In the evening after 7 pm CET/CEST a further feedback file is provided after the backup enrichment:
   89TVBKU001ABCLO20210304XEUR.CSV

5. Much later the business partner uploads historical correction files:
   89TVUPL500ABCLO20220905XEUR.CSV, 89TVUPL500ABCLO20220905XETR.CSV

In the following description the row count starts with 1 for the header row.

5.1   Extract sample files

The trading member is shown in every row in column INFO: EXECUTING_ENTITY_ID as DUMMYLEI123456789000, the instrument ISIN in column INFO:INSTRUMENT_ID.

Row	General description	Eurex specific 89TVEXT001ABCLO20210303XEUR.CSV	Xetra specific 89TVEXT001ABCLO20210303XETR.CSV
2	The seller is a natural person identified with a national ID by looking up the client ID short code in the separately uploaded short/long code mapping. The field in INFO: SELLER_BRANCH_COUNTRY is filled with the country code of the trading member's legal address. Since the information about the seller name and birth date is not contained in the long code, the fields SELLER_FIRSTNAME, SELLER_SURNAME, SELLER_BIRTHDATE must be filled in the upload, which is indicated by 'Y' in INFO: MISSING_SELLER. Also the optional seller decision maker fields can be filled in the upload. Buyer is the CCP, accordingly the LEI of Eurex Clearing AG is given. No further buyer fields have to be filled in the upload. The investment decision maker ID fields are left empty since the transaction is with a client. The execution decision maker ID fields are filled with NORE since the execution ID short code in the order mapped to NORE in the long code. INVEST_DEC_BRANCH_COUNTRY is empty since the investment decision maker ID fields are empty, so there was no branch supervising the investment decision. SUPERVISING_BRANCH_COUNTRY is empty since the execution decision maker ID type is NORE.	Product FCCO, series ISIN DE000C6G3VZ5 is a commodity future, therefore INFO: MISSING_COMMODITY_DERIV_INDICATOR = Y The field NET_AMOUNT does not apply to Eurex and is always empty. SHORT_SELLING_INDICATOR is always 'SELL' since short selling does not apply to Eurex.	ISIN DE0007236101 Since the instrument is an equity and the transaction is a sell, the short selling indicator must be uploaded, therefore INFO: MISSING_SHORT_SELLING_INDICATOR = Y
3	The buyer short code mapped to AGGR as long code for aggregated client orders. Therefore, BUYER_ID_TYPE and BUYER_ID are filled with INTC. The corresponding client-side executions will have to be added by the member in the upload file.	product FGBL, series ISIN DE000C1T6JE8 Bond future	ISIN DE000A1EWWW0, equity Short selling indicator does not have to be uploaded since the transaction is a buy.
4	Here the buyer is Eurex Clearing and the seller is a customer of the trading member, which was not known at the time of the order entry, i.e. the client ID in the order was filled with a short code mapping to long code PNAL (pending allocation). Therefore, the seller fields are empty and have to be added in the upload (INFO: MISSING_SELLER = Y). Since here the client is the seller, INFO: BUYER_BRANCH_COUNTRY is empty and INFO:SELLER_BRANCH_COUNTRY is filled with the country code of the trading member's legal address. For the execution decision maker, the short code in the order mapped to a long code of a natural person.	Another bond future transaction.	ISIN DE0002635265, ETF on bonds Short selling indicator does not have to be uploaded since no equity/government bond.
5	INFO: BUYER_BRANCH_COUNTRY is empty since the transaction is done on a proprietary account, therefore MIFIR_TRADING_CAPACITY is DEAL. Investment decision maker is extracted from the Investment ID and filled with the provided long code.	product FCBI, series ISIN DE000C6FT9Q4, corporate bond index	ISIN DE0007236101, equity Short selling indicator does not have to be uploaded since transaction is a buy.
6	Here the short code in the client ID mapped to an invalid LEI. Therefore, BUYER_ID contains 'Invalid LEI ZZ1233456'. Furthermore, the long code of the execution ID also contained an invalid NATIONAL_ID_CONCAT so that EXEC_RESP_ID contains 'Invalid national id in short code '. Both values must be corrected in the transaction upload and to avoid these errors in the future the member should also correct the short/long code upload.		ISIN DE0007236101, equity Short selling indicator does not have to be uploaded since transaction is a buy.

7	Like row 3 but in another instrument.	product FGBL, series ISIN DE000C6EBR73 bond future	ISIN DE0007236101, equity Short selling indicator does not have to be uploaded since transaction is a buy.
8	Like row 2. Here the short code entered in the client ID of the order could not be found. Hence the flag for missing seller is Y.	Product FCCO, series ISIN DE000C6G3VZ5 is a commodity future, therefore INFO: MISSING_COMMODITY_DERIV_INDICATOR = Y	ISIN DE0007236101 Another sell equity transaction, therefore missing short selling indicator.
9	As in row 2: since the information about the seller name and birth date is not contained in the long code, the fields SELLER_FIRSTNAME, SELLER_SURNAME, SELLER_BIRTHDATE must be filled in the upload, which is indicated by 'Y' in INFO:MISSING_SELLER.	Product FCCO, series ISIN DE000C6G3VZ5 is a commodity future, therefore INFO: MISSING_COMMODITY_DERIV_INDICATOR = Y	ISIN DE0007236101 Since the instrument is an equity and the transaction is a sell, the short selling indicator must be uploaded, therefore INFO: MISSING_SHORT_SELLING_INDICATOR = Y

5.2   Upload sample files

In the upload file the INFO: columns are ignored. They can be left as in the extract, or empty as here. For Eurex, the short selling indicator could also be left empty since it will be set to SELL automatically after the upload.

Upload Row	Extract Row	General description	Eurex specific 89TVUPL001ABCLO20210304XEUR.CSV	Xetra specific 89TVEXT001ABCLO20210304XETR.CSV
2	2	Here the missing seller fields are filled. The INTC column can either be left empty or filled with 0. Both will be interpreted as 0.	The missing commodity derivative indicator is forgotten.	The missing short selling indicator is forgotten.
3	2	In this row the information for a second seller for the same transaction as in row 2 is uploaded. Note that except for the seller fields only the key fields TVTIC, SIDE_TRADE_ID, TRADE_ID, INTC_NUM and SEQUENCE_NUM are filled. The buyer ID has not been provided.		
4	3	This row just repeats the same row for that transaction as in the extract file since no further information must be added to that record. Therefore, it could also be left out completely.		
5	3	This row is adding a client-side transaction report to the transaction in extract row 3. However, since it is an aggregated order, at least one more row with a client-side transaction report should have been added.		
6	4	This row is adding the missing seller fields to the transaction in row 4 of the extract. Details of a seller decision maker are also added.		
-	5	There is no upload row for extract row 5 since there is no missing information for that transaction.		
7	6	This row is correcting the wrong buyer and execution decision maker ID in extract row 6.		
8	7	This row adds a client-side transaction report for extract row 7. The market-side transaction report is not uploaded again since there is no change.		
9	7	This row adds the first buyer in a shared account of a second client-side transaction for extract row 7.		
10	7	This row adds the second buyer in a shared account of a second client-side transaction for extract row 7.		

11	8	This row is adding the seller for extract row 8.	The commodity derivative indicator is also added.	The short selling indicator is also added.
12	-	With this row the member is trying to upload a record of a historic trading day, however this can only be done in a file for historic transaction uploads. Furthermore, the mandatory field BUYER_ID_TYPE is missing.		
13	9	This row is adding the seller details for extract row 9.	The commodity derivative indicator is also added.	The short selling indicator is also added.
14	9	In this row the information for a second seller for the same transaction as in row 13 is uploaded. Note that except for the seller fields only the key fields TVTIC, SIDE_TRADE_ID, TRADE_ID, INTC_NUM, SEQUENCE_NUM and the buyer fields are filled.		

5.3   Feedback sample files

Feedback-file rows with FEEDBACK_NUM=0 are listed first in the FBK file and show the status of the transactions which will be reported for the trading day.

Rows with FEEDBACK_NUM>0, if any, are listed after all FEEDBACK_NUM = 0 records and provide error or warnings to records in the upload file (see the UPLOAD ROW column for reference) and for these rows the status fields MISSING_BUYER up to UPLOAD_STATUS are left empty. Upload rows 4 and 6-11 have no error, so there is no FEEDBACK_NUM>0 row for them.

Feedback Row	Upload Row	General description	Eurex specific 89TVFBK001ABCLO20210304125959XEUR.CSV	Xetra specific 89TVFBK001ABCLO20210304125959XETR.CSV
12	2	The upload record is rejected.	Rejection since the commodity derivative indicator is missing in row 2 of the upload file.	Rejection since the short selling indicator is missing in row 2 of the upload file.
13	3	This row informs that also upload row 3 has been rejected since it provides a second seller to the already rejected row 2. Since the buyer was empty in the upload, the ERR-07.7 would be expected, however this is not validated as the record is ignored due to the master record rejection.		
14	5	Here the feedback is that for upload row 5 which reports a client-side transaction, at least one further client-side transaction should be provided in the upload file, otherwise it cannot be an aggregated order. The upload record is thus rejected.		
15	12	This row informs that the upload transaction cannot be found since it was from a historic trading day and therefore must be uploaded in a historic upload file (see chapter 4.7 Support of corrections and cancellations). The upload record is rejected.		

16	12	This row shows that there is a further error in upload row 12 since the mandatory field BUYER_ID_TYPE is missing.		
2	-	From row2 to row 11 the reporting status of the transactions of the previous trading day is shown. Since for row 2 there was no valid upload, the upload status is still 'waiting for upload' and the MISSING_SELLER flag is still Y.	MISSING_COMMODITY_ DERIVATE_INDICATOR = Y	MISSING_SHORT_SELLING_ INDICATOR = Y
3-7, 10-11	-	For the other transactions from the trading day the status row shows that there was either a valid upload or no upload was needed.		
8-9	-	These rows show the status of the valid INTC client-side transaction uploads.		
17	-	This row shows the file level error that the INTC market- and client-side transaction buy/sell-volumes did not add up for the transaction reports with instrument ID DE000C5Q39W5. This does not lead to any further rejections (see section 4.4.3 above)		

5.4   Backup enrichment sample files

These files show the feedback after the backup enrichment.

Row	General description	Eurex specific 89TVBKU001ABCLO20210304XEUR.CSV	Xetra specific 89TVBKU001ABCLO20210304XETR.CSV
2	Row 2 shows the only transaction which had to be backup enriched since there was no valid upload for it. The MISSING_SELLER flag remains Y since the trading member has to provide this information as soon as possible with a historical upload together with the other missing Eurex or Xetra specific field (see to the right).	MISSING_COMMODITY_ DERIV_INDICATOR = Y	MISSING_SHORT_SELLING_ INDICATOR = Y
3-7, 10-11	For the other transactions from the trading day the status row shows that there was either a valid upload or no upload was needed.		
8-9	These rows show the status of the valid INTC client-side transaction uploads.		

5.5   Historical upload files

These files show the upload of historical corrections see 6.1 below.

Row	General description	Eurex specific 89TVUPL500ABCLO20220905XEUR.CSV	Xetra specific 89TVUPL500ABCLO20220905XETR.CSV
2	Row 2 shows an update to an old transaction report where the BUYER_ID is changed.		
3	This row cancels an old INTC client side transaction report.		
4	This row cancels an old RRH transaction report.		

6. Limitations to the current release

This section illustrates the major limitations to RRS R.1.4 with respect to the functional specifications presented in this document. For a full overview of the known limitations related to this release, please refer to the Known Limitation List provided by DBAG Business to the Trading Members soon after Production start.

6.1 Historical corrections

The historical upload functionality for the corrections of transactions after the T+1 window (cf. Section 4.7 above), was re-enabled with the introduction of RRS R.1.3. This allows Trading members once again to perform data enrichment or corrections after T+1 18:00 CET/CEST.

The historical correction waves, including the provision of TVEXT500 files showing old transaction reports to be corrected, are planned after RRS R.1.4. Members will be duly informed about the correction plan.

6.2 Limitations to aggregated transaction reporting (INTC quantity check)

Since BaFin does not perform nor require a quantity-check on the aggregated trades, this check is currently not implemented on RRS. Therefore, if the INTC-client side overall quantity does not correspond to the related INTC market side quantity, ERR-F.02 will not be triggered (see Trading Venue File Specs, FILE LEVEL ERROR CODES).

6.3 Warnings

Warning messages resulting from the validation of National IDs are not implemented.

6.4 Reporting for Members with "in process" status and ported LEI

Members with SAP status 'in process' will still not be able to automatically receive their Venue Extract and should therefore contact their KAM.

Members whose LEI has been ported to another LEI should also contact their KAM, as the automatic functionality for transaction tracking of ported LEIs has not yet been implemented on RRS.

7. Testing

Testing is possible during release simulation as well as regular simulation tests for all admitted Non-MiFIR members of FSE and Eurex and the ones that are in the onboarding process. The RRS simulation environment will be connected to the T7 simulation environment so that members can test the reporting of their T7 simulation transactions. However, please note that the production data of the non-MiFIR status of a member will be used for the simulation testing.

- All production Non-MiFIR members will be enabled for testing automatically but must set up the access to the Common Report Engine (CRE) and Common Upload Engine (CUE) simulation environment to receive and upload the transaction reporting files. The setup of CUE and CRE access is described in section 3.1 above.

- Extracts will only be created at the end of a simulation batch day. Please note that in simulation a batch day can include multiple trade dates. Please note that upload files for transactions older than the most recent batch date must have a number 500 or higher in the upload file name and are only processed in the next overnight batch (but see 6.1).

8.   Customer support

Client Services and Key Account Management:

Exchange participant support for readiness activities

Call: +49 69 211 10 333

Mail to: client.services@deutsche-boerse.com

or directly via your Key Account Manager

Client Onboarding:

Exchange participant onboarding support

Mail to: onboarding-team@deutsche-boerse.com

Technical Support and Connectivity - TKAM

- Technical support to CRE/CUE (sFTP) connection for simulation and production
- Connectivity-related questions
- Questions on the availability of reports CRE (Common Report Engine)

Service times: Monday 01:00 A.M. - Friday 10:00 P.M. CET/CEST

Call: +49 (0) 69-211-VIP/ +49 (0) 69-211-10 888 (all)

Mail to: CTS@deutsche-boerse.com

Functional support - Business Operations

- Functional support during simulation
- Ongoing first-level functional support

Service Times: Monday - Friday 07:00 – 18:20 CET/CEST

Call: +49 69 211 11 320

Fax: +49 69 211 6 11 320

Mail to: TVR@deutsche-boerse.com

9.   Abbreviations/Terms

The following definitions and abbreviations are adopted throughout this User Manual.

Term	Description
BaFin	Bundesanstalt für Finanzdienstleistungsaufsicht
Business Partner	Legal Entity, who is the contract partner of the respective Deutsche Börse entity
CCP	Central Counterparty, also the name of the legacy cash market clearing system
CUE	Common Upload Engine (sFTP server for upload of member files)
CRE	Common Report Engine (sFTP server for download of member reports)
DBAG	Deutsche Börse AG
Eurex	Eurex Frankfurt AG, market operator of trading venue Eurex Deutschland
ESMA	European Securities and Markets Authority
EU	European Union
FSE	Frankfurt Stock Exchange
ISIN	International Securities Identification Number
KAM	Key Account Manager
LEI	Legal Entity Identifier
Member	Participant of the trading venue, belongs to a Business Partner
MIC	Market Identifier Code
MIFID	The Markets in Financial Instruments Directive
MiFIR	The Markets in Financial Instruments Regulation
RRH	Regulatory Reporting Hub
RRS	Regulatory Reporting Solution
RTS	Regulatory Technical Standards
SSCA	Self-Service Certificate Administrator
TKAM	Technical Key Account Manager
TVTIC	Trading Venue Transaction Identification Code
T7	DBAG Trading System
Xetra	Trading Venue operated by FSE