UnaVista EMIR Reporting

Technical Specification

Version 2.2.0

London Stock Exchange Group

Technical Specification

26th January 2016

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London Stock Exchange Group

Technical Specification

1.0 Introduction

1.1 Overview

This document will provide you with a technical overview of the UnaVista EMIR Reporting application (an interface for clients to manage the derivatives reporting responsibilities imposed by ESMA under EMIR, delivering those reports to UnaVista EMIR Trade Repository).It will enable you to get a better understanding of some of the technical aspects of the system.

This information provided in this document is subject to change and update with little notice. All document updates will be shown in the Version Table - chapter 1.3**.**

1.2 Acronyms

Abbreviation	Meaning
ESMA	European Securities and Markets Authority
EMIR	European Market Infrastructure Regulation

1.3 Version Table

Document Version	Release Date	Information
v1.0	21/11/2013	First release
v.1.1	25/11/2013	Update to include modification audit info etc.
v2.0	05/12/2013	Formatting changes, content update: - 2.0 - Fix to misaligned chapter numbering - 4.0 - further information added on file order processing, record layout and FpML 5.5 format link - 5.0 - further sFTP and FTP information added - 6.0 – confirmation added that data rows in response files are not cumulative - 6.0 – Internal ID added to response files where applicable, correction to **'UVTR_'** response filename prefix removed - 8.1 – Audit and Data Retention in the Trade Repository (new section added)
v2.1	09/01/2014	Formatting changes, content update. - Global – All references to UnaVista EMIR Trade Repository includes reference to other non UV TRs.(chapters 1.1, 1.4, 2.0 etc.) - Update copyright info (2013 > 2014)
V2.2	23/01/2014	6.0. PUTI added to UV_Res and UV_TR response files Adapted chapter 9.1 to indicate that Archiving has been implemented

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Document Version	Release Date	Information
V2.3	18/02/2012	4.1 Additional FpML information included 6.5 Matching Response File Responses - Matched with Differences file added - Matched with Differences field added Summaries files - Break Priority added to Differences file - File format of Matched with Differences file
V2.4	24/03/2014	6.5 Matching Response File Responses - Updated file names and Summaries to align with other documentation 7.1 Trade Repository Client Data Access added csv functionality
V1.8.1	3/11/2014	Version numbering updated 6.5 Matching Response File Responses **-** Counterparty Value field added to Differences and Reconciled with Differences file responses
V2.0.1	9/07/2015	7.1 Trade Data field specification updated – field lengths revised
V2.0.4	09/07/2015	7.1 Trade Data field specification updated – New position reporting validations
V2.0.5	25/09/2015	7.1 Trade Data file limit and footer rows added 7.1 Quantity Unit reverted from text back to decimal

1.4 Systems

UnaVista's trade repository offering comprises of **UnaVista EMIR Reporting** and the **UnaVista EMIR Trade Repository**.

The UnaVista EMIR Reporting application is the client-facing part of the system. It accepts data from clients, validates it, and passes it on to the UnaVista EMIR Trade Repository database. The UnaVista EMIR Trade Repository feeds back confirmation of acceptance and validation results to UnaVista EMIR Reporting for client consumption. The Trade Repository holds a permanent record of all EMIR reports received, matches those internally, collates data from other trade repositories where necessary, and presents the data to the regulator and authorities that require it, all under ESMA's governance.

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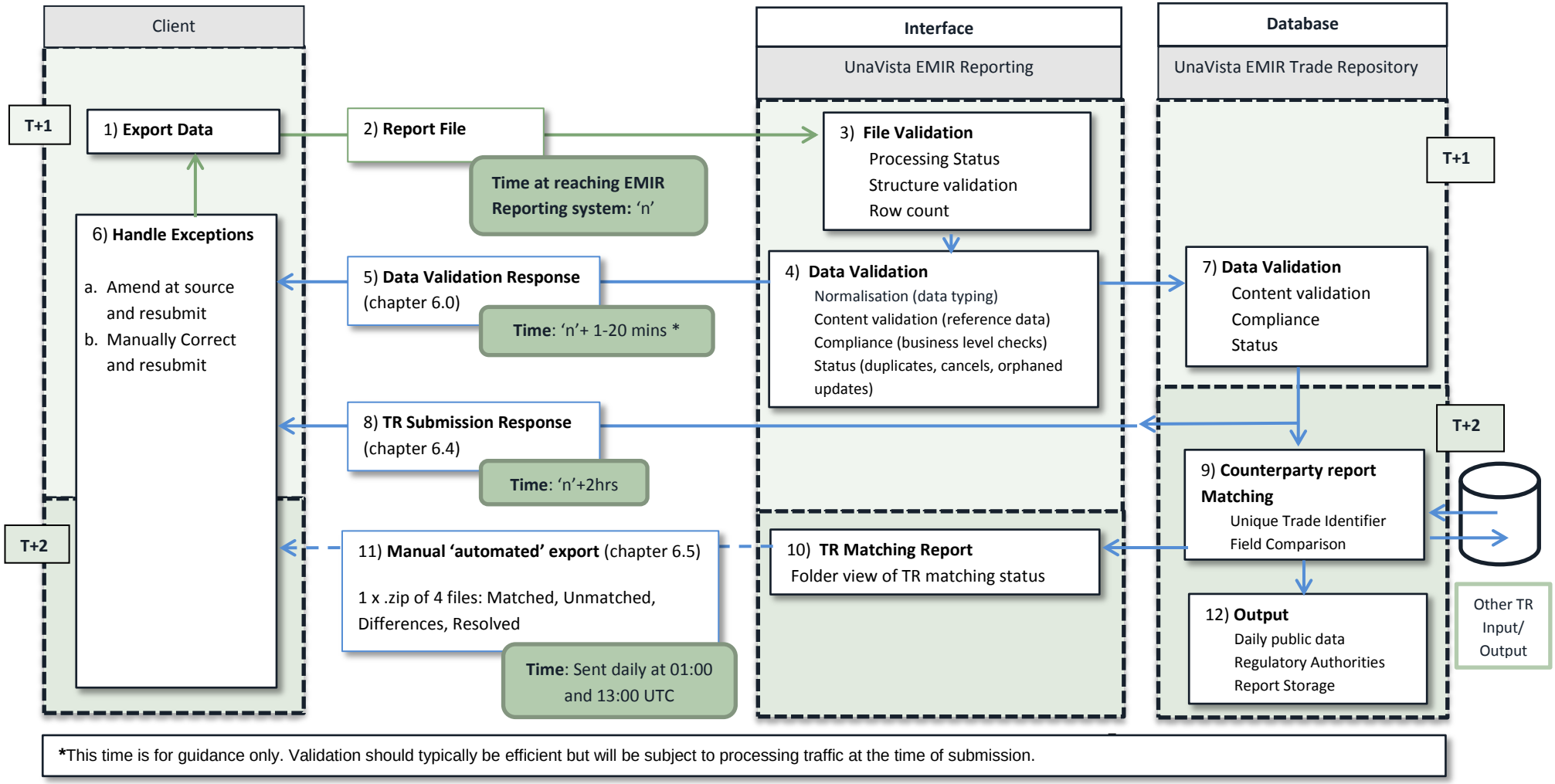
2.0 UnaVista EMIR Reporting Workflow

This section provides an overview of the flow of data through UnaVista and all associated timings.



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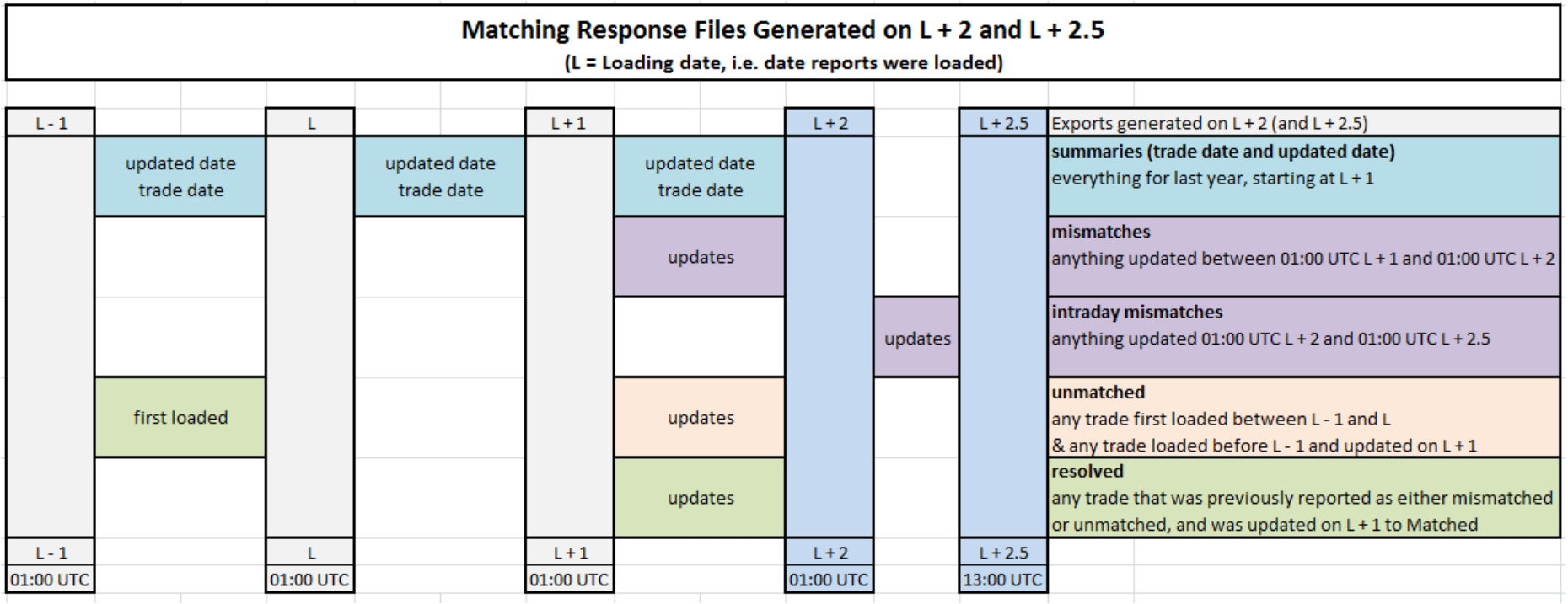
3.0 Matching Response Timing Workflow

This section provides all associated timings for the Matching Response File. For further in-depth information relating to the Matching Response File please see chapter 6.5



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4.0 Reporting Specification

This section describes the format and contents of the standard transaction reporting file required by the Unavista EMIR Reporting application.

The following information is included:

- the convention that firms should adopt when naming the files to be transmitted to us
- the formats and character sets to be used when populating data fields
- the layout of records
- a description of each field contained within a record
- a list of fields that are required in order for the firm to meet its reporting requirements
- the validation applied to each field by UnaVista

4.1 Standard File Structure

UnaVista EMIR Reporting provides some standard templates to guide client development, since use of a template reduces risk of data corruption or incorrect data being populated. However, UnaVista EMIR Reporting is capable of accepting and normalising client data in any format.

Below is a list of the template file types that are available for submission of data to UnaVista EMIR Reporting. Most other files formats can also be configured, although they may require a short set-up period.

- Pipe and Comma-delimited files (.CSV)
- Excel files
- FpML 5.5 files – the FpML Report specification is available from the FpML standards website: www.fpml.org/spec/fpml-5-5-8-rec-2/html/recordkeeping/schemaDocumentation/index.html

FpML

We advise you to consider the following limitations of FpML:

- It is only valid for OTC trades so may limit reporting methods if you are also required to submit ETD trades
- The format of a file per trade does not lend itself well where large reporting volumes are required. Additionally, EMIR reporting is a T+1 obligation and does not require real time reporting.

If you wish to use the FpML file format, you must follow the following UnaVista standards.

- When submitting batches of trades (any point where you must send more then one trade a time) then FpML messages must be sent in a zip file.
  For example, if you need to report 10 trades and you would send 10 FpML files, you must send one zip file that contains the 10 FpML messages inside the compressed file.

- You must adhere to the FpML 5.5 format. UnaVista are unable to accommodate any bespoke mapping changes

4.2 Workflow

Once data has been imported to the UnaVista system, it follows a prescribed workflow that includes mandatory validation, additional customisable validation, exception handling and report submission to the regulator.

4.3 File Naming Conventions

There are no fixed rules regarding the naming of the file as long as the name is used consistently. Prior to the first file being loaded, the file name will need to be pre-agreed with the London Stock Exchange.

We recommend the use of a file name with a date time suffix: yyyyMMddHHmm. For example, 201311091425 for 9 November 2013 at 14:25hrs.

An example file name might be:

```
Firmtransactionreport_201311091425
```

Compressed files

The name of compressed files should be the data filename as above with '.zip' appended to it. For example:

```
Firmtransactionreport_201311091425.zip
```

4.4 File Size and Order of Processing

We recommend for optimal processing that files no more then 50,000 rows. For data exceeding 100,000 rows we advise loading data in multiple files.

Files will be processed in the order that they are received to the UnaVista system. In the event that multiple files are received at the same time, they will be processed in date order as per the time stamp in the file name in conjunction with the examples provided above.

Alternative bespoke sequencing can be used if an identifiable mechanism is available in the filename, and is subjective to confirmation by your on boarding representative.

4.5 Field Formats

This section describes the field formats required in files submitted to UnaVista as specified in the 'Format' column. For a full list of fields enabled in the UnaVista EMIR Reporting application, please refer to the EMIR Reporting Field List which is available via the following link:
http://www2.londonstockexchangegroup.com/unavista-field-list-excel

Character set

The files should use the 8-bit ASCII character set (ISO 8859-1). In particular:

- the end-of-record field should contain the New Line (NL) character, which is 10 in decimal (or 0A in Hexadecimal);
- No other 'control' or non-printable characters should be included: only ASCII characters between 32 and 127 (decimal) are permitted;
- spaces are 32 in decimal (or 20 in Hexadecimal). Spaces in this document are denoted by the symbol. '§'

Alphanumeric data

Alphanumeric fields, denoted by 'Alpha' and may contain alpha and numeric characters.

Numeric data

Numeric fields, denoted by 'Decimal'. The length field will describe the overall length and number of decimal places allowed. For example Length 30 (25,5) allows up to and including 25 digits followed by 5 decimal places.

The decimal point must be a full stop (.).

Date and Time Fields

Date only fields should be in the format YYYY-MM-DD.

Time fields should be in the format HH:MM:SS (24-hour clock) and must be in UTC time.

Date and Time fields should be in the format YYYY-MM-DD HH:MM:SS and should follow the guidance as specified above for the date and time elements.

Each field within the date must have leading zeros where applicable. Dates must be valid. For example, 1 December 2002 would be represented as '2002-12-01'.

Times must be valid. For example, 3.25 p.m. would be represented as '15:25:00', whereas 3.25 am would be represented as '03:25:00'. Where firms do not have access to the Seconds field for the time, they should complete the seconds with '00'.

Optional and unused field

Optional fields should be populated where possible. Unused fields should be left blank.

> 🕮 *Where optional fields have been populated by the client, the values will be validated in the same way as the mandatory fields. If they pass the validation, they will be sent on to the regulator despite being optional fields. You should be aware though that by populating the optional fields, you are increasing the risk of failing validation.*

4.6 Record Layout

FpML files should follow the format as specified in the FpML file structure.

Comma separated and Excel files should contain a header row which will contain the field headers.

Files should be in sequence order with older records at the top and newer records at the end.

The file content will be loaded into UnaVista in the same order as it is in the file. In the event that the same file has dependent data rows e.g. a New and Cancel record, they should appear in the file in the following sequence:

- *Header row*
- *New record*
- *Cancellation record*

For the full field specification and data types please refer to the EMIR Reporting Field List which is available here: http://www2.londonstockexchangegroup.com/unavista-field-list-excel

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5.0 Input Methods/Connectivity Options

Given that the reporting obligation is on T+1, UnaVista EMIR Reporting aims to take data in a file format, rather than message formats. The list below is of the standard options that are expected. UnaVista EMIR Reporting has a suite of functionality around the import of files, covering timings of imports, retry and deferral options, configurable alerts when files are missing, reporting of issues, and other options.

Note that all of the below are secure transport methods.

- sFTP
- encrypted files submitted via FTP
- SWIFTNet FileAct
- Direct upload through the UnaVista EMIR Reporting https user interface

5.1 sFTP and FTP

The following sFTp and FTP information below indicates that FTP is interchangeable for both protocols unless indicated otherwise.

Directory Structure

The directory structure is as follows and is from the client's perspective, e.g. Outgoing refers to outbound connections from the client to UnaVista.

```
<Root>
      /Outgoing
      /Incoming
      /Archive
```

Client Directory Access

Client Access to directories is shown in the table below:

Connection	Access Type
Outgoing	Full client access
Incoming	Read only access
Archive	Read only access

Default Directory Behaviour

Default directory behaviour of files entering the system is as follows:

- Files will stay in the **/Incoming** directory for 7 days
- Files will stay in the **/Archive** directory until they are 21 days old (7+14)

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Files Sent to LSE

When a client logs in to the system they are automatically directed to the Outgoing directory, meaning that they have full client access to the system. Authentication is made by IP address, username and password.

Access to Production and Disaster Recovery environments are the same, whereas UAT access requires a different corresponding login although the FTP server details will be the same.

UnaVista acts as an FTP server in all instances so the client is required to:

- Push files to the LSE
- Pull files from the LSE

Files from UnaVista

The directory will contain all files that UnaVista returns to the client. They can be identified by the filenames following the conventions followed in the Validation Response Files section (Chapter 6.0) of this document. The FTP mode must be passive.

ftp Transport Connection Mode

The ftp connection mode is passive. Available protocol options are:

- FTP - control port = 21 - data port = 21250-21299
- sFTP - control / data port = 22

Dependent on the options chosen above, the client will also need to open any additional ports (as their chosen preferred transport protocol).

5.2 SWIFTNet FileAct

For SWIFTNet FileAct set up information, please contact your on boarding representative.

5.3 Manual Upload to UnaVista Interface

To learn how to manually upload files to the UnaVista Interface please refer to the UnaVista EMIR User Guide.

6.0 Validation Response Files

6.1 Overview

Clients submitting files will receive the following response files: As standard you will receive response files in the same format as the files you submitted.

- An initial response file will be produced following validation by UnaVista EMIR Reporting. This will have the same name as the submitted transaction file minus the original extension, but with a suffix **_UVRes.xml** (or **.txt** dependent on the file format you originally submitted).
- Any errors returned in the validation response files are explicitly for the file that was loaded. The response files are **not** cumulative and errors for that file will only be returned once. All errors will be shown in the GUI until they are resolved (either by manual action or subsequent correction). If the file is submitted again with some corrections, the validation response file will only show any errors in that current file.

Example:

Submitted File Name	Firmtransactionreport_201311091425.xml
1st Response File Name	Firmtransactionreport_201311091425_**UVRes**.xml

- A subsequent response file will be produced following submission to the Trade Repository. This will have the same name as the submitted transaction file minus the original extension, but with a suffix **_UVTR.xml** (or**.txt** dependent on the file format you originally submitted).

Example:

Submitted File Name	Firmtransactionreport_201311091425.xml
1st Response File Name	Firmtransactionreport_201311091425_**UVTR**.xml

For reference please refer to the Workflow diagram in Chapter 2.

6.2 FpML 5.5 Response

FpML-format response files can only be sent where the client loads FpML. The reason being the inbound FpML file contains the MessageID field and Sender information required for the response.

Response Filename: Same as inbound client file (minus the original extension but including any timestamp), with **_UVRes.xml** appended to the end.

Valid files can be determined by their inclusion of a **nonpublicExecutionReportAcknowledgement** and the original message. Invalid files can be determined by a **nonpublicExecutionReportException** and the reason for the exception plus additional data (see below).

The schema used for the response files can be found at the following link:

http://www.fpml.org/spec/fpml-5-5-7-rec-1/html/recordkeeping/schemaDocumentation/schemas/fpml-recordkeeping-processes-5-5_xsd/elements/nonpublicExecutionReportException.html

The details of the data in each of the fields returned is listed below

Section	Field	Contents
header	inReplyTo	Identifier of the report that this is a response for. Taken from the inbound data
header	sentBy	Identifier for UnaVista EMIR Reporting. Currently the text "UnaVista EMIR Reporting"
header	sendTo	Identifier for the client the response is intended for. Taken from the inbound data
header	creationTimestamp	Date & time at which the response file was created (in UK time)
validation	validation	Either SUCCESS or FAILURE depending on the validation of the report
reason	reasonCode	UnaVista error code for the exception. Null if there is none
reason	location	Name of the field that caused the error. Null if there is none
reason	description	UnaVista error reason field, textual explanation of the error. Null if there is none
reason	additionalData	Value of the data in the field. In the form "Error Value=" + errorvalue. Null if there is none

6.3 Comma separated (.csv) / Pipe delimited

Sent once initial validation has been completed on the file, prior to submission to the TR.

Response Filename: Same as inbound client file with **_UVRes.txt** appended to the end.

Example:

Submitted File Name	Firmtransactionreport_201311091425.csv
1st Response File Name	Firmtransactionreport_201311091425.csv_**UVRes.txt**

Header row

Fieldname	Format	Description
Row Type	Integer (always 0)	0 for header row
Inbound	Text (200)	Name of the file that was loaded to the EMIR Reporting

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Filename		application
Import Date	Datetime (yyyy-MM-DD HH:mm:ss)	Date & time that the file was received (in UK timezone)
Reports Loaded	Integer	Number of reports contained in the file
Validation Failed	Integer	Number of reports which failed UnaVista EMIR Reporting validation
Validation Errors	Integer	Number of validation exceptions on reports which failed UnaVista EMIR Reporting validation
Queued to TR	Integer	Number of reports queued for submission to the TR

Data

All values in the response records are taken from the reports that were in error, and so may be blank where they are blank on the report. e.g. where a client does not populate the Reporting Firm ID field on a report, the Reporting Firm ID field on the response row will be blank.

The data file will contain one row per error. For example, if row *x* was to contain 2 errors due to missing Reporting Firm and Counterparty data, then it would have 2 rows reporting each error and would relate both errors to row *x*.

Fieldname	Format	Description
Row Type	Integer (always 1)	1 for data row
Row Number	Integer	Position of the report within the original inbound client file
Error Field	Text (100)	Field within the report that was in error
Error Code	Integer	UnaVista code for the error that has occurred
Error Reason	Text (100)	English text describing the error that has occurred
Error Value	Text (200)	Data that caused the error (shows contents of Error Field, may be blank)
Reporting Firm ID	Text (50)	ID of the reporting firm (taken from the report)
UTI	Text (52)	UTI of the report (taken from the report)
Action Type	Text (1)	Action Type of the report
Internal ID	Text (120)	Internal ID as populated in CD63
PUTI	Text (100)	PUTI as populated in CD8A

Footer

Fieldname	Format	Description
Row Type	Integer (always 9)	9 for footer row
Row Count	Integer	Number of data rows in this response file, excluding header and footer
Create Date	Datetime (yyyy-MM-DD HH:mm:ss)	Date & time that this response file was created (in UK timezone)

6.4 Trade Repository Response Files

Sent once the data has been submitted to the trade repository, and a response has come back to the EMIR Reporting system.

Any errors returned in the response files are explicitly for the file that was loaded. The response files are **not** cumulative and errors for that file will only be returned once. All errors will be shown in the GUI until they are resolved (either by manual action or subsequent correction). If the file is submitted again with some corrections, the validation response file will only show any errors in that current file.

To view the UnaVista EMIR Reporting workflow diagram, please see chapter 2 of this document, in particular **8) TR Submission Response.**

Response Filename: Same as inbound client file with _**UVTR.txt** (or **.xml** dependent of file format submitted) appended to the end.

Example:	
Submitted File Name	Firmtransactionreport_201311091425.csv
1st Response File Name	Firmtransactionreport_201311091425.csv_**UVTR.txt**

Header row

Fieldname	Format	Description
Row Type	Integer (always 0)	0 for header row
Inbound Filename	Text (200)	Name of the file that was loaded to the EMIR Reporting application
Import Date	Datetime (yyyy-MM-DD HH:mm:ss)	Date & time that the file was received (in UK timezone)
Reports	Integer	Number of reports contained in the file

Loaded		
Validation Failed	Integer	Number of reports which failed UnaVista EMIR Reporting validation
Validation Errors	Integer	Number of validation exceptions on reports which failed UnaVista EMIR Reporting validation
Queued to TR	Integer	Number of reports queued for submission to the Trade Repository
Submitted to TR	Integer	Number of reports submitted to the Trade Repository
Rejected by TR	Integer	Number of reports rejected by the Trade Repository

Data

All values in the response records are taken from the reports that were in error, and so may be blank where they are blank on the report.

Fieldname	Format	Description
Row Type	Integer (always 1)	1 for data row
Row Number	Integer	Position of the report within the original inbound client file
Error Field	Text (100)	Field within the report that was in error
Error Code	Integer	UnaVista code for the error that has occurred
Error Reason	Text (100)	English text describing the error that has occurred
Error Value	Text (200)	Data that caused the error (shows contents of Error Field, may be blank)
Reporting Firm ID	Text (50)	ID of the reporting firm (taken from the report)
UTI	Text (52)	UTI of the report (taken from the report)
Action Type	Text (1)	Action Type of the report
Internal ID	Text (120)	Internal ID as populated in CD63
PUTI	Text (100)	PUTI as populated in CD8A

Footer

Fieldname	Format	Description
Row Type	Integer (always 9)	9 for footer row
Row Count	Integer	Number of data rows in this response file, excluding header and footer
Create Date	Datetime (yyyy-MM-DD HH:mm:ss)	Date & time that this response file was created (in UK timezone)

6.5 Matching Response File Responses

UnaVista EMIR Reporting application generates four different types of matching response file: Summary, Unpaired, Differences and Reconciled. These are generated at the data source level i.e. one set of data for every data source loaded by a client.

Trades will only be sent once in each status file. Files are not cumulative for each status, but should a change result then it will appear in the relevant file. E.g. if a trade is unpaired, it will only be sent once in the Unpaired file. Should that trade then be reconciled with differences, it will then be sent only once in the Differences file. Should the trade then be reconciled either from unpaired or differences then it will appear once in the Reconciled file.

For a detailed graphical overview of the Matching Response File Timings please see chapter 3.0

Response File name: The client will receive a.zip file containing one file at intraday delivery (13:00) and four files in .zip at 01:00 UTC daily.

The zip file will be in the following format: ***<sourcename>*_Matching Responses_yyyyMMddHHmm.zip** (where <*sourcename*> refers to the name of the file that was entered into the system.

At 13:00 the zip file sent to client will only contain one .txt file:
***<sourcename>*_Intraday differences_yyyyMMdd.txt**

At 01:00 the zip file sent to client will contain the following .txt. files:

Folder Name	File Name
Summary	***<sourcename>*_Summary by Lastupdated_yyyyMMdd.txt *** ***<sourcename>*_Summary by Trade Date_yyyyMMdd.txt ***
Differences	***<sourcename>*_Differences_yyyyMMdd.txt**
Unpaired	***<sourcename>*_Unpaired_yyyyMMdd.txt**
Reconciled with Differences	***<sourcename>*_Reconciled with Differences_yyyyMMdd.txt**
Reconciled	***<sourcename>*_Reconciled_yyyyMMdd.txt**

*****Clients can opt to receive one or both of the summaries.

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Summaries

Summary files can be provided by either trade date or last update date. The summary reports go back 365 days, and show a simple single line report on the trades for that date.

- Summary reports will be provided after the end of each day. They will be sent out around 01:00 UK time

Field	Format	Description
Date	yyyy-MM-dd	Date that the line relates to. Can be either the trade date, or the date that the trade was last loaded into UnaVista (last updated date)
Trades	Integer	Total number of trades for that date
Reconciled	Integer	Number of trades that have been reconciled on all key fields
Differences	Integer	Number of trades that have been reconciled, but which do not reconcile on one or more key fields
Unpaired	Integer	Number of trades that have not yet been paired for that date
Reconciled with Differences	Integer	Number of trades that have been matched, but which do not reconcile on one or more non-key fields
Ineligible for Reconciliation	Integer	Number of trades that are ineligible for reconciliation

Differences and Reconciled with Differences

Differences occur where a report of a trade is paired with the report from the other counterparty, but there are fields on the two reports that do not match.

The Differences file will contain differences on key fields (for key fields, please refer to the UnaVista EMIR User Guide). If a UTI has multiple differences on key and non-key fields then it will show in the Differences file. Break priority 1 fields must match.

The Matched with Differences file will contain differences on non-key fields. These fields should be matched.

Two client responses for the Differences files are generated daily:

- The first at 01:00 UK time shows difference information for all trades last updated in the prior day
- The second export at 13:00 will include all trades last updated since 01:00. This provides the information to clients as soon as possible

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Field	Format	Description
Last Update	yyyy-MM-dd hh:mm	Time at which the trade was last updated (including changes made to the other counterparty's report)
Reporting Firm ID	Alpha (20)	LEI of the reporting counterparty
Counterparty ID	Alpha (20)	LEI of the other counterparty to the trade
UTI	Alpha (52)	Unique trade identifier for the trade
Difference Field	Alpha (100)	Name of the field which does not match against the counterparty's report. Note that there may be more than one of these
Difference Field Value	Alpha (100)	Value of the field of the Reporting Firm
Internal ID	Text (120)	Internal ID as populated in CD63
Break Priority	Integer	Key fields (must match) –1 Non-key fields – 2
Counterparty Value	Alpha (100)	Value of the field of the Counterparty

Unpaired and Ineligible for Reconciliation

Trades are considered Unpaired if no match has been found for them within 2 days. Up to that point, we have to consider the possibility that the other counterparty to the trade is late in reporting.

The Unmatched client response file is generated at 01:00 UK time. It includes details of any Unpaired trades that was first loaded more than two days ago, and was updated in the last three days.

Trades that are Ineligible for Reconciliation include trades where reconciliation will not be carried out, for example, the non-counterparty EEA flag is Y.

Field	Format	Description
Last Update	yyyy-MM-dd hh:mm	Time at which the trade was last updated (including changes made to the other counterparty's report)
Reporting Firm ID	Alpha (20)	LEI of the reporting counterparty
Counterparty ID	Alpha (20)	LEI of the other counterparty to the trade
UTI	Alpha (52)	Unique trade identifier for the trade

Internal ID	Text (120)	Internal ID as populated in CD63

Reconciled

Trades which have been reported as mismatches or unpaired but are now resolved will be shown in this response file. It is generated at 01:00 UTC, and contains details of all trades resolved in the previous day.

Field	Format	Description
Last Update	yyyy-MM-dd hh:mm	Time at which the trade was last updated (including changes made to the other counterparty's report)
Reporting Firm ID	Alpha (20)	LEI of the reporting counterparty
Counterparty ID	Alpha (20)	LEI of the other counterparty to the trade
UTI	Alpha (52)	Unique trade identifier for the trade
Internal ID	Text (120)	Internal ID as populated in CD63

7.0 Data Reports

7.1 Trade Repository Client Data Access File

Using the GUI, users can request data for a Reporting Firm ID that they have submitted to the Trade Repository. Files can be generated for Trade or Valuation data for a defined period. For information on how to request the data using the GUI, please refer to the Unavista User Guide for details. This section will provide details on the file format that is generated.

Data Content

Trade and Valuation Data will provide data for the requested period based on Reporting Timestamp. This is the timestamp of when the data row was received by the Trade Repository.

File Limits

Please note that all request files are limited to 25 million rows of data. Should your request exceed 25 million rows the data will be truncated. Please note this information is included in the file footer.

File Format and Name

The files formats are pipe (|) delimited and csv files. The files are .zip files that contain the .txt or .csv data file.

TradeDataRequest_*<ReportingFirmID>_{SubmittingFirmID}_<StartDate yyyyMMdd>_{EndDate yyyyMMdd}*.{txt|csv}.zip
ValuationDataRequest _*<ReportingFirmID>_{SubmittingFirmID}_<StartDate yyyyMMdd>_{EndDate yyyyMMdd}*.{txt|csv}.zip

For example: .

- TradeDataRequest_213800QAUUUP6I445N30_20131201_21031230.zip
- TradeDataRequest_213800QAUUUP6I445N30_20131201_21031230.txt
  Or
- TradeDataRequest_213800QAUUUP6I445N30_20131201_21031230.zip
- TradeDataRequest_213800QAUUUP6I445N30_20131201_21031230.csv

Please note the SubmittingFirmID and EndDate will be included depending on the data request made. Where the SubmittingFirmID is referenced then it will also be included. If the data is for a single day, then as the start and end dates specified are the same date, the EndDate will not be included in the file name.

Header and Footer Row

All files contain a header row of the field names.

All files will contain 2 footer rows, the first is the row count and the second footer is a reminder of the file limit.

ROW COUNT = {x}
IF ROW COUNT IS 25000000 THE DATA HAS BEEN TRUNCATED AND YOU NEED TO REFINE THE REQUEST.

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For example:

ROW COUNT = 10000
IF ROW COUNT IS 25000000 THE DATA HAS BEEN TRUNCATED AND YOU NEED TO REFINE THE REQUEST.

Field Specification

The fields included in the file are fields that are stored in the Trade Repository. Some fields on the specification are used for processing purposes and may not be included on the file where they are not sent to the Trade Repository. The fields included are as below and the data type and content will reflect the field details as provided in the EMIR Field list.

Trade Data:

No.	Format	Len	UV Field Name	Notes
CP0A	Text	1	Common Data Delegated	Should not be populated.
CP2	Text	20	Reporting Counterparty ID	
CP2A	Text	1	Reporting Firm ID Type	Should not be populated.
No.	**Format**	**Len**	**UV Field Name**	**Notes**
CP3	Text	50	Other Counterparty ID	
CP3A	Text	1	Other Counterparty ID Type	
CP4	Text	100	Reporting Firm Corporate Name	
CP5	Text	500	Reporting Firm Registered Office	
CP5A	Text	2	Reporting Firm Country Code of Branch	
CP6	Text	1	Reporting Firm Corporate Sector	
CP7	Text	1	Reporting Firm Financial Status	
CP8	Text	50	Broker ID	
CP8A	Text	1	Broker ID Type	
CP9	Text	50	Submitting Entity ID	
CP9A	Text	1	Submitting Entity ID Type	
CP10	Text	50	Clearing Member ID	
CP10A	Text	1	Clearing Member ID Type	
CP11	Text	50	Beneficiary ID	
CP11A	Text	1	Beneficiary ID Type	
CP12	Text	1	Trading Capacity	
CP13	Text	1	Buy / Sell Indicator	
CP14	Text	1	Counterparty EEA Status	
CP15	Text	1	Commercial / Treasury Activity	
CP16	Text	1	Above Clearing Threshold	
CP17	Decimal	20 (26.12)	Mark to Market Value	

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CP18	Text	3	Mark to Market Currency	
CP19	Date	10	Valuation Date	yyyy-MM-dd
CP20	Time	8	Valuation Time	
CP21	Text	1	Valuation Type	
CP22	Text	2	Collateral Type	
CP23	Text	1	Collateral Portfolio	
CP24	Text	200	Collateral Portfolio Code	
CP25	Decimal	20 (26.12)	Collateral Value	
CP26	Text	3	Collateral Value Currency	
CP27	Text	50	Fund Manager ID	
CP27A	Text	1	Fund Manager ID Type	
CD1	Text	1	Instrument ID Taxonomy	
CD2	Text	12	Instrument ID	
CD2A	Text	2	ETD Asset Class Type	
CD3	Text	6	Instrument Classification	
CD4	Text	20	Underlying Instrument ID	
No.	**Format**	**Len**	**UV Field Name**	**Notes**
CD4A	Text	1	Underlying Instrument ID Type	
CD5	Text	3	Notional Currency 1	
CD6	Text	3	Notional Currency 2	
CD7	Text	3	Deliverable Currency	
CD8	Text	52	UTI	
CD9	Text	40	MiFID Transaction Reference Number	
CD10	Text	4	Venue ID	
CD11	Text	1	Compression Exercise	
CD12	Decimal	20 (26.12)	Price / Rate	
CD13	Text	3	Price Notation	
CD14	Decimal	20 (26.12)	Notional	
CD15	Decimal	10 (26.12)	Price Multiplier	
CD16	Decimal	10 (26.12)	Quantity	
CD17	Decimal	20 (26.12)	Up Front Payment	
CD17a	Text	3	Upfront Payment Currency	
CD18	Text	1	Delivery Type	
CD19	Date & Time	NA	Execution Timestamp	yyyy-MM-dd HH:mm:ss
CD20	Date	NA	Effective Date	yyyy-MM-dd
CD21	Date	NA	Maturity Date	yyyy-MM-dd

CD22	Date	NA	Termination Date	yyyy-MM-dd
CD23	Date	NA	Settlement Date	yyyy-MM-dd
CD24	Text	50	Master Agreement	
CD25	Text	4	Master Agreement Version	
CD26	Date & Time	NA	Confirmation Timestamp	yyyy-MM-dd HH:mm:ss
CD27	Text	1	Confirmation Type	
CD28	Text	1	Clearing Obligation	
CD29	Text	1	Cleared	
CD30	Date & Time	NA	Clearing Timestamp	yyyy-MM-dd HH:mm:ss
CD31	Text	20	CCP ID	
CD31A	Text	1	CCP ID type	
CD32	Text	1	Intragroup	
CD33	Decimal	10 (26.12)	Fixed Rate Leg 1	
CD34	Decimal	10 (26.12)	Fixed Rate Leg 2	
CD35	Text	20	Fixed Rate Day Count	
No.	**Format**	**Len**	**UV Field Name**	**Notes**
CD36	Text	10	Fixed Leg Payment Frequency	
CD37	Text	10	Floating Rate Payment Frequency	
CD38	Text	10	Floating Rate Reset Frequency	
CD39	Text	50	Floating Rate Leg 1	
CD40	Text	50	Floating Rate Leg 2	
CD41	Text	3	Currency 2	
CD42	Decimal	10 (26.12)	Exchange Rate 1	
CD43	Decimal	10 (26.12)	Forward Exchange Rate	
CD44	Text	7	Exchange Rate Basis	
CD45	Text	2	Commodity Base	
CD46	Text	2	Commodity Details	
CD47	Text	16	Delivery Point	
CD48	Text	50	Interconnection Point	
CD49	Text	2	Load Type	
CD50	Date & Time	NA	Delivery Start Timestamp	yyyy-MM-dd HH:mm:ss
CD51	Date & Time	NA	Delivery End Timestamp	yyyy-MM-dd HH:mm:ss
CD52	Text	50	Contract Capacity	
CD53	Text	10	Quantity Unit	Decimal
CD54	Decimal	10 (26.12)	Price Per Time Interval Quantities	
CD55	Text	1	Put / Call	

CD56	Text	1	Option Exercise Type	
CD57	Decimal	10 (26.12)	Strike Price	
CD58	Text	1	Action Type	
CD59	Text	50	Action Type Details	
CD60	Text	1	Message Type	
CD61	Text	4	ETD Indicator	
CD41a	Decimal	20 (26.12)	Notional 2	
CD8A	Text	100	PUTI	
CD62	Text	120	Instrument Description	
CD63	Text	120	Internal ID	
CD64	Date and Time	NA	Event Timestamp	yyyy-MM-dd HH:mm:ss
CD65	Text	100	Reporting Jurisdiction(s) (EMIR, EMIR + ASIC only)	
	Text	152	ThreeWayKey	Text

Valuation Data:

No.	Format	Len	UV Field Name	Notes
CP2	Text	20	Reporting Counterparty ID	
CP3	Text	50	Other Counterparty ID	
CP17	Decimal	20 (26.12)	Mark to Market Value	
CP18	Text	3	Mark to Market Currency	
CP19	Date	10	Valuation Date	yyyy-MM-dd
CP20	Time	8	Valuation Time	
CP21	Text	1	Valuation Type	
CP22	Text	2	Collateral Type	
CP23	Text	1	Collateral Portfolio	
CP24	Text	200	Collateral Portfolio Code	

CP25	Decimal	20 (26.12)	Collateral Value	
CP26	Text	3	Collateral Value Currency	
	Text	152	ThreeWayKey	Text
CD8A	Text	100	PUTI	
CD64	Date and Time	NA	Reporting Timestamp	yyyy-MM-dd HH:mm:ss

Example Files
These are available in the UnaVista EMIR Trade Repository Document Pack.

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8.0 Validation and Exception Codes

All error codes relating to the EMIR Transaction Reporting application are available in the EMIR Field list document which is available via the following links: http://www2.londonstockexchangegroup.com/unavista-field-list-excel

Technical Specification

9.0 Useful Information

9.1 Audit and Data Retention in the Trade Repository

All validated data loads and manually actioned records sent to the Trade Repository will be processed to the TR. These include all new, cancel, modifications, error and compression events.

All data in the TR will also be fully audited as standard in the UnaVista system for each database record whether a new creation or updated with a subsequent record. This will also capture when the data record was changed, and where manual actions are involved, who was responsible for the audit event.

Raw database input records, TR data and TR audit data will be archived after 3 days and retained for 10 years as per ESMA requirements.

9.2 User Guides and Training

A UnaVista EMIR Reporting user guide will be made available to all clients, either during testing or following live deployment of the solution. Formal training with a UnaVista solution specialist is also available upon request.

9.3 On-Going Support

As this document is intended to supply information to future system users any questions relating to the functionality of the application should be directed to your UnaVista Pre-Sales Representative.

For all queries during on boarding please contact your on boarding representative or email EMIRonboarding@lseg.com

For all queries post go live then please contact UnaVistahelp@londonstockexchange.com

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