Technical Specification

August 2017

Reconciliation Files IDEM

London Stock Exchange Group

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1.0   Change History

Version	Date	Reason for Change
1.0	August 2017	First Draft

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2.0   Introduction

2.1 Purpose

The purpose of this document is to provide a detailed analysis for the new Reconciltiation Files for IDEM.

These CR aims to provide customers with their orders and trades details in a MIFID II compliant format to support their reporting duties under MIFID II regulation.

System impacts:

- SOLA

- FTP

3.0   Assumptions

ID	Description	Notes
1	Bundle Orders and Third Party Orders	Bundle and Third Party Orders will be managed as Committed Orders
2	Quotes	Quotes will be reported only if traded (Trades file)
3	Cross Orders	Cross Orders entered via OX message will be reported only as Trades
4	Schedule	Files will be generated after the end of the extended trading hours (20:30 CEST)
5	Members	Files will be generated by Member (CED code)
6	Price Decimal	Price field will be converted in order to report decimal separator (Es. 9.4)
7	Timestamp	All timestamps will need to be converted in a MIFID II format

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4.0 Impact Analysis

In order to generate the files, the following events need to be taken into account:

Event	SAIL message	Notes
New Order	KE	
Triggered Order	KE	KE messages with Special Price Term blank and Additional Price populated
Modified Order	KM	
Partially trades Orders	KE, NT	
New Cross Order (OX)	NT	
Cancelled by Participant Order	KZ	
Cancelled by the Exchange Orders	NZ	
Expired Orders	NZ	
Trades	NT, NL	
Cancelled by Exchange Trades	NX, NY	

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4.1   File Format

The file should be comma separated.

4.2   ORD file specifications

Field Name	Field Type	Size	Description	Notes
Order timestamp	Timestamp	20	Order date/time in MIFID format: YYYYMMDDHHMMSSmmmuuu	
Instrument	Sail Instrument ID + Group ID	6	Instrument Sico	
ISIN	ISIN	12	Instrument ISIN	To be retrieved from the Instrument's reference data
Trader ID	Trader ID	8	Identification of the trader: FirmID (4)+ExchangeID(1)+ ID **0201IMM1**	
Order ID	Order ID	14	Unique Order Id: Instrument Sico + Order Id	This value needs to be concatenated by the CDW in order to build a unique order identifier
Order Status	Status	1	This field may contain the following values: ' ': blank 'A': Cancelled by trader 'X': Order fully executed (or remaining quantity having possibly been eliminated due to FAK or SEP) 'E': The order has been eliminated by the trading engine. 'B': Order eliminated (Out of	It needs to be used for reporting: • cancelled orders • stop triggered orders

Field Name	Field Type	Size	Description	Notes
			instrument limits) 'C': Order eliminated by Circuit Breaker 'M': Eliminated by Market Control 'I': Eliminated on disconnection 'U': Eliminated due to Unpriced Leg 'R': Eliminated Due To Risk Master Switch 'S': Order put in book as Stop order 'T': Eliminated Due To Risk Limit Exceeded 'Z': Removed by SEP	
Verb	Verb	1	Order side. Possible values: 'B': Buy 'S': Sell	
Quantity	Quantity	8	Order size	
Assigned Price	Price	10	Order price	Price format is to be reported with decimal separators: Es: 2000000960 Becomes: 9.6000
Clearing Instruction	Clearing Instruction	12	Free text clearing instructions	
Account Type	Account Type	1	Possible values: 'C': Client 'H': House 'P': Matched Principal	
Open/Close	Open/Close	1	Possible values are: 'O': Open 'C': Close	

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Field Name	Field Type	Size	Description	Notes
Hedge/Spec	Hedge/Spec	1	Possible values are: ''H': Hedge 'S': Speculator	
Clearing Operation	Clearing Operation mode	1	This field can contain the following values: ' ': blank 'G': Give up	
Owner Data	Client Order ID	24	Client OrderID	Free text. This value is taken from the first 24 characters of the Owner Data
Owner Data	Client Reference ID	26	Client ReferenceID	Free text. This value is taken from the last 26 characters of the Owner Data
Original Order ID	Original Order ID	14	Unique order id: Instrument Sico + Order Id	This value needs to be concatenated by the CDW in order to build a unique order identifier
Client Code Qualifier	Client ID Code Qualifier	1	Possible values: ' ': blank or 0 'L': Legal Entity Identifier 'P': Natural Person	
Client ID Code	Client ID Code	10	Possible values: ' ': blank or 0 '1': PNAL '2': AGGR Numerical Short Code	
Investment Decision Qualifier	Investment Decision Qualifier	1	Possible values: ' ': blank or 0 'A': Algorithm	

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Field Name	Field Type	Size	Description	Notes
			'P': Natural Person	
Investment Decision	Investment Decision	10	Possible values: ' ': blank or 0 Numerical Short Code	
Execution Decision Qualifier	Execution Decision Qualifier	1	Possible values: ' ': blank or 0 'A': Algorithm 'P': Natural Person	
Execution Decision	Execution Decision	10	Possible values: '3': CLIENT Numerical Short Code	
DEA Flag	Yes/No (1)	1	Possible values: 'Y' or 'N'	
Algo Flag	Yes/No (1)	1	Possible values: 'Y' or 'N'	
Liquidity Provision Flag	Yes/No (1)	1	Possible values: 'Y' or 'N'	
Physical Leg	Text	20	This field will only be populated for Exchange For Physical orders (Price Type: 'P')	
Price Type	Price Type	1	Possible values: 'L': Limit 'O': at Opening price 'M': at best opposite price (Top Order) 'W': at any price (Market Order) 'C': Committed 'P': Exchange For Physical blank: Unknown	
Displayed Quantity	Displayed Size	8	This value shows: • full order quantity at order entry	

Field Name	Field Type	Size	Description	Notes
			• remaining order quantity in case of partial trade • Disclosed Quantity for Iceberg Orders	
Proposal Type	Proposal Type	1	This field can contain the following values: 'B': Bundle Order 'T': Inter Dealer Broker Order Reported only in case of Bundle committed or Third Party Committed orders	
Proposal ID	Proposal ID	8	Proposal ID. Reported only in case of Bundle committed or Third Party Committed orders	
Operation Firm ID	Firm ID	4	Participant Firm ID	
Special Price Term	Special Price Term	1	Populated only for Stop Orders. Can contain the following values: ' ': No term 'S': Stop 'T': If Touched 'E': Stop On Bid 'F': If Bid Touched 'I': Stop On Ask 'H': If Ask Touched	
Additional Price	Additional Price	10	This price is only populated when Special Price Term is one of the followings: 'S': Stop 'T': If Touched 'E': Stop On Bid 'F': If Bid Touched 'I': Stop On Ask 'H': If Ask Touched	Price format is to be reported with decimal separators: Es: 2000000960 Becomes: 9.6000
Quantity Term	Quantity Term	1	This field can contain one of	Field is only populated for the following

Field Name	Field Type	Size	Description	Notes
			the following values: 'M': Minimum 'D': Disclosed ' ': None	order types: • FOK • FAK • Iceberg
Additional Quantity	Additional Quantity	8	This field is populated only in case the field Quantity Term is 'M' or 'D'	
Duration Type	Time in force	1	This field can contain one of the following values: 'J': Day (Valid for the current Day only) 'D': Good till date (Order is Valid until date) 'F': Good till cancel (Valid until instrument expiration) 'E': Fill and Kill (Immediate order, cannot be booked) 'W': While Connected	
GTD Date	GTD Date	8	Order time validity expressed in: YYYYMMDD	
Opposite Firm	Firm ID	4	Market Firm ID. Only populated in case of Committed Orders	
Order Type	Order Type	1	'O': Order	
Remaining Quantity	Quantity	8	Remaining size of partially traded orders	
Initial Quantity	Quantity	8	Initial Order Size	
Priority Timestamp	Timestamp	20	Anytime the order changes its priority (iceberg refill, order modification, etc), this field is updated with the new priority timestamp expressed in MIFID II format YYYYMMDDHHMMSSmmmuuu	

Field Name	Field Type	Size	Description	Notes

4.3 TRD file specifications

Field Name	Field Type	Size	Description	Notes
Trade timestamp	timestamp	20	Trade date/time in MIFID format: YYYYMMDDHHMMSSmmmuuu	Message header
Instrument	Sail Instrument ID + Group ID	6	Instrument Sico	
ISIN	ISIN	12	Instrument ISIN	To be retrieved from the Instrument's reference data
Trader ID	Trader ID	8	Identification of the trader: FirmID (4)+ExchangeID(1)+ ID **0201**IMM1	
Reference ID	Reference ID	14	Order unique identifier: Sail Instrument Sico + Order ID	To be built by the CDW by concatenating Instrument's Sico and Order id. For trades entered by the Exchange (using ConfigManager), this field is always set to '00000000'
Verb	Verb	1	Order side. Possible values: 'B': Buy 'S': Sell	
Quantity Traded	Quantity	8	Match quantity	
Trade Price	Price	10	Match Price	Price format is to be

Field Name	Field Type	Size	Description	Notes
				reported with decimal separators: Es: 2000000960 Becomes: 9.6000
Clearing Instruction	Clearing Instruction	12	Free text clearing instructions	
Account Type	Account Type	1	Possible values: 'C': Client 'H': House 'P': Matched Principal	
Open/Close	Open/Close	1	Possible values are: 'O': Open 'C': Close	
Hedge/Spec	Hedge/Spec	1	Possible values are: ''H': Hedge 'S': Speculator	
Clearing Operation	Clearing Operation mode	1	This field can contain the following values: ' ': blank 'G': Give up	
Owner Data	Client Order ID	24	Client OrderID	Free text. This value is taken from the first 24 characters of the Owner Data
Owner Data	Client Reference ID	26	Client ReferenceID	Free text. This value is taken from the last 26 characters of the Owner Data
Special Trade Indicator	Special Trade Indicator	1	This field may contain one of the following values: ' ':: Normal Trade '1': Exchange Granted 1 (EG1) '2': Exchange Granted 2 (EG2) 'B': Block	

Field Name	Field Type	Size	Description	Notes
			'D': Crossed 'K': Committed Block 'T': Committed 'E': Exchange for Physical (EFP)	
Price Type	Price Type	1	Possible values: 'L': Limit 'O': at Opening price 'M': at best opposite price (Top Order) 'W': at any price (Market Order) 'C': Committed 'P': Exchange For Physical blank: Unknown	
Trade Type	Trade Type	1	Possible values: 'O': Opening (Uncrossing trades) 'M': Trade entered by the Exchange 'F': Traded during Continuous Trading	
Trade Number	Transaction ID	14	Transaction unique identifier: Sail Instrument Sico + Trade Number Es: **IZ10zA00003462**	To be built by the CDW by concatenating the values InstrumentID + Group ID + Trade Number
Trade Number Base 62	Transaction ID	20	Transaction unique identifier	Base 62 Decoded version of the SOLA Trade ID concatenate with the SICO (Instrument ID + Group ID) To be built by the CDW

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Field Name	Field Type	Size	Description	Notes
Trade Memo	Trade Memo	50	Free text	
Original Reference ID	Original Reference ID	8	Original Order ID Sail Instrument Sico + Order ID	To be built by the CDW by concatenating Instrument's Sico and Order id. For trades entered by the Exchange (using ConfigManager), this field is always set to '00000000'
Client Code Qualifier	Client ID Code Qualifier	1	Possible values: ' ': blank or 0 'L': Legal Entity Identifier 'P': Natural Person	
Client ID Code	Client ID Code	10	Possible values: ' ': blank or 0 '1': PNAL '2': AGGR Numerical Short Code	
Investment Decision Qualifier	Investment Decision Qualifier	1	Possible values: ' ': blank or 0 'A': Algorithm 'P': Natural Person	
Investment Decision	Investment Decision	10	Possible values: ' ': blank or 0 Numerical Short Code	
Execution Decision Qualifier	Execution Decision Qualifier	1	Possible values: ' ': blank or 0 'A': Algorithm 'P': Natural Person	
Execution Decision	Execution	10	Possible values:	

Field Name	Field Type	Size	Description	Notes
	Decision		'3': CLIENT Numerical Short Code	
DEA Flag	Flag	1	Possible values: 'Y' or 'N'	
Algo Flag	Flag	1	Possible values: 'Y' or 'N'	
Liquidity Provision Flag	Flag	1	Possible values: 'Y' or 'N'	
PTT Trade Type Flag	PTT Trade Type Flag	1	Possible values: ' ': blank 'T' (TPAC): Package transaction flag 'X' (XFPH): Exchange for physical transaction flag	
PTT Cancellations and Amendments Flag	PTT Cancellations and Amendments Flag	1	Possible values: ' ': blank 'C' (CANC): Cancellation flag 'A' (AMND): Amendment flag	
Waiver Indicator Flag	Pre trade Waiver Indicator Flag	1	Possible values: ' ': blank '0' (LRGS): Large in scale '1' (ILQD): Negotiated transaction in illiquid instrument '2' (SIZE): Above specified size transaction	
Deferral Flag	Post Trade Deferral Flag	1	Possible values: ' ': blank 'L' (LRGS): Deferral for Large in scale 'I' (ILQD): Deferral for illiquid instrument 'S' (SIZE): Deferral for size specific transaction	
Trade Status	Proposal Status	1	Possible values: 'A': Approved	
Physical Leg	Text	20	Free text. Always populated in case of Price Type 'P'	

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Field Name	Field Type	Size	Description	Notes
			(Exchange For Physical)	
Order Type	Order Type	1	Possible values: 'O': Order 'Q': Quote 'X': Cross Order	
Liquidity Status	Liquidity Status	1	Possible values: 'M': Maker 'T': Taker ' ': blank	The field will assume value 'Taker' for traded aggressive orders and 'Maker' for traded passive (in the book) orders. This field will always be blank in case of uncrossing trades (NT with Trade Type ='O')
Remaining Quantity	Quantity	8	This field is populated in case of partially filled orders	
Proposal Type	Proposal Type	1	This field can contain the following values: 'B': Bundle Order 'T': Inter Dealer Broker Order Reported only in case of Bundle committed or Third Party Committed orders	
Proposal ID	Proposal ID	8	Proposal ID. Reported only in case of Bundle committed or Third Party Committed orders	
Special Price Term	Special Price Term	1	Can contain the following values: ' ': No term 'S': Stop 'T': If Touched 'E': Stop On Bid 'F': If Bid Touched 'I': Stop On Ask 'H': If Ask Touched	
Additional Price	Additional Price	10	This price is only populated when Special Price Term is one of the followings: 'S': Stop	Price format is to be reported with decimal separators:

Field Name	Field Type	Size	Description	Notes
			'T': If Touched 'E': Stop On Bid 'F': If Bid Touched 'I': Stop On Ask 'H': If Ask Touched	Es: 2000000960 Becomes: 9.6000
Additional Quantity	Quantity Term	1	This field can contain one of the following values: 'M': Minimum 'D': Disclosed ' ': None	Field is only populated for the following order types: • FOK • FAK • Iceberg
Additional Quantity	Additional Quantity	8	This field is populated only in case the field Quantity Term is 'M' or 'D'	
Duration Type	Time in force	1	This field can contain one of the following values: 'J': Day (Valid for the current Day only) 'D': Good till date (Order is Valid until date) 'F': Good till cancel (Valid until instrument expiration) 'E': Fill and Kill (Immediate order, cannot be booked) 'W': While Connected	
GTD Date	GTD Date	8	Order time validity expressed in YYYYMMDD	
Connection ID	Member Participant	11	Participant ID connection	
Exchange ID	Exchange ID	1	This field may contain the following values: 'I': IDEM	It can be used to map the market MIC Code: XDMI
OrderTimeStamp	Date Time ms	20	Order timestamp expressed in MIFID II format: YYYYMMDDHHMMSSmmmuuu	
Strategy Sico	Instrument Sico: Strategy	6	Populated in case of Strategy Report or Implied Trades	

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Field Name	Field Type	Size	Description	Notes
	Instrument ID + Strategy Group ID			
Strategy Verb	Verb	1	Populated in case of Strategy Report or Implied Trades	
Strategy Trade Number	Number	14	Transaction unique identifier: Instrument Sico + Trade Number	To be built by the CDW by concatenating the values Instrument ID + Group ID + Trade Number
Strategy Trade Number Base 62	Strategy transaction ID	20	Transaction unique identifier: Instrument Sico + Trade Number	Base 62 Decoded version of the SOLA Trade ID concatenate with the SICO (Instrument ID + Group ID) To be built by the CDW
Match Number	Match Number	8	Match ID that links all trades involved in the match (NT's and NL's)	
Notional Amount	Notional Value	16	Trade notional amount expressed in 12i.4d	