



DOCUMENT TITLE

Universal Trading Platform Market Data Feed Equities

Mapping from TOPCAC/FIM data feeds

STATUS

Version 1.1 / 18 July 2008

Introduction

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Overview

This document provides a functional detailed mapping for FIM/TOPCAC data feed users who want to migrate to the Universal Trading platform Market Data feed.

History

V1.0 - 1st July 2008, Initial version, based on Universal Trading Platform Market Data Feed V 1.1

V1.1 - 18 July 2008, based on Universal Trading Platform Market Data Feed V 1.0.1:
. Addition of 2 fields in the '140-Quote' message ('TypeOfAskPrice' and 'TypeOfBidPrice')
. Modification of the name of the field 'CValMneCpsIdx' in the A5 message

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General overview

The aim of this document is to provide to FIM/TOPCAC data feeds users a comparison between TOPCAC/FIM feeds and the Universal Trading Platform Market Data Feed (UTP-MDF).

This document is only functional oriented and does not cover a comparison of the protocols (e.g. how to detect a message loss, how to get incoming data in sequence, how to replay the feed, ...) and does not explain how to process the feed (e.g. how to maintain orderbooks, ...)

NB: From a technical point of view, FIM and TOPCAC are the same feed, but with a different entitlement. TOPCAC is the feed dedicated to members while FIM is the feed dedicated to datavendors. Even if FIM and TOPCAC are the same feed, each one having its own specifications, it can occur that the name of some fields differ in the 2 specifications. It is the reason why field names and offset have been added.

Relevant documentation:

- FIM: Release 6.7.8 (March 2008) + Off-exchange trade reports Appendix Release 1.2
- TOPCAC: Release 8.12 (April 2008)

1 - High level mapping

In FIM/TOPCAC data feeds as in UTP-MDF, data is organized in messages. The following table provides a mapping between FIM/TOPCAC messages and UTP Market data feeds messages.

Some functional messages, even if they are still described in the current FIM/TOPCAC Specifications, are obsolete and not used any more. No mapping is provided for these messages. In addition, a mapping is not provided for technical messages.

TopCac / FIM Messages	UTP-MDF Messages
0001 - Opening trade	220 - Trade creation 240 - Trade full information
0002 - Trade	220 - Trade creation 221 - Trade deletion 240 - Trade full information
0003 - Price update	241 - Price update
0004 - 5 Best limits	To be decommissioned - Out of scope
0005 - Instrument state change	505 - Instrument state change
0007 - Start of trading day	N/A
0010 - Settlement price	244 - Settlement price
0013 - EURO interbank rate	513 - EURO interbank rate
0016 - Group state change	516 - Group state change
0023 - Mail	523 - Mail
0030 - Theoretical opening price	530 - TOP ((NSC) 531 - Market imbalance
0032 - Auction summary	245 - Summary
0034 - Authorised limits outside the trading session	534 - Authorized out of session limits
0035 - TCS Trading state changes	535 - TCS Trading state changes
0036 - Trade publication	243 - Trade reporting
0037 - Intermediate static thresholds	537 - Thresholds
0038 - Weighted average spread	141 - WAS
0039 - Session timetable	539 - Session timetable
0094 - Market shares	Out of scope
0100 - Transmitter start-up	N/A
0109 - Presence (I'm alive)	N/A
0133 - TCS Trade	242 - TCS Trade
0350 - Start of instrument characteristics (current day)	550 - Start of instrument characteristics
0351 - End of instrument characteristics (current day)	551 - End of instrument characteristics
0353 - Instrument characteristics (current day)	553 - Instrument characteristics (+ flat file on the Web)
0450 - Start of instrument characteristics (next day)	550 - Start of instrument characteristics
0451 - End of instrument characteristics (next day)	551 - End of instrument characteristics
0453 - Instrument characteristics (next day)	553 - Instrument characteristics (+ flat file on the Web)
00A5 - Stock index - Composition	544 - Index composition
00A6 - Display of bid and ask	540 - Display of bid and ask
00B1 - Real time Index	542 - Real-time index
00B2 - Stock index - Summary of the day	543 - Index summary
00B4 - Market maker quote	Obsolete - Out of scope
00B5 - Name of subscriber representative	Obsolete - Out of scope
00B6 - Liquidity provider's best quotes	Obsolete - Out of scope
00B9 - Day's summary	541 - Daily summary
00L4 - 10 Best limits	140 - Quotes
00S0 - Market sheet retransmission	N/A
00S3 - Market sheet update	230 - Order update
00S4 - Deletions in market sheet	230 - Order update

2 - Message mapping

2.1) 0001 - Opening trade

There is a 220 and a 240 outgoing message in the UTP Market Data feed when there was a 0001 message in the TOPCAC/FIM feed. It is up to customers to either use the 220 or 240 messages. **Customers should never use both 220 and 240 simultaneously for price updates.**

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Quantity traded	1	8	Trades-220 and Trades-240	Volume Volume
2	Price of trade	9	10	Trades-220 and Trades-240	Price + PriceScaleCode Price + PriceScaleCode
3	Cumulative quantity traded	25	9	Trades-240	CumulativeQuantity
4	Sign of price variation from last reference price	34	1		N/A
5	Percentage variation today's price/last reference price (2 decimals)	35	5		N/A
6	Cross order indicator	44	1	Trades-220 and Trades-240	TradCond3 TradCond3
7	Last trade at same price indicator	45	1	Trades-220 and Trades-240	TradCond2 TradCond2
8	Sign of variation from previous price	48	1	Trades-240	TickDirection
9	Trade ID	53	7	Trades-220 and Trades-240	TradeIDNumber TradeIDNumber
10	Percentage variation today's price/last reference price	60	10	Trades-240	VariationLastPrice + VariationScaleCode

NB: The field Phase in the 220 and 240 messages takes the value 'O' when fed by a 0001 message

2.2) 0002 - Trade

2.2.1) Creation of a trade (Trade cancellation indicator=07)

There is a 220 and a 240 outgoing message in the UTP Market Data feed where there was a 0002 message in the TOPCAC/FIM feed, with Trade cancellation indicator=07. It is up to customers to either use the 220 or 240 messages. **Customers should never use both 220 and 240 simultaneously for price updates.**

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Quantity traded	1	8	Trades-220 and Trades-240	Volume Volume

2	Price of trade	9 10	1 9	Trades-220 and Trades-240	Price + PriceScaleCode Price + PriceScaleCode
3	Cumulative quantity traded	25	9	Trades-240	CumulativeQuantity
4	Sign of price variation from last reference price	34	1		N/A (Obsolete)
5	Percentage variation today's price/last reference price (with 2 decimals)	35	5		N/A (Obsolete)
6	High price of the trading session	42	10	Trades-240	HighestPrice + PriceScaleCode
7	Low price of the trading session	52	10	Trades-240	LowestPrice + PriceScaleCode
8	Trade cancellation indicator	62	2		
9	Cross order indicator	66	1	Trades-220 and Trades-240	TradCond3 TradCond3
10	Last trade at same price indicator	67	1	Trades-220 and Trades-240	TradCond2 TradCond2
11	Origin of market information indicator	68	1		N/A (Obsolete)
12	Sign of variation from previous price	71	1	Trades-240	TickDirection
13	Trade ID	75	7	Trades-220 and Trades-240	TradeIDNumber TradeIDNumber
14	Percentage variation today's price/last reference price	82	10	Trades-240	VariationLastPrice + VariationScaleCode

2.2.2) Cancellation of a trade (Trade cancellation indicator=00)

There is a 221 outgoing message in the UTP Market Data feed where there was a 0002 message in the TOPCAC/FIM feed, with Trade cancellation indicator=00.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Quantity traded	1	8		N/A
2	Price of trade	9 10	1 9		N/A
3	Cumulative quantity traded	25	9		N/A
4	Sign of price variation from last reference price	34	1		N/A
5	Percentage variation today's price/last reference price (with 2 decimals)	35	5		N/A (Obsolete)
6	High price of the trading session	42	10		N/A
7	Low price of the trading session	52	10		N/A
8	Trade cancellation indicator	62	2		
9	Cross order indicator	66	1		N/A
10	Last trade at same price indicator	67	1		N/A
11	Origin of market information indicator	68	1		N/A (Obsolete)
12	Sign of variation from previous price	71	1		N/A

13	Trade ID	75	7	Trades-221	OriginalTradeIDNumber
14	Percentage variation today's price/last reference price	82	10		N/A

2.3) 0003 - Price update

There is a 241 outgoing message in the UTP Market Data feed where there was a 0003 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Last price of the trading day	1	10	Trades-241	Price + ScaleCode
2	High price of the trading day	11	10	Trades-241	HighestPrice + ScaleCode
3	Low price of the trading day	21	10	Trades-241	LowestPrice + ScaleCode
4	Type of price	31	2	Trades-241	TypeOfPrice
5	Sign of variation from previous day's closing price	33	1		N/A (Obsolete)
6	Variation from previous day's closing price (with 2 decimals)	34	5		N/A (Obsolete)
7	Sign of variation from previous price	39	1		N/A
8	Percentage variation today's price/last reference price	40	10	Trades-241	VariationLastPrice + VariationScaleCode

2.4) 0004 - 5 Best limits

This message type is decommissioned in July 2008, so out of scope. Please see message type 00L4.

2.5) 0005 - Instrument state change

There is a 505 outgoing message in the UTP Market Data feed where there was a 0005 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Instrument trading status indicator	1	1	Mkt info-505	InstrumentTradingStatus
2	Origin of reservation	2	1	Mkt info-505	OriginReservation
3	Start date of halting	3	8	Mkt info-505	StartDateHalting
4	Start time of halting	11	6	Mkt info-505	StartTimeHalting
5	Instrument state	17	2	Mkt info-505	InstrumentState
6	Action affecting the instrument state	19	1	Mkt info-505	ActionAffectingState
7	Programmed opening time for instrument	20	6	Mkt info-505	ProgOpeningTime
8	Instrument state in TCS	26	1	Mkt info-505	InstrumentStateTCS
9	Period side	27	1	Mkt info-505	PeriodSize

2.6) 0007 - Start of trading day

This technical message is out of scope.

2.7) 0010 - Settlement price

There is a 244 outgoing message in the UTP Market Data feed where there was a 0010 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Settlement price	1	10	Trades-244	Price + ScaleCode

2.8) 0013 - Euro interbank rate

There is a 513 outgoing message in the UTP Market Data feed where there was a 0013 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Euro interbank rate in another currency	1	10	Mkt info-513	EuroInterbRate + RateScaleCode
2	Type of rate for currency rate message	31	2	Mkt info-513	TypeOfRate
3	Indicator for change in Euro interbank rate / previous rate	33	1	Mkt info-513	TickDirection
4	Change in Euro interbank rate / previous rate	34	5	Mkt info-513	ChangeRate + ChangeScaleCode
5	Iso 4217 3A code for Euro interbank rate currency of expression	39	3	Mkt info-513	Currency

2.9) 0016 - Group state change

There is a 516 outgoing message in the UTP Market Data feed where there was a 0016 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Instrument group identification	1	2	Mkt info-516	InstrumentGroupCode
2	Instrument group status	3	1	Mkt info-516	InstrumentGroupState

2.10) 0023 - Mail

There is a 523 outgoing message in the UTP Market Data feed where there was a 0023 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
	Mail header				
1	Instrument group code	1	2	Mkt info-523	InstrumentGroupCode
2	Priority indicator	3	1	Mkt info-523	PriorityIndicator
3	Nature of message	4	1	Mkt info-523	TypeOfMessage
4	Address type	5	2	Mkt info-523	AddressType
5	Mail message number	7	3	Mkt info-523	EMailMsgNumber
6	Number of pages or breaks	10	2	Mkt info-523	SequenceNumber
7	Page or break number	12	2	Mkt info-523	NumberOfMessage
	Mail message				
8	Title	14	80	Mkt info-523	Title
9	Text	94	854	Mkt info-523	Text

2.11) 0030 - Theoretical opening price

There is a 530 outgoing message in the UTP Market Data feed where there was a 0030 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Theoretical opening price	1	10	Mkt info-530	TOPPrice + PriceScaleCode
2	Sign of variation from previous day's reference price	20	1	Mkt info-530	N/A (Obsolete)
3	Percentage variation today's price/last reference price (with 2 decimals)	21	5	Mkt info-530	N/A (Obsolete)
4	Percentage variation today's price/last reference price	74	10	Mkt info-530	Variation + VariationScaleCode

2.12) 0032 - Opening summary

There is a 245 outgoing message in the UTP Market Data feed where there was a 0032 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	First price	1	10	Trades-245	FirstPrice + PriceScaleCode
2	Last price	11	10	Trades-245	LastPrice + PriceScaleCode
3	Session high	21	10	Trades-245	HighestPrice + PriceScaleCode

4	Session low	31	10	Trades-245	LowestPrice + PriceScaleCode
5	Type of last price	41	2	Trades-245	TypeOfLastPrice
6	Cumulative quantity	43	9	Trades-245	CumulativeQuantity
7	Sign of variation from previous day's closing price	52	1		N/A (Obsolete)
8	Variation from previous day's closing price (with 2 decimals)	53	5		N/A (Obsolete)
9	Sign of variation from previous price	58	1	Trades-245	TickDirection
10	Instrument valuation price flag	59	1	Trades-245	InstrumentValuationPrice
11	Percentage variation today's price/last reference price	60	10	Trades-245	Variation + VariationScaleCode

2.13) 0034 - Authorised limits outside the trading session

There is a 534 outgoing message in the UTP Market Data feed where there was a 0034 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Minimum price for normal out-of-session trades	1	10	Mkt info-534	MinPriceTrades + TradeScaleCode
2	Maximum price for normal out-of-session trades	11	10	Mkt info-534	MaxPriceTrades + TradeScaleCode
3	Minimum price for out-of-session block trades	21	10	Mkt info-534	MinPriceBlockTrades + BlockTradeScaleCode
4	Maximum price for out-of-session block trades	31	10	Mkt info-534	MaxPriceBlockTrades + BlockTradeScaleCode

2.14) 0035 - TCS Trading state changes

There is a 535 outgoing message in the UTP Market Data feed where there was a 0035 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Instrument group code	1	2	Mkt info-535	InstrumentGroupCode
2	Change trading cycle for an instrument group	3	1	Mkt info-535	ChangeTradingCycle

2.15) 0036 - Trade publication

FIM only

There is a 243 outgoing message in the UTP Market Data feed in the UTP Market Data feed where there was a 0036 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Trade action indicator	1	1	Trades-243	TradeActionIndicator

2	Trading date	2	8	Trades-243	TradingDate
3	Trading time	10	6	Trades-243	TradingTime
4	Reporting date	16	8	Trades-243	ReportingDate
5	Reporting time	24	6	Trades-243	ReportingTime
6	ISIN code	30	12	Trades-243	ISIN
7	Unit price	45	10	Trades-243	Price + PriceScaleCode
8	Price notation	55	3	Trades-243	PriceNotation
9	Quantity	59	9	Trades-243	Quantity
10	Quantity notation	68	3	Trades-243	QuantityNotation
11	Trade Reference	72	30	Trades-243	TradeReference
12	TCS Trade ID	102	16	Trades-243	TCSTradeld
13	Venue identification	118	11	Trades-243	Venue
14	Price multiplier	140	20	Trades-243	PriceMultiplier + MultiplierScaleCode
15	Delayed publication indicator	160	1	Trades-243	DelayedIndicator

2.16) 0037 - Intermediate static thresholds

There is a 537 outgoing message in the UTP Market Data feed where there was a 0037 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Upper intermediate static threshold	1	10	Mkt info-537	HighThresholds + HighScaleCode
2	Lower intermediate static threshold	11	10	Mkt info-537	LowThresholds + LowScaleCode

2.17) 0038 - Weighted average price (WAS)

There is a 141 outgoing message in the UTP Market Data feed where there was a 0038 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Average buy price	1	10	Quotes-141	BuyingPrice + ScaleCode
2	Average sell price	11	10	Quotes-141	SellingPrice + ScaleCode
3	Weighted average spread quantity	21	9	Quotes-141	N/A (Obsolete)
4	Normal money amount of block	30	13	Quotes-141	MoneyAmount + MoneyScaleCode

2.18) 0039 - Session timetable

There is a 539 outgoing message in the UTP Market Data feed where there was a 0039 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF	Field name
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				Msg#	
1	Instrument group code	1	2	Mkt info-539	InstrumentGroupCode
2	Time of Pre-opening 1	3	6	Mkt info-539	TimePreOpening1
3	Time of Opening 1	9	6	Mkt info-539	TimeOpening1
4	Time of Closing 1	15	6	Mkt info-539	TimeClosing1
5	Time of Pre-opening 2	21	6	Mkt info-539	TimePreOpening2
6	Time of Opening 2	27	6	Mkt info-539	TimeOpening2
7	Time of Closing 2	33	6	Mkt info-539	TimeClosing2
8	Time of Pre-opening 3	39	6	Mkt info-539	TimePreOpening3
9	Time of Opening 3	45	6	Mkt info-539	TimeOpening3
10	Time of Closing 3	51	6	Mkt info-539	TimeClosing3
11	Time of End-of-Day inquiry	57	6	Mkt info-539	EodTime

2.19) 0094 - Market shares

TOPCAC only

This message type is out of scope

2.20) 0100 - Transmitter start-up

This message type is out of scope

2.21) 0109 - Presence (I'm alive)

This message type is out of scope. Please look at the heartbeat messages in the UTP market data feeds.

2.22) 0133 - TCS Trade

There is a 242 outgoing message in the UTP Market Data feed where there was a 0133 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Trade ID	1	16	Trades-242	TCSTradeID
2	Trade cancellation indicator	17	1	Trades-242	TradeCancellIndicator
3	Quantity traded	18	9	Trades-242	Volume
4	Trade price	27	10	Trades-242	Price
5	Trading venue	37	4	Trades-242	TradingVenue
6	Date original declarations were matched	55	8	Trades-242	DateOriginalDecl
7	Time original declarations were matched	63	6	Trades-242	TimeOriginalDecl

8	Effective date of trade indicator	103	1	Trades-242	EffectiveDateIndicator
9	Start time for the VWAP computation period	104	6	Trades-242	StartTimeVwap
10	End time for the VWAP computation period	110	6	Trades-242	EndTimeVwap
11	TCS Block-trade code	118	1	Trades-242	BlockTradeCode
12	Trade type	119	1	Trades-242	TradeType
13	Financial market code for the instrument	120	1	Trades-242	FinancialMarketCode
14	TCS trade message sub-type code	121	1	Trades-242	TCSSTypeCode
15	Open	122	10	Trades-242	FirstPrice + PriceScaleCode
16	Last trade	132	10	Trades-242	LastPrice + PriceScaleCode
17	High	142	10	Trades-242	HighestPrice + PriceScaleCode
18	Low	152	10	Trades-242	LowestPrice + PriceScaleCode
19	Cumulative capital traded	162	8	Trades-242	CumulativeCapital
20	Cumulative number of instrument traded	170	9	Trades-242	CumulativeNumberSecurities

2.23) 0350 - Start of instrument reference data flow (Morning)

This message is out of scope

2.24) 0351 - End of instrument reference data flow (Morning)

This message is out of scope

2.25) 0353 - Instrument characteristics for the current trading date (Morning)

There is a 553 outgoing message in the UTP Market Data feed where there was a 0353 message in the TOPCAC/FIM feed. The field 'PeriodIndicator' takes the value 'M' when the 553 message is sent in the morning (effective for the current trading day).

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Instrument name	1	18	Mkt info-553	InstrumentName
2	Previous day's adjusted closing price	19	10	Mkt info-553	LastAdjPrice + LastAdjPriceScaleCode
3	Type of market admission	29	1	Mkt info-553	TypeOfMarketAdmission
4	Issuing country code	30	3	Mkt info-553	IssuingCountryCode
5	Trading currency	33	3	Mkt info-553	TradingCurrency
6	Type of unit of expression for instrument price	36	1	Mkt info-553	TypeOfUnitExp
7	Instrument category	48	1	Mkt info-553	InstrumentCategory
8	Market indicator	49	1	Mkt info-553	MarketIndicator
9	Official Quotation List classification: Section number Heading number	50	1 3	Mkt info-553	OfficialQuotationList + SectionNumber OfficialQuotationList + HeadingNumber

10	Stock exchange code	54	3	Mkt info-553	Stock Exchange Code
11	Instrument group code	57	2	Mkt info-553	InstrumentGroupCode
12	Previous day capital traded	59	13	Mkt info-553	+ PrevDayCapitalTradedScaleCode
13	ISIN code	80	12	Mkt info-553	InstrumentCode
14	Type of derivative for a given instrument	92	1	Mkt info-553	TypeOfDerivatives
15	Stock type	93	3	Mkt info-553	TypeOfInstrument
16	Tax deductibility code	104	1	Mkt info-553	TaxCode
17	Date security last traded	105	8	Mkt info-553	DateOfLastTrade
18	ISIN code of underlying security for lending market	113	12	Mkt info-553	UnderlyingRepoISINCode
19	Nominal market value of the security	125	13	Mkt info-553	NomMktPrice + NomMkdtPriceScaleCode
20	Number of shares for this security traded on previous day	149	9	Mkt info-553	PrevVolumeTraded
21	Indicator of underlying security on lending market	158	1	Mkt info-553	RepoIndicator
22	Expiry date of lending security	159	8	Mkt info-553	RepoExpiryDate
23	Minimum tradable quantity	167	13	Mkt info-553	LotSize + LotSizeScaleCode
24	First possible settlement date for instrument	185	8	Mkt info-553	FirstSettlementDate
25	ICB ID for Economic sub-sector of the issuing company	196	4	Mkt info-553	ICB
26	BIC code of depository/settlement system for instrument	200	11	Mkt info-553	BICDepository
27	MIC (Market Identification code) of the instrument	211	4	Mkt info-553	MIC
28	Euronext code of the underlying instrument of a warrant	215	12	Mkt info-553	UnderlyingWISINCode
29	List of Depository/settlement systems for instrument	227	25	Mkt info-553	DepositoryList
30	Main Depository/settlement system for instrument	252	5	Mkt info-553	MainDepository
31	Type of corporate event causing orderbook purges	257	2	Mkt info-553	TypeOfCorporateEvent
32	Time lag between Euronext time and UTC time	259	5	Mkt info-553	TimeLagEuronextUTC
33	Time lag between Mifid regulator time and UTC time	264	5	Mkt info-553	TimeLagMiFIDRegUTC
34	CFI Code	269	6	Mkt info-553	CFI
35	Quantity notation	275	3	Mkt info-553	QuantityNotation
36	Number of instruments in circulation	278	16	Mkt info-553	NumberInstrumentCirc
37	Index of the set of variable price ticks for the instrument	294	2	Mkt info-553	IndexSetOfVarPriceTick
38	Amount of the fixed price tick for an instrument	296	10	Mkt info-553	FixPriceTick + FixPriceTickScaleCode
39	MICs of the listing places	306	24	Mkt info-553	MICList

2.26) 0450 - Start of instrument reference data flow (Evening)

This message is out of scope

2.27) 0451 - End of instrument reference data flow (Evening)

This message is out of scope

2.28) 0453 - Instrument characteristics for the current trading date (Evening)

There is a 553 outgoing message in the UTP Market Data feed where there was a 0453 message in the TOPCAC/FIM feed. As the 553 message is also used in case of reception of a 0353 message, the field 'PeriodIndicator' takes the value 'E' when the 553 message is sent in the evening (effective for the next trading day).

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Instrument name	1	18	Mkt info-553	InstrumentName
2	Type of market admission	29	1	Mkt info-553	TypeOfMarketAdmission
3	Issuing country code	30	3	Mkt info-553	IssuingCountryCode
4	Trading currency	33	3	Mkt info-553	TradingCurrency
5	Type of unit of expression for instrument price	36	1	Mkt info-553	TypeOfUnitExp
6	Instrument category	48	1	Mkt info-553	InstrumentCategory
7	Market indicator	49	1	Mkt info-553	MarketIndicator
8	Official Quotation List classification: Section number Heading number	50	1 3	Mkt info-553	OfficialQuotationList + SectionNumber OfficialQuotationList + HeadingNumber
9	Stock exchange code	54	3	Mkt info-553	Stock Exchange Code
10	Instrument group code	57	2	Mkt info-553	InstrumentGroupCode
11	ISIN code	80	12	Mkt info-553	InstrumentCode
12	Type of derivative for a given instrument	92	1	Mkt info-553	TypeOfDerivatives
13	Stock type	93	3	Mkt info-553	TypeOfInstrument
14	Tax deductibility code	104	1	Mkt info-553	TaxCode
15	ISIN code of underlying security for lending market	113	12	Mkt info-553	UnderlyingRepoISINCode
16	Nominal market value of the security	125	13	Mkt info-553	NomMktPrice + NomMkdtPriceScaleCode
17	Indicator of underlying security on lending market	158	1	Mkt info-553	RepoIndicator
18	Expiry date of lending security	159	8	Mkt info-553	RepoExpiryDate
19	Minimum tradable quantity	167	13	Mkt info-553	LotSize + LotSizeScaleCode
20	First possible settlement date for instrument	185	8	Mkt info-553	FirstSettlementDate
21	ICB ID for Economic sub-sector of the issuing company	196	4	Mkt info-553	ICB
22	BIC code of depository/settlement system for instrument	200	11	Mkt info-553	BICDepository
23	MIC (Market Identification code) of the instrument	211	4	Mkt info-553	MIC
24	Euronext code of the underlying instrument of a warrant	215	12	Mkt info-553	UnderlyingWISINCode
25	List of Depository/settlement systems for instrument	227	25	Mkt info-553	DepositoryList

26	Main Depository/settlement system for instrument	252	5	Mkt info-553	MainDepository
27	Type of corporate event causing orderbook purges	257	2	Mkt info-553	TypeOfCorporateEvent
28	Time lag between Euronext time and UTC time	259	5	Mkt info-553	TimeLagEuronextUTC
29	Time lag between Mifid regulator time and UTC time	264	5	Mkt info-553	TimeLagMiFIDRegUTC
30	CFI Code	269	6	Mkt info-553	CFI
31	Quantity notation	275	3	Mkt info-553	QuantityNotation
32	Number of instruments in circulation	278	16	Mkt info-553	NumberInstrumentCirc
33	Index of the set of variable price ticks for the instrument	294	2	Mkt info-553	IndexSetOfVarPriceTick
34	Amount of the fixed price tick for an instrument	296	10	Mkt info-553	FixPriceTick + FixPriceTickScaleCode
35	MICs of the listing places	306	24	Mkt info-553	MICList

2.29) 00A5 - Stock index - Composition of the index

The A5 message contains up to 15 components. The WEP message contains only one component. So, there are up to 15 outgoing 544 messages in the UTP Market Data feed where there was a 00A5 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Aggregate 1 (capitalization of the security in the index)	1			
	Euronext code of index component		12	Indices-544	InstrumentIDOfComponent
	Mnemonic code of index component		5	Indices-544	Mnemo
	Security's percentage in previous day's reference capitalization of the index		7	Indices-544	InstrumentWeight + PriceScaleCode
	Capitalization adjustment coefficient of an security in an index		13	Indices-544	InstrumentFactor + PriceScaleCode
2	Aggregate 2	57	56	Indices-544	Same as aggregate 1
3	Aggregate 3	113	56	Indices-544	Same as aggregate 1
4	Aggregate 4	169	56	Indices-544	Same as aggregate 1
5	Aggregate 5	225	56	Indices-544	Same as aggregate 1
6	Aggregate 6	281	56	Indices-544	Same as aggregate 1
7	Aggregate 7	337	56	Indices-544	Same as aggregate 1
8	Aggregate 8	393	56	Indices-544	Same as aggregate 1
9	Aggregate 9	449	56	Indices-544	Same as aggregate 1
10	Aggregate 10	505	56	Indices-544	Same as aggregate 1
11	Aggregate 11	561	56	Indices-544	Same as aggregate 1
12	Aggregate 12	617	56	Indices-544	Same as aggregate 1
13	Aggregate 13	673	56	Indices-544	Same as aggregate 1
14	Aggregate 14	729	56	Indices-544	Same as aggregate 1
15	Aggregate 15	785	56	Indices-544	Same as aggregate 1

16	Last 00A5 message for the index	841	1		N/A
17	Total number of securities in the index	842	3	Indices-544	NumberOfComponents
18	Previous day's closing reference index	845	10	Indices-544	PreviousClose + LevelScaleCode
19	Frequency of index calculation	855	1	Indices-544	IndexFrequency

2.30) 00A6 - Display of bid and ask

There is a 540 outgoing message in the UTP Market Data feed where there was a 00A6 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Bid or ask price	1	10	Mkt info-540	Price + PriceScaleCode
2	Type of last price	11	2	Mkt info-540	Side

2.31) 00B1 - Index

There is up to 3 542 outgoing message in the UTP Market Data feed where there was a 00B1 message in the TOPCAC/FIM feed, depending if the net and gross profitability levels are provided.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Index level indicator	1	1	Indices-542	IndexLevelCode
2	Time of session high	14	6		N/A
3	Time of session low	26	6		N/A
4	Number of securities quoted	32	3	Indices-542	NumOfSecuritiesQuoted
5	Percentage of capitalization	35	5	Indices-542	PercentageOfCapitalization + PercentageScaleCode
6	Sign of variation (forerunner)	40	1	Indices-542	ForerunnerLevel + LevelScaleCode
7	Variation (forerunner)	41	5	Indices-542	ForerunnerLevel + LevelScaleCode
8	Sign of variation from previous day's price	46	1	Indices-542	VariationFromPreviousDaysPrice + VariationScaleCode
9	Variation from previous day's price	47	5	Indices-542	VariationFromPreviousDaysPrice + VariationScaleCode
10	Sign of variation from liquidation day price	52	1		N/A
11	Variation from liquidation day price	53	5		N/A
12	Sign of variation from previous year-end price	58	1		N/A
13	Variation from previous year-end price	59	5		N/A
14	Net profitability index	64	7	Indices-542	IndexLevel + LevelScaleCode (TypeOfLevel=2)
15	Global profitability index	71	7	Indices-542	IndexLevel + LevelScaleCode (TypeOfLevel=3)
16	Number of falling securities	78	3		N/A
17	Number of rising securities	81	3		N/A
18	Number of securities unchanged	84	3		N/A
19	Number of securities not quoted	87	3		N/A
20	Number of reserved securities	90	3		N/A

21	Number of suspended securities	93	3		N/A
22	Total number of securities	96	3		N/A
23	Sign of average percentage variation of security	99	1		N/A
24	Average percentage variation of securities	100	6		N/A
25	Average percentage variation of falling securities	106	6		N/A
26	Average percentage variation of rising securities	112	6		N/A
27	Previous indicators flag	118	1		N/A
28	Index	119	10	Indices-542	IndexLevel + LevelScaleCode (TypeOfLevel=1)
29	Session High	129	10	Indices-542	SessionHigh + LevelScaleCode
30	Session Low	139	10	Indices-542	SessionLow + LevelScaleCode

2.32) 00B2 - Stock index - Summary of the day

There is up to 3 543 outgoing message in the UTP Market Data feed where there was a 00B2 message in the TOPCAC/FIM feed, depending if the net and gross profitability levels are provided.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Closing reference level Closing reference time	1	7 6	Indices-543	ClosingReferenceLevel + LevelScaleCode (TypeOfLevel=1) ClosingReferenceTime
2	Preliminary Opening Reference level Preliminary Opening Reference time	14	7 6	Indices-543	PreliminaryOpeningLevel + LevelScaleCode PreliminaryOpeningTime
3	First level First time	27	7 6	Indices-543	FirstLevel + LevelScaleCode FirstTime
4	High level High time Variation from previous day's closing index	40	7 6 7	Indices-543	HighLevel + LevelScaleCode HighTime
5	Low level Low time Variation from previous day's closing index	60	7 6 7	Indices-543	LowLevel + LevelScaleCode LowTime
6	Opening reference level Opening reference time	80	7 6	Indices-543	OpeningReferenceLevel + LevelScaleCode OpeningReferenceTime
7	Clearing level Clearing time	93	7 6	Indices-543	ClearingLevel + LevelScaleCode ClearingTime
8	Liquidation level Liquidation time	106	7 6	Indices-543	LiquidationLevel + LevelScaleCode LiquidationTime
9	Direction of variation from previous day's closing index	119	1	Indices-543	PercentVariationPrevClos + VarScaleCode
10	Percent of variation from previous day's closing index	120	6	Indices-543	PercentVariationPrevClos + VarScaleCode
11	Net dividends paid today on the stocks in this index	126	15		N/A
12	Global dividends paid today on the stocks in this	141	15		N/A

	index				
13	Capitalisation at close of previous day	156	15		N/A
14	Capitalisation adjustment coefficient	171	17		N/A
15	Net profitability index at closing	188	7	Indices-543	ClosingReferenceLevel + LevelScaleCode (TypeOfLevel=2)
16	Global profitability index at closing	195	7	Indices-543	ClosingReferenceLevel + LevelScaleCode (TypeOfLevel=3)

2.33) 00B4 - Market maker quote

This message type is out of scope

2.34) 00B5 - Subscriber's representatives

TOPCAC only

This message type is out of scope

2.35) 00B6 - Liquidity providers best quotes (Yellow strip)

This message type is out of scope

2.36) 00B9 - Day's summary of prices and amount of capital on TCS & NSC

This message type is out of scope

2.37) 00L4 - 10 Best limits

The 00L4 message of the TOPCAC/FIM contains up to 11 limits. The 140 message in the UTP Market Data feed contains only one limit. So, the customer can expect up to 11 times one 140 outgoing messages in the UTP Market Data feed where there was one single 00L4 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Origin of market information	1	1		N/A
2	Indicator of best limits that have changed	8	11*1	Quotes-140	N/A or LimitNumber
	Limit 1 (Aggregate):				
3	Quantity for bid price 1	19	9	Quotes-140	BidSize
4	Number of buy orders 1	28	4	Quotes-140	NumberBidOrders
5	Best bid price 1	32	10	Quotes-140	BidPrice + ScaleCode+ TypeOfBidPrice
6	Best ask price 1	42	10	Quotes-140	AskPrice + ScaleCode+ TypeOfAskPrice
7	Number of sell orders 1	52	4	Quotes-140	NumberAskOrders
8	Quantity for a ask price 1	56	9	Quotes-140	AskSize

9	LP presence indicator at the buy side 1	65	1	Quotes-140	QuoteCondition
10	LP presence indicator at the sell side 1	66	1	Quotes-140	QuoteCondition

2.38) 00S0 - Market sheet retransmission

N/A

2.39) 00S3 - Market sheet update

There is a 230 outgoing message in the UTP Market Data feed where there was a 00S3 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Type of action	1	1	OrderBook-230	ActionType
2	Order position (buy/sell)	2	1	OrderBook-230	Side
3	Original order price	3	10	OrderBook-230	Price + PriceScaleCode
4	Order displayed quantity	13	9	OrderBook-230	Volume
5	Order ID: Date of the order Sequential order number	30	8 6		OrderDate OrderID
6	Type of price entered	44	1	OrderBook-230	OrderType
7	Order priority time stamp	45	20	OrderBook-230	OrderPriorityDate + OrderPriorityTime + OrderPriorityMicroSecs

2.40) 00S4 - Deletions in market sheet

There is a 230 outgoing message in the UTP Market Data feed where there was a 00S4 message in the TOPCAC/FIM feed.

#	Field name	Offset	Size	UTP-MDF Msg#	Field name
1	Type of deletion	1	1	OrderBook-230	ActionType
2	Order ID Order entry date Order sequence number	5	8 6	OrderBook-230	OrderDate OrderID
3	Side of the order	19	1	OrderBook-230	Side