

FIX TRADING COMMUNITY

EMEA Trading Conference 2023

– Global Technical Committee Update –

Thursday 9th March 2023

Hanno Klein

FIX Technical Director

GTC EMEA Co-Chair

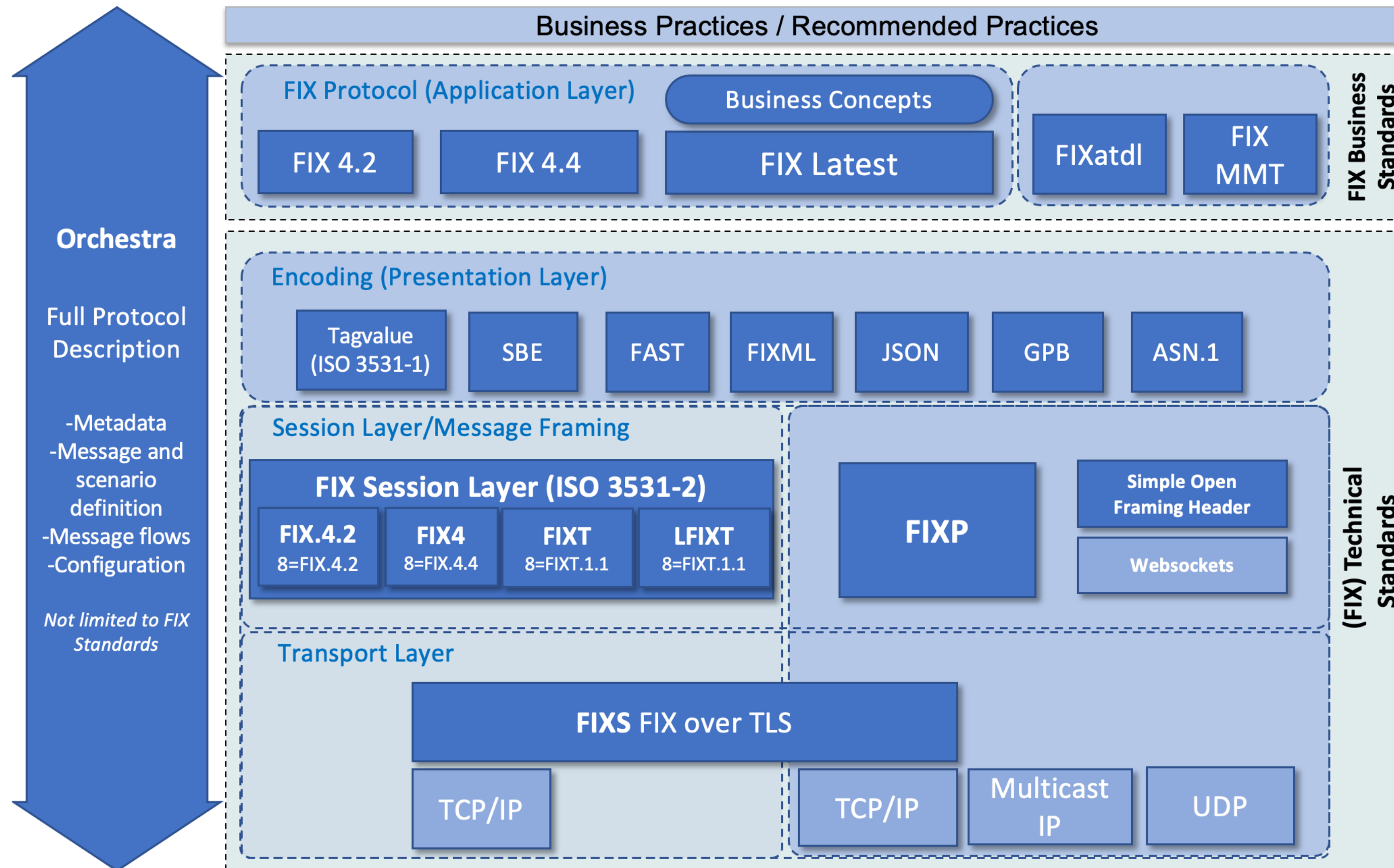
Senior Standards Advisor, FIXdom



Agenda

- GTC Strategy
 - GTC collaboration
 - New GTC Organisation
- FIX Business Standards
 - Digital Asset Trading
 - Regulatory trade identifiers (UTI/USI)
 - Miscellaneous
- FIX Technical Standards
 - Orchestra v1.1
- FIX Tools
 - Orchestra Server
 - Playlist v1.1

FIX Standards



TCP/IP, Multicast IP, UDP, Websockets are not FIX Technical Standards

GTC Update 2023

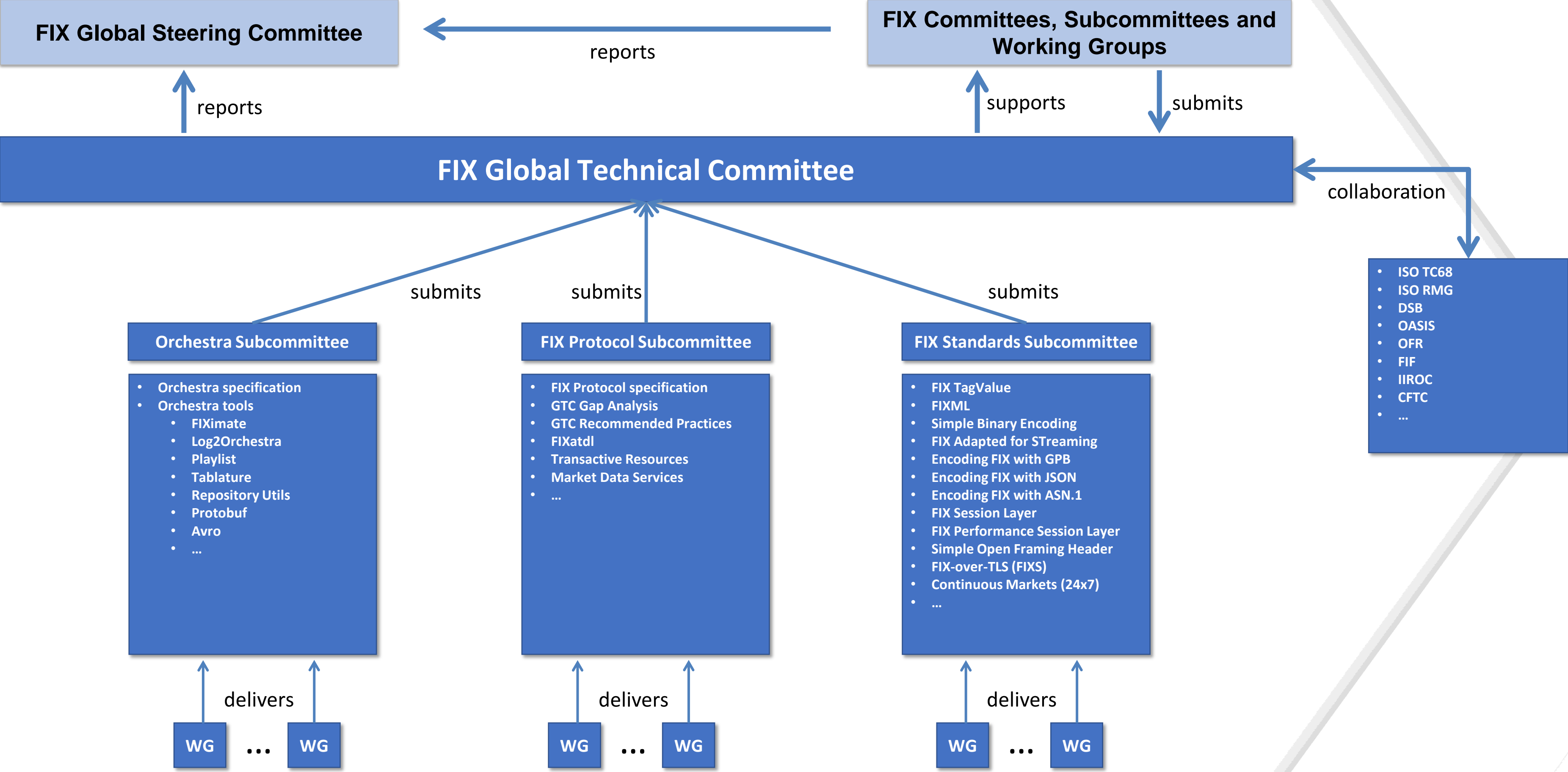
GTC Strategy



GTC Collaboration

- FIX has contacts to a number of (standards) organizations
 - ISO TC68 Financial Services (chaired by FIX Director Jim Northey <https://www.iso.org/committee/49650.html>)
 - ISO RMG (Registration Management Group, <https://www.iso20022.org/registration-management-group>)
 - ASC X9 (Accredited Standards Committee, <https://x9.org>)
 - DSB (Derivatives Services Bureau, <https://www.anna-dsb.com>)
 - OFR (Office of Financial Research, <https://www.financialresearch.gov>)
 - OMG (Object Management Group, <https://www.omg.org/>)
- Industry collaboration activities
 - FIX is a Liaison A organization to ISO TC68/SC8 and SC9 and participates in multiple working groups
 - FIX participates in selected ISO RMG (Sub)SEGs (Standards Evaluation Groups) and is the secretary of the ISO RMG Derivatives SubSEG
 - FIX is a Category A member of ASC X9
 - FIX participates in the DSB Products Committee and is a member of the Technical Advisory Committee
 - FIX has provided reference data as Orchestra XML files to the FIRD (Financial Instrument Reference Data) database published by OFR

New GTC Organisation



GTC co-chairs manage GTC subcommittees; GTC subcommittee co-chairs monitor WGs; GTC resources drive WGs

New GTC Organisation

- Permanent subcommittees for key areas
 - 3 subcommittees: Orchestra, FIX Protocol, FIX Standards
 - A subcommittee has one or two co-chairs and one associated GTC co-chair
 - Subcommittees maintain (temporary) working groups to produce specific deliverables for GTC submission, supported by GTC resources
- Working Groups for the extension of FIX Standards
 - Created with the objective of a specific deliverable for a new version of a FIX Technical Standard or for a related recommended practice document.
 - Report into a GTC subcommittee on a regular basis
 - Only need to exist until the deliverable has been published

GTC Update 2023

FIX Business Standards



FIX Business Standards

- Digital Asset Trading (EP273)
 - Standardisation for trading of digital assets (cryptocurrencies like Bitcoin and any kind of digital tokens).
 - Support for two different trading styles:
 - FX-style – currency pairs (e.g. BTC/USD, BTC/ETH) of fiat and/or digital currencies
 - Securities-style – for trading any digital asset, priced and/or settling in either a fiat or digital currency
 - Security identifiers for digital assets
 - New SecurityIDSource(22)=Y (Digital Token Identifier – ISO 24165)
 - Use of SecAltIDGrp to identify the currencies for FX-style trading (new field SymbolPositionNumber(2957) to reference the first or second currency or digital asset in Symbol(55))
 - Currency source schemes
 - Addition of ISO 24165 to currency datatype (previously only ISO 4217)
 - New fields, e.g. CurrencyCodeSource(2897), to identify class or source of currency

FIX Business Standards

- Regulatory Trade Identifiers (EP275)
 - Update to the CFTC Parts 43 and 45 reporting technical specification requirements, where both the Unique Swap Identifier (USI) and Unique Transaction Identifier (UTI) can be used for reporting purposes to the CFTC.
 - Support for UTI (ISO 23897)
 - New value 1=UTI for RegulatoryTradeIDSource(1905) to explicitly indicate that RegulatoryTradeID(1903) contains a UTI
 - Continued support for USI (CFTC standard)
 - RegulatoryTradeID(1903) for the USI transaction identifier
 - RegulatoryTradeIDSource(1905) for the namespace of the entity creating the USI

FIX Business Standards

■ Miscellaneous

■ Recommended Practices for Digital Asset Trading

- <https://www.fixtrading.org/packages/recommended-practices-for-digital-asset-trading/>
- Contains a PDF document and a machine-readable version (Orchestra XML file)

■ EP274 – Anonymous Trade Indicator

- New field AnonymousTradeIndicator(2961) to support CFTC regulatory requirement for trade reporting of swaps into a Swaps Data Repository (SDR)

■ EP276 – Securities Reference Data Supplement

- New field SecurityReferenceDataSupplement(2962) to support the unique identification of derivative instruments where the security identifier and core reference data attributes are not sufficient

■ EP2xx – MMT v4.0 Support (work in progress)

- Support changes required after ESMA review of RTS 1 and RTS 2 (e.g. post-trade flags)

■ See <https://www.fixtrading.org/extension-packs/> for EP details

■ Market Model Typology Version 4.0 (see separate session)

GTC Update 2023

FIX Technical Standards



FIX Technical Standards

- Orchestra v1.1 under development
 - Orchestra is a meta-data standard and v1.0 was published in Feb 2021
 - FIX Latest published as XML file compliant with Orchestra v1.0 since EP255
 - Comprehensive set of features provided with Orchestra v1.0
 - Messages, groups, components, fields, code sets, code values, datatypes
 - Scenarios for messages all the way down to code sets
 - Conditional rules for field presence
 - Actors, workflows and state machines
 - Enhancements for Orchestra v1.1
 - Scenarios for datatypes, e.g. “int” with scenarios for short and long integers
 - Centralize declarations of scenarios as 1st level elements with unique IDs
 - Base field to identify a related field (e.g. non-encoded field related to encoded field)
 - Annotations for top-level elements, e.g. categories and sections
 - See GitHub (<https://github.com/donmendelson/fix-orchestra>) for details

Contact the FIX Program Office (fix@fixtrading.org) if you would like to join!

GTC Update 2023

FIX Tools



FIX Tools – Orchestra Server

FIX TRADING COMMUNITY™

Welcome to
FIX orchestra
SERVER

Central Repository for FIX and non-FIX
Protocol Specifications

Powered by EsproW ETP S-Box ©

Log in

Get access to Protocol Specifications Server

* Email

* Password

Login

FIX Tools – Orchestra Server

The screenshot shows the 'Specifications' page for the 'NewOrderSingle [D] (base) Message' in the FIX Standard v Latest_EP269. The interface includes a left-hand navigation menu for 'Dictionary Elements' (Messages, Components, Groups, Fields, Code Sets, Data Types, Sections, Categories) and a main table of dictionary elements. The table columns are Name, Id, Scenario, Presence, and Documentation. A dropdown menu is open over the 'Export version' button, showing options for PDF, FIX Orchestra XML, and QuickFIX XML. The 'Parties' section is expanded, showing a list of party roles with their respective IDs and descriptions.

Name	Id	Scenario	Presence	Documentation
StandardHeader	1024	base	required	MsgType = D
CIOrdID	11	base	required	Unique identifier of the order as assigned by institution or by the intermediary (CIV term, not a hub/...
OrderRequestID	2422	base	optional	
SecondaryCIOrdID	526	base	optional	
CIOrdLinkID	583	base	optional	
DuplicateCIOrdIDIndicator	2829	base	optional	
Parties	1012	base	optional	This is party information related to the submitter of the request.
PartyID	448	base	optional	Required if NoPartyIDs(453) > 0. Identification of the party.
PartyIDSource	447	base	optional	Required if NoPartyIDs(453) > 0. Used to identify classification source.
PartyRole	452	base	optional	Required if NoPartyIDs(453) > 0. Identifies the type of PartyID(448).
ExecutingFirm	452001	base		Executing Firm (formerly FIX 4.2 ExecBroker)
BrokerOfCredit	452002	base		Broker of Credit (formerly FIX 4.2 BrokerOfCredit)
ClientID	452003	base		Client ID (formerly FIX 4.2 ClientID)
ClearingFirm	452004	base		Clearing Firm (formerly FIX 4.2 ClearingFirm)
InvestorID	452005	base		Investor ID
IntroducingFirm	452006	base		Introducing Firm
EnteringFirm	452007	base		Entering Firm
Locate	452008	base		Locate / Lending Firm (for short-sales)
FundManagerClientID	452009	base		Fund Manager Client ID (for CIV)
SettlementLocation	452010	base		Settlement Location (formerly FIX 4.2 SettlLocation)
OrderOriginationTrader	452011	base		Order Origination Trader (associated with Order Origination Firm - i.e. trader who initiates/submits t...
ExecutingTrader	452012	base		Executing Trader (associated with Executing Firm - actually executes)

FIX Tools – Orchestra Server

- Orchestra Server creates rules of engagement documentation (PDF) together with its Orchestra representation (XML)
 - Visualisation and maintenance of Orchestra XML files
 - Comprehensive interactive capabilities to easily define and annotate messages, repeating groups, components, fields, and values.
 - Use FIX Latest or your own Orchestra files as starting point
 - Add your user-defined elements
 - Included in the FIX membership
 - Based on the ETP S-Box service from Espro

See <https://www.fixtrading.org/packages/orchestra-factsheet/> for details.

FIX Tools – Playlist v1.1

FIX Playlist

Creates a subset of an Orchestra file



Input

Source Orchestra file

100%

Drag file to read or

Choose File

FIX Standard

OrchestraFIXLatest.xml

Use Selector File

Clear Input File

Output

Orchestra file to create (*.xml)

myorchestra.xml

Create Orchestra file

User Guide

Terms of Service

Select Your Content

(All elements sorted alphabetically. Greyed out items are deprecated)

+ | MESSAGES

+ | GROUPS

+ | COMPONENTS

- | FIELDS

+ | Tags 1-999

+ | Tags 1000-1999

+ | Tags 2000-2999

+ | Tags 40000-49999

+ | CODESETS

+ | DATATYPES

- | NewOrderSingle(35=D)

- Account(1) - Type String
- AccountType(581) - Type AccountTypeCodeSet
- AcctIDSource(660) - Type AcctIDSourceCodeSet
- AffiliatedFirmsTradeIndicator(2525) - Type Boolean
- AllocID(70) - Type String
- AuctionAllocationPct(1804) - Type Percentage
- AuctionInstruction(1805) - Type AuctionInstructionCodeSet
- AuctionType(1803) - Type AuctionTypeCodeSet
- BookingType(775) - Type BookingTypeCodeSet
- BookingUnit(590) - Type BookingUnitCodeSet
- CancellationRights(480) - Type CancellationRightsCodeSet
- CashMargin(544) - Type CashMarginCodeSet
- ClOrdID(11) - Type String
- ClOrdLinkID(583) - Type String
- ClearingAccountType(1816) - Type ClearingAccountTypeCodeSet
- ClearingFeeIndicator(635) - Type ClearingFeeIndicatorCodeSet
- CommissionData - Component
- CommissionDataGrp - Group
- ComplianceID(376) - Type String
- ComplianceText(2404) - Type String
- ContraOrderOrigination(2882) - Type OrderOriginationCodeSet
- ContraRoutingArrangementIndicator(2884) - Type RoutingArrangementIndicatorCodeSet
- CopyMsgIndicator(797) - Type Boolean
- CoveredOrUncovered(203) - Type CoveredOrUncoveredCodeSet
- Currency(15) - Type Currency

Select FIX Standard File

FIX44Session.xml

FIXTSession.xml

OrchestraFIX42.xml

OrchestraFIX44.xml

OrchestraFIXLatest.xml

CANCEL

FIX Tools – Playlist

- Second release of Playlist (FIX members only)
 - Generates a base Orchestra XML file from an input Orchestra reference file loaded into your local browser
 - Web-based visualisation of input file with check boxes for selections of messages, groups, components, their fields and values of these fields
 - New version 1.1 published November 2022
 - Direct access to standard FIX Orchestra XML files from GitHub (e.g. FIX Latest)
 - Optional selector file to preselect check boxes of reference file
 - Use case: minor extensions of an existing Orchestra XML file
 - Possibility to load multiple selector files (create superset of subsets)