

店頭衍生性商品集中結算機制— 交易確認平台與帳戶架構說明

活絡期貨交易 服務實質經濟
避險增益 價格發現

臺灣期貨交易所

108年9月18日

議程

壹、報告事項

(一) 有關本公司規劃之交易確認登記平台，擬邀請IHS公司(提供MarkitWire及TradeSERV交易確認平台)及與會者討論相關事宜，謹報請公鑒。

貳、討論事項

(一) 有關交易確認登記平台實務作法，謹提請討論。

參、臨時動議

肆、散會



壹、報告事項



案由一

有關本公司規劃之交易確認平台，擬邀請IHS公司(提供MarkitWire及TradeSERV交易確認平台)及與會者討論相關事宜，謹報請公鑒。

交易確認登記平台之角色與功能

- 一. 國際主要結算機構交易資料皆由交易登記平台傳送至結算系統，交易雙方於交易平台上(如Bloomberg等電子平台)完成後，得以在交易確認登記平台即時確認交易內容、指定結算會員與結算機構及傳送確認後之交易資料予CCP，亦將交易雙方原簽訂之交易契約(ISDA契約)藉由此平台進行債務變更(novation)程序，解除原交易契約並提交CCP，成為CCP與交易雙方之新契約，由CCP成為交易雙方之共同交易對手，故交易確認登記平台具法律約束力(legal binding)，屬於集中結算流程之一環。
- 二. 依國際實務作法，為便利市場參與者參與集中結算，國際主要結算機構如倫敦結算所(LCH)及芝加哥商業交易所(CME)等均提供多管道之交易確認登記平台由市場參與者依其所需自行選擇。

交易登記平台之國際趨勢

- 一. 國內店頭衍生性商品參與者，部分已參與參與國際主要結算機構提供之結算服務，爰規劃與國際主要結算機構核可之交易登記平台建立連線。
- 二. 現行參與店頭衍生性商品交易之國際金融機構採用之多採用IHS公司提供之MarkitWire(IRS平台)及TradeSERV(NDF平台)進行交易確認，國際主要結算機構亦多透過其傳送接收店頭交易資料以進行集中結算業務。
- 三. 本次專題研討會擬請IHS公司及與會者討論下列議題：
 - (一) 交易確認平台在集中結算流程中扮演之角色
 - (二) 交易確認平台介紹－MarkitWire
 - (三) 交易確認平台介紹－TradeSERV
 - (四) 市場參與者於明年(2020)上線擬預先準備事項

The background of the slide is a complex collage. It features various international banknotes, including a 1000 Euro note, a 2000 Euro note, a 1000 US Dollar note, and a 1000 Chinese Yuan note. A world map is also visible, showing the outlines of continents. The entire image is overlaid with a semi-transparent blue filter. In the center, the text '貳、討論事項' is written in a white, stylized font.

貳、討論事項



案由一

有關交易確認登記平台實務作法，謹提請討論。



IHS Markit™

IHS Markit

Introduction to OTC Clearing

Introduction to IHS Markit

Company overview

About IHS Markit

Every colleague is committed to putting Customers First

Our mission is to delight IHS Markit customers daily by delivering a powerful combination of world-class expertise, knowledge and solutions so they can make more informed decisions to enable their organizations' long-term, sustainable growth.

10000+

IHS Markit
colleagues

130+

Offices in
34 countries

Including 5,000+ analysts, data scientists, financial experts and industry specialists who offer:

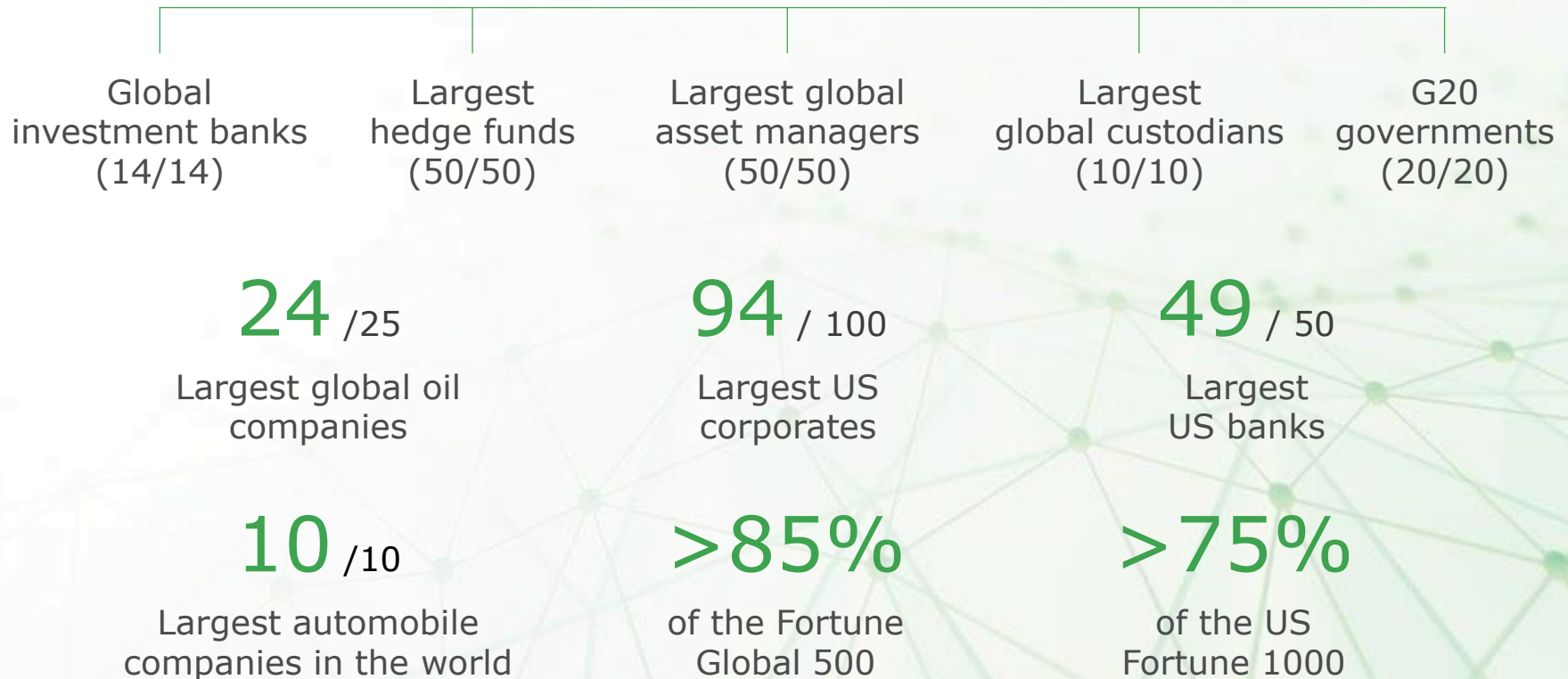
- Unsurpassed ability to interpret data
- Award-winning forecasting
- Relationships with industry leaders



About IHS Markit

Serving 50,000 customers in 140+ countries including...

ALL



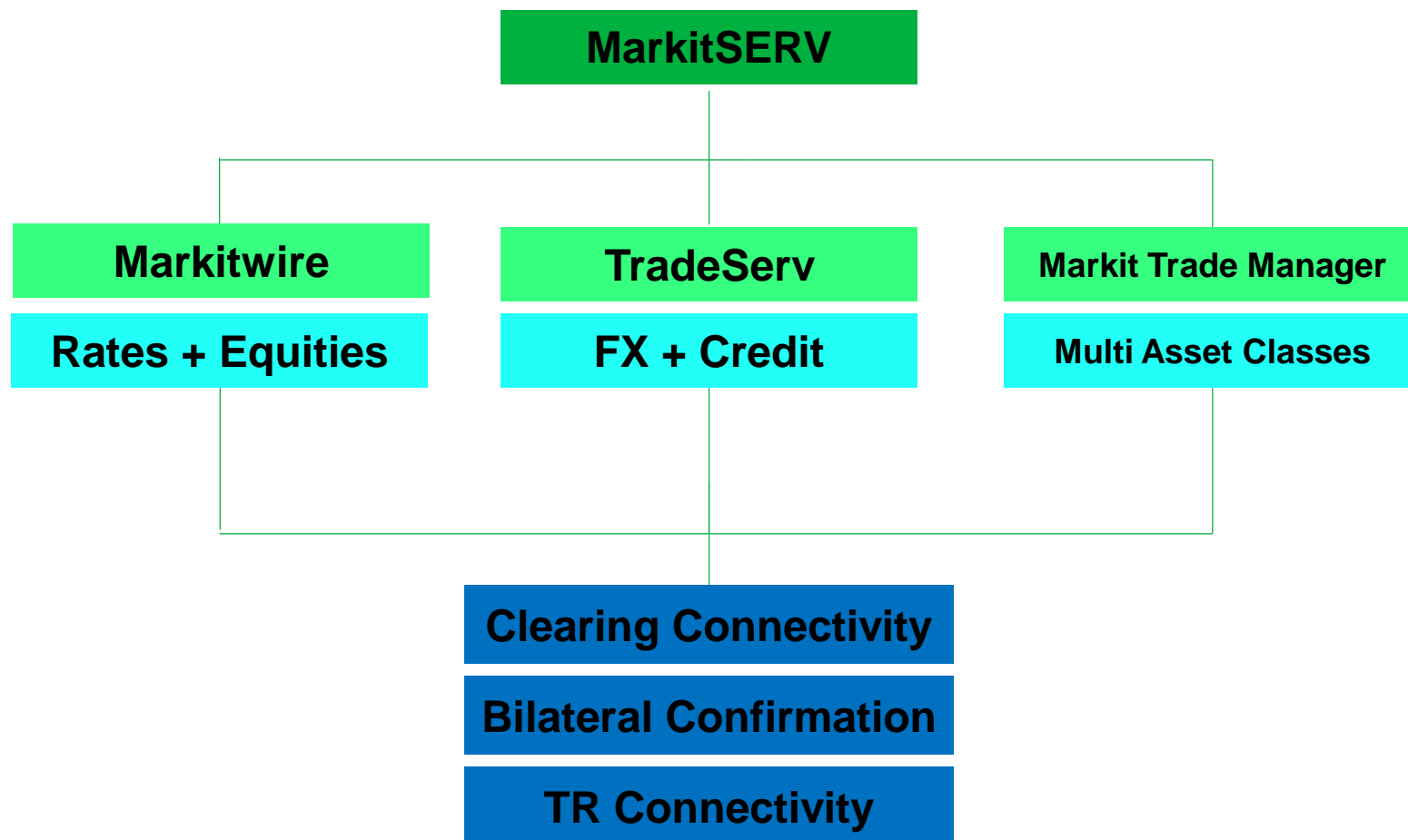
Addressing strategic challenges with interconnected capabilities

We deliver on the promise of The New Intelligence

IHS Markit provides leaders from multiple industries with the perspective and insights they need to make the best choices and stay ahead of their competition.



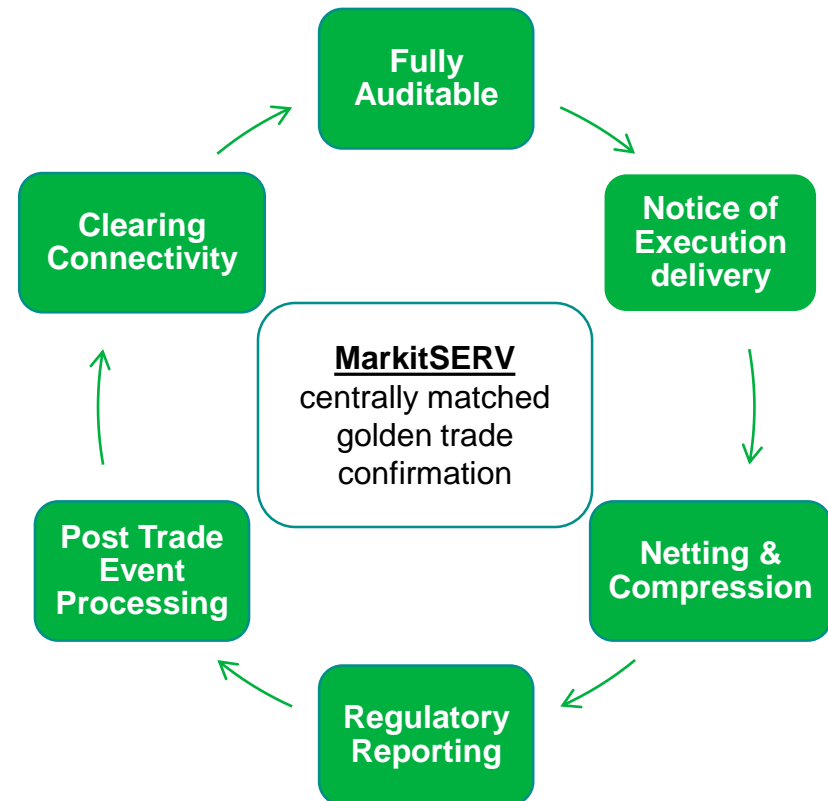
IHS Markit Clearing Platforms



TradeServ

Centralized FX post trade infrastructure

- Over the last decade, fragmentation has become the defining characteristic in the global FX market. The industry lacks workflow and messaging standards which impedes growth and advancement.
- By simplifying and automating trade processing across multiple FX products, MarkitSERV reduces operational risk, streamlines workflow and improves trading certainty for all FX participants
 - > **Confirmation and Matching:** Supports the broadest coverage of cleared/non-cleared trades across all major asset classes
 - > **Clearing Coverage:** Connectivity to all significant clearing houses globally/full coverage of every clearable product
 - > **Global Network:** Leading network of participants linking dealers, their customers and all other participants in the trade lifecycle
 - > **Simplified Regulatory Reporting:** Provides a single solution for regulatory reporting across multiple jurisdictions
 - > **Automated Trade Workflow:** Fully automates process workflow throughout the trade lifecycle
 - > **99% of all FX clearing volume processed via MarkitSERV** including support FX NDF, FX Option, FX Spot, FX Forwards



TradeServ FX

- TradeServ is the product of MarkitSERVs strategic technology vision to consolidate its post trade services onto one modern cloud enabled platform that will improve service delivery and the customer experience.
- TradeServ went live in Production in September of 2018 for FX NDFs and will be expanded to support FX Options, Spot Forwards and CDS by April 2020.
- TradeServ is a modern platform as a service (PaaS). It uses microservices architecture and cloud infrastructure to make the platform highly flexible, scalable and reliable.

TradeServ

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UAT

FX

CAPTURE

UPLOAD

SEARCH

DIRECTORY

29001 TRADES

CONFIRMATION

TradeServ Screenshot

TradeServ

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UAT

FX

FX-SUPPORTVIEW

CAPTURE

UPLOAD

SEARCH

DIRECTORY

31645 TRADES

	ACTIONS	TRADE REFERENCE NUMBER	TRANSACTION STATUS	CLEARING STATUS	SUBMISSION DATE	ACTIVITY	PRODUCT TYPE	CURRENCY PAIR	REFERENCE CCY	BASE AMOUNT
CONFIRMATION	(CLEAR ALL)									
		0025G40468708201	Confirmed	Novated	09/11/2019 21:48:24	New	FX Non Deliverable Forward (NDF)	USDTWD	TWD	100.00
ALLEGED	5079	0011G40468708202	Confirmed	Novated	09/11/2019 21:48:21	New	FX Non Deliverable Forward (NDF)	USDTWD	TWD	100.00
CANCELLED	724		Alleged		09/11/2019 20:02:05	New	FX Non Deliverable Forward (NDF)	USDIDR	IDR	20,000,000.00
CANCELLED-ALL	886		Unconfirmed		09/11/2019 20:02:05	New	FX Non Deliverable Forward (NDF)	USDIDR	IDR	20,000,000.00
CONFIRMED	17382	EHP-2OZHSX	Unconfirmed		09/11/2019 20:01:51	New	FX Non Deliverable Forward (NDF)	USDPHP	PHP	7,000,000.00
ERROR	5426	EHP-2OZHQR	Unconfirmed		09/11/2019 20:01:51	New	FX Non Deliverable Forward (NDF)	USDPHP	PHP	7,000,000.00
PENDING	35		Alleged		09/11/2019 20:01:43	New	FX Non Deliverable Forward (NDF)	USDPHP	PHP	13,000,000.00
PENDING-ALLE...	81		Unconfirmed		09/11/2019 20:01:38	New	FX Non Deliverable Forward (NDF)	USDPHP	PHP	21,000,000.00
UNCONFIRMED	2032		Alleged		09/11/2019 20:01:30	New	FX Non Deliverable Forward (NDF)	USDTWD	TWD	5,000,000.00
			Unconfirmed		09/11/2019 20:01:30	New	FX Non Deliverable Forward (NDF)	USDTWD	TWD	5,000,000.00
CLEARING	(CLEAR ALL)									
		EHP-2OZHQP	Unconfirmed		09/11/2019 20:01:07	New	FX Non Deliverable Forward (NDF)	USDINR	INR	11,000,000.00
CANCELLED	359		Alleged		09/11/2019 20:01:07	New	FX Non Deliverable Forward (NDF)	USDINR	INR	11,000,000.00
NOVATED	12986	EHP-2OZHQN	Unconfirmed		09/11/2019 20:01:02	New	FX Non Deliverable Forward (NDF)	USDINR	INR	10,000,000.00
PARKED	0		Alleged		09/11/2019 20:01:02	New	FX Non Deliverable Forward (NDF)	USDINR	INR	10,000,000.00
PARKED-CANC...	0	EHP-2OZHQG	Unconfirmed		09/11/2019 19:51:50	New	FX Non Deliverable Forward (NDF)	USDCNY	CNY	2,000,000.00
PENDING CLRG	0		Alleged		09/11/2019 19:51:50	New	FX Non Deliverable Forward (NDF)	USDCNY	CNY	2,000,000.00
PENDING-CAN...	12	EHP-2OZHPP	Unconfirmed		09/11/2019 16:30:35	New	FX Non Deliverable Forward (NDF)	USDPEN	PEN	12,000,000.00
RECEIVED	241		Unconfirmed		09/11/2019 16:30:29	New	FX Non Deliverable Forward (NDF)	USDPEN	PEN	12,000,000.00
REJECTED	2782		Alleged		09/11/2019 16:30:29	New	FX Non Deliverable Forward (NDF)	USDPEN	PEN	4,000,000.00
REJECTED-CAN...	28	EHP-2OZHP6	Unconfirmed		09/11/2019 16:30:21	New	FX Non Deliverable Forward (NDF)	USDPEN	PEN	29,000,000.00
SENT TO CLRG	280		Alleged		09/11/2019 16:30:21	New	FX Non Deliverable Forward (NDF)	USDPEN	PEN	29,000,000.00
			Alleged		09/11/2019 16:03:33	New	FX Non Deliverable Forward (NDF)	USDCLP	CLP	7,000,000.00
		EHP-2OZH3	Unconfirmed							



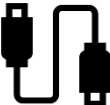

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REFRESH

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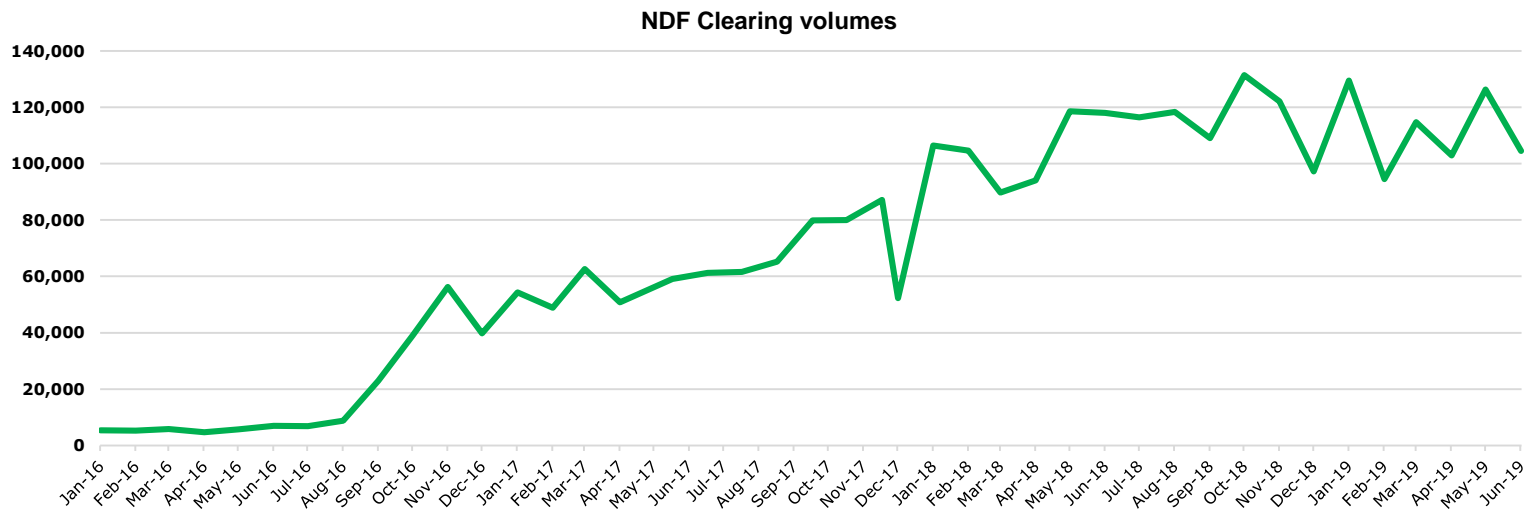
NOTIFICATIONS (198)

How to connect to TradeServ?

	How to connect?	Overview	Implementation timelines
	User interface UI / CSV submission	A brand new fully customizable web-based user interface (UI). Contains trade capture, CSV submission, elastic search, export, closest match, allege acceptance and force match features	Access is immediate once IPs are whitelisted
	FPML over MQ	Customers may leverage the TradeServ MQ to programmatically submit their messages. This is MQ Server to MQ server and a leased line will be required for this option	3-5-week integration
	Standardized connectivity adapter via FX enterprise	A customer may leverage standardized adapters designed to help translate native OMS message protocol into TradeServ. Message enrichment and rule-based logic can also be applied.	4-6-week build
	Markit Trade Manager (MTM)	Buyside customers who leverage MTM for Rates, CDS, Equities may very easily extend that workflow to support FX instruments for confirmation and clearing	2-4 weeks

Centralized FX growth

- MarkitServ has observed exponential growth in **its FX NDF matching and clearing service** since Sep 2016 \$3 trillion variation margin requirement went live
- Network has grown to be **include 45+ banks, buysides, FCMs, venues and 3 CCPs**
- NDF daily clearing volume regularly **exceeds \$100 billion**
- Volume for FXO, Forward and Spot confirmation/clearing service **exceeds 1,000 trades per month**



FX Product Support

MarkitSERV supports a single point of connection for **45+** dealers / buysides, **10+** execution venues and submits trades into **3** FX clearing houses

MarkitSERV removes the cost and complexities of OTC trade processing and promotes a plug and play model that allows customers to connect instantaneously with customers all over the world

Product	Confirmation	LCH	CME	HKEX
FX NDFs	X	X	X	X
FX G10 / CSF*	X	X	X	
FX Options	X	X**		
FX Spot	X	X		
FX Forward	X	X		
FX NDO*	X	O	X***	

*CSF: Cash Settled Forwards

*NDO: Non Deliverable Options

X**: Physically settled FX options

X***: Cash Settled NDO

O: A roadmap consideration

Clearing Brokers & Client Clearing

We support Clearing Broker Workflows

- Pre-clearing CB & FCM acceptance flows
- Principal and agency models
- Regulatory compliant reporting fields including USI, LEI, Reporting Jurisdiction, Trade Repositories
- Clearing broker submissions for non clearing members
- Our SWIFT partnership allows any participant to submit trades for clearing into MarkitSERV by reusing existing SWIFT messaging capability

We support Client Clearing

- Markit Trade Manager (MTM) provides a single interface across multiple asset classes for buy-side trade submissions
- Markit provides services to more than 2,500 clients across all asset classes and most will be able to reuse their existing connectivity
- A single full Straight Through Processing (STP) interface for all executing and clearing brokers, FCMs and clients clearing through any FX CCP

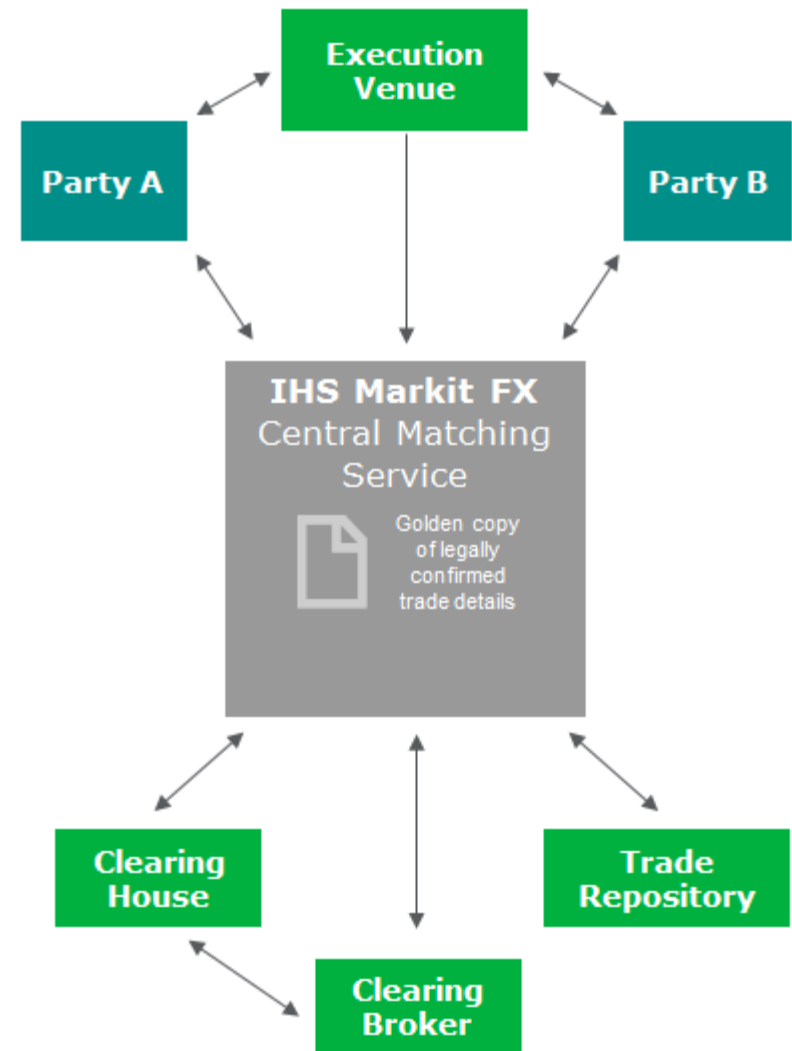


Confirmations & Clearing

IHS Markit's FX matcher facilitates non-member clearing by allowing a participant to specify a clearing broker on a trade, sending confirmed FX trades to the clearing brokers of the respective parties.

Different options can be configured for CB acceptance:

- The trade is sent to the CCP only after the clearing brokers give their consent to clear the trade at the chosen clearing house. The clearing brokers accept requests from the matcher to take up the trade for clearing. The CBs can either accept or reject the request from the Matcher.
- The clearing brokers can also be setup to accept or reject the trade at the CCP.



MarkitWire Clearing

MarkitWire Overview

- **MarkitWire Platform (part of MarkitServ's trades processing suite)**
 - > End to end, electronic confirmation platform integrating the trade lifecycle, clearing and reporting flows



- **MarkitWire Connectivity**
 - > Leased Line
 - > Internet
- **MarkitWire Applications and Tools**
 - > MarkitWire Trader and End User GUI / MarkitWire API (allows trades submission and bilateral and unilateral amendments)
 - > MarkitWire Tracker GUI /MarkitWire API DealSink (allows trades view and unilateral changes)

MarkitWire clearing service – key points

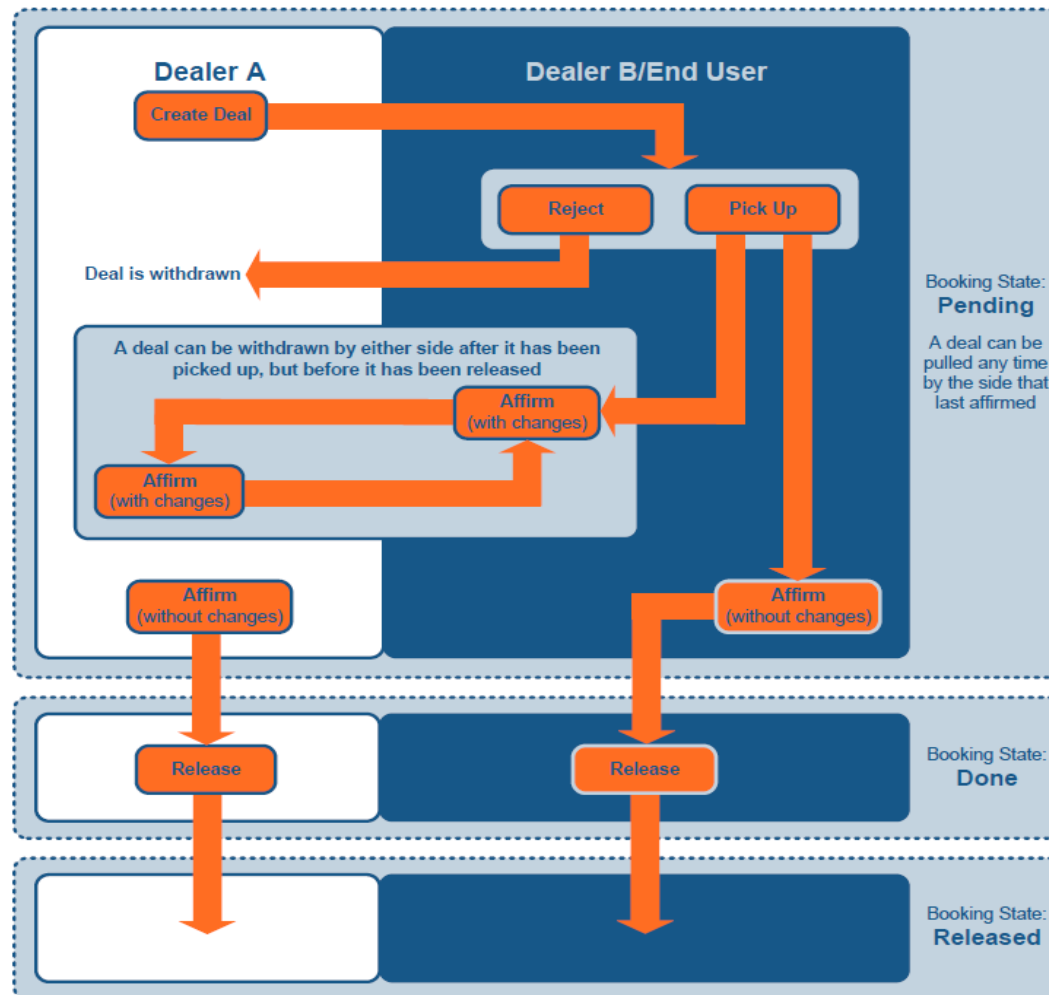
- **Coverage:**

- > MarkitWire supports Member to Member clearing (D2D), 'Client Clearing' (D2C) as well as Client to Client clearing (C2C); using both Principal and Agency models
- > Asset class coverage: Interest Rates and Credit OTC derivatives. FX supported through separate platform (TradeServ)
- > Life cycle events support for post clearing events (compressions, porting, DMP etc.)
- > Regulatory reporting details inclusion in the exchanged xml (USI, UTI, execution timestamp etc)

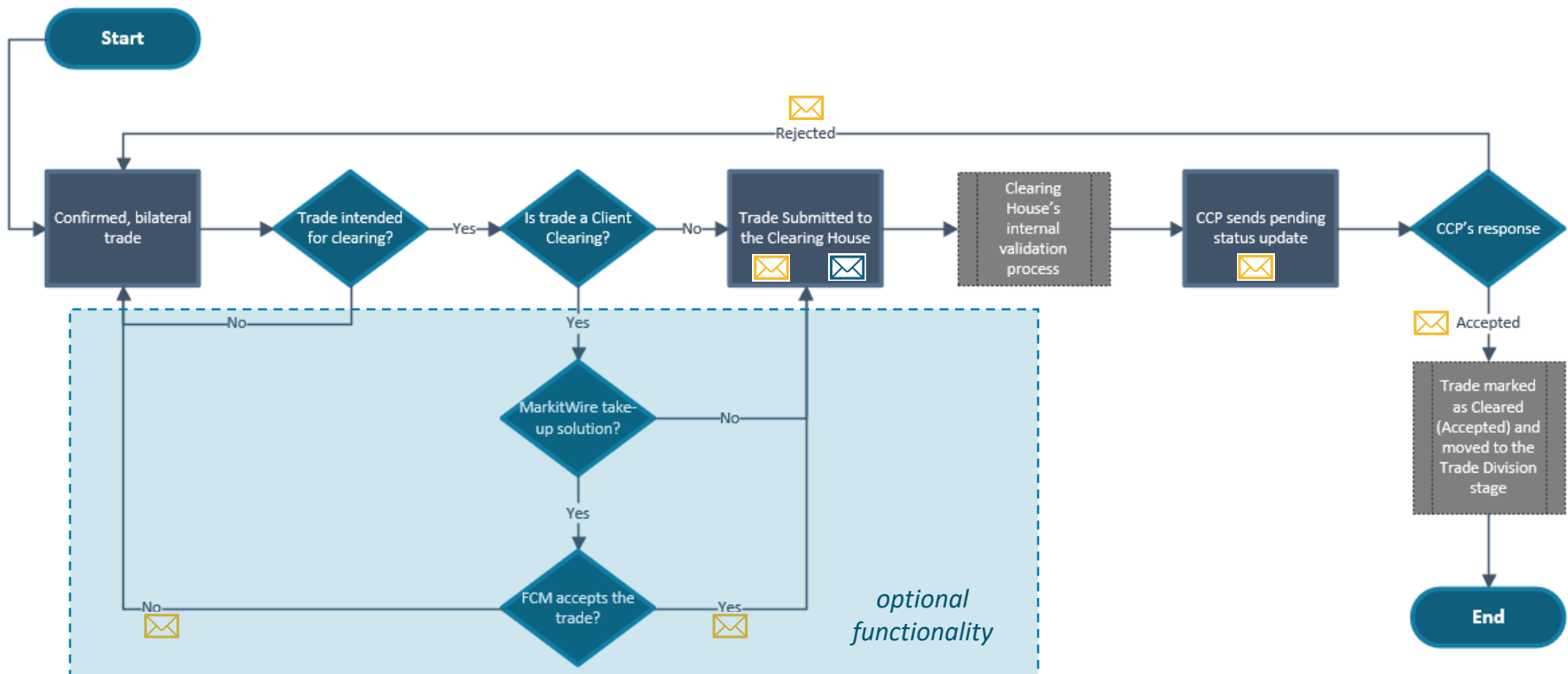

- **Interface:**


- > Trades sent for clearing in real-time
- > Using the eligibility rules of each clearing house, MarkitWire can screen trades at the point of confirmation, informing parties whether trades will pass or fail the clearing eligibility criteria
- > MarkitWire provides status updates to all parties of a trade throughout the lifecycle
- > Leveraging existing MarkitSERV connectivity, all parties including IDB/Venues receive clearing updates and can STP these downstream

Clearing Workflow – confirmation stage



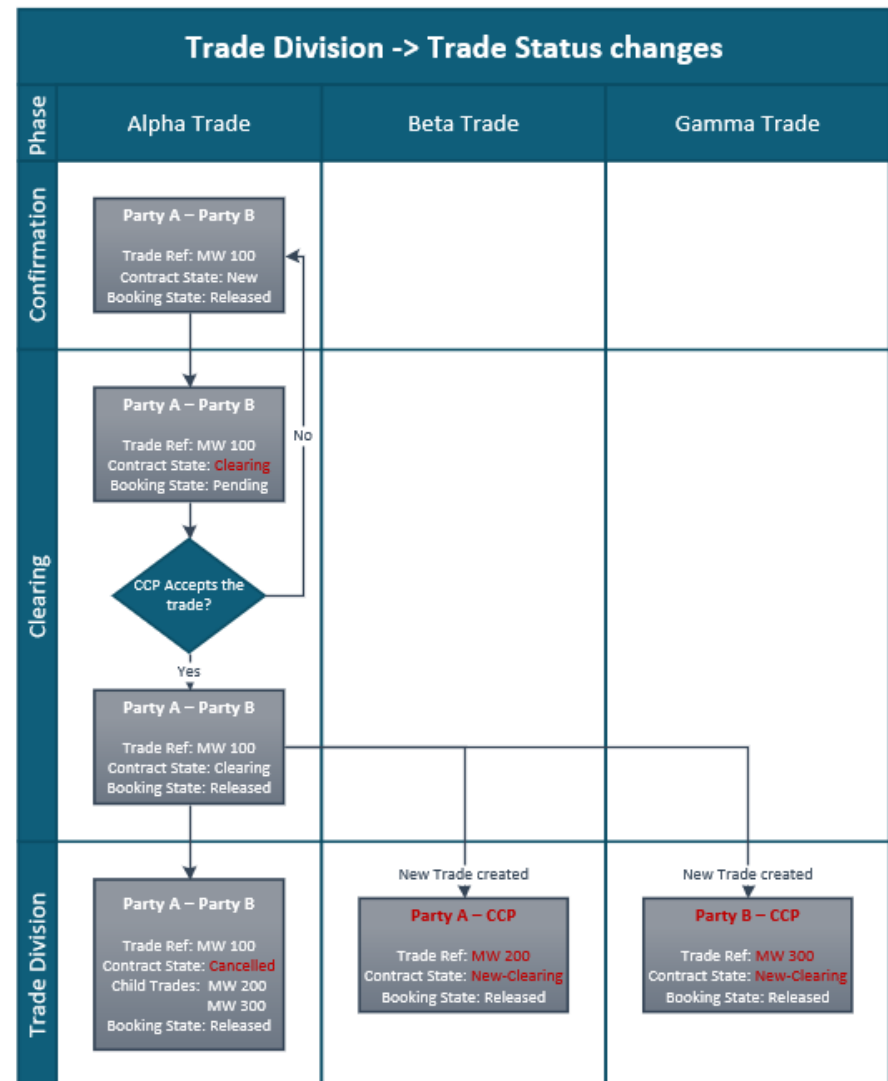
Clearing Workflow – Submission to the Clearing House


 Dealer's trade status notification

 CCP's trade status notification

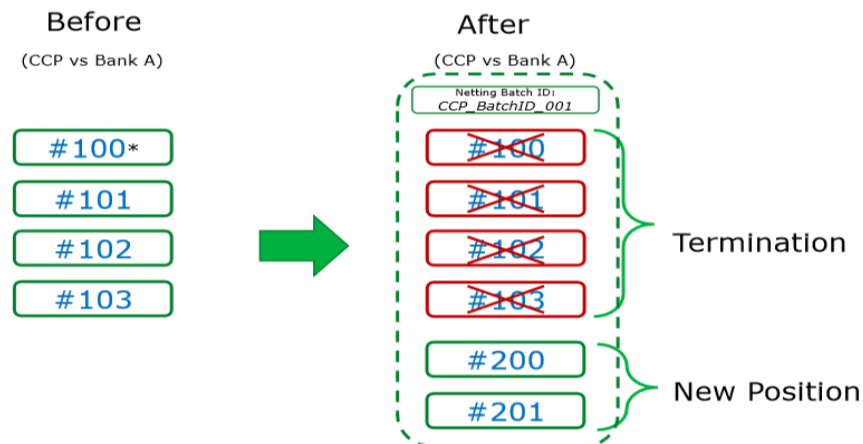
Clearing Workflow – Trade Division

- Trade division mirrors the clearing houses' novation process where original (alpha) trade is cancelled and two (beta/gamma) trades are generated.
- The clearing house (or clearing broker in case of the principal client clearing flow) becomes the counterparty on the beta/gamma trades.
- MarkitWire preserves the link between the alpha trade and its beta/gamma replacements.



Post Clearing Events (Netting Synchronisation)

- Clearing houses supply notifications of trades that have been collapsed as well as send residual trades to MarkitWire
- MarkitWire sends notifications for netting / other post cleared activity consistent with existing notifications
- Sample events: Solo Compression, Portfolio Transfer, DMP





參、臨時動議



肆、散會