



Market Data & MiFID II breakfast briefing – Our Solution

London, 22nd November 2017 Presented by David Lawlor

MiFID II introduces a range of changes into capital markets

Market

Structure

Market

Transparency

MiFID

Internal

Controls /

Governance

Investor

Protection

External

Controls /

Reporting

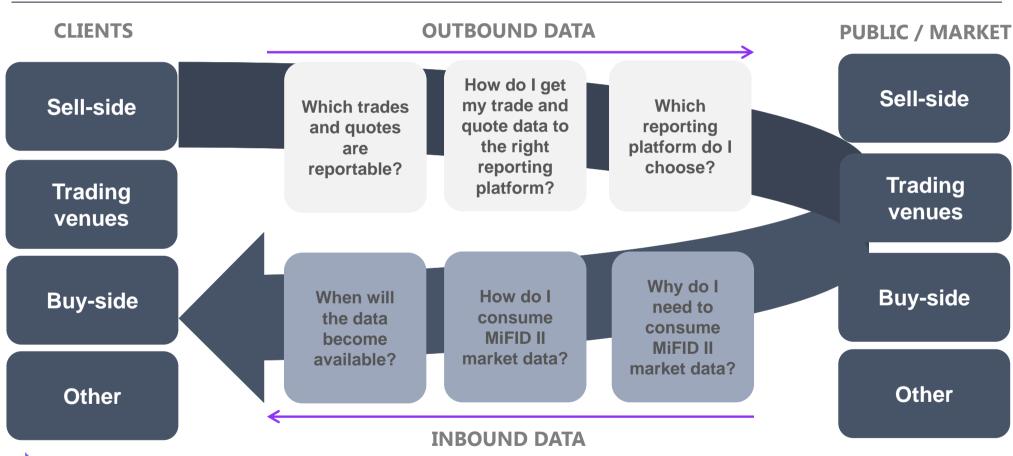
- **Ban on** *softing* Bundling of research with dealing commission will be banned. Implications for Broking business
- Further compliance rules on inducements, etc.

- Additional requirements for venues non-discriminatory fees, nondiscriminatory access, clock synchronization, system resilience, etc.
- Universal conduct of business requirement, including special requirements for Algorithms and HFT
- Position reporting and limits for commodity derivatives
- Best Execution

- Increased structure in marketplaces –
 Creation of new OTF trading venue for discretionary trading in certain markets, extension of the systematic internaliser regime, trading obligations for certain instruments
 - **Proliferation of venues expected** fragmentation of liquidity?
 - Extensive new pre and post-trade transparency requirements across all markets, including currently "unlit" markets – bonds, SFPs and derivatives are most impacted
 - Formal, regulated reporting entities (APAs), but publication likely to be fragmented
 - Commercial restrictions mandatory unbundling and disaggregation into very granular, individual "feeds"; subject to "reasonable commercial basis" at source
 - Increased importance of reference data for accurate, more detailed reporting

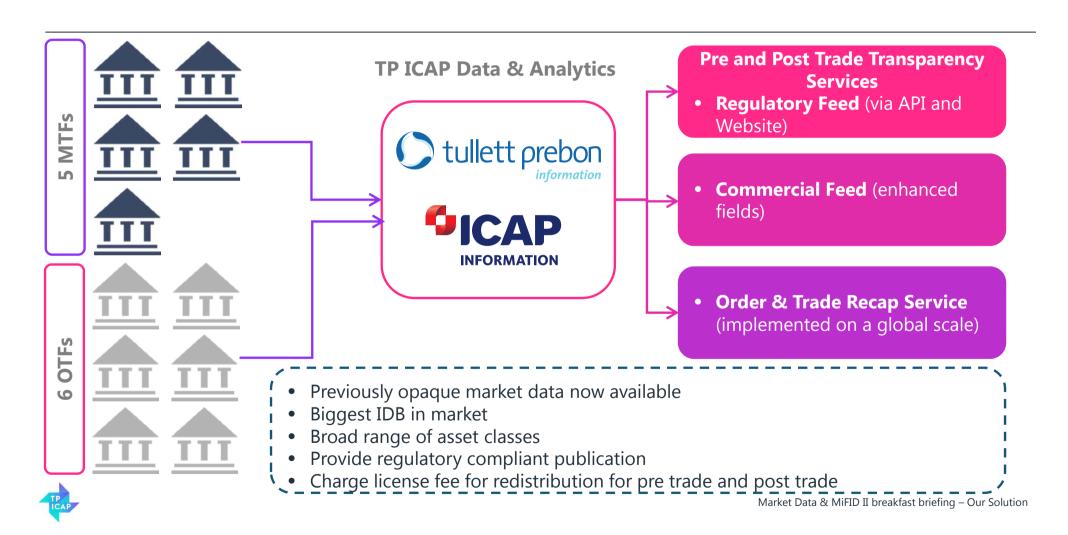


Market Transparency - Implementation Questions





MiFID II – Service Description



Trading Venue Structure

TP ICAP will operate 11 venues, using CLOB, RFQ, Auction and Voice Systems **ICAP ICAP Global** i-Swap Euro **ICAP Energy ICAP WCLK Tullett Prebon Tullett Prebon PVM Oil Legal Entity Securities Derivatives** Ltd. **Europe Securities Futures** Ltd. Ltd. Ltd. Ltd. Credit, Fixed MTF MTF MTF MTF MTF Income, Money Markets Rates Rates Rates, Equity, Rates, Money Fixed Income, Credit, FX, Markets, FX, Money Markets, **OTF** Money Markets, Fixed Income, Credit, Equity Fixed Income, **Commodities Commodities OTF OTF OTF** OTF **OTF** Commodities **Fixed** Rates, FX, **Commodities** Rates, Money Money Markets, Income Markets, FX, Credit, Equity, Fixed Income, Fixed Income Commodities



Asset Classes - Wide in Scope (1/2)

RATES

- Fixed Floating Swap
- Forward Rate Agreement (FRA)
- Overnight Index Swap (OIS)
- Floating Floating/Basis Swap
- Constant Maturity Swap
- Constant Maturity Swaption
- Constant Maturity Swap FRA
- Inflation Swap
- Inflation Option
- Interest Rate Option (IRO)
- Interest Rate Swaption
- IRO Midcurves
- Interest Rate Guarantees
- Spread Option
- Bond Option
- Single Payment Swap
- Zero Coupon Swap
- Basis Swap
- Clearing House Basis
- Base Rate Swap
- Forward Swaption
- Swaption
- Bermudan OptionQuanto Option

MONEY MARKETS

- UK Treasury Bill
- Primary Certificates of Deposit
- Secondary Certificates of Deposit
- Traded Paper
- Commercial Paper
- Repos
- Money Market Funds

EQUITY

- Cash Equity
- Stock Loans
- GDRs
- ADRs
- Exchange Traded Funds
- Equity Swap
- Equity Option
- Equity Forward

FIXED INCOME

- Government Bonds
- Inflation Bonds
- Corporate Bonds
- Covered Bonds
- Floating Rate Note
- European Government Bonds
- Loans
- Asset-Backed Securities
- Floating-Rate Notes
- Bearer Bonds
- Real Estate Bonds
- Spreads (vs Government Bonds)
- Bond Basis (vs Futures)
- Switches
- Sovereign, Supernational and Agency Bonds

FX DERIVATIVES

- FX Forward
- FX Swap
- FX Non-Deliverable Forward
- FX Option
- FX Deliverable Forward



Asset Classes - Wide in Scope (2/2)

COMMODITIES & ENERGY DERIVATIVES

- Forwards
- Precious Metals Option
- Precious Metals Forward
- Coal Swap
- Coal Option
- UK Gas Forward
- UK Gas Option
- Euro Gas Forward
- Euro Gas Option
- UK Power Forward
- Euro Power Forward
- Euro Power Option
- Euro Power Swap
- Electricity Certificates Forward
- Soft Commodities
- Emissions
- Dispersions
- Oil
- LNG

CREDIT

- Credit default Swaps Index
- Credit Default Swaps Single Name Corporate
- Credit Default Swaps Single Name Sovereign



New User Cases

Front Office

- **Enhance trading strategies** Executed price and volume data supports improved decision making in relation to execution of trades
- Order routing Attributed quote data and trade data aids identification of liquidity pools and supports order routing decision

Risk

- Identification of FRTB (Fundamental Review of the Trading Book) MRFs (Modellable Risk Factors) Support banks using internal models to conduct their risk factor analysis and identify which of their risk factors can be classified as modellable
- Increased accuracy of broader market risk modelling

Compliance

- Best Execution
- **Systematic Internaliser determination** Aggregation of executed trade data to estimate total market size aids management decision making and planning in relation to which instruments will be in-scope of systematic internaliser obligations
- Trade surveillance

Back Office

• **Valuations** - Real time executed trade data can be used for end-of-day / intra-day valuations; delayed data can support evaluated pricing



MiFID II market data can be made available through existing products (1/2)



Real Time Feed

Bloomberg





Tick History



Product escriptior

- All Mifid II data available over existing lowlatency aggregated global data feeds delivering tick level market data
- New Non equity asset classes

- Historical time series
- Supports GUI and API access

MiFID II

- On board new non-equity content sets
- Support new fields such as granular time stamps and trade flags
- Enhanced fields
- Buy sell indicators ,Type of counterparty, Indicative curves incorporated into trading info, VWAP,TWAP O/H/L/C
- YTD-high, low price in terms of volume figures

- Tick History will record all MiFID II data tick-bytick as it is published over the network
- Support new fields such as granular time stamps and trade flags
- Enhanced fields also included



MiFID II market data can be made available through existing products (2/2)





Desktop Access



- Non-streaming data platform that includes information on end-of-day and intraday pricing

FTP file access

- MiFID II market data intra-day and end-of day
- Enhanced fields

• TP ICAP Website/Eikon/Bloomberg a powerful combination of information, analytics and exclusive news

- Ability to manipulate MiFID II data in time series graphs
- Aggregated trade data view our data amongst other sources
- Enhanced fields

Benefits

- Minimise implementation effort by using existing products
- Creation of derived data creates additional value-add
- Consistency across existing and easy access products



Potential Product Fields - Example

Vanilla Field List

Plain fields to include in all product offerings

- Indicative Bid
- Indicative Ask
- Indicative Mid
- Net Change in Indicative
- Percentage Change in Indicative
- H/L/O/C: running (day, week, month, year) & to date (day, week, month)

MiFID II Field List

New field combinations which are a result of MiFID II Transparency regime

Post Trade

- MiFID Last Trade Price
- MiFID Last Trade Volume
- MiFID Last Trade Time
- MiFID Last
 Trade Date

Pre Trade

- MiFID
 Bid/Ask
 Ouote
- MiFID
 Bid/Ask
 Quote with
 Volume
- MiFID Time
- MiFID Date

Proposed Analytics Field List

Analytics derived from Trade and Quote data

- Total Trade Volumes
- Total Notional Volume by Tenor
- VWAP
- TWAP
- Moving Average/Median Prices
- Historical Volatilities
- Total Trade Count
- Bid/Ask/Trade Liquidity Metric
- B/O Average Spreads
- Tick Sizes
- Minimum/Average Trade Size
- Time stamps (all quotes/prints)
- Hit/lift passive aggressive ratios
- Pattern of activities analysis
- % breakdown between V and E
- Market times for open and close



Thank you



