#### **Review of the Markets in Financial Instruments Directive**

#### Questionnaire on MiFID/MiFIR 2 by Markus Ferber MEP

The questionnaire takes as its starting point the Commission's proposals for MiFID/MiFIR 2 of 20 October 2011 (COM(2011)0652 and COM(2011)0656).

All interested stakeholders are invited to complete the questionnaire. You are invited to answer the following questions and to provide any detailed comments on specific Articles in the table below. Responses which are not provided in this format may not be reviewed.

Respondents to this questionnaire should be aware that responses may be published.

Please send your answers to econ-secretariat@europarl.europa.eu by 13 January 2012.

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<u>FIX Protocol Limited</u> (FPL) is the non-profit, global industry organisation at the heart of the electronic trading community: The FIX Protocol is fundamental to the investment community, and is used by thousands of firms to complete millions of transactions every day in markets around the world on behalf of both institutional and retail clients. FPL's mission is to improve the global trading process by defining, managing and promoting an open protocol for real-time electronic communication between industry participants, whilst complementing other industry standards.

FPL is a membership organisation with members from the exchange, broker dealer, investment manager, vendor, data and regulatory communities from both developed and emerging markets. FPL does not benefit financially as a result of the FIX Protocol being adopted, and a trust structure was established some years back to ensure that it remains free and open for the industry.

A key element is to ensure that investor interests are accurately protected through the use of non-proprietary, free and open standards, removing the potential for commercial conflict whilst promoting efficiency, transparency and innovation alongside prudent risk controls and oversight.

Many of the questions posed in this questionnaire extend beyond the remit of FPL as an independent industry standards body; therefore our comments will focus on the practical issues within the subject matter which can be addressed through the adoption of non-proprietary, free and open industry standards.

In addition, FPL would like to highlight an initiative which has been developed across the financial community: The Investment Roadmap (appendix 1).

The Investment Roadmap initiative is ideally positioned to complement industry regulation as it provides for a clear business model from the primary issuer markets through the various business steps of the investment lifecycle including regulatory surveillance and oversight. The principle behind this initiative is to ensure consistency across the investment process by working towards a common business model (ISO 20022) yet protecting the investments in financial technology and protocols by market participants. Regulation does not need to specify any particular protocol or standard, as all participating protocols are non-proprietary, free and open, but has the opportunity to set parameters for effective regulation without imposing unnecessary costs or restrictions.

Theme	Question	Answers
Scope	1) Are the exemptions proposed in Directive Articles 2 and 3 appropriate? Are there ways in which more could be done to exempt corporate end users?	
	2) Is it appropriate to include emission allowances and structured deposits and have they been included in an appropriate way?	
	3) Are any further adjustments needed to reflect the inclusion of custody and safekeeping as a core service?	
	4) Is it appropriate to regulate third country access to EU markets and, if so, what principles should be followed and what precedents should inform the approach and why?	FPL as an Independent Industry Standards Body cannot offer a view on particular proposed regulations however can offer that in seeking to ensure that all interaction with EU markets be conducted on a fair and equitable basis, adherence with recognised, non-proprietary, free and open industry standards should be the base level of expectation to underpin all transactions.
Corporate governance	5) What changes, if any, are needed to the new requirements on corporate governance for investment firms and trading venues in Directive Articles 9 and 48 and for data service providers in Directive Article 65 to ensure that they are proportionate and effective, and why?	

Organisation of markets and trading	6) Is the Organised Trading Facility category appropriately defined and differentiated from other trading venues and from systematic internalisers in the proposal? If not, what changes are needed and why?	
	7) How should OTC trading be defined? Will the proposals, including the new OTF category, lead to the channelling of trades which are currently OTC onto organised venues and, if so, which type of venue?	Whilst FPL as an independent and neutral industry standards body cannot suggest any definition or likely impact from proposed regulation, where we can offer a view is how the necessary information regarding those trading activities can be captured in order to facilitate the necessary transparency, supervision and oversight.
		To allow ESMA to address the practical implementation of such proposed regulation, it is suggested that reference be made to key attributes relating to the format and protocols surrounding the information which can achieve this. Recitals should extend to specify that any protocol should be non-proprietary, free and open to avoid commercial conflicts yet the flexibility that existing industry standards and protocols can be used thus minimising the additional costs of new regulations to the industry and investors.
	8) How appropriately do the specific requirements related to algorithmic trading, direct electronic access and co-location in Directive Articles 17, 19, 20 and 51 address the risks involved?	As referenced in ESMA consultation 244, FIX Protocol Limited has developed a series of Risk Control best practice guidelines which can provide the necessary risk mitigation best practices across the subject of the respective Articles; Such parameters as are required to ensure that risks throughout the investment process can be identified, that

	there be appropriate oversight and supervision, and the timely delivery of information to ensure intervention when needed can be incorporated into such best practice guidelines. The risk controls referred to can also be extended to include interaction with circuit breakers as just one example.
9) How appropriately do the requirements on resilience, contingency arrangements and business continuity arrangements in Directive Articles 18, 19, 20 and 51 address the risks involved?	
10) How appropriate are the requirements for investment firms to keep records of all trades on own account as well as for execution of client orders, and why?	
11) What is your view of the requirement in Title V of the Regulation for specified derivatives to be traded on organised venues and are there any adjustments needed to make the requirement practical to apply?	
12) Will SME gain a better access to capital market through the introduction of an MTF SME growth market as foreseen in Article 35 of the Directive?	The most significant benefit from the adoption of non-proprietary, free and open industry standards is that they can be adopted across all markets – whether established or SME - without the risk of commercial exploitation:
13) Are the provisions on non-discriminatory access to market infrastructure and to benchmarks in Title VI sufficient to provide for effective competition between providers?  If not, what else is needed and why? Do the proposals fit appropriately with EMIR?	It has been widely acknowledged that the adoption of standards, not only in the financial services industry, creates a level playing field moreover provides a platform for innovation and competition which benefits end users of services. In this instance, commercial offerings can be based upon a set of

	standards and protocols to meet the required fiscal and regulatory risk controls but also differentiate on the service offering or product offered thus competition is enabled by the adoption of non-proprietary, free and open standards.
14) What is your view of the powers to impose position limits, alternative arrangements with equivalent effect or manage positions in relation to commodity derivatives or the underlying commodity? Are there any changes which could make the requirements easier to apply or less onerous in practice? Are there alternative approaches to protecting producers and consumers which could be considered as well or instead?	As referred to in question 8 above, FPL published a set of Risk Control best-practice guidelines which have within their scope the ability to be extended across asset classes ensuring the most appropriate application and implementation across the industry.  Regulation should not prevent the industry establishing, and maintaining the relevance of, specific asset class best practice guidelines with the appropriate oversight, supervision and sanctions as deemed necessary.

Investor protection	15) Are the new requirements in Directive Article 24 on independent advice and on portfolio management sufficient to protect investors from conflicts of interest in the provision of such services?	
	16) How appropriate is the proposal in Directive Article 25 on which products are complex and which are non-complex products, and why?	
	17) What if any changes are needed to the scope of the best execution requirements in Directive Article 27 or to the supporting requirements on execution quality to ensure that best execution is achieved for clients without undue cost?	What is clear is that to implement the scope of this Article, a standardised approach to what information is to be considered when evaluating best execution requirements is required; A specific examples is speed of execution – ie where speed is a consideration, then a standardised measurement of latency should be adopted ensuring a fair and equitable representation of the constituent parts of best execution requirements. A like-for-like comparison of speed of execution can then be drawn. Considerable work has already been undertaken to develop such a standard by FPL members.
	18) Are the protections available to eligible counterparties, professional clients and retail clients appropriately differentiated?	
	19) Are any adjustments needed to the powers in the Regulation on product intervention to ensure appropriate protection of investors and market integrity without unduly damaging	It has been widely recognised over an extended period of time that the adoption of standards increases competition and innovation. Regulation which requires adherence to the

financial markets?	recognised non-proprietary, free and open industry standards
	already in use can ensure that not only do financial markets
	avoid undue damage, that being no-proprietary means that the
	financial markets cannot be held financial hostage and similarly
	being free and open gives rise to industry wide collaboration to
	ensure that such standards remain at the forefront of industry
	requirements to minimise systemic risks and provide for a strong
	and transparent financial market for the protection of investor
	interests.

Transparency	20) Are any adjustments needed to the pre-trade transparency requirements for shares, depositary receipts, ETFs, certificates and similar in Regulation Articles 3, 4 and 13 to make them workable in practice? If so what changes are needed and why?	
	21) Are any changes needed to the pre-trade transparency requirements in Regulation Articles 7, 8, 17 for all organised trading venues for bonds, structured products, emission allowances and derivatives to ensure they are appropriate to the different instruments? Which instruments are the highest priority for the introduction of pre-trade	
	transparency requirements and why?  22) Are the pre-trade transparency requirements in Regulation Articles 7, 8 and 17 for trading venues for bonds, structured products, emission allowances and derivatives appropriate? How can there be appropriate calibration for each instrument? Will these proposals ensure the correct level of transparency?	
	<ul> <li>23) Are the envisaged waivers from pre-trade transparency requirements for trading venues appropriate and why?</li> <li>24) What is your view on the data service provider provisions (Articles 61 - 68 in MiFID), Consolidated Tape Provider (CTPs), Approved Reporting Mechanism (ARMs), Authorised Publication Authorities (APAs)?</li> </ul>	FPL is a neutral industry standards body and therefore not in a position to comment about the suitability of the respective provisions; we would like however to highlight that to ensure transparency and efficient implementation, and to minimise systemic risks, that Article 66 paragraph 5 the Parliament should consider extending the reach of this paragraph to specify that "non-proprietary, free and open industry standards" are implemented. The non-proprietary

	nature is fundamental to ensure that the industry is not "held hostage" to commercial exploitation at some later stage:  This suggested approach is not to mandate any particular standard but to ensure that so far as possible, and as has been enshrined in legislation recently in the US, that machine readable standards compatible with other existing industry standards for data sharing and exchange between governments and agencies is mandated. This will further assist to ensure alignment with IOSCO principles and Financial Stability/G20 expectations. ESMA is already engaged with the industry as expanded upon in our response
25) What changes if any are needed to the post-trade transparency requirements by trading venues and investment firms to ensure that market participants can access timely, reliable information at reasonable cost, and that competent authorities receive the right data?	In 2010, the CESR Working Group published recommendations about trade conditions which could be adopted across the industry – those recommendations require updating to take consideration of the new market paradigm and should be evolved into a non-proprietary, free and open industry standard which can be universally adopted and ensure consistency across all market participants and regulators.  There are however two aspects to ensuring consistency with regards to post-trade transparency standards as above – that is the creation of the standard and the ongoing governance of
	the standard: FPL has experience of working with the industry to create standards and more importantly, the ongoing governance via a structure which is not conflicted by any commercial interest, and ensures that such standards remain free and open yet can evolve with market structure

avoiding unnecessary costs being imposed on the industry to migrate to new standards.
FPL members, in conjunction with other industry participants have been working to progress the trade conditions and standards which will be required to deliver the required post-trade transparency.
FPL does not seek to address the topic of "reasonable cost"

Horizontal issues	26) How could better use be made of the European Supervisory Authorities, including the Joint Committee, in developing and implementing MiFID/MiFIR 2?	
	27) Are any changes needed to the proposal to ensure that competent authorities can supervise the requirements effectively, efficiently and proportionately?	
	28) What are the key interactions with other EU financial services legislation that need to be considered in developing MiFID/MiFIR 2?	
	29) Which, if any, interactions with similar requirements in major jurisdictions outside the EU need to be borne in mind and why?	
	30) Is the sanctions regime foreseen in Articles 73-78 of the Directive effective, proportionate and dissuasive?	
	31) Is there an appropriate balance between Level 1 and Level 2 measures within MIFID/MIFIR 2?	Whilst FPL as a neutral industry standards body cannot comment on specifics, it does believe that a greater balance and transparency can be achieved through the use of non-proprietary, free and open existing industry standards as referenced in the attached appendix.

# Investment Roadmap September 2010













### **Executive Summary**

- Within the financial services industry, there are multiple messaging standards being used, and the purpose of the Standards Coordination Group has been to come up with an approach that leverages and includes these standards into a broader framework without reinventing and creating redundant messages that increase implementation costs and cause confusion for the industry.
- This investment roadmap affirms the commitment of each organization (FIX, FpML, SWIFT, XBRL, ISITC and FISD) to the ISO 20022 business model by laying the groundwork for defining a common underlying financial model and ensuring some level of interoperability by producing a consistent direction for utilization of messaging standards and communicating that direction clearly to the industry.
- The respective business processes included in the roadmap are or will be incorporated within
  the ISO 20022 business model and the model allows for ISO 20022 XML based messages to
  be created to support the business processes, while at the same time provides in certain
  circumstances for existing domain specific syntaxes and protocols to be maintained in order
  to protect the investments of market participants.
- The organizations are committed to meeting on a consistent basis to ensure the roadmap continues to accurately depict the standards environment.

#### Investment Roadmap - FIX, ISO, FpML, XBRL syntax (HIGH LEVEL)

	Function		Cash Equities & Fixed Income	Forex <sup>(2)</sup>	Listed Derivatives	OTC Derivatives <sup>(2)</sup>	Funds
Issuer	Pre-investme	nt decision		N/A		N/A	
Front Office	Pre-Trade	Pre-Trade					
Front Office	Trade						
Middle	Post-Trade	Post-Trade		<b>A</b> •	<b>A</b> •		
Office	Clearing / Pre-Settlement				<b>A O</b>		
	Asset Servicing		•	N/A			•
Back Office	Collateral Mar	nagement	<b>A</b> •	N/A	<b>A</b> •		N/A
Back Office	Settlement						
	Pricing / Risk	/ Reporting					
Investor Supervision Regulatory Reporting		<b>A O</b>	<b>A</b> •	<b>A</b> •			
Issuer Supervision Regulatory Reporting			N/A		N/A		
	FIX 🔵	ISO (1)	(1) Represents ISO 20022, ISO 15022 and MT messages (2) See OTC Derivatives breakout for details: - Syndicated Loans, Privately Negotiated FX, and OTC Equity, Interest Rate, Credit, and Commodity Derivatives - FpML payload may be used in combination with FIX business processes in dealer to buy side communication				
	FpML 🤷	XBRL					
			ı				

## Goal: ISO 20022 Common Business Model (HIGH LEVEL)

	Function		Cash Equities & Fixed Income	Forex <sup>(2)</sup>	Listed Derivatives	OTC Derivatives <sup>(2)</sup>	Funds
Issuer	Pre-investment	decision		N/A		N/A	
Front Office	Pre-Trade						
Front Office	Trade						
Middle Office	Clearin Asset Servicing	0-2	0022	GOIII			0 🔷
Back Office USI	Collateral Mana	gement OJJJ Reporting			is S	WEL	Jes
Investor Supervision	Regulatory Rep	orting	<b>A</b> •		<b>A (()</b>		1
Issuer Supervision	Regulatory Rep	orting		N/A		N/A	1
<b>A</b>	FIX 💮	ISO (1)	(1) Represents ISO (2) See OTC Derivat	ives breakout for		OTC Equity, Inter-	est Rate,
	FpML 🤷	XBRL	Credit, and FpML pay	Commodity Deriv	atives in combination with		

#### Investment Roadmap - FIX, ISO, FpML, XBRL syntax (MEDIUM LEVEL)

	Function	Cash Equities & Fixed Income	Forex	Listed Derivatives	OTC Derivatives	Funds	
Issuer	Pre-investment decision: Filing Fundamental Data with the Regulator, Analytical Models		N/A		N/A		
Front Office	Pre-Trade: Ols, Trade adverts, Quotes, Market data, Short Sale Locate, Reference Data						FIX
Front Office	Trade: Order Routing, Trade Execution, Trade Date Position Reporting, Reference Data						
Middle Office	Post-Trade: Trade Capture & Validations, Allocation, Matching, Confirmation/Affirmation, Position Management, OTC Derivatives Post Trade Processing	<b>A</b> •	<b>A</b> •	<b>A</b> •			Fpl
	Clearing / Pre-Settlement: Matching, Netting, Funding, Reference Data			<b>A</b> •			ISC
	Asset Servicing: Issuance, Corporate Actions, Proxy Voting, Securities Lending	<b>O</b>	N/A			<b>O</b>	ХВІ
	Collateral Management: Initial Margining, Margin Call, Substitution, Recall, Transfer, Interest Payment	<b>A</b> •	N/A	<b>A</b> •		N/A	
Back Office	Settlement: Pre-advisement, Settlement Notification, Settlement, Transaction Management, Fail and Claim Management						
	Pricing / Risk / Reporting: Tax Management, Income Collection, Risk Management, Pricing & Valuation, Reporting, Position Management						
Investor Supervision	Regulatory Reporting: Short Sale Reporting, Trade Surveillance Reporting, Position Management Reporting, Tax Lot Reporting	<b>A</b> •					
Issuer Supervision	Regulatory Reporting: Short Interest Reporting, Financial Statement Reporting, Investment Reporting		N/A		N/A		

# Investment roadmap – FIX, ISO, FpML, XBRL syntax (DETAIL LEVEL)

	Cash Equities	Fixed Income	Forex	Listed Derivatives	OTC Derivatives <sup>(1)</sup>	Funds
Pre-investment Decision						
•Filing Fundamental Data with the Regulator	XBRL	XBRL	$\setminus$	XBRL	><	XBRL
•Analytical Models	XBRL	XBRL	$\bigvee$	XBRL	$\bigvee$	XBRL
Pre-Trade:						
•IOIs	FIX	FIX	$\bigvee$	FIX	FpML	$\searrow$
•Trade advertisements	FIX	FIX	$\bigvee$	FIX	FpML	$>\!\!<$
•Quotes	FIX	FIX	FIX	FIX	FpML	$\searrow$
•Market Data	FIX	FIX	FIX	FIX	FpML	ISO
•Short Sale Locate	FIX	$\bigvee$	$\bigvee$	FIX	$\bigvee$	$\bigvee$
•Reference Data	FIX	FIX	FIX	FIX	FpML	ISO
Trade:						
Order Routing	FIX	FIX	FIX	FIX	$>\!\!<$	ISO
Trade Execution	FIX	FIX	FIX	FIX	FpML	ISO
•Trade Date Position Reporting	FIX	FIX	FIX	FIX	FpML	ISO
•Reference Data	FIX	FIX	FIX	FIX	FpML	ISO
Post-Trade:						
•Trade Capture & Validations	FIX, ISO	FIX, ISO	FIX, ISO	FIX, ISO	FpML	ISO
•Allocation	FIX, ISO	FIX, ISO	FIX, ISO	FIX, ISO	FpML	ISO
•Matching	FIX, ISO	FIX, ISO	FIX, ISO	FIX, ISO	FpML	ISO
<ul> <li>Confirmation/Affirmation</li> </ul>	FIX, ISO	FIX, ISO	FIX, ISO	FIX, ISO	FpML	ISO
•Position Management	FIX, ISO	FIX, ISO	FIX, ISO	FIX, ISO	FpML	ISO
•Novation/Assignment (OTC Derivatives)	$>\!\!<$	$\bigvee$	$\bigvee$	$>\!\!<$	FpML	$\searrow$
•Amendments / Modifications (OTC Derivatives)	$>\!<$	$>\!\!<$	$\times$	$>\!<$	FpML	$>\!\!<$
•Termination (OTC Derivatives)	>	>>	$\searrow$	>	FpML	$\sim$
•Increases (OTC Derivatives)	$>\!\!<$	>>	>>	$>\!\!<$	FpML	>>
•Affirmations (OTC Derivatives)	>	>>	>>	$>\!\!<$	FpML	>>
EXERCISE (OLD PRIXED YES)	X.bursiness.processe	s in dealer to buy side	communication	$>\!<$	FpML	$>\!\!<$

# Investment roadmap – FIX, ISO, FpML, XBRL syntax (DETAIL LEVEL)

	Cash Equities	Fixed Income	Forex	Listed Derivatives	OTC Derivatives	Funds
Clearing / Pre-Settlement:						
•Matching	ISO	ISO	ISO	FIX, ISO	FpML	ISO
•Netting	ISO	ISO	ISO	FIX, ISO	FpML	ISO
•Funding	ISO	ISO	ISO	FIX, ISO	FpML	ISO
•Reference Data	ISO	ISO	ISO	FIX, ISO		ISO
Asset Servicing:						
•Issuance	ISO, XBRL	ISO, XBRL		ISO		ISO, XBRL
•Corporate Actions	ISO, XBRL	ISO, XBRL		ISO	FpML	ISO, XBRL
•Proxy Voting	ISO, XBRL	ISO, XBRL		ISO		ISO, XBRL
•Securities Lending	ISO	ISO	>	ISO	FpML	ISO
Reconciliation:						
•Portfolio Reconciliation	ISO	ISO	$\searrow$	ISO	FpML,ISO	ISO
•Cash Flow Matching	ISO	ISO		ISO	FpML	ISO
Collateral Management:						
Initial Margining	ISO	FIX, ISO	$\overline{}$	FIX, ISO	FpML,ISO	
• Margin Call	ISO	FIX, ISO	>	FIX, ISO	FpML,ISO	
Substitution	ISO	FIX, ISO		FIX, ISO	FpML,ISO	
• Recall	ISO	ISO	>>	ISO	FpML,ISO	
• Transfer	ISO	ISO	>>	ISO	FpML,ISO	
Interest Payment	ISO	ISO		ISO	ISO	

# Investment roadmap – FIX, ISO, FpML, XBRL syntax (DETAIL LEVEL)

	Cash Equities	Fixed Income	Forex	Listed Derivatives	OTC Derivatives	Funds
Settlement:						
•Pre-advisement	ISO	ISO	ISO	ISO	FpML	ISO
Settlement Notification	ISO	ISO	ISO	ISO	FpML	ISO
•Settlement	ISO	ISO	ISO	ISO	ISO	ISO
•Transaction Management	ISO	ISO	ISO	ISO	ISO	ISO
•Fail and Claim Management	ISO	ISO	ISO	ISO	ISO	ISO
Pricing / Risk / Reporting						
•Tax Management	ISO	ISO	$\mathbb{N}$	ISO	ISO	ISO
•Income Collection	ISO	ISO	ISO	ISO	ISO	ISO
•Risk Management	FpML,ISO	FpML,ISO	FpML,ISO	FpML,ISO	FpML,ISO	FpML,ISO
∙Pricing & Valuation	FpML,ISO	FpML,ISO	FpML,ISO	FpML,ISO	FpML,ISO	FpML,ISO
•Reporting	FpML,ISO	FpML,ISO	FpML,ISO	FpML,ISO	FpML,ISO	FpML,ISO
•Position Management	FpML,ISO	FpML,ISO	FpML,ISO	FpML,ISO	FpML,ISO	FpML,ISO
Regulatory Reporting - Investor						
Short Sale Reporting	FIX, ISO	FIX, ISO	$\mathbb{N}$	FIX, ISO	$>\!<$	$\mathbb{N}$
•Trade Surveillance Reporting	FIX, ISO	FIX, ISO	FIX	FIX, ISO	FpML	ISO
Position Management Reporting	FIX, ISO	FIX, ISO	FIX, ISO	FIX, ISO	FpML,ISO	ISO
•Tax Lot Reporting	FIX, ISO	FIX, ISO	FIX, ISO	FIX, ISO	FpML,ISO	ISO
Regulatory Reporting - Issuer		14			S 331	
•Short Interest Reporting	XBRL	XBRL -		XBRL	>>	XBRL
•Financial Statement Reporting	XBRL	XBRL .		XBRL		XBRL
•In∨estment Reporting	XBRL	XBRL -		XBRL .		XBRL

#### OTC Derivatives Detail - Client Side Applications

	Function	Syndicated Loans	FX Derivatives	Equity Derivatives	Interest Rate Derivatives	Credit Derivatives	Commodity Derivatives			
ssuer	Pre-investment Decision:	N/A	N/A	N/A	N/A	N/A	N/A			
Front Office	Pre-Trade:  Ots, Trade adverts, Guotes, Market data, Short Sale Locate, Reference Data  Trade:  Order Routing, Trade Execution, Trade Data Positions, Reference Data	representation	Communication between clients and brokers of OTC Derivative Process and Product epresentations for Pre-Trade and Trade Processes will continue to be discussed. A Gap alysis to be performed by ISDA and FPL has been proposed to determine requirements for and feasibility of FIX Protocol Support in these areas.							
Middle Office	Post-Trade: Trade Capture & Validations, Allocation, Matching, Confirmation/Affirmation, Position Management, Trade Surveillance, OTC Derivatives Post Trade Processing									
	Clearing / Pre-Settlement: Matching, Netting, Funding, Reference Data									
	Asset Servicing: Issuance, Corporate Actions, Proxy Voting, Securities Lending									
	Collateral Management: Initial Margining, Margin Call, Substitution, Recall, Transfer, Interest Payment									
	Reconciliation: Cash Flow Matching, Portfolio Reconciliation									
Back Office	Settlement: Pre-advisement, Settlement Notification, Settlement, Transaction Management, Fall and Claim Management									
	Pricing / Risk / Reporting: Tax Management, Income Collection, Risk Management, Pricing & Valuation, Accounting, Position Management					<u> </u>				
nvestor Supervision	Regulatory Reporting: Short Sale Reporting, Trade Surveillance Reporting, Position Management Reporting, Tax Lot Reporting									
lssuer Supervision	Regulatory Reporting: Short Interest Reporting , Financial Statement Reporting, Investment Reporting	N/A	N/A	N/A	N/A	N/A	N/A			