ISDA®
International Swaps and Derivatives Association, Inc.

SIFMA
Securities Industry and Financial Markets Association

December 31, 2010

David A. Stawick
Secretary of the Commission
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, N.W.
Washington, DC 20581

**Re: Release No. 34-63423, File No. 4-620 - Request for comments: Algorithmic Study (Acceptance of Public Submissions on a Study Mandated by the Dodd-Frank Wall Street Reform and Consumer Protection Act, Section 719(b) (75 Fed. Reg. 76706))**

Dear Mr. Stawick:

The International Swaps and Derivatives Association, Inc. ("**ISDA**")[1] and the Securities Industry and Financial Markets Association ("**SIFMA**")[2], hereinafter the "**Associations**", appreciate the opportunity to provide comments to the Commodity Futures Trading Commission and the Securities and Exchange Commission, hereinafter referred to as the "**Commissions**", on the study of the feasibility of requiring the derivatives industry to adopt standardized computer-readable algorithmic descriptions which may be used to describe complex and standardized financial derivatives.

The Associations respectfully submit the following responses to the questions posed in the Commissions' request for comments regarding the study of the feasibility of requiring the derivatives industry to adopt standardized computer-readable algorithmic descriptions which may be used to describe complex and standardized financial derivatives. ISDA provides the framework for and develops the actual specifications for the FpML standard (see www.fpml.org). We have responded to the questions from that perspective. Questions specifically related to implementation experiences are left for implementers' responses.

FpML (Financial products Markup Language) is an open derivatives industry computer-readable format for communicating descriptions of derivatives transactions between and within firms, supported by ISDA. It is currently used by a large number of organizations in the industry to electronically confirm and clear trades, to report new trading activity to custodians and other service providers, and to report portfolio valuations and economic details to counterparties. FpML has been a key component of the derivatives

[1] ISDA was chartered in 1985 and has over 830 member institutions from 57 countries on six continents. Our members include most of the world's major institutions that deal in privately negotiated derivatives, as well as many of the businesses, governmental entities and other end users that rely on over-the-counter derivatives to manage efficiently the risks inherent in their core economic activities. For more information, visit www.isda.org.

[2] SIFMA brings together the shared interests of hundreds of securities firms, banks and asset managers. SIFMA's mission is to support a strong financial industry, investor opportunity, capital formation, job creation and economic growth, while building trust and confidence in the financial markets. SIFMA, with offices in New York and Washington, D.C., is the U.S. regional member of the Global Financial Markets Association. For more information, visit www.sifma.org.

industry's successful efforts to reduce confirmation backlogs, reduce error rates, and improve process automation.

FpML's descriptions of derivatives allow recipients to compute valuations for a wide variety of standard and complex derivative transaction types that represent an overwhelming share of the market activity. For infrequently traded transaction types, FpML provides a format for reporting key economic details of the transaction.

FpML has a strong track record in developing standard representations for derivatives to support industry automation objectives. As industry needs are identified, working groups are convened to define and standardize the representations of these products. ISDA welcomes input from regulators on new priorities for the standard in order to meet the objectives of the Dodd-Frank Act.

While FpML is widely used in the derivatives industry, it is important to note that not all derivative transactions can fully be reduced to FpML or another standardized computer readable language. For highly customized products it is not practical to create a standardized parametric XML representation that is suitable for confirmation purposes. For these products ISDA recommends that where electronic reporting is required, a summary representation should be used. The information set forth in this letter should not lead the Commission to conclude that it is reasonable to require by regulation that all transactions be electronically confirmed and cleared using FpML. Such a rule would stifle the ability of the derivatives market to offer tailored products for clients and to innovate and create new solutions to clients' needs.

Below, we provide answers to selected questions presented in the Commission's request for comments.

**Calculation of "Net Exposures to Complex Derivatives" and other "Computerized Analysis":**

*1. How would your organization or community define "net exposures to complex derivatives?"*

The first possible interpretation of "net exposure" is as current economic exposure, or the market value of outstanding derivatives positions.
In general, the current economic exposure to a position of a single derivative instrument is measured as the current market value of that instrument. If the market value is not directly observable, the mark-to-market value is estimated using a valuation model. Current economic exposure can be used to measure any gain or loss in the value of the instrument in question, but does not necessarily measure the risk of potential future losses or counterparty credit exposure, both of which are discussed below.
The current net economic exposure of a portfolio of derivatives executed under a single master agreement (i.e., the net exposure associated with a "netting set") is the sum of the mark-to-market values of all instruments in the same netting sets.

The current net economic exposure of a portfolio of derivatives belonging to different netting sets is the sum of the current net economic exposure of all netting sets.

Current economic exposure is a static measure of exposure measured at a given instant in time. In contrast, statistical models such as Value at Risk ("VaR") attempt to measure the potential risk of loss in the future.

The calculation of exposure may, however, vary if the objective is to determine exposure to counterparty credit risk. For example, the exposure to counterparty credit risk for a portfolio consisting of a single derivative instrument is the mark-to-market value of the instrument less the fair value of any collateral posted by the counterparty if it is positive, and zero otherwise. Note that even though a party may have negative exposure to its counterparty (such that the counterparty is in the money), that party may have credit exposure to such counterparty as a result of the party having over collateralized its counterparty. Counterparty credit exposure for a single netting set is the sum of the values of all contracts in that netting set, less the fair value collateral posted by the counterparty, if that sum is positive, zero otherwise. Note that it is possible to have more than one netting set for a single counterparty. For example, a large international bank may have several different master agreements with various subsidiaries of another large international bank or corporation.

Total counterparty credit exposure is the sum of counterparty exposures for each netting set.

Finally, because counterparty exposure depends on the value of the portfolio of instruments with another counterparty, the amount of the exposure can change as market rates and prices change. Banks use a variety of different models to calculate expected or potential counterparty exposure, and the Basel II Capital Guidelines describe different methods for performing such calculations.

*2. Do you calculate net exposures to complex derivatives?*

In general, the major derivatives dealers measure derivatives exposures using all of the aforementioned methods, as each method addresses a different question or different type of risk. The Basel II Capital Guidelines require all banks to perform each of these types of calculations where applicable. Practices among financial firms in general will vary depending on how actively the firm in question trades OTC derivatives

*3. What data do you require to calculate net exposures to complex derivatives? Does it depend on the derivatives instrument type? How?*

To independently determine the value of a derivative, three different components are required:

1. A mathematical representation of the derivative product. This is generally derived from the parametric[3] representation of the derivative terms, such as is provided by a standard like FpML, and is in most cases relatively straightforward to generate from the former for all but the most structured derivatives.
2. A mathematical representation of the market environment. This includes information such as yield curves, credit spreads and default probabilities, securities prices, FX rates, and volatilities. This is generally constructed by each market participant based on publicly available market data and proprietary market models, and varies depending on instrument type.
3. A (usually proprietary) pricing model that can value the product using the previous two sets of data. In certain cases, such as for some kinds of swaps and forwards, this model can directly

[3] A "parametric" representation of a derivatives product represents all of the parameters used to generate the cash flows and other events of the trade. For example, this will typically include date elements such as the start and end date of the transaction, the frequency of accruals and payments, underlying assets or indexes, fixed rates or prices, and adjustment rules. The list of parameters required will vary depending on the derivative product.

compute the value of the derivative by forecasting cash flows and discounting them to the present using interest rates. In other cases, such as with many options, it is necessary to simulate a large variety of market evolutions and compute an expected value of the derivative across these scenarios.

For many products, the third component, the pricing model, is the most complex and difficult part. Two market participants may generate different estimates of the value of the derivative, due to differences in items #2 and #3 above.

For more liquid products, one might obtain valuation estimates from third party valuation services based on the parametric representation of the transaction. However, this type of estimate is usually approximate and only supports commonly traded products.

If, as discussed in question 1, the objective is to determine exposure to counterparty credit risk, the following additional information is required:

1) The market value of the collateral posted or received from the counterparty and, if referring to potential exposures, the haircuts applicable to the collateral held or posted.

2) Netting opinions (for current and potential exposure) and collateral opinions (potential exposure only)

3) Information regarding the legal agreement(s) for each of the transactions in order to construct netting sets.

*6. How often do you perform net exposure calculations at the level of your organization? Is it continuous and real time, only for periodic external reporting, or some frequency in between?*

Credit exposure calculations are typically done once per day by most dealers. Credit exposure calculations require complex computer intensive calculations and simulations that would be difficult to run on a more frequent basis. Market Risk on the other hand is managed intraday.

**Current practices concerning standardized computer descriptions of derivatives:**

*7. Do you rely on a discrete set of computer-readable descriptions ("ontologies") to define and describe derivatives transactions and positions? If yes, what computer language do you use?*

A significant number of the Associations' members use an XML-based internal messaging specification, often based on an extended or adapted version of FpML, for communicating trade details between systems. Many derivatives industry utilities and service providers use FpML for communicating trade details with the participants.

*8. If you use one or more ontologies to define derivatives transactions and positions, are they proprietary or open to the public? Are they used by your counterparties and others in the derivatives industry?*

FpML is an open standard that is publicly available. It is widely used to represent trade details by counterparties, industry utilities, and service providers, for a number of processes including confirmation, clearing, trade instruction reporting, and portfolio valuation and reconciliation reporting. It covers all major OTC derivative asset classes and business event types. For example, several automated

confirmation services representing an overwhelming majority of credit and interest rate derivatives transactions are based on FpML. FpML is used by most of the major derivatives dealers to report portfolio values and economic details to sophisticated asset managers. FpML is also used by many large derivatives market participants as a basis for their internal messaging systems.

*9. How do you maintain and extend the ontologies that you use to define derivatives data to cover new financial derivative products? How frequently are new terms, concepts and definitions added?*

FpML is maintained by a series of working groups that are open to the derivatives community. New terms, concepts, and definitions are added continuously based on market demand. A complete new version of the standard is typically finalized about twice a year, based on a series of interim versions that are published every month or two. This schedule is reviewed monthly by the FpML Standards Committee, which represents key stakeholders in the standard, and can be adjusted if necessary to meet market requirements.

Individual firms that base their standards on FpML are free to set their own schedules for updating their standards.

*10. What is the scope and variety of derivatives and their positions covered by the ontologies that you use? What do they describe well, and what are their limitations?*

FpML covers the following standardized derivative products:

- interest rate derivatives, including most types of interest rate swaps (fixed-float, basis, cross currency, averaging, compounding, uneven notional, inverse floater, cancelable swaps, extendibles, early termination clauses, asset swaps, non-deliverable swaps, etc.), caps, floors, swaptions, forward rate agreements, inflation swaps, and OTC bond options
- credit derivatives, including single name CDS, index CDS, index tranches, custom baskets, CDS on mortgages and loans, and options on CDS, as well as options on credit bonds and total return swaps on credit bonds
- equity derivatives, including a variety of OTC equity options, equity return swaps, and equity forwards, variance and correlation swaps, and dividend swaps, as well as options on many of these
- commodity derivatives, including financially and physically settled swaps and options on oil, natural gas, power, and other commodities
- FX products, including spot, forward, FX swap, non-deliverable forwards, options, averaging options, barrier options, digital options, and term deposits)
- commercial loans.

In addition, FpML provides a “generic” product representation that describes key economic details of the transaction. This "generic" product representation can be used for products currently not covered by FpML.

FpML’s standardized representations have traditionally focused mostly on products and transaction types that are traded in relatively high volume (which typically have a certain level of legal standardization) where there is a need to improve automation. This strategy has been very successful, as the current FpML product support includes transaction types that represent a large majority share of derivatives transactions executed each year.

As new products become used commonly, and the automation thresholds are met, the industry develops, under the FpML framework, standard representations that will allow a variety of processes to be supported, such as confirmation, pricing, settlement, and reporting. This is independent from the complexity of the product. Until products become common, however, there are typically not standardized representations, nor, in some cases, FpML capabilities for such products.

For example, mortgage derivatives, which are complex products, are covered in the standard. Once a need to address this product area was identified, FpML convened a working group and quickly developed a representation that was suitable for use by automated confirmation services (and other types of services).

Going forward, the regulatory requirements will be an important factor in setting the priorities of coverage in the standard.

*11. How do you think any limitations to the ontologies you use to describe derivatives can be overcome?*

Based on industry and regulatory demand, FpML can broaden its scope to include more information about transaction types that are traded in smaller numbers. Higher volume transaction types can be represented in a full standard FpML parametric representation that is suitable for multiple processes such as confirmation, valuation, and settlement. Lower volume transaction types can be represented using key descriptive parameters. There is a diversity of opinion within the derivatives industry on how feasible it would be to fully represent complex structured products using standardized simple building blocks such as basic financial events[4]. ISDA welcomes regulatory input in order to improve transparency in this area without compromising the derivatives industry's ability to rapidly innovate new products and transactions to meet evolving needs.

*12. Are these ontologies able to describe derivatives transactions in sufficient detail to enable you to calculate net exposures to complex derivatives?*

FpML allows most derivatives transactions representing the large majority of activity in the market to be described in sufficient detail to enable market participants to compute values and exposures, given adequate descriptions of market data and appropriate pricing models. The market data can also be described precisely using FpML. Highly complex derivatives tend to vary greatly in detail and are small in number. For these products, FpML is able to include a generic product definition that allows key identifying details to be provided but cannot provide enough detail to allow participants to compute values and exposures.

[4] e.g. one way could be the use of a layered model in FpML where the top layer would retain the familiar form of the full parametric representation, which would be assembled from an elemental layer with a simple, but robust model of financial obligations and rights, and associated financial events. The elemental layer would support a rich set of processes and analyses, and require only occasional, minimal expansion as new types of contracts are introduced. see: Unified Financial Analysis, by Brammertz, et. al., published by John Wiley & Sons, 2010

*13. Are these ontologies able to describe derivatives transactions in sufficient detail to enable you to perform other analysis? What types of analysis can you conduct with this data, and what additional data must be captured to perform this analysis?*

Generally, once it is possible to compute a price or value for a derivative transaction, it is possible to perform many other analyses, including calculating the sensitivity of the price to changes in the market inputs, computing the credit equivalent for the transaction, and computing aggregate measures such as value at risk. In order to be able to compute derivative transaction values and other types of exposures, it is necessary to have a model of the current market environment, and of the types of permutations and scenarios that need to be applied to compute the exposures. FpML includes representation of most key market inputs (such as benchmark instrument prices, yield and credit curves, volatility and correlation surfaces, etc.) and of many of the types of valuation scenarios that can be applied.

*14. Which identifier regimes, if any, do you use to identify counterparties, financial instruments, and other entities as part of derivatives contract analysis?*

FpML defines standard identification conventions for counterparties, product types, and reference entities, but it allows individual implementations to use existing or alternative identification schemes for these entities.

**Current use of standardized computer readable descriptions for messaging of derivatives transactions:**

*16. Is there a difference between the created message and the communicated message? For example, does your internally archived version of the message contain proprietary fields or data that are removed when it is communicated to counterparties or clearing houses?*

For many users of FpML, their internal representation is somewhat different in fine detail, for instance reference data, than the representation used with external entities such as confirmation platforms. For example, counterparty identifiers within a firm typically use the firm's standard party identification system reference data, which is usually unique to the organization. Once the FpML needs to be communicated to an external platform, these identifiers will be translated into those used by the platform. However, the product descriptions will be highly consistent across internal and external representations with regard to the material contractual terms.

*17. Are different messaging standards used to describe different contracts, counterparties, and transactions?*

FpML can be used to describe the large majority of types of contracts and transactions for all types of parties. The same standard and messages can be used by a variety of organization types, including counterparties to the transaction, industry utilities, and service providers such as operations outsourcers, custodians, or fund administrators. The standard addresses all common trade lifecycle events, as well as areas such as reconciliation, valuation, and reporting. All structures are designed to apply to all applicable product types, to provide the greatest possible degree of commonality across products and transaction types.

*19. What information is currently communicated, by and to whom, and for what purposes?*

Some of the areas where FpML is used include:

| Data | Users | Purpose |
|---|---|---|
| Trade and post-trade event descriptions for a variety of transaction types | Major dealers and large investment managers and hedge funds; confirmation services | Affirm and confirm OTC derivative trades and post-trade events such as novations, increases, and full and partial terminations |
| Trading activity | Investment managers and custodians, using industry financial messaging services | IMs instruct custodians on changes to OTC derivative positions |
| Portfolios of positions with valuation information | Major dealers and large hedge funds | Report and reconcile portfolio contents and valuations |
| Projected cash flows | Major dealers and settlement netting services | Reconcile settlement and netting calculations and perform net settlement |
| Portfolio value sensitivity reports and other risk report | Exact usage is unknown | Communicate risk calculations from one party to another |
| Trades and post-trade event descriptions | Clearing member firms; clearing services | Clear trades by novating them to a central counterparty |
| Reports on portfolios | Clearing services and other central utilities; member firms | Report on changes to portfolio composition and on other events such as rate setting |
| Reference data reports | Exact usage is unknown | Report on changes to reference data such as counterparties and other party relationships |

The FpML specifications contain sets of examples[5] for each of the versions, that give an idea of the information communicated. We would be happy to provide more information where needed.

*20. For lifecycle event messages (e.g., credit events, changes of party names or identifiers), are there extant messaging standards that can update data relating to derivatives contracts that are stored in data repositories?*

FpML includes messages that can be used to report on changes in contract information, whether these are caused by trading events or by external events such as corporate actions or credit events.

*21. What other standards (i.e., FpML, FIX, etc.) related to derivatives transactions does your organization or community use, and for what purposes? Has your implementation of these standards had*

[5] For version 5 examples, see: http://www.fpml.org/spec/fpml-5-0-9-rec-1/html/confirmation/fpml-5-0-examples-frame.html

*any effect on the way your business is conducted (e.g., does it reduce misunderstanding of contract terms, has it increased the frequency or ease of trades).*

The Associations' members use FpML heavily for confirming OTC derivative transactions in a number of asset classes representing the bulk of the derivatives market volume. Introduction of FpML-based confirmation services has had the effect of greatly reducing confirmation backlogs. For example, between 2005 and 2010, average confirmation backlogs for large firms in credit derivatives dropped from 23.5 days to 1 day, while volumes increased considerably over that period, according to the 2010 ISDA Operations Benchmarking Survey. The improvements in backlogs, automation rates, and reduction in error rates in most asset classes, are directly linked with the adoption of FpML-based industry utilities.

*22. Is the data represented by this/these messaging standard(s) complete enough to calculate net exposures to complex derivatives? What additional information would need to be represented?*

For products supported by a complete product representation, FpML includes the economic content required to fully value derivatives transactions. As discussed above, to compute valuations also requires market data and pricing models. Products supported by a generic representation must be valued using information not currently captured in FpML.

FpML can also be used to report counterparty valuations; these can be aggregated by counterparties to compute overall exposures to their trading partners. FpML is currently working on producing simplified valuation and portfolio reconciliation reports, to make it easier for firms to implement this type of reporting.

*23. In general, to what extent are XML-based languages able to describe a derivatives contract for further analysis? To what extent is other technology needed to provide a full description?*

FpML, which is an XML-based language, is capable of fully describing the contract terms of derivative transactions.

*24. What other analysis can be conducted with this data? What additional information should be captured?*

FpML-based trade descriptions can be used to compute values, sensitivities of values to changes in market inputs, aggregate market risk measures, credit exposures, and other types of aggregate exposure reporting. FpML has structures that allow many of these types of exposures to be reported once they have been computed, and is developing a new set of simplified reports to improve the implementability of this type of reporting.

*25. Do you have plans to change your messaging schemes/formats in the near future?*

FpML continuously extends its standard, and each new minor version retains backward compatibility with previous minor versions. A new major version (version 5) has recently been introduced. This version introduces a number of new features to improve flexibility and understandability, and as a result introduces some incompatibility with prior versions. However, minor versions within the 5.x series will

maintain both backward compatibility and forward compatibility (for previously available features).[6]

Some of the areas currently being developed in FpML include:

- messages to support collateral processes
- improvements in support for clearing of OTC transactions
- messages to automate option exercise processing
- new reports in a variety of areas including position, valuation, and activity reporting and reference data reporting
- improvements in representations of FX products to broaden the covered product set and improve the flexibility of the product representations
- expanded coverage for commercial loans.

*26. Are there identifier regimes widely used in the derivatives market for identifying counterparties, financial instruments, and other entities in messaging?*

FpML defines default coding schemes for each of these values. For counterparties, the default identifier is the SWIFT BIC code. For financial instruments, the default identifier is the FpML product type coding scheme for OTC derivatives, and there are several industry standard identification systems (such as CUSIP, ISIN, and SEDOL) for securities identifiers. For reference entities, the default identifier is the RED (Reference Entity Database) pair code. However, confirmation and clearing platforms have the ability to define their own identifier systems for use within FpML.

**The need for standardized computer descriptions of derivatives:**

*27. Would there be a benefit to standardizing computer readable descriptions of financial derivatives? What about standardization for a certain class/type of financial derivatives (i.e., CDS versus interest rate, or plain vanilla versus complex)?*

Standard computer readable descriptions already exist for the large majority of OTC derivatives, in the form of FpML. These computer readable descriptions have been aided by the standardization of the legal terms and definitions used to define the derivative transactions, as documented in the ISDA definitional booklets. This legal standardization includes development of standard definitional matrices and master confirmations, which have been developed with an eye on operational efficiencies. The FpML specifications are developed in close collaboration with the legal work and in many cases there is a one to one matching between the FpML elements and the ISDA legal terms. The computer readable descriptions have already yielded significant benefits for the industry, including reduced confirmation backlogs, increased automation, reduced operational risk, and reduced error rates. There would be a benefit in extending the use of these existing standards to more firms and for more business processes. There is also added value in continuing to increase the standardization of the underlying legal framework across all products, to improve the clarity of computer readable descriptions.

[6] FpML version compatibility guidelines are published on the FpML website at http://www.fpml.org/documents/standard/changeGuidelines.pdf. In addition, FpML has analyzed version compatibility issues in a paper published on the FpML public website at http://www.fpml.org/documents/technote/Schema%20Versioning.doc. Conclusions from this paper were used to further improve version compatibility in the version 5.x series of the standard.

*28. What would be the issues, costs and concerns associated with standardizing computer readable descriptions of financial derivatives? Are there existing standards that could or should be expanded (i.e., FpML, FIX, etc.)? Do the existing standards in this area have materially different costs or issues?*

FpML has a well-defined process in place for extending the standard to cover new areas should this be necessary to meet regulatory requirements. We welcome input from regulators on setting the priorities.

*29. What would be an ideal ontology for you in terms of design, implementation, and maintenance of the data sets and applications needed for your business?*

An ideal data format for derivatives is one that covers all derivatives contracts in a consistent way, that is widely accepted in the industry as an accurate reflection of the terms of the derivatives contracts and the underlying legal documentation, is supported by a large number of platforms, dealers, and investors, and is maintained by an open industry process that is able to rapidly incorporate changes in market needs.

*30. How would a standardized computer readable description of financial derivatives be developed and maintained (i.e., a government-sponsored initiative, a public-private partnership, standard-setting by a collaborative process, etc.)? Are there current models that should be considered?*

FpML is maintained by an open industry-sponsored group. There is a well-defined and transparent maintenance process in place. All information is available on the FpML website; the specifications are open source. Participation in working groups is open to any interested person. The Standards Committee, which approves the release of new versions of the standard, consists of ISDA members selected to represent key stakeholders from different organization types including dealers, investment managers and hedge funds, service providers, clearing houses, and custodians. Draft versions of the standard are debated within working group, and once agreed, they are published in a series of increasingly stable Working Drafts, Last Call Working Drafts, Trial Recommendations, and finally Recommendations. The process is designed to move quickly enough to meet industry priorities in a timely fashion, but is sufficiently deliberate that needs from a variety of stakeholders can be considered and addressed during the development and implementation of the standard. ISDA welcomes regulatory input into the FpML process, and believes that increased input from regulators would be of benefit to the standards definition process.

Looking at the broader financial standards landscape, ISDA is a liaison A member to ISO and participates in the ISO 20022 registration management group and several of the working groups. Within these, ISDA represents the OTC derivatives industry and provides the OTC derivatives input and focus. Under the ISO umbrella, ISDA/FpML in collaboration with other standards organizations developed the investment roadmap for the financial industry.[7]

*31. What is the importance of ontologies for the representation of derivatives data now and in the future?*

Financial derivatives are complex and the language used to describe them can be difficult to understand. Different firms may use different terminology internally to describe the same transaction characteristics. For this reason, it is the Associations' position that FpML, an industry-standard, precise, computer

[7] www.iso20022.org/documents/general/InvestmentRoadmap.pdf

readable representation of each derivative contract is crucial for accurate reporting, confirmation, and reconciliation of derivative contract information. This is necessary to improve efficiency via automation and to reduce operational risk caused by inconsistent understanding of transaction characteristics between firms.

**Implementation:**

*34. What were the main difficulties that you experienced during a transition/implementation of new data standards? What could the organization developing and maintaining the standards do (or avoid) to help alleviate these difficulties?*

Moving to FpML took many years and required changes to numerous systems in each institution. To change to a different standard would involve a tremendous amount of work effort across the industry.

*36. How should regulators and standard setters implement description standards in the derivatives market?*

The Associations are convinced that the most feasible and practical solution is for regulators to leverage existing standards that are already used to confirm a large majority of derivatives trades electronically. Where the regulators feel that additional detail and precision or breadth of applicability would be beneficial, they should provide their input directly to the relevant existing standards bodies and confirm that these requirements are being addressed. The Associations believe that it would be costly for regulators to independently define or impose a data representation standard, due to the breadth, complexity, and rapid rate of change in the OTC derivative marketplace. To that effect ISDA welcomes regulatory involvement in the FpML standards development process. One area where regulators could provide value is in participating in the definition of a protocol for determining when a transaction type should move to a fully defined parametric representation.

**Making computer descriptions legally binding:**

*37. Are there currently aspects of financial derivatives messaged in a computer readable format that have a legally-binding effect?*

Yes: for several electronic confirmation services, representing a high proportion of the credit derivatives and interest rate derivatives market, the electronic representation of the transaction represents the legally binding transaction definition, supplemented by legal agreements with the confirmation provider and standard terms agreed by the parties. For example, for all credit derivative transactions that have a confirmed (golden) status in the DTCC TIW[8], FpML is the legally binding representation.

*38. What information, if any, is not captured that would be required to make the computer descriptions themselves, without reference to other materials, legally binding?*

Typically derivatives transactions exist within a framework of agreements between the firms. A single transaction may be a represented as a transaction supplement within a master confirmation which contains

[8] More than 95% of all credit derivative transactions exist in DTCC with a confirmed status.

standard terms for that type of transaction, and that operates within a master agreement that covers various contingencies such as credit issues and extraordinary events. This transaction supplement is legally binding but references other materials. To provide a complete standalone economic description of the transaction would require a "long form" representation of the transaction, which includes both the standard economic terms (found in the master confirmation) and the variable terms for the individual transactions (found in the transaction supplement). FpML includes long form definitions of all products, though frequently confirmations services only use the "short form" or "transaction supplement" versions for confirming the transactions. In almost all cases the long form transaction descriptions will reference other materials such as master agreements. To completely characterize the legal agreement would require reproduction of the master agreements between the counterparties in addition to the economic description of the transaction.

*39. What information would need to be captured for a legally binding contract that would not need to be captured for analyzing the contract? Is there a substantial cost differential between the processes needed to capture one set of information versus another?*

As an initial matter, the analysis of what constitutes a "legally binding contract" can be a fact intensive inquiry the answer to which may differ based on the governing jurisdiction. For purposes of responding to this question, we will discuss the documentation that market participants typically require in order to enter into a derivative trading relationship with a counterparty.

To fully describe the legal framework of a transaction would require duplicating the master agreement information, which governs all derivatives transactions between two parties as well as the credit support annex, which governs the security and other credit support arrangements between two parties. In addition, if master confirmations are used or matrices, the terms in these documents need to be included as well. The inclusion in FpML happens by reference to scheme values that unambiguously represent these documents. However the terms in the documents themselves are not included.

The master agreement and credit support information is not required to analyze the economic characteristics of the trade, however, the terms of each may have an impact on trade terms such as pricing. Matrices and master confirmation information might be needed, however, FpML always has the "full representation" available that allows for the relevant information to be included.

*40. Would there be a benefit to making the computer readable descriptions of financial derivatives legally binding? Would there be drawbacks? What are they?*

There are benefits to making the short form parametric computer readable transaction descriptions legally binding, as has already been achieved with FpML in a number of areas of the derivative market place. These benefits include eliminating the need to manually review paper confirmations, eliminating the need to store and retrieve paper confirmations, and providing a single electronic record as reference information in case of disagreement or dispute. The main drawback, if any, is that firms that are less automated need to rely on service providers to be able to translate the computer readable descriptions into human readable documentation. The main obstacles to quickly developing legally binding computer readable transaction descriptions have included difficulties in standardizing the legal definitions across dealers in some asset classes, and cost challenges in automating low volume and complex product areas.

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ISDA®
International Swaps and Derivatives Association, Inc.

SIFMA
Securities Industry and
Financial Markets Association

We appreciate the opportunity to provide comments on the study regarding of the feasibility of requiring the derivatives industry to adopt standardized computer-readable algorithmic descriptions of complex and standardized financial derivatives, and we would be pleased to discuss any questions the Commissions might have with respect to this letter. Please feel free to contact the undersigned or our staffs at your convenience.

Sincerely,

Robert Pickel
Executive Vice Chairman
ISDA

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