1. Introduction

Financial product Markup Language (FpML), through the FpML Standards Committee, appreciates the opportunity to provide the Canadian Securities Administrators (CSA) with comments and recommendations on the Updated Model Rules – Derivatives Product Determination and Trade Repositories and Derivatives Data Reporting.

We fully support the response submitted by ISDA. The analysis conducted and provided in this comment letter is an addition to the ISDA response with a focus on technical implementation. We also note that the engagement with regulators in the US, Europe and Asia on various reporting requirements through the FpML Regulatory Reporting Working Group¹ has been very beneficial.

We would welcome a similar engagement with the CSA, preferably early on in the process.

FpML (Financial products Markup Language) is the freely licensed business information exchange standard for electronic dealing and processing of privately negotiated derivatives and structured products. It establishes the industry protocol for sharing information on, and dealing in, financial derivatives and structured products. It is based on XML (Extensible Markup Language), the standard meta-language for describing data shared between applications. The standard is developed under the auspices of ISDA, using the ISDA derivatives documentation as the basis. As a true open standard, the standards work is available to all at no cost and open to contribution from all. The standard evolution and development is overseen and managed by the FpML Standards Committee, following W3C rules of operations guidelines. The Standards Committee has representatives from dealers, buy side, clearing houses large infrastructures, vendors, Investment managers and custodians. To find additional information on FpML, visit www.fpml.org.

Within the broader standards landscape, we collaborate actively with ISO on the further development of the ISO 20022 standard and with standard organizations that cover other parts of the financial standards landscape such as Swift (payments, settlements, securities) and FIX (securities).

A variety of changes have been made to the FpML standard to allow for coverage of the reporting requirements in different jurisdictions with an initial focus on the Dodd-Frank regulation and CFTC reporting requirements. A core design principle has always been to implement a robust technical framework that could be leveraged by global regulators, as new regulations become available. To that effect we have tracked requirements that are specific for a particular reporting regime in a structure that accommodates the needs of multiple regulators. Over a period of time FpML has been actively

¹ The meeting materials and minutes of the various FpML working groups, including the reporting working group are publicly available at: www.fpml.org in the working group section

See e.g. http://www.fpml.org/pipermail/rptwg/
involved with other regulatory bodies in devising compliant solutions in order to report the specific data fields for various regulatory regimes. As mentioned previously, the work done has benefitted greatly from regulatory involvement in the FpML working groups and we believe that a similar process in Canada would be very positive for the regulatory community and the industry.

We value the references made to data standards in the Updated Model Rules and appreciate the acknowledgement of the ISDA Product Taxonomy. Particularly in the area of identifiers we strongly suggest to leverage the work done by the industry and regulatory community to date with unique identifiers on a global basis. This includes:

- **Legal Entity Identifier (LEI)**: support for LEI / GLEI and if an interim identifier is needed, leverage the CICI that the industry is implementing for CFTC reporting.

- **Unique Trade Identifier (UTI)**: Most value will be derived by the regulatory community and the industry if there is one global UTI and we fully support the ISDA UTI workflow paper which sets out the principles for a global UTI\(^2\). The comments in this response focus on compatibility of the CSA requirements with requirements in other jurisdictions. In addition we strongly believe that CSA, together with other regulators should push for a global solution, potentially under the auspices of the FSB, as has been done for LEI.

The UTI constructs contain two parts: A first part to uniquely identify the entity that assigns the UTI; and as second part a trade identifier that is unique for that entity. The combination gives a Unique Trade Identifier.

The first part to uniquely identify the entity through the `issuerIdScheme` specifically for use in the UTI context, e.g. `issuerIdScheme` = [http://www.fpml.org/coding-scheme/external/issuer-identifier](http://www.fpml.org/coding-scheme/external/issuer-identifier).

```xml
<trade>
  <tradeHeader>
    <partyTradeIdentifier> <!-- UTI -->
      <issuer issuerIdScheme="http://www.fpml.org/coding-scheme/external/issuer-identifier">FCHUXIINML</issuer>
      <tradeId tradeIdScheme="http://www.fpml.org/coding-scheme/external/unique-transaction-identifier">12345678901234567890123456789012</tradeId>
    </partyTradeIdentifier>
  </tradeHeader>
</trade>
```

Domains that can change are modeled using FpML “Coding Schemes”. An FpML scheme type contains a data value, typically a string and a scheme URI, which identifies the domain from which the value is coming.

Coding schemes can be standard FpML schemes or they can be external coding schemes. External coding schemes provide the ability to indicate explicitly within the scheme URI that they are external to FpML.

As seen below an external coding scheme is identified by the text \textit{ext} in the coding scheme URI
\begin{itemize}
  \item http://www.fpml.org/\textit{ext}/moodys
  \item http://www.fpml.org/\textit{ext}/iso4217-2001-08-15 (ISO currency codes)
\end{itemize}

In addition FpML supports fields with data values chosen from a “domain” (defined list). Small, fixed domains are modeled using XML Schema Enumerations.

For an overview see: http://www.fpml.org/spec/coding-scheme/index.html

\section*{2. Analysis}

The analysis presented in the remainder of this document is a detailed analysis and impact assessment on a standards level of the CSA requirements against the coverage as defined in FpML version 5.5, which is the FpML version that covers US and European reporting requirements.

This analysis takes into account all minimum data fields required to be reported to a designated trade repository for derivatives data reporting.
We highlight below the fields that need additional clarification, with suggested changes where appropriate.

**Operational Data: Master Agreement Type**

FpML defines a set of standard Master Agreement Types which can be found in the FpML documentation in the scheme section, also copied below. We strongly recommend the use of the existing coding scheme for the description of Master Agreement Type. The use of free text as a format definition is not recommended.

\begin{center}
\begin{tabular}{|l|l|}
  \hline
  \textbf{MasterAgreementType} & \textbf{Explanation} \\
  \hline
  AFB & AFB Master Agreement for Foreign Exchange and Derivatives Transactions \\
  \hline
\end{tabular}
\end{center}

The MasterAgreement Type as specified below contains a reference to several master agreements used in the industry.
As shown in the example below, the representation of MasterAgreementType in FpML includes the Type, Version and Agreement Date. All three might be needed to uniquely identify the Master Agreement in question.

**XML Example**

```xml
<masterAgreement>
  <masterAgreementType>ISDA</masterAgreementType>
  <masterAgreementVersion>1992</masterAgreementVersion>
  <masterAgreementDate>2006-01-03</masterAgreementDate>
</masterAgreement>
```

Ref: [http://www.fpml.org/coding-scheme/master-agreement-type](http://www.fpml.org/coding-scheme/master-agreement-type)

**Operational Data: Clearing exemption**

- Indicate whether one or more of the counterparties to the transaction are exempted from a mandatory clearing requirement.

This information can be obtained from the relatedParty /Role element which specifies the relationship of the counterparty. If the counterparty is exempted from mandatory clearing requirement this can be indicated via the coding scheme by assigning the Role element to the value ClearingExceptionParty. The ClearingExceptionParty is a party that claims a clearing exception.
Operational Data: Inter-affiliate

- Indicate whether the transaction is between two affiliated entities.

This can be represented in FpML using a related party reference or possibly as part of an end user exception declaration (using an organization characteristic).

This needs further discussion at the FpML Reporting Working Group.

Operational Data: Collateralization

- Indicate whether the transaction is collateralized
- Field Values: Fully (initial and variation margin posted by both parties), Partially (variation only posted by both parties), One-way (one party will post some form of collateral),Uncollateralized."

While we agree with the field values we strongly advise reusing the codes currently defined by FpML.

<table>
<thead>
<tr>
<th>FpML</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully</td>
<td>Both initial margin (independent amount) and variation margin will be posted. For Transparency view, both parties will do this; for Recordkeeping view, this party will do this (a separate indicator in the other partyTradeInformation block is used for the other side)</td>
</tr>
<tr>
<td>Partially</td>
<td>Variation margin (but not initial margin) will be posted. For Transparency view, both parties will do this; for Recordkeeping view, this party will do this (a separate indicator in the other partyTradeInformation block is used for the other side).</td>
</tr>
<tr>
<td>OneWay</td>
<td>Applies to Transparency view only. One party will post some form of collateral (initial margin or variation margin.)</td>
</tr>
<tr>
<td>Uncollateralized</td>
<td>No collateral is posted for this trade. In Transparency view, no collateral is posted by either party; in Recordkeeping view, no collateral is posted by the counterparty.</td>
</tr>
</tbody>
</table>

Ref: [http://www.fpml.org/coding-scheme/party-role](http://www.fpml.org/coding-scheme/party-role)

Ref: [http://www.fpml.org/coding-scheme/collateral-type](http://www.fpml.org/coding-scheme/collateral-type)
Counterparty Information: Reporting counterparty dealer or non-dealer
  • Indicate whether the reporting counterparty is a dealer or non-dealer.

Counterparty Information: Non-reporting counterparty is a local counterparty or not local.
  • Indicate whether the non-reporting counterparty is a local counterparty or not.
Although FpML does not have specific fields to indicate details of the counterparty- whether it is a dealer/non-dealer or local/non-local this information can be derived from the party structure.

Party Structure:
The information whether a counterparty is a dealer vs. non-dealer can be obtained from the classification element above. The industry classification coding scheme specifies corporate sector as defined by or for regulators including ESMA and CFTC.

The information whether a counterparty is local vs. non-local can be obtained from the party/country element.

**Common data: Contract Type**

- The name of the contract type (e.g. swap, swaption, forwards, options, basis swap, index swap, basket swap, other).

The information regarding the contract type is derived from the product messages in FpML. We propose to derive this field from the ISDA product taxonomy classification. FpML can work with regulators to map existing ISDA product taxonomy codes to the Contract Type Codes.

By way of example, for an IRD Vanilla swap with a fixed and floating leg:

```
<swap>
  <primaryAssetClass>InterestRate</primaryAssetClass>
  <productType productTypeScheme="http://www.fpml.org/coding-scheme/product-taxonomy">InterestRate:IRSwap:FixedFloat</productType>
  <swapStream>
    <-- Details of the fixed leg -- >
  </swapStream>
  <swapStream>
    <-- Details of the floating leg -- >
  </swapStream>
</swap>
```

**ISDA Product Taxonomy:**
The ISDA product taxonomy went through a public comment period; is freely available and has rules of operations that allow for further evolution of the taxonomy through a transparent process. In addition the rules of operations are open to further input from regulators. The ISDA taxonomy is currently used for CFTC and JFSA reporting and has been integrated into FpML. The ISDA OTC taxonomy and Taxonomy Rules of Operations are freely available on the ISDA website: http://www2.isda.org/otc-taxonomies-and-upi/

In addition to complex derivative products, the FpML standard has a representation for a fairly large number of standardized financial instruments. These instruments, called “UnderlyingAssets” in FpML, can be used for a variety of purposes:

- As underlying assets in various derivatives, including:
- Equity options
- Equity swaps
- Asset swaps
- As reference obligations in credit default swaps
- For a variety of purposes in pricing and risk, including:
  - For describing curve inputs
  - For describing benchmark asset prices

The underlying asset framework is very similar to the product framework. In places where underlying assets are used, a substitution group allows the asset to be substituted as required. The structure contains standard data fields available for all assets (e.g., instrumentId can be used to capture the ISIN, CUSIP, ... code) and fields specific to each asset (e.g., currency, maturity, coupon rate).

By way of example: “equity” is an FpML underlying asset and can be used as a basket component in the following way:

```xml
<basketConstituent>
  <equity>
    <instrumentId instrumentIdScheme="http://www.fpml.org/coding-scheme/external/instrument-id-bloomberg">TIT.ME</instrumentId>
    <description>Telecom Italia spa</description>
    <currency>EUR</currency>
    <exchangeId exchangeIdScheme="http://www.fpml.org/coding-scheme/external/exchange-id-MIC">Milan Stock Exchange</exchangeId>
  </equity>
  <constituentWeight>
    <openUnits>432000</openUnits>
  </constituentWeight>
</basketConstituent>
```

**Common Data: Asset Class**

- Major asset class of the product (e.g. interest rate, credit, commodity, foreign exchange, equity, etc.).

The current FpML standard has an existing assetClassScheme which is used to represent a simple asset class categorization. Further information can be found at the coding scheme link below.

Ref: [http://www.fpml.org/coding-scheme/asset-class](http://www.fpml.org/coding-scheme/asset-class)

**Commodities: Up-front payment**

- The amount of any upfront payment
Currency: currencies of up-front payment

• The currency in which any up-front payment is made by one counterparty to another.

The above two fields have been previously identified as gaps in FpML compared to the European and Australian reporting requirements. The FpML Commodities Working Group is in the process of consulting with the ISDA commodities steering committee.

Data fields specific to each asset class

Commodity derivatives: Transmission duration

• For power, the hours of day transmission starts and ends.

The current FpML “ElectricityDeliveryPeriods” structure reports this information via the ‘settlement Periods’ element. The settlement Periods element can provide the start and end time / duration of the transmission.
3. Conclusion
The FpML standard - in particular version 5.5 - is well equipped to represent all the reportable data fields CSA recognizes. The gaps and suggestions identified are few. We expect to include these in the next release of the standard.

We hope that you will find our comments and suggestions useful, and we are available if you would like to discuss these in further detail.

Karel Engelen
Director and Global Head Technology Solutions
International Swaps and Derivatives Association