February 22, 2016

Secretary
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549-1090

Re: File No. S7-26-15 - Establishing the Form and Manner with which Security-Based Swap Data Repositories Must Make Security-Based Swap Data Available to the Commission

To Whom It May Concern:

The FIX Trading Community [1](FIX) (http://www.fixtradingcommunity.org/) would like to provide feedback to the Securities and Exchange Commission ("SEC") on File No. S7-26-15 – Establishing the Form and Manner with which Security-Based Swap Data Repositories Must Make Security-Based Swap Data Available to the Commission. We are pleased to know that the SEC is proposing to require SDRs to make security-based swap data available either via FIX or FpML. As an existing standard used by thousands and thousands of firms in the financial services industry globally for over twenty years, FIX as a required alternative is the right approach.

New regulation is often costly for market participants, however, the additional financial burden can be minimized by framing such new rules and regulations around the use of a common standard such as the FIX Protocol. FIX Trading Community has worked closely with regulatory bodies across the globe and here are a few examples:

- CFTC (U.S. Commodity Futures Trading Commission) – FIXML is being utilized for the following reporting requirements directly to the Commission:
    - Part 20 - large trader reporting for swaps
    - Part 39 - daily margin reporting by DCO
    - Position reporting
    - Trade reporting and large trader reporting for listed derivatives
- FINRA (Financial Industry Regulatory Authority) – FIX is being used for asset- and mortgage-backed securities trade reporting to TRACE.
- ASIC (Australian Securities and Investments Commission) – ASIC published FIX requirements for the disclosure and reporting of short sales.
- IIROC (Investment Industry Regulatory Organization of Canada) – IIROC adopted FIX for market surveillance and transactional reporting.
- OCC (Options Clearing Corporation) – distribution of clearing information via FIXML to its clearing members on a real time basis for nearly 13 years.

[1] FIX Trading Community is the non-profit, industry-driven standards body at the heart of global trading. The organization is independent and neutral, dedicated to addressing real business and regulatory issues impacting multi-asset trading in global markets through standardization, delivering operational efficiency, increased transparency, and reduced costs and risks for all market participants. Central to FIX Trading Community's work is the continuous development and promotion of the FIX family of standards, including the core FIX Protocol messaging language, which has revolutionized the trading environment and has successfully become the way the world trades. Visit www.fixtradingcommunity.org for more information.

We look forward to working closely with the SEC on this initiative and engaging more closely with the Commission so that we can continue to partner to meet the SEC's reporting requirements, now and in the future. Please see the below responses to your requests for comment where we felt appropriate to respond.

Request for Comment – Discussion of the Proposed Amendment

- **The Commission has developed two interoperable schemas so that SDRs can make SBS transaction data available to the Commission using already existing standards in a form and manner that can be easily utilized by the Commission for analysis and aggregation. Are there other ways to provide for the representation of SBS transactions that could be easily utilized by the Commission? If so, what are they? What are their strengths and weaknesses?**

The Commission's choice of both FIXML and FpML is the best possible compromise for the industry with regards to communication of SBS transaction data to the SEC. The industry, depending on the systems involved, would use either FIX/FIXML or FpML. The choice to support both of these standards would allow the industry to minimize their costs of complying to the reporting regime as existing infrastructures can be reused.

- **Should the Commission require direct electronic access be provided by SDRs using only an FpML schema? Should the Commission require direct electronic access be provided by SDRs using only an FIXML schema? Is there another standard that the Commission should consider as acceptable? If so, which characteristics about that standard should make it acceptable to the Commission and how does that standard affect the Commission's ability to normalize, aggregate, and analyze the SBS data?**

Our belief is that the Commission should allow SDRs to choose between FIXML or FpML as the access format. Some SDRs may be more proficient in one standard over the other due to the nature of their business. Historically, FpML was used for trade confirmation in the pre-clearing of swaps mandate while FIX/FIXML is the dominant standard for electronic trading of cash securities (e.g. equities and fixed income), derivatives and increasingly "OTC" swaps traded on SEFs. Market participants who are familiar with one or the other standard would be more comfortable with the standard they are used to, additionally it would minimize market participant's costs of reporting compliance.

As an example, the CME Group has standardized on FIXML in nearly all aspects of their business where FIXML is the right choice, while the DTCC has chosen to standardize on FpML for most of their reporting interfaces. The costs involved with switching to either one schema or the other would be extremely high for these parties in addition to leading to potential errors in data quality.

Members of the FIX Trading Community who have implemented trading venues for OTC style products report that within their participant large banks. It is often necessary for the venue to produce the information in FpML for one group and FIX or FIXML for another group within the same bank. This demonstrates that even within the major institution's participation in ISDA and the FIX Trading Community, that there is no consensus opinion on one standard over the other.

Finally, we do not feel this should affect the Commission's ability to normalize, aggregate and analyze the SBS data given the Commission has taken a common data model approach. FIX Trading Community is hopeful we can partner with the Commission to ensure the FIXML standard can map cleanly to the Commission data model. We are also keen to cooperate and work with ISDA and the important FpML standard to promote clarity and consistency in reporting across message formats.

- **Does the Commission's approach to providing for direct electronic access using either the FpML or FIXML schemas allow for the accurate representation of SBS transactions as described in Regulation SBSR? If not, why not?**

We are of the opinion that FIXML can accurately represent the SBS transactions as required by Reg SBSR. Based on our own mappings and understanding of the Reg SBSR data requirements, there are less gaps than originally perceived by the Commission. These are further described in our mapping table (see within response to Draft Security-Based Swap Data Technical Specification), however, just as an example, these are some of the required reporting elements that are not gaps in the FIXML schema:

- *the currencies of any upfront payment, if applicable;*
- *a description of the settlement terms;*
- *the title of any margin agreement;*
- *the date of any margin agreement.*

FIX Trading Community is poised to provide support for securities based swaps (equity swaps) by the end of this week. This work was done to meet Dodd-Frank Parts 43 and 45.

FIX Trading Community looks forward to working with the Commission to address and fill the gaps and/or address any misunderstanding of the definitions and requirements of the common model's data elements. FIX has a streamlined process for identifying gaps via a Gap Analysis and readily incorporating any changes via our Extension Pack process.

- **Are the FpML and FIXML standards sufficiently developed to require either one of them to be used by SDRs to provide access to the required SBS data? What factors or indicators should the Commission use to determine when an SBS-related standard has become sufficiently developed to require its use for providing the Commission with direct electronic access to SBS data?**

Yes, FIXML is sufficiently developed and can be exemplified through the maturity of the standard and the user base, the scope in which the standard has been in use, and the collective expertise of the standard's community of users across the entire trade lifecycle and across asset classes (equities, fixed income, listed and OTC derivatives, FX). FIX and FIXML have been the standard of choice of market participants for over 20 years for electronic trading with significant support globally by buy-side/IM institutions, broker-dealers, execution venues (e.g. ATS, ECNs, SEFs), established exchanges, regulators, and industry vendors and service providers.

- **Should the Commission allow SDRs to develop their own standards or leverage other standards to provide access to the Commission? How would the Commission's ability to normalize, aggregate, and analyze the data be affected if**

SDRs used different standards and developed different schemas for representing the SBS data?

While it is possible for an SDR to develop their own or leverage other standards, the argument against this is additional mappings would need to be maintained by the Commission from said syntax to the Commission's common data model. We believe the approach outlined by the SEC to define a specific reporting format in both FIXML and FpML that maps to the SEC Data Model is the optimal solution for the market. This approach will assure that the SEC will receive the correct information, while not burdening the industry with unnecessary change. We commend the SEC for starting with a data model which defines the requirements for reporting. We hope that other regulatory entities will follow a similar approach in the future. With the data model defined, then it becomes a straight forward process of mapping the existing message syntaxes of FIXML and FpML to conform to the requirements of the data model.

- **Instead of leveraging industry standards, such as FIXML and FpML, should the Commission create a new standard or contract with a third-party to create a new standard? Why or why not?**

This approach was followed by ESMA for MiFID II/MiFIR via their selection of ISO 20022 message syntax. The result will be delays in both the definition of new ISO 20022 messages and then there will be a cost burden as reporting utilities build out the new infrastructure for ISO 20022 messaging. These utilities will then likely build conversion utilities to take in FIX and FpML from market participants and perform the mapping to the new ISO 20022 messages.

The Commission should leverage existing standards, FIXML and FpML, where existing infrastructure is already in place to support these standards. Creating a new standard would just reinvent the wheel and create redundant messages that would incur costs on the industry to comply with the reporting regime and cause overall confusion for the industry.

We believe that the SEC should use existing FIXML and FpML messages, with appropriate restrictions and a subset of fields available instead of creating new messages in either syntax. FIX Trading Community is willing to assist the SEC in the creation of their FIXML Schemas and implementation guidelines.

This approach taken by the SEC will likely minimize cost and impact on the industry.

- **Are there other approaches to developing or using a standard that the Commission should consider? Please explain in detail.**

As per the above responses, there are no other approaches that the Commission should consider besides the industry standards that have been recommended and again are commonly used. Again, we commend the SEC for starting first with a data model that defines their requirements, then mapping those requirements onto the two existing messaging standards in use at all the major financial institutions that require reporting.

- **What would be the costs to an SDR to provide data in either FpML or FIXML standard?**

In order to comply with CFTC's reporting requirements, existing SDRs such as CME, ICE, Bloomberg, and DTCC would already have incurred the majority of the costs and chose the standard in which they are most proficient in using, whether it is FIXML, FpML or both. There will of course be incremental costs in transforming some data and delivering the information to the SEC, but these are minor in comparison to requiring a conversion to a new messaging standard.

- **Are there other ways that SBS data should be provided to the Commission? Are there other standards that would cost less but still allow the Commission to similarly normalize, aggregate, and analyze the data?**

We do not think there are other appropriate standards available to support the Commission's requirements that has a sufficient user base, available and existing infrastructure and maturity.

- **Should the Commission institute a test phase for providing this information in either an FpML or FIXML standard? If so, how long should this test phase last?**

A test phase would be highly recommended as this would allow for ensuring the data requirements of the common data model can be met and that unforeseen gaps can be addressed. The testing phase may take a representative use case approach where swaps of different types and events are used in the test. The FIX Trading Community would be happy to participate in a testing environment.

- **Other than using schemas, is there another effective mechanism for SDRs to provide direct electronic access to the Commission that still achieves similar or better aggregation and consistency results?**

XML Schemas are well known and an established technical format and therefore is the best mechanism. As per the above responses, there are no other alternative mechanisms that would make sense for the Commission to pursue. Using the existing adopted schemas is the best approach for the SEC to obtain the necessary SBSR data.

- **The Commission intends to incorporate validations into its schemas to help ensure the quality and completeness of the SBS data that SDRs make available to the Commission. Is there another effective mechanism that would help ensure completeness and still achieve similar or better aggregation and consistency results?**

Schema validation is the best method if XML schemas are used. However, one challenge may be related to allowable values for data elements/attributes that are "free form" - i.e. does not have a standard defined list of allowable values. The Commission should partner with standard organizations to define such a list of allowable values. We look forward to working closely with the SEC to assist in defining data quality and validation requirements to improve overall reporting efficiency for the benefit of the overall market.

- **How should the common data model support reporting requirements that do not yet have equivalents in FpML or FIXML, while preserving the ability to normalize, aggregate, and analyze the data? As discussed in Section II.B.2, the Commission's schemas would require specific extensions of existing FpML and FIXML reporting elements. Is there a better alternative? Specifically, how would the alternative affect SDRs, the Commission, and market participants?**

FIX Trading Community is willing to work with the Commission to ensure that the FIXML standard is appropriately enhanced and extended so that all the reporting requirements are met. FIX Trading Community has defined an agile process for enhancing the standard via an extension pack process that defines "FIX Latest". This process has been well received by the community and is much less disruptive than waiting for major version releases.

The following document (http://www.fixtradingcommunity.org/mod/file/download.php?file_guid=1437402) describes the formal and thorough process undertaken by the FIX Trading Community in reviewing and ratifying proposals to enhance the FIX Protocol.

Request for Comment – Economic Analysis

- **What additional information sources can the Commission use to calibrate the cost of setting up and implementing policies, procedures, and information systems to format and submit SBS transaction data in accordance with the Commission's schemas?**

FIX Trading Community recommends that in addition to this open comment period, that the SEC conduct a survey amongst the reporting participants in order to calibrate the cost of setting up and implementing policies, procedures, and information systems to format and submit SBS transaction data.

- **What fraction of reporting participants already use FpML or FIXML to format SBS data?**

At this time, the FIX Trading Community does not have quantitative information regarding the use of FpML and FIXML by market participants. We are aware that both messaging standards are in use often within the same financial institution. Although it was not the original goal of the FIX Trading Community to pursue OTC derivatives, our members and other regulators pushed for expansion. The result is a comprehensive coverage of OTC Derivatives that is closely aligned with FpML, albeit in the simpler repository based FIX standard.

- **What fraction of reporting participants use proprietary XML representations of SBS?**

The FIX Trading Community does not track this information. Our experience is that the majority of SBS reporting is done via FpML and FIXML, although variants of both exist.

- **What additional information sources can the Commission use to calibrate (a) the cost of extending FpML and FIXML and (b) the cost of periodically updating these standards?**

Extending FIX/FIXML is done by volunteers in working groups or by the commissioning of the efforts by FIX in order to extend the standard in a faster time period. The membership of FIX Trading Community collectively bears the cost of such commissioning of work by their contribution in the form of membership dues to the FIX organization. Individual costs for these extensions would then be minimal. The agile release process available via FIXML also should reduce costs imposed on reporting organizations. The SEC should consider a standard maintenance cycle as part of their overall plan so that reporting entities can factor this into their operational budgets.

Request for Comment – Paperwork Reduction Act

- **Determine whether there are ways to enhance the quality, utility, and clarity of the information to be collected; and**

We would encourage the SEC to provide a mapping guideline from the SEC common data model to FpML/FIXML on top of the schema files in order to have a means to explain the semantics of the standards. This is similar to an approach the CFTC has taken in publishing guidebooks for existing reporting requirements which detail how to use specific messages (i.e. guidebooks for Part 20 and Part 39 reporting).

Once again, we are pleased to hear that the SEC is proposing to require SDRs to make security-based swap data available via FIXML. We would be more than happy to meet directly to discuss the feedback attached and provide any clarification where needed. In addition to this, we would definitely like to review the Commission's proposed draft updates to their FIXML schema prior to posting to the Commission's website. Please let us know how we assist the Commission on this important initiative.

Sincerely,

Courtney Doyle McGuinn
FIX Operations Director
FIX Trading Community
[redacted]

Draft Security-Based Swap Data Technical Specification

FIX Response to SEC

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Introduction

FIX Trading Community is pleased to offer this response and these recommendations to the draft "Security-Based Swap Data Technical Specification" http://www.sec.gov/files/SBS_Data_Technical_Specification-2015-12-11.pdf.

FIX Trading Community is an industry-driven organization whose initiatives are pursued in response to market participant requests. Our work is organized through a global network of committees and working groups that attract colleagues, peers and competitors who work together in a collaborative manner, free from commercial conflict, to address core industry challenges. One of our recent initiatives, sponsored in part and contributed to by the Futures Industry Association, extended the FIX standard to support full reporting of the OTC derivatives that are to be regulated under the Dodd-Frank Wall Street Reform and Consumer Protection Act.

This paper supplements our response to the SEC's "Proposed Amendment Establishing the Form and Manner with which Security-Based Swap Data Repositories Must Make Security-Based Swap Data Available to the Commission" https://www.sec.gov/rules/proposed/2015/34-76624.pdf.

FIX Response

Data Element Gaps

In reviewing the SEC documents we have identified a small number of requirements that are not met under the current FIXML standard – see Appendix A below. We propose that FIX Trading Community personnel, working with the SEC business and technology staff, draft, publish and present a formal gap analysis to the FIX Global Technical Committee at the earliest opportunity. Once resolved these items can be closed and incorporated into the standard schema.

Participation by regulators in FIX standards development is a normal component of our process. Representatives from the FIA and CFTC have participated extensively with FIX for Part 20, 43, and 45 reporting.

Introduction of new messages

Two new messages are introduced in SEC's proposed extension schema http://www.sec.gov/page/derataxonomies: PriTrdInfoRpt and SecTrdInfoRpt – both based on the standard TrdCaptRpt. While we understand the underlying goals of constraining messages and to have clear parallels between FIXML and FpML we do not recommend this practice. Defining new messages rather than using the standard TrdCaptRpt would require data repositories to generate FIXML-like documents using non-standard schemas rather than the one they would use to communicate using FIXML with trade contributors.

Restriction of DataTypes and Enumerations

SEC's proposed extension schemas focus on data type and enumeration validation through the use of restrictions. We believe this approach is appropriate for defining data validation rules. But we believe the data repositories would prefer restriction of the standard FIXML schema rather than to override with two new schemas.

Once again, please see Appendix A below which describes the FIX data element mapping. As mentioned above, we propose that FIX Trading Community personnel, working with the SEC business and technology staff, draft, publish and present a formal gap analysis to the FIX Global Technical Committee at the earliest opportunity. We looking forward to working with you on this.

Sincerely,

_____

Courtney Doyle McGuinn
FIX Operations Director
FIX Trading Community
[redacted]

Appendix A. FIX Data Element Mapping

The goal of a FIXML or FpML confirmation or record-keeping document is to describe trade details. The requirements of the regulatory reporting agencies are somewhat simpler but often not reported in single elements or attributes. So to extract an appropriate value often requires a process, not just looking up one particular element or attribute. Our response here tries to assist with that process.

Questions and Issues:

- In rows 23 and beyond “counterparty” seems to be used to mean “trading party”, so we assume that usage here. “Counterparty” in industry standard usage refers to the party on the opposite side of the trade. I.e. if A trades with B, both are “trading parties”, B is A’s counterparty and A is B’s counterparty.
- The roles of the parties to the trade are implemented differently depending on the execution venue or trading model. In an aggressor/liquidity provider trade the party roles may be “Order origination firm” and “Executing Firm”. However in an order book trade these roles may not apply and thus a role such as “Entering firm” is used. Some SEFs and SDRs use “Entering firm” regardless of the trading model.

#	§ 901 Ref.	Common Data Model Concept	FIXML Data Elements as given by SEC	FIXML Data Elements proposed: Elements are within <TrdCaptRpt> message context	Comments	SBSR Rule Page Reference
1	(c)(1)	Product ID	Prod SecTyp PxDtrmnMeth SettlMeth SwapClss	*omit or use* Instrmt/ @ID=<product id> @Src=<source of product id> @SecTyp=<sec type>	There is currently no "unique product ID" for security-based swaps. The alternative if not unique or universal, according to §901, is to provide elements (c)(1)(i)-(v) below.	page 26 near the top
2	(c)(1)(i)	Asset Class	SwapSubClss CFI	Instrmt/ @Prod @SecTyp @AssetClss @AssetSubClss @AssetTyp @CFI	(c)(1)(i) requires “the [specific] underlying reference asset(s), reference issuer(s), or reference index for the security-based swap, as well as the asset class of the security-based swap.” Attributes @SwapClss and @SwapSubClss do not apply to security-based swaps.	page 32 - 33 Footnote on pg 33 also defines "*asset class*" as "*those security-based swaps in a particular broad category, including, but not limited to, credit derivatives and equity derivatives.*"
3	(c)(1)(i)	Underlying Reference Asset(s)	Undly	Undly/ @ID=<asset id> @Src=<source of asset id> @SecTyp=<sec type>	Underlyings in FIXML can be multiple, complex and weighted. Note that CDS underlyings are described in the main <Instrmt> component.	page 32 - 33
4	(c)(1)(i)	Underlying Reference Issuer(s)	Issr	Undly/ @Issr		page 32 - 33

#	§ 901 Ref.	Common Data Model Concept	FIXML Data Elements as given by SEC	FIXML Data Elements proposed: Elements are within <TrdCaptRpt> message context	Comments	SBSR Rule Page Reference
5	(c)(1)(i)	Underlying Reference Index	NdxSeries	Undly/ @ID=<index id> @Src=<source of index id> @NdxSeries @NdxAnxVer @NdxAnxSrc	Note that CDS underlyings are described in the main <Instrmt> component.	page 32 - 33
6	(c)(1)(ii)	Effective Date	EfctvDt	Instrmt/Strm/EftcvDt/ @DtUnadj *or* @Dt		page 34 - 35
7	(c)(1)(iii)	Scheduled Termination Date	TrmntDt	Instrmt/Strm/TrmtnDt/ @DtUnadj *or* @Dt		page 34 - 35
8	(c)(1)(iv)	Terms of any standardized fixed rate payments	PmtStrm CalcDts Rt Amt Ccy	*In the instance of* Instrmt/Strm *where* Instrmt/Strm/PmtStrm/Fixed *exists*: Instrmt/Strm/CalcDts/ @FreqPeriod @FreqUnit Instrmt/Strm/PmtStrm/Fixed/ @Rt *or* @Amt @Ccy		page 35 - 39
9	(c)(1)(iv)	Frequency of any fixed rate payments	PmtDts	*In the instance of* Instrmt/Strm *where* Instrmt/Strm/PmtStrm/Fixed *exists*: Instrmt/Strm/PmtStrm/PmtDts/PmtDt/ @FreqPeriod @FreqUnit or @Reltv @OfstPeriod @OfstUnit @OfstDayTyp	Swap fixed payment dates are usually relative to calculation dates, in which case “frequency” will be specified there, not in payment dates.	page 35 - 39
10	(c)(1)(iv)	Terms of any standardized floating rate payments	ResetDts	*In the instance of* Instrmt/Strm *where* Instrmt/Strm/PmtStrm/Float *exists:* Instrmt/Strm/CalcDts/ @FreqPeriod @FreqUnit Instrmt/Strm/PmtStrm/ResetDts/ @Reltv @FreqPeriod @FreqUnit Instrmt/Strm/PmtStrm/Float/ @Ndx @NdxSrc @NdxUnit @NdxPeriod		page 35 - 39

#	§ 901 Ref.	Common Data Model Concept	FIXML Data Elements as given by SEC	FIXML Data Elements proposed: Elements are within <TrdCaptRpt> message context	Comments	SBSR Rule Page Reference
11	(c)(1)(iv)	Frequency of any floating rate payments	PmtDts	*In the instance of* Instrmt/Strm *where* Instrmt/Strm/PmtStrm/Float *exists:* Instrmt/Strm/PmtStrm/PmtDts/PmtDt/ @FreqPeriod @FreqUnit or @Reltv @OfstPeriod @OfstUnit @OfstDayTyp	Swap floating payment date are usually relative to calculation dates or reset dates, in which case "frequency" will be specified there, not in payment dates.	page 35 - 39
12	(c)(1)(v)	Custom Swap Flag		Instrmt/ @SubTyp=NS (Non-Standardized Swap)	To meet the requirement that if the price cannot be determined through (c)(1)(i)-(iv) the submitter should set this flag	page 39 - 44
13	(c)(2)	The date and time, to the second, of execution, expressed using Coordinated Universal Time (UTC)	TrdRegTS TS Typ Src	TrdRegTS/ @TS=<utc timestamp> @Typ=1 (Execution time)	The @Src attribute is unnecessary for @Typ=1. It should be the time traded on the venue as reported with <Pty R='73'/> (Execution venue).	page 44 - 51
14	(c)(3)	The price	Px	@LastPx	There are potentially many Px field in FIXML but in <TrdCaptRpt> the traded price is @LastPx.	page 51 - 54
15	(c)(3)	The currency in which the price is expressed	Ccy	@Ccy		page 51 - 54
16	(c)(3)	The amount(s) of any up-front payments	UpfrontPx	Pmt/ @Typ=1 (Upfront fee) @Amt=<amount>	@LastUpfrontPx is a price not an amount, e.g. the percentage of notional or the points above or below the standard coupon rate. [1]	page 51 - 54
17	(c)(3)	The currenc(ies) of any up-front payments		Pmt/ @Typ=1 (Upfront fee) @Ccy=<currency>		page 51 - 54

[1] FIXML plans to deprecate UpfrontPrice, UpfrontPriceType and LastUpfrontPrice in favor of the <PaymentGrp> component. Those three fields were added to the standard before we embarked on the OTC Derivative extensions. Going forward the <PaymentGrp> component will be the prevailing method to express up-front payments and any other payments related to a swap.

#	§ 901 Ref.	Common Data Model Concept	FIXML Data Elements as given by SEC	FIXML Data Elements proposed: Elements are within <TrdCaptRpt> message context	Comments	SBSR Rule Page Reference
18	(c)(4)	The notional amount(s)	Strm Notl	Instrmt/Strm/@Notl also @LastQty	Per Rules 907(a)(1) and 907(a)(2), the SDR is to "determine the appropriate conventions for reporting all required data elements, including the notional amount." Rule 907(a)(1) and (2) are on page 626 and 627.	page 54 - 57
19	(c)(4)	The currenc(ies) in which the notional amount(s) is expressed	Ccy	Instrmt/Strm/@Ccy		page 54 - 57
20	(c)(5)	Inter-Dealer Swap Flag	Pty Typ	**[GAP]**	We propose using the <Pty/Sub @Typ='45'/> (Swap dealer) to be the equivalent of “Registered swap dealer” according to § 901. Our initial solution was to identify an inter-dealer swap as one where both parties to the trade are swap dealers. Reviewers however perceive that this is an attribute of the contract not the parties and thus is a **[GAP]. T**he SEC requirement appears to be for a separate indicator.	page 57 - 59
21	(c)(6)	Intention To Clear Flag	ClrIntn	@ClrIntn		page 59 - 61

#	§ 901 Ref.	Common Data Model Concept	FIXML Data Elements as given by SEC	FIXML Data Elements proposed: Elements are within <TrdCaptRpt> message context	Comments	SBSR Rule Page Reference
22	(c)(7)	If applicable, any flags pertaining to the transaction that are specified in the policies and procedures of the registered SDR to which the transaction will be reported		Inter-affiliate trade: @IntraFirmTrdInd=Y Netting or Compression trade: @TrdContntn=5 (Compression/Netting) *or* =6 (Full netting) =7 (Partial netting) Forced trading session conducted by a clearing agency: **[GAP]** Trade reported late: **[GAP]** although we do have @TrdTyp=4 (Late trade) *or* =8 (Late bunched trade) Trade as a result of default of a clearing member: **[GAP]** Package trade: @TrdTyp=65 (Package trade) Others – see @TrdContntn	The rule discusses a trade that does not accurately reflect the market for one of a multitude of reasons. This is somewhat open ended, however on page 63 the SEC does list other possible "flags" that SDRs "*should consider providing condition flags identifying the following: inter-affiliate security-based swaps; transaction resulting from netting or compression exercises; transactions resulting from a "forced trading session" conducted by a clearing agency; transactions reported late; transactions resulting from the default of a clearing member; and package trades.*" Looking at that list, we know we can map some of them, but "*transactions resulting from a forced trading session" by a clearing agency*", "*transactions reported late*", and "*transactions resulting from the default of a clearing member*" might be legitimate gaps.	page 57 - 64
23	(d)(1)	The counterparty ID [on the reporting side]	Pty ID Src R R Sub ID Typ	*Find the side of the trade and the <Pty> instance of the reporting party. That party's ID is the trading party on the reporting side:* RptSide[n]/Pty/ @ID=<party id> @Src=N (LEI) @R=7 (Entering firm) or 1 (Executing firm) or 13 (Order origination firm) Sub/ @ID=Y @Typ=49 (Reporting entity)	"Counterparty" in industry standard usage refers to the party on the opposite side of the trade. I.e. if A trades with B, both are "parties", B is A's counterparty and A is B's counterparty. However the SEC documents seem to use the term "counterparty" as a synonym of "trading party", so we assume that usage here.	page 67 - 73

#	§ 901 Ref.	Common Data Model Concept	FIXML Data Elements as given by SEC	FIXML Data Elements proposed: Elements are within <TrdCaptRpt> message context	Comments	SBSR Rule Page Reference
24	(d)(1)	The execution agent ID [on the reporting side], as applicable	R	*Identify the side of the trade of the reporting party:* RptSide[n]/Pty/ @ID=<party id> @Src=N (LEI) @R=7 (Entering firm) or 1 (Executing firm) or 13 (Order origination firm) Sub/ @ID=Y @Typ=49 (Reporting entity) *The execution agent if present is identified in a separate <Pty> instance within that <RptSide> of the trade:* RptSide[n]/Pty/ @ID=<agent id> @Src=N (LEI) @R=30 (Agent) or 49 (Asset manager)		page 67 - 73

#	§ 901 Ref.	Common Data Model Concept	FIXML Data Elements as given by SEC	FIXML Data Elements proposed: Elements are within <TrdCaptRpt> message context	Comments	SBSR Rule Page Reference
25	(d)(1)	The counterparty ID [on the non-reporting side]	R	*Identify the reporting party's side of the trade:* RptSide[n]/Pty/ @ID=<party id> @Src=N (LEI) @R=7 (Entering firm) or 1 (Executing firm) or 13 (Order origination firm) Sub/ @ID=Y @Typ=49 (Reporting entity) *The trading party <Pty> element within the opposite <RptSide> element is the non-reporting counterparty:* RptSide[n]/Pty/ @ID=<party id> @Src=N (LEI) @R=7 (Entering firm) or 1 (Executing firm) or 13 (Order origination firm)		page 67 - 73
26	(d)(1)	The execution agent ID of each counterparty, as applicable	R	RptSide[n]/Pty/ @ID=<agent> @Src=N (LEI) @R=30 (Agent) or 49 (Asset manager)		page 67 - 73

#	§ 901 Ref.	Common Data Model Concept	FIXML Data Elements as given by SEC	FIXML Data Elements proposed: Elements are within <TrdCaptRpt> message context	Comments	SBSR Rule Page Reference
27	(d)(1)	[As applicable] the branch ID of the direct counterparty on the reporting side	R	*Identify the reporting party:* RptSide[n]/Pty/ @ID=<party id> @Src=N (LEI) @R=7 (Entering firm) or 1 (Executing firm) or 13 (Order origination firm) Sub/ @ID=Y @Typ=49 (Reporting entity) *The branch ID if present is one of the <Sub> elements of that <Pty>:* Sub/ @ID=<branch id> @Typ=31 (Location)		page 67 - 73
28	(d)(1)	[As applicable] the broker ID of the direct counterparty on the reporting side	R	*This would occur if the reporting party is not the direct trading party. First Identify the reporting entity's side:* RptSide[n]/Pty/ @ID=<party id> @Src=N (LEI) @R=116 (Reporting entity) *The broker if present is identified in another <Pty> element within that <RptSide> of the trade:* RptSide[n]/Pty/ @ID=<broker id> @Src=N (LEI) @R= 1 (Executing firm)		page 67 - 73

#	§ 901 Ref.	Common Data Model Concept	FIXML Data Elements as given by SEC	FIXML Data Elements proposed: Elements are within <TrdCaptRpt> message context	Comments	SBSR Rule Page Reference
29	(d)(1)	[As applicable] the execution agent ID of the direct counterparty on the reporting side	R	*Identify the reporting party's side:* RptSide[n]/Pty/ @ID=<party id> @Src=N (LEI) @R=7 (Entering firm) or 1 (Executing firm) or 13 (Order origination firm) Sub/ @ID=Y @Typ=49 (Reporting entity) *The execution agent if present is identified in another <Pty> element within that <RptSide> of the trade:* RptSide[n]/Pty/ @ID=<agent> @Src=N (LEI) @R=30 (Agent) or 49 (Asset manager)		page 67 - 73
30	(d)(2)	[As applicable] the trader ID of the direct counterparty on the reporting side	R	*Identify the reporting party's side:* RptSide[n]/Pty/ @ID=<party id> @Src=N (LEI) @R=7 (Entering firm) or 1 (Executing firm) or 13 (Order origination firm) Sub/ @ID=Y @Typ=49 (Reporting entity) *The trader is identified in another <Pty> element within that <RptSide> of the trade:* RptSide[n]/Pty/ @ID=<trader id> @Src=<source of trader id> @R=12 (Executing Trader) or 11 (Order origination trader)		page 73 - 80

#	§ 901 Ref.	Common Data Model Concept	FIXML Data Elements as given by SEC	FIXML Data Elements proposed: Elements are within <TrdCaptRpt> message context	Comments	SBSR Rule Page Reference
31	(d)(2)	[As applicable] the trading desk ID of the direct counterparty on the reporting side	R	*Identify the reporting party:* RptSide[n]/Pty/ @ID=<party id> @Src=N (LEI) @R=7 (Entering firm) or 1 (Executing firm) or 13 (Order origination firm) Sub/ @ID=Y @Typ=49 (Reporting entity) *The trading desk if present is one of the <Sub> elements of that <Pty>:* Sub/ @ID=<desk id> @Typ=25 (Location desk)		page 73 - 80
32	(d)(3)	the terms of any fixed or floating rate payments, or otherwise customized or non- standard payment streams		Instrmt/Strm/PmtStrm/PmtSched/.. Instrmt/Strm/PmtStrm/PmtStub/ ..	There can be early stubs, late stubs, changes in notional, rate, calculation, reset and payment schedules, etc. All are supported by FIXML in instances of <PmtSched> and <PmtStub>.	page 81 - 83
33	(d)(3)	the frequency of any fixed or floating rate payments, or otherwise customized or non- standard payment streams	PmtDts PmtDts	Instrmt/Strm/CalcDts/ @FirstReglrStartDtUnadj @LastReglrEndDtUnadj Instrmt/Strm/PmtStrm/PmtDts/ @LastReglrDtUnadj Instrmt/Strm/PmtStrm/PmtSched/.. Instrmt/Strm/PmtStrm/PmtStub/ ..	There can be early stubs, late stubs, changes in notional, rate, calculation, reset and payment schedules, etc. All are supported by FIXML.	page 81 - 83
34	(d)(3)	the contingencies of any fixed or floating rate payments, or otherwise customized or non-standard payment streams	ContingencyType	Instrmt/Strm/PmtStrm/PmtSched/.. Instrmt/Strm/PmtStrm/PmtStub/ ..	The attribute @ContingencyType does not apply here. Stepped rates, notionals and payment schedules can be contingent on external values, adjusted by a multiplier, spread cap, floor, etc. These contingencies are accommodated via the PmtStrm and the appropriate sub-components.	page 81 - 83
35	(d)(4)	title of any master agreement	FinDetls AgmtDesc	FinDetls/@AgmtDesc		page 83 - 88
36	(d)(4)	the date of any master agreement	AgmtDt	FinDetls/@AgmtDt		page 83 - 88

#	§ 901 Ref.	Common Data Model Concept	FIXML Data Elements as given by SEC	FIXML Data Elements proposed: Elements are within <TrdCaptRpt> message context	Comments	SBSR Rule Page Reference
37	(d)(4)	the title of any collateral agreement	CrdSuprtDesc BrkrCnfmDesc	FinDetls/@CrdSuprtDesc		page 83 - 88
38	(d)(4)	the date of any collateral agreement	CrdSuprtDt	FinDetls/@CrdSuprtDt		page 83 - 88
39	(d)(4)	the title of any margin agreement		FinDetls/@CrdSuprtDesc		page 83 - 88
40	(d)(4)	the date of any margin agreement		FinDetls/@CrdSuprtDt		page 83 - 88
41	(d)(4)	the title of any other agreement	CnfmDesc BrkrCnfmDesc	FinDetls @CrdSuprtDesc @CnfmDesc @BrkrCnfmDesc		page 83 - 88
42	(d)(4)	the date of any other agreement	CnfmDt	FinDetls @CrdSuprtDt @CnfmDT		page 83 - 88
43	(d)(5)	any additional data elements included in the agreement between the counterparties that are necessary for a person to determine the market value of the transaction		<TrdCapRpt>	This is essentially the balance of all other fields in the FIXML <TrdCaptRpt> message.	page 88 - 92
44	(d)(6)	the name of the clearing agency to which the security-based swap will be submitted for clearing	R ID	Pty/ @ID=<clearing org> @Src=N (LEI, ISO 17442) @R=21 (Clearing organization)	We are assuming the use of LEIs as much as possible per Rule 903 and the section I(A) on "Unique Identification Codes" on page 14.	page 92
45	(d)(7)	whether they have invoked the exception in Section 3C(g) of the Exchange Act (15 U.S.C. 78c-3(g))	ClrReqmtExcptn	@ClrReqmtExcptn		page 93 - 94
46	(d)(8)	a description of the settlement terms		Instrmt/CashSettlTrm/ .. *or* Instrmt/PhysSettlTrm/ ..	The <CashSettlTrm> and <PhysSettlTrm> repeating elements give a thorough description of the settlement terms.	page 94 - 95
47	(d)(8)	whether the security-based swap is cash settled or physically settled	SettlMeth	@SettlMeth		page 94 - 95
48	(d)(8)	the method for determining the settlement value	SettlNdx SettlNdxLctn	Instrmt/CashSettlTrm/ @QteMeth @PxSrc @ValMeth	@SettlNdx and @SettlNdxLctn only apply to commodities.	page 94 - 95

#	§ 901 Ref.	Common Data Model Concept	FIXML Data Elements as given by SEC	FIXML Data Elements proposed: Elements are within <TrdCaptRpt> message context	Comments	SBSR Rule Page Reference
49	(d)(9)	The platform ID, if applicable	R ID Src	Pty/ @ID=<platform> @Src= G (MIC, ISO 10383) or N (LEI, ISO 17442)) @R=73 (Execution venue)	We are assuming the use of LEIs as much as possible per Rule 903 and the section I(A) on "Unique Identification Codes" on page 14. Generally execution venues or trading platforms use the ISO 10383 (aka MIC) so we recommend this as an option for platform ID scheme over the LEI.	page 95 - 97
50	(d)(10)	the transaction ID of an allocated security based swap	AllExc TransTyp TrdID	RegTrdID/ @ID=<id> @Evnt=1 (Allocation) @Typ=0 (Current)	This requirement is satisfied by the USI as specified by other regulations and supported through the <RegTrdID> element.	page 97 - 99 and page 151 where it says "*As discussed in Section II(B)(3)(j), the Commission is adopting in the Rule 901(d)(10) a requirement that the reports of new security-based swaps (such as a beta and gamma) that result from allocation, termination, novation, or assignment of one or more existing security-based swaps (such as an alpha) must include the transaction ID of the allocated, terminated, assigned or novated security-based swap(s). This requirement is designed to allow the Commission and other relevant authorities to link related transactions across different registered SDRs.*"
51	(d)(10)	the transaction ID of a terminated security-based swap	RegTrdID TrmTyp TrdID	@TrdContntn=2 (Termination) RegTrdID/ @ID=<id> @Evnt=5 (Termination) @Typ=0 (Current)		page 97 - 99
52	(d)(10)	the transaction ID of a novated security-based swap	TrdContntn TrdContntn OrigTrdID Side	@TrdContntn=0 (Novation) RegTrdID/ @ID=<id> @Evnt=4 (Novation) @Typ=0 (Current)	From the point-of-view of the novating parties.	page 97 - 99

#	§ 901 Ref.	Common Data Model Concept	FIXML Data Elements as given by SEC	FIXML Data Elements proposed: Elements are within <TrdCaptRpt> message context	Comments	SBSR Rule Page Reference
53	(d)(10)	the transaction ID of an assigned security-based swap	AsgnTyp TrdID	@TrdContntn=0 (Novation) RegTrdID/ @ID=<id> @Evnt=4 (Novation) @Typ=0 (Current)	From the point-of-view of the non-novating party.	page 97 - 99
54	(e)(1)(i)	A life cycle event, and any adjustment due to a life cycle event, that results in a change to information previously reported pursuant to paragraph (c), (d), or (i) of this section shall be reported by the reporting side [except that the reporting side shall not report whether or not a security-based swap has been accepted for clearing]	TrdContntn TrdContntn	@TrdContntn		final Rule 901(e)(1) on page 286 - 287 more details on Rule 901(e)(1)(i) on page 154 - 155
55	(e)(1)(ii)	Acceptance for clearing	RskLmitChkStat	@RiskLmtChkStat *or* RptSide/@RiskLmtChkStat		Cannot find reference to this specific rule
56	(e)(2)	All reports of life cycle events and adjustments due to life cycle events shall, within the timeframe specified in paragraph (j) of this section, be reported to the entity to which the original security-based swap transaction will be reported or has been reported and shall include the transaction ID of the original transaction.	OrigTrdID	RegTrdID/ @ID=<original block trade id> @Typ=2 (Block)		page 287 - 288
57	(f)	Time stamp, to the second, its receipt of any information submitted to it pursuant to paragraph (c), (d), (e), or (i) of this section.	TrdRegTS TS Typ Src	TrdRegTS/ @TS=<utc timestamp> @Typ= 11 (Publicly reported) *or* 12 (Public report updated) 13 (Non-publicly reported) 14 (Non-public report updated)		page 110 - 111

#	§ 901 Ref.	Common Data Model Concept	FIXML Data Elements as given by SEC	FIXML Data Elements proposed: Elements are within <TrdCaptRpt> message context	Comments	SBSR Rule Page Reference
58	(g)	A transaction ID to each security-based swap, or establish or endorse a methodology for transaction IDs to be assigned by third parties.	TrdID	RegTrdID/ @ID=<traded> @Src=<assigning entity> @Event=<lifecycle event> @Typ=<current, previous, block, etc.> @LegRefID=<for multi-leg trades> @Scope=<clearing member vs client>	This transaction ID is to be assigned following a methodology prescribed by the SDR, not the entity reporting to the SDR. The SEC is also not asking for USI/UTI either. Final Rule 901(g) "*provides that a registered SDR "shall assign a transaction to each security-based swap, or establish or endorse a methodology for transaction IDs to be assigned by third parties."*	page 111 - 115