Response

to the

ESMA

Consultation Paper:

"Draft technical standards on access to data and aggregation and comparison of data across TR under Article 81 of EMIR"

Delivered to ESMA

by

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I. Executive Summary

There are an extensive (and increasing) number of requirements with which Trade Repositories must comply as the regulatory programs for collecting and monitoring market transactions evolve and more specifications are added.

The original 2012 stipulations set forth a matrix of different types of reporting and access for the benefit of a number of different relevant authorities and across three main levels of data granularity: transaction detail, counterparty positions, and financial product aggregates.

Initial requirements regarding counterparty and transaction data elements to be reported when submitting transactions **to** Trade Repositories were established in the Commission Delegated Regulation (EU) No 148/2013 from December 2012.

Technical aspects of communication protocols, messaging standards, functional objectives, operational infrastructure, and performance considerations receive most of the attention in the consultation.

The consultation paper does not specifically address the issues and challenges for system-wide common data standards necessary to support access, consolidation and aggregation.

The need for clear financial data standards at both the data element and data structure levels is acknowledged, but the consultation paper suggests that these issues will be addressed by the subsequent development and adoption of new ISO 20022 messaging repository content and schemas.

Adopting ISO 20022 as a framework and harness for new definitions and XML message schemas for TR can leverage existing ISO 20022 data standards where applicable, but the actual work needed to establish new definitions and XML message schemas for ESMA/TR data standards is not addressed in this consultation. This makes the continued involvement and engagement of TRs and other stakeholders as actively engaged participants in this subsequent work all the more important.

By way of comparison, the Legal Entity Identifier (LEI) project would not have succeeded had it remained confined to a single regulatory jurisdiction. The LEI standards initiative was taken up at the international level under the G-20 and the Financial Stability Board, where the initiative benefited from broad stakeholder participation and buy-in – and subsequent global, cross-border adoption.

Since similar efforts for standards for financial contract data interfaces have also been introduced in other jurisdictions, it would be preferable if the ESMA initiative could be pursued with an eye towards an eventual globally federated and harmonized network of cooperating authorities.

II.   Overview

The consultation paper narrative and associated questions fall into three main categories:

- Data security

- Regulator services

- Data standardization

Data Access Security

In one form or another, Questions 1, 4 and 5 address data access security topics: secure FTP for file transmission, public key encryption, and user credential authorization for data access control. These functionalities are straightforward and easy to support.

Regulator Data Services

Owing to the persistent difficulties and labor-intensive efforts that regulators have faced when trying to consolidate and aggregate data from different sources, a key driver and objective of the ESMA Trade Repository Project is, not surprisingly, to eliminate the barriers to productive and efficient access and use of Trade Repository data.

Questions 3, 4, and 7 address topics relating to TR data query services and topics (e.g., standing queries and reports, *ad hoc* search , bandwidth, performance and access frequency) as well as data standards intended to facilitate the consolidation and aggregation of data.

This aspect of the consultation aims to shift the burden of work from regulators (who currently must perform a significant amount of post-processing after making the rounds to each TR) to the Trade Repositories (to develop APIs and services that provide pre-processed and "ready-to-use" data to National Competent Authorities and data consumers).

It is worth noting that this represents a potentially significant shift in the business model among stakeholders regarding the allocation of costs and resources required to develop and support the improvements in the regulatory services supply chain and data infrastructure.

Data Standardization

One of the root causes of the many impediments to the productive fulfillment of the intended role of TR data collection for macro-prudential regulatory supervision has been clearly recognized to be the absence of a consistent set of uniform data standards.

A key component of the solution strategy that is reflected in the current ESMA consultation and related plans is the decision to promote ISO 20022 to serve as

the vehicle for both establishing the operational data standards as well as the means to specify the data interchange standards. (See the section below on the *BUSINESS JUSTIFICATION FOR THE DEVELOPMENT OF NEW ISO 20022 FINANCIAL REPOSITORY ITEMS* for more detail on ESMA's plan)

There are other benefits that are expected to result from the adoption of the ISO 20022 framework, but there are also some additional risks, costs and implications that accompany this approach to the pressing need to establish effective data definition and interchange standards.

Critical Factors

Dependence on Data Standards

The Consultation Paper solicits feedback on proposed services and data access facilities that are to be developed by Trade Repositories for the benefit of National Competent Authorities as well as for the reconciliation and matching among TRs.

These functional and technical discussions are certainly worthwhile, but the success and feasibility of all of such planned services on the part of regulators for the public good depend entirely on the establishment and implementation of common data standards. ESMA plans to satisfy this critical requirement by adopting and developing data access interfaces based on the ISO 20022 messaging standards.

Rationale for adopting ISO 20022

Firms or communities looking to adopt ISO 20022 as a data communications interface must determine whether existing ISO 20022 message sets are suitable for their needs, or if new metadata content and/or message types or templates need to be developed and added to ISO 20022 to support the intended applications.

ISO 20022 has evolved to cover a large number of financial business elements in its metadata repository. However, deciding to adopt ISO 20022 in order to achieve common data standards in a new financial transaction supply chain (such as EMIR) does not eliminate the need to conduct a thorough standards development or definitions process that includes all relevant stakeholders and participants be undertaken.

In several of the references to ISO 20022 in the consultation paper, there does appear to be an implication that adopting ISO 20022 will solve the need to establish common data standards for the authorized consumers requiring access to the transaction, positional and aggregate data that are contained in the network of Trade Repositories. Defining and implementing the necessary data standards is not likely to be quite so simple a task, however, and underestimating what is required to do so is perhaps one of the larger hidden risks in the roadmap of this initiative.

III.   Response to Consultation Paper Questions

Q1 (secure FTP)

Q1: Do you foresee any technical issues with the establishment of secure FTP connections between trade repositories and authorities? What are the cost implications of the establishment of secure FTP connections? What other practical difficulties, if any, do you foresee? Please elaborate.

> A1: Using secure FTP connections for data access and transfer connections between trade repositories and authorities is both a viable and simple approach.

Q2 (Use of ISO 20022)

Q2: Do you foresee any technical issues with the above mentioned data exchange supported by ISO 20022 methodology? Do you foresee any cost implication from the establishment of standardised data exchange? Do you foresee any additional benefit from establishing data exchange supported by ISO 20022 methodology? Please elaborate.

> A pre-defined schema is of course a necessary requirement for a standard communication interface. We would point out, however, that defining the structure of such a schema containing data elements is one thing, but defining and standardizing the actual data elements themselves that the schema contains is an additional type of exercise.

> To the best of our knowledge, apart from the *Regulatory Transaction Report V02* message component, ISO 20022 does not currently contain the data structures and schemas that will be needed to meet the requirements to standardize a common data interface between and among ESMA and the TRs.

> (According to plans described in the Business Justification that ESMA submitted to ISO 20022, ESMA plans to introduce one set composed of 16 messages for MiFID II / MiFIR regulatory reporting, and another set of 5 messages for EMIR regulatory reporting).

> It would be easy to underestimate the cost and timeframe required to adequately develop a (new) common interface and schema data standards for this project.

> We recommend and urge ESMA to seek active participation on the part of stakeholders in the entire process surrounding the definition and creation of new ISO 20022 structures and data elements where necessary.

Q3 (Recurrent and Ad-hoc Queries)

Q3: Do you foresee any technical issues with the establishment of recurrent and predefined queries? If so, how would authorities be able to compare and aggregate data across TRs in absence of standardised queries and how would they be able to make use of TR data for the exercise of their duties if they are not able to properly and immediately access TR data? What are the cost implications stemming from the establishment of the proposed predefined and ad-hoc

queries? Do you agree with the proposed minimum set of queries? What would be the maximum number of recurrent queries which a single authority could submit in a given day? What would be the maximum number of ad-hoc queries which a single authority could submit in a given day? Please elaborate.

A wide range of query options and desired capabilities for relevant authorities has been described.

The effort and information resources needed to develop and provide the range of capabilities and services described are themselves wide-ranging, and have the potential for consuming considerable IT as well as human resources.

In order to start simple and learn from initial phases, it would be best to organize the development of these services in a series of stages and incremental roll-out of the described functionalities and modes of access.

Q4 (Query frequency)

Q4: Do you agree with the proposed frequency to provide data to the relevant authorities? Please elaborate.

The feasibility of the frequency of data access requests is tied to the types and range of capabilities and services that are to be provided. (See above)

There are issues that relate not just to the timing, but to the structure and format of results as well.

As an aside, it would be advantageous to define some flexible output formats that could be used for generic reporting of arbitrary collections of properties of contracts at some point.

Q5 (Electronic signature / Encryption)

Q5: Do you agree with this proposal? Please elaborate.

Use of these measures will help support the security of the exchange of information among the relevant parties.

Q6 (User authentication / access credentials / exception reporting)

Q6: Do you agree with this proposal? Please elaborate.

User authentication and maintenance of secure access credentials to ensure proper access by various parties to different levels of public and restricted data will clearly be a required capability of this data interchange capability.

Two observations:

- Sufficient time and attention should be allocated to analyzing the business requirements, roles and infrastructure for access control among cooperating entities, and

- The ongoing cost and complexity to implement and administer an access control system based on secure user credentials and access rights may not be fully appreciated.

Q7 (ISO 20022 XML template)

Q7: Do you foresee any technical issues with the implementation of xml template in accordance with the ISO 20022 methodology? Do you foresee any technical issues in translating data received in non xml format to an xml template in accordance with ISO 20022 methodology? Do you foresee any benefit from establishing standardised xml template in accordance with ISO 20022 methodology for the aggregation and comparison of data? Would any other data standard fulfil to the same extent the requirements set out in paragraph 48 with respect to the aggregation and comparison of data by authorities? Please elaborate.

This question is rather open-ended and vague in view of the fact that the XML template itself is as yet completely undefined, and the "devil is in the details".

Translating data in "non-XML" format to XML is not itself a technical issue. The issue is strictly one of creating the data model and appropriate standards for the content of the data.

For example, there are significant structural and data content differences between 'vanilla' swaps with regular cash flow / repricing frequencies, on the one hand, and 'exotic' derivatives with step-ups, custom schedules and notional adjustments, on the other (i.e., "buy-side" derivatives for such things as construction financing, and which are decomposed into collections of vanilla transactions on the wholesale side).

Furthermore, apart from the obvious benefit of standardization of the data representation and format that is required regardless of the choice of data representation conventions, there is no inherent benefit for the aggregation or comparison of data that is obtained simply from the use of XML or ISO 20022.

The issue of aggregation goes beyond establishing data standards at the contract level. The methodology for aggregation of contracts and positions is the key topic that is not yet addressed in this question or consultation. The methodology for data aggregation is an important subject that warrants additional attention in future work.

IV.   Assessment and Recommendations

Operational Data Standards Development

To reiterate the suggestions in Q2 and Q7 above, we urge ESMA to seek active involvement and participation from a broad collection of stakeholders in data standards development and subject matter requirements meetings and work groups with ESMA and other TRs. All subsequent work, progress and success hinges on these initial standards decisions.

Private Sector / Public Sector Cooperation and Collaboration

Currently ESMA and the National Competent Authorities (NCAs) are doing the preponderance of the mapping and consolidation work in order to get contract data. The current consultation indicates that a significant amount of the work required to implement the standard would rest with the TRs (e.g., providing data outputs in accordance with the new schema, providing new reports, servicing repeating or ad hoc query requests, etc).

The key is to find the right balance in the degree of effort, cost, and resources on the part of the TRs compared to ESMA and the NCAs.

## Importance of Systemic Interoperability

The Legal Entity Identifier project would not have succeeded had it remained within one jurisdiction (i.e., the U.S., under the domestic auspices of the OFR). Promoting the LEI standards initiative to the international level under the G-20 and the Financial Stability Board provided it with broad stakeholder requirements setting and implementation buy-in. This has resulted in a globally federated, and well-structured, foundation for a successful solution.

It would be preferable if the ESMA initiative regarding standards for financial contract data interfaces were to be pursued with an eye towards an eventual globally federated and harmonized network of cooperating authorities. This opportunity is described below.

## TR Access Standards via a Globally Federated Network

ESMA / Trade Repository Network

The diagram below is excerpted from the ESMA document *BUSINESS JUSTIFICATION FOR THE DEVELOPMENT OF NEW ISO 20022 FINANCIAL REPOSITORY ITEMS* for "Financial instruments and transactions regulatory reporting"[1]. It shows the conceptual architecture supporting the objectives of ESMA's Instrument Reference Data Project and its Trade Repositories Project to provide access, consolidation and aggregation services for data consumers of Trade Repository in the EU community.
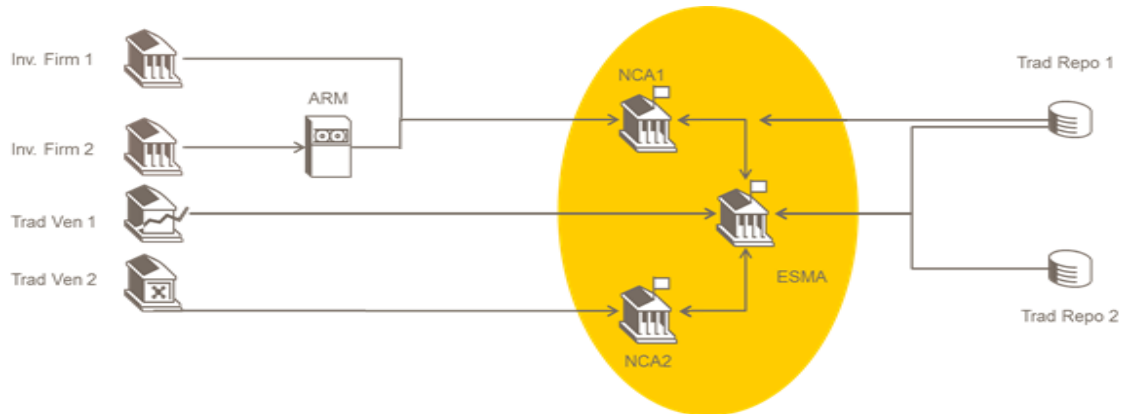
ESMA + Global Federated Network

The diagram below shows how the regional and EU jurisdictional scope of the ESMA initiative is completely compatible with a federated gateway architecture for providing harmonized access to financial contracts and aggregated positions to cooperating stakeholders across the global financial system. As the diagram suggests, ESMA's role as a data mapping and consolidation intermediary for the EU community is exactly that of a regional/jurisdictional gateway in the federated network strategy recommended at the FSB Aggregation Feasibility Study Group.

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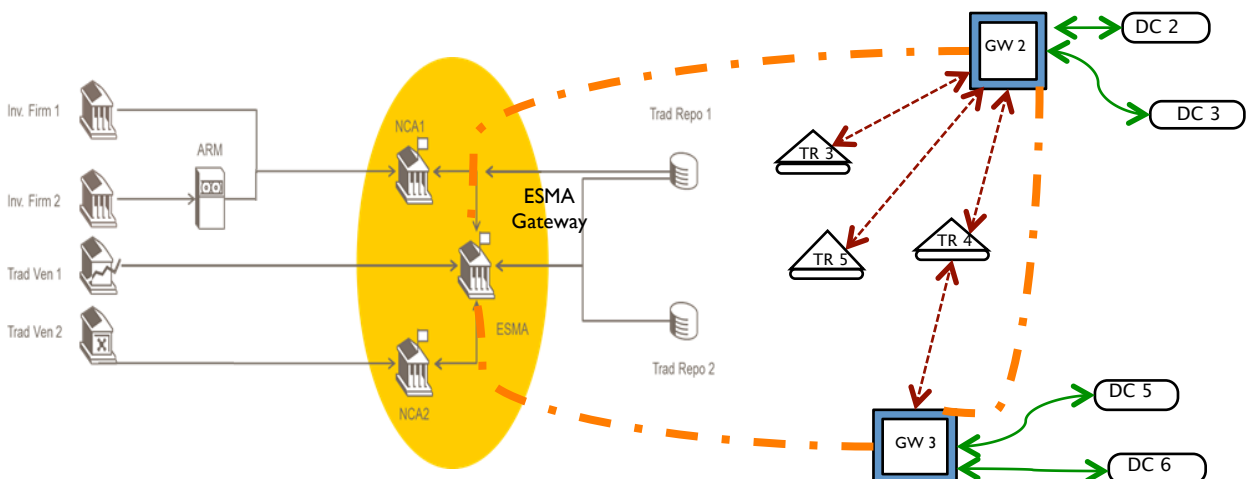
[1] *ESMA BUSINESS JUSTIFICATION FOR THE DEVELOPMENT OF NEW ISO 20022 FINANCIAL REPOSITORY ITEMS,* PAGE 5
http://www.iso20022.org/documents/BJ/BJ108/ISO20022BJ_Instruments_and_Transactions_RegReporting_ESMA_v2.docx