



To: **FSB Aggregation Feasibility Study Group**
From: J. Braswell / Tahoe Blue Ltd
Re: Comments on *Feasibility study on approaches to aggregate OTC derivatives data*

Even though the FSB Aggregation Feasibility Study Group consultation paper *Feasibility study on approaches to aggregate OTC derivatives data* (issued February 4, 2014) specifically addresses OTC derivatives, when undertaking a study of this nature (i.e., aimed at systemic risk regulatory monitoring), it is worthwhile keeping in perspective a broader context of the aggregation of the full gamut of financial instrument and contract data on the books of financial institutions.

The more narrow scope of the current study is framed by two different limiting constraints that limit the analysis to the following facets:

1. Only a subset of financial activities are being considered (i.e., capital markets transactions), and – of that subset – only a further subset of traded financial instruments (i.e., certain derivatives)
2. A limited subset of data sources is being considered: namely, Trade Repositories that record settled trades for this subset of financial market instruments.

The feasibility study is positioned as an analysis and assessment of architectural, technical and cross-border/legal factors that would result in an optimal – or at least practical -- approach to aggregating cross-border financial system data (for OTC derivatives) for the purpose of systemic risk monitoring by regulators in sovereign jurisdictions.

Three high-level architectural configuration scenarios are considered and compared in the study.

However, the limited focus placed on the type and source of financial transactions in this stage of the analysis does not consider the full scope of the issues – and alternatives – regarding questions of how best to integrate and aggregate more complete and robust financial industry instrument and position data. Since one of the stated primary purposes of the study is to assess the feasibility of ways to improve the understanding and gauging of systemic risk via the aggregation of detailed transaction data, it would be good to broaden the scope of the study beyond OTC derivatives in Trade Repositories.

A more complete scope of an aggregation study might be described thusly:

1. In addition to the aggregation of data for instruments (including derivatives) that are traded in financial markets (and which may be recorded in Trade Repositories), the financial obligations, contracts and positions that constitute the full balance sheets of financial institutions are data that also need to be consolidated and aggregated in order to take the full measure of systemic risks. This data is not expressed in accounting systems; rather
2. Trade repositories may be a source of the data for the types of financial transactions that are the current subject of the aggregation study, but the ultimate/original source of the financial data for these and all of the other positions

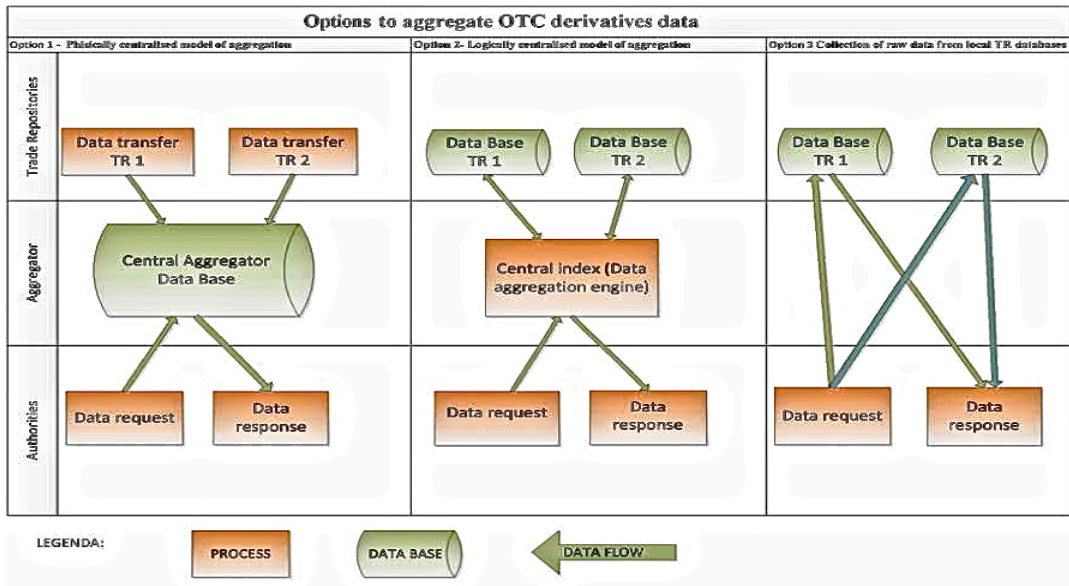
and contracts that together comprise the comprehensive state of a financial institution (and which require some form of aggregation) is each institution itself.

3. These data are not accounting system nor G/L data, but contractual data of the terms of the account-level financial products domiciled in the systems of record of an institution.
4. These data, representing customer and counterparty relationships and obligations of the entire institution, are also in need of being standardized and aggregated in order for regulators to have sufficient information to analyze systemic risk.

Following are comments and responses to some of the questions posed.

Question 2:

Does the analysis of the data and technology considerations cover the key issues? Are there additional data and technology considerations - or possible approaches that would mitigate those considerations - that should be taken into account?



The above diagram (contained in the consultation paper, page 7) is conceptual, but it is over-simplified, particularly in the middle configuration where multiple Trade Repositories cooperate in a federated fashion to provide access to all the data in the system.

In particular, each of the Trade Repositories is likely to have different transaction data file formats, and there will almost certainly need to be a mapping/translation process between each TR and the central Index / consolidation function.. Furthermore, with regards to this question raised in the report:

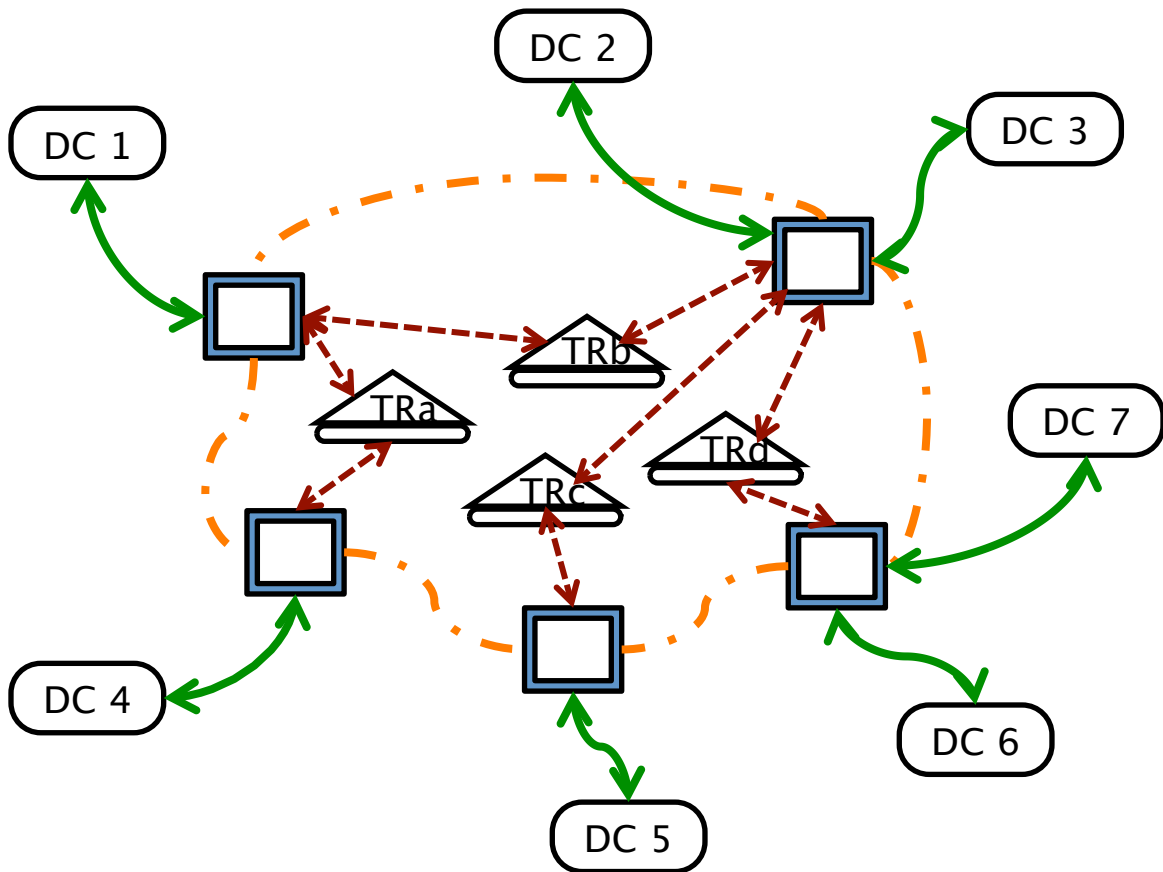
Does the data need to be reported in a globally consistent manner to TRs in the first place to make accurate global aggregation of the data feasible, or is it possible to develop a translation mechanism that will permit the aggregation of data originally provided in different formats?

It would of course be highly desirable if a standard data interface between institutions and Trade

Repositories could be established. However, differences in data import and reporting formats on the part of different TRs will make it highly unlikely that institutions can use a standard format to publish data to different TRs. A common standard for reporting transactions to TRs (and hence standard data requirements and formats for transactions) is therefore needed before that can happen.

Furthermore, the same likely differences in TR data formats will also likely require some transformations and mapping of data formats provided by a particular TR on the output and export side in order for data consumers to be able to consolidate data across the universe of existing TRs. For this reason, a federated architecture as shown below is recommended. In this approach, a federated network of data access gateways (the blue squares) is established between the data consumers and the TRs. This network of data access gateways *can* provide a common interface to consolidated and aggregated financial instrument data for data consumers (DC1, DC2, ...) using a common format that harmonizes the different data formats and interfaces provided by different Trade Repositories (TRa, TRb, ...) shown as triangles.

In this architecture, the network of federated aggregated data gateways provides a seamless interface to the underlying collection of data from any of the Trade Repositories. The federated aggregation gateways would communicate among themselves (the orange dashed line) such that regional financial data aggregation gateways could serve or manage data from Trade Repositories in their local territories. This would not require each data aggregation gateway to maintain data from every Trade Repository. Rather, a data aggregation gateway could access the data in another data aggregation gateway in the cooperating network of federated data aggregation gateways.





Secondly, seeking to develop an interface standard for a narrow financial product class (e.g., OTC derivatives) in isolation without developing a consistent framework to standardize the full gamut of financial products is likely to result in an interface that has important gaps in its design and which will need to be revised when other instruments and transaction types are taken up later.

Establishing a federated network of financial data aggregation gateway services as a layer between end-users and TRs will also put in place a means by which other sources and types of financial data (other market instruments, financial products, positions, contracts, counter-party obligations, collateral agreements, etc.) -- in addition to OTC derivatives data currently available from Swap Data Repositories (SDRs) and Trade Repositories (TRs) -- can subsequently be incorporated into a scalable system for providing consolidated and aggregated financial position data to end-users and data consumers.

Third, it is recommended that financial institutions take the time to concertedly develop and implement a consistent, internal enterprise-wide financial instrument data standardization framework. Having different business divisions or product silos within an institution independently contribute data to external recipients (e.g., via silo rollups) in a way that is uncoordinated with a consistent financial instrument data model for the enterprise will make it difficult to establish common interfaces to external consolidators of trade repositories, not to mention financial regulators in general.

Ideally, an export data model for an aggregated snapshot (at appropriately accurate levels of granularity) of a financial institution's balance sheet can be established. Doing so would provide a standard data model and interface to which financial institutions can map and securely transfer their financial data for regulatory reporting purposes. This "docking model database" (think "USB flash drive") would be associated and logically co-located with the institution, and could theoretically also be directly accessed by financial data gateway servers in the federated data aggregation network.

Question 3:

Is the list of criteria to assess the aggregation options appropriate?

Regarding Data: *Degree of necessary standardisation and harmonisation: (p. 41)*

"Standardisation can be thought of from two different perspectives: (i) the existing use of data standards or the potential to implement the use of common standards; and, (ii) the ability of a model to meet its requirements and manage legal constraints with or without the use of data standards ..."

Comment: The two perspectives mentioned above do not seem to add up to a consistent framing of the topic of standardization.

The first perspective was perhaps meant to start out as "*the use of existing data standards ...*" ?

The second part of the first perspective would seem to be the relevant and operative question: namely, what is the "*potential to implement the use of common standards*" ?

The second perspective (the "*ability of a model to meet its requirements ... with or without the use of data standards ...*") seems odd, as it is hard to consider how any system of financial data aggregation could be achieved without the use of data standards.