esma European Securities and Markets Authority

Consultation Paper

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

Responding to this paper

ESMA invites comments on all matters in this paper and in particular on the specific questions summarised in Annex 1. Comments are most helpful if they:

- respond to the question stated;

- indicate the specific question to which the comment relates;

- contain a clear rationale; and

- describe any alternatives ESMA should consider.

ESMA will consider all comments received by **01/02/2016**

All contributions should be submitted online at www.esma.europa.eu under the heading 'Your input - Consultations'.

Publication of responses

All contributions received will be published in their entirety following the close of the consultation, unless you request otherwise. Please clearly and prominently indicate in your submission any part you do not wish to be publically disclosed. A standard confidentiality statement in an email message will not be treated as a request for non-disclosure. A confidential response may be requested and disclosed in accordance with ESMA's rules on access to documents[1].

Data protection

Information on data protection can be found at www.esma.europa.eu under the heading Legal Notice.

Who should read and respond to this paper

All interested stakeholders are invited to respond to this consultation paper. In particular, responses are sought from financial and non-financial counterparties of OTC derivatives transactions, central counterparties (CCPs) and trade repositories (TRs), as well as all the authorities having access to the TR data.

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[1] Decision of the Management Board ESMA/2011/MB/69 of 24 May 2011, available at http://www.esma.europa.eu/system/files/2011_MB_69___Decision_on_access_to_documents_rules.pdf

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1 Executive Summary

Reasons for publication

Article 81 of Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC Derivatives, CCPs and Trade Repositories (EMIR) requires ESMA, in order to ensure consistent application of this Article, after consulting the members of ESCB, to develop draft regulatory technical standards specifying the frequency and the details of the information referred to in paragraphs 1 and 3 as well as operational standards required in order to aggregate and compare data across repositories and for the entities referred to in paragraph 3 to have access to information as necessary. ESMA delivered its Final Report "Draft technical standards under the Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC Derivatives, CCPs and Trade Repositories" on 27 September 2012 (ESMA document 2012/600), i.e. less than three months after the publication of the EMIR. The standards were endorsed by the Commission, published in the Official Journal of the EU (OJ EU) on 23 February 2013 and entered into force on 15 March 2013.

Since the entry into force of the standards and the start of the reporting obligation, ESMA has worked on ensuring the consistent application of EMIR and its RTS on data access, and aggregation and comparison of data. The practical implementation of such RTS highlighted particular instances where improvements could usefully be made to allow the authorities to better fulfil their respective responsibilities and mandates, in particular with respect to the monitoring of systemic risk and increased OTC derivatives transparency.

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The authorities entitled to have access to TR data have had to adapt to different and sometimes divergent practices with respect to access to data and data aggregation and comparison. In general, ESMA considers that the current functionalities offered for data access require a significant improvement and that comparison of data is not sufficiently robust, which requires some elements to be fixed and improved. This document outlines amendments to the current rules to ensure direct and immediate access to data and aggregation and comparison of data across trade repositories.

Next Steps

Following the assessment of the responses received, a final report will be prepared and submitted to the Commission. Pursuant to Article 10 of Regulation (EU) No 1095/2010, the Commission has three months from the receipt of a draft regulatory technical standard by ESMA to decide whether to endorse it.

2 Review of the EMIR Technical Standards on data access and operational standards for comparison and aggregation of data

2.1 Background

1. Article 81 of Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC Derivatives, CCPs and Trade Repositories (EMIR) requires ESMA, in order to ensure consistent application of this Article, after consulting the members of ESCB, to develop draft regulatory technical standards specifying the frequency and the details of the information referred to in paragraphs 1 and 3 as well as operational standards required in order to aggregate and compare data across repositories and for the entities referred to in paragraph 3 to have access to information as necessary.

2. ESMA fulfilled this mandate in September 2012 and submitted those drafts to the Commission, which became the Regulation No. 151/2013 (RTS, hereinafter).

3. The RTS consists of a definition of the data (i) to be made publicly available on a weekly basis by the TRs, (ii) the access levels for EEA and third country authorities, as well as (iii) a brief reference to the use of communication procedures, standards for messaging and reference data used at international level without specifying or prescribing standards to be used.

4. At the time of drafting the RTS (2011-2012), there were still a number of discussions at international level on the aggregation of data across TRs. The final report from CPSS-IOSCO on "OTC derivatives data reporting and aggregation requirements"[2] was produced in 2012, while the "FSB Feasibility Study on Aggregation of OTC Derivatives Trade Repository Data"[3] didn't start until early 2014, the publication of the final Study taking place only in September 2014. Therefore, ESMA decided to keep the wording of the RTS sufficiently flexible to accommodate further developments of international standards.

5. In addition, at the time when ESMA drafted the RTS there was only limited practical experience with the reporting of derivatives and the access to derivatives data reported to multiple TRs. In terms of the practical definition of the access levels for the entities listed in Article 81(3) of EMIR, the technical standards based on the functional approach established by the European Commission and the general principles outlined in the CPSS-IOSCO's consultative documents regarding

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[2] http://www.bis.org/cpmi/publ/d100.pdf
[3] http://www.financialstabilityboard.org/wp-content/uploads/r_140919.pdf

Authorities' access to trade repository data, being the final report released in August 2013[4].

6. The operational standards for data access and comparison and aggregation of data were areas where ESMA could not build on lessons learnt. As a result, the practical implementation of EMIR reporting and the experience gained so far has shown several shortcomings and limitations that need to be addressed so that the data provided to authorities under EMIR could better allow them to fulfil their responsibilities and mandates.

7. It is worth mentioning that soon after the reporting go-live, authorities started accessing the trade data and encountered several major issues due to the lack of standardisation of the reports provided to them, notwithstanding the granular level of details included in the RTS. In addition, some TRs provided to the authorities better tools and functionalities than others to properly access and use the data stored by TRs. In particular, it has become evident the lack of a common format and channels for data access that would enable authorities to easily consolidate and process data received from various TRs. Considering the number of TRs which all authorities should approach in order to access the data, the total cost for authorities is significant.

8. Derivatives data is reported under EMIR since 12 February 2014 and as of the beginning of October 2015 there are more than 23 billion submissions that have been made by the entities subject to reporting obligation under EMIR to the six TRs, the weekly average being greater than 300 million submissions. In light of this substantial amount of data reported so far, it becomes imperative to streamline the access to TR data by authorities and the aggregation and comparison of data by authorities across the TRs.

9. ESMA has drafted the amendments to the RTS subject to this consultation to define the minimum operational standards that need to be used in order to allow the direct and immediate access to TR data and the aggregation and comparison of data across TRs.

10. With regards to the operational standards for access to TR data and aggregation and comparison of data across TRs, ESMA has drafted the amendments to the RTS specifying the precise operational standards that comply with the following characteristics to allow the relevant authorities to fulfil their responsibilities and mandates:

- standardised output format of the TR data, based on international ISO standards, allowing comparison and aggregation;

- minimum types of queries that need to be available for the authorities;

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[4] http://www.bis.org/cpmi/publ/d110.pdf

- standardised and secure data exchange, based on ISO standards, between TRs and authorities;

- standard frequencies for the provision of direct and immediate access to TR data;

- secure machine-to-machine connection and use of data encryption protocols.

11. This Consultation Paper introduces two categories of changes to the current RTS, which will be further described in the next section:

- Common provisions for operational standards for aggregation and comparison of data as well as common output formats; and

- Common provisions for operational standards for access to data and data exchange procedures between TRs and the competent authorities listed in Article 81(3) EMIR.

12. For detailed changes and the actual proposals please see Annex IV and Annex V.

2.2 Analysis

13. The experience so far has shown that the lack of specific standards for data access and data aggregation and comparison led to several structural deficiencies, with the following consequences for authorities:

    a. Inability to perform adequate assessment of systemic risk due to low quality data;

    b. TR portals are offering limited capabilities for data querying and for access to large datasets with no uniform functionality or message format across TRs;

    c. Extreme difficulty in aggregating and comparing data across TRs, due to the lack of standardisation.

    d. Ultimately, in some cases, difficulties to obtain real direct and immediate access to TR data.

14. As a result, due to non-standard, sometimes insufficient tools and functionalities provided by TRs, the authorities need to spend considerable time connecting to different TRs, downloading files in TR-customised formats, translating them into a common one, cleaning[5] the resulting dataset and trying to aggregate it. These are all manual processes and only few authorities had the resources dedicated to these processes and could make use of the data they were accessing.

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[5] Cleaning of the dataset is the process of detecting and correcting (or removing) corrupt or inaccurate records from a record set, table, or database. Used mainly in databases, the term refers to identifying incomplete, incorrect, inaccurate, irrelevant, etc. parts of the data and then replacing, modifying, or deleting this data.

15. Although, certain improvements have already been made by the TRs following ESMA's requests, the continuous interactions of ESMA's staff with the relevant authorities show that there is still significant room for improvement in this respect. New entrants to the TR industry should benefit from legal certainty of what is required to operate a TR in the EU, which calls for an update or improvement in the applicable Regulation. Likewise, competent authorities covered in article 81 of EMIR (many of which have not yet connected to all Trade Repositories) should have clarity about the minimum functionalities that they will be able to access when those connections are established.

16. Therefore, it is imperative to better specify the operational framework for accessing, aggregating and comparing data across TRs. The current one is considered insufficient to allow the authorities to fulfil their responsibilities and mandates. If the data provided by TRs to the relevant authorities is so challenging and extremely difficult to be used, the exact purpose for which TRs were created, i.e. providing information to the relevant authorities, is put at stake.

17. As mentioned in the introduction, the provisions regarding the operational standards for access to data and aggregation and comparison of data were not addressing all the particular details that need to be addressed so as to allow direct and immediate access to TR data, as well as data aggregation and comparability across TRs.

18. The next sections outline the two different types of amendments to the technical standards that are proposed. These cover two areas:

    • Operational standards to access data

    • Operational standards to aggregate and compare data across TRs

2.2.1 Operational standards to access data

19. Currently, most of the TRs are providing access to the data reported to them through Internet-based portals, while some are making the data available to authorities through periodic reports. There are also some cases, where both approaches are in place at the same time. The practical experience has showed that those portals are offering only limited functionalities and are not allowing for extensive data searches nor for downloading "huge-size" (more than 100MB of data) files.

20. Although the "huge-size" files are not common across all the authorities, many of the EU authorities supervising the most active entities trading derivatives are entitled to access such files regarding the daily activity of their supervised entities.

21. Access to the internet-based portals has also proved difficult due to the different system specifications across each TR. Instead of simplifying, such system specifications add another layer of difficulty in accessing TR data. The size limitation issue has been solved, by some TRs, by using secured FTP connections where the

output data reports produced by the TRs are posted in the folder of the authorities needing access, instead of being posted in an Internet-based portal.

22. Nevertheless, in light of the lack of precise legal requirements to set up secured FTP connections, certain TRs have been reluctant to do so in a timely manner or for the majority of the authorities, thus introducing another layer of non-harmonised access to data which potentially un-levels the playing field for authorities. In order to solve this situation, the amendments to the technical standards establish the need to have at least a secure FTP connection so as to allow the secure access to high–volume datasets.

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.

23. Furthermore, the proposed modifications to the standards address also the communications between the TRs and the relevant authorities.

24. It is worth mentioning that the communications between the TRs and the authorities should also be supported by ISO compliant methodology, in order to allow the authorities an automatic treatment.

25. An xml template based on ISO methodology will be used to facilitate aggregation and comparison of TR data as explained in details in paragraphs 45 and following.

26. The assessment of the definition of the adequate standards for access to data and for aggregation and comparison of data by authorities has leveraged on the analysis made to determine the most appropriate channel for data reporting to authorities under MiFID2/MiFIR.

27. In that occasion several available standards for data reporting were studied, in terms of their compliance with certain regulatory requirements such as being standardised, non-customised, open source and subject to sound governance framework.

28. Based on a specific study performed for the purposes of defining reporting standards under MiFID2/MiFIR, ISO 20022 was determined to be the most suitable due to the high level of compliance with envisaged legal requirements of standardised output format and standardised data exchange as well as its performance and extensibility capability. The proposed amendment to the standards under EMIR for availability of data encompasses the use of xml format compliant with the ISO 20022 methodology.

29. ISO 20022 is a standardisation methodology which sets out guidelines, principles and formats that should be followed in the development of a common formal notation to describe financial processes.

30. This specification does not affect the data requirements for collection of data or the means of their collection or publishing (for example, no specific technical format, like XML, is required for the collection or publication of data by TRs). Therefore, it just affects the flow of data between TRs and the public authorities entitled to access them.

31. The use of ISO 20022 will ensure the correct and harmonised handling of the communications between the TRs and the authorities. This standardisation is expected to reduce the long-term costs for data communication for both TRs and the authorities.

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.

32. A further important issue faced by competent authorities accessing the TR data was the lack of standardised or at least harmonised query functionalities at the TRs. Currently it is impossible to query data in the case of those TRs which do not have a data portal for authorities. TRs with no internet based portal can only a provide NCAs with pre-agreed periodically furnished reports. In cases where portals do exist, NCAs have encountered difficulties with the query functionalities. Inefficient functionality and a lack of consistency of query reports across TRs add to the issues NCAs are currently experiencing. In addition, a significant limitation which is common across all existing portals is the size of downloadable files, which severely impacts on the immediate accessibility by authorities, given the significant amount of manual work needed before obtaining the data the authority is looking for.

33. Two types of query functionalities can be distinguished – those referring to recurrent or predefined data searches or retrievals of information based on identical criteria and those referring to ad-hoc searches which offer the authorities the possibility to tailor made the data to be made available by the TRs. Both query types serve different purposes and both are considered complementary in their implementation and use.

34. The recurrent query function provides the competent authorities with access to the full data set reported in the relevant reference period established. Those predefined reports should contain information, at least, on all the daily submissions processed by the TRs, the most updated state of the trades with open interest (i.e. not terminated by the counterparties) as well as data on those trades which have reached the TR after the T+1 reporting deadline.

35. As noted before, most of the TRs are generating predefined reports on an ongoing basis, however they still have some differences in terms of the content and format of the data presented. The proposed RTS and templates will standardise them as much as possible.

36. In addition, the practical experience gathered since the kick-off of the reporting obligation, as well as the different mandates of the competent authorities, require the need to allow the authorities to be able to query the data corresponding to the access level of that authority based on certain search criteria. The ad-hoc query provides one-off access to a dataset, selected by the competent authority, which is mainly used to perform targeted investigations. ESMA is proposing that TRs should offer any combination of the following ones:

- Queries regarding fields[6] related to the parties, such as "Reporting Counterparty ID", "ID of the other Counterparty", "Broker ID", "Report submitting entity ID", "Beneficiary ID", and "CCP". This ad-hoc query will allow the authorities to gain insight on the trades concluded, reported or cleared by any of those parties and it will be particularly important for investigations regarding risks to financial stability, interconnectedness and market abuse, but also when there is a particular market or credit event with regards to a particular entity.

- Queries regarding fields related to characteristics of the Reporting Counterparty, such as "Corporate sector of the reporting counterparty" and "Nature of the reporting counterparty". This ad-hoc query will allow gaining information on the derivatives activities of particular types of entities for supervisory purposes, such as financial intermediaries, funds, etc.

- Queries regarding fields related to the characteristics of the product or the venue where the contract was concluded, such as "Contract type", "Asset class", "Product classification", "Product identification", "Underlying identification", "Venue of execution", "Notional currency 1", "Notional currency 2", "Deliverable currency", "Delivery currency" and "Commodity base". This ad-hoc query will allow the authorities to easily obtain data regarding the different types of products traded, the particular underlying assets or currencies traded or the specific venues where the derivatives trades were concluded. This will enable the authorities to have better information on particular instruments in case of market events or to monitor specific spikes in the activity in certain products or venues.

- Queries regarding fields related to the economic terms of the contract, such as "Price/rate", "Notional amount", "Fixed rate of leg 1" and "Fixed rate of leg 2". This ad-hoc query will allow better insight on derivatives trades concluded with particular economic characteristics.

- Queries regarding fields related to dates and time, including the reporting timestamp, the execution timestamp, the maturity date, and the termination date. This ad-hoc query will allow the authorities to define specific time criteria for their queries and restrict the set of data obtained for a specific period.

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[6] The names of all the fields are as per ESMA's Final Report "Review of the Regulatory and Implementing Technical Standards on reporting under Article 9 of EMIR" submitted to the European Commission on 13 November 2015.

- Queries regarding fields related to the collateral such as "Initial margin posted", "Variation margin posted", "Initial margin received", "Variation margin received", "Excess collateral posted" and "Excess collateral received". This ad-hoc query will allow the authorities to better determine specific collateral criteria relevant for the performance of their duties and to detect under-collateralisation and, therefore, potential risks.

- Queries regarding fields related to the life-cycle events such as "Action type". This ad-hoc query will enable authorities to filter the data based on the action types and will allow them to determine the types of submissions and lifecycle events relevant for the performance of their supervisory duties and monitor whether the counterparties are populating those correctly.

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.

37. The timeliness of the access to data has also been an aspect of the lack of harmonisation of the data access and the aggregation and comparison of data. Although EMIR clearly refers to the provision of "direct and immediate access to the data reported to the TRs", given the lack of specification of what direct and immediate access means, most of the TRs were providing access to the data reported on T+1 only late in T+2. Furthermore, depending on the internal processes at each TR, they were providing the information starting at early in the morning in the case of some TRs to later in the afternoon in the case of others.

38. The proposed amendments set out clear timelines for the provision of this data to the authorities. This is expected to allow them better plan and schedule their internal processes related to gathering and analysis of TR data. The deadlines for provision of information are different from the ones for validation of queries to be performed by the TRs, which are referred to in paragraph 44.

39. In particular it is expected where the data request refers to the daily submissions made by the counterparties to the TRs as well as to the transaction data regarding outstanding derivative contracts or derivative contracts which have matured or for which submissions with action types "E", "C", "Z" or "P" were made within the last year could be provided by 7 am UTC on the day following the one on which the specific request to access is submitted. This timeline will allow the authorities to have timely

access to the outstanding trades and the recent data reported to the TRs and will allow them be in a position to quickly react to market events.

40. In the case of transaction data regarding derivative contracts which have matured or for which submissions with action types "E", "C", "Z" or "P" were made more than one year before the date on which the request was submitted, the authorities should be provided with access no later than three working days after the specific request to access is submitted to the TR. Given that TRs might use different recordkeeping procedures for this type of data and the authorities might not directly need this type of data for the assessment of current market events or exposures of entities, the timeline for the provision is significantly greater although sufficient to allow the authorities to have direct and immediate access.

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

41. In order to better ensure the confidentiality, integrity and protection of the data in line with Article 80(1) EMIR, the TRs when providing access to or making available the data to the authorities should use electronic signature and data encryption protocols.

42. Those signatures and data encryption protocols should be sufficient to maintain the confidentiality, integrity and protection of data, should not impede the timely provision of data to authorities neither should they pose any type of barrier to the access to data.

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

43. The proposed amendments to the operational standards on data access also establish the requirement to validate each request for access to data and to provide standardised feedback in a timely manner.

44. In case of invalid data queries (e.g. the authority represented by the user is not onboarded to the TR), the TR should send a feedback message to that authority no later than 15 minutes after the submission of the request by the authority. This timeline will allow the authority to quickly react and to amend the criteria included in the query.

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

2.2.2   Operational standards to aggregate and compare data across TRs

45. The current framework did not provide granular information with respect to the format and content of the data files made available to the competent authorities. This was left to the discretion of the TRs. Whilst this could have been a sound approach in the early days of reporting, the practical experience has showed that without specific legal basis to establish a clear format of the data and of the content of the data fields

made available to authorities, the TRs are providing access to data in several different output formats – comma separate values (csv), text (txt) files and extended mark-up language (xml). The compliance with the requirements varies across those formats, being the xml the one offering greater quality of the data.

46. The lack of standardisation and harmonisation of the output data introduces a significant cost for the more than 60 authorities entitled to have access to the TR data pursuant to Article 81(3) EMIR.

47. As mentioned before, the lack of standardised output files from the TRs has hampered the access to data, but also the correct aggregation and comparison of data across TRs. When an authority requires TR data for a specific day they send a request to the six different TRs and (if applicable) receive six different files in potentially six different formats. Performing any sufficient analysis on TR data in this manner is both time inefficient, due to the file types, size and access, and also costly.

48. In terms of the set of requirements for format and content of the data files provided to authorities, ESMA understands that at least to following characteristics should be respected:

   a. They should be based on open and transparent standards; and

   b. They should be subject to robust governance from regulatory community

49. The assessment of the definition of the adequate standards for access to data and for aggregation and comparison of data by authorities has leveraged on the analysis made to determine the most appropriate channel for data reporting to authorities under MiFID2/MIFIR which is detailed in paragraphs 28 and following.

50. It is worth mentioning that the provision of data for regulators does not affect the data requirements for collection of data nor the means of their collection or publishing (for example, no specific technical format, like XML, is required for the collection or publication of data).

51. Stemming from the above considerations, ESMA understand that xml templates in accordance with ISO 200022 methodology are those which provide higher standardisation of the output data and which allow for the establishment of high data quality levels.

52. In practical terms, it means that the additional burden resulting from the alignment is limited to the transformation of the data so that they are represented in a standard way, thus it can be considered marginal.

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.

53. The requirements discussed previously are considered as essential for the establishment of a solid basis for the achievement of the policy objectives related to the reporting of derivatives to TRs such as the transparency of the derivatives trades and the monitoring of the systemic risks related to those trades.

54. In order to further facilitate data access and data aggregation and comparison by authorities, ESMA announced a few months ago that is building, by delegation of 27 Competent Authorities, a system to facilitate access to TRs. The system will provide a query functionality and receipt and distribution of transaction level data under EMIR through a single access point. The system will allow submission of queries to the central data access point and it will distribute those queries to the relevant TRs. The access levels of the relevant authorities will be determined by the TRs in accordance with Articles 2 and 3 of the technical standards on data access. The operational standards for data access and data aggregation and comparison will be the same irrespective of whether the data is provided to the relevant authorities through the ESMA system or via a direct connection with the authorities (be it because those authorities do not participate in the ESMA system of because they access directly the TR through a different method). The provision of data access to those authorities that have delegated their access to ESMA will, obviously, be compliant with the requirements that will be set out in the final draft standards that are now being consulted upon.

3 Annexes

3.1 Annex I

Summary of questions

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.

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.

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.

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

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

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

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.

3.2 Annex II

Legislative mandate to develop draft technical standards

<u>Article 81(5)</u>

In order to ensure consistent application of this Article, ESMA shall, after consulting the members of the ESCB, develop draft regulatory technical standards specifying the frequency and the details of the information referred to in paragraphs 1 and 3 as well as operational standards required in order to aggregate and compare data across repositories and for the entities referred to in paragraph 3 to have access to information as necessary. Those draft regulatory technical standards shall aim to ensure that the information published under paragraph 1 is not capable of identifying a party to any contract.

3.3 Annex III

Cost-benefit analysis

ESMA's choices in this review are of a pure technical nature and do not imply strategic decisions or policy choices.

ESMA's options are limited to the approach it took to drafting these particular regulatory technical standards and the need to ensure direct and immediate access to derivatives data and the aggregation and comparison of the data across TRs.

The main policy decisions have already been analysed and published by the European Commission taken under the secondary legislation, i.e. EMIR.

The impact of such policy decisions has already been taken into account when drafting the technical standards on reporting to trade repositories, including the ones being amended, and may be found under the following link:

http://www.esma.europa.eu/system/files/2012-379.pdf

The cost-benefit analysis of the proposed amendments will be further based on the evidence and feedback received in the course of this consultation process. ESMA understands that the main costs attached to the changes required in this RTS will be borne by Trade Repositories and authorities, and thus ESMA is especially interested in receiving precise estimates from them in the context of this public consultation.

Notwithstanding this, at this stage, ESMA understands that the proposed amendments to RTS will provide a clear benefit to the authorities which are entitled to access EMIR data, but also to TR. Some of those benefits are listed below.

The standardised output format of the TR data, based on international ISO standards, allowing comparison and aggregation will reduce drastically, by more than 80%, the time needed to connect to different TRs, to download files in TR-customised formats, to translate them into a common one, to clean the resulting dataset and to try to aggregate them so as to start performing their duties in order to fulfil their responsibilities and mandates. However, given that the discontinuation of the use of templates with comma separated values (csv) or text (txt) files might entail some costs for the TRs, it is considered that the TRs should not withdraw them.

The minimum types of queries that need to be available for the authorities will allow them to immediately access data based on certain parameters determined by them.

The standardised and secure data exchange, based on ISO standards, between TRs and authorities will streamline the download of data by the authorities, it will also facilitate the communications between authorities and TRs.

The harmonisation of the frequency in which data is provided to the authorities by the TRs will improve the direct and immediate access to TR data and it will allow the authorities and the TRs to better schedule their internal data processes.

The secure machine-to-machine connection and use of data encryption protocols will ensure the confidentiality and protection of data during the data transfer.

3.4 Annex IV

Draft regulatory technical standards on trade repositories

COMMISSION DELEGATED REGULATION (EU) No …/…

of [   ]

Amending Commission Delegated Regulation (EU) No 151/2013 of 19 December 2012 supplementing Regulation (EU) No 648/2012 of the European Parliament and of the Council

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to the opinion of the European Central Bank,

Having regard to Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories, and in particular Article 81 (5) thereof,

Whereas:

(1) Experience in the application of Commission Delegated Regulation (EU) No 151/2013 so far has shown that the lack of specific standards for data access and data aggregation and comparison led to structural deficiencies. Thus, the authorities referred to in Article 81(3) of Regulation (EU) No 648/2012 were unable to perform adequate assessment of systemic risk due to non-standardised data, in non-uniform functionality or message format. This jeopardised the direct and immediate access to data, necessary for the fulfilment of the authorities' respective responsibilities and mandates.

(2) To address the aforementioned drawbacks, these technical standards further specify the operational standards required in order to aggregate and compare data across repositories and for the entities referred to in) Article 81(3) of Regulation (EU) No 648/2012 to have access to information as necessary.

(3) For the effective performance of authorities' responsibilities and mandates it is crucial to ensure the comparison and aggregation of data across repositories. The technical standards establish the use of standardised XML format templates developed in accordance with ISO 20022 methodology to facilitate the aggregation of data by

authorities across repositories as well as the use of standardised XML messages for the purposes of communication between the authorities and the trade repositories. The XML format templates should be used to provide the data to the authorities in a manner which facilitates its aggregation, while the XML messages streamline the data exchange process between the TRs and the authorities. The technical standards do not exclude the use of non-XML format templates, such as comma separated values (csv) or text (txt) files, to the extent that they allow the authorities to fulfil their responsibilities and mandates and therefore those formats can continue being used by trade repositories. However, as a minimum, XML format templates based on ISO 20022 methodology are necessary to ensure comparability and aggregation of data across trade repositories.

(4) It is essential to facilitate the direct and immediate access to specific datasets and thus to establish a set of combinable ad-hoc queries referring to the parties to the trade, the economic terms, the derivatives contract classification and identification, the collateral information, the time horizon of execution, reporting and maturity, as well as the business and life-cycle events.

(5) Confidentiality of data is a primary aspect and therefore any type of data exchange between trade repositories and authorities should be carried out through a secure machine-to-machine connection and by using data encryption protocols.

(6) Harmonisation of the frequency in which data is provided to the authorities by the trade repositories will improve the direct and immediate access to trade repository data and will allow the authorities and the trade repositories to better schedule their internal data processes.

(7) Therefore, it is imperative to amend Commission Delegated Regulation (EU) No 151/2013 in order to better specify the operational framework for accessing, aggregating and comparing data across trade repositories.

(8) It is necessary to allow for a three-month period after entry into force, in order to facilitate the adaptations of systems by trade repositories to the specifications contained in this Regulation.

(9) This Regulation is based on the draft regulatory technical standards submitted by the European Securities and Markets Authority to the Commission.

(10) In accordance with Article 10 of Regulation (EU) No 1095/2010, ESMA has consulted the relevant authorities and the members of the European System of Central Banks (ESCB) before submitting the draft regulatory technical standards on which this Regulation is based. ESMA has also conducted open public consultations on these draft regulatory technical standards, analysed the potential related costs and benefits and requested the opinion of the ESMA Securities and Markets Stakeholder Group established in accordance with Article 37 of that Regulation,

HAS ADOPTED THIS REGULATION

Article 1

Amendments to Commission Delegated Regulation (EU) No 151/2013

(1)   Article 4 is amended as follows:

(a)   The first paragraph is replaced by the following:

'A trade repository shall provide access directly and immediately, including where delegation under Article 28 of Regulation 1095/2010 exists, to the entities listed in Article 81(3) of Regulation (EU) No 648/2012 to the details of the derivatives contracts in accordance with Articles 2 and 3 of this Regulation. These details shall be provided, at least, in an XML format and using a template developed in accordance with ISO 20022 methodology.'

(b)   The second paragraph is deleted.

(2)   Article 5 is amended as follows:

The following paragraphs (3) to (8) are added:

'3.   A trade repository shall allow the entities listed in Article 81(3) of Regulation (EU) No 648/2012 to connect with a secure machine-to-machine interface in order to submit data requests and to receive data. The trade repository shall use standardised XML messages developed in accordance with ISO 20022 methodology to communicate through this interface.

4.   A trade repository shall allow the entities listed in Article 81(3) of Regulation (EU) No 648/2012 to establish predefined periodic requests to access all transaction data of the derivatives contracts they need to fulfil their responsibilities and mandates.

5.   A trade repository shall allow the entities listed in Article 81(3) of Regulation (EU) No 648/2012 to submit requests specifying the transaction data to be made available, according to any combination of the following fields as defined in the Annex to Commission Delegated Regulation XXX/2016 [insert: draft regulatory technical standards under Article 9 of EMIR submitted to the European Commission on 13 November 2015]:

     a.   Reporting timestamp;

     b.   Reporting Counterparty ID;

     c.   ID of the other Counterparty;

     d.   Corporate sector of the reporting counterparty;

     e.   Nature of the reporting counterparty;

     f.   Broker ID;

g.   Report submitting entity ID;

h.   Beneficiary ID;

i.   Initial margin posted;

j.   Variation margin posted;

k.   Initial margin received;

l.   Variation margin received;

m.   Excess collateral posted;

n.   Excess collateral received;

o.   Contract type;

p.   Asset class;

q.   Product classification;

r.   Product identification;

s.   Underlying identification;

t.   Notional currency 1;

u.   Notional currency 2;

v.   Deliverable currency;

w.   Venue of execution;

x.   Price/rate;

y.   Notional;

z.   Execution timestamp;

aa.   Maturity date;

bb.   Termination date;

cc.   CCP;

dd.   Fixed rate of leg 1;

ee.   Fixed rate of leg 2;

ff.   Delivery currency 2;

gg.   Commodity base; and

hh.   Action type.

A trade repository shall allow the entities listed in Article 81(3) of Regulation (EU) No 648/2012 to access in accordance with Articles 2 and 3 of this Regulation to the last trade state of the derivatives contracts and to all the submissions relating to those contracts.

6.   A trade repository shall set up the necessary technical arrangements to allow direct and immediate access by the entities listed in Article 81(3) of Regulation (EU) No 648/2012 to all transaction data of the derivatives contracts they need to fulfil their mandates and responsibilities in accordance with the following frequency:

a. For transaction data regarding outstanding derivative contracts or derivative contracts which have matured or for which submissions with action types "E", "C", "Z" or "P" were made less than one year before the date on which the request was submitted, no later than 7 am Universal Coordinated Time on the day following the one on which the specific request to access is submitted; and

b. For transaction data regarding derivative contracts which have matured or for which submissions with action types "E", "C", "Z" or "P" were made more than one year before the date on which the request was submitted, no later than three working days after the specific request to access is submitted.

7. A trade repository shall acknowledge and validate the requests to access to data submitted by the entities listed in Article 81(3) of Regulation (EU) No 648/2012 and shall notify those entities on the result of the validation no later than fifteen minutes after the submission of the request.

8. A trade repository shall use electronic signature and data encryption protocols in order to ensure the confidentiality, integrity and protection of the data made available to the entities listed in Article 81(3) of Regulation (EU) No 648/2012.'

Article 2

Entry into force

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

It shall apply from [insert date: 3 months after publication]

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, […]   [For the Commission

The President]

[On behalf of the President]

3.5 Annex V

Consolidated text of the articles that are amended.

Article 4

Operational standards for aggregation and comparison of data

A trade repository shall provide access directly and immediately, including where delegation under Article 28 of Regulation 1095/2010 exists, to the entities listed in Article 81(3) of Regulation (EU) No 648/2012 to the details of the derivatives contracts in accordance with Articles 2 and 3 of this Regulation. These details shall be provided, at least, in an XML format and using a template developed in accordance with ISO 20022 methodology.

Article 5

Operational standards for access to data

1. A trade repository shall record information regarding the access to data given to the entities listed in Article 81(3) of Regulation (EU) No 648/2012.

2. The information referred to in paragraph 1 shall include:

    a. the scope of data accessed;

    b. a reference to the legal provisions granting access to such data under Regulation (EU) No 648/2012 and this Regulation.

3. A trade repository shall allow the entities listed in Article 81(3) of Regulation (EU) No 648/2012 to connect with a secure machine-to-machine interface in order to submit data requests and to receive data. The trade repository shall use standardised XML messages developed in accordance with ISO 20022 methodology to communicate through this interface.

4. A trade repository shall allow the entities listed in Article 81(3) of Regulation (EU) No 648/2012 to establish predefined periodic requests to access all transaction data of the derivatives contracts they need to fulfil their responsibilities and mandates.

5. A trade repository shall allow the entities listed in Article 81(3) of Regulation (EU) No 648/2012 to submit requests specifying the transaction data to be made available, according to any combination of the following fields as defined in the Annex to Commission Delegated Regulation XXX/2016 [insert: draft regulatory technical standards under Article 9 of EMIR submitted to the European Commission on 13 November 2015]:

    a. Reporting timestamp;

b.   Reporting Counterparty ID;

c.   ID of the other Counterparty;

d.   Corporate sector of the reporting counterparty;

e.   Nature of the reporting counterparty;

f.   Broker ID;

g.   Report submitting entity ID;

h.   Beneficiary ID;

i.   Initial margin posted;

j.   Variation margin posted;

k.   Initial margin received;

l.   Variation margin received;

m.   Excess collateral posted;

n.   Excess collateral received;

o.   Contract type;

p.   Asset class;

q.   Product classification;

r.   Product identification;

s.   Underlying identification;

t.   Notional currency 1;

u.   Notional currency 2;

v.   Deliverable currency;

w.   Venue of execution;

x.   Price/rate;

y.   Notional;

z.   Execution timestamp;

aa.   Maturity date;

bb.   Termination date;

cc.   CCP;

dd.   Fixed rate of leg 1;

ee.   Fixed rate of leg 2;

ff.   Delivery currency 2;

gg.   Commodity base; and

hh.   Action type.

A trade repository shall allow the entities listed in Article 81(3) of Regulation (EU) No 648/2012 to access in accordance with Articles 2 and 3 of this

Regulation to the last trade state of the derivatives contracts and to all the submissions relating to those contracts.

6. A trade repository shall set up the necessary technical arrangements to allow direct and immediate access by the entities listed in Article 81(3) of Regulation (EU) No 648/2012 to all transaction data of the derivatives contracts they need to fulfil their mandates and responsibilities in accordance with the following frequency:

   a. For transaction data regarding outstanding derivative contracts, or derivative contracts which have matured or for which submissions with action types "E", "C", "Z" or "P" were made less than one year before the date on which the request was submitted, no later than 7 am Universal Coordinated Time on the day following the one on which the specific request to access is submitted; and

   b. For transaction data regarding derivative contracts which have matured or for which submissions with action types "E", "C", "Z" or "P" were made more than one year before the date on which the request was submitted, no later than three working days after the specific request to access is submitted.

7. A trade repository shall acknowledge and validate the requests to access to data submitted by the entities listed in Article 81(3) of Regulation (EU) No 648/2012 and shall notify those entities on the result of the validation no later than fifteen minutes after the submission of the request.

8. A trade repository shall use electronic signature and data encryption protocols in order to ensure the confidentiality, integrity and protection of the data made available to the entities listed in Article 81(3) of Regulation (EU) No 648/2012.