Final report

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

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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 to develop draft regulatory technical standards specifying the frequency and the details of the information to be made available to the relevant authorities and the information to be published as well as operational standards required in order to aggregate and compare data across repositories and for the relevant authorities to have access to information as necessary. For the reasons explained in the Consultation Paper (ESMA/2015/1866), ESMA decided to amend the RTS in order to better ensure access by authorities, comparison and aggregation of data. ESMA received strong support from the respondents to the consultation. Based on the practical experience of the respondents, different options were proposed so as to better achieve the mentioned objectives. ESMA has considered these options and the concerns expressed by some of the respondents and finalised its proposed draft amendment to the technical standards.

Contents

This document summarises the comments received during the consultation period, ESMA's considerations on those and ESMA's final proposal, including the legal text of the draft amendment to the technical standards to be submitted to the European Commission. Among others, ESMA proposes the following (i) use of XML templates based on ISO 20022 methodology, (ii) minimum standards for secure machine to machine connection and data exchange between TRs and authorities, (ii) harmonised timeliness and frequencies for data access, (iv) enhanced procedures for data security and (v) validations of the data requests by TRs,

Next Steps

Following the submission of this final report to the European Commission and pursuant to Article 10 of Regulation (EU) No 1095/2010, the Commission has three months from the receipt of the draft regulatory technical standards by ESMA to decide whether to endorse them.

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 to develop draft regulatory technical standards specifying the frequency and the details of the information to be made available to the relevant authorities and the information to be published as well as operational standards required in order to aggregate and compare data across repositories and for the relevant authorities 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 (EU) No. 151/2013 (RTS, hereafter).

3. The RTS consisted 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"[1] was published in January 2012, while the "FSB Feasibility Study on Aggregation of OTC Derivatives Trade Repository Data"[2] did not start until early 2014 and the publication of the final Study took 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 were based on the access approach established by EMIR and the general principles outlined in the CPSS-IOSCO's consultative documents regarding authorities' access to trade repository data, being the final report released in August 2013[3].

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[1] http://www.bis.org/cpmi/publ/d100.pdf
[2] http://www.financialstabilityboard.org/wp-content/uploads/r_140919.pdf
[3] http://www.bis.org/cpmi/publ/d110.pdf

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 date 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.

8. 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[4] the resulting dataset and finally trying to aggregate it. These are all overly manual processes and only few authorities had the resources dedicated to these processes and could make use of the data they were accessing.

9. 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.

10. 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 of the applicable Regulation. Likewise, 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.

11. Derivatives transaction data is reported under EMIR since 12 February 2014 and as of the end of 2015 there are more than 27 billion submissions that have been made by the entities subject to the reporting obligation under EMIR to the six TRs, the weekly average being around 330 million submissions. In light of this substantial amount of data reported so far, it is vital to streamline the access to TR data by authorities in addition to ensuring the possibility to aggregate and compare data across TRs. The current process is considered insufficient to allow the authorities to fulfil their responsibilities and mandates.

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[4] 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.

12. If the data provided by TRs to the relevant authorities is so challenging and difficult to use, the exact purpose for which TRs were created, i.e. providing information to the relevant authorities is put at stake.

13. ESMA has drafted the amendments to the RTS 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.

14. 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 across TRs;

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

   - 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, based on SSH File Transfer Protocol, and use of data encryption protocols.

15. This Final report contains the summary of feedback and assessment of whether a proposal is kept or amended. For detailed changes and the actual proposals please see Annex IV and Annex V.

2.2 Summary of feedback and proposals

16. A total of 15 responses coming from the registered TRs, the reporting parties and the data users were received.

2.2.1 Secure machine-to-machine connection

17. As mentioned in the consultation paper, 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 or for downloading "huge-size" (more than 100MB of data) files.

18. Access to the internet-based portals 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 SFTP 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.

19. All the respondents support the establishment of secure machine-to-machine connection. Half of them are supportive of the use of SFTP both as a low-cost alternative and as a secure channel.

20. The other half of respondents, however, expresses concerns with the use of SFTP. Those concerns are mainly related to the expected size of data to be transferred through this channel. Most of those respondents proposed alternative solutions based on messaging protocols such as messaging queue (MQ, hereinafter), however neither specific technological benefits with regards to the expected volumes have been indicated nor clear economic benefits or particular cost savings versus the use of SFTP have been provided. In terms of the costs for establishing SFTP connections, only one quantitative estimation has been provided and the cost included in it can be considered as reasonable.

21. With regards to the requests by respondents for more detailed information on security controls, authentication, etc., ESMA takes note and where relevant will intend to address those aspects through another tool.

22. One of the responses indicated that the type of SFTP connection has to be better specified, in order to achieve common understanding across TRs regarding this requirement. Furthermore, the respondent has requested to clarify that the authentication has to be done by using public keys, as the highest security option.

23. Therefore, given that all registered TRs have experience in communicating with authorities through SFTP, and in view of its low-cost and scalable nature that is required in order to support varying requirements and implementation capabilities of the numerous European authorities, ESMA considers that the connections should be organised as proposed in the consultation paper and the draft RTS. In order to establish a minimum applicable standard and to provide for a consistent and secure data transfer between TRs and authorities, ESMA is further specifying in the draft RTS that a secure machine-to-machine interface, at least the SFTP (the SSH File Transfer Protocol), should be used by TRs. This further specification is needed to establish the expected minimum level of standardisation across TRs. ESMA is allowing the use of other alternatives, such as the suggested use of MQ, to the extent that the TRs put in place at least an SFTP (the SSH File Transfer Protocol). Therefore, other alternatives can also be offered to the extent that at a minimum SFTP is offered.

2.2.2 Data exchange between TRs and authorities

24. ESMA proposed an XML template based on ISO 20022 methodology will be used to facilitate aggregation and comparison of data across repositories as explained in details in paragraphs 65 and following. It is worth mentioning that, in order to allow automatic treatment by authorities, the communications between the TRs and the authorities should also be supported by messages based on ISO compliant methodology.

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

26. 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 reporting and communication standard due to the high level of compliance with the envisaged legal requirements of standardised output format, standardised data exchange and its performance and extensibility capability. Furthermore, use of ISO 20022 has brought substantial benefits in terms of straight-through processing, transparency, regulatory compliance and interoperability; open standards have also reduced costs and frictions, and facilitated the roles of regulators and supervisors thus helping to ensure the development of more resilient and safer financial markets. The proposed amendment to the standards under EMIR for availability of data encompasses the use of XML format compliant with the ISO 20022 methodology. 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.

27. The use of ISO 20022 will ensure the correct and harmonised handling of the communications between the TRs and the authorities. ESMA will profit from the development and registration process established by ISO with regards to the adoption of these messages as the usage of business concepts from the ISO 20022 standard will allow ESMA to apply consistent definitions and to automate processing of the received data. This will facilitate the collection of data at a daily frequency and processing the data in a timely manner. Additionally, the usage of standards is likely to improve data quality and ensure global semantic interoperability with all other ISO 20022 based systems. This standardisation is expected to significantly reduce the long-term costs for data communication for both TRs and authorities.

28. Several aspects have been indicated by the respondents as potential drawbacks for the implementation of data exchange via ISO 20022: (i) unavailability of ISO 20022

messages, (ii) need for different schemas for output reports (treated in section 2.2.7), (iii) need for additional validation of output reports, and (iv) CSV format being best placed for bulk reporting whereas XML format being more suitable for single messaging structures.

29. Some respondents raised concerns on the lack of available messages. It is important to point out that ESMA is in the process of requesting the registration of ISO messages which have been prepared to support output reports from TRs to authorities as well as the data exchange between TRs and authorities. ESMA is confident that these messages will be registered by ISO by Q3 2016.

30. Some of the respondents, particularly the TRs, have suggested not to validate the data which is already recorded by the TR. They provide as rationale for this request the fact that this data has already been validated by the TRs prior to being stored. Based on the experience with the EMIR reporting regime and in particular the on-going data quality issues, ESMA disagrees with this reasoning and confirms the requirement that the data made available to the authorities should be provided in accordance with the relevant XML schema under the ISO 20022 methodology, which would require that the data is compliant with the syntax rules implemented in the XML schema.

31. One of the respondents has indicated that it foresees technical issues with the use of XML templates for communication, because XML is a tool that is best used to support single message structures and when used to define a bulk data output, XML uses significantly more file space than a flat file report definition and will significantly increase the cost of storing and transmitting report output. ESMA recognises that in comparison with CSV, XML will indeed be more costly because of bigger file size and as it requires more resources to process the files. The feature, however, that XML provides - a mechanism to ensure the validation of data syntax – results in much greater benefit, compared to the relatively low costs of the IT infrastructure, in terms of the improvement of the quality of the data.

32. Furthermore, the detailed schema and the solutions for different problems raised in the responses will be developed as per the ISO 20022 message development and registration process, which is an additional benefit of using ISO methodology.

33. For the reasons above, ESMA keeps its proposal to establish a minimum requirement for the use of XML messages developed with accordance to ISO 20022 methodology in the communications between TRs and authorities. To the extent that all the TRs have established data exchange based on ISO 20022, ESMA would not exclude the complementary use of data exchange based on other standards.

2.2.3 Query functionalities

34. A further important issue faced by the authorities accessing TR data is 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 provide NCAs with pre-agreed periodic 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.

35. In the consultation paper ESMA proposed two types of query functionalities– 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 have tailor made data available from TRs. Both query types serve different purposes and both are considered complementary in their implementation and use.

36. In terms of the feedback received, it is worth mentioning that the establishment of harmonised query functionalities was very positively perceived by the respondents to the CP. Some of them recommended greater use of recurrent queries functionalities compared to the use of ad-hoc query functionalities and even requested extending the number of recurrent queries templates.

37. Furthermore, some of the respondents indicated difficulties in understanding the typology of data to be provided as a result of the recurrent queries and whether the recurrent reports would provide the daily activity data, i.e. all daily submissions, but also the trade state data[5]. In order to address these aspects, ESMA is introducing an additional recital and a separate provision which better specifies the type of data to be provided.

38. The next subsections describe the (i) general feedback received on the queries functionalities, (ii) the feedback to the recurrent queries and (iii) the feedback to ad-hoc queries.

2.2.3.1   General aspects

39. The comments received from the respondents with respect to query functionalities refer to the following general aspects: (i) the maximum size of the files and the establishment of splitting and joining rules, (ii) the rejection of queries exceeding a given limit, (iii) the alignment with MiFID2 / MiFIR, (iv) handling of updates to derivative data already provided to authorities and (v) disconnection of existing query and delivery channels. These general comments are detailed in the following paragraphs.

40. One of the respondents has requested the inclusion of more detailed information regarding the maximum size of the files to be provided by the TRs to the authorities as

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[5] Trade state data refers to the most updated values of all the derivative contracts with open interest at the end of the day

well as the establishment of the relevant splitting and joining rules for the files in order to be further processed by the authorities. ESMA understands that these are very technical aspects related to the practical implementation of the requirements included in the revised technical standards, hence their definition should not be included in the text of the RTS. Nevertheless, ESMA takes note of those concerns and will address them, where relevant, during the implementation of the requirements by the TRs.

41. Some respondents have requested ESMA to establish certain limits to the number and the scope of the queries submitted by the authorities and in case such limit is reached, to reject the subsequent requests by the given authority for the given day. The comments refer more to the technological feasibility to process the queries rather than to the legal mandates of the authorities to request access to the data. ESMA acknowledges the request by the TRs, however, it is worth noting that, in accordance with Article 81(2) EMIR, the access to data by authorities should be direct and immediate. Hence, ESMA sees little room for manoeuvre regarding the RTS, nevertheless would look together with the TRs for practical solutions to this aspect in order to achieve the correct balance with regards to the usage of the TRs' systems.

42. Furthermore, one respondent requested alignment between the data access framework under EMIR and MiFID2/MiFIR. In particular the respondent referred to the reporting of data directly to regulators under MIFID2/MiFIR. It is worth mentioning that such alignment has already taken place from the reporting perspective, however, the objective and the legal framework of both regulations are certainly different and, more importantly, the Level 1 provisions in the two Regulations are completely divergent. In particular, MiFID2/MiFIR establishes direct reporting to national competent authorities, whereas EMIR provides for reporting to TRs and subsequent availability of data to the relevant authorities. Therefore, in terms of availability of data to authorities, the co-legislators have not envisaged any such alignment, hence it is outside the scope of this report.

43. There have been some questions on how to deal with situations where the data that is made available to an authority has been subsequently amended by any of the parties to the derivative contract. ESMA understands that the corrected data will be made available by the TRs to the authorities in the course of the provision of the complete daily activity recurrent report to the authorities. To the extent that the corrections affect the trade state data, the latest trade state report will incorporate the most updated data for a derivative trade. This way the authorities will be able to identify all those trades where corrections take place and, if needed, they will be able to correct also past data in their own systems. Since the information provided to authorities will be timestamped by the TR, it will be easy to identify and to keep record of the amended values.

44. Finally, one respondent has indicated that he believes that the current delivery mechanisms which the TRs employ to provide access to the data reported under EMIR should be disconnected. As stated with regards to the use of SFTP and ISO 20022 messages, ESMA does not consider it critical to prevent the TRs and

authorities to continue with the existing mechanisms to the extent that the minimum requirements set out under this RTS are fulfilled.

2.2.3.2 Recurrent queries

45. 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[6] reporting deadline. As noted before, most of the TRs are generating predefined reports on an on-going basis, however they still have some differences in terms of the content and format of the data presented. The proposed RTS and relevant templates will standardise them as much as possible.

46. As mentioned in the previous sections, the majority of the respondents are positive with respect to the recurrent queries. The only additional issue to the ones mentioned in section 2.2.3.1 that affects the recurrent queries refers to some doubts by the respondents with respect to the provision of standardised reports regarding trades reported after the reporting deadline. However no background information was provided by the respondent. This aspect also refers to the actual implementation of this particular type of recurrent query, therefore ESMA considers that no amendment to the proposed RTS should take place. ESMA will work with the TRs during the implementation of this type of report in order to solve any potential issues.

2.2.3.3 Ad-hoc queries

47. 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. In the consultation paper, ESMA proposed that TRs should offer ad-hoc queries based on any combination of the following 34 fields[7]:

- Fields related to the parties, such as "Reporting Counterparty ID", "ID of the other Counterparty", "Broker ID", "Report submitting entity ID", "Beneficiary ID", and "CCP".

- Fields related to characteristics of the Reporting Counterparty, such as "Corporate sector of the reporting counterparty" and "Nature of the reporting counterparty".

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[6] It is usual practice to define the trade date as (T) and subsequently the reporting deadline – the following business day after the conclusion, modification or termination of a derivative contract- as (T+1).

[7] 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

- 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".

- 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".

- Fields related to dates and time, including the "Reporting timestamp", the "Execution timestamp", the "Maturity date", and the "Termination date".

- 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".

- Fields related to the life-cycle events such as "Action type".

48. This was one of the most widely discussed aspects of the consultation. The respondents, mainly TRs, requested several amendments to the proposed framework: (i) reduction of the number of queryable fields, (ii) establishment of minimum set of mandatory fields, (iii) clarification on the use of "AND/OR" operators and (iv) mechanism to de-duplicate queries by ESMA.

49. The last three aspects in the above paragraph refer to the actual implementation of the system by the TRs, hence ESMA considers that they should not be further specified in the RTS. Notwithstanding this, ESMA sees some benefit in establishing a minimum number of filter criteria so that the queries submitted by the authorities do not require the TRs to unnecessarily scan the entire database. Furthermore, with regards to the de-duplication of queries by ESMA, which has been suggested by some TRs, ESMA believes that it should be the TRs that establish the appropriate internal mechanisms to check for duplicate queries from the same authority and inform the authorities about such situation. Feedback messages developed under ISO 20022 could also serve this purpose.

50. Regarding the request for reduction in the number of queryable fields, the respondents have indicated that the implementation of a query engine to support the 34 fields would require substantial investments on their side and there might be instances in which the query can require the TR to scan the entire database. Based on the feedback received and in order to allow that the ad-hoc query functionality achieves its objective of providing access to a dataset, based on certain filtering criteria, ESMA is proposing to reduce the number of queryable fields for ad-hoc queries from 34 fields to

18 fields. Therefore TRs should allow the authorities to query the data based on the following fields[8]:

- Fields 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.

- 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.

- Fields related to the characteristics of the product or the venue where the contract was concluded, such as "Asset class", "Product classification", "Product identification", "Underlying identification", "Venue of execution". This type of 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.

- Fields related to dates and time of a derivative contract, 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.

- 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 to monitor whether the counterparties are populating those fields correctly.

2.2.4 Frequency and timeliness of the access to data

51. The timeliness of access to data has also been one aspect related to 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

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[8] 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

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.

52. One of the respondents has indicated that they understand that the TR system availability should be compatible with the TRs opening hours. In this respect, ESMA considers that it is important to clarify that the submission and validation of queries and the provision of output reports should be automated and therefore, there should be no requirement for the submissions and the responses to be made during the opening hours of a TR. Authorities will need to have direct and immediate access to the data reported to the TRs even outside the TR's opening hours. For this reason automation of the systems and avoidance of manual interventions is essential.

53. The proposed amendments set out clear timelines for the provision of data to the authorities. This is expected to allow them to 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 deadlines for validation of queries to be performed by the TRs, which are referred to in paragraph 63.

54. In particular, ESMA proposed to have two deadlines depending on whether the data requested is expected to contain historical data or not. One of the respondents was indifferent about the separation of historical and more current data, while another one was in favour. ESMA therefore considers that there is no need to amend this separation.

55. 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, the relevant output report should be provided by 7am UTC on the day following the one on which the specific request to access is submitted. All the reports produced by recurrent queries will be delivered by that deadline. 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. It is worth mentioning that other reporting regimes such as the Money Market Statistical Reporting to ECB[9] have established similar deadline for provision of data to authorities.

56. 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.

57. Some other respondents had some doubts to what would be the timeline to provide data in case the data resulting from the request includes contracts falling under both categories – current and historical. In that case, ESMA would expect the TR to comply with the least strict deadline and provide the resulting data no later than the third working day following the one on which the query is submitted. In order to address this, ESMA is introducing the relevant reference in the RTS.

58. Two respondents indicated that they would prefer having more time to process the information and one of them suggested that in case ESMA had a preference for 7am UTC deadline, there should be a cut-off time 12 hours before, i.e. 7pm UTC on T+1. Given the right for the counterparties to report until no later than the working day following the conclusion, modification or termination of the derivative contract, ESMA cannot establish an earlier cut-off time and thus depriving reporting parties from their right to report until the end of the working day. Nevertheless, ESMA understands that in order to provide high-quality data to the authorities, the TRs would need more time to better perform their internal processes. Therefore, ESMA is proposing to amend the time by which the data is provided to the authorities to 12:00 UTC. ESMA considers that this time would allow for the completion of the processes by the TRs and would also ensure that the authorities have timely access to high quality data.

59. Some of the respondents had some doubts regarding the relevant reference date for the provision of data access by 12:00 UTC. In this respect, ESMA expects that by 12:00 UTC on T+2[10], the TRs provide access to the reports resulting from the relevant ad-hoc queries, defined in paragraph 55, even if those were requested on T+1. In case the reporting timestamp for the last reporting date to be included in the query is not provided by the authority, it will be understood that it is the day on which the query is submitted or in case the query is submitted on a non-working day, it will be considered as referring to the immediately preceding working day in accordance with the TARGET calendar. In the case of recurrent queries, the output report should be provided by 12:00 UTC on each working day in accordance with the TARGET calendar.

2.2.5 Data security

60. In order to better ensure the confidentiality, integrity and protection of the data in line with Article 80(1) EMIR, ESMA proposed that the TRs should use electronic signature and data encryption protocols, when providing access to or making available the data to the authorities. Furthermore, in the consultation paper it was indicated that those

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[10] Providing access on T+2 is essentially the same as providing access to data on the day following the receipt of the information by the TR.

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 pose any type of barrier to the access to data.

61. This proposal was unanimously accepted by all respondents to the consultation paper. The confidentiality, integrity and protection of the data are key aspects of the EMIR reporting regime and therefore, all respondents supported the establishment of requirement for the encryption of data. There were some technical proposals which refer to the practical implementation of this requirement, such as the use of a particular encryption protocols. ESMA does not see a need to include those technical details in the RTS, however, where relevant, clarifications will be provided at the time of the implementation of the amended RTS.

2.2.6 Validation by TRs of data access requests made by authorities

62. 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.

63. In case of invalid data queries (e.g. the authority represented by the user is not onboarded to the TR), ESMA proposed that 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 would allow the authority to quickly react and to amend the criteria included in the query. Most of the respondents agreed with the proposed timeline, however some others questioned it in terms of the need to adapt to the SFTP connection and the cases where the SFTP might be busy making available data to the requesting NCAs.

64. ESMA understands that the time at which requests for access will be submitted by the authorities (during the working day) will be substantially different from the time at which the data will be made available (at the very beginning of the working day), therefore, it is not expected that there are any particular peaks affecting the validation of queries. Taking into account that the SFTP protocol is not the best placed for a real-time messaging, ESMA proposes to increase the validation time to 60 minutes. ESMA understands that this deadline will allow the TRs to validate the data in due course and will also allow the authorities to timely amend their queries where they are not valid.

2.2.7 Operational standards to aggregate and compare data across TRs

65. One of the key components of having operational standards for data aggregation and data comparison is the format of the standardised output file which facilitates high quality data. As mentioned in the consultation paper, the current framework did not establish strict and concrete requirements with respect to the format and content of the data files made available to the competent authorities. Thus 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, with XML offering greater quality of the data. The lack of standardisation and harmonisation of the output data introduces a significant cost for the circa 100 authorities entitled to access the TR data pursuant to Article 81(3) EMIR.

66. 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.

67. In order to address all the above issues and to take into account the fact that the format and content of the data files provided to authorities (i) should be based on open and transparent standards; and (ii) should be subject to robust governance from regulatory community, ESMA has proposed in the consultation the use of XML template based on ISO 20022 methodology. Taking into account the above criteria, ESMA considers that it is necessary to introduce strict requirements with regards to the syntax to be used for the provision of the required information to different competent authorities. Allowing many alternative syntaxes would seriously hinder the quality, the comparability and the easiness to exchange the information as well as it would also multiply the development and running costs to be borne by the regulatory community. The ISO 20022 XML syntax satisfies the aforementioned requirements as it has been already successfully implemented in pan-European projects related to the exchange of financial information (e.g. MMSR, T2S, SEPA).

68. 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), although ESMA understands that the TRs and the reporting counterparties might benefit from extending the use of the XML template for the reporting to TRs.

69. There are different views among the respondents to the consultation. All agree on the need for harmonisation, but they consider that there are different ways to achieve it. The responses cover two separate aspects of the proposed use XML template in accordance with ISO 20022 methodology.

- alternative XML and non-XML formats

- use of same or different XML schema definitions (XSD, hereinafter)

2.2.7.1 Alternative formats

70. Some respondents propose the use of alternative XML formats such as FpML or FIXML, where some others propose to continue using flat CSV files. The main reason to continue using flat CSV files that was indicated by the respondents is to transfer files with more reduced size than XML files.

71. As already explained in this report and in the consultation paper, for the purpose of defining MiFID2/MiFIR standards, ESMA conducted a detailed analysis of different reporting standards that are used throughout the financial industry. ISO 20022 was considered as the most suitable for MiFIR reporting as it facilitates the common understanding of business requirements and business data definition through its business dictionary and data model (it is a unique characteristic of ISO 20022 and is not provided by other standards), to large extent already covers the European reporting requirements, has a robust governance framework and has been already successfully implemented in pan-European projects related to the exchange of financial information. ESMA considers that those reasons remain valid also for data access under Article 81 EMIR. Moreover, the use of a single messaging standard across different reporting requirements (MiFIR, EMIR, MMSR), even if it requires some extensions to fully support derivatives data, is more beneficial for the regulators and the industry than introducing a different reporting standard for each regulation.

72. With respect to those that propose use of flat csv, the practical experience has shown that these file types are insufficient to contribute to ESMA's objective for high quality data. Furthermore, their structure might give rise to multiple syntax and formatting issues, which cannot ensure that authorities would be able to treat in an automated way the information provided by the TRs, which is one of the objectives of this amendment.

2.2.7.2 XML Schemas

73. Some of the responses enter into purely technical details regarding the number of XSDs needed in order to provide access to data gathered under different validation rules. ESMA will consider taking into account those comments when defining the actual XSDs, however, ESMA understands that there is no need to include very specific and prescriptive technical definitions in the RTS. The objective of the RTS is to establish the standards, but not to define the actual technical implementation of these standards. In practical terms, ESMA expects to have XSDs which can support the data reported to TRs and ensure the achievement of high-quality data. Given that the XML templates will be ISO 20022 compliant they will be directly available at https://www.iso20022.org.

74. Similar to the feedback included in section 2.2.2, some respondents question the suitability of the use of XML templates based on ISO 20022 methodology and the fact that those are not yet formally accepted. As mentioned earlier, ESMA is in the process of requesting the registration of ISO messages which have been prepared to support

output reports from TRs to authorities as well as the data exchange between TRs and authorities. ESMA is confident that these messages will be registered in Q3 2016.

2.2.8 ESMA's Access to Trade Repositories Project

75. In order to further facilitate data access and data aggregation and comparison by authorities, ESMA announced in 2015 that is building 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 via the central 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 are set out in the final draft standards.

76. One common request by the respondents is that there is only one delivery mechanism, through the ESMA system, i.e. the current functionalities to provide data access to authorities, are removed. ESMA acknowledges this request, though ESMA cannot take it into account because it would be contrary to the requirement in Article 81(2) EMIR to provide direct and immediate access to data to all the authorities mentioned in Article 81(3) EMIR and not all of them will use ESMA system to access TRs. Notwithstanding this, ESMA will be working with all the relevant authorities in order to streamline their access to data and to reduce the overall costs for TRs and authorities.

2.2.9 Date of application

77. Some of the respondents have requested extended implementation, in light of the updates that they need to make to their systems. Some of the respondents, registered TRs in particular, are proposing to introduce a phased approach to the application of the RTS in order to enable them to better plan the implementation and to allow them testing more extensively internally and with the authorities.

78. ESMA takes note of and agrees with the requests made by the respondents to extend the time for implementation. ESMA thus considers that the date of application of the RTS should be the same as the date of application of the regulatory technical standards to be adopted under Article 9 EMIR. This means that in practice ESMA is adding roughly 3 months compared to the implementation timeframe included in the consultation paper. ESMA understands that this will provide sufficient time for the TRs to adapt their systems to the provisions in the RTS.

3 Annexes

3.1 Annex I

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.

3.2 Annex II

Opinion of Securities and Markets Stakeholder Group

In accordance with Article 10 of Regulation (EU) No 1095/2010 ESMA requested the opinion of the ESMA Securities and Markets Stakeholder Group. The SMSG opted not to comment.

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

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 requested precise estimates from them in the context of public consultation. ESMA expected to gather further information on the cost-benefit analysis of the proposed amendments based on the evidence and feedback received. Nevertheless, ESMA received only one quantitative response regarding the costs to establish sFTP and the cost of implementing an XML template in accordance with the ISO 20022 methodology. The rest of the responses have been much more qualitative and referred to providing the relevant entities more information for the implementation of the proposals and establishing greater timespan for the implementation.

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 TRs. 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.

Based on the above considerations, ESMA understands that the RTS will bring much more benefits, even in the short term, i.e. following the date of application, than the potential costs related to establishing the proposed standardised approach.

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) In order to enable the effective and efficient comparison and aggregation of data across trade repositories, XML format templates and XML messages developed in accordance with ISO 20022 methodology should be used for access to data and for communication between the authorities and the trade repositories. This should not

exclude the possibility that trade repositories and the relevant authorities may agree between themselves to provide access or to communicate using some other format. 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 additional separate 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 in addition to, but never as a substitute for, the use of the XML format templates. However, as a minimum, XML format templates and XML messages based on ISO 20022 methodology must be used for all output reports and exchanges 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 time horizon of execution, reporting and maturity, as well as the business and life-cycle events.

(5) Transaction data for a derivatives contract should include all submissions made to the trade repository in relation to the derivatives contract and also the latest trade state for the derivatives contract. Data concerning the latest trade state of derivatives contracts with open interest is essential for monitoring financial stability and systemic risk. Therefore, the relevant authorities should have access to that data.

(6) 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.

(7) 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.

(8) 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.

(9) The application of the provisions laid down in this Regulation should be deferred in order to facilitate the adaptations of systems by trade repositories to the specifications contained in this Regulation.

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

(11)   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 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, including by the SSH File Transfer Protocol, 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.   In accordance with Articles 2 and 3, a trade repository shall allow the entities listed in Article 81(3) of Regulation (EU) No 648/2012 access to

(a)   all submissions relating to reported derivatives contracts, and

(b)   the latest trade states of reported derivatives contracts that have not matured or which have not been the subject of submissions with action types "E", "C", "P" or "Z" as referred to in field 93 of Commission Implementing Regulation (EU) No 1247/2012 [Note to EC: This field is introduced by the draft implementing technical standards amending Commission Implementing Regulation (EU) No 1247/2012 submitted to the European Commission on 13 November 2015].

5.   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.

6.   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 referred to in the Annex to Commission Delegated Regulation 1247/2012 [Note to EC: These fields are referred as per the draft implementing technical standards amending Commission Implementing Regulation (EU) No 1247/2012 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)   Asset class;

(j)   Product classification;

(k)   Product identification;

(l)   Underlying identification;

(m)   Venue of execution;

(n)   Execution timestamp;

(o)   Maturity date;

(p)   Termination date;

(q)   CCP; and

(r)   Action type.

7.   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 either matured or for which submissions with action types "E", "C", "Z" or "P" as referred to in field 93 of Commission Implementing Regulation (EU) No 1247/2012 [Note to EC: This field is introduced by the draft implementing technical standards amending Commission Implementing Regulation (EU) No 1247/2012 submitted to the European Commission on 13 November 2015] were made less than one year before the date on which the request was submitted, no later than 12:00 Universal Coordinated Time on the

first calendar day following the day on which the specific request to access is submitted; and

(b) For transaction data regarding derivative contracts which have either matured or for which submissions with action types "E", "C", "Z" or "P" as referred to in field 93 of Commission Implementing Regulation (EU) No 1247/2012 [Note to EC: This field is introduced by the draft implementing technical standards amending Commission Implementing Regulation (EU) No 1247/2012 submitted to the European Commission on 13 November 2015] 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.

Where a request relates to derivative contracts falling under sub-paragraphs (a) and (b), the trade repository shall provide the transaction data no later than three working days after the specific request to access is submitted.

8. 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 sixty minutes after the submission of the request.

9. 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 and application

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 [EC to insert date as follows: same date of application as the Delegated Act amending Delegated Regulation (EU) No 148/2013, based on draft Technical Standards submitted by ESMA in November 2015]

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 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, including by the SSH File Transfer Protocol, 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. In accordance with Articles 2 and 3, a trade repository shall allow the entities listed in Article 81(3) of Regulation (EU) No 648/2012 access to

    (a) all submissions relating to reported derivatives contracts, and

    (b) the latest trade states of reported derivatives contracts that have not matured or which have not been the subject of submissions with action types "E", "C", "P" or "Z" as referred to in field 93 of Commission Implementing Regulation (EU) No 1247/2012 [Note to EC: This field is introduced by the draft implementing technical standards amending Commission Implementing Regulation (EU) No 1247/2012 submitted to the European Commission on 13 November 2015]..

5. 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.

6. 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 referred to in the Annex to Commission Delegated Regulation 1247/2012 [Note to EC: These fields are referred as per the draft implementing technical standards amending Commission Implementing Regulation (EU) No 1247/2012 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) Asset class;

   (j) Product classification;

   (k) Product identification;

   (l) Underlying identification;

   (m) Venue of execution;

   (n) Execution timestamp;

   (o) Maturity date;

   (p) Termination date;

   (q) CCP; and

   (r) Action type.

7. 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 either matured or for which submissions with action types "E", "C", "Z" or "P" as referred to in field 93 of Commission Implementing Regulation (EU) No 1247/2012 [Note to EC: This field is introduced by the draft implementing technical standards amending Commission Implementing Regulation (EU) No 1247/2012 submitted to the European Commission on 13 November 2015] were made less than one year before the date on which the request was

submitted, no later than 12:00 Universal Coordinated Time on the first calendar day following the day on which the specific request to access is submitted; and

(b) For transaction data regarding derivative contracts which have either matured or for which submissions with action types "E", "C", "Z" or "P" as referred to in field 93 of Commission Implementing Regulation (EU) No 1247/2012 [Note to EC: This field is introduced by the draft implementing technical standards amending Commission Implementing Regulation (EU) No 1247/2012 submitted to the European Commission on 13 November 2015] 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.

Where a request relates to derivative contracts falling under sub-paragraphs (a) and (b), the trade repository shall provide the transaction data no later than three working days after the specific request to access is submitted.

8. 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 sixty minutes after the submission of the request.

9. 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.