

An assessment of the technical changes to  
implement Post-Trade Transparency draft  
Regulatory Technical Standards (RTS 1 and RTS 2)  
and its impact on the implementation period

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## Background and executive summary

In March 2022, ESMA published draft legislation for changes to post-trade transparency following an industry consultation of a combined review of RTS 1 (equity transparency) and RTS 2 (non-equity transparency)<sup>1</sup>. ESMA published the output of the consultation into two separate reports, each with discrete draft Regulatory Technical Standards:-

- Final Report on the Review of RTS 1 (equity transparency)<sup>2</sup>
- Final Report on the Review of RTS 2 (non-equity transparency)<sup>3</sup>

The legislation in each Final Report is integral to defining how APAs in the EU operate. The technical changes to meet the new regulations will significantly impact APAs, their clients and subscribers who use their services. It affects nearly every component of an APA and its interfaces with clients and subscribers.

APARMA members are concerned about the timeframe for implementation. ESMA has clarified the implementation as being twenty days after publication in the Official Journal for both RTS 1 and RTS 2, and it could be as soon as Q4-2022. There are significant challenges for APARMA members, their clients and subscribers to meet this deadline and, based on APARMA members' analysis, it will typically take twelve months to implement. Furthermore, as expressed in the Final Report, the changes to the regulations are an interim step, with additional changes expected as part of later reviews.

This assessment describes the high-level technical changes required to implement the legislative draft of RTS 1 and RTS 2 and the impact on the implementation period. The paper also provides recommendations for policymakers to consider in order to facilitate a successful market-wide implementation.

Please note that this is a summary of issues raised by APARMA members based on their views of the draft legislation and focuses on the practicalities of implementation rather than the content of the proposals. In addition, APARMA has concerns around some of the proposed changes in the details within RTS 1 and 2 and the consequent impact on transparency and improving data quality. APARMA has outlined those concerns in a separate paper.

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<sup>1</sup> [https://www.esma.europa.eu/sites/default/files/library/esma70-156-4236\\_consultation\\_paper\\_on\\_the\\_review\\_of\\_rts\\_1\\_and\\_2.pdf](https://www.esma.europa.eu/sites/default/files/library/esma70-156-4236_consultation_paper_on_the_review_of_rts_1_and_2.pdf)

<sup>2</sup> [https://www.esma.europa.eu/sites/default/files/library/esma70-156-4944\\_final\\_report\\_-\\_rts\\_1\\_review.pdf](https://www.esma.europa.eu/sites/default/files/library/esma70-156-4944_final_report_-_rts_1_review.pdf)

<sup>3</sup> [https://www.esma.europa.eu/sites/default/files/library/esma70-156-4825\\_final\\_report\\_-\\_rts\\_2\\_review.pdf](https://www.esma.europa.eu/sites/default/files/library/esma70-156-4825_final_report_-_rts_2_review.pdf)

## Legislative timeframe

The Final Reports include draft legislation for changes to RTS 1 and RTS 2, which has started to make its way through the European legislative process with its submission to the European Commission and European Parliament.

There are several steps for the legislation to come into force; however, if it passes as planned, the implementation timetable could be as soon as Q4-2022.

Legislative steps	RTS 1	RTS 2
ESMA published draft revisions of RTS 1 and RTS 2.	28-MAR-22	
Deadline for Commission to accept or amend draft RTS	28-JUN-22 (*)	
Deadline for EP and Council to accept or reject RTS (if adopted by Commission)	SEP-22 (*)	
Legal and language checks of final RTS and translation	Q4-22 (*)	
Publication in the OJ	Q4-22 → Q1-23 (*)	
Entry into force	20 days after publication in the OJ <b>Q4-22</b> → Q1-23 (**)	

(\*) APARMA understands dates may be extended whilst there is an ongoing dialogue between stakeholders.

(\*\*) Although parts of the RTS 2 text were drafted with an implementation date of 1-JAN-24, ESMA has confirmed that this is a drafting error. Both RTS 1 and RTS 2 are due to come into force 20 days after publication in the Official Journal.

## Impact on post-trade reporting draft RTS

Before describing the impact on implementation, it may be helpful to understand the components of a typical APA.

- APAs typically have multiple interface options for investment firms to submit trades to their APA – these could include FIX, CSV, XML file interfaces and web-based GUI for manual trade submission. Any introduction of new flags, new fields or changes to existing specifications requires an upgrade to each interface and the associated client interface technical documentation to help explain the technical changes its users need to make.

FIX protocol is an industry standard widely used by APAs and the user community. The standard adheres to a strict protocol. Any changes to standard fields require industry collaboration within a strict governance structure. For example, changes to FIX standard for MMT took several months to finalise. Similarly, the new third-country trading venue field will require the adoption of new FIX fields, new specifications for CSV, XML schemas interfaces and new UI input.

All the changes to any interface will require development and testing.

- As trades are processed, each field and value is validated against a set of rules determined by the regulations to ensure conformance with the regulations. For example, validation will require development and testing to ensure that only the correct measure(s) of volume are used for the financial instrument or asset class associated with the trade, or validation of valid values submitted for the new Third-Country Trading Venue (TCTV) field. Furthermore, sourcing third-country trading venue data, taking into consideration effective dates and database storage, will require development and testing.
- Each trade is stored within a database schema, driven by the regulations. Changes where new fields are introduced will require database schema changes. These changes require development, testing and considerations for backward compatibility of existing trades submitted.
- Any changes to the user interfaces will require clients to develop against the new interface specification and schedule conformance testing to ensure behaviour is as expected.
- The logic behind an APA to meet the complex deferral regime is equally complex, and any changes to deferral logic require significant testing.
- An APA is responsible for checking for potentially erroneous trades. Changes to specifications will require changes to monitor for erroneous trades.
- An APA's core function is to publish trades via a real-time feed and for free after 15 minutes in a machine-readable format. Any new flags and fields will require changes to the publication specification documentation, the delayed machine-readable download documentation and public web GUI, and the interfaces' development. The

APA will be required to make changes and conduct conformance test to ensure behaviour is as expected.

- APAs provide a summary of trades on a T-7 basis for ESMA to conduct transparency calculations (Quantitative Transparency reports). The logic to generate non-equities (NQU) reports is particularly complex. Whilst the specifications of the ESMA interface may not change, APAs will re-validate correct calculations and will require further clarification from ESMA in order to consider the impact of the new third-country trading venue activity in the EQU and NQU reports.

In summary, although many changes may appear minor, the overall impact is not insignificant as the changes impact nearly every component of the APA stack and will require users to develop for the changes and perform conformance tests.

The summary of the technical impact is described below.

Area of change in scope	High-level technical impact
APA interfaces for firms submitting trades to EU APA (new flags, deleted flags, third-country trading venues, fields names etc.)	<ul style="list-style-type: none"> <li>• New client EU specifications</li> <li>• Update interfaces: FIX, CSV files, XML files, GUI etc.</li> <li>• Validation rules</li> <li>• Database schema changes</li> <li>• Quality Assurance (QA) testing</li> <li>• Conformance testing with clients</li> </ul>
APA interfaces for publishing EU trades (new flags, deleted flags, fields names etc.)	<ul style="list-style-type: none"> <li>• New publication specifications</li> <li>• Update interfaces: FIX, CSV, GUI, Public Web (Delayed), CSV (Delayed)</li> <li>• Quality Assurance (QA) testing</li> <li>• Conformance testing with market data subscribers</li> </ul>
Interfaces to ESMA (new flags, deleted flags, fields names etc.)	<ul style="list-style-type: none"> <li>• Validate calculations for RTS 1 and RTS 2 NQU/EQU files</li> <li>• Update XML schema for RTS 2 NTR files</li> <li>• Commodity derivatives reference data</li> <li>• Underlying interest rate benchmark reference data</li> <li>• Conformance testing with ESMA</li> </ul>

Area of change in scope	High-level technical impact
Changes for reporting investment firms to EU APA	<ul style="list-style-type: none"> <li>• Prioritise in firm's release cycles</li> <li>• Develop new APA EU interface specifications</li> <li>• Submission of third-country trading venue trades</li> <li>• A new measure of volume for non-equities</li> <li>• Missing price logic changes</li> <li>• Removal of concatenation for identifying instruments – source ISIN only for instruments</li> <li>• Schedule conformance testing with APA</li> </ul>
Changes to EU deferrals and new scheduling	<ul style="list-style-type: none"> <li>• Thresholds for deferrals</li> <li>• New scheduling periods</li> </ul>
Erroneous trade checks on EU APA	<ul style="list-style-type: none"> <li>• Accommodate new validations</li> </ul>

The changes are significant in scope and size for APAs and significant for industry participants using APAs. Clients, subscribers, users and OMS/EMS vendors will all need to develop against new specifications and perform conformance tests.

#### Typical implementation timeline

An indicative minimum timeline of twelve months would be required for APAs and industry participants to implement the changes in scope from RTS 1 and RTS 2 based on a detailed analysis of the effort needed to develop and test, as well as allowing users to analyse new APA interfaces specifications, code and schedule conformance testing. The majority of investment firms who are reporting parties have stringent technology release cycles that are typically scheduled well in advance to accommodate development requirements and priorities and typically a lead time of a number of months is required to schedule technical changes.

The timeline below assumes that the final regulations are published in the Official Journal of the European Union on 1-JAN-2023 and includes a three-month testing window for conformance testing with clients, subscribers and OMS/EMS vendors.

ID	Task Name	Indicative duration	2022		2023												2024					
			Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
1	Assume final text published in EU OJ	0w		◆																		
2	RTS 1 and RTS 2 combined implementation	51.4w			▽																	▽
3	Detailed Analysis of final regulations	4w			■																	
4	New RTS 1 & 2	47w			▽																	▽
5	APA Development and testing	30w																				
6	Industry testing window (Reporting firms, Subscribers, ESMA interfaces)	13w																				
7	Production release go live	0w																				◆

### Period to implement

A twenty-day implementation period after publication in the Official Journal is simply not achievable given the scale of the changes.

### Backward compatibility

It is unclear how the regulators expect backward compatibility to handle trades inflight post-implementation. Two scenarios will need to be addressed:-

1. How cancelled or amended trades should be treated for trades submitted pre-implementation.; and
2. Not all trades are fully published on the submission date; for instance, deferrals are published partially or fully after submission. How the deferrals should be published after the implementation date where the trade was submitted before the implementation date.

This is a significantly complex area which needs careful thought and preparation to achieve an effective outcome to avoid creating a detrimental impact on data quality post implementation. APARMA is undertaking a further study specifically focused on backward compatibility and will present findings shortly in a third paper.

### Further proposed changes

As the Final Reports note, the regulatory changes are an interim subset of changes, and additional changes have been set aside for further consideration and implementation after the MiFIR review.

Details of the additional changes to be considered are described in the Appendix. The changes set aside will also touch every APA component covered by these interim changes and will likely be just as extensive, leading to further development and testing for clients, subscribers, users and OMS/EMS vendors.



APARMA would like to encourage policymakers to avoid iterative sets of changes of this nature.

## Alternative proposal

To facilitate a smooth migration and reduce the cost to the industry, APARMA requests policymakers to consider the following alternatives:

- 1) Bring forward the MiFIR review related to topics covered in RTS 1 and RTS 2 and incorporate all the changes subject to further reviews or guidance as described in the Appendix. This will help to facilitate the adoption of the Consolidated Tape in one phase and will reduce unnecessary development and testing duplication.
- 2) Set a realistic implementation period of at least twelve months for RTS 1 and RTS 2 with an implementation date with the preference for a Monday to allow for weekend deployment.

To facilitate a realistic implementation period, APARMA suggests the following drafting of Article 2 in RTS 1 and RTS 2 respectively. The changes for each RTS are highlighted in bold.

### [Suggested draft RTS 1, 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. **This Regulation shall apply on the first Monday following twelve months from publication in the Official Journal.***

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

### [Suggested draft RTS 2, 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. **This Regulation shall apply on the first Monday following twelve months from publication in the Official Journal.***

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

## Appendix

### RTS 1 Items identified in ESMA's Final Report to be covered in further reviews or guidance

#	Paragraph reference	Items highlighted in final report which are to be addressed later	ESMA assessment and next steps
1	105, 107, 111	<p>ESMA's proposal included in the CP aimed at further aligning the practices for disclosing pre-trade information. Precisely, as opposed to post-trade transparency, RTS 1 does not include a specific description of the format of pre-trade transparency information to be disclosed. In practice, this means that trading venues and systematic internalisers have significant discretion to interpret the requirements set out in Table 1 of Annex I.</p> <p>Therefore, ESMA proposed to amend Annex I of RTS 1 by specifying the obligations and harmonising format for the publication of the pre-trade transparency information. To facilitate the consumption and aggregation of pre-trade transparency information published on EU markets, ESMA considered it important that these new requirements should apply to both trading venues and systematic internalisers. To that effect, it was proposed to amend Article 3, Article 9 and Annex I of RTS 1.</p>	<p>ESMA therefore decided not to make concrete proposals regarding the format of pre-trade transparency at this stage. ESMA will reassess its proposals based on the arguments provided by stakeholders replying to the consultation and, also in light of the current reform of MiFIR, might include revised recommendations in the next RTS review, i.e. when reviewing RTS 1 and 2 following the MiFIR review.</p>
2	190, 191, 192, 193	<p>Nevertheless, since the application of MiFID II ESMA has noted that a number of issues with flags persist, thereby undermining the quality and usability of transactions published, in particular for OTC transactions.</p> <p>In view of these observations, ESMA proposed in its CP to review the complete set of flags with the objective of ensuring that flags are applied in a consistent manner across the Union by all market</p>	<p>Bearing in mind the feedback received to the consultation, and to avoid working now on topics that overlap with the discussions at the European institutions on possible amendments to MiFID II and MiFIR (MiFIR Review), ESMA decided to carry out the review of the flags in two steps.</p>

#	Paragraph reference	Items highlighted in final report which are to be addressed later	ESMA assessment and next steps
		<p>participants, thereby delivering meaningful and accurate information about important characteristics of different types of transactions to market participants and regulators. In the CP, ESMA suggested deleting a number of flags, amending certain existing flags and introducing a few additional flags in RTS 1. ESMA also suggested requiring the publication of flags in a prescribed order.</p>	<p>The majority of amendments proposed would only be considered in the second review following the MiFIR review. Nevertheless, feedback from the market has indicated that clarity around non-price forming transactions should be dealt with as a priority. Tackling this issue will also contribute to greater data quality in the context of establishing a CTP. Hence ESMA is covering these changes as well as changes to the accompanying flags in the current report. Furthermore, this report provides an overview on the feedback received to the other proposals included in the CP, which may be included in the second review after the MiFIR review.</p>
3	198, 200, 202	<p>In relation to the systematic internalisers' flags, stakeholders had splits views on whether to delete the flags SIZE, ILQD and RPRI. Several respondents were in favour of ESMA's proposal to streamline the use of flags, as they noted that SIZE and ILQD had no meaningful additional information and could hence be deleted. Some were of the opinion that RPRI would still have some informative and supervisory value.</p> <p>In relation to the agency cross transaction flags, ESMA's proposal was rather controversial, with market participants divided between those who were in favour of the deletion of the ACTX flag and those who did not support the removal.</p>	<p>As also mentioned above, most of the amendments related to flags will be pushed to a second review. This also holds for the potential deletion of existing flags, including the systematic internalisers and agency cross transaction flags. ESMA will further consider the views from stakeholders in its second review of RTS 1.</p>

#	Paragraph reference	Items highlighted in final report which are to be addressed later	ESMA assessment and next steps
4	214, 215	<p>Finally, the proposed deletion of the PRIC flag was proposed in conjunction with a possible addition of new flags for transactions executed on the basis of orders benefitting from the LIS waiver. It was indeed ESMA's understanding that non-price forming transactions (i.e. transactions exempted from the STO through Article 2 of RTS 1) are generally executed either under the waiver set out under Article 4(1)(b)(iii) (i.e. negotiated transactions subject to conditions other than the current market price or NT3) or under an LIS waiver (when used for pre-arranged transactions). The addition of new flags to identify pre-arranged transactions executed under the LIS waiver (NTLS flag in particular, see section 6.3 for further details) would have therefore made the PRIC flag redundant.</p>	<p>As explained below the proposals regarding a possible addition of new flags for pre-arranged transactions executed under the LIS waiver is the next review of RTS 1. It is therefore proposed to maintain the PRIC flag for the moment and re-evaluate its relevance in the next review round.</p>
5	217, 218, 225	<p>In the CP, ESMA proposed to introduce two new equity flags in RTS 1. This would concern one flag related to on-book transactions benefitting from a pre-trade large in scale (LIS) waiver and one for off-book transactions that are pre-arranged and benefit from a LIS waiver (due to order size) but do not benefit from a negotiated trade (NT) waiver. The objective of introducing two dedicated pre-trade LIS waiver flags was to clear out any inconsistencies in the use of the LRGS post-trade flag as a pre-trade flag. Certain market participants had also suggested the off-book flag in particular.</p> <p>For on-book transactions the flag WAIV was proposed for transactions executed on-venue where at least one order benefitted from the LIS waiver. To counter any information leakage for partially filled orders, ESMA had suggested to consider limiting the flag to only completely filled LIS</p>	<p>As also mentioned above, most of the amendments related to flags will be pushed to a second review. This also holds for pre-trade LIS flags. ESMA will further consider the views from stakeholders in its second review of RTS 1.</p>

#	Paragraph reference	Items highlighted in final report which are to be addressed later	ESMA assessment and next steps
		orders. For off-book transactions the flag NTLS was proposed for transactions negotiated OTC but brought onto a venue for final execution.	
6	234, 235, 236, 237	<p>According to these respondents ESMA should consider at least one of the following actions:</p> <ul style="list-style-type: none"> <li>• explicitly including such trades under one of the transaction reporting exemptions (while recognising that RTS 22 is not in scope for this consultation);</li> <li>• introducing a new exemption under Article 13 of RTS 1 that explicitly refers to this type of transaction; or</li> <li>• introducing a new flag to allow the trades to be distinguished from other activity.</li> </ul> <p>In addition to the above, ESMA asked stakeholders in the CP whether they recommended any other amendments, including additions and deletions of flags that would, in particular, aim at better identifying addressable liquidity. Market participants responded to this request providing the following suggestions, which were not necessarily linked to identifying addressable liquidity:</p> <ul style="list-style-type: none"> <li>• the addition of a flag for trades benefitting from OMF waivers in order to allow NCAs and ESMA to conduct a full analysis on the size and type of trading that takes place under each waiver;</li> <li>• the addition of flags necessary to implement the FIX MMT flags standard in order to support a European equity consolidated tape;</li> <li>• the introduction of PNDG and NOAP as trade flags rather than price field value.</li> </ul>	As mentioned above, most of the amendments related to flags will be pushed to a second review. This also holds for the potential addition of new flags, such as those mentioned above.
7	240, 241, 242	Stakeholders expressed mixed views on the proposal to align the order of flags with the current approach in the FIX MMT standard.	As also mentioned above, most of the amendments related to flags will be pushed to a second

#	Paragraph reference	Items highlighted in final report which are to be addressed later	ESMA assessment and next steps
		<p>Many respondents agreed with the logic behind the proposal, especially in light of the development of a CTP but believed that this change would require a significant re-engineering effort across the market data value chain with important costs. They also supported the proposal to prescribe an order but insisted on the importance to be consistent with current market practices, particularly the MMT model. In this context, stakeholders noted that the proposed order appears to be taking some design principles from FIX MMT while making some key structural changes that would render ESMA's proposals incompatible with FIX MMT without substantial changes to the latter.</p> <p>Many stakeholders also expressed strong disagreement with ESMA's proposal as they believed that such provisions would be potentially very disruptive in terms of data structure and data format, without adding value to post-trade transparency quality.</p>	<p>review. This also holds for the potential revision of the order of flags. ESMA will further consider the views from stakeholders and investigate the concerns on any possible inconsistencies with FIX MMT standards in its second review of RTS 1.</p>

## RTS 2 Items identified in ESMA's Final Report to be covered in further reviews or guidance

#	Paragraph reference	Items highlighted in final report which are to be addressed later	ESMA assessment and next steps
1	21-22, 28-29	<p>ESMA proposed in the CP to amend Annex I of RTS 2 by inserting a new table establishing clearer obligations regarding the provision of pre-trade information. The table aimed at providing a harmonised format for the publication pre-trade transparency information and complementing the pre-trade transparency requirements calibrated per trading system as set out in Table 1 of Annex I. The</p>	<p>In view of the feedback received, ESMA considers that there is a need to reflect more on the proposed harmonisation of pre-trade information through RTS 1 and 2, i.e. on whether it is needed and, if yes, on which fields are necessary for different asset classes and on how they should be</p>

#	Paragraph reference	Items highlighted in final report which are to be addressed later	ESMA assessment and next steps
		<p>proposed list for non-equity instruments was longer than the one proposed for equity instruments due to the fact that non-equity financial instruments encompass a much greater variety of instruments, the characteristics of which need to be adequately reflected.</p> <p>In short, it was proposed:</p> <ul style="list-style-type: none"> <li>• to amend Article 2 of RTS 2 to refer to (the new) "Tables 1, 2 and 3 of Annex I"; and</li> <li>• to add a new table to Annex I of RTS 2 with a list of details to be published for the purpose of pre-trade transparency.</li> </ul>	<p>populated. ESMA also took note of the more technical suggestions.</p> <p>ESMA therefore decided not to make concrete proposals regarding the format of pre-trade transparency at this stage and will not add a new table to Annex I of RTS 2. ESMA will reassess its proposals based on the arguments provided by stakeholders replying to the consultation and, also in light of the current reform of MiFIR, might include, if deemed necessary, revised recommendations in the next RTS review, i.e. when reviewing RTS 1 and 2 following the MiFIR review.</p>
2	30	<p>LIS and SSTI thresholds in RTS 2 excluding commodity derivatives</p> <p>ESMA explained in the CP that it however also recognises that in response to the Call for Evidence (CfE) on RTS 1 and 2 several stakeholders asked to revise certain aspects of the methodologies for both LIS and SSTI calibrations in RTS 2, for instance relating to Articles 9, 10, 13 of RTS 2 and Table 6.2 of Annex II of RTS 2.</p>	<p>Therefore, ESMA considered that it could carry out a targeted review of specific issues in a future review of RTS 2. Consequently, ESMA invited stakeholders in its CP to comment on which item would be most pressing to resolve and suitable for a targeted review.</p>
3	34, 35	<p>Some respondents provided more detailed remarks, which varied significantly and did not point to one single threshold to be reviewed. A few comments aligned with the topics that were mentioned in the CP, others were newly introduced issues. The</p>	<p>Based on the variety of comments received, there does not seem to be an urgent need for a specific and targeted recalibration of one particular asset class or threshold. In light of the decision by ESMA to prioritise a first series of</p>

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		<p>comments mirrored those from the CfE and included the following suggestions:</p> <ul style="list-style-type: none"> <li>• establishing a distinction for fixed income products (e.g. sovereigns) based on the size of the market (e.g. smaller country) or liquidity of the bonds traded;</li> <li>• recalibrating LIS thresholds for ETDs in general;</li> <li>• improving the ETD threshold calculations for bond options and stock futures, to be tied more specifically to individual market specifics: (i) for stock futures it was highlighted that trading is concentrated around certain corporate events and that the methodology with ADNA does not appropriately reflect this liquidity pattern; (ii) for bond options, the current methodology does not take into account duration versus trade size;</li> <li>• for non-equity in general, re-calibrating the deferral for package transactions, incorporating trading volumes into pre-trade SSTI and LIS thresholds, re-assessing the thresholds for sub-classes determined not to have a liquid market, and improving the accuracy of liquidity assessments under RTS 2 (re-assess thresholds post-Brexit, add qualitative criteria, remove exemptions for entire asset classes like Foreign Exchange (FX), ensure that off-venue trading activity with systematic internalisers is included);</li> <li>• distinguishing LIS for fixed income products based on the size of market or liquidity (especially for sovereigns);</li> </ul>	<p>proposed amendments (issues that have received broad support from stakeholders and/or are considered important in the context of establishing a CTP), the current report does not include any adjustments to the LIS and SSTI thresholds. Nevertheless, as explained above, the issues that are not further elaborated on here will be included in a subsequent report.</p>



#	Paragraph reference	Items highlighted in final report which are to be addressed later	ESMA assessment and next steps
		<ul style="list-style-type: none"> <li>• for listed derivative sub-asset classes the following calibrations in order of priority:               <ul style="list-style-type: none"> <li>o fixed income options: removing the percentile approach and having the calculation mirror the methodology used for single stock and equity index options;</li> <li>o equity and equity index options: basing the LIS thresholds on on-screen liquidity levels and setting at the greater of a) the sum of the number of active registered market makers multiplied by the minimum market maker quote size obligation and b) a screen liquidity indicator metric</li> </ul> </li> </ul>	
4	73, 93, 94	<p>Proposals in the CP and stakeholders' feedback in relation to the liquidity determination and the LIS and SSTI thresholds</p> <p>In the CP, ESMA made nine proposals related to the review of the liquidity framework for commodity derivatives, emission allowances (EA) and derivatives on emission allowances (DEA). The following paragraphs focus on the most controversial proposals, i.e. (1) the calibration of the average daily number of trades (ADNT); (2) the combination of criteria to be used for the liquidity determination; (3) the methodology to calculate the LIS/SSTI thresholds; and (4) whether pre-arranged transactions should be included in the liquidity assessment and LIS/SSTI calculations.</p>	<p>In ESMA's view, this situation demonstrates that further work is necessary to arrive at a solution which ensures that the modified liquidity framework applicable to commodity derivatives meets the transparency objectives of MiFID II/MiFIR, while taking into account the specificities of this market.</p> <p>To allow time to perform this additional work, the proposals related to the liquidity determination and the LIS and SSTI thresholds applicable to commodity derivatives (proposals 1 to 9 covered under Question 30 of the CP) are postponed until the next review of RTS 2, which will take place in the broader context of the upcoming MiFID review.</p>
5	107, 108	Field "Trading Date and Time" – Table 2 of Annex II of RTS 2	ESMA appreciates the concerns expressed and shares the view that the different granularity of the timestamps does not

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		<p>As far as the field "Trading Date and Time" is concerned, ESMA confirms that no other changes are made on top of a couple of corrections to references to Articles, i.e. Article 3 of Delegated Regulation (EU) 2017/574 is corrected with Article 2 and Article 5 of Delegated Regulation (EU) 2017/590 is corrected with Article 4.</p>	<p>provide the same precision. The different levels of granularity of the timestamps are currently defined on the basis of the type of market participant providing this information and, its capability to grant a certain level of precision. Therefore, in line with the proposal in RTS 1 (Table 3 of Annex I), ESMA proposes to tackle this issue in parallel with the establishment of the CTPs. Indeed, the MiFIR review proposal includes a requirement for ESMA to draft RTS on clock synchronisation for the purpose of the CTP (Article 22a (2) of the amendment MiFIR). Therefore, ESMA will further analyse this issue when developing the RTS.</p>
	<p>117, 118, 120, 121</p>	<p>Fields "Price", "Price currency" and "Price Notation"</p> <p>The "Price", "Price currency" and "Price Notation" fields are extremely relevant for the aggregation of the post-trade reports and might be subject to data quality issues. Therefore, on the basis of the feedback received from the consultation, ESMA proposes a number of clarifications to those fields.</p>	<p>In relation to other instrument types, including among others, interest rate swaps, bonds, FX derivatives, etc. considering the limited feedback received, it is suggested not to propose additional changes to this field at this point of time. ESMA intends to provide further guidance on this via Level 3 measures. This approach would ensure a better analysis of certain reference data fields included already in FIRDS, e.g. fixed rate and floating rate and other data elements that compose the elements of the price information for certain derivatives and could leverage on these fields. Furthermore, it</p>

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			<p>is ESMA intention to provide also more guidance on spreads and yields definitions as requested in the feedback to the consultation. This approach will allow for a smooth implementation of those changes, as well as more targeted feedback by market participants on the appropriateness and feasibility of the requirements;</p> <p>As far as the price currency is concerned, it was suggested by respondents to the consultation to specify how this field should be populated for FX derivatives, i.e. with the numerator currency. ESMA appreciates this feedback and will include it when providing more guidance on the price field for those instruments. Therefore, no additional changes are proposed compared to the CP.</p> <p>The same applies to the field "price notation" where no changes are proposed.</p>
6	122, 123, 124	<p>New field "Strike price" and "strike price notation"</p> <p>Following the suggestions received in the CfE, ESMA proposed to add to the post-trade reports fields for the strike price of options and related notation since, in the price field, the option premium has to be reported.</p>	<p>However, after further assessment, this field appears not strictly necessary. Indeed, instruments for which post-trade transparency reports have to be provided are instruments traded on a trading venue (ToTV). Therefore, for all those instruments reference data has to be provided in FIRDS and the strike price is part of this information. As a result, on the basis of the ISIN, which is</p>

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			<p>provided both in the post-trade transparency reports and in FIRDS, this information could be easily retrieved by market participants. ESMA will provide further clarity on the price information via level 3 guidance to ensure that the strike price will be mandatory for all relevant instruments.</p> <p>Consequently, both the strike price and strike price notation fields are not proposed to be added in the final recommendations included in this report.</p>
7	125-128	<p>5.1.1.3.8 Fields "Notional amount" and "Notional currency"</p> <p>The fields related to the reporting of the notional amount of the contract are of very high relevance for the aggregation of the post-trade reports, for instance under the supplementary deferrals.</p>	<p>In this context, ESMA proposed to further clarify the value that is expected and to align it to the extent possible to Field 20 "Notional" in the CDR (EU) No 148/2013 (RTS supplementing Regulation (EU) No 648/2012 (EMIR)).</p> <p>However, the reporting approach under EMIR might be further modified in light of the proposal made in the Final Report on the Technical standards on reporting, data quality, data access and registration of Trade Repositories under EMIR REFIT (Article 5 page 127). Therefore, it is considered more appropriate not to cross-refer to such RTS at this stage and only provide further clarity on the population of this field for the purpose of post-trade transparency. The</p>

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			<p>instructions on the population of notional amount for derivatives are, in general, kept at a high level with the exception of credit default swaps where the more detailed instructions proposed in the CP are maintained.</p> <p>Furthermore, considering that also this field, will be further analysed in Level 3 guidance together with the price field, the field for the second currency for FX contracts or multi-currency swaps has been removed. Indeed, as in the case of the "strike price" field, the information of the second notional currency should be provided in FIRDS (see Field 42 and 47 of RTS 23). Therefore, further investigation on the provision of this field will be made since it should be already retrievable.</p>
8	177-179	<p>ESMA suggested the addition of the duration of the delivery period as a new segmentation criterion for electricity and natural gas contracts. To capture this attribute, a new reference data field should be added to the reference data table (Table 2 of Annex IV of RTS 2, new field #15a).</p> <p>Stakeholders agreed with the proposal but several suggested that the addition of this new segmentation criterion should not be limited to electricity and gas contracts. Some further suggested to rename the segmentation criterion "contract term" and to standardise the reporting to specific values such as "monthly", "yearly" etc.</p>	<p>This change consists in the creation of a new field (new reference data point, new segmentation criterion). Therefore, it has significant implications on the IT systems both for reporting entities and ESMA. Consistently with the two-step approach explained in the introduction of this report, it will hence be implemented at the same time as the broader review of RTS 2 following the MiFIR review. It has not been integrated in the draft RTS 2 for the purpose of this final report.</p>

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9	180-184	<p>For the energy sub-asset classes, the segmentation criterion 1 is defined in Table 7.1 of Annex III of RTS 2 as follows: Segmentation criterion 1 - energy type: oil, oil distillates, coal, oil light ends, natural gas, electricity, inter-energy.</p> <p>This segmentation criterion is based on the commodity sub-product in RTS 23 (RTS23#36). ESMA highlighted in the CP that the list of energy types in RTS 2 did not include the term "Renewable energy", although "Renewable energy" features on the list of commodity sub-products in RTS 23.</p> <p>ESMA hence suggested in the CP the addition of the value "renewable energy" in RTS 2 to ensure an alignment with RTS 23. Without disagreeing with the proposal, several commented that it was unclear which contracts would be caught under the category "renewable energy" given that, in their opinion, solar power and wind power futures are C10 derivatives.</p> <p>183. ESMA concurs with the stakeholders' feedback that solar power and wind power futures should be classified under C10 because they are derivative contracts relating to climatic variables. However, there could be other types of derivative contracts for which the underlying commodity would be classified as "Renewable energy".</p>	<p>To allow a further assessment of whether this change would be relevant, ESMA suggests not to take the proposal on board for the purpose of this final report, but to reconsider it in the context of the next review of RTS 2.</p>
10	218, 225	<p>Flags (Table 3 of Annex II of RTS 2)</p> <p>Table 2 of Annex II of RTS 2 specifies flags for identifying different types of transactions, thereby aiming at informing market participants and regulators of specific characteristics of transactions.</p>	<p>This final report only contains limited amendments to the list of flags included in the Table 3 of Annex II of RTS 2 (see section on non-price forming transactions) and the main review of the flags for RTS 2 will</p>

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		<p>According to Articles 11(4)(a) and 21(5)(a) of MiFIR the flags aim at providing information on the details of a transactions concluded, including 'distinguishing between those [transactions] determined by factors linked primarily to the valuation of the financial instruments and those determined by other factors'. Furthermore, according to Article 21(5)(b) of MiFIR, ESMA may specify the application of post-trade transparency obligations 'to transactions involving the use of those financial instruments for collateral lending or other purposes where the exchange of financial instruments is determined by factors other than the current market valuation of the financial instrument.'</p>	<p>be included in the second review following the MiFIR review.</p>
11	222, 223	<p>Nevertheless, since the application of MiFID II ESMA has noted that a number of issues with flags persist, thereby undermining the quality and usability of transactions published, in particular for OTC-transactions.</p>	<p>In view of these observations, ESMA proposed in its CP to review the complete set of flags with the objective of ensuring that flags are applied in a consistent manner across the Union by all market participants, thereby delivering meaningful and accurate information about important characteristics of different types of transactions to market participants and regulators. In the CP, ESMA suggested deleting one flag, amending a number of flags and introducing very few additional flags in RTS 2. ESMA also suggested requiring the publication of flags in a prescribed order.</p>
12	224, 225	<p>As with RTS 1, the general topic of providing clarity on non-price forming transactions has been deemed a priority, for its potential to improve data quality in the</p>	<p>This final report only contains limited amendments to the list of flags included in the Table 3 of Annex II of RTS 2 (see section</p>

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		<p>context of establishing a CTP. However, contrary to RTS 1, no changes were deemed necessary for RTS 2 regarding the flagging of non-price forming transactions, as after careful consideration the regime in respect of non-equity was judged appropriate.</p>	<p>on non-price forming transactions) and the main review of the flags for RTS 2 will be included in the second review following the MiFIR review.</p>
13	226, 227, 229	<p>RTS 2 provides for an agency cross transaction flag (ACTX) to be used for OTC-transactions where an investment firm has brought together clients' orders with the purchase and the sale conducted as one transaction and involving the same volume and price.</p> <p>As ESMA illustrated in the CP, the use of the flag is limited to OTC-trading that is not done by systematic internalisers, given that under MiFID II systematic internalisers are not allowed to perform matched principal trading on a regular basis. Moreover, since Article 23(2) of MiFIR requires firms that operate an internal matching system to be authorised as an MTF, the practical use case of the ACTX flag appears limited. Hence ESMA suggested deleting the ACTX flag.</p>	<p>In line with the general approach explained above, ESMA decided to not delete the ACTX flag at this stage and will further consider the views from stakeholders in its second review of RTS 2.</p>
14	230, 231, 234	<p>In view of ESMA's general approach to limit the number of flags in order to streamline the use of flags across market participants and improve the quality of post-trade transparency data, ESMA proposed in the CP to merge the current non-equity deferral flags, i.e. the LIS deferral, the illiquid deferral and the SSTI deferral, into one general deferral flag (DEFR).</p> <p>ESMA noted that it would not seem necessary to distinguish between the three different types of non-equity deferrals. Mainly the information that the publication is deferred would be of importance.</p>	<p>In line with the general approach explained above, ESMA decided to not amend the deferral flags at this stage and will further consider the views from stakeholders in its second review of RTS 2.</p>



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		<p>Moreover, ESMA observed that these deferral flags have been used inconsistently and have often been used to flag transactions executed on the basis of orders that benefitted from a waiver. For ESMA, merging the flags into one clear deferral flag could alleviate such issues. ESMA invited stakeholders to comment on this proposal.</p>	
15	242, 243	<p>ESMA notes that the respondents unanimously agreed to maintain the current NPFT flag. The only issue raised was whether this flag should be complemented by a new flag for portfolio transactions (PORT flag) or, more generally, by a new obligation to flag these portfolio transactions.</p>	<p>ESMA regrets though that the respondents did not provide a tentative definition of these portfolio trades or more examples on specific situations and transactions the proposed PORT flag would need to cover. In the absence of such information, it is difficult for ESMA to establish concrete rules. For this reason, ESMA will not include this suggestion into its final set of proposals. ESMA remains however ready to further look into this proposal should more input be provided by the concerned stakeholders.</p>
16	249, 251	<p>The proposal by ESMA to introduce a general waiver flag for non-equity transactions benefitting from a waiver received limited support. Of those in favour, some respondents nevertheless suggested for the flag not to be limited to partial fills (and hence contrary to the proposal in the CP). Others noted that a new waiver flag should only be introduced if it will be also published by the consolidated tape.</p>	<p>In line with the general approach explained above, ESMA decided to not add pre-trade waiver flags at this stage and will further consider the views from stakeholders in its second review of RTS 2.</p>
17	252, 256	<p>In the CP, ESMA suggested introducing a specific flag for the subset of pre-arranged transactions. While MiFIR does not have specific provisions for negotiated or pre-</p>	<p>In line with the general approach explained above, ESMA decided to not add a pre-arranged transaction flag at</p>

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		<p>arranged transactions for non-equity instruments, it is nevertheless possible to formalise such transactions on a trading venue subject to meeting the conditions for the respective waivers from pre-trade transparency set out in Article 9(1) of MiFIR. This is further clarified by Q&amp;A 11 in the ESMA Q&amp;A on transparency issues<sup>21</sup> on whether pre-arranged or “negotiated” transactions are permitted for transactions in non-equity instruments.</p>	<p>this stage and will further consider the views from stakeholders in its second review of RTS 2.</p>
18	258, 261	<p>Similar to the proposal made in the CP for RTS 1, ESMA suggested prescribing a similar reporting logic for the population of flags in RTS 2. ESMA’s proposal was largely based on the current approach in the FIX MMT standard. However, since ESMA contextually proposed to delete and add certain flags, the proposal illustrated in the CP could not fully match the current FIX MMT approach.</p>	<p>In line with the general approach explained above, ESMA decided to not amend the order of flags at this stage and will further consider the views from stakeholders in its second review of RTS 2. ESMA will also investigate the concerns on any possible inconsistencies with FIX MMT standards in its second review of RTS 2.</p>

## Abbreviations

APA – Approved Publication Arrangement

APARMA – The APA and ARM Association

CONT – Contingent transactions flag

CSV – Comma Separated Values

EMS – Execution Management System

EQU – Equities Quantitative data

ESMA – European Securities and Markets Authority

FIX – Financial Interface Exchange

GUI – Graphical User Interface

MMT – Market Model Typology

NOAP – Not applicable price

NPFT – Non-price forming transactions flag

NQU – Non-equities Quantitative data

NTR – Non-Equity Transparency Reference Data

OJ – Official Journal of the European Union

OMS – Order Management System

PORT – Portfolio trade

PNDG – Pending Price

RTS – Regulatory Technical Standard

TNCP – Transactions not contributing to the price discovery process

XML – Extensible Markup Language

XOFF – Off Exchange

## About APARMA

The APA and ARM Association, [APARMA](http://www.aparma.org), represents common APA and ARM interests on regulations and laws impacting APA and ARM businesses in the EU and UK and the associated supervisory framework to ensure efficient dialogue with regulatory policymakers. APARMA focuses on developing and supporting the adoption of best practices with the common aim of improving industry data quality. APARMA aims to assist authorities and regulators with advice on practicalities related to implementing laws and rules, bearing in mind the practicalities of the data sets involved. Its six founding members are affiliates of Bloomberg, Cboe Europe, Euronext, London Stock Exchange, MarketAxess and Tradeweb Markets. More information can be found at [www.aparma.org](http://www.aparma.org).

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