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# **REPORT ON**

DERIVATIVES

Expert stakeholder group on equity and non-equity market data quality and transmission protocols

**October 2024** 

#### Report on derivatives

October 2024

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## Background of the preparation of this report

The expert stakeholder group on group on equity and non-equity market data quality and transmission protocols (the "DEG") was tasked to provide consensus advice on (i) the quality and the substance of data, (ii) the quality of the transmission protocols (with respect to the Consolidated Tape) as well as (iii) the non-equity deferral regime.

This was very challenging as the working period given to establish the group, collect data inputs, formulate and agree proposals was almost entirely during the summer holiday season in Europe. This was exacerbated by the fact that many experts of the DEG were also involved in the equities and the bond discussions. Furthermore, GDPR issues delayed the DEG rapporteur being provided the contact details of the DEG experts.

## Summary of the applicable derivatives markets

Liquid markets for derivatives and other instruments provides reliable pricing, enables efficient trading, facilitates effective risk management, and ultimately leads to reduced funding costs for investors and for corporations operating in the real economy.

Improved market liquidity will be essential for the broader success of the Savings and Investment Union, making the EU a more attractive environment for investment and capital raising, and supporting economic growth for the Union.

In this context, it is of the utmost importance to remind readers of this report that the Overthe-Counter (OTC) Derivatives market is a principal one rather than an agency one. The liquidity provision in the market is based on the intervention of market makers as liquidity providers ("LPs") to Multilateral Trading Facilities (MTFs)/Organised Trading Facilities (OTFs) or directly as Systematic Internalisers (SIs) for OTC trades. Absent such participants, the "natural" liquidity of the OTC Derivatives market would be very low, and investors' orders would take weeks, if not months, to be absorbed by spontaneous opposite interests from other investors. The calibration of the transparency framework must hence aim at maximizing the level of transparency while protecting market makers against undue risk, which would reduce execution certainty and increase costs for corporates seeking to hedge their risks efficiently.

The calibration exercise must also take into account the impact that the transparency regime will have on the **attractiveness and competitiveness of the EU market**. This is all the more important as, in parallel to the EU review of MiFIR, the UK is redesigning its own transparency framework. The FCA consulted on an amendment to the UK transparency regime at the beginning of 2024 (<u>CP23/32: Improving transparency for bond and derivatives</u> <u>markets (fca.org.uk)</u>). An ill-calibrated EU transparency regime may disadvantage EU trading

venues, incentivise EU market makers and investors alike to execute orders on UK venues and impoverish liquidity and transparency in the EU.

## Scope of the DEG work

Based on (i) the DEG's Creating Act and mandate<sup>1</sup>, (ii) the Rules of Procedure, (iii) the first and  $2^{nd}$  meeting on 16 July 2024 and 25 September 2024, (iv) the presentations given by ESMA, (v) the respective discussions on those days (minutes <u>here</u>), and (vi) the follow-ups between the rapporteur and ESMA, the group focussed their main efforts on:

- 1) deferrals for derivatives;
- 2) Consolidated Tape input/output data quality and transmission protocols.

## Findings of the DEG

## 1. Maintain supplementary/extended deferrals for derivatives (RTS 2 Article 11) during transition (RTS 2 updates for bonds and RTS 2 update for derivatives)

As part of the review of RTS 2 in a phased approach (i.e., bonds first and derivatives a few months after) there is a need to keep the current regime of supplementary/extended deferrals to work between the moment the "new RTS 2 for Bonds" enters into force and the moment the "new RTS 2 for bonds and for derivatives" enters into force. There is no interest for the market and from any stakeholder to jump from supplementary deferrals to a default T+2 without any prior reflection, analysis, consultation and industry feedback.

ESMA is aware of the subject and is looking into possible solutions.

## 2. The RTS 2 Scope and its impact on the deferrals regime for OTC derivatives need to be clarified

When considering deferrals, it is important to consider the scope of transactions that are included in the EU's MiFIR Post-Trade Transparency (PTT) regime. The new PTT regime applies to derivatives instruments that demonstrate a sufficiently elevated level of liquidity according to the level 1 text. The Level 1 provides a prescriptive scope of liquid transactions, e.g., for interest rate derivative transactions, the scope is limited to derivatives of specific

<sup>&</sup>lt;sup>1</sup> <u>Commission Decision of 26.2.2024 setting up the Expert stakeholder group on equity and non-equity market data quality</u> <u>and transmission protocols</u>

whole year tenors<sup>2</sup> that are subject to the clearing obligation and cleared. At first glance it would appear that it is clear that the new Level 1 refers to vanilla spot starting fixed vs. floating interest rate swaps only.

However, this is not currently entirely clear. Below we consider the following products.

- a) Forward-starting swaps
- b) Only Fixed/Float Swaps are in-scope
  - i. FRAs are out of scope
  - ii. Basis swaps are out of scope
- c) Fixed vs. Floating IMM swaps are in-scope
- d) Non-standard swaps
- e) Index CDS containing a GSIB reference entity
- f) Securitized Derivatives

#### a) Forward-starting swaps

The new PTT scope applies to derivatives instruments that demonstrate a sufficiently elevated level of liquidity that reporting of their price to the market will be truly representative of the level at which those instruments are trading. For example, the scoping-out of contracts involving counterparties that are exempt from the clearing obligation removes contracts that would be priced differently to those involving counterparties that are within scope of the clearing obligation, because of the different counterparty risk profile of those contracts.

Recital 8 of the MiFIR reform states that 'only interest rate derivatives with the most standardised and liquid currency and tenor combinations should fall within the scope of the transparency requirements.'

Forward starting interest rate swaps are less liquid than the regular spot starting swaps. E.g. a 5 year forward-starting interest rate swap with a 5-year tenor denominated in any of

<sup>&</sup>lt;sup>2</sup> For an explanation of how to distinguish full tenors from broken tenors in a dataset, please refer to Annex 5.

the G4 currencies is considerably less liquid than a spot starting 5-year interest rate swap in any of the G4 currencies.

We therefore believe that forward-starting interest rate swaps fall out of the scope of the PTT regime at present. However, should they be considered in scope of the PTT regime, forward starting swaps will need appropriate treatment. There would be three possible ways to approach this:

- i. give forward starting swaps lower thresholds and longer deferrals in general;
- ii. consider each possible combination of X-year forward starting swaps with Yyear tenor and define size thresholds and deferrals for each, which would be unduly complex and time-consuming for ESMA and firms to implement, impacting costs and data quality; or
- iii. consider an approach where the forward starting swap is treated as the less liquid of its "two component parts".

To explain point (iii), when considering forward starting swaps, consider a firm buying (paying fixed) on, for example, a 2-year forward starting 8yr fixed/floating interest rate swap. In effective the buyer is obtaining a package, i.e., the buyer is buying a 10-year swap and selling a 2-year swap, leaving him with exposure from years 2-10. However, rather than executing this as a package of two vanilla trades, it is executed as a single forward starting swap.

One could assess the liquidity of the forward starting swap by treating it as the less liquid of its "two component parts" or, for simplicity, one could treat the forward starting swap as the full length of the swap from trade date to termination date, rather than from the effective date to the termination date, as one is exposed to the risk for the whole time period not just the part with active swaps payments being made, effectively using the "longest swap" for liquidity purposes. Therefore:

- a 1yr 4yr is treated as a 5yr rather than a 4yr for deferrals
- a 3yr 3yr is treated as a 6yr rather than a 3yr for deferrals
- a 2yr 6yr is treated as an 8yr rather than a 6yr for deferrals
- a 3yr 7yr is treated as a 10yr rather than a 7yr for deferrals
- 10yr 30yr is treated as a 40-year and is thus out of scope of PTT.

The longer swap will generally be the less liquid of the two swaps, but as shown in the cases above marked with an asterisk this will not always be the case (the 5yr is more liquid than

the 4yr, and the 10yr is more liquid than both the 7yr). Therefore, it becomes a balance between simplicity and absolute calibration.

#### b) Only Fixed/Float Swaps and Fixed/Float IMM Swaps are in-scope

In the Interest Rate derivatives asset class, only Spot-starting Fixed-Float Swaps and Fixed-Float International Monetary Market (IMM) Swaps that are subject to the clearing obligation, are cleared and that are one of the whole year tenors listed in Article 8a(2) MiFIR are in scope of post-trade transparency in the new MiFIR.

While the clearing obligation for Interest Rate derivatives is broader than this product set, we observe that recital 10 of the MiFIR reform also links application of trade transparency requirements to 'the most standardised and liquid currency and tenor combinations.'

In this context, we observe that, regarding other Interest Rate derivatives products that are subject to the clearing obligation:

i. Forward Rate Agreements (FRAs) are out of scope:

There is no economic rationale for FRAs on risk-free rates. Hence there are no trades in FRAs for EuroSTR, SONIA, TONA, and SOFR as demonstrated by the Osttra MarkitWire data for global volumes in H1 2024 in Table 1 below.

#### Table 1:

Trade Count	EURIBOR	EuroSTR	SONIA	TONA	SOFR
FRAs	*	0	0	0	0

Source: Osttra's MarkitWire - All FRAs traded GLOBALLY for Q1 & Q2 2024

While there are trades in EURIBOR FRAs, these trades are:

- Almost entirely administrative non-price forming transactions resulting from post trade risk reduction ("PTRR") activities, which will no longer be subject to the PTT regime under MiFIR, as publication of details of these trades would give a misleading impression of liquidity and price to the market, and
- 2) FRAs are very short dated, typically < 1yr and rarely exceeding 18 months. Therefore, of the tenors specified in the level 1 MiFIR text, only the 1-year EUR-denominated FRA trades at all, and this is in very low volumes, as evidenced by the ISDA Data in Annex 2, which shows only 110 1yr FRAs were made public in the EU in the first half of 2024, despite the fact that the current PTT regime includes PTRR transactions.</p>

Therefore, we observe that a PTT regime including FRAs is inappropriate. EMIR reporting of these trades should exclusively facilitate regulatory oversight. Were an EU PTT regime implemented for FRAs, there would be no FRA trades reported except for 1yr EURIBOR FRAs, where there would likely be one or two transactions reported per month. We observe that this cannot reasonably meet the intent of Recital 8 of the MiFIR reform.

ii. Basis Swaps are out of scope:

Basis swaps are generally illiquid and are illiquid at all the tenor points listed in MiFIR Article 8a. However, should they be considered in scope of the PTT regime, basis swaps will need appropriate treatment with lower thresholds and longer deferrals to avoid creating undue risk for the users of these products.

Looking at the *global* single currency basis swaps volumes, the Osttra MarkitWire data for global volumes in H1 2024 shows there is no volume in SONIA, due to GBP being a single rate currency, and there is very limited volume in other indices compared to the equivalent single currency fixed versus floating swaps. The data in Table 2 below is shown both for all tenor points and separately for just those listed in the new MiFIR PTT regime.

Table 2:

Trade Count	EURIBOR	EuroSTR	SONIA	TONA	SOFR
Fixed vs. Floating (IRS or OIS template combined)	141,780	125,803	136,369	99,795	401,699
Basis Swaps <b>(All tenors)</b> (Floating vs. Floating)	942	210	0	53	3034
Basis Swaps <b>(On new MiFIR</b> <b>tenors)</b> (Floating vs. Floating)	855	160	0	41	1863

Source: Osttra's MarkitWire - All single currency basis swaps traded GLOBALLY for Q1 & Q2 2024

However, there is no economic rationale for a single currency basis swap between an RFR and the same RFR. Therefore, there are no trades in EuroSTR vs EuroSTR, SONIA vs SONIA, TONA vs TONA, nor SOFR vs SOFR.

The SOFR basis swaps are mostly versus Fed Funds, which is not an in-scope index for MiFIR PTT regime. Similarly, the TONA basis swaps are versus other out of scope JPY indices.

Therefore, the only single currency basis swaps that could possibly be in the scope of the new MiFIR are

1) EURIBOR versus EuroSTR, and

- 2) EURIBOR versus EURIBOR for differing tenors, including
  - EURIBOR 1m versus EURIBOR 3m
  - EURIBOR 1m versus EURIBOR 6m
  - EURIBOR 1m versus EURIBOR 12m
  - EURIBOR 3m versus EURIBOR 6m
  - EURIBOR 3m versus EURIBOR 12m
  - EURIBOR 6m versus EURIBOR 12m

There are a very small number of single currency basis swaps in any of the above combinations globally, especially at the new MiFIR tenors. Applying the new MiFIR tenors to the current PTT data, the ISDA Data in Annex 2 shows that across the 55 possible combinations of basis swaps in scope (5 indices multiplied by 11 tenors) only 6 buckets had any trades that were made public in the EU in the first half of 2024. Each of those buckets had only one trade reported in the whole of the first half of 2024.

- EURIBOR 1yr 1 trade made public in the EU in the first half of 2024
- EURIBOR 3yr 1 trade made public in the EU in the first half of 2024
- EuroSTR 1yr 1 trade made public in the EU in the first half of 2024
- SOFR 2yr 1 trade made public in the EU in the first half of 2024
- SOFR 12yr 1 trade made public in the EU in the first half of 2024
- SOFR 25yr 1 trade made public in the EU in the first half of 2024

Half of those 6 trades are on SOFR and as such would not be in scope, as they are versus another USD index that is not in scope of the new MiFIR PTT regime.

Therefore, we observe that a PTT regime including single currency basis swaps is inappropriate. EMIR reporting of these trades should exclusively facilitate regulatory oversight. Were a PTT regime to be implemented for single currency basis swaps, there would likely be less than ten trades per annum reported in across all the 55 possible tenor/index combinations of single currency basis swaps which cannot reasonably meet the intent of Recital 8 of the MiFIR reform.

However, should they be considered in scope of the PTT regime, basis swaps will need appropriate treatment with lower thresholds and longer deferrals to avoid creating undue risk for the users of these products.

#### c) Fixed versus Floating IMM Swaps

IMM swaps are also considerably less liquid than Fixed/Float swaps. If these products are deemed in-scope, it is important that they are subject to a realistic deferral regime. This is demonstrated by the Osttra MarkitWire data for global volumes in Q2 & Q3 2023 for global swaps volumes. Table 3 below shows the percentage of total swaps that are IMM swaps.

#### <u>Table 3</u>:

	EURIBOR	EuroSTR	SONIA	TONA	SOFR
IMM % by trade count	5.69%	1.34%	3.17%	7.46%	3.21%
IMM % by notional volume	12.12%	1.16%	1.39%	4.06%	5.54%

Source: Osttra's MarkitWire - All Fixed versus Floating Interest Rate Swaps traded GLOBALLY for Q2 & Q3 2023

The DEG considered separate treatment for IMM swaps but concluded that they should have the same treatment as standard swaps for simplicity, as additional complexity comes at a cost. However, it is noted that, should the timelines for standard swaps be significantly tighter than proposed in this advice, then IMM swaps would need separate specific treatment to avoid creating undue risk for the users of these products.

#### d) Non-standard Swaps

Non-standard swaps are illiquid at all the tenor points listed in MiFIR Article 8a(2). However, should they be considered in scope of the PTT regime, non-standard swaps will need to be flagged appropriately and be given appropriate treatment with lower thresholds and longer deferrals.

The DEG understands that the EC will publish a delegated regulation specifying OTC derivatives identifying reference data to be used for the purposes of MiFIR transparency requirements. It is anticipated that there will be a table specifying the standard values for each index for approximately 11 fields which may include fields such as Business Day Adjustment Convention, Fixed Day Count Convention, Fixed Payment Frequency, Floating Day Count Convention, Floating Payment Frequency, Fixing Lag, Fixing Calendar, Additional Payments, Roll Convention, and Effective Date Offset.

It is noted that the current EU PTT regime only includes the upfront fee (Additional Payment) from these 11 fields. The Propellant Digital data in Annex 3 shows that there is no trade activity with upfront fees in EuroSTR, SONIA, SOFR and TONA in H1 2024.

Osttra has previously looked into some of the potential fields using the global MarkitWire data and it appears that, for each of the potential fields, the standard values are used in the vast majority of cases for each of the five in scope indices. However, given that the fields in the delegated regulation are not yet finalised, it would not be appropriate to publish data at this time. Once the fields are published, the DEG could seek to obtain the applicable data for the global swaps market and consider what percentage of trades would be considered non-standard to help determine the appropriate treatment for non-standard trades. There does not appear to be an available source for EU specific data on these fields at this time.

#### e) Index CDS containing a GSIB reference entity

We observe that Article 8a(2)(c) MiFIR is intended to capture the iTraxx Senior financials and iTraxx sub-ordinates financials contracts only. It would appear disproportionate to require post-trade transparency under MiFIR for any Credit Default Swaps (CDS) referring to an index of which a Global Systemically Important Bank (GSIB) is a constituent reference entity.

Apart from the index CDS contracts that are subject to the EU clearing obligation, the iTraxx financials index contracts are by far the most actively traded and liquid among index CDS contracts including one or more GSIB reference entities.

A data exercise undertaken by ISDA using Depository Trust and Clearing Corporation (DTCC) Trade Information Warehouse (TIW) data from 2021 showed that 'on-the-run' iTraxx Senior financials index traded on average 41 times per day at that time (suggesting that it could sustain some level of price transparency (subject to current RTS 2 deferral arrangements, pending amendment of RTS 2 to apply new appropriately calibrated deferrals)).

We acknowledge that the regulatory interest in CDS referring to GSIB reference entities (following market events in Spring 2023) would be served by inclusion of the iTraxx Senior financials and iTraxx subordinates financials contracts in-scope (albeit that EMIR reporting and MiFIR transaction reporting should also provide regulators with this data, and that PTT is intended for consumption by market participants). However, the inclusion of relatively illiquid index contracts containing only one or a handful of GSIB reference entities in the scope of MiFIR PTT would be disproportionate. It would also add little to market (or regulatory) understanding of market developments, given that contracts on GSIB reference entities would represent such a minor component of the value of such contracts.

The DEG is also of the view that only the 'on-the-run' iTraxx Senior financials and iTraxx sub-ordinates financials contracts should be subject to PTT, as these contracts display much more liquidity than when 'off-the-run.'

It would furthermore seem a strange outcome if the 'off-the-run' iTraxx Senior financials and iTraxx sub-ordinate contracts were viewed as in-scope of trade transparency when the 'off-the-run' versions of the clearing-obligated iTraxx Europe Main and iTraxx Europe Crossover are not.

Regulators can obtain access to trade information pertaining to these contracts through EMIR reporting and MiFIR transaction reporting.

#### f) Securitized derivatives

Securitised derivatives are also not subject to the clearing obligation, and as such we have not considered them as part of the new MiFIR PTT regime.

The MiFIR Review took a different approach to the definition of the scope of OTC derivatives transparency to that taken under the previous MiFIR regime (MiFIR 1). While MiFIR 1 focused on OTC derivatives that were 'traded on a trading venue', the MiFIR Review instead prescribed a limited set of the most liquid, high-volume derivatives (with the only exception to this approach being the inclusion in the scope of the transparency regime of Single Name CDS referring to GSIBs). While the scope of OTC derivatives in MiFIR 1 was broad, securitized derivatives were addressed as an afterthought, first being explicitly addressed in RTS 2, when they were categorised as 'transferable securities'.

Given the prescriptive scoping of OTC derivatives transparency under the MiFIR Review, we believe it is reasonable to take the view that the co-legislators did not intend that securitised derivatives should be included in-scope of trade transparency under the revised MiFIR.

We also observe that securitized derivatives are illiquid (as is underlined by securitised derivatives having been deemed illiquid under RTS 2), which would suggest that – unless they are explicitly named as in-scope of trade transparency (as is the case of SN CDS referring to GSIBs) – they should be out of scope of PTT.

## 3. RTS 2 – deferrals for OTC derivatives

The DEG has the following recommendations for PTT and deferrals:

#### a. OTC interest rate derivatives

For each *Index* and *tenor* combination of *fixed versus floating* single currency interest rate swaps:

- Where there are greater than X trades per day Reporting is **Real-time** where the size is below the threshold and deferred to **End Of Day (EOD)** where the size is greater than the threshold.
- Where there are less than X trades per day Reporting is deferred to **EOD** where the size is below the threshold and deferred to **T+1** where the size is greater than the threshold.

X should be set by ESMA at a number between 4 and 15 trades per day, depending on the EC / ESMA's view on sufficient liquidity. The value chosen will have the following impact based on H1 2024 data in the current EU transparency regime.

- 15 trades per day would capture all EURIBOR tenors, 1 yr, 5 yr in EuroSTR in real-time, other index / tenor combinations would be subject to deferral.
- 10 trades per day would capture all EURIBOR MiFIR level 1 tenors, and 1 yr, 2 yr, 5 yr, 10 yr in EuroSTR, and 2 yr, 5 yr, 10 yr SOFR in real-time, other index / tenor combinations would be subject to deferral.

NB: 10 trades per day was previously referenced by ESMA as a criterion.

- 5 trades per day would additionally capture 30 yr EuroSTR in real-time, other index / tenor combinations would be subject to deferral.
- 4 trades per day would additionally capture 30 yr SOFR in real-time, other index / tenor combinations would be subject to deferral.

The threshold should be determined with reference to the 67<sup>th</sup> percentile for standard swaps.

The average daily volume (ADV) is an additional appropriate indicator of liquidity levels because it represents a measure of how much trading occurs in a given instrument across the market as a whole. In other words, the lower the ADV, the lower the liquidity of the product. When selecting the appropriate threshold, ADV should be considered to ensure there is sufficient time for a market maker to trade out of (hedge) a position avoiding undue risk.

There should be a cap applied at the 90th percentile. The group agreed to a cap subject to the size being uncapped at 3 months.

There is a lot less trading in IMM compared to standard rolls, but the product is highly standardised.

	EURIBOR	EuroSTR	SONIA	TONA	SOFR
IMM % by trade count	5.69%	1.34%	3.17%	7.46%	3.21%
IMM % by notional volume	12.12%	1.16%	1.39%	4.06%	5.54%

Source: Osttra's MarkitWire - All Fixed versus Floating Interest Rate Swaps traded GLOBALLY for Q2 & Q3 2023

However, it was agreed that IMM could have the same treatment as standard swaps for simplicity.

Given the lower liquidity of non-standard swaps, the DEG recommends that the non-standard threshold be set at the 50<sup>th</sup> percentile.

For each *Index* and *tenor* combination of *fixed versus floating* single currency non-standard swaps

- Reporting is **EOD\*** where the size is below the below threshold, and
- Reporting is deferred to **T+2** where the size is greater than the threshold.

\*If the same threshold were to be used for non-standard swaps as standard swaps, then the reporting should be T+1 rather than EOD for non-standard trades where the size is below the threshold.

It was noted by the DEG that:

- SEF liquidity is accessible by many EU firms;
- EU banks don't have access to UK venues;
- The buckets that meet the # trades per day criteria and the criteria itself should be reviewed annually.

#### b. OTC Credit Derivatives

The group briefly discussed deferrals for Credit derivatives. Given the timeframes available, it was optimal to review some previous analysis that the rapporteur had access to from 2021 that had been conducted by industry on the DTCC data.

The objective of that data analysis was to provide data on liquidity of CDS, including singlename CDS and index CDS, and propose an example of an appropriate PTT deferrals framework based on liquidity profiles and transaction sizes. The framework balances between (1) the number of different categories to ensure that transactions within those categories are sufficiently homogonous, and (2) simplicity of implementation.

The ADV is an appropriate indicator of liquidity levels because it represents a measure of how much trading occurs in a given instrument across the market in an average day.

#### i. Single-name CDS

The DTCC Trade Information Warehouse (TIW) data provides weekly global transaction activity for single-name CDS. Data for the period from January 1, 2021, to December 31, 2021 was used (see below for more details on the Methodology). Total traded notional and transaction count for the period was approximately \$2.0 trillion and 371.000, respectively. The data set covered 845 reference entities.

#### Liquidity categories

To access liquidity of single-name CDS, various ADV categories were previously analysed. The analysis took into consideration traded notional/the number of reference entities covered by each category as well as the length of time expected to take for the average trade size in each bucket to be unwound from a risk perspective (the 'trade out time').

For simplicity, one ADV threshold that separates single-name CDS in two liquidity categories ('liquid' and 'not-liquid') was used. The analysis demonstrated that for two categories, an ADV threshold at **\$3 million** represents an optimal balance between the length of the implied deferral periods and the instruments captured in each such category.

#### Table 1

ADV Categories	Total Traded Notional (US\$ billions)	Total Transaction Count	ADV (US\$ millions)	Average Daily Trade Count	Average Trade Size (US\$ millions)	Trade out Period (Average Trade Size/ADV)	Number of Issuers
ADV < \$3M	81.4	23,088	0.8	0.2	3.5	4.299	397
ADV ≥ \$3M	1,908.9	347,819	17.0	3.1	5.5	0.322	448
Total	1,990.3	370,907	9.4	1.8	5.4	0.570	845

ADV Categories	Total Traded Notional	Total Transaction Count	Number of Issuers
ADV < \$3M	4.1%	6.2%	47.0%
ADV ≥ \$3M	95.9%	93.8%	53.0%
Total	100.0%	100.0%	100.0%

As shown in Table 1, setting the liquidity threshold at an ADV level of \$3 million would mean:

- That there would be an average of 3.1 trades per day in the single-name CDS instruments covered;
- That 95.9% of total traded notional would be captured as liquid;
- That 93.8% of transactions would be captured;
- That 53% of reference entities referenced in single-name CDS contracts would be captured by the liquidity threshold.

Setting the ADV threshold at a lower level (for example, \$1 million), would lead to some single-name CDS instruments with a higher ADV being inaccurately labelled as 'liquid' and imply longer deferral periods for the 'not liquid' category (as shown in the Table 2 below for the 'trade-out period' for instruments in  $a \le $1$  million ADV category).

On the other hand, setting the ADV threshold at the higher level (for example, \$5 million), would result in a higher percentage of traded single-name CDS instruments being viewed as 'not liquid', and this would skew the indicated 'trade-out period' lower, which would lead to inaccurate deferral periods for a large portion of illiquid instruments.

While very long deferral periods are implied by instruments with a very low average trade count, average trade size/ADV at such low trade count becomes less of an accurate indicator for the time it would take to trade out of a position. Therefore, such a long deferral period may not be required.

#### Table 2

ADV Categories	Т	otal Traded Notional (US\$ billions)	Total Transaction Count	ADV (US\$ millions)	Average Daily Trade Count	Average Trade Size (US\$ millions)	Trade out Period (Average Trade Size/ADV)	Number of Issuers
ADV < \$1M		20.7	5,456	0.3	0.1	3.8	12.188	266
ADV ≥ \$1M		1,969.5	365,451	13.6	2.5	5.4	0.396	579
Total		1,990.3	370,907	9.4	1.8	5.4	0.570	845

ADV Categories	Total Traded Notional	Total Transaction Count	Number of Issuers
ADV < \$1M	1.0%	1.5%	31.5%
ADV ≥ \$1M	99.0%	98.5%	68.5%
Total	100.0%	100.0%	100.0%

ADV Categories	То	tal Traded Notional (US\$ billions)	Total Transaction Count	ADV (US\$ millions)	Average Daily Trade Count	Average Trade Size (US\$ millions)	Trade out Period (Average Trade Size/ADV)	Number of Issuers
ADV < \$5M		169.0	47,896	1.4	0.4	3.5	2.542	487
ADV ≥ \$5M		1,821.3	323,011	20.3	3.6	5.6	0.277	358
Total		1,990.3	370,907	9.4	1.8	5.4	0.570	845

ADV Catagorias	Total Traded National	<b>Total Transaction</b>	Number of
ADV Categories		Count	Issuers
ADV < \$5M	8.5%	12.9%	57.6%
ADV ≥ \$5M	91.5%	87.1%	42.4%
Total	100.0%	100.0%	100.0%

#### Deferral categories

Most trading in single-name CDS occurs in the *current* five-year benchmark tenor (the 'on-the-run' contract)<sup>3</sup> – these benchmark tenor instruments are considerably more liquid than CDS with non-five-year tenors, or off-the-run 5Y tenors. It is therefore proposed to differentiate deferral categories between five-year (5Y) and non-5Y contracts in each of the liquidity categories described above.

The analysis shows that 5Y single-name CDS with ADV of more than \$3 million represent the most liquid category among single-name CDS, while non-5Y single-name CDS with ADV below \$3 million are illiquid.

Based on the DTCC data, the analysis estimated that single-name CDS transactions with 5Y tenor represent approximately 50% of traded notional and ADV. Therefore, in 2021, transactions with non-5Y tenor account for the remaining 50%. Given that there are approximately ten different tenor points in non-5Y category, each of those tenor points will have an ADV of approximately one-tenth of the total non-5Y ADV. As the result, the implied trade out period for non-5Y transactions (as shown in Table 3 below) is about 10x longer compared with 5Y benchmark tenor transactions.

<sup>&</sup>lt;sup>3</sup> The market treats a 5-year 'on-the-run' CDS as any maturity from 5.25 to 4.75 years – the market moves to a new 'onthe-run' contract every 6-months (on each 20th March and September). E.g. on 10th August 2022, the current 'on-therun' 5-year Index CDS contract will mature on 20th June 2027, then on 20th September 2022, firms will switch to trading contacts maturing on 20th December 2027 and this will remain the 5-year 'on-the-run' contract until 20 March 2023, at which point firms will switch to trading contracts maturing on 20th June 2023. Therefore, on the 20th September 2022, the current 5-year 'on-the-run' Index CDS will have a time to maturity of 5.25 years.

#### Table 3

ADV and Tenor Categories	ADV (US\$ millions)	Average Daily Trade Count	Average Trade Size (US\$ millions)	Trade out Period (Average Trade Size/ADV)	Trade out Period (\$3M/ADV)	Trade out Period (\$5M/ADV)	Trade out Period (\$10M/ADV)
< \$3M	0.8	0.2	3.5	4.299	3.656	6.093	12.187
5Y Tenor	0.4	0.1	3.5	8.819	7.500	12.500	25.000
Non-5Y Tenor	0.04	0.1	3.5	88.186	75.000	125.000	250.000
≥ \$3M	17.0	3.1	5.5	0.322	0.176	0.293	0.587
5Y Tenor	8.5	1.9	5.5	0.644	0.352	0.587	1.173
Non-5Y Tenor	0.9	1.2	5.5	6.440	3.520	5.867	11.735

Based on the analysis, the proposal in Table 4 below could represent an appropriate framework for price and size deferrals categories for single-name CDS traded in the EU.

Category	Description	Price Deferral	Size Deferral	
Category 1	5Y single-name CDS with ADV more than \$3 million	1 day	1 day for transactions with notional below \$3 million. 1 week for transactions with notional above \$3 million and below \$50 million.	Transactions with notional below \$3 million are reported with an actual transaction size in one day. Transactions with notional \$3 million and above are initially reported as "\$3 million +". Actual notional is reported in 1 week. Transactions with a notional \$50 million and above are reported as "50 million+" in 1 week and actual notional is never disclosed.
Category 2	Non-5Y single- name CDS with ADV more than \$3 million	1 week	1 week for trades below \$3 million 2 weeks for trades above \$3 million and below \$50 million	Transactions with a notional below \$3 million are reported with an actual transaction size in one week. Transactions with a notional \$3 million and above are initially reported as "\$3 million +". Actual notional is reported in 2 weeks. Transactions with a notional \$50 million and above are reported as "50 million+" in 2 weeks and actual notional is never disclosed.

#### Table 4: Proposal for a single-name CDS transparency framework

Category 3	5Y single-name CDS with ADV less than \$3 million	1 week	1 week for trades below \$3 million 4 weeks for trades above \$3 million and below \$50 million	Transactions with a notional below \$3 million are reported with an actual transaction size in one week. Transactions with a notional \$3 million and above are initially reported as "\$3 million +". Actual notional is reported in 4 weeks. Transactions with a notional \$50 million and above are reported as "50 million+" in 4 weeks and actual notional is never disclosed.
Category 4	Non-5Y single- name CDS with ADV less than \$3 million	4 weeks	4 weeks for all trades below \$50 million	All transactions with a notional below \$50 million are reported with an actual transaction size in 4 weeks. Transactions with a notional \$50 million and above are reported as "50 million+" in 4 weeks and actual notional is never disclosed.

#### Note:

In the right-hand column of Table 4 above, for every proposed category, a 'volume cap' is proposed for very large trades (of \$50 notional). As with rates disclosing the size of such larger than normal trade sizes could expose liquidity providers to 'undue risk' (the risk that liquidity providers' risk positions will be exposed, and that opportunistic traders will use this information to take positions at the liquidity provider's expense) – note that this risk will be exacerbated the further above than \$50 million threshold the trade size is. In this case, it should suffice to indicate that a trade of notional volume \$50 million or above has been executed. As with rates this could then be uncapped at 3-months, as time will have eroded the risk of causing undue risk.

#### ii. Index CDS

The DTCC TIW data provides weekly global transaction activity for index CDS. Data for the period from January 1, 2021, to December 31, 2021, was used (see below for more details on the methodology).

Total traded notional and transaction count for the period was approximately \$25.5 trillion and 557,000, respectively.

Six core CDS indices (CDX.NA.HY, CDX.NA.IG, ITRAXX EUROPE, ITRAXX EUROPE CROSSOVER, ITRAXX EUROPE SENIOR FINANCIALS, CDX.EM), were analysed which accounted for about 98% of total index CDS traded notional.

The analysis showed index CDS are significantly more liquid compared to single-name CDS (based on ADV and average daily trade count metrics). Within index CDS, 'on-the-run' index series are more liquid compared to 'off-the run' series. An index series is considered 'on-the-run' if it is the latest series and version of that index on a given date. Note that 'off-the-run' index CDS includes multiple series, therefore, the liquidity in each 'off-the-run' series will be lower that the data in the below Table 5 indicates.

#### Table 5

All Index CDS	Total Traded Notional (US\$ billions)	Total Transaction Count	ADV (US\$ billions)	Average Daily Trade Count	Average Trade Size (US\$ billions)	Trade out Period (Average Trade Size/ADV)
CDX.NA.HY	2,657.1	118,490	10.6	474	0.022	0.002
CDX.NA.IG	9,598.0	136,193	38.4	545	0.070	0.002
ITRAXX EUROPE	9,199.0	116,182	36.8	465	0.079	0.002
ITRAXX EUROPE CROSSOVER	2,236.5	90,737	8.9	363	0.025	0.003
ITRAXX EUROPE SENIOR FINANCIALS	772.2	12,478	3.1	50	0.062	0.020
CDX.EM	475.9	30,906	1.9	124	0.015	0.008
Other	522.3	52,063	2.1	208	0.010	0.005
Total	25,461.1	557,049	101.8	2,228	0.046	0.000

On-the-run Index CDS	Total Traded Notional (US\$ billions)	Total Transaction Count	ADV (US\$ billions)	Average Daily Trade Count	Average Trade Size (US\$ billions)	Trade out Period (Average Trade Size/ADV)
CDX.NA.HY	2,028.2	98,718	8.113	395	0.021	0.003
CDX.NA.IG	7,474.3	116,819	29.897	467	0.064	0.002
ITRAXX EUROPE	6,711.7	93,340	26.847	373	0.072	0.003
ITRAXX EUROPE CROSSOVER	1,777.9	75,228	7.112	301	0.024	0.003
ITRAXX EUROPE SENIOR FINANCIALS	542.5	10,265	2.170	41	0.053	0.024
CDX.EM	367.6	24,115	1.470	96	0.015	0.010
Other	352.2	21,356	1.409	85	0.016	0.012
Total	19,254.3	439,841	77.017	1,759	0.044	0.001

Off-the-run Index CDS	Total Traded Notional (US\$ billions)	Total Transaction Count	ADV (US\$ billions)	Average Daily Trade Count	Average Trade Size (US\$ billions)	Trade out Period (Average Trade Size/ADV)
CDX.NA.HY	628.9	19,772	2.516	79	0.032	0.013
CDX.NA.IG	2,123.7	19,374	8.495	77	0.110	0.013
ITRAXX EUROPE	2,487.4	22,842	9.950	91	0.109	0.011
ITRAXX EUROPE CROSSOVER	458.6	15,509	1.835	62	0.030	0.016
ITRAXX EUROPE SENIOR FINANCIALS	229.7	2,213	0.919	9	0.104	0.113
CDX.EM	108.3	6,791	0.433	27	0.016	0.037
Other	170.1	30,707	0.680	123	0.006	0.008
Total	6,206.8	117,208	24.827	469	0.053	0.002

Based on the analysis, the proposal in Table 6 is an appropriate framework for price and size deferrals for index CDS traded in the EU.

Category	Description	Price Deferral	Size Deferral	
Category 1	On-the-run core index CDS (CDX.NA.HY, CDX.NA.IG, ITRAXX EUROPE, ITRAXX EUROPE CROSSOVER, ITRAXX EUROPE SENIOR FINANCIALS and CDX.EM), 1x off-the-run core indices, including only five years tenors.	15 mins	15 mins for trades below caps 1 week for trades above caps	Cap notional at \$50 million for CDX.NA.IG, iTraxx Europe and iTraxx Europe Senior Financials; \$20 million cap for CDX.HY, iTraxx Europe Crossover and CDX.EM. The actual size of transactions above the cap is reported in one week up to \$500 million and \$200 million. The actual size of the transactions above \$500 million and \$200 million is never reported.
Category 2	Off-the-run index CDS (six core indices, excluding 1x off-the- run), non-five-year tenors and all other index CDS.	End of day	End of day for trades below caps 2 weeks for trades above caps	Cap notional at \$50 million for CDX.NA.IG, iTraxx Europe and iTraxx Europe Senior Financials; \$20 million cap for CDX.HY, iTraxx Europe Crossover, CDX.EM and all other indices. The actual size of transactions above the cap is reported in two weeks up to \$500 million and \$200 million. The actual size of the transactions above \$500 million and \$200 million is never reported.

#### Table 6: Proposal for an index CDS transparency framework

#### iii. Methodology

The analysis described above was based on DTCC TIW data that provides weekly global transaction activity for index CDS and single-name CDS. The transactions covered in this analysis included only transactions where market participants were engaging in market risk transfer activity. Risk transfer activity is defined as transactions that change the risk position between two parties. These transaction types include new trades between two parties, a

termination of an existing transaction, or the assignment of an existing transaction to a third party.

DTCC TIW Weekly Transaction Activity report captures only weekly market activity for singlenames and indices with 10 contracts or greater in the warehouse.

Single-name CDS and index CDS data was downloaded from CDS Kinetics home page for the period from January 1<sup>st</sup>, 2021, to December 31<sup>st</sup>, 2021. When downloading the data, all single-name reference entities, market type, market sector and DC region were selected. CDS transactions that didn't have any weekly activity (only had records of notional outstanding) were removed from the analysis.

Total traded notional is calculated as the sum of weekly transaction activity for index CDS and single-name CDS for full year 2021. Total trade count is calculated as the sum of number of contracts for 2021.

ADV is calculated by dividing annual total traded notional by 250. For single-name CDS analysis, ADV is calculated at a reference entity-level. ADV represents a measure of how much trading occurs in a given reference entity or across the market as a whole and is used as proxy for liquidity.

Average daily trade count is calculated by dividing annual total trade count by 250. Average trade size is calculated by dividing total traded notional by total trade count.

## 4. RTS 2 - deferrals for ETD

The DEG was unable to obtain data or material comments on the Exchange-traded Derivatives (ETDs) PTT regime and, as such, was unable to reach a consensus to make any recommendations on ETDs.

## 5. Latency

The DEG believes that the latency standard for OTC derivatives need not be as prescriptive as for that in equities. The US CFTC PTT regime requires as soon as technologically practicable (ASATP) but no more than 15 minutes. The fact that most OTC derivatives trades to be reported in EU PTT are trading only a few times per day means that the time sensitivity of the data is less pronounced and, as such, a similar requirement to the CFTC requirement would be sufficient. Given this, the latency of the CTP itself is a not a material factor and the OTC derivatives CTP should be required to process trades in minutes, or seconds, rather than milliseconds.

## 6. Business clock synchronisation

The DEG was unable to reach a consensus to make any recommendations on Business clock synchronisation.

## 7. Data quality for the purpose of the CT

The DEG puts forward the following recommendations:

- 1) Real-time notification and rectification of issues.
- 2) A logic is needed to determine whether to publish or reject bad data. For example:
  - 100m in a date field reject (invalid)
  - notional of EUR 1.00 reject on business logic or accept and warn
  - etc...
- 3) Resolution protocols need to be specified to determine how quickly submitters are expected to fix issues, and the CTP should measure (and publish) performance.
- 4) It was generally felt that data quality should not be mandated to impact revenue share.

It was noted that ESMA and the other ESAs aim for data consistency, interoperability on a cross-sectional basis. So, while for OTC derivatives FIX protocol is used widely, ESMA will likely only allow FIX if it is compatible with ISO20022, but not if bespoke. ESMA and the other ESAs are trying to reuse data, so they need harmonisation and alignment. The CTP is a data flow that needs to interoperate.

## 8. Receipt and transmission protocols

Please refer to Section 4 of the DEG's bond report.

## Annex 1: Data Provided

#### 1. The ISDA Data

The International Swaps and Derivatives Data ("ISDA Data") was sourced by ISDA from EU APAs and TVs for the 1st half of 2024 (January 1, 2024, to June 30, 2024) "H1 "2024". Only new transactions are included; small transactions with a size equal to or smaller than EUR 100,000 are excluded.

## 2. The Propellant Digital Data

The Propellant Digital Data ("Propellant Data") was sourced by Propellant Digital from EU APAs and TVs for the 1st half of 2024 (January 1, 2024, to June 30, 2024) "H1 "2024". Only new transactions are included; small transactions with a size equal to or smaller than EUR 100,000 are excluded.

## 3. The Osttra Data

The Osttra MarkitWire Data ("Osttra Data") was sourced by Osttra from a non-public data source, Osttra's MarkitWire platform, which processes OTC interest rate derivatives globally and is therefore a significantly broader data set than the cross-regime PTT data and the EU specific PTT data. All data has been provided as tables within the report, each specifying the applicable time-period and scope.

## Annex 2: ISDA Data

https://finance.ec.europa.eu/document/download/c6f922d0-e739-49f2-8e57d2406d5ef773 en?filename=241017-deg-report-derivatives-annex-2 en.pdf

## Annex 3: Propellant Data

https://finance.ec.europa.eu/document/download/19f39ca5-a835-4bcf-ac56-521b8097ccc8 en?filename=241017-deg-report-derivatives-annex-3 en.pdf

## Annex 4: Reference materials

The group reviewed several documents - reports, whitepapers, position papers, policy or other studies - both as a group and in a series of bilateral meetings, for either background or source data to assist the group during their deliberations and in compiling this report in the short time available. The listing below provides links to those reference documents that are public.

However, the group does not, nor do the members, necessarily endorse any findings or results in any of these documents and the contents have not necessarily been taken into account in the group recommendations. The listing is provided for completeness and transparency purposes only.

- Osttra article on EU venue share versus SEFs and UK venues <u>http://osttra.com/articles/brexit-impact-on-trading-location-global-otc-irs-</u> <u>markets-q1-2023-review-2</u>
- ISDA paper on CDS markets <u>https://www.isda.org/2023/05/17/liquidity-and-risk-management-in-single-name-cds-and-implications-for-mifir/</u>
- ISDA paper on Credit Derivatives Data Analysis and Proposal on Price and Size Deferrals

## Annex 5: How to distinguish full tenor from broken tenor in a dataset?

In the context of the review of RTS 2 for credit and interest rate OTC derivatives transactions, what would be the correct formula (based on available fields "effective date" and "maturity date" or other) to identify a "full year tenor"?

There is a well-established market practice on the use of adjustment around Effective Date and Termination Date, which makes working out a whole year tenor trade straightforward, with just a small twist for IMM swaps.

In the OTC interest rate derivatives markets, there is a long-established convention that the Effective Date should be pre-adjusted so that it always falls on what is anticipated to be a good business day at the time of trading. I.e. a spot starting EURIBOR swap trading on Wednesday, September 4, 2024, would have an effective date of Friday, September 6, 2024. Whereas a spot starting EURIBOR swap trading on Thursday, September 5, 2024, would have an effective date of Monday, September 9, 2024, rather than Saturday, September 7, 2024, i.e. it is pre-adjusted to a good business day. This effective date does not have any further adjustment specified in the contract, therefore should Monday, September 9, 2024, turn out to be a bad day due to an unexpected public holiday being announced then the effective date remains Monday, September 9, 2024.

Conversely, in the interest rates OTC interest rate derivatives markets there is a longestablished convention that the Termination Date should be calculated as x years (where x is the tenor of the trade) from the effective date and should not be pre-adjusted so that it can fall on a good or bad business day regardless. So a spot starting 1-year EURIBOR swap trading on Wednesday, September 4, 2024 with an effective date of Friday, September 6, 2024 will have a Termination Date of Saturday, September 6, 2025. This termination date has adjustment specified i.e. Target business days subject to the modified following business day convention, meaning that the actual termination date and settlement date in practice will be Monday, September 8, 2025 but crucially this date is not in the contract nor specified, it is calculated from the parametric values provided. Meanwhile a spot starting 1-year EURIBOR swap trading on Thursday, September 5, 2024 with an effective date of Monday, September 9, 2024 (as described above) will have a Termination Date of Tuesday, September 9, 2025, this termination date has adjustment specified i.e. Target business days subject to the modified following business day convention meaning the actual termination date and settlement date in practice could change should Tuesday, September 9, 2025 subsequently become a bad business day.

Therefore, the logic for a whole year tenor is as follows:

- Termination Date dd = Effective Date dd
- Termination Date mm = Effective Date mm
- Termination Date yyyy (minus) Effective Date yyyy = One of the MiFIR level one text tenors...

#### dd=day, mm=month, yyyy=year

Credit derivatives operate on standard rolls i.e. the 20th of March, June, September, December, so it is even more simplified but helpfully the above rule still holds.

The only issue that arises is for IMM swaps where the IMM dates are the third Wednesday of the month. For example the IMM version of a 1-year EURIBOR swap trading on Wednesday, September 4, 2024, will have an effective date of Wednesday, September 18, 2024, and will have a Termination Date of Wednesday, September 17, 2025

Therefore, for IMM the rule needs to be adapted to check that the days of the Effective Date and Termination Date are in fact IMM dates.

- Termination Date dd = IMM date for that mm/yyyy
- Effective Date dd = MM date for that mm/yyyy
- Termination Date mm = Effective Date mm
- Termination Date yyyy (minus) Effective Date yyyy = A MiFIR level one tenor

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