Final Report

Draft RTS on the trading obligation for derivatives under MiFIR
# Table of Contents

1. Executive Summary ........................................................................................................ 4
2. Introduction .................................................................................................................... 5
3. General Approach ......................................................................................................... 7
4. Determination of the classes of interest rate derivatives to be subject to the TO ............ 9
5. Determination of the classes of credit derivatives to be subject to the TO .................. 14
6. Date from which the TO applies and phase-in ............................................................ 15
7. Public register ............................................................................................................... 16
8. Annexes ....................................................................................................................... 19
    8.1 Annex I .................................................................................................................. 19
    8.2 Annex II ................................................................................................................. 32
    8.3 Annex III .............................................................................................................. 34
    8.4 Annex IV .............................................................................................................. 49
### Acronyms used

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA</td>
<td>Competent Authority</td>
</tr>
<tr>
<td>CBA</td>
<td>Cost Benefit Analysis</td>
</tr>
<tr>
<td>CEA</td>
<td>Commodity Exchange Act</td>
</tr>
<tr>
<td>CCP</td>
<td>Central Counterparty</td>
</tr>
<tr>
<td>CDS</td>
<td>Credit Default Swap</td>
</tr>
<tr>
<td>CFTC</td>
<td>Commodity Futures Trading Commission</td>
</tr>
<tr>
<td>CO</td>
<td>Clearing obligation</td>
</tr>
<tr>
<td>CP</td>
<td>Consultation Paper</td>
</tr>
<tr>
<td>DP</td>
<td>Discussion paper</td>
</tr>
<tr>
<td>EEA</td>
<td>European Economic Area</td>
</tr>
<tr>
<td>ESMA</td>
<td>European Securities and Markets Authority</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>IRS</td>
<td>Interest Rate Swap</td>
</tr>
<tr>
<td>LIS</td>
<td>Large in scale</td>
</tr>
<tr>
<td>MAT</td>
<td>Made available to trade</td>
</tr>
<tr>
<td>MTF</td>
<td>Multilateral trading facility</td>
</tr>
<tr>
<td>OTC</td>
<td>Over-the-counter</td>
</tr>
<tr>
<td>OTF</td>
<td>Organised trading facility</td>
</tr>
<tr>
<td>RFQ</td>
<td>Request for quote</td>
</tr>
<tr>
<td>RM</td>
<td>Regulated Market</td>
</tr>
<tr>
<td>RTS</td>
<td>Regulatory Technical Standard</td>
</tr>
</tbody>
</table>
for trading venues and investment firms in respect of bonds, structured finance products, emission allowances and derivatives

**RTS 4** Commission Delegated Regulation (EU) 2016/2020 of 26 May 2016 supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council on markets in financial instruments with regard to regulatory technical standards on criteria for determining whether derivatives subject to the clearing obligation should be subject to the trading obligation

**SEF** Swap Execution Facility

**SSTI** Size specific to the instrument

**TR** Trade Repository

**TO** Trading obligation
1 Executive Summary

Reasons for publication

This final report presents the revised draft RTS specifying the trading obligation for derivatives (TO) for classes of interest rate swaps (IRS) and credit default swaps (CDS) as foreseen in Articles 28 and 32 of Regulation (EU) No 600/2014 of the European Parliament and the Council on markets in financial instruments. The final report explains the revised approach taking into account feedback received from stakeholders to the September 2016 discussion paper (DP) and June 2017 consultation paper (CP).

Contents

Sections 3 presents the overall approach and provides feedback received to questions raised in the CP. Section 4 presents ESMA’s final approach for interest rate swap (IRS) classes that should be subject to the TO and section 5 presents ESMA’s final approach for credit default swap (CDS) classes. The final report closes with section 6 that presents ESMA’s approach for the date from which the TO should apply. Annex I provides a detailed description of feedback received to the consultation as well as ESMA’s responses. Annex II contains the legislative mandate to develop technical standards, Annex III the final Cost Benefit Analysis (CBA) and Annex IV the draft RTS.

Next Steps

ESMA submitted the final report to the European Commission on 28 September 2017. The Commission has three months to decide whether to endorse the draft RTS.
2  Introduction

Article 32 of MiFIR

1. ESMA shall develop draft regulatory technical standards to specify the following:

   (a) Which of the class of derivatives declared subject to the clearing obligation in accordance with Article 5(2) and (4) of Regulation (EU) No 648/2012 or a relevant subset thereof shall be traded on the venues referred to in Article 28(1) of this Regulation;

   (b) The date or dates from which the trading obligation takes effect, including any phase-in and the categories of counterparties to which the obligation applies where such phase-in and such categories of counterparties have been provided for in regulatory technical standards in accordance with Article 5(2)(b) of Regulation (EU) No 648/2012.

ESMA shall submit those draft regulatory technical standards to the Commission within six months after the adoption of the regulatory technical standards in accordance with Article 5(2) Regulation (EU) No 648/2012 by the Commission.

Before submitting the draft regulatory technical standards to the Commission for adoption, ESMA shall conduct a public consultation and, where appropriate, may consult third-country competent authorities.

2. In order for the trading obligation to take effect:

   (a) The class of derivatives pursuant to paragraph 1(a) or a relevant subset thereof must be admitted to trading or traded on at least one trading venue as referred to in Article 28(1); and

   (b) There must be sufficient third-party buying and selling interest in the class of derivatives or a relevant subset thereof so that such a class of derivatives is considered sufficiently liquid to trade only on the venues referred to in Article 28(1).

3. In developing the draft regulatory technical standards referred to paragraph 1, ESMA shall consider the class of derivatives or a relevant subset thereof as sufficiently liquid pursuant to the following criteria:

   (a) The average frequency and size of trades over a range of market conditions, having regard to the nature and lifecycle of products within the class of derivatives;

   (b) The number and type of active market participants including the ratio of market participants to products/contracts traded in a given product market;

   (c) The average size of the spreads.
In preparing those draft regulatory technical standards, ESMA shall take into consideration the anticipated impact that trading obligation might have on the liquidity of a class of derivatives or a relevant subset thereof and the commercial activities of end users which are not financial entities.

ESMA shall determine whether the class of derivatives or relevant subset is only sufficiently liquid in transactions below a certain size.

4. ESMA shall, on its own initiative, in accordance with the criteria set out in paragraph 2 and after conducting a public consultation, identify and notify to the Commission the classes of derivatives or individual derivative contracts that should be subject to the obligation to trade on the venues referred to in Article 28(1), but for which no CCP has yet received authorisation under Article 14 or 15 of Regulation (EU) No 648/2012 or which is not admitted to trading or traded on a trading venue referred to in Article 28(1).

Following the notification by ESMA referred to in the first subparagraph, the Commission may publish a call for development of proposals for the trading of those derivatives on the venues referred to in Article 28(1).

5. ESMA shall in accordance with paragraph 1, submit to the Commission draft regulatory technical standards to amend, suspend or revoke existing regulatory technical standards whenever there is a material change in the criteria set out in paragraph 2. Before doing so, ESMA may, where appropriate, consult the competent authorities of third countries.

1. Article 28 of MiFIR introduces a TO for derivatives, established in accordance with the procedure set out in Article 32 of MiFIR and further specified in Commission Delegated Regulation (EU) 2016/2020 of 26 May 2016\(^1\) (RTS 4). Derivatives that are subject to the TO may only be traded on a regulated market (RM), multilateral trading facility (MTF), organised trading facility (OTF) or a third country trading venue deemed to be equivalent by the Commission. Article 32(1) of MiFIR mandates ESMA to develop regulatory technical standards (RTS) specifying the derivatives that should be subject to the TO.

2. This final report presents ESMA’s approach for determining which derivatives should be subject to the TO taking into account comments received from stakeholders responding to the consultation paper (CP) published on 19 June 2017.\(^2\) After the review of the 35 responses received to this consultation, the draft regulatory technical standards were amended as presented in Annex II of this final report.

---


3. The overall approach presented in the CP as well as the classes of fixed-to-float single currency interest rate swaps (IRS) and Index credit default Swaps (CDS) proposed for the TO received broad support from stakeholders. This final report provides feedback to the comments received and explains the changes that ESMA made to the draft RTS.

3 General Approach

4. Article 32 of MiFIR outlines the procedure for establishing which derivatives should be declared subject to the trading obligation. In the DP and CP, ESMA presented its approach to determine the scope of the trading obligation.

5. According to Article 32(1), once a class of derivatives has been made subject to the CO under EMIR, ESMA shall produce draft RTS specifying the subset of derivatives that should be subject to the TO.

6. Some respondents argued that as some provisions in EMIR allow for certain exemptions to the CO, for example for intragroup transactions, the same exemptions should also apply to the TO for derivatives. ESMA notes that as per the draft RTS the provisions that apply to the CO also apply to the TO for derivatives, therefore if an exemption is given under EMIR, that same exemption also applies to the TO.

7. Article 32(2) of MiFIR further specifies the two factors that have to be met for a class of derivatives that is subject to the CO to be also made subject to the TO. Those two factors are the trading venue test and the liquidity test.

8. In the CP, ESMA proposed that for a class of derivatives to pass the trading venue test it should be admitted to trading or traded on at least one trading venue.

9. Whilst some respondents were in favour of this approach, others argued that the minimum should be higher than one (in some cases two, in other cases three) based on the argument that one trading venue may not allow all participants to trade on that venue.

10. ESMA continues to believe that the Level 1 requirement is satisfied if a class of derivatives is admitted to trading or traded on one venue. In addition, ESMA would like to point out that derivatives subject to the TO are eligible to be admitted to trading or traded on any trading venue on a non-exclusive and non-discriminatory basis in accordance with Article 28(3) of MiFIR. Furthermore, MiFID II requires trading venues to establish, publish and maintain transparent and non-discriminatory rules based on objective criteria governing access to a venue as specified in Articles 53(1) and 18(3). ESMA also notes that the classes of derivatives included in the RTS are all admitted to trading or traded on more than one trading venue.

11. Furthermore, one respondent remarked that caution should be exercised when assessing classes of derivatives traded on trading venues established in the United Kingdom (UK) in
the context of the UK leaving the EU. ESMA is aware that the UK leaving the EU may have implications for the TO at a later point in time but those implications remain unclear for now. At the point of drafting this report the UK remains a member of the EU and therefore trading on UK trading venues has to be assessed just like trading on any other venue in the EU.

12. In the CP, ESMA further clarified its approach to assess the liquidity status of OTC derivatives in order to determine the scope of the TO. ESMA notes that most respondents agreed with the holistic approach taken to analyse the liquidity of classes of derivatives and therefore the approach was maintained.

13. ESMA also presented the issues it encountered with the analysis of data from trade repositories (TRs) in the DP. To address concerns expressed by respondents to the CP ESMA collected data from trading venues and included that data in the analysis of the liquidity of the different classes of derivatives. Most respondents agreed with ESMA’s approach of including on-venue data and support maintaining this approach in future analyses.

Market liquidity in relation to transaction size

14. Article 32(3) of MiFIR requires ESMA to determine whether a class of derivatives is sufficiently liquid only in transactions below a certain size. ESMA proposed in the CP not to exempt large trades from the TO.

15. Some respondents disagreed with this approach and claimed that a certain degree of protection to ensure there is no information leakage is needed to prevent predatory trading when large trades are executed. Furthermore, some respondents also pointed out that an exemption would be in line with the US regime.

16. Other respondents, however, argue that the calibration of pre- and post-trade transparency in MiFIR already provides for the needed flexibility to execute large trades.

17. ESMA maintains its view that MiFIR already provides for a sufficient degree of flexibility to execute large trades. This is reflected in the different execution venues permitted under the trading obligation, the various trading models those execution venues can utilise and the ability of trading venues to apply for pre-trade waivers under Articles 9(1)(a) and 9(1)(b) of MiFIR to prevent information leakage.

18. Furthermore, MiFIR also provides market participants with post trade deferrals in accordance with Article 11 that gives market participants the appropriate level of protection for large orders on the post-trade side.

19. Taking all these points into account arguably the MiFIR system already goes beyond the flexibility granted by the US regime so that an alignment in respect of this particular exemption does not appear warranted. ESMA maintains its approach that no specific exemption from the TO should be granted for large trades.
Package transactions

20. ESMA notes that most respondents have requested clarification in respect of the treatment of package trades under the TO.

21. While ESMA agrees that clarity is needed regarding the treatment of package transactions for the purposes of the TO, ESMA points out that the mandate for developing draft RTS specifying the TO for derivatives does not empower ESMA to provide for a tailored regime for these transactions.

22. ESMA notes the request for providing more guidance on the concept of package transactions and is currently working on a number of Q&As for further clarification.

4 Determination of the classes of interest rate derivatives to be subject to the TO

23. Based on the feedback received to the CP, ESMA has decided to generally maintain its initial approach regarding the classes of interest rate derivatives to be subject to the trading obligation, while taking into account some propositions submitted by market participants.

Parameters specifying the classes of instruments in all interest rate derivatives proposed for the TO

24. Regarding all classes of interest rate swaps, overall respondents suggested to add a number of additional parameters to achieve an adequate degree of granularity when determining the relevant classes.

25. ESMA agrees to adding some parameters to more precisely specify the classes subject to the TO and to ensure a greater degree of alignment at the international level.

26. As a consequence, ESMA added the following parameters to the Annex of the draft RTS: i) notional type (constant), ii) optionality (no) and iii) day count convention of the floating leg.

27. Concerning the tenors included in the Annex to the draft RTS, ESMA maintains its view that a component shall be deemed to have a tenor of a certain year where the period of time between the date when the obligations under the contract come into effect and the termination date of the contract equals that year, plus or minus five days.

28. A few respondents suggested adding 'fixed rate', as an additional specification criterion in order to further align the TO with the current rules applicable in the US. However, given that all the instruments considered by ESMA are at par (market value), and that ‘standard coupon’ option is not a parameter that was considered so far, ESMA will not add this parameter for now.
Interest rate swaps denominated in EUR

29. The majority of respondents agreed to introduce the TO for the classes of derivatives proposed in the CP. Furthermore, concerning the additional classes on which stakeholders were invited to provide comments, a significant number of respondents agreed that these classes are sufficiently liquid for the TO as has been demonstrated by the application of the TO for these instruments in the US. Some respondents were opposed to extending the TO to these additional cases, as they considered these instruments to not be sufficiently liquid.

30. ESMA agrees with the argument that the additional classes have proven sufficiently liquid for the TO in the US in the past years and considers that overall the TO has had a positive impact. In addition, ESMA would again like to highlight the different trading venues and the various trading models that MiFIR allows as compliant with the TO which should provide the necessary flexibility when trading these additional classes on-venue. ESMA considers that sufficient liquidity in those classes is present in the EU as market participants can source liquidity in those with relative ease.

31. ESMA would also like to emphasise that overall the TO is still limited to a relatively small subset of interest rate derivatives, focusing on three major currencies. With that in mind, ESMA considers it as justified to cast a wider net for derivatives denominated in these three currencies as this better aligns the EU with the approach taken in the US. Additionally it more effectively implements the G20 mandate on the TO as well as its embodiment in MiFIR, bearing in mind in particular, that the initial commitment was to have the TO in place in 2012. ESMA considers that going for a highly cautious approach limited to just a handful of classes and tenors would not imply an effective fulfilment of its legislative mandate.

32. On balance, ESMA has decided to include the classes that were already proposed for the TO in the CP, as well as the additional cases on which feedback was sought, to the TO.

33. Furthermore, some market participants suggested adding additional tenors, i.e. 8Y, 9Y and 12Y to the liquid classes based on EURIBOR 3M. Respondents argued that those instruments are sufficiently liquid and easily available for trading and adding them would simplify the presentation of classes. ESMA did not however receive any empirical evidence showing sufficient liquidity of those additional tenors. As those tenors are also not subject to the TO in the US, ESMA decided not to include them at this point in time.

<table>
<thead>
<tr>
<th>Fixed-to-Float single currency interest rate swaps – EUR EURIBOR 3 and 6M</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Settlement currency</strong></td>
</tr>
<tr>
<td>Trade start type</td>
</tr>
<tr>
<td>Optionality</td>
</tr>
</tbody>
</table>
### Interest rate swaps denominated in USD

34. The majority of responses were in agreement with ESMA’s classes of derivatives proposed in the CP. A number of respondents were in favour of also applying the TO to the additional cases for which ESMA asked for feedback on in the CP based on the liquidity of those instruments, as well as the fact that these cases are subject to the trading obligation, and liquid in the US. Some other respondents did not consider them as sufficiently liquid for the TO.

35. In light of the feedback received, and for similar reasons as described in the case of Euro-denominated derivatives, ESMA included the additional classes that had been asked for feedback on in the CP. Particularly for US Dollar denominated derivatives, ESMA considers that the advantages of creating a consistent regime outweigh the concerns raised by some stakeholders. ESMA is also aware of recent reports regarding a possible revamp of the TO rules in the US, however it is ESMA’s understanding these appear to concern methods of execution rather than the instrument scope of the TO in the US.

36. More specifically, in accordance with respondents’ requests, ESMA has limited the IMM dates subject to the obligation to the two closest dates, i.e. IMM+1 and IMM+2.

37. Some respondents requested clarification regarding the treatment of MAC swaps. ESMA has not received any evidence of liquidity on those instruments, therefore only IMM Par coupon are subject to the trading obligation at this point.

<table>
<thead>
<tr>
<th>Tenor</th>
<th>2,3,4,5,6,7,8,9,10,12,15,20,30Y</th>
<th>2,3,4,5,6,7,10,15,20,30Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notional type</td>
<td>Constant Notional</td>
<td>Constant Notional</td>
</tr>
<tr>
<td><strong>Fixed leg</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment frequency</td>
<td>Annual or Semi-annual</td>
<td>Annual or Semi-annual</td>
</tr>
<tr>
<td>Day convention</td>
<td>30/360 or Actual/360</td>
<td>30/360 or Actual/360</td>
</tr>
<tr>
<td><strong>Floating leg</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reference index</td>
<td>EURIBOR 6M</td>
<td>EURIBOR 3M</td>
</tr>
<tr>
<td>Reset frequency</td>
<td>Semi-annual or quarterly</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Day convention</td>
<td>Actual/360</td>
<td>Actual/360</td>
</tr>
<tr>
<td>Settlement currency</td>
<td>USD</td>
<td>USD</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Trade start type</td>
<td>Spot (T+2)</td>
<td>IMM (next two IMM dates)</td>
</tr>
<tr>
<td>Optionality</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Tenor</td>
<td>2,3,4,5, 6,7,10,12,15,20,30Y</td>
<td>2,3,4,5,6,7,10,12,15,20,30Y</td>
</tr>
<tr>
<td>Notional type</td>
<td>Constant Notional</td>
<td>Constant Notional</td>
</tr>
</tbody>
</table>

**Fixed leg**

<table>
<thead>
<tr>
<th>Payment frequency</th>
<th>Annual or semi-annual</th>
<th>Annual or semi-annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day count convention</td>
<td>30/360 or Actual/360</td>
<td>30/360 or Actual/360</td>
</tr>
</tbody>
</table>

**Floating leg**

<table>
<thead>
<tr>
<th>Reference index</th>
<th>USD LIBOR 3M</th>
<th>USD LIBOR 3M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reset frequency</td>
<td>Quarterly</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Day count convention</td>
<td>Actual/360</td>
<td>Actual/360</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Settlement currency</th>
<th>USD</th>
<th>USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade start type</td>
<td>Spot (T+2)</td>
<td>IMM (next two IMM dates)</td>
</tr>
<tr>
<td>Optionality</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Tenor</td>
<td>2,3,4,5,6,7,10,12,15,20,30Y</td>
<td>2,3,4,5,6,7,10,12,15,20,30Y</td>
</tr>
<tr>
<td>Notional type</td>
<td>Constant Notional</td>
<td>Constant Notional</td>
</tr>
</tbody>
</table>

**Fixed leg**

<table>
<thead>
<tr>
<th>Payment frequency</th>
<th>Annual or semi-annual</th>
<th>Annual or semi-annual</th>
</tr>
</thead>
</table>
Day count convention | 30/360 or Actual/360 | 30/360 or Actual/360
---|---|---
Floating leg
Reference index | USD LIBOR 6M | USD LIBOR 6M
Reset frequency | Quarterly or semi-annual | Quarterly or semi-annual
Day count convention | Actual/360 | Actual/360

**Interest rate swaps denominated in GBP**

38. ESMA received broad support for including the classes of derivatives proposed in the CP as well as the additional cases, on which stakeholders feedback was sought. According to the feedback received, ESMA has included into the tables Libor 6M contracts with quarterly fixed leg frequency, as well as Libor 3M contracts with semi-annual fixed leg frequency.

39. Furthermore a few respondents suggested to add a few additional tenors to the TO but did not provide any data supporting this approach. Therefore, ESMA has decided to limit the scope to the originally consulted range of tenors.

40. As a general observation ESMA intends to re-assess the liquidity of derivatives denominated in all three currencies, also on a per tenor basis, once additional data is available as a consequence of MiFID II implementation.

| Fixed-to-Float single currency interest rate swaps – GBP LIBOR 3 and 6M |
|---|---|---|
| Settlement currency | GBP | GBP |
| Trade start type | Spot (T+0) | Spot (T+0) |
| Optionality | No | No |
| Tenor | 2,3,4,5,6,7,10,15,20,30Y | 2,3,4,5,6,7,10,15,20,30Y |
| Notional type | Constant Notional | Constant Notional |
| Fixed leg |
| Payment frequency | Quarterly or semi-annual | Quarterly or semi-annual |
### Day count convention

<table>
<thead>
<tr>
<th>Floating leg</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Reference index</th>
<th>GBP LIBOR 6M</th>
<th>GBP LIBOR 3M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reset frequency</td>
<td>Semi-annual or quarterly</td>
<td>Quarterly</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Day count convention</th>
<th>Actual/365F</th>
<th>Actual/365F</th>
</tr>
</thead>
</table>

## 5 Determination of the classes of credit derivatives to be subject to the TO

41. Following the feedback received to the DP highlighting that the two proposed classes of credit derivatives are sufficiently liquid to be subject to the TO, ESMA conducted for the CP an analysis assessing whether the whole first off-the-run series should be subject to the TO or only the first 30 days of the off-the-run series. Based on that analysis, ESMA proposed in the CP to declare the following classes of credit derivatives subject to the TO:

### Classes of credit derivatives to be subject to the TO

<table>
<thead>
<tr>
<th>Type</th>
<th>Sub-type</th>
<th>Geographical zone</th>
<th>Reference index</th>
<th>Settlement Currency</th>
<th>Series</th>
<th>Tenor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index CDS</td>
<td>Untranched index</td>
<td>Europe</td>
<td>iTraxx Europe Main</td>
<td>EUR</td>
<td>on-the-run series first off-the-run series</td>
<td>5y</td>
</tr>
<tr>
<td>Index CDS</td>
<td>Untranched index</td>
<td>Europe</td>
<td>iTraxx Europe Crossover</td>
<td>EUR</td>
<td>on-the-run series first off-the-run series</td>
<td>5y</td>
</tr>
</tbody>
</table>

42. The large majority of respondents to the consultation supported this proposal. The views from those respondents not agreeing to ESMA’s proposal were split. Some recommended that the classes of credit derivatives subject to the TO should be exactly the same as the classes defined for the purposes of the CO and include all series starting with series 17. Other respondents considered that only the on-the-run series should be subject to the TO since liquidity in those contracts immediately drops after a series becomes off-the-run.
43. Considering the strong support received, ESMA maintained its proposal and determined that the two classes of credit derivative as specified in 4 I of the Annex of the draft RTS should be subject to the TO.

6 Date from which the TO applies and phase-in

44. ESMA is required to specify from which date the TO applies and include any phase-in according to Article 32(1)(b).

45. In the CP, ESMA shared its intention to replicate the approach taken for the CO under EMIR and therefore, proposed that the TO should start no earlier than the date of the CO. Since the CO is already applicable for counterparties of category 1 and 2, the TO could start as of the date of application of the RTS on the TO for counterparties of category 1 and 2. Since the CO will only apply to counterparties of category 3 and 4 at a later date, the TO could also only apply as of this date for counterparties of category 3 and 4.

46. As a result, ESMA proposed in the CP the following schedule:

<table>
<thead>
<tr>
<th>OTC derivatives class</th>
<th>Category of counterparty</th>
<th>Date of application of the RTS on the TO</th>
<th>Date of application of the RTS on the TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRD (EUR, GBP, USD)</td>
<td>Category 1</td>
<td>Date of application of the RTS on the TO</td>
<td>21 June 2019</td>
</tr>
<tr>
<td></td>
<td>Category 2</td>
<td>Date of application of the RTS on the TO</td>
<td>21 June 2019</td>
</tr>
<tr>
<td>Credit derivatives</td>
<td>Category 3</td>
<td>Date of application of the RTS on the TO</td>
<td>21 June 2019</td>
</tr>
<tr>
<td></td>
<td>Category 4</td>
<td>Date of application of the RTS on the TO</td>
<td>21 December 2018</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Date of application of the RTS on the TO</td>
<td>09 May 2019</td>
</tr>
</tbody>
</table>

47. Many respondents disagreed with ESMA’s proposal and were in favour of a phase-in also for counterparties of category 1 and 2.

48. Most respondents were in favour of the approach taken for categories 3 and 4.

49. The main reasons that justify a phase in approach, according to respondents, includes operational issues, uncertainty on any equivalence decisions, the need to avoid a “big bang” effect on the 3 January 2018 and the ongoing EMIR review.

50. A few respondents also highlighted that late authorisation of OTFs, limited time to become a member of a trading venues and impact of straight through processing justify a delay on the date of application of the TO.

51. ESMA appreciates any technical reasons raised by respondents in favour of a phase-in and also is aware of the large number of new rules taking effect already from 3 January 2018 for market participants and regulators alike. Therefore, ESMA would not be opposed to a short delay of application of the TO at the start of 2018 which should not exceed three
months. ESMA also agrees that in order to ensure an orderly implementation of the TO, a sufficient number of equivalence determinations will need to be completed before the TO comes into effect.

52. Nonetheless, as stated in the CP, ESMA would like to remind market participants that the TO for derivatives goes back to a 2009 G20 commitment which was supposed to be implemented by 2012. The EU transposition of this G20 commitment was always foreseen in the MiFID II framework for which the legislative process started in 2009 and which benefited from an additional one year delay to ensure the technical readiness of all parties concerned.

53. It is therefore fair to state that the advent of the TO for derivatives in 2018 has been transparent and clear to market participants for a long time.

54. ESMA has also already indicated, via its autumn 2016 DP, which classes of derivatives it will focus on, and has maintained that focus throughout the process. These are the classes that many of the category 1 and 2 counterparties will already be accustomed to trading under the TO in the US.

55. Therefore, ESMA considers that no significant delay via a phase-in of the TO appears warranted for categories 1 and 2 and submits its proposal to the Commission with the intention of applying the TO from early 2018.

56. In addition, ESMA notes that the technical difficulties raised in the responses are more significant for category 3 and category 4 counterparties who will benefit from a phased-in approach in accordance with ESMA’s planning.

57. Concerning the impact of the upcoming EMIR review, ESMA’s approach to the TO reflects the current state of play. Should the review of EMIR result in changes in the scope of the CO, ESMA may, if and when necessary, propose adjusting the RTS to reflect those changes.

7 Public register

58. Article 34 of MiFIR requires ESMA to publish and maintain on its website a public register for the TO for derivatives. This register should specify in an exhaustive and unequivocal manner:

- the derivatives that are subject to the trading obligation,
- the venues on which the derivatives are admitted to trading or traded, and
- the dates from which the obligation takes effect.

59. With regard to the classes of derivatives subject to the TO, the register will include the following specifications:
Interest rate derivatives:

- Type
- Reference index
- Settlement currency
- Settlement currency type
- Trade start type
- Optionality
- Tenor
- Notional type
- Fixed rate type
- Fixed rate:
  i. payment frequency
  ii. day count convention
- Floating rate:
  i. reset frequency
  ii. day count convention

Credit derivatives:

- Type
- Sub-type
- Geographical zone
- Reference index
- Settlement currency
• Applicable series

• Tenor

60. With regard to trading venues where the relevant instruments are available for trading, ESMA will maintain a separate register with the list of trading venues that are trading interest rate derivatives and credit derivatives. This register will not specify on which particular trading venue a given granular instrument is traded.
8 Annexes

8.1 Annex I

Feedback on the consultation paper

Q 1: Do you agree with ESMA’s assessment and proposed way forward for the criteria assessing the number and types of active market participants? If not, please explain your position and how you would integrate these elements into the liquidity test.

1. Most respondents were supportive of ESMA’s holistic approach for assessing the liquidity status of OTC derivatives in general, and for the assessment of the criteria on the number and types of active market participants more particularly. In detail:

2. **Number and type of active market participants**: The large majority of respondents supported the assessment proposed in the CP taking not only quantitative factors into account but also qualitative factors (such as the diversity of market participants) and allowing for some flexibility when assessing this criterion. A few respondents considered that the quantitative criterion should be considered as a necessary conditions that should be complemented by qualitative criteria.

3. **Number of trading venues**: About half of respondents agreed with ESMA’s approach to consider a minimum of one trading venue for meeting this criterion, whereas the other half of respondents argued in favour of more than one trading venue (three trading venues, in a few cases two), mainly on the basis of arguments that requiring only one trading venue may undermine competition and may not allow all market participants to trade on that venue. A few respondents requested an additional liquidity test assessing the liquidity on those trading venues that admit/trade derivatives considered for the TO.

4. **Number of market makers**: Broad endorsement of ESMA’s proposal to give this criterion a lower weighting. One respondent disagreed with ESMA’s proposal to apply a broad interpretation of the concept of market makers/liquidity providers.
5. **Ratio of market participants to average size/frequency of trades:** Only few respondents provided feedback for this criterion. Overall, broad support to consider this criterion but based on a lower weighting.

6. **ESMA’s response:** Given the broad support by stakeholders, ESMA did not make any changes to the criteria assessing the type and number of market participants following the consultation. Regarding the concerns expressed by some respondents that the trading obligation may undermine competition or may not allow all market participants to meet the requirement if only one trading venue trades a particular derivative subclass, ESMA would like to recall that MiFID II/MiFIR provides for various provisions aiming at avoiding/limiting the effect of such unintended consequences. In particular, Article 28(3) of MiFIR requires that derivatives that are subject to the TO should be eligible for being admitted to trading/traded on a trading venue on a non-exclusive and non-discriminatory basis.

7. Furthermore, MiFID II requires regulated markets (Article 53(1)) and MTFs and OTFs (Article 18(3)) to establish, publish, maintain and implement transparent and non-discriminatory rules based on objective standards, governing access to their facilities. These provisions have been further specified by ESMA in recently published Q&As (Q&A 3 of section 5 (multilateral and bilateral systems of the Q&As covering market structure issues, published on 7 July 2017). Finally, it should be noted that all the classes of derivatives that were subject to this consultation can be traded on more than one trading venue.

**Q 2: Do you agree with the revised proposal not to exempt post-trade LIS transactions?**
If not, please explain and present your proposal

8. Respondents expressed different views on this question, with the majority disagreeing with ESMA’s revised proposal not to exempt post-trade LIS transactions from the trading obligation. Respondents advocating against ESMA’s proposal largely cited common reasons for doing so, mainly focusing on:
   a. Ensuring any EU regime is fully aligned with the US, in this case their block trade exemption;
   b. Ensuring zero information leakage when executing large orders in order to prevent predatory trading.
9. Respondents agreeing with the revised proposal cited that the suite of available pre- and post-trade waivers, and the freedom for trading venues to specify trading protocols for instruments subject to the trading obligation mitigates their concerns regarding these two potential issues.

10. In addition, respondents commonly requested ESMA provide further clarity regarding the legitimacy under the trading obligation of negotiated ‘off-venue’ transactions that are subsequently reported ‘on-venue’, pursuant to the venue’s rules and procedures.

11. **ESMA’s response:** ESMA has considered the feedback received and, having reflected on the responses considers it is appropriate to include post-trade LIS transactions within the trading obligation. ESMA agrees with respondents that the available pre- and post-trade waivers are sufficient to allow for the development of trading protocols for instruments in scope of the trading obligation that will mitigate the prevailing concerns.

12. ESMA will continue to reflect on the issue of ‘off-venue’ transactions that are subsequently reported ‘on-venue’.

**Q 3: Do you agree with this proposal? If not, please explain why and provide an alternative proposal for ESMA to populate and maintain the register.**

13. The majority of responses supported ESMA’s proposal of a public register. The timing of publication is important for market participants and preferably such register should be available before the trading obligation starts applying.

14. Regarding the scope of the publication, a few respondents recommended that:

   a. In order to ensure that the register is most useful, and given the constraints faced by ESMA, the register could be simplified, e.g. it could provide a list of instruments subject to the trading obligation and separately a list of trading venues that have admitted those derivatives to trading, without specifying which exact instruments are traded on which particular trading venue.

   b. A ‘floating leg payment frequency’ field should be added to the register of interest rates derivatives.

   c. The fields ‘optionality’ and ‘settlement currency type’ should be clarified.

15. A large number of respondents mentioned that it is necessary to update the register in a timely manner. A few respondents suggested that reference data under MIFID II/MiFIR could be used to update the register.

16. A few respondents were of the view that the register would only be useful if it was a golden source of information, i.e. it is always complete and up to date (no later than T+1 basis). If those conditions cannot be met by ESMA, it was suggested that information could be available from the trading venues instead.

17. **ESMA’s response:** MiFIR requires ESMA to maintain a register for the TO. Given the broad support with the approach proposed in the CP, ESMA did not change this approach. The scope of publication will be aligned with the final parameters defining derivatives subject to the TO. ESMA will also make sure that the register, at least in a simplified form, is published before the start of the trading obligation application date.
Q 4: Do you agree with this proposal? Would you add other parameters e.g. day count convention of the floating leg, notional type (constant vs. variable), fixed rate type (MAC vs. MAC)? If yes, please explain why and provide the parameters.

18. While there was overall support for the approach, only a limited number of respondents agreed with the proposal a 100%. The majority of respondents provided additional parameters to be included or suggested for some parameters to be excluded. Proposals included the following:

a. some respondents (all members of the same association) supported the use of the same parameters as those used for the purpose of the clearing obligation, i.e. reference index (LIBOR), settlement currency (EUR), maturity (28D-50Y), settlement currency type (single currency), optionality (no) and notional type (constant or variable);

b. one respondent suggested that the following parameters should be considered: Currency, Floating rate index, Trade start type, Maturity, Rolls (new), Optionality, Dual currencies, Notional type (new), Fixed leg rate (new), Tenor(s) (new), Holiday calendar(s) (new), Business day convention, Fixed leg payment frequency, Fixed leg day count convention, Floating leg payment/reset frequency, Floating leg day count (new);

c. a few respondents suggested to include: Day count convention of the floating leg, Notional type (constant vs. variable) and Fixed rate type (MAC);

d. one respondent suggested that the following parameters should be taken into account: Day count convention of the floating leg, Payment frequency floating leg: to distinguish between compounding or averaging IRS, Notional type: IRS with variable notional should not be considered for the liquidity, Embedded optionality: IRS with embedded optionality should not be considered for the liquidity;

e. some respondents supported the inclusion of the notional type and exclude variable notional (either amortising, accreting or rollercoaster) because they are not liquid;

f. a few respondents stated that including holiday calendar and business day convention are unnecessary;

g. one respondent stated that fixed rate type (MAC) should not be taken into account;

h. a few respondents stated that it is not necessary to include trades within a +/- 5 day parameter of the benchmark tenor;

i. one respondent suggested that the following parameters should not be considered because risk factors are not affected by those parameters and liquidity is amalgamated according to risk factors: Day count convention of the floating leg, Day count convention of the fixed leg, Payment frequency fixed leg and Fixed rate type.

19. ESMA’s response: In view of the overall support for the approach and to take into account additional parameters, ESMA has maintained its approach and has included some additional factors. ESMA agrees that the approach may benefit from adding the following parameters:

a. Notional type: since IRS with variable notional should not be considered for the liquidity;

b. Day count convention of the floating leg;
c. Optionality: since IRS with embedded optionality should not be considered.

Q 5: For each Case, specify if you agree with the proposal of qualifying the sub-classes as liquid for the purpose of the trading obligation and if not, please explain why and provide an alternative proposal.

20. For fixed-to-float IRS denominated in EUR ESMA proposed to deem liquid for the purpose of the trading obligation the following classes:

<table>
<thead>
<tr>
<th>Case</th>
<th>Trade start type</th>
<th>Settlement Currency</th>
<th>Floating reference rate with term</th>
<th>Fixed leg payment frequency</th>
<th>Fixed rate day count</th>
<th>Floating leg reset frequency</th>
<th>Benchmark tenor +/- 5D</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>spot starting (T+2)</td>
<td>EUR</td>
<td>Euribor 3M</td>
<td>Annual</td>
<td>30/360 ACT/360</td>
<td>Quarterly</td>
<td>2Y, 3Y, 4Y, 5Y, 6Y, 7Y, 10Y, 15Y, 20Y, 30Y</td>
</tr>
<tr>
<td>A2</td>
<td>spot starting (T+2)</td>
<td>EUR</td>
<td>Euribor 6M</td>
<td>Annual</td>
<td>30/360 ACT/360</td>
<td>Semi-annual</td>
<td>2Y, 3Y, 4Y, 5Y, 6Y, 7Y, 8Y, 9Y, 10Y, 12Y, 15, 20Y, 30Y</td>
</tr>
</tbody>
</table>

21. The majority of respondents agreed with the proposal suggested for the EUR denominated transactions, also with included 15Y, 20Y and 30Y tenors.

22. A few responses suggested that the ‘fixed leg day count’ of ACT/360 should be removed from the proposition in both bases, since it is market convention to use 30/360 day count, and the transactions with ACT/360 counting are illiquid. Some responses suggested to remove the parameter ‘fixed rate day count’ from the trading obligation’s liquidity assessment.

23. One response suggested that the classes defined by CFTC should be replicated in ESMA’s approach for the trading obligation, while one other response suggested that the trading obligation criteria should be fully aligned with the clearing obligation parameters for simplicity.

24. ESMA’s response: Given the general approval of the proposal ESMA maintained its approach with respect of classes of EUR denominated transactions to be subject to the trading obligation.

Q 6: Would you also consider any of these possible sub-classes as liquid? Which other combinations of fixed leg payment frequency and floating leg reset frequency specifically would you consider to be sufficiently liquid?

25. For fixed-to-float IRS denominated in EUR ESMA asked for feedback whether the following classes should be deemed liquid for the purpose of the TO:
26. Respondents in general go beyond the question asked and request to avoid complexity in the specification of the TO given systems’ implications. Some respondents support the alignment of the classes of derivatives subject to the EU TO and those in scope of the MAT regime. Most respondents make the point that liquid instruments are only those where the floating leg reset frequency is the same as the floating reference rate tenor, while all types of Fixed Leg payment frequency are liquid.

27. Respondents to the CP that answer the question have opposite views on the liquidity of these instruments. A number of respondents fully support ESMA’s Case 3 and 4 proposals as they are. Other respondents are not in favour of including Cases A3 and A4 in the TO as not sufficiently liquid in the EU while a limited number support to add EUR 3M Euribor spot 8,9 and 12Y tenors. They also indicate that IMM and MAC tenors are liquid and suggest to add the 2Y, 3Y, 5Y and 10Y IMM and MAC tenors. Some respondents say that the additional features in red in Cases A3 and A4 are not liquid and should not be subject to the TO. A limited number of respondents indicate that the TO should simply be based on the CO.

28. **ESMA’s response:** Given the feedback received by respondents represent opposite views and there is no clear agreement, ESMA has reflected on the proposals and decided to include semi-annual payment frequency on the fixed leg, as well as – for contracts referencing the EURIBOR6M - a quarterly reset frequency on the floating leg. The latter change applied only where the reference index is EURIBOR 6M.

29. ESMA has also decided not to include IMM and MAC tenors in IR denominated in Euros at this stage. Furthermore, it has not included other tenors for EUR 3M EURIBOR other than those proposed in the CP.

Q 7: For each Case, specify if you agree with the proposal of qualifying the sub-classes as liquid for the purpose of the trading obligation and if not, please explain why and provide an alternative proposal.

30. For fixed-to-float IRS denominated in USD ESMA proposed to deem liquid for the purpose of the trading obligation the following classes:

<table>
<thead>
<tr>
<th>Case</th>
<th>Trade start type</th>
<th>Settlement Currency</th>
<th>Floating reference rate with term</th>
<th>Fixed leg payment frequency</th>
<th>Fixed rate day count</th>
<th>Floating leg reset frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>A3</td>
<td>spot starting (T+2)</td>
<td>EUR</td>
<td>Euribor 3M</td>
<td>Semi-annual/ Annual</td>
<td>30/360 ACT/360</td>
<td>Quarterly/ Semi-annual</td>
</tr>
<tr>
<td>A4</td>
<td>spot starting (T+2)</td>
<td>EUR</td>
<td>Euribor 6M</td>
<td>Semi-annual/ Annual</td>
<td>30/360 ACT/360</td>
<td>Quarterly/ Semi-annual</td>
</tr>
</tbody>
</table>
31. The majority of respondents agreed with the proposal, in particular one respondent specified that ESMA should clarify that the “IMM” category covers both par coupon and MAC swaps. Furthermore, one respondent asked to clarify that for IMM date ESMA intends to include the next 2 IMM dates, i.e. IMM+1 and IMM+2.

32. Some respondents agreed with the proposal in general but they would substitute for IMM contracts the 6Y with the 7Y since in the US the benchmark tenor of 6 years is not made available to trade. On the other hand one respondent claimed for the deletion of the 7Y benchmark from spot starting contracts. Furthermore, one respondent claimed that for cases C1 and C3 the 4Y benchmark should be excluded.

33. One respondent disagreed with the proposal claiming that the approach is adding an unnecessary layer of complexity and that the classes should coincide with those of the clearing obligation.

34. A few respondents stated the following:
   a. For case C1 eliminate the contracts with fixed rate day count convention of ACT/360
   b. For case C2 eliminate all the contracts since liquidity is in the US
   c. For case C3 eliminate all the contracts
   d. For case C4 eliminate all the contracts since liquidity is in the US

35. Some respondents claimed for full alignment with the US regime.

36. **ESMA's response**: Given the overall support for determining those classes of derivatives sufficiently liquid for the purpose of the TO, ESMA maintained its proposal. In addition,
ESMA clarifies that the IMM dates subject to the TO is limited to the two closest dates, i.e. IMM+1 and IMM+2.

Q 8: Would you also consider any of these possible sub-classes as liquid? Which other combinations of fixed leg payment frequency and floating leg reset frequency specifically would you consider to be sufficiently liquid?

37. For fixed-to-float IRS denominated in USD ESMA asked for feedback whether the following classes should be deemed liquid for the purpose of the TO:

<table>
<thead>
<tr>
<th>Case</th>
<th>Trade start type</th>
<th>Settlement Currency</th>
<th>Floating reference rate with term</th>
<th>Fixed leg payment frequency</th>
<th>Fixed rate day count</th>
<th>Floating leg reset frequency</th>
<th>Benchmark tenor +/- 5D</th>
</tr>
</thead>
<tbody>
<tr>
<td>C5</td>
<td>spot starting (T+2)</td>
<td>USD</td>
<td>Libor 3M</td>
<td>Semi-annual/ Annual</td>
<td>30/360 ACT/360</td>
<td>Quarterly/ Semi-annual</td>
<td>2Y, 3Y, 4Y, 5Y, 6Y, 7Y, 10Y, 12Y, 15Y, 20Y, 30Y</td>
</tr>
<tr>
<td>C6</td>
<td>spot starting (T+2)</td>
<td>USD</td>
<td>Libor 6M</td>
<td>Semi-annual/ Annual</td>
<td>30/360 ACT/360</td>
<td>Quarterly/ Semi-annual</td>
<td>2Y, 3Y, 4Y, 5Y, 6Y, 7Y, 10Y, 12Y, 15Y, 20Y, 30Y</td>
</tr>
<tr>
<td>C7</td>
<td>IMM</td>
<td>USD</td>
<td>Libor 3M</td>
<td>Semi-annual/ Annual</td>
<td>30/360 ACT/360</td>
<td>Quarterly/ Semi-annual</td>
<td>2Y, 3Y, 4Y, 5Y, 6Y, 7Y, 10Y, 12Y, 15Y, 20Y, 30Y</td>
</tr>
<tr>
<td>C8</td>
<td>IMM</td>
<td>USD</td>
<td>Libor 6M</td>
<td>Semi-annual/ Annual</td>
<td>30/360 ACT/360</td>
<td>Quarterly/ Semi-annual</td>
<td>2Y, 3Y, 4Y, 5Y, 6Y, 7Y, 10Y, 12Y, 15Y, 20Y, 30Y</td>
</tr>
</tbody>
</table>

38. Several respondents agreed with ESMA’s proposal to have a TO in the EU that would initially start with a more narrowly defined set of IRS denominated in USD as these instruments are more traded in the US than in the EU, as only derivatives contracts that are sufficient liquid in the relevant classes within the EU should be subject to the TO.

39. On the other hand, some respondents indicated that the liquidity profile of an instrument does not drastically change based on geographical boundaries as both US and EU market participants interact with the same group of liquidity providers and experience similar pricing and liquidity dynamics, which will become more obvious with equivalence, and urged ESMA not to look only at EU liquidity data, in order to reduce regulatory arbitrage.
and to ensure US and EU participants are on a level playing field. Some respondents suggested a two way cooperation with the CFTC on the identification of liquid instruments.

40. The respondents had opposite views on what cases are liquid (C5-C8) but agreed overall that the swaps where the floating payment reset frequency differs from the reference tenor were not liquid. Several respondents recommended to add the 6, 12, 15 and 20Y tenors and to include some IMM and MAC tenors. A limited number of respondents indicated that compounding swaps should not be subject to the TO, that cases C5 and C7 should refer only to a quarterly floating leg reset frequency and cases C6 and C8 to a semi-annual floating leg reset frequency, to include additional detail in the description of these sub-classes such as calendar and business day convention as relevant features of each sub-class, and to clarify the meaning of optionality.

41. **ESMA’s response** In light of the feedback received in the CP, ESMA decided to include the additional tenors proposed in the CP for the reference index USD LIBOR 3M to the TO.

42. Furthermore, ESMA also included derivatives with the reference index USD LIBOR 6M. ESMA considers that the advantages of creating a consistent regime outweighs the liquidity concerns raised by some stakeholders.

**Q 9: For each case, specify if you agree with the proposal of qualifying the sub-classes as liquid for the purpose of the trading obligation and if not, please explain why and provide an alternative proposal.**

43. For fixed-to-float IRS denominated in GBP ESMA proposed to deem liquid for the purpose of the trading obligation the following classes:

<table>
<thead>
<tr>
<th>Case</th>
<th>Trade start type</th>
<th>Settlement Currency</th>
<th>Floating reference rate with term</th>
<th>Fixed leg payment frequency</th>
<th>Fixed rate day count</th>
<th>Floating leg reset frequency</th>
<th>Benchmark tenor +/- 5D</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>spot starting (T+0)</td>
<td>GBP</td>
<td>Libor 6m</td>
<td>Semi-annual</td>
<td>ACT/365F</td>
<td>Semi-annual</td>
<td>2Y, 3Y, 4Y, 5Y, 6Y, 7Y, 10Y, 15Y, 20Y, 30Y</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Case</th>
<th>Trade start type</th>
<th>Settlement Currency</th>
<th>Floating reference rate with term</th>
<th>Fixed leg payment frequency</th>
<th>Fixed rate day count</th>
<th>Floating leg reset frequency</th>
<th>Benchmark tenor +/- 5D</th>
</tr>
</thead>
<tbody>
<tr>
<td>D2</td>
<td>spot starting (T+0)</td>
<td>GBP</td>
<td>Libor 3m</td>
<td>Quarterly</td>
<td>ACT/365F</td>
<td>Quarterly</td>
<td>2Y, 3Y, 4Y, 5Y, 6Y, 7Y, 10Y, 15Y, 20Y, 30Y</td>
</tr>
</tbody>
</table>
44. The large majority of respondents agreed with the proposal in the CP. Very few respondents disagreed overall and recommended that the liquidity determination should be only based on a data analysis and not supplemented by qualitative information. One respondent did not agree to add the tenors highlighted in red to the TO in case D1. One respondent suggest that the determination of the classes subject to the TO should be based on the classes of derivatives subject to the CO.

45. **ESMA’s response:** Given the broad support, ESMA did not amend its proposal and IRS denominated in GBP covered in cases D1 and D2 will be subject to the TO.

**Q 10: Would you also consider the possible sub-classes here below as liquid? Which other combinations of fixed leg payment frequency and floating leg reset frequency specifically would you consider to be sufficiently liquid?**

46. For fixed-to-float IRS denominated in GBP ESMA asked for feedback whether the following classes should be deemed liquid for the purpose of the TO:

<table>
<thead>
<tr>
<th>Case</th>
<th>Trade start type</th>
<th>Settlement Currency</th>
<th>Floating reference rate with term</th>
<th>Fixed leg payment frequency</th>
<th>Fixed rate day count</th>
<th>Floating leg reset frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>D3</td>
<td>spot starting (T+0)</td>
<td>GBP</td>
<td>Libor 6m</td>
<td>Quarterly/Semi-annual</td>
<td>ACT/365F</td>
<td>Quarterly/ Semi-annual</td>
</tr>
<tr>
<td>D4</td>
<td>spot starting (T+0)</td>
<td>GBP</td>
<td>Libor 3m</td>
<td>Quarterly/Semi-annual</td>
<td>ACT/365F</td>
<td>Quarterly/ Semi-annual</td>
</tr>
</tbody>
</table>

47. Respondents were generally opposed to including IRS where the underlying floating reference rate’s term is not aligned with the floating leg’s rest frequency (e.g. GBP Libor 3m that resets every six months). Such products are seen as involving complex pricing factors (non-linear products) and for that reason are considered very illiquid.

48. Views were more balanced with respect to other IRS denominated in GBP where the underlying floating reference rate’s term and the floating leg’s rest frequency are aligned. For some respondents, the EU and US regimes should be aligned to the extent possible and therefore they recommend ESMA for extending the TO to other GBP IRS in particular GBP 3m Libor swaps with semi-annual fixed leg frequency and also, to a lesser extent though, to GBP 6m Libor swaps. Some other respondents, although they acknowledged that ideally there should be no discrepancy between the EU and US regimes, recommended ESMA to only include under the scope of the TO swaps for which the quantitative analysis has demonstrated that they are liquid.

49. It is worth stressing that responses (not only to this question, but to all question asking for feedback on the liquidity assessment for IRS) were generally not supported by any quantitative evidence.
50. **ESMA’s response:** In view of the feedback provided, ESMA included Libor 6 months contracts with a quarterly fixed leg frequency and Libor 3 months contracts with a semi-annual-fixed leg frequency to the classes of instruments that should be subject to the TO.

Q 11: Do you agree with this proposal? If not, please explain why and provide an alternative proposal

51. A large majority of respondents agreed that at this point in time fixed to float IRS denominated in JPY and in other currencies are not sufficiently liquid to be considered for imposing a TO. Many of those respondents also agreed that a minimum of three tenors should pass the liquidity test before a TO for IRS denominated in a particular currency can be established.

52. One respondent considered that the TO on JPY should be imposed based on a CO existing in Japan or elsewhere. One respondent considered JPY denominated IRS as liquid based on an analysis of US trade repository data and that US data should be taken into account to arrive at a more global view of what is a global market in the first place. Another respondent asked why ESMA did not look into the liquidity of CHF yet and wondered whether ESMA’s conclusions in respect of the liquidity status of other currencies were entirely accurate.

53. **ESMA’s response:** As per the Level 1 text, ESMA has to perform a reasonably concrete liquidity test and cannot impose the TO solely on the basis of the existence of a CO being established in another jurisdiction. ESMA takes note of the liquidity that can be attributed to trading in JPY denominated swaps in US trade repositories but despite the global nature of the market ESMA has to base its liquidity test based on trading in the EU. ESMA will nonetheless strive to achieve an aligned regime across major jurisdictions to the extent possible. ESMA performed its analysis based on available data from trading venues and trade repositories but appreciates that it may not have complete access to all trading in the EU. ESMA has taken this into account when performing its analysis but still considers that at this point in time it should maintain its approach in respect of swaps denominated in JPY and other currencies. ESMA will continue working on the TO in the future and may then, for example, also take swaps denominated in CHF into account which at the moment though are not even subject to the CO in the EU.

Q 12: Do you agree with this proposal? If not, please explain why and provide an alternative proposal.

54. ESMA proposed the following indices to be subject to the TO. In particular, with respect to the DP ESMA proposed to consider liquid also the first off-the-run series.
55. Most respondents agreed with the proposal while only some respondent disagreed with it. Those respondents who disagreed either stated that the classes should be exactly the same as those for the purpose of the clearing obligation, i.e. without distinguishing between on-the-run and off-the-run or that off-the run series generally should not be included in the TO since liquidity immediately drops after roll.

56. **ESMA’s response**: Considering the strong support received for the proposal ESMA maintained its proposal.

**Q 13: Do you agree to the proposed timeline? If not, please explain why and present your proposal.**

57. While some respondents agreed to the proposed timeline, the majority of respondents were in favour of phasing-in the TO, in particular for counterparties of category 1 and 2. Most respondents agreed with the proposed phase-in for counterparties of category 3 and 4, with some respondents asking for a later phase-in and reconsideration of the treatment of counterparties of category 3 in view of the ongoing EMIR-review.

58. The main arguments brought forward for a delay included operational issues (late authorisation of OTFs, impact of straight through processing rules, limited time to become member of a trading venue, trading venues are not ready to offer trading in all instruments, uncertainty about the treatment of package transactions), uncertainty about timing and content of equivalence decisions by the Commission, avoiding a big bang effect, and the ongoing EMIR review, which may result in a change of scope of the clearing obligation.

59. On the other hand, respondents that supported ESMA’s approach were not concerned about the operational issues and considered it feasible to ensure a swift implementation of the TO on 3 January 2018 given that it is already possible today to trade these instruments on a trading venue and that it does not require a lot of lead time to become a member of a trading venue. It should also be noted that no phase-in was granted for the trading obligation in the US.

60. Concerning the appropriate length of a delay, most respondents were in favour of a delay of 1-6 months for counterparties of category 1 and 2, with some respondents asking for a delay of 1 year. Most respondents considered that the TO should only be implemented after the European Commission has taken equivalence decisions, in particular for the US.

61. Some respondents argued in favour of different application dates for counterparties of category 1 and 2, claiming that counterparties of category 2 would necessitate more time. On the other hand, some respondents were supportive of aligning the timeline for
counterparties of category 1 and 2. Several respondents recommended that the treatment of counterparties 3 should be aligned with any forthcoming changes to EMIR.

62. **ESMA’s response:** ESMA maintains its view that market participants have sufficient time to prepare for the TO so that no phase-in for counterparties of category 1 and 2 is needed. ESMA does not consider that many of the operational issues mentioned by respondents (such as becoming member of a trading venue) could not be overcome ahead of the application of MiFIR as evidenced by the responses provided by some respondents. ESMA did not receive any compelling evidence that would justify treating counterparties of category 1 and 2 differently, and therefore did not amend its approach.

63. ESMA expects that the Commission will finalise its equivalence decisions, covering at least the most important jurisdictions, sufficiently ahead of 3 January 2017.

64. Concerning the treatment of counterparties of category 3 in particular, and the impact of the ongoing EMIR-review on the trading obligation for derivatives more generally, ESMA’s approach reflects the current scope of the CO and the TO. Should the review of EMIR result in changes to the scope of the CO, and in consequence to the TO under MiFIR, ESMA, where necessary, will adjust any RTS on the TO, should this be necessary, to reflect that change in scope.
8.2 Annex II

Legislative mandate to develop technical standards

Article 32 of MiFIR

1. ESMA shall develop draft regulatory technical standards to specify the following:

(a) Which of the class of derivatives declared subject to the clearing obligation in accordance with Article 5(2) and (4) of Regulation (EU) No 648/2012 or a relevant subset thereof shall be traded on the venues referred to in Article 28(1) of this Regulation;

(b) The date or dates from which the trading obligation takes effect, including any phase-in and the categories of counterparties to which the obligation applies where such phase-in and such categories of counterparties have been provided for in regulatory technical standards in accordance with Article 5(2)(b) of Regulation (EU) No 648/2012.

ESMA shall submit those draft regulatory technical standards to the Commission within six months after the adoption of the regulatory technical standards in accordance with Article 5(2) Regulation (EU) No 648/2012 by the Commission.

Before submitting the draft regulatory technical standards to the Commission for adoption, ESMA shall conduct a public consultation and, where appropriate, may consult third-country competent authorities.

2. In order for the trading obligation to take effect:

(a) The class of derivatives pursuant to paragraph 1(a) or a relevant subset thereof must be admitted to trading or traded on at least one trading venue as referred to in Article 28(1); and

(b) There must be sufficient third-party buying and selling interest in the class of derivatives or a relevant subset thereof so that such a class of derivatives is considered sufficiently liquid to trade only on the venues referred to in Article 28(1).

3. In developing the draft regulatory technical standards referred to paragraph 1, ESMA shall consider the class of derivatives or a relevant subset thereof as sufficiently liquid pursuant to the following criteria:

(a) The average frequency and size of trades over a range of market conditions, having regard to the nature and lifecycle of products within the class of derivatives;

(b) The number and type of active market participants including the ratio of market participants to products/contracts traded in a given product market;

(c) The average size of the spreads.
In preparing those draft regulatory technical standards, ESMA shall take into consideration the anticipated impact that trading obligation might have on the liquidity of a class of derivatives or a relevant subset thereof and the commercial activities of end users which are not financial entities.

ESMA shall determine whether the class of derivatives or relevant subset is only sufficiently liquid in transactions below a certain size.

4. ESMA shall, on its own initiative, in accordance with the criteria set out in paragraph 2 and after conducting a public consultation, identify and notify to the Commission the classes of derivatives or individual derivative contracts that should be subject to the obligation to trade on the venues referred to in Article 28(1), but for which no CCP has yet received authorisation under Article 14 or 15 of Regulation (EU) No 648/2012 or which is not admitted to trading or traded on a trading venue referred to in Article 28(1).

Following the notification by ESMA referred to in the first subparagraph, the Commission may publish a call for development of proposals for the trading of those derivatives on the venues referred to in Article 28(1).

5. ESMA shall in accordance with paragraph 1, submit to the Commission draft regulatory technical standards to amend, suspend or revoke existing regulatory technical standards whenever there is a material change in the criteria set out in paragraph 2. Before doing so, ESMA may, where appropriate, consult the competent authorities of third countries.
8.3 Annex III

Cost-benefit analysis

Pursuant to Articles 10(1) and 15 of the Regulation establishing ESMA\(^1\), ESMA is empowered to develop draft regulatory technical standards (RTS) or draft implementing technical standards (ITS) where the European Parliament and the Council delegate power to the Commission to adopt the RTS/ITS by means of delegated acts under Article 290 TFEU in order to ensure consistent implementation and application in the areas specifically set out in the legislative acts within the scope of action of ESMA. The same Article obliges ESMA to conduct open public consultations on draft RTS/ITS and to analyse the related potential costs and benefits, where appropriate. Such consultations and analyses should be proportionate in relation to the scope, nature and impact of the draft RTS/ITS.

This section contains a cost-benefit analysis (CBA) of the draft RTS with regard to the TO for derivatives.

1. Executive Summary

Article 28 of MiFIR introduces an obligation for financial counterparties and for some non-financial counterparties to execute non-intra group transactions in derivatives pertaining to a class of derivatives subject to the TO on regulated markets, MTFs, OTFs or equivalent third-country venues. Article 32 of MiFIR sets out the conditions to be met and the criteria to be taken into account for a derivative contract to be subject to the TO. The purpose of the draft RTS is to further specify the derivative contracts (derivatives) subject to the clearing obligation (CO) to be made subject to the TO and the date(s) from which the TO takes effect.

This document has five sections: an introduction to the topic discussed (Introduction), the baseline to consider when determining the incremental costs and benefits arising from the draft RTS (Baseline), an identification of the stakeholders subject to those amendments and how they may be affected (Stakeholders), an analysis of the costs and benefits arising from the incremental obligation attributed to the draft RTS vs. the baseline defined previously (Cost Benefit Analysis) and a final section on literature review. The stakeholders identified are trading venues, members and participants of trading venues, financial counterparties, significant non-financial counterparties and other market participants.

2. Introduction

Parties to the G20 Pittsburgh summit on 25 September 2009 reached an agreement to move trading in standardised OTC derivative contracts to exchanges or electronic trading platforms where appropriate. To fulfil the Union’s G20 commitments on derivatives, MiFIR mandates trading between financial counterparties and large non-financial counterparties in all

derivatives subject to the CO and which are sufficiently liquid to take place on trading venues and equivalent third country venues. Article 32 of MiFIR outlines the process for deciding which derivatives should be subject to the TO and sets out the criteria to be taken into account by ESMA when developing draft RTS to specify which derivatives should be subject to the TO.

Based on those criteria, the draft RTS proposes an exhaustive list of derivatives that should be subject to the TO.

The costs and benefits section provides an analysis of the potential effects of the draft RTS on the stakeholders directly and indirectly affected, taking into account the comments received on the DP published on 20 September 2016 and the CP published on 19 June 2017. In practice however, it may sometimes be very difficult to disentangle the effects of the Level 1 legislation, for which an impact assessment covering the general aspects of the Regulation has been already performed and published by the European Commission⁴, and the effects of the Level 2 RTS. As very few responses were received to the CBA questions included in the CP, the final CBA remains of a qualitative nature.

ESMA notes that the costs incurred by market participants in relation to the TO may partly depend on whether the key derivative third-country trading venue will be benefiting from an equivalence decision by the Commission by the time the TO takes effect. However, this issue is not within ESMA’s remit and is therefore not taken into consideration in the CBA.

3. Baseline

From a legal perspective, the legislation to consider is Article 28 of MiFIR that introduces a TO for certain derivative contracts, and Article 32 setting out the process for determining the derivative contracts subject to the TO, as supplemented by the Commission Delegated Regulation (EU) 2016/2020 of 26 May 2016 supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council on markets in financial instruments with regard to regulatory technical standards on criteria for determining whether derivatives subject to the CO should be subject to the TO⁵ (RTS 4).

Under Article 32(1) of MiFIR, ESMA is empowered to develop draft RTS to specify i) which derivatives subject to the CO should be subject to the TO and (ii) the date(s) at which the TO takes effect.

Article 32 (2) of MiFIR establishes that the derivative contract must be admitted to trading or traded on a trading venue and be sufficiently liquid. Article 32(3) of MiFIR provides for the criteria to be taken into account by ESMA when assessing whether a derivative is sufficiently liquid for mandatory trading on a trading venue, i.e. average frequency and size of trades, number and types of active market participants and average size of spreads.

---

⁵ OJ L 313, 19.11.2016, p. 2–5
In preparing the draft RTS, ESMA is required to take into consideration the anticipated impact that the TO may have on the liquidity of the derivative and the commercial activities of end-users which are not financial entities. Finally, ESMA must determine whether the derivative is only sufficiently liquid in transactions below a certain size.

The additional obligation created by the draft RTS is the exact list of derivatives that will be subject to the TO and the date(s) from which the TO takes effect. However, it is extremely difficult to disentangle the costs arising respectively from the Level 1 text and from the draft RTS. ESMA considers that most of those costs are linked to the Level 1 text.

Article 32(4) of MiFIR foresees that ESMA shall, on its own initiative, identify and notify to the Commission derivative contracts that should be subject to the TO, although those contracts would not be centrally cleared or admitted to trading or traded on a trading venue. At this stage, ESMA did not deem it necessary to make use of this empowerment.

4. Stakeholders

The stakeholders identified are:

- Trading venues: Trading venues trading derivatives subject to the TO will likely receive, and have to process, additional membership requests. Trading venues may have to hire additional supporting staff should there be a substantial increase in members/participant and trading volume. Those potential additional efforts are expected to be far outweighed by the positive impact of the TO on trading venues, through increased trading volume and revenues.

  Some trading venues that currently do not offer trading in derivatives subject to the TO may be incentivised to do so.

- Financial counterparties:

  o Where those entities are already members/participants of trading venues trading the derivative contracts subject to the TO, they will benefit from the increased liquidity available on those trading venues, without additional direct costs.

  o Where those entities currently do not trade derivatives subject to the TO on trading venues, they will incur direct additional costs such as IT connectivity costs, membership fees. For firms that trade those derivatives infrequently, those additional costs could be significant and firms might consider switching to alternative instruments or amending their business model.

  Whenever they currently trade derivatives to be subject to the TO OTC, market participants may also have to amend their trading model for instance by switching from voice trading to electronic trading, which may have organisational, IT and staff impact. While the draft RTS specifying the TO does not prescribe the trading protocols to be used by trading venues, it is
nevertheless likely that the TO will likely offer less flexibility in the way derivatives may be traded. Moving to on-venue trading may also impact the revenue structure of financial counterparties, with a potential increase in (i) fee based revenue vs spread based revenue, and (ii) their revenue sources as more transparent on-venue trading will likely increase competition.

- Significant non-financial counterparties: Where significant non-financial counterparties trade derivatives subject to the TO for purposes other than hedging, they may decide to become a member/participant or alternatively, amend the way they currently trade those derivatives, for instance by entrusting their execution to a trading venue member/participants on an agency basis or switching to slightly different instruments.

- Counterparties not subject to the TO and end-investors more generally: Those stakeholders will be impacted to the extent that the increased pre-trade transparency framework resulting from the combined effect of Level 1 and of the derivatives subject to the TO under the draft RTS has an impact on total cost of trading in such derivatives and on the ability of such market participants to appropriately mitigate risks. Those market participants may also try, or be offered, to switch to slightly different instruments to escape the TO.

5. Cost-Benefit Analysis

The draft RTS sets out the list of derivatives subject to the TO and the dates from which such obligation takes effect.

A- Determination of derivatives subject to the TO

Under Article 32(2) of MiFIR, two main tests must be carried out to determine whether a class of derivatives subject to the CO should also be subject to the TO: i) a venue test (is the class of derivatives admitted to trading or traded one trading venue?) and ii) a liquidity test (is the class of derivatives sufficiently liquid and has sufficient third party-buying and selling interests?).

a) Venue test

In the CP, ESMA proposed that a class of derivative would pass the trading venue test if admitted to trading on a least one trading venue. Some respondents argued that the number should be higher (two or three) in case that one trading venue would not allow participants to access the venue. ESMA notes that derivatives subject to the TO are eligible to be admitted to trading or traded on any trading venue on a non-exclusive and non-discriminatory basis in accordance with Article 28(3) of MiFIR. In addition, under Articles 53(1) and 18(3) of MiFIDII, trading venues must have transparent and non-discriminatory rules based on objective criteria governing access to their venue. Consequently, ESMA maintained its initial approach.

Based on the list of derivatives meeting the liquidity test below, ESMA notes that all those derivatives are also available for trading on at least one trading venue. In their response to the CP, some trading venues confirmed that all the derivative instruments that ESMA identified to
be subject to the TO were currently available for trading on their system. ESMA considers that a similar statement would also apply to the extended list of instruments subject to the TO under the final draft RTS.

One respondent to the CP stressed that Brexit should be taken into consideration when assessing whether a class of derivatives is admitted to trading on a trading venue. ESMA agrees that the UK leaving the EU may have implications on the TO but considers that this cannot be anticipated in the draft RTS as the UK is currently still part of the EU.

b) Liquidity test

The liquidity test conducted for liquidity is based on TR data and data on fixed-to-float single currency swaps and OIS collected from some MTFs for the period 1 July-31 December 2016. The data received has been integrated with TR data covering the same period and data cleaning has been performed to avoid double counting to the extent possible.

Most respondents to the CP agreed with ESMA’s approach of including on-venue data and supported maintaining this approach in future analysis. The approach has therefore been maintained.

Given that the data collected from MTFs only captures a relatively small part of the overall trading in IRS and that only a small part of TR data could be taken into consideration due to missing fields, ESMA notes that the liquidity analysis conducted in the CP is likely to understate the overall liquidity in IRS. The liquidity analysis has been conducted only for transactions in EUR, GBP, USD, JPY and SEK as no data was received from MTFs for other currencies. No further liquidity analysis was conducted for the final draft RTS.

Finally, given the outstanding uncertainties surrounding the data set used for the liquidity assessment, ESMA did not set fixed thresholds to be met for the liquidity criteria (average frequency of trades, average size of trades, number and type of active market participants and average size of spreads) and rather relied on a holistic liquidity assessment, which allows for better consideration and weighting of the various liquidity criteria mentioned below. Most respondents agreed with the holistic approach taken to analyse the liquidity of classes of derivatives and the approach was maintained here as well.

i. Number of market participants: ESMA considers that 50 counterparties appears to be a reasonable number, but notes that there may be room for deviation depending on the overall market size and liquidity of the different derivative classes.

ii. Number of trading venues: ESMA is of the view that having more than one trading venue making a derivative available for trading should not be a prerequisite to consider that the derivative has a liquid market. Nor does it consider that a minimum level of trading activity should be taking place on the trading venue making the derivative available for trading. ESMA however notes that MTF data has now been included in the liquidity assessment, thereby contributing to ensuring that only sufficiently liquid standardised derivatives will be subject to the TO.
iii. Number of market makers: This criterion has been given a lower rating given the ambiguities around the concept of market makers/liquidity providers and the absence of binding liquidity arrangements at many trading venues.

iv. Ratio of market participants to average size/frequency of trades and average size of spreads: ESMA did not consider those criteria in the liquidity assessment due to uncertainties of the intended purpose or unavailability of data.

Regarding the anticipated impact of the TO on the liquidity of a class of derivatives, ESMA notes that the TO will likely lead to changes in trading behaviour, but it can reasonably be expected that where a class of derivatives passes the liquidity assessment, there will be no immediate negative impact on liquidity due to the TO. To the contrary, more centralised and transparent markets may contribute to decreased trading costs and increased liquidity (see also Section 6 on Literature review).

c) List of derivatives subject to the TO

Based on the responses to the CP, ESMA has decided to generally maintain its initial approach regarding the classes of derivatives subject to the TO. ESMA however took into account some of the remarks and suggestions made by respondents.

In order to more easily identify the IRS subject to the TO and ensure a greater degree of cross-border alignment, ESMA has added the following parameters to the determination of those IRS: i) notational type (constant), ii) optionality (no) and iii) day count convention of the floating leg.

As regards the tenors covered by the TO, some respondents disagreed with the approach taken by ESMA that a component shall be deemed to have a tenor of a certain year where the period of time between the effective date and the termination date of a contract equals that year plus or minus five days. They note that if clients are determined to avoid the trading obligation, they could anyhow request to trade 6-day off-benchmark or whatever duration is required to evade any such anti-avoidance mechanism. Fundamentally, those respondents are concerned that this rule expands the scope of the trading obligation in the EU beyond the USA.

After due consideration, ESMA has decided to maintain the definition of tenors proposed in the CP. Based on available TR data, ESMA notes that there is not insignificant trading taking place just before and after the benchmark date and that the plus or minus five trading days anti-avoidance mechanism appears justified. In addition, the approach suggested is consistent with the definition of tenors that appears in the draft RTS on package transactions. Finally, ESMA considers that whilst the definition of tenors may extend the TO beyond the scope of the TO in the US, trading venues in the EU offer more flexibility to trade instruments subject to the TO.

Regarding more specifically the list of derivatives that would be subject to the TO, and based on the comments received, ESMA has made the following amendments to the list of derivatives set out in the Annex to the initial draft RTS:
i. Fixed-to-float IRS in EUR, GBP and USD

In the initial draft RTS, ESMA proposed that fixed-to-float IRS in EUR, GBP and USD with the most standardised characteristics and benchmark tenors should be subject to the TO and took a cautious approach thereof by considering that fewer sub-classes were determined to be liquid compared to the TO in the US for IRS denominated in EUR, USD and GBP. However, ESMA invited comments on the potential addition of some more tenors identified in the CP.

For all three currencies, the majority of respondents agreed to introduce the TO for the class of derivatives proposed in the initial draft RTS. Concerning the additional classes of derivatives for which stakeholders were asked for feedback, a significant number of them supported the additions proposed, whilst some respondents considered those additional tenors not liquid to be subject to the TO.

After considering the various arguments put forward by the respondents, on balance, ESMA decided to go for the broader approach, which includes the additional tenors put forward for comments in the CP. Although there may not be a high number of trades per day, ESMA notes that sufficient liquidity is available in those classes of derivatives in the EU as market participants can source liquidity in those with relative ease, whilst the TO still remains limited to a relatively small subset of interest rate derivatives focusing on three major currencies. Furthermore, this broader approach provides for more consistency between the EU and the US approach to the TO. This will facilitate cross-border implementation and support integrated global derivative markets.

ii. Credit Derivatives

Based on an assessment of trade frequency and the availability of those contracts on trading venues, ESMA proposed in the CP that the current on-the-run series and the latest off-the-run series of the two Index CDS that are subject to the CO are considered sufficiently liquid to be made subject to the TO. As the large majority of respondents supported this proposal, ESMA did not amend it.

Many respondents to the CP asked ESMA to clarify the treatment of package transactions under the TO. ESMA can only reiterate that it is not explicitly empowered to develop a tailored TO regime for package transactions. Nor does ESMA’s mandate indicate that there may be room for exempting certain components of package transaction components from the TO, as the CFTC does. Accordingly, the draft RTS on the TO abstains from dealing with package transactions. Package transactions will be further addressed through Q&As.

ESMA also notes that where specific transactions, such as intra-group transactions, are excluded from the clearing obligation, those transactions are excluded from the TO per se without any further need for a specific exclusion in the final draft RTS. The final draft RTS does not add any additional obligations to market participants in those areas.
<table>
<thead>
<tr>
<th><strong>Policy Objective</strong></th>
<th>Ensuring trading in derivatives that are sufficiently liquid takes place on venue for more efficient markets.</th>
</tr>
</thead>
</table>
| **Technical Proposal** | Under the draft RTS, the most standardised IRS in EUR, GBP and USD and the current on-the-run series and latest off-the-run series in two Index CDS (EUR) will be subject to the TO.  
See Annex of the draft RTS for more details. |
| **Benefits** | The draft RTS provides clarity, legal certainty and predictability with respect to derivatives subject to the TO and further contributes to supervisory convergence.  
The draft RTS is based on a holistic approach to liquidity rather than on fixed thresholds, which allows better taking into account and weighting the various liquidity criteria.  
The final draft RTS provides for further alignment with the US approach to the TO. This will reduce operational implementation costs for market participants trading classes of derivatives subject to the TO across the Atlantic. The approach followed will also support integrated and efficient global derivative markets.  
The TO remains focused on a relatively small subset of interest rate derivatives focusing on three major currencies. This will contribute to reducing potential disrupting impact on market participants and will reduce the operational burden for firms trading derivatives in other currencies (e.g., SEK). |
| **Cost to regulator:** | CAs may incur additional on-going staff supervisory costs to ensure that derivatives subject to the TO are traded on an EU trading venue or an equivalent third-country venue.  
ESMA considers those costs to be mainly driven by Level 1. |
| - **One-off** |  |
| - **On-going** |  |
| **Compliance cost:** | Trading venues offering trading in derivatives subject to the TO will likely incur one-off IT and human costs to process additional membership requests, including from buy-side clients.  
They may also incur on-going staff and IT costs for monitoring a larger number of members/participants and increased trading volume on their systems.  
ESMA considers those costs to be mainly driven by Level 1. |
| - **One-off** |  |
| - **On-going** |  |
| **Cost to other stakeholders** | A number of market participants may incur one-off staff costs, including staff training, legal costs and IT costs to connect to trading systems.  
ESMA considers those costs to be mainly driven by Level 1. |
venues, or additional trading venues trading derivatives subject to the TO.

Those market participants will incur on-going staff costs to ensure compliance with trading venues’ rules, as well as on-going IT maintenance costs, in addition to on-going membership fees.

For firms that trade derivatives subject to the TO infrequently, those additional costs may be significant and may lead them to switch to less perfect OTC derivative hedging or to reconsider their business model.

ESMA considers those costs to be mainly driven by Level 1.

| Indirect costs | The uncertainty surrounding the treatment of package transactions with respect to the TO may be a source of costs for some market participants.  
|               | The lack of consistency between the liquidity tests for transparency and TO purposes may result in different treatments for the same class of derivatives, creating uncertainty and costs to market participants. ESMA notes that, in any case, the static nature of the list of derivatives subject to the TO combined with the dynamic annual review of derivatives liquidity for transparency purposes create an on-going risk of inconsistency between the two assessments.  
|               | ESMA considers those last two indirect costs to be mainly driven by Level 1. |

B- Trading obligation and transparency

As required by Article 32(3) of MiFIR, ESMA also considered whether a class of derivatives is only sufficiently liquid in transactions below a certain size.

In the CP, ESMA proposed not to systematically exempt transactions above a certain size from the TO, considering that MiFIR already provides for pre-trade transparency waivers for orders that are above pre-trade LIS and differed publication for transactions above post-trade LIS.

Mixed views were expressed in the responses to the CP. Some respondents disagreed with the proposed approach that would not be aligned with the CFTC one, noting the need for protection against information leakage and other predatory behaviours. Others stressed that pre-trade transparency waivers and post-trade transparency deferrals are left to NCAs’ discretion and that they cannot be relied upon to exempt large transactions from the TO. Even
where pre-trade waivers would be granted, clients will be forced to seek liquidity in very large trades on venue, where it is unlikely that liquidity will be available at favourable prices.

Some other respondents supported ESMA’s proposed approach, stressing that trading venues are able to offer trading protocols specifically to facilitate larger size-trades.

ESMA gave due considerations to the comments received. ESMA noted, in particular, the flexibility offered by the various trading models permitted under MiFID II compared to mandated Central Limit Order book and RFQ to three models under the US TO as well as the ability of trading venues to apply for a pre-trade transparency waiver to avoid information leakage when trading large orders. Therefore, ESMA decided to maintain its approach and not to propose an exemption from the TO for trades above a certain size. ESMA also notes that, although large trades are exempted from the TO in the US, such trades would typically be executed on the system of a SEF for credit check purposes.

Many respondents asked for clarifications on the ability to pre-negotiate transactions in large and then to report the trade on-venue. However, this is outside ESMA’s TO mandate and is not discussed in this CBA. ESMA intends to address this issue through Q&As.

<table>
<thead>
<tr>
<th>Policy Objective</th>
<th>Ensuring an appropriate level of transparency for derivatives subject to the TO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Proposal</td>
<td>No specific exemption from the TO for trades above a certain size.</td>
</tr>
<tr>
<td>Benefits</td>
<td>The draft RTS provides clarity, legal certainty and predictability with respect to derivatives subject to the TO and further contributes to supervisory convergence.</td>
</tr>
<tr>
<td></td>
<td>The meaningful MiFIR transparency framework remains unaffected by the TO. The draft does not add an additional layer of complexity in the design, and implementation, of the MiFIR transparency regime.</td>
</tr>
<tr>
<td></td>
<td>Having all trades subject to the TO executed on a trading venue will enhance competition amongst market participants and should contribute to enhance pricing.</td>
</tr>
<tr>
<td></td>
<td>The draft RTS also contributes to enhanced market integrity by transferring trading activity onto regulated venues with monitoring and surveillance capabilities.</td>
</tr>
<tr>
<td>Cost to regulator:</td>
<td>No additional cost identified for regulators.</td>
</tr>
<tr>
<td>- One-off</td>
<td></td>
</tr>
</tbody>
</table>

43
### Compliance cost:

| - On-going | None identified for trading venues. |
| - One-off  |                                        |
| - On-going |                                        |

### Cost to other stakeholders

None identified.

### Indirect costs

No indirect costs identified with respect to pre-trade transparency as MiFIR already provides for the possibility to waive pre-trade transparency requirements for transactions above a certain size, which addresses information leakage concern.

With respect to post-trade transparency, market participants will be able to benefit from deferred publication of transactions that are LIS. Compared to the option where those LIS transactions would not have been published at all, ESMA considers that the marginal indirect costs are not significant as post-trade transparency is more likely to generate indirect costs for markets participant when trading in illiquid and non-standardised instruments.

---

**C- Date from which the TO takes effect**

The TO for derivatives implements a G20 commitment of 2009, which was expected to be implemented by 2012. The US implemented this G20 commitment in 2014.

Taking into account the already late implementation of the TO in the EU, and the fact that there is still a significant period of time between the publication of the DP and the MiFID II application date, ESMA did not consider it appropriate to further delay the TO implementation after MiFID II applies on 3 January 2018. ESMA also took note of the political expectation that the TO becomes effective as soon as possible.

However, as the TO can only apply to derivatives subject to the CO, the initial draft RTS took into account the phase-in for the four different categories of counterparties set out in the
Commission Delegation Regulations\(^6\) establishing the CO under EMIR, including the further delay endorsed by the Commission for counterparty category 3\(^3\).

Whilst most respondents to the CP agreed with ESMA’s proposal for counterparties of category 3 and 4, most respondents disagreed with the approach for counterparties of category 1 and 2.

Those respondents expressed major concerns about the TO being applied on 3 January 2018 without prior favourable venue equivalence determination being made in time for major jurisdictions, including the US. ESMA recognises the importance of the equivalence decisions for the TO. However, as noted earlier, this issue is not within ESMA’s remit and is therefore not taken into consideration in the CBA.

The other concerns expressed relate to more operational issues. In particular, respondents noted that OTFs will likely not be authorised until 2018. Investment firms will therefore have no time to connect to OTFs, test connections and ensure that legal documentation is in place prior to 3 January 2018. A TO application on that day would temporarily favour using the existing market infrastructure for the TO.

They also stressed that there are significant inter-related changes that go live on this same day, including the clearing STP rules as specified in RTS 26. Firms will have little time to test fully the end-to-end workflow associated with the TO, on top of the other range of venue testing that must be completed.

ESMA could understand the reason for a short delay for the TO to take effect, such as one month after MiFIDII/MIFIR application, to minimise the operational risks associated with multiple changes taking place on the same day for counterparties of categories 1 and 2. However, ESMA decided not to amend the date proposed in the CP for the reasons already set out. In particular, ESMA notes that market participants have long been made aware of the upcoming TO and that very little change is being made in the final draft RTS to the instruments proposed to be subject to the TO in the CP.

Accordingly, under the draft RTS, for counterparties of categories 1 and 2 the TO would take effect on the date of entry into force of the RTS on TO, i.e. the day following the publication of the RTS in the OJ. For counterparties of categories 3 and 4, for which the CO will start to apply far after 3 January 2018, the TO will take effect on the same day as the CO, i.e. on 21 June 2019 for category 3 and respectively on 21 December 2018 (IRD) and 9 May 2019 (Credit derivatives) for category 4.

\(^6\)Commission Delegated Regulation (EU)2015/2205 of 6 August 2015  
Commission Delegated Regulation (EU)2016/1178 of 10 June 2016  
<table>
<thead>
<tr>
<th><strong>Policy Objective</strong></th>
<th>Ensuring a timely application of the TO in the EU.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Technical Proposal</strong></td>
<td>For counterparty categories 1 and 2, the TO takes effect on the date of entry into force of the RTS on TO.</td>
</tr>
<tr>
<td></td>
<td>For counterparty categories 3 and 4, the TO takes effect on the date of entry into force of the CO.</td>
</tr>
<tr>
<td></td>
<td>See Article 2 of the draft RTS for more details.</td>
</tr>
<tr>
<td><strong>Benefits</strong></td>
<td>The draft RTS ensures that the TO takes effect as soon as possible once MiFIDII/MiFIR applies.</td>
</tr>
<tr>
<td><strong>Cost to regulator:</strong></td>
<td>CAs may incur additional on-going staff supervisory costs to ensure that the respective phase-ins for the TO are met by each category of counterparty.</td>
</tr>
<tr>
<td>- <strong>One-off</strong></td>
<td>We consider those additional costs to be non-significant.</td>
</tr>
<tr>
<td>- <strong>On-going</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Compliance cost:</strong></td>
<td>Trading venues will have to process potential additional membership requests from counterparty category 1 and 2 and consider the potential extension of the list of derivatives made available for trading at the same time they will be finalising preparation for MiFID II/MiFIR implementation.</td>
</tr>
<tr>
<td>- <strong>One-off</strong></td>
<td>Although this may be a source of additional one-off costs, we do not expect those costs to be significant compared to the overall potential additional business activity arising from the TO.</td>
</tr>
<tr>
<td>- <strong>On-going</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Cost to other stakeholders</strong></td>
<td>Market participants belonging to counterparty categories 1 and 2 will need to set up arrangements with trading venues at the same time they finalise arrangements prior to the MiFID II/MiFIR application date. This may be a source of additional costs as more resources may be needed over a limited period of time. Those costs would however be limited by the choice made in the draft RTS not to opt for full alignment of the trading mandate between the EU and the US right from the start.</td>
</tr>
<tr>
<td></td>
<td>Counterparties of categories 1 and 2 will incur search costs to check publication of the RTS in the OJ. We do not expect those costs to be significant and those market participants may decide to anticipate the TO by a few days or weeks to avoid such costs.</td>
</tr>
<tr>
<td><strong>Indirect costs</strong></td>
<td>None identified</td>
</tr>
</tbody>
</table>

i. Background

In January 2016, the Bank of England produced a staff working paper analysing the impact of the implementation of the US trade mandate of the Dodd-Frank Act and the mandatory trading of certain interest rate swaps that came into effect on 15 February 2014 on interest rate swap market liquidity.

The analysis used transaction data for USD and EUR denominated vanilla spot interest rate swaps obtained from the London Clearing House (LCH) and the Depository Trust & Clearing Corporation (DTCC).

Under the Dodd-Frank Act, Swaps subject to the trade execution mandate must be traded on a Swap Execution Facility (SEF) or a designated contract market (DCM). SEFs are multilateral trading platforms that operate a multi dealer request for quote (RFQ) functionality and a Central Limit Order Book (CLOB). On a SEF, the RFQ functionality requires that a request for quote is sent to at least three market participants. This easily enables the client asking for a quote to compare prices among dealers and thus promote competition for order flow among dealers. Dealers cannot see each others’ quotes and do not know which other dealers have received the request.

The CLOB and the RFQ functionalities operate in conjunction for swaps subject to the trading mandate. The SEF must provide the RFQ requester with any firm resting bid or offer in the order book, together with any other quote received from the RFQ platform.

Transactions are subject to real-time reporting and public dissemination.

According to the authors, SEFs change the microstructure of the market in two ways. First, they increase transparency by allowing market participants to more easily compare prices quoted by dealers. Second, SEFs allow end-users to compete directly with dealers in supplying liquidity, although most of the liquidity provision is still being done by dealers.

ii. Results

The authors analysed the impact of those market microstructure changes on the liquidity and trading patterns in interest swaps markets. Their key findings are summarised below:

- The introduction of trading on SEFs improved liquidity, in particular for USD swaps that were mandated to trade on SEFs, i.e. for the swaps that were already the most liquid, with total execution costs decreasing by $20-$40 million daily for USD mandated swap and by $7-13$ million daily for end-users;

---

- The trading mandate has led the EU and US swap markets to be somewhat less integrated – some non-US persons became less willing to trade with US persons as this would require them to trade on a SEF. However this increased fragmentation did not have a detrimental effect on trading costs (liquidity).

- The authors tested whether improved transparency reduced the importance of dealers in matching the ultimate counterparties. Results show a reduction in inter-dealer trading equally spread across different maturities and currency (this could in turn explain the lower execution costs after SEFs). However, evidence does not permit to firmly conclude that this reduction in interdealer trading was due to mandated trading on SEFs; it could be also driven by the new RFQ functionality that forces dealers to quote more competitive spreads and in turn this leads to narrower spreads.

As a conclusion, the authors note that the increased transparency, and particularly the pre-trade transparency, and competition that SEFs brought about significantly improved trading conditions for swaps, especially for those that were forced to trade on them, i.e. the most liquid ones. They also note that the result that increased pre- and post-trade transparency improves liquidity is consistent with work undertaken by other academics on other asset classes.
8.4 Annex IV

COMMISSION DELEGATED REGULATION (EU) .../...

of [ ]
supplementing Regulation (EU) No 600/2014 of the European Parliament
and of the Council on markets in financial instruments with regard to
regulatory technical standards on the trading obligation for derivatives
(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No
648/2012 (\(1\)), and in particular Article 32(1) thereof,

Whereas:

(1) Regulation (EU) No 600/2014 provides for an obligation to trade on a regulated market, a
multilateral trading facility, an organised trading facility or an equivalent third-country
trading venue certain classes of derivatives which have been declared subject to the clearing
obligation in accordance with Regulation (EU) No 648/2012 of the European Parliament
and of the Council\(^{(10)}\). This trading obligation only applies to classes of derivatives that are
sufficiently liquid and available for trading on at least one trading venue.

(2) For interest rate derivatives subject to the clearing obligation, liquidity is concentrated in
derivative contracts which have the most standardised characteristics. It is therefore
important to take those characteristics into consideration when establishing the list of
derivatives subject to the trading obligation.

(3) Similarly, liquidity in interest rate derivatives subject to the clearing obligation is
concentrated in derivative contracts having certain benchmark tenors. It is therefore
appropriate to limit the application of the trading obligation to derivatives with those
benchmark tenors. In order to distinguish derivative contracts starting immediately after the
execution of the trade from derivative contracts starting at a predetermined date in the
future, the tenor of a contract should be calculated based on the effective date at which the

---

9 OJ L 173, 12.6.2014, p. 84.
obligations under the contract come into effect. However, it is important not to make use of benchmark tenors as strict thresholds but rather as point of reference for targeted intervals to adequately take into account the derivatives’ liquidity pattern and to avoid circumvention of the trading obligation.

(4) For credit derivatives, with respect to the two index credit default swaps (CDS) that are subject to the clearing obligation, liquidity is concentrated in the current on-the-run series and the latest off-the-run series. It is therefore appropriate to limit the application of the trading obligation to derivatives belonging to those series only.

(5) Under the clearing obligation in accordance with Regulation (EU) No 648/2012, four categories of counterparties have been identified and a phased-in application of the provisions established so as to accommodate the specific needs of each type of counterparty. Since the trading obligation can only take effect once the clearing obligation has taken effect, it is appropriate to ensure that the provisions of this Regulation do not apply before the application of the clearing obligation in relation to the four categories of counterparties identified in accordance with Regulation (EU) No 648/2012.

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

(7) ESMA has conducted open public consultations on the draft regulatory technical standards on which this Regulation is based, analysed the potential related costs and benefits and requested the opinion of the Securities and Markets Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council

HAS ADOPTED THIS REGULATION:

Article 1

Classes of derivatives subject to the trading obligation

The classes of derivatives set out in the Annex shall be subject to the trading obligation.

Article 2

Dates from which the trading obligation takes effect

The trading obligation shall take effect from the later of the following dates:

(a) the date when this Regulation applies;

(b) the date from which the clearing obligation for the derivatives takes effect in relation to a category of counterparties in accordance with Article 3 of Commission Delegated Regulation (EU) No 2015/2205 (12) as well as Article 3 of Commission Delegated Regulation (EU) No 2016/592 (13).

Article 3

Entry into force and application

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

It shall apply from 3 January 2018.

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

Done at Brussels, []

For the Commission
The President

[For the Commission
On behalf of the President

[Position]


ANNEX

Classes of derivatives subject to the trading obligation

Table 1

Fixed-to-float interest rate swaps denominated in EUR

<table>
<thead>
<tr>
<th>Settlement currency</th>
<th>EUR</th>
<th>EUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade start type</td>
<td>Spot (T+2)</td>
<td>Spot (T+2)</td>
</tr>
<tr>
<td>Optionality</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Tenor</td>
<td>2,3,4,5,6,7,8,9,10,12,15,20,30Y</td>
<td>2,3,4,5,6,7,10,15,20,30Y</td>
</tr>
<tr>
<td>Notional type</td>
<td>Constant Notional</td>
<td>Constant Notional</td>
</tr>
</tbody>
</table>

Fixed leg

<table>
<thead>
<tr>
<th>Payment frequency</th>
<th>Annual or semi-annual</th>
<th>Annual or semi-annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day count convention</td>
<td>30/360 or Actual/360</td>
<td>30/360 or Actual/360</td>
</tr>
</tbody>
</table>

Floating leg

<table>
<thead>
<tr>
<th>Reference index</th>
<th>EURIBOR 6M</th>
<th>EURIBOR 3M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reset frequency</td>
<td>Semi-annual or quarterly</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Day count convention</td>
<td>Actual/360</td>
<td>Actual/360</td>
</tr>
</tbody>
</table>

Table 2

Fixed-to-float interest rate swaps denominated in USD

<table>
<thead>
<tr>
<th>Settlement currency</th>
<th>USD</th>
<th>USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade start type</td>
<td>Spot (T+2)</td>
<td>IMM (next two IMM dates)</td>
</tr>
</tbody>
</table>
### Fixed-to-Float single currency interest rate swaps – USD LIBOR 3M

<table>
<thead>
<tr>
<th></th>
<th>(\text{USD LIBOR} , 3\text{M})</th>
<th>(\text{USD LIBOR} , 3\text{M})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Settlement currency</td>
<td>\textbf{USD}</td>
<td>\textbf{USD}</td>
</tr>
<tr>
<td>Trade start type</td>
<td>Spot (T+2)</td>
<td>IMM (next two IMM dates)</td>
</tr>
<tr>
<td>Optionality</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Tenor</td>
<td>(2,3,4,5,6,7,10,12,15,20,30\text{Y})</td>
<td>(2,3,4,5,6,7,10,12,15,20,30\text{Y})</td>
</tr>
<tr>
<td>Notional type</td>
<td>Constant Notional</td>
<td>Constant Notional</td>
</tr>
<tr>
<td>Fixed leg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment frequency</td>
<td>Annual or semi-annual</td>
<td>Annual or semi-annual</td>
</tr>
<tr>
<td>Day count convention</td>
<td>30/360 or Actual/360</td>
<td>30/360 or Actual/360</td>
</tr>
<tr>
<td>Floating leg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reference index</td>
<td>\textbf{USD LIBOR} , 3\text{M}</td>
<td>\textbf{USD LIBOR} , 3\text{M}</td>
</tr>
<tr>
<td>Reset frequency</td>
<td>Quarterly</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Day count convention</td>
<td>Actual/360</td>
<td>Actual/360</td>
</tr>
</tbody>
</table>

### Fixed-to-Float single currency interest rate swaps – USD LIBOR 6M

<table>
<thead>
<tr>
<th></th>
<th>(\text{USD LIBOR} , 6\text{M})</th>
<th>(\text{USD LIBOR} , 6\text{M})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Settlement currency</td>
<td>\textbf{USD}</td>
<td>\textbf{USD}</td>
</tr>
<tr>
<td>Trade start type</td>
<td>Spot (T+2)</td>
<td>IMM (next two IMM dates)</td>
</tr>
<tr>
<td>Optionality</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Tenor</td>
<td>(2,3,4,5,6,7,10,12,15,20,30\text{Y})</td>
<td>(2,3,4,5,6,7,10,12,15,20,30\text{Y})</td>
</tr>
<tr>
<td>Notional type</td>
<td>Constant Notional</td>
<td>Constant Notional</td>
</tr>
<tr>
<td>Fixed leg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment frequency</td>
<td>Annual or semi-annual</td>
<td>Annual or semi-annual</td>
</tr>
<tr>
<td>Day count convention</td>
<td>30/360 or Actual/360</td>
<td>30/360 or Actual/360</td>
</tr>
<tr>
<td>Floating leg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reference index</td>
<td>\textbf{USD LIBOR} , 6\text{M}</td>
<td>\textbf{USD LIBOR} , 6\text{M}</td>
</tr>
<tr>
<td>Reset frequency</td>
<td>Quarterly or semi-annual</td>
<td>Quarterly or semi-annual</td>
</tr>
<tr>
<td>Day count convention</td>
<td>Actual/360</td>
<td>Actual/360</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
</tbody>
</table>

Table 3

**Fixed-to-float interest rate swaps denominated in GBP**

<table>
<thead>
<tr>
<th>Settlement currency</th>
<th>GBP</th>
<th>GBP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade start type</td>
<td>Spot (T+0)</td>
<td>Spot (T+0)</td>
</tr>
<tr>
<td>Optionality</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Tenor</td>
<td>2,3,4,5,6,7,10,15,20,30Y</td>
<td>2,3,4,5,6,7,10,15,20,30Y</td>
</tr>
<tr>
<td>Notional type</td>
<td>Constant Notional</td>
<td>Constant Notional</td>
</tr>
</tbody>
</table>

**Fixed leg**

<table>
<thead>
<tr>
<th>Payment frequency</th>
<th>Quarterly or semi-annual</th>
<th>Quarterly or semi-annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day count convention</td>
<td>Actual/365F</td>
<td>Actual/365F</td>
</tr>
</tbody>
</table>

**Floating leg**

<table>
<thead>
<tr>
<th>Reference index</th>
<th>GBP LIBOR 6M</th>
<th>GBP LIBOR 3M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reset frequency</td>
<td>Semi-annual or quarterly</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Day count convention</td>
<td>Actual/365F</td>
<td>Actual/365F</td>
</tr>
</tbody>
</table>

Table 4

**Index CDS**

<table>
<thead>
<tr>
<th>Type</th>
<th>Sub-type</th>
<th>Geographical zone</th>
<th>Reference index</th>
<th>Settlement Currency</th>
<th>Series</th>
<th>Tenor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index CDS</td>
<td>Untranchied index</td>
<td>Europe</td>
<td>iTraxx Europe Main</td>
<td>EUR</td>
<td>on-the-run series first off-the-run series</td>
<td>5y</td>
</tr>
<tr>
<td>Index CDS</td>
<td>Untranchd index</td>
<td>Europe</td>
<td>iTraxx Europe Crossover</td>
<td>EUR</td>
<td>on-the-run series first off-the-run series</td>
<td>5y</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------</td>
<td>--------</td>
<td>------------------------</td>
<td>-----</td>
<td>-------------------------------------------</td>
<td>----</td>
</tr>
</tbody>
</table>