EBA/RTS/2014/05

28 March 2014

EBA FINAL draft Regulatory Technical Standards

on additional liquidity outflows corresponding to collateral needs resulting from the impact of an adverse market scenario on the institution's derivatives transactions, financing transactions and other contracts for liquidity reporting under Article 423(3) of Regulation (EU) No 575/2013 (Capital Requirements Regulation CRR)

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Abbreviations

AMAO	Advanced Method for Additional Outflows
BCBS	Basel Committee on Banking Supervision
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
HLBA	Historical Look Back Approach
IMM	Internal Model Method
ITS	Implementing Technical Standard
LCR	liquidity coverage ratio
QIS	Quantitative Impact Study
RTS	Regulatory Technical Standard
SFT	Secured Financing Transaction

1. Executive Summary

Regulation (EU) No 575/2013 (Capital Requirements Regulation - CRR) sets out prudential requirements for liquidity.

In a number of Articles the CRR contains specific mandates for the EBA to develop draft Regulatory or Implementing Technical Standards (henceforth 'RTS' and 'ITS', respectively) related to liquidity and liquidity reporting requirements. These standards will be part of the single rulebook enhancing regulatory harmonisation in Europe.

The EBA has developed these draft RTS in accordance with the mandate contained in Article 423(3) of the CRR, which requires the submission of the draft RTS to the European Commission by 31 March 2014.

1.1 Main features of the RTS

Article 423(3) of the CRR mandates the EBA to draft RTS in order to address the materiality and to determine the measurement of additional collateral outflows resulting from the impact of an adverse market scenario on institutions' derivatives transactions, financing transactions and other contracts. In specific, the draft RTS focus on the capture of adverse changes in market valuation of derivatives and similar transactions and contracts which contractually require collateral to be held in such cases.

These draft RTS contain two methods for determining these additional collateral outflows, namely: an internal model-based method, which is called the Advanced Method for Additional Outflows ('AMAO'') and the Historical Look Back Approach ('HLBA'). The HLBA will serve as an obligatory floor to capture minimum additional collateral outflows and is to be implemented by all institutions regardless of whether they adopt the AMAO method or not.

The internal model-based method is designed for institutions with large derivative portfolios. It is built on the simulation of adverse market scenario conditions and takes into account contractual specificities. However, to reflect the fact that most institutions do not have internal systems capable of combining the simulation of market shocks with collateral characteristics of individual contracts, these draft RTS restrict the use of this method to institutions that already have an approved Internal Model Method (IMM) for counterparty credit risk.

As an obligatory floor, the historical look back approach, based on the approach outlined by the Basel Committee on Banking Supervision ('BCBS') in January 2013 is implemented.[1]

[1] Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools. To be found on http://www.bis.org/publ/bcbs238.htm

Based on feedback received during the consultation, the EBA acknowledges that, performing the calculations of these draft RTS for institutions with very immaterial portfolios may be unduly burdensome, while not adding considerable benefits in terms of safety and soundness. Thus, for reasons of proportionate application of the rules, and in order to specify the notion of materiality as per the requirement of Article 423(3), a threshold has been incorporated. For the purposes of these draft RTS, a derivative portfolio is deemed material if the total of notional amounts of such contracts exceeds 10% of the net Liquidity Coverage Requirement outflows. Institutions with derivative portfolios below this threshold are excluded from the application of these RTS.

2. Background and rationale

On 27 June 2013, Directive 2013/36/EU (the Capital Requirements Directive- CRD IV) and Regulation (EU) No 575/2013 (Capital Requirements Regulation- CRR), which seek to apply the Basel III framework in the EU, were published in the European Union's Official Journal. These represent a recasting of the contents of the previous Capital Requirements Directive (CRD) and are together colloquially referred to as the CRD IV/CRR.

The nature of RTS under EU law

The present draft RTS are produced in accordance with Article 10 of EBA regulation[2]. According to Article 10(4) of EBA regulation, draft RTS shall be adopted by means of a regulation or decision.

According to EU law, EU regulations are binding in their entirety and directly applicable in all Member States. This means that, on the date of their entry into force, they become part of the national law of the Member States and that their implementation into national law is not only unnecessary but also prohibited by EU law, except in so far as this is expressly required by them.

Shaping these rules in the form of a Regulation would ensure a level-playing field by preventing diverging national requirements and would ease the cross-border provision of services; currently, an institution that wishes to take up operations in another Member State has to apply different sets of rules.

Background and regulatory approach followed in the draft RTS

In January 2013, the Basel Committee on Banking Supervision (BCBS) published its revised rules text regarding the liquidity coverage ratio (LCR). The objective of the LCR is to promote the short-term resilience of the liquidity risk profile of banks. It does this by ensuring that banks have an adequate stock of unencumbered high-quality liquid assets (HQLA) which can be converted easily and immediately in private markets into cash to meet the banks' liquidity needs for a 30 calendar day liquidity stress scenario. It is intended that the LCR will improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source, thus reducing the risk of spillover from the financial sector to the real economy. The CRR provisions related to liquidity coverage requirements translate these BCBS proposals into EU law.

The draft RTS of the EBA contained herein are a direct result of Article 423(3) of the CRR, which mandates the EBA to draft RTS to determine the conditions of application in relation to the notion of materiality and methods for the measurement of additional collateral outflows resulting from the impact of an adverse market scenario on institutions' derivatives transactions, financing transactions and other contracts. More in particular, these draft RTS focus on capturing adverse market valuation

[2] Regulation (EU) N° 1093/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority), amending Decision N° 716/2009/EC and repealing Commission Decision 2009/78/EC.

changes in derivatives, other transactions and contracts that contractually require collateral in such cases. The EBA is mandated to submit these draft RTS to the Commission by 31 March 2014.

These RTS present two methods to determine these additional collateral outflows, namely: an internal model-based method , which is called the Advanced Method for Additional Outflows ('AMAO') and the historical look back approach ('HLBA'). The HLBA will serve as an obligatory floor to capture minimum additional collateral outflows and is to be implemented by all institutions regardless of whether they adopt the AMAO or not.

In comparison to the Consultation Paper ("CP") on the draft RTS issued on 23 May 2013 the main method, namely the Standard Method, has now been excluded from the final draft RTS. This method provided for the revaluation of institutions' portfolios according to various stress scenarios to determine the net collateral outflows. Consultation feedback pointed out that a reliable revaluation of derivatives under strong (hypothetical) stress conditions would not be possible for many institutions. A broader concern expressed was that the method is rather complex, especially in light of the fact that it would apply to the majority of medium-sized to large institutions, and that it has not been extensively and quantitatively impact-tested.

Additionally, the EBA has also removed the Simplified Method. In the CP the simplified Method was deliberately designed as a method with a punitive treatment applicable to institutions with very small derivative portfolios and for whom the implementation of the Standard Method would be too cumbersome. However due to the removal of the standard Method, the EBA has evaluated whether the Simplified Method would be suitable for application to all institutions that do not have the capability to implement the AMAO. After concluding that the simplified Method could not easily be re-calibrated in a manner that would make it more appropriate for a broad application, such as adding risk sensitivity, the EBA has decided on its removal from the final draft RTS.

The internal model-based method proposed, namely, the 'Advanced Method for Additional Outflows' ('AMAO'), is designed for institutions with large derivative portfolios. It has the potential to provide a more accurate estimation of collateral outflows in that it should allow a diversity of adverse market scenario conditions to be captured. An institution can opt for this method if it already has an approved Internal Model Method (IMM) model for the calculation of own funds requirements for counterparty credit risk. Using the IMM model as a base for estimating the additional collateral outflows requires a certain set of model adjustments. But most importantly, it would require institutions to change their focus from market shocks that, on the whole, are positive to the positions of the institution, to combinations of market shocks that are negative for the institution. Also, it would require institutions to run their IMM model on derivatives that are within the scope of Article 423(3) CRR. Further modifications to these existing models shall be necessary, given their difference in purpose. Inflows can only be taken into account where collateral received can be fully re-used. Regarding partial use, these draft RTS require institutions to apply the same partial use under the AMAO as under the IMM, with non-IMM transactions of IMM entities to be captured under an adjusted version of the mark-to-market method for counterparty credit risk and non-IMM entities to be captured under the HLBA. In order to reflect consultation feedback, the consolidated calculation can be performed by aggregating the solo or sub-consolidated results, while excluding intra-group transactions.

As a floor, a historical look back approach ("HLBA") derived from that outlined by the Basel Committee on Banking Supervision ('BCBS') in January 2013 is implemented. [3] The EBA has concluded that it would be most appropriate to require institutions to calculate additional collateral outflows using this approach by looking for the largest difference in collateral posted during periods of 30 days during the preceding 2 years. This will require institutions to take stock of the total amount of collateral posted for all relevant contracts on each day. Also here, the EBA acknowledges that the approach is arguably not ideal, for example due to its pro-cyclicality. However, in light of creating a level playing field with non-EU institutions and to be consistent with the BCBS standards, the EBA deems the implementation of the HLBA as a floor to the AMAO as an appropriate addition to the framework. More in particular, it counterbalances the fact that the AMAO method has not been quantitatively impact-tested.

In response to consultation feedback, the EBA acknowledges that performing the calculations of these draft RTS for institutions with very immaterial portfolios, may be unduly burdensome, while not adding considerable benefits in terms of safety and soundness. Thus, for reasons of proportionate application of the rules, and in order to specify the notion of materiality as per the requirement of Article 423(3), a threshold has been included. For the purposes of these draft RTS, a derivative portfolio is deemed material if the total of notional amounts of such contracts exceeds 10% of the net Liquidity Coverage Requirement outflows. Institutions with derivative portfolios below this threshold are excluded from the application of these RTS.

Pursuant to the mandate of Article 423(3) these draft RTS should also apply to relevant Secured Financing Transactions (SFTs). On the basis of consultation feedback, and further discussion, the EBA has drawn the conclusion that a relevant additional collateral outflow would result from a SFT mainly if a currency mismatch is involved. Specifically, where both legs of the SFT are denominated in a different currency, an exchange rate shock could render the value of the leg posted by the institution lower than that of the leg received by the institution, resulting in additional collateral pledges, where contractually required. However, given the timelines available it may not be practicable to incorporate these types of contracts into the methods of the draft final RTS. Further, when combined with the EBA's current perception that additional collateral outflows pursuant to these contracts may be of little materiality, the EBA has opted to exclude these contracts from the calculation of additional collateral outflows of these draft final RTS. However, for monitoring purposes, institutions shall calculate the results of the application of the HLBA to these exposures.

In light of further experience with the practical implementation of the methods contained herein, the draft RTS is expected to be reviewed within the next two years. The review would, in particular, reconsider the calibration of the methods and the introduction of additional methods; it would also allow the EBA to take into account international developments (such as implementation of the HLBA in non-EU jurisdictions), which will have taken place in the meantime, as well as other regulatory developments such as in the field of margining practices, including the development of VaR models to that purpose, and potential changes resulting from the European Commission's delegated act expected to be issued in 2014. Also, a specific topic for review will be whether the type of contracts covered, amongst others SFTs, is adequate.

[3] Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools. To be found on http://www.bis.org/publ/bcbs238.htm

3. EBA FINAL draft Regulatory Technical Standards corresponding to collateral needs resulting from the impact of an adverse market scenario on the institution's derivatives transactions, financing transactions and other contracts for liquidity reporting under Article 423(3) of Regulation (EU) No 575/2013 (Capital Requirements Regulation - CRR)

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Brussels, XXX
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COMMISSION DELEGATED REGULATION (EU) N
supplementing Regulation (EU) No 575/2013 of 26 June 2013 of
Parliament and of the Council with regard to regulatory technic
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of an adverse market scenario on an institution's derivatives trans
transactions and other contracts for liquidity reporting under

EXPLANATORY MEMORANDUM

1. CONTEXT OF THE DELEGATED ACT

Article 423(3) of Regulation (EU) No 575/2013 ('the Regulation') empowers the Commission to adopt, following submission of draft standards by the European Banking Authority (EBA), and in accordance with Articles 10 to 14 of Regulation (EU) No 1093/2010, delegated acts specifying the materiality and the measurement of additional collateral outflows resulting from the impact of an adverse market scenario on institutions' derivatives transactions, financing transactions and other contracts.

In accordance with Article 10(1) of Regulation (EU) No 1093/2010 establishing the EBA, the Commission shall decide within three months of receipt of the draft standards whether to endorse the drafts submitted. The Commission may also endorse the draft standards in part only, or with amendments, where the Union's interests so require, having regard to the specific procedure laid down in those Articles.

2. CONSULTATIONS PRIOR TO THE ADOPTION OF THE ACT.

In accordance with the third subparagraph of Article 10(1) of Regulation (EU) No 1093/2010, the EBA has carried out a public consultation on the draft technical standards submitted to the Commission in accordance with Article 423(3) of the Regulation. A consultation paper was published on the EBA internet site on 23 May 2013, and the consultation closed on 14 August 2013. Moreover, the EBA invited the EBA's Banking Stakeholder Group set up in accordance with Article 37 of Regulation (EU) No 1093/2010 to provide advice on them.

Together with the draft technical standards, the EBA has submitted an explanation on how the outcome of these consultations has been taken into account in the development of the final draft technical standards submitted to the Commission.

Together with the draft technical standards, and in accordance with the third subparagraph of Article 10(1) of Regulation No (EU) 1093/2010, the EBA has submitted its Impact Assessment, including its analysis of the costs and benefits, related to the draft technical standards submitted to the Commission. This analysis is available at http://www.eba.europa.eu/regulation-and-policy/liquidity-risk/draft-regulatory-technical-standards-on-additional-liquidity-outflows, pages 22-32 of the Final Draft Regulatory Technical Standards package.

3. LEGAL ELEMENTS OF THE DELEGATED ACT

The provisions of this delegated act set out an internal model-based method for determining these additional collateral outflows, which is called the Advanced Method for Additional Outflows ('AMAO') and an obligatory floor to capture minimum additional collateral outflows, the Historical Look Back Approach ('HLBA'), which is to be implemented by all institutions regardless of whether they adopt the AMAO method or not. To reflect the fact that most institutions do not have internal systems capable of combining the simulation of market shocks with collateral characteristics of individual contracts, this delegated act restricts the use of AMAO to institutions that already have an approved Internal Model Method (IMM) for counterparty credit risk.

Given the novelty of the rules on additional liquidity outflows corresponding to collateral needs resulting from derivatives and in light of further experience with the practical implementation of the methods contained herein, the EBA is considering reviewing the delegated act within the next two years.

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COMMISSION DELEGATED REGULATION (EU) No …/…
supplementing Regulation (EU) No 575/2013 of 26 June 2013 of the European Parliament and of the Council with regard to regulatory technical standards for additional liquidity outflows corresponding to collateral needs resulting from the impact of an adverse market scenario on an institution's derivatives transactions, financing transactions and other contracts for liquidity reporting under Article 423(3)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,
Having regard to Regulation (EU) No 575/2013 of the European Parliament and of the Council of of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012[1], and in particular fourth subparagraph of Article 423(3) thereof,
Whereas:

(1) Given that both transactions and contracts defined in Annex II of Regulation (EU) No 575/2013, as well as credit derivatives, options written, and any combination thereof can be subject to additional collateral outflows that result from an adverse market scenario other than changes in the value of collateral posted, rules on additional liquidity outflows corresponding to collateral needs resulting from the impact of an adverse market scenario should apply to these as well. Given considerations of materiality and practicality, these rules should not apply to Secured Financing Transactions ('SFTs'). Nonetheless, the SFTs where a change in the relevant exchange rate could trigger outflows of collateral from the institution due to one leg of the SFT being denominated differently from the other, should be monitored within the Historical Look-Back Approach ('HLBA') so that developments can be taken into account.

(2) It is appropriate to develop different approaches for determining additional collateral outflows that would result from the impact of an adverse market scenario on an institution's derivatives positions if material. To facilitate institutions that do not

[1] OJ L 176, 27.6.2013, p. 1.

have sophisticated modelling experience to calculate additional collateral outflows, the HLBA should be introduced. Additionally, to allow for a diversity of adverse market scenario conditions to be captured, an internal model-based method should be introduced. With a view to adhere to the Basel Committee standard, also for institutions under the Advanced Method for Additional Outflows ('AMAO'), the additional outflow requirement should not be lower than the outcome of the HLBA.

(3) Given that Article 423(3) of Regulation (EU) No 575/2013 refers to collateral needs, the rules should be restricted to contracts that are collateralised including those that mature within 30 days.

(4) It would be appropriate for all institutions that have been permitted by the relevant competent authorities to use the internal model method ('IMM') set out in Section 6 of Chapter 6 of Regulation (EU) No 575/2013, based on their level of sophistication, to adopt the Advanced Method for Additional Outflows ('AMAO') as referred to in Section 2 of this Regulation. Nevertheless, no obligation for these institutions to immediately apply the AMAO should be established in view of the novelty of the rules on additional liquidity outflows corresponding to collateral needs resulting from derivatives, which require institutions to develop changes in their IMM models, some of which might not be effected immediately for operational constraints.

(5) Given the novelty of the rules on additional liquidity outflows corresponding to collateral needs resulting from derivatives, its practical application and its impact on institutions should be examined by the European Banking Authority within the next two years, and any international regulatory developments until then should be analysed, with the view to examining whether any of the parts of this Regulation should be reviewed. This refers in particular to the optionality, calibration and scenario definitions of the AMAO method and the potential introduction of an additional (non-IMM-based) option.

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

(7) The European Banking Authority 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 Banking Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1093/2010.

HAS ADOPTED THIS REGULATION:

Article 1

Conditions of application in relation to the notion of materiality for the purposes of first subparagraph of Article 423 (3) of Regulation (EU) No 575/2013

1. An institution's derivatives transactions shall be considered material for the purposes of the first subparagraph of Article 423(3) of Regulation (EU) No 575/2013 where the total of notional amounts of such contracts has exceeded 10% of the net Liquidity Coverage Requirement outflows as referred to in Article 412 of that Regulation at any time in the previous two years.

2. For the purpose of this Article the Liquidity Coverage Requirement outflows as referred to in Article 412 of Regulation (EU) No 575/2013 shall be calculated without the additional outflow component of Article 423(3) of that Regulation.

Article 2

Methods for the measurement of the additional outflow

1. In order to calculate their additional outflows corresponding to collateral needs resulting from the impact of an adverse market scenario ('additional outflows') on their derivatives transactions if material, as referred to in Article 423(3) of Regulation (EU) No 575/2013, institutions shall use as additional outflows the highest of the following two amounts (a) and (b):

   (a) The amount resulting from the application of the Advanced Method for Additional Outflows ('AMAO') as referred to in Section 1, subject to the conditions described therein;

   (b) The amount resulting from the application of the Historical Look-Back Approach ('HLBA') as referred to in Section 2.

   In the course of the calculation of the additional outflows according to subparagraph 1, institutions shall apply the rules described in paragraphs 2 to 7.

2. Where institutions calculate their additional outflows on a consolidated basis according to the AMAO method referred to in Section 1, and where certain entities in the group have no approved internal model method ('IMM') pursuant to the third subparagraph of Article 273(1) of Regulation (EU) No 575/2013, institutions shall calculate the additional outflows corresponding to those non-IMM entities for their consolidated calculation according to the HLBA referred to in Section 2.

3. Where institutions calculate their additional outflows on an individual basis according to the AMAO method referred to in Section 1, they shall calculate the additional outflows for all derivatives transactions for which they have not received permission under paragraph 1 of Article 283 to use the IMM, according to the specific treatment referred to in Article 6.

4. For the purpose of applying any of the methods of paragraph 1 on a consolidated basis, institutions may do one of the following:

(c) apply the relevant method on a consolidated basis, except in the cases referred to in paragraphs 2 and 3;

(d) apply the relevant method on a sub-consolidated and solo basis and subsequently aggregate the results of such calculations.

Institutions shall notify competent authorities about their choice of method and of any subsequent changes from (a) to (b).

5. Where applying either of the methods referred to in paragraph 1 on a consolidated basis, institutions shall exclude transactions entered into exclusively with different legal entities of the group on the basis of the prudential consolidation situation of the group.

Section 1- Advanced Method for Additional Outflows ('AMAO') method

Article 3

Conditions of application of the AMAO method

1. An institution that has been permitted by the relevant competent authorities to use the internal-model method (IMM) set out in Section 6 of Chapter 6 of Regulation (EU) No 575/2013, may apply the AMAO method for the calculation of additional outflows subject to meeting the requirements referred to in Article 4.

2. An institution shall derive the AMAO method from the IMM as defined in Section 6 of Chapter 6 of Regulation (EU) No 575/2013 in accordance with Article 4, and it shall manage and monitor this dedicated process for the calculation of the additional outflows.

3. Institutions shall notify the relevant competent authorities of their intention to apply the AMAO method 60 days in advance of the first reporting under that method.

Article 4

General rules applying in the course of the measurement of additional outflows according to the AMAO method

1. The AMAO method shall use the stress calibration of the IMM referred to in the second subparagraph of point 2 of Article 292 of Regulation (EU) No 575/2013 unless otherwise indicated in this Article.

2. For the purposes of the calculation of Article 5, any single transaction or contract that is not part of a margining set, shall be considered as a margining set of its own.

3. For the purposes of Article 5, institutions shall treat a set of transactions and contracts with a single counterparty or with a single central counterparty as defined in Regulation (EU) No 648/2012 of the European Parliament and of the Council[2], as

[2] OJ L 201, 27.7.2012, p. 1.

a margining set, where all transactions and contracts in the set comply with all of the following conditions:

(a) all transactions and contracts are marked-to-market daily and any aggregate change in value leads to daily collateral outflows or inflows that fully cover such change in value;

(b) the collateral outflows or inflows take place on a net basis;

(c) where collateral is received on any of the transactions or contracts within the set it can be fully and on the same day used to cover outflows on any other transaction or contract within this set.

Article 5

Measurement of additional outflows according to the AMAO method

1. Institutions shall measure the additional outflows under the AMAO method based on the largest expected positive net additional outflow over a time horizon of one month and shall undertake it according to the following steps in sequence:

(a) For each joint change in market variables ('scenario') of the IMM referred to in paragraph 1 of Article 284 and for each margining set, institutions shall generate an additional outflow or an additional inflow at least at all the future dates referred to in the fourth subparagraph of Article 284(4) Regulation (EU) No 575/2013 used for the purposes of computing the exposure value for counterparty credit risk, where these are of a duration of less than or equal to one month;

(b) For each scenario and at each future date ti, institutions shall calculate the positive net additional outflow as the larger between zero and the sum of all the additional outflows, and inflows determined under point (a).

(c) For each future date ti, institutions shall calculate the average of all the positive net additional outflows calculated under (b) for all scenarios of the exposure model of Section 6 of Chapter 6 of Regulation (EU) No 575/2013 to work out the expected positive net additional outflows on that date.

(d) Finally, institutions shall select the largest of the expected positive net additional outflows calculated under (c) for all future dates ti less than or equal to one month, to form the largest expected positive net additional outflow within one month.

2. For the purposes of point (a) of paragraph 3, all of the following shall apply:

(a) At any given future date ti, an additional outflow shall be deemed to occur where the scenario of the exposure model of Section 6 of Chapter 6 of Regulation (EU) No 575/2013 generates a downward change in the mark-to-market value of the margining set between the current date t0 and ti;

(b) At any given future date ti, an additional inflow shall be deemed to occur where the scenario of the exposure model of Section 6 of Chapter 6 of

Regulation (EU) No 575/2013 generates an upward change in the mark-to-market value of the margining set between the current date t0 and ti;

(c) For the purpose of this calculation, an additional outflow shall have a positive sign and an additional inflow shall have a negative sign;

(d) All scenarios generated by the IMM shall be considered for the calculation of additional outflows or inflows, regardless of whether they result in a positive or negative market value of a transaction or a margining set at any future date ti;

(e) Where institutions use the method set out in Article 285 1(c) Regulation (EU) No 575/2013, they shall adjust the outcomes of point (a) to take account of any contractual arrangement that may affect the value of the additional outflows or additional inflows. Institutions shall not carry out this adjustment where they use either of the methods set out in point (a) or (b) of Article 285(1);

(f) No adjustments shall be made to reflect initial margins already posted.

3. For the purposes of point (b) of paragraph 3, institutions shall be ready to substantiate that both of the following conditions are met:

(a) the inflow of collateral is on the same day available to cover outflows to any other counterparty;

(b) the inflow of collateral is a liquid asset as reported in accordance with points (a) to (c) of Article 416(1) of Regulation (EU) No 575/2013, unless excluded according to Article 416(2) or Article 416 (3) of that Regulation.

Article 6

Specific treatment of non-covered derivative transactions in AMAO entities

1. Institutions shall determine their additional collateral outflows of the derivative transactions referred to in paragraph 3 of Article 2 by undertaking the following steps:

(a) they shall calculate the potential future exposure of their contracts in accordance with paragraph 2 of Article 274 of Regulation (EU) No 575/2013 for financial derivatives and in accordance with paragraph 2 of Article 299 of that Regulation for credit derivatives;

(b) they shall divide the potential future exposure resulting from point (a) by the square root of 12.

2. When performing the calculation of point (a) of paragraph 1, for the purposes of determining the potential future exposure value of those contracts, institutions shall take into account the effects of contracts for novation and other netting agreements by applying Article 295 of Regulation (EU) No 575/2013, except in relation to contractual cross-product netting agreements as referred to in point (c) of that Article.

3. When performing the calculation of point (a) of paragraph 1, in relation to all sold credit default swaps, institutions shall use the percentages of points (i) and (ii) of

paragraph (a) of paragraph 2 of Article 299 of Regulation (EU) No 575/2013. The provision of the second subparagraph of point (a) of Article 299(2) of that Regulation shall not apply.

Section 2- Historical Look-Back Approach (HLBA)

Article 7

Measurement of additional outflows according to the HLBA

1. In order to calculate the additional collateral outflows under the HLBA, institutions shall collect the total fair value amount of collateral posted for all derivatives for each day in the preceding two years and shall use as additional outflow the largest difference in collateral posted within consecutive periods of 30 days during the two years preceding the date of the outflow calculation, or, where shorter, during the period elapsed since the first application of this Regulation.

Article 8

Additional HLBA calculation for monitoring of relevant SFTs

1. Institutions shall calculate the total amount of collateral posted for the Securities Financing Transactions ('SFTs') where a change in the relevant exchange rate could trigger outflows of collateral from the institution due to one leg of the SFT being denominated differently from the other. They shall do so for each day during the two years preceding the date of the outflow calculation.
2. They shall use as additional outflow for SFT monitoring purposes, the largest difference in collateral posted within consecutive periods of 30 days during the two years preceding the date of the outflow calculation or, where shorter, during the period elapsed since the first application of this Regulation.

Article 9

Entry into force

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

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]

4. Accompanying documents

4.1 Cost- Benefit Analysis / Impact Assessment

Introduction

Article 423 (3) of the CRR requires the EBA to develop draft Regulatory Technical Standards (RTS) to determine "*an additional outflow corresponding to collateral needs that would result from the impact of an adverse market scenario on the institution's derivatives transactions, financing transaction and other contracts if material*". This additional outflow is part of the elements comprising the denominator of the Liquidity Coverage Ratio (LCR).

As per Article 10(1) of the EBA regulation (Regulation (EU) No 1093/2010 of the European Parliament and of the Council), any draft implementing technical standards/regulatory technical standards developed by the EBA – when submitted to the EU Commission for adoption - shall be accompanied by an Impact Assessment (IA) which, inter alia, analyses 'the potential related costs and benefits' arising from the implementation of the Technical Standards or Guidelines. The Annex provides the reader with an overview of the findings regarding the identification of the problem, the options considered to address the problem and their potential impact.

The current Annex presents the impact assessment (IA) of the provisions included in the RTS.

Problem identification

Issues addressed by the European Commission (EC) regarding liquidity management

In its impact assessment of the CRR-CRDIV framework, the European Commission noted that the existing supervision and management of liquidity risk inadequately capture the risks inherent in market practices and trends. These shortcomings contributed to the failure of several institutions and strongly undermined the financial health of many others, threatening financial stability and leading to unprecedented levels of central bank liquidity and government support.

To address this issue, the Commission proposed, amongst others, the Liquidity Coverage Ratio requirement, which aims at ensuring that an institution has enough high quality liquid resources to survive an acute stress scenario lasting for 30 days. This requirement will contribute to realizing the general objectives of the CRDIV framework, as well as the two following specific objectives:

- Enhancing adequacy of capital and liquidity requirements;
- Enhancing bank risk management.

Issues addressed by the RTS

This RTS aims at addressing liquidity risks stemming from an unexpected increase of collateral calls. In particular, this RTS focuses on the capture of adverse changes in market valuation of derivatives that contractually require collaterals. In such a case, institutions would face additional liquidity outflows (as they would have to post additional collaterals) and be required to hold liquid assets against such outflow.

Crisis experience show that institutions highly involved in derivative transactions may be put under high liquidity pressure when receiving mushrooming collateral calls when derivatives values become highly volatile. Moreover, some institutions were not able to withstand such a liquidity stress without being bailed out. The aforementioned market failures mainly exist due to the lack of a global approach to capture adverse changes in market valuations of derivatives and, in general, by inadequate liquidity risk management of derivatives exposures.

Background

a) BCBS guidelines

The BCBS has previously published guidelines detailing the elements that should be incorporated in the estimations of outflows relating to derivatives contracts[4]:

'A bank should incorporate cash flows related to the re-pricing, exercise or maturity of financial derivatives contracts in its liquidity risk analysis, including the potential for counterparties to demand additional collateral in an event such as a decline in the bank's credit rating or creditworthiness or a decline in the price of the underlying asset.'

In the same document, regarding collateral management in the context of liquidity, Principle 9 states that:

'A bank that uses derivatives should take into account the potential for contractually specified additional collateral requirements as a result of changes in market positions or changes in the bank's credit rating or financial position[5].'

Finally, as to stress tests the document advices explicitly that *'a bank needs to consider the appropriateness' of the assumptions about 'additional margin calls and collateral requirements'*[6].

b) Reflection in the BCBS LCR calculation

In January 2013, as a part of the LCR calculation, the BCBS has outlined additional requirements for estimating collateral outflows, including inter alia, liquidity needs (e.g. collateral calls) related to financing transactions, derivatives and other contracts following a 3 notch downgrade and market

[4] http://www.bis.org/publ/bcbs144.pdf, BCBS, September 2008, Paragraph 40

[5] Op. Cit. Paragraph 93

[6] Op. Cit. Paragraph 103

valuation changes. Concerning the latter type of outflow (increased liquidity needs related to market valuation changes on derivative or other transactions) a historical look-back approach has been formulated.

Under the BCBS framework, the impact of the requirement for these additional collateral outflows (estimated according to the BCBS historical look based approach) could be limited, especially during non-volatile periods. Table 1 (see below) shows that the approach would represent, on average, 3% of LCR net outflows, which implies that without any additional collateral outflows, the LCR of the ISG sample would increase by 3 percentage points on average.

Objectives of the technical standards

The main purpose of the RTS is to specify the calculation of the collateral outflows relating to derivative transactions as a component of the Liquidity Coverage Requirement. The objectives of the draft RTS are the following:

To identify the institutions which are required to calculate the amount of additional collateral outflows in determining their Liquidity Coverage Requirements;

To specify transactions for which additional outflows related to the posting of collateral should be calculated;

To specify adverse market conditions that have to be applied, depending on the method;

To specify different calculation methods according to the amount and complexity of an institution's position in relevant transactions and contracts, and commensurate with the overall size and sophistication of the institution.

Policy options

The EBA has considered three methods for the calculation of the outflows corresponding to collateral needs:

- Option 1 : the Simplified Approach;
- Option 2 : the Advanced Method for Additional Outflows (AMAO);
- Option 3: the Historical Look Back Approach (HLBA).

In addition, the EBA has considered a threshold under which institutions are excluded from the scope of this RTS. The threshold addresses the proportionality of the proposed regulations in relation to the level of derivative exposures.

a) Option 1. Simplified Method

Scope

The Simplified Approach has been designed as a main method applicable to the majority of institutions, particularly for those which cannot implement the AMAO.

Content

The simplified approach provides a straightforward way to estimate additional collateral outflows. It is based on mark-to-market method that is used to calculate own funds requirements for counterparty credit risk. Under this method, the notional amounts of derivatives exposures are multiplied by pre-specified outflow factors according to Articles 274 and 275 of the CRR[7].

The outcome of the mark-to-market method is adjusted to account for the 30-day volatility of the liquidity coverage ratio requirement (against the 1 year time horizon for own funds requirements for counterparty credit risk). The 30-day is derived by dividing the one-year volatility by the square root of 12[8].

Option 2. Advanced Method for Additional Outflows (AMAO)

Scope

The Advanced Method of Additional Outflows (named UNE in the consultation paper, Unexpected Negative Exposures) is designed for institutions with large derivative portfolios. Only institutions with an approved Internal Model Method (IMM) for the calculation of own funds requirements for counterparty credit risk are eligible for this method.

Content

The AMAO requires banks to use their IMM for the calculation of additional collateral outflows due to changes in derivatives valuations. The use of the IMM would require a set of model adjustments. Especially, institutions have to re-run their IMM to focus only on derivatives exposures within the scope of Article 423 (3) CRR and on market shocks that are negative for the liquidity positions.

In order to allow for partial use of the IMM, the exposures that are not covered by the IMM/AMAO will be calculated according to an adjusted version of the mark-to-market method used to calculate own funds requirements for counterparty credit risk. As in the mark-to-market method itself, the notional amounts of transactions and contracts are multiplied by specified outflow factors according to articles 274 and 275 CRR. The outcome of the mark-to-market method is subsequently adjusted to take into account the 30-day time horizon of the liquidity coverage requirement (against the 1 year

[7] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:176:0001:0337:EN:PDF . The two articles provide details on how to calculate the potential future credit exposures and the original exposures values.

[8] The annualized volatility σ is the standard deviation of the instrument's yearly logarithmic returns. The generalized volatility σT or time horizon T in years is expressed as: $\sigma\ T = \sigma\sqrt{T}$. Consequently, the monthly volatility (i.e., T = 1/12 of a year) is $\sigma\ \sqrt{\frac{1}{12}}$.

time horizon for own funds requirements for counterparty credit risk). The 30-day is also derived by dividing the one-year volatility by the square root of 12[9].

Option 3. Historical Look-Back Approach (HLBA)

Scope

The HLBA is applicable to all institutions under the scope of this RTS. This method has been designed as a floor and it could be considered as complementary in this respect to the other two approaches. Likewise, it is ensured that the amount of additional collateral outflows should be equal or greater than the amount of additional collateral outflows resulting from the implementation of the HLBA.

Content

According to the EBA's version of the HLBA, institutions are required to use additional outflows as the largest difference in accumulated collateral posted within 30 consecutive days during the two preceding years.

Exemption

The EBA also considered that a derivative portfolio could be deemed material if the total of notional amounts of such contracts exceeds 10% of the net Liquidity Coverage Ratio requirement outflows. Institutions with derivative portfolios below this threshold are excluded from the application of this RTS. The quantitative analysis in the following sub-section shows that the threshold of 10% is conservative.

Assessment of the methods

a) Quantitative impact assessment

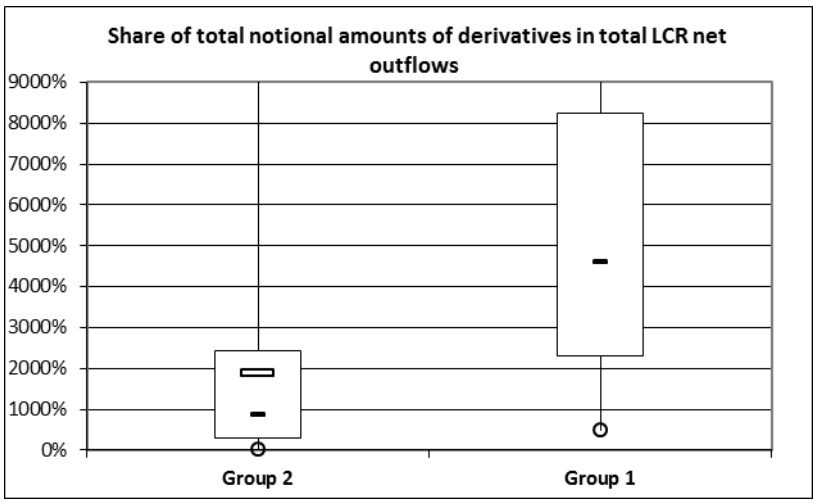
Scope of the exemption

The threshold under which banks can be excluded from the scope of the RTS is deemed adequately conservative. the ISG data (June 2013) show that only 11 out of the 167 banks that participate in the ISG monitoring exercise (6.6 %) would be exempt from the scope of the RTS. Figure 1 indicates that the lowest quartiles for Group 1 and Group 2 banks are 296% and 3211%, respectively, which are well above the minimum threshold of 10%.

[9] See footnote 5.

All institutions that are eligible for exemption are Group 2 banks. Ten out of these 11 eligible banks do not have derivatives exposures which imply that only one institution with derivatives exposures would have been exempt from the scope of this RTS.

Fig. 1 : Share of total notional amounts of derivatives in total LCR net outflows (June 2013 QIS data)



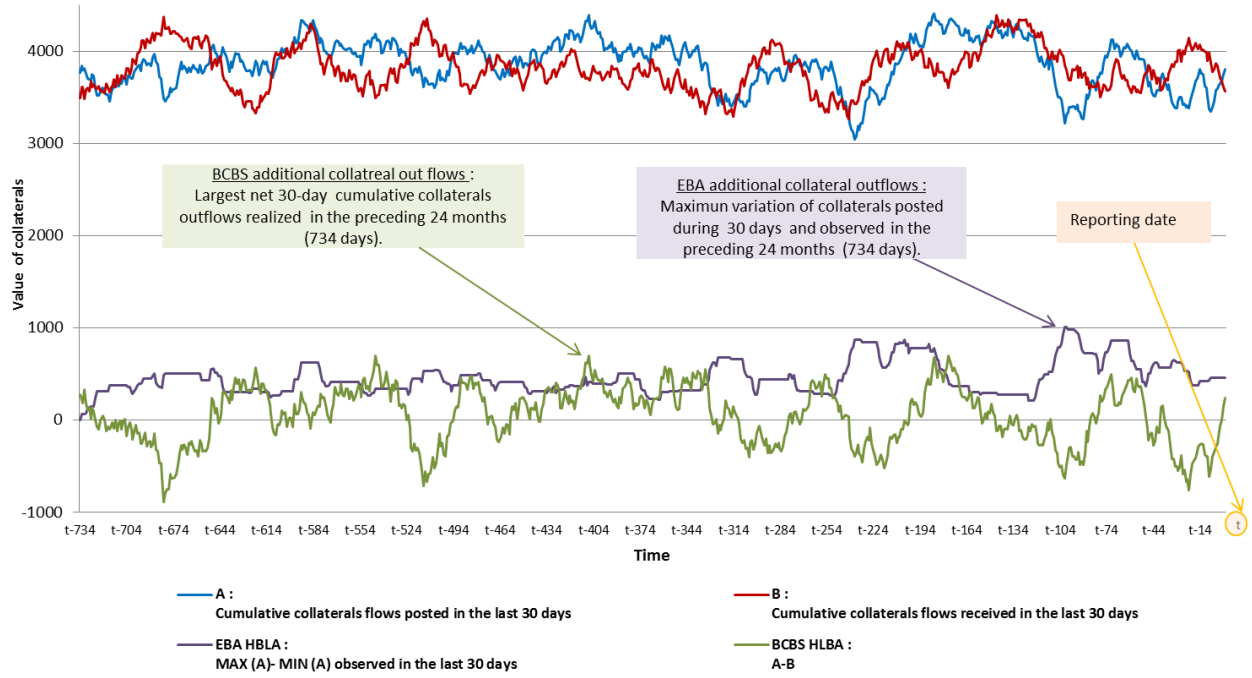
Basel HLBA *versus* EBA HLBA

In this RTS, the EBA has made its adjustments to the BCBS HBLA[10], in the following manner (See fig. 3):

- The BCBS HLBA requires institutions to report as additional outflows the "largest absolute net 30-day collateral flows realized during the preceding 24 months". It is a net-based approach under which the additional collateral outflows is given by the difference between the total of collaterals flows posted (outflows) in the last 30 days and the total of collaterals flows received (inflows) during the same period. The largest difference observed in the preceding 24 months should be reported in the LCR.
- The EBA HLBA only focuses on the fluctuations in the amount of the collateral posted. Institutions are required to report "the largest difference in collateral posted within consecutive periods of 30 days observed within two years preceding the date of the outflow calculation". Under this approach, the additional collateral outflow is the largest difference between the highest amount of collaterals posted and the lowest amount of collaterals flows posted during any 30-day11 period in the preceding 24 months. Under this interpretation of the HLBA, collateral amounts pledged towards bank are not taken into account. The approach, in the view of the EBA, leaves the HLBA less vulnerable to collateral inflows that may not be re-used or is made up of less liquid assets.

[10] Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools. To be found on http://www.bis.org/publ/bcbs238.htm

[11] The 2-year observation period consists of approximately 730 periods of 30-day, partly overlapping, rolling window



EBA's interpretation of the HLBA is more conservative than the BCBS HLBA because it does not allow institutions to offset their exposures with collaterals inflows. In particular, banks with higher collaterals inflows may be more affected by the EBA HLBA in comparison to the BCBS HLBA.

In addition, by taking into account the minimum and the maximum of the cumulative collaterals posted during consecutive periods of 30 days, the EBA HLBA tends to be less volatile than the BCBS HLBA. Indeed, under the BCBS framework, the net collaterals outflows may vary on a daily basis as direct input data (used for the calculation of the HLBA) are changing every day[12]. On the contrary, under the EBA HLBA, net collaterals outflows may not vary on daily basis if the maximum and the minimum of the considered period remain unchanged.

However, contrary to the BCBS approach, the EBA HLBA only captures the risks stemming from a high variation of collaterals posted during 30-day periods. Thus, an institution with high collateral outflows will not necessarily be subject to high additional collaterals outflows if the daily amount of collaterals posted is stable over the considered period.

Impact of the different options on the LCR

[12] Every day, new daily collateral inflows and outflows have to be included in the calculation.

Table 2 below shows the global impact of the BCBS HLBA and of the Simplified Approach on the LCR. Due to data unavailability, it was not possible to assess the impact of the two other options (EBA HLBA and AMAO).

Results show that the impact of the Simplified Approach on the LCR is high. The implementation of the Simplified Approach would reduce the LCR, on average, by 16 percentage points. The implementation of the approach has a greater impact on Group 1 banks that the Group 2 banks.

The BCBS historical based approach appears to be less conservative compared to the Baseline. Its implementation would decrease the LCR, on average, by 3% percentage points. Under this approach Group 1 and Group 2 banks are impacted in the same way (negative 3 percentage points for Group 1/ negative 4 percentage points for Group 2).

Table. 2: Impact on the LCR (June 2013 QIS data)[13]

		Baseline *	BCBS HLBA **	Simplified approach***
Weighted average group 1 banks	LCR	107%	104%	90%
	additional derivatives/ LCR net outflows	0%	2.5%	15.9%
Weighted average group 1 banks excluding 10 institutions	LCR	122%	118%	113%
	additional derivatives/ LCR net outflows	0%	3.1%	7.0%
Weighted average group 2 banks	LCR	139%	133%	133%
	additional derivatives/ LCR net outflows	0%	4.3%	4.4%
Weighted average all institutions	LCR	110%	107%	94%
	additional derivatives/ LCR net outflows	0%	3%	15%

* Under this scenario, additional collateral outflows have been removed from the calculation of the BCBS liquidity coverage requirement.

** This column shows the outcome of the BCBS HLBA as reported by the institutions in the LCR QIS template. Only 66 banks have reported a non-zero number in the LCR dedicated cell.

*** This column shows the outcome of the simplified approach using the CEM method as reported in the QIS leverage ratio. Adjustments have been made to the LCR net outflows to excluded the impact of the BCBS HLBA.

Qualitative impact assessment

Principle underlying the composition of methods

The underlying principle for developing the methods in the final draft RTS was that, for any given portfolio, the relatively non-complex Simplified Method will be relatively non-resource intensive to implement, but may not be adequately risk-sensitive. For institutions undertaking small positions in derivatives and other transactions and contracts as described in CRR 423(3), the Simplified method may therefore only lead to a rough estimation of collateral outflows.

[13] Based on a sample of 166 banks (41 group1 banks; 125 group 2 banks).

For institutions with larger positions, such lack of risk-sensitivity would tend to make the application of the Simplified Method, for example due to its non-recognition of hedging, overly conservative. For these institutions, the more complex methods should provide a more precise identification of liquidity needs and smaller estimates of outflows, when this is appropriate. Therefore, institutions should have more incentives for using more advanced (and more precise) methods as the volume of contracts requiring collateral grows.

The HLBA has been included as a floor to the other methods to benefit from its strength as an evidence-based approach. Especially, given the fact that the AMAO is not tested yet and the Simplified Method is less than fully risk sensitive, the HLBA provides a useful complement. The potential pro-cyclicality of the HLBA can be mitigated by the fact that either the Simplified Method or AMAO provides an estimate in times of market calm in which the HLBA may produce results that are too low.

Other sources of economic impact arising from the proposals

The costs arising from complying with the LCR (e.g. potential changes to the balance/off-balance structure of the balance sheet, lengthening the maturity of wholesale funding, increasing the holdings of highly liquid assets) are driven by the requirements of the Level 1 text and have already been included in the impact assessment published by the Commission. Nonetheless, for institutions with significant derivative portfolios the calibration of the methods could have a material impact. Many of the questions for consultation were aimed at eliciting strong evidence and substantiated views on the impact of the methods and materiality of additional collateral outflows as a source of liquidity risk.

Compliance with the requirements of this RTS will generate direct compliance costs to meet reporting and documentation requirements, for record keeping, hiring new staff and/or professional advisers and changes to the IT infrastructure.

The costs could vary amongst different institutions in different countries, depending on the following factors:

- the volume of activities requiring collateral: Institutions that are conducting large volume of collateralised transactions will bear higher costs compared to those that are conducting less collateralised transactions.
- the complexity of contracts (derivatives) and the complexity of margining agreements: ranges from the most simple contracts (e.g. standardised contracts) to the most sophisticated ones.
- the level of in the existing liquidity risk management framework, i.e. IT solutions, data marts and modelling, etc.

When developing the requirements proposed in this RTS, the EBA has taken into account the proportionality of its proposals on institutions and other stakeholders. Smaller banks should use the HLBA, which will require fewer resources to be implemented. On top of this, the EBA has set a threshold of materiality of the derivative positions to avoid having banks with small derivative exposures to apply complex models.

The Joint-ESAs RTS on margin requirements for non-centrally-cleared derivatives under Art. 11 of the EMIR may affect the ability of institutions to re-use collateral. The EBA acknowledges that this may also affect the impact of this regulation.

This RTS will ensure that institutions use the same risk sensitive practices to calculate the additional liquidity outflows corresponding to collateral needs under adverse scenario. This will reduce compliance costs for cross-border institutions and will establish a more effective supervision for these institutions.

Outcome of comparisons and recommendations

a) Simplified approach

The EBA acknowledges the following benefits of the Simplified Approach:

- it does not have pro-cyclical effects, and
- it is consistent with and complementary to the HLBA, as it requires additional collateral in non-volatile periods when the HLBA may lead to zero requirements.

However, the Simplified Approach lacks risk sensitivity and has a great impact on the LCR, therefore it does not seem to be an appropriate method to identify the additional collateral outflows.

b) AMOA

The AMAO method is the most resource intensive but also the most precise. The advantage of the approach is that the AMAO method can accurately estimate outflows and inflows under different scenarios, and also facilitates judgments on the probability of a scenario occurring. Therewith it can attach confidence levels to certain levels of additional outflow that may occur. The aim of this RTS is to specify the steps by which realistic estimations for additional outflows can be made. This may ultimately involve the prescription of the confidence level and further specifications regarding the underlying simulation.

c) EBA HLBA

Also, the EBA acknowledges that the HLBA approach is highly pro-cyclicality depending on the phase of the economic circle. However, in light of creating a level playing field with non-EU institutions by adhering to the BCBS standards, the EBA considers the implementation of a floor based on the HLBA approach as an appropriate addition to the framework as it also provides an objective, non-parametric, baseline to the other methods. Specifically it counterbalances the fact that the Simplified Method is not adequately risk-sensitive and that the AMAO method has not been tested.

d) Exemption

Further, the EBA acknowledges that for institutions with very immaterial portfolios, performing the calculations of these RTS may not weigh up to the added benefits for safety and soundness. In line with the proportionality principles, and to make sure that the application of the rules does not unduly penalize institutions with less than material portfolios, an exemption threshold for an entity as a whole has therefore been added. This would exempt an institution if its total of derivatives contracts in terms of notional amounts is below 10% of net outflows of the liquidity coverage requirement.

4.2 Views of the Banking Stakeholder Group (BSG)

The BSG expressed itself in favour of including the HLBA as a method in the RTS, based on perceived simplicity and transparency. It is advised that concerns about procyclicality could potentially be addressed via adjustments to the method that would somewhat increase or decrease the outcome respectively during periods of market clam or turmoil. However no specific adjustment to the draft RTS was specified. A similar adjustment was said to be desirable to control for portfolio adjustments.

Regarding the Standard Method and AMAO (in the consultation paper named UNE), while it was supportive of the requirement for stressed inflows to be immediately available to cover stressed outflows, it questioned whether potential value-increasing effects of market turmoil on highly liquid assets could be take into account to reduce the outcome of these RTS.

Further, the BSG expressed the concern that having requirements for an inter-bank derivative transaction when both counterparties to the transactions are banks may not optimally accomplish the macro-prudential objective that the BSG associates with the Liquidity Coverage Requirement. In the latter context the BSG emphasized that no two institutions, or the banking system on a whole, could both lose on a derivative transaction.

4.3 Feedback on the public consultation and on the opinion of the BSG

The EBA publicly consulted on the draft proposal contained in this paper.

The consultation period lasted twelve weeks and ended on 14 August 2013. Nineteen responses were received, of which fourteen were published on the EBA website. The BSG also provided an opinion on the draft RTS.

This paper presents a summary of the key points and other comments arising from the consultation, the analysis and discussion triggered by these comments and the actions taken to address them, where deemed necessary.

In many cases several industry bodies made similar comments or the same body repeated its comments in the response to different questions. In such cases, the comments, and EBA analysis, are included in the section of this paper that the EBA considers the most appropriate.

Changes to the draft RTS have been incorporated as a result of the responses received during the public consultation.

Summary of key issues and the EBA's response

General comments

Respondents generally welcomed the opportunity to comment on the EBA's proposal. However, a majority of respondents expressed concerns about the complexity of the standard method, especially if it was to be applied to small and medium sized institutions. Additionally, many respondents are concerned about the impact of the simplified method, which hasn't been subjected to a QIS. The feedback on the historical look-back approach is mixed. Many respondents prefer close alignment with the BCBS and emphasize a level playing field. The feedback on the AMAO (named UNE in the consultation paper) method indicates that the feasibility of implementation may strongly depend on whether partial use can be recognized.

Standard Method

A majority of the respondents expressed concerns about the Standard Method. First, respondents noted its complexity, particularly when a full re-valuation would be hard to perform for a considerable amount of small-to-medium sized institutions. Second, respondents noted concerns about the potential impact, which was often estimated to have a material impact on liquidity coverage requirements, and pointed to the lack of a QIS.

The EBA response

The EBA acknowledges that the standard method may be complex for at least small institutions, especially given the requirement to perform full re-valuations under stress conditions. Also, on the basis that the method has not been quantitatively impact-tested, the EBA has decided to remove the standard method from the draft final RTS.

Simplified Method

Many respondents welcomed the simplified method given its ease of implementation, which was the highest amongst the consulted approaches. However, as a drawback, many respondents were concerned about the impact of the simplified method, which hasn't been subjected to a QIS. Next to the size of the outflow factors, many respondents commented that the hedging of positions were not appropriately taken into account.

The EBA response

In light of the lack of impact assessment of the simplified method, and a lack of risk sensitivity, the EBA has decided to remove the simplified Method. The EBA has evaluated whether the simplified Method could be suitably adjusted for application to all institutions that do not have the capability to implement the AMAO. However, after concluding that the simplified Method could not easily be re-calibrated for a broad application, by amongst others adding risk sensitivity, the EBA has decided on its removal from the final draft RTS.

The Historical Look-Back Approach (HLBA)

A majority of respondents are in favour of including the HLBA as a stand-alone method in the RTS based on its perceived simplicity and low implementation costs. Also respondents emphasized a need for a level playing field with third (non-EU) country institutions.

However, respondents also underlined limitations associated with the HLBA, in particular the potential for procyclicality and its inability to adapt to changed portfolio compositions. Several suggestions have been made, such as basing the HLBA on stress periods and/or applying scalars to account for changed portfolio size.

The EBA response

The EBA acknowledges that the HLBA has some weak aspects, especially in terms of procyclicality. At the same time, the EBA values its evidence-based character. Also, the EBA considers that if the HLBA is set as a floor, one of the other methods can ensure that during years of low volatility the requirement for additional collateral outflows will remain at a level to capture stressed flows, the combination of which would reduce procyclicality. Implementing it as a floor also ensures compliance with Basel. Further note that the EBA will keep the RTS under review and monitor the impact of the HLBA.

The calculation will be performed by: i) collecting the amounts of collateral posted for contracts under scope on a daily basis, ii) applying a 30 day moving window for the preceding 2 years to find the highest increase/decrease in the amount of collateral posted

The Advanced Method for Additional Outflows (AMAO)

Most respondents are in favour of introducing an advanced approach in the RTS based on IMM, especially since basing a new approach on an already existing approach reduces implementation costs.

A majority of respondents expressed concerns about the coverage of the model-based approach. They believe that a combination of approaches should be permissible for the consolidated Liquidity Coverage Requirement supervisory returns, possibly by allowing partial use in accordance with the approved products for an institution's IMM model.

Many respondents argue that the definition of inflows in the RTS – article 6 (1) (c) (ii), which allows inflows to be taken into account only if they are reported in accordance with Article 416 (1) (a) – (c) CRR, is too restrictive and that 'level 2' assets should be counted as inflows (with haircuts).

Some respondents question the use of the term 'immediately' used in article 6 (2) (c). They suggest replacing it by 'available' and to clarify that the intent of the text is to secure that the collateral received is available for re-hypothecation.

Most respondents suggest lowering the 99% confidence level as it is deemed too conservative. While some propose an 80% level, others suggest 95%. Furthermore, some argue that within the IMM model, from which the internal model is derived, the expectation over the positive exposure is considered, rather than a percentile. Therefore, they suggest to align the internal liquidity approach to the one applied in CCR thus basing it on Expected Liquidity Outflows. Others deem the 99% confidence interval relevant as it is also used for capital modeling purposes.

A few respondents are concerned about the complexity of assessing effects of the initial margin used with central clearing counterparties (CCP) and would favour using approximating methods to avoid having to model the VaR calculation performed by the CCP. Another respondent suggests that initial margins should be deducted from the additional outflows, by any of the methodologies, since initial margins could cover additional outflows due to adverse scenarios.

One respondent argues that some adjustments prescribed in the RTS may be immaterial and thus overly burdensome, and suggests introducing a materiality threshold such that any adjustment which relates to transactions <5% of outstanding notional should not be required as it would not significantly increase liquidity coverage requirement outflows. In particular, they argue that the following two adjustments are not necessary (1) the capture of minimum transfer amounts, which are normally very small amounts and (2) SFTs expiring outside of the 30 days, which will probably not lead to a collateral outflow or inflow.

The EBA response

The EBA acknowledges that given partial use of the IMM method for counterparty credit risk is permitted, partial use under these RTS should also be facilitated. Also see question 20 on consolidation.

Regarding 'level 2' assets, the EBA acknowledges that such inflows may have liquidity value, especially if not bound by a cap on the amount of these assets. However if bound by a cap on the amount of these assets, and if counterparties to which outflows of the institution takes place expect to receive cash or extremely high quality collateral, then inflows of level 2 would be less valuable. In the interest of keeping complexity at bay the EBA chooses to not broaden the recognition of inflows.

Regarding the term 'immediately' as a condition for recognizing inflows, the EBA acknowledges this should be clarified. At the same time, the EBA would like to emphasize the importance of receiving collateral inflows swiftly after the relevant value changes in contracts. If particular inflows would occur infrequently then the institution could run out of liquidity. The EBA therefore chooses to change 'immediately' to 'daily'.

Regarding calibration, the EBA acknowledges that no QIS results are available on this new method. Therefore, as an alternative to selecting a 99% percentile of a non-stressed distribution, an approach built on a "conservative average" and a stressed distribution is chosen. This entails the application of stressed parameters rather than the regular level of IMM market parameters, therewith rendering the method less procyclical. Additionally, institutions will have to perform calculations for all time horizons over a 30 day period for which the counterparty credit risk exposure measure is calculated, reflecting the EBA's view that collateralised transactions maturing within 30 days have to be taken into account in the calculation of additional collateral outflows. Most probably the revised approach would lead to a somewhat lower outcome than that proposed in the CP, addressing concerns on overcalibration. Note that the EBA will keep the RTS under review and monitor its impact.

Regarding initial margin posted, it is to be noted that the initial margin may already be consumed before the start of the 30 day period. In combination with the interest of keeping complexity at bay, the EBA chooses not to allow for potential offsetting effects resulting from initial margins.

The decision, mentioned earlier in this statement, to allow for partial use should significantly alleviate difficulties of implementing the AMAO (called UNE in the CP).

Regarding minimum transfer amounts, the EBA finds it especially important that any estimate of its impact is conservative. If the effect is that it arguably leads to lower outflows, although it cannot be accurately ingrained into the model, then its effect should be zero. If it arguably leads to higher outflows, then this effect should be approximated conservatively.

Scope

Regarding scope several respondents raised the question as to whether potential value-increasing effects of market turmoil on highly liquid assets could be taken into account to reduce the outcome of these RTS.

Many respondents have emphasized the 'if material' clause in CRR Article 423(3). Among these, several suggested that there should be an exemption test applicable for the institution as a whole and not for specific products or categories.

Regarding Securities Financing Transactions (SFTs) that could be relevant for these RTS, several respondents indicated that certain tri-party repos or securities-for-securities transactions in combination with collateral swaps may be of relevance.

The EBA response

Regarding potential offsetting effects between liquid assets and derivative outflows, the EBA acknowledges that in certain cases, when the derivative contract constitutes a hedge on the exact same asset, an offsetting effect could occur. However, such offsetting effects may be outside of the

mandate of Article 423(3) CRR and their consideration at this stage of the process given time constraints could potentially complicate the framework.

The EBA acknowledges that for institutions with very immaterial portfolios, it may be disproportional to perform the calculations of these RTS. In line with the principles on proportionality, an exemption threshold is proposed for an institution as a whole.

Regarding potentially relevant SFT transactions, the EBA acknowledges that there seems to be a potential for additional outflows in cases of stress events. However at this stage, the EBA did not have the opportunity to thoroughly consider and for the moment believes that the haircuts of Article 418 CRR will provide sufficient resilience. The type of SFTs, on the other hand, that the EBA, does consider to qualify for these RTS are those where outflows could result due to a currency mismatch. Specifically, where both legs are denominated in a different currency, an exchange rate shock could render the value of the leg posted by the institution below that of the leg received by the institution, with, if contractually required, additional collateral pledges as a result. Given time constraints and the EBA's current perception of materiality these are however not included in scope. As an exception, for the HLBA, institutions will nonetheless be required to calculate the HLBA for these transactions for monitoring purpose. They will not be included in the calculation of the additional collateral outflows, as their inclusion would clearly be too punitive.

Summary of responses to the consultation and the EBA's analysis

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
General comments			
	A few respondents noted that the projected outflows need to consider the offsetting impacts of valuation changes (of underlying assets) and the initial margins posted (in the case of trades with CCPs).	There may be a case to be made for offsetting with liquid assets in case that the contract constitutes a hedge on the exact same asset. However, this would complicate the framework, which given time constraints the EBA chooses not to further explore at this point. Regarding initial margin posted, it is to be noted that the initial margin may already be consumed before the start of the 30 day window. In combination with the interest of keeping complexity at bay the EBA chooses not to allow for offsetting effects as a result of initial margins.	A clarification in the AMAO method that initial margins should not be taken into account, and in particular that posted initial margins cannot offset additional outflows.
	Many respondents have emphasized the 'if material' clause in CRR Article 423(3) and the Article 1 of the RTS. Among these, several suggested that there should be an exemption test applicable for the institution as a whole and not for specific products or categories.	The EBA acknowledges that for institutions with very immaterial portfolios, it may be disproportional to perform the calculations of these RTS. In line with the principles on proportionality, an exemption threshold is proposed for an institution as a whole.	For the purposes of these RTS, a derivative portfolio is deemed material if the total of notional amounts of such contracts exceeds 10% of the net Liquidity Coverage Requirement outflows. Institutions with

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
			derivative portfolios below this threshold are excluded from the application of these RTS.
Responses to questions in Consultation Paper EBA/CP/2013/19			
Question 1. Is there any specific category of contracts subject to this Regulation that could only lead to immaterial additional outflows? If so, could you explain why and clearly specify the type of contract?	Some respondents noted that the proposed methodology may project highly conservative outflows on intra-group transactions, which are claimed to pose little outflow risks. The main argument is that at a stand-alone (i.e. solo) basis, the requirements would lead to double-counting since both entities would need to maintain liquidity buffers due to opposing 'worst-case' scenarios. In reality, only one of those scenarios will materialize, leading to a transfer of collateral from one group entity to another group entity. Another respondent argued that the approach would generate undue regulatory costs for entities that act as trading- or investment-arms for the whole group, which typically engage in back-to-back transactions with limited liquidity risks of their own One respondent has noted that purchased options that are currently out-of-the money are not likely to give rise to material outflows. In particular, one respondent argues that within the whole population of products as defined in	The EBA acknowledges that in reality only one side of an intra-group transaction can face collateral outflows. However, the mandate is to also prepare the institution for liquidity stress on a solo level, which implies that the additional outflow requirement should reflect an appropriate 'worst case' stress on intra group transactions as well. Note that under the AMAO (called UNE in the consultation paper) these entities won't be impacted that much as long as they can demonstrate that the inflows (which would equal outflows in back-to-back positions) meet the conditions for being taken into account. This would be true as long as the instruments remain out-of-the-money, implying that the net present values remain floored at zero, leading to no valuation changes and hence no outflows. The EBA has not been provided with sufficient information on what type of contract would likely be	None

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	Annex II of CRR, some products are immaterial (eg point 2(e) 'other contracts of a similar nature').	immaterial but still subject to additional collateral outflows. Lacking this information, no specific product-related exemption thresholds can be determined.	
Question 2. Does the specification in paragraph 2 give sufficient clarity on which flows are included and excluded for the purposes of this RTS? If not, please provide us with an alternative specification.	Several respondents have argued for a consideration of offsetting valuation changes to the assets that are hedged by a contract that is within scope of the RTS. For example a fixed-rate debt instrument, which is hedged with a payer-fixed/receiver-floating interest rate swap (IRS). More broadly, many respondents have asked EBA to consider the interactions between different hedging and securities financing solutions. An example was given of a bank that sells a forward instrument on a market index to a corporate client, with delivery of underlying assets in three months. The bank can hedge its risk from this transaction by entering into a standardized futures contract, agreeing to buy the same assets in three months. Alternatively, the bank can purchase the assets now and finance this transaction by a three month repo, posting the assets as collateral. The collateral outflows corresponding to these solutions would be subject to different parts of the CRR. For the repo funding, the projected outflows will be calculated according to Article 422(2). For the futures contract, the relevant article would be either Article 422(6) if the collateral comprises of the index assets or Article 423(3) (or, these RTS) if	There may be a case to be made for offsetting valuation changes in liquid assets where the contract constitutes a hedge on these assets. Cognisant of industry comments on the potential complexity of the RTS, such an adjustment at the finalisation stage of the RTS is not possible currently given time constraints. The EBA will keep the RTS under review and monitor possible arbitrage opportunities that may arise. At this stage, due to both time constraints imposed by the CRR mandate and the alternative treatment applied to different contracts under CRR, it is not possible to further harmonise at this stage.	

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	the collateral comprises of unrelated assets. To sum up, the respondents were concerned that seemingly comparable derivatives and financing options would be subject to highly distinct LCR outcomes, which may not always be justifiable from a prudential perspective.	It is the EBA's understanding that the CRR mandate excludes flows referred to in article 1 paragraphs 2(a) and 2(b) from the scope of the RTS.	
	In order to improve the consistency of the in- and outflow calculations, several respondents suggested that the scope of the RTS should be expanded to cover all operations under margining requirements, including secured financing transactions, and capturing flows referred to in Article 1 paragraphs 2(a) and 2(b) in the draft RTS. Several respondents have sought further clarification on whether the RTS is applicable to transactions that could lead to out- and inflows within or beyond the next 30 days. One respondent argued that transactions with residual contractual maturities less than 30 days should be excluded from the scope of the RTS since the collateral needs for lower maturities would be covered by cash flows from settlements and valuation changes (see above). Similarly, another respondent argued that the partial and final redemptions to take place within the next 30 days to be netted out from the outflow calculations.	The draft RTS excludes the flows referred to in Article 1 paragraphs 2(a), which implies that collateral outflows and inflows up to the day of settlement are within scope, but that the settlement itself, which reverses the collateral flow, shall not be taken into account for the purposes of Article 423(3) CRR. The EBA considers that the CRR does not, and also does not intend to, disregard the effects of stress scenarios on contracts that mature within 30 days. Contracts which are not collateralized are out of scope.	Clarification in the RTS that the institutions under the AMAO method should ensure a conservative assessment (overestimation of outflows and underestimation of inflows) in case the assessment isn't precise.
		Apart from initial margins, the EBA finds that taking into account conditions of the counterparty margining set such as posting thresholds, collateral eligibility, or minimum transfer amounts is essential, especially in view of the fact that it may provide for a	

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	One respondent argued that the adopted methodology should take into account the terms and conditions of the counterparty margining set, such as posting thresholds, collateral eligibility, or minimum transfer amounts.	more prudential estimation of collateral flows under stress.	
Question 3. Would your institution face additional collateral outflows from securities financing transactions for other reason than a decline in value of the collateral? If yes please provide us with a detailed description on the type of contract, the reason for the outflow and the approximate volume.	Two plausible examples were given: Tri-party repos. In such cases, the custodian bank, which acts as an intermediary to the two parties, can call for additional collateral independently from the value changes of the underlying assets, due to breaches in concentration thresholds. Although the former case is covered elsewhere, the latter may be subject to this RTS. This would also hold true for bilateral arrangements and CCP's who have an option to here. Securities-for-securities lending & collateral swaps. Cases where a security (rather than cash) is lent against collateral represent such a possibility. In that case, collateral calls may arise if the price of the borrowed security increases. This is particularly the case in collateral swap agreements, where the value of either the collateral posted or received moves in an asymmetrical fashion in relation to the value of the swapped collateral.	For both type of contracts there seems to be a potential for additional outflows in cases of stress events. However at this stage, the EBA did not have the opportunity to thoroughly consider and for the moment assumes that the haircuts of Article 418 CRR will provide sufficient resilience. The type of SFTs, on the other hand, that the EBA, does consider to qualify for these RTS are those where outflows could result due to a currency mismatch. Specifically, where both legs are denominated in a different currency an exchange rate shock could render the value of the leg posted by the institution below that of the leg received by the institution, with, if contractually required, additional collateral pledges as a result. Given time constraints and the EBA's current perception of materiality these are however not included into scope. As an exception, for the HLBA however, institutions will nonetheless be required to calculate the HLBA for monitoring purpose. This will not contribute to the Liquidity Coverage Requirement denominator, reflecting EBA's view that the HLBA could be too punitive for these type of transactions.	The subset of SFTs that involve a foreign exchange mismatch are are outside of scope of the AMAO method. For the HLBA the calculation is separately performed for these contracts and are only there for monitoring purposes.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
		The EBA will keep the RTS under review and monitor possible arbitrage opportunities that may arise, especially regarding other type of SFTs in which the transaction's legs need to continuously equal each other. At this stage, due to time constraints imposed by the CRR mandate it is not seen as possible to evaluate the necessity of all types of SFTs.	
Question 4. Are paragraphs 2c and 2d sufficient for reducing incentives for cherry picking behaviour? Are there other specifications that could help this purpose?	Most respondents have argued for allowing partial use of a method within the consolidation parameter. At a consolidated-level, institutions integrating new legal entities or with smaller subsidiaries may not be able to implement immediately the advanced method, which would pose a problem for the entire group. In that respect, the combination of paragraphs 2c and 2d may be interpreted at group (or sub group) level as a 'tainting rule' that requires the whole group (or sub group) to apply the most sophisticated method applied in the group. The issue may be even more complicated for banks with substantial non-EU subsidiaries, which may not be subject to similar approval processes. Certain exotic derivative structures may not be captured by the EPE model, and an alternative approach may be required to capture the additional liquidity outflows. In those cases, the prohibition of a partial use might have a counterproductive effect as an institution cannot use better results from advanced methods, even if	The EBA acknowledges that given partial use of the EPE method for counterparty credit risk is permitted, partial use under these RTS should also be facilitated. Also see question 20 on consolidation. The EBA is not mandated in Article 423(3) CRR to provide for supervisory approval in the RTS.	The possibility of partial use will follow the decisions made for the counterparty credit risk IMM model for a specific institution.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	it covers 80 or 90% of the trades. Several respondents suggested to change the current text of paragraph 2d from 'institutions shall not revert from…' to 'institutions shall not revert, without approval by their supervisor, from (…)'.		
Question 5. Are there any aspects of the standard method that you would describe differently? If so, how would you describe these? Are there methodological concerns? If so, what are these and how should they be addressed? Are the scenarios described in annex I appropriately calibrated? If not, how would you suggest improving calibration?		The standard method has been removed from the draft RTS.	The standard method has been removed from the draft RTS. See the first of the general comments at the start of the feedback statement.
Question 6. What instruments transactions and contracts are you aware of that are sensitive to changes in multiple risk factors? How material are they to your institutions stock of assets of extremely high and high liquidity and credit quality as calculated in accordance with Part Six of CRR? Does the standard method capture these adequately? If not, what	Many respondents confirmed that the Standard Method captured all the impacts on multi-risk factor transactions. Two respondents argued that the standard method neglected the interconnection of volatility and underlying price/rate. The suggestion was to combine volatilities and the shift of the risk factors of the underlying (rather in one scenario than in two independent scenarios).	The standard method has been removed from the draft RTS	The standard method has been removed from the draft RTS.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
alternatives would you consider necessary to ensure they are appropriately incorporated?	One respondent suggested the use of the historical look back approach in order to capture correlation effects and to alleviate the inaccuracy of modeling this using the standard method. The respondent argued that any derivative with at least one cash flow in a foreign currency would be sensitive to both interest rate and exchange rate shocks because the cash flow would be both discounted with its respective interest rate and converted to the reporting currency. This included cross currency swaps, interest rate swaps in foreign currency and currency forwards. Moreover, structured products had components that might be sensitive to different risk factors. Another respondent suggested to replace shocking individual risk factors by scenario based modeling consistently applied across product groups and legal entities in order to avoid overstating collateral outflows. One respondent suggested, in order to reduce operational burden, to eliminate the second iteration of the calculation, if the institution can argue, that the effect of the additional effort is below a 'relevance level' and hence immaterial.		
Question 7. How do you view the restriction in paragraph 2, point h(ii) that only additional inflows of extremely high liquidity can be recognised outside of margining sets? To	One respondent noted that it institution mainly uses cash as collateral for derivatives, however expressed concern that this might change with the new LCR requirements. Another respondent explicitly agreed with the restriction to cash and high quality liquid assets	The standard method has been removed from the draft RTS	The standard method has been removed from the draft RTS.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
what extent do assets of typically lesser liquidity constitute part of collateral flows for your institution? What assets are they? Do these assets typically comprise outflows, inflows or both? How material is it for the LCR of your institution?	since this represented 98% of the institution's collateral flows. Others confirmed that all collateral flows or at least a majority qualify as HQLA under the Basel 3 framework. Antithetically, a further respondent stated that extremely high quality assets required for inflows outside of margining sets would not make sense either economically or within the LCR framework. Many respondents expressed concerns that increased collateral demand due to these RTS, in addition to other upcoming collateral requiring regulations, could lead to a collateral shortage. It was suggested to classify inflows and outflows in categories and admit inflows to be used to cover outflows of the same or lesser category and where margining sets permit, respectively. Alternatively collateral of lesser quality could be subject to a haircut and economic safety margins, respectively. One respondent found it difficult to comply with the requirement of usability of inflows. Classification as liquid assets would normally be made downstream within the institution in separate systems. Hence banks would either have to apply the conservative assumption that inflows are non usable or incur a considerable amount of manual labor in non-automated identification of securities. Both would reduce the benefits of the standard method.		
Question 8. What are the	Several respondents stated, in identical wording,	The standard method has been removed from the	The standard

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
expected implementation costs of the standard method and what is the time you would need for implementation? If possible, please compare it to the implementation costs of the other methods.	that both expected costs together with time needed for implementation will be medium to high for less sophisticated . One respondent judged it to be 'not too costly' to implement at institution level. Some other respondents were more specific. One of which estimated the implementation time to be 9-12 months for 2/3 people on each homogeneous perimeter, compared to 6 months for the simplified method together with the historical approach, and +18 months for the AMAO (named UNE under the consultation version) method. Another expected approximately 3-6 months of implementation time and significant development costs, compared to less than a month for a more simplified approach. A third believed the implementation to require 1-1.5 years and indicated 1 January 2016 as realistic starting point. A fourth expected one-off implementation costs of 10-100 million USD, compared with 'minimal' cost for the historical look-back approach. A fifth mentioned that a large institution had estimated implementation cost for derivatives to 350 thousand EUR and implementation time to 6 months and did not see cost differences between the standard and advanced method. Several respondents suggested to simplify the approach by applying sensitivities (e.g. duration) in case a contract has a linear payoff (e.g. for IR swaps, not for FX options).	draft RTS	method has been removed from the draft RTS.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
Question 9. What impact in terms of liquidity coverage requirements do you foresee of the application of the standard method on your institution?	One respondent considered the additional outflow to be disproportionate since it estimated it would lead to a doubling of total net cash outflow. In addition an analysis by an institution showed that about 80% of additional outflows is due to intra-group derivatives, thus emphasising the importance of a correct treatment of intra-group transactions. Another respondent calculated the impact to be equivalent to more than 300% of all margins paid in a recent month. A few other respondents noted that there would be a significant overstatement collateral outflows as the method doesn't take into account correlations. Another respondent calculated a substantial amount of additional outflow and regarded the subsequent higher level of liquid assets as necessary in banks. Two respondents favored more quantitative impact studies.	The standard method has been removed from the draft RTS	The standard method has been removed from the draft RTS.
Question 10. How would you view an insertion of a special foreign exchange rate shock for currency pairs between the Euro and a currency participating in the ERM II? If positively, what shock factor	Several respondents proposed 2.25% as an adequate shock factor for currencies pegged to the EUR at a respective spread of +/- 2.25% such as DKK. For LTL and LVL the fluctuation band of +/- 15% in ERM II is considered in line with the specified FX shock of 15%. Subsequently a specific FX shock is	The standard method has been removed from the draft RTS	The standard method has been removed from the draft RTS.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
would be appropriate, taking into account compulsory intervention rates?	not considered to be necessary. LVL, however, will be replaced by EUR before the RTS takes effect. One respondent suggested to reduce the scenario magnitude for other low volatility currency pairs, while referring to the SEK/NOK exchange rate where the largest monthly change since 1971 reportedly had been 13%.		

Question 11. Are there any aspects of the simplified method that you would describe differently? If so, what are these and how would you describe them? Are there methodological concerns? If so, please provide details of these concerns and how in your view they could be addressed? Are the outflows factors described in annex II appropriately calibrated? If not, please describe how they should they be calibrated, justifying your proposal?	Many respondents commented that the outflow factors in the simplified approach are too harsh, especially for institutions with hedged positions. Many respondents noted that the draft RTS provides that all derivatives are to be accounted for, whether or not they are subject to margining. Similarly, the simplified method does not consider the effects of hedging or netting, thus over-estimating the potential outflows. Several respondents have commented on the materiality threshold. Among these, most were concerned with the fact that the threshold was currently defined as a proportion of a sub-group of liquid assets (as defined in Article 416 (a) to (d)), excluding standby credit facilities and liquidity support from central organizations or other network members (paragraphs (e) and (f)). One respondent suggested that the materiality threshold should be defined as a proportion of total outflows and not liquid assets. A few respondents suggested that the final calibrations should be refined during the liquidity coverage requirement observation period and via the Quantitative Impact Study (QIS). Another advocated that the historical look-back approach (HLBA) should be used to set a ceiling for the scenario outflows under the simplified approach.	The simplified method has been removed from the draft RTS	The simplified method has been removed from the draft RTS.
Question 12. What are the expected implementation costs of the simplified method and what is the time you would need for implementation? If	Many respondents stated that among the three approaches proposed by the EBA, the simplified method was the cheapest and fastest one to implement. One respondent stated that the implementations costs would depend on the size	The simplified method has been removed from the draft RTS	The simplified method has been removed from the draft RTS.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
possible, please compare it to the implementation costs of the other methods	and complexity of the institution.		
Question 13. What impact in terms of your institutions liquidity coverage requirement do you foresee for the application of the simplified method? How would this compare to the 5% threshold that is specified in paragraph 1 article 3?	Given its simplicity and lower implementation costs, many respondents argued for a higher threshold for eligibility into the simplified method. Some of these respondents argued for the use of the simplified approach at least as an intermediate step to more advanced methods, at least until the banks develop the necessary internal systems. Several respondents nevertheless reported that the simplified approach would be too penalizing and it does not seem conceivable to use for most banks, due to lack of margining sets, consideration of hedging operations, and conservative outflow factors.	The simplified method has been removed from the draft RTS	The simplified method has been removed from the draft RTS.
Question 14. Would a special treatment of the narrowest of the currency pegs of the ERM II be appropriate? If so, what shock factor would be appropriate?	Many respondents were supportive of the proposed ERM II treatment for the newer euro-zone members, in particular the Danish Krona, which is pegged at a very narrow spread of 2.25%.	The simplified method has been removed from the draft RTS	The simplified method has been removed from the draft RTS.
Question 15. Are there any aspects of the advanced method based on EPE that you would describe differently? If, so please provide details? Are there methodological	Most respondents are in favour of introducing an advanced approach in the RTS based on EPE. The implementation costs would be less if based on an already existing approach. Another respondent is opposed to the use of internal models, suggesting that it makes the LCR less harmonised and also in	The EBA acknowledges that given partial use of the IMM method for counterparty credit risk is	The possibility of partial use will follow the decisions made for the counterparty credit

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
concerns? If so, please provide details of these concerns and how in your view they could be addressed? Are there any additional adjustments or conditions that you see as appropriate especially in view of an absence of an approval process? If so, please provide details? Is the 99% confidence level appropriate? If not, please justify why?	comparison with non-EU institutions.	permitted, partial use under these RTS should also be facilitated. Also see question 20 on consolidation.	risk IMM model for a specific institution.
	A majority of respondents are concerned about the coverage of the model-based approach. They believe that a combination of approaches should be permissible for the consolidated LCR return, possibly by allowing partial use in accordance with the approved products for an institution's IMM model.	The EBA acknowledges that inflows of 'level 2' assets may have liquidity value, especially if not bound by a cap on the amount of these assets. However if bound by a cap on the amount of these assets, and if counterparties to which outflows of the institution takes place expects to receive cash collateral, then inflows of level 2 would be less valuable. In the interest of keeping complexity at bay the EBA chooses to not broaden the recognition of inflows.	No change
	Many respondents argue that the definition of inflows in the RTS – article 6 (1) (c) (ii), which allows inflows to be taken into account only if they are reported in accordance with Article 416 (1) (a) – (c) CRR, is too restrictive and that 'level 2' assets should be counted as inflows (with haircuts).	The EBA acknowledges that 'immediately' is unclear. However, the EBA would like to emphasize the importance of receiving collateral inflows swiftly after the relevant value changes in contracts. If particular inflows would occur infrequently then the institution could run out of liquidity. The EBA therefore chooses to change 'immediately' to 'daily'.	Change to 'daily'
	Some respondents question the use of the term 'immediately' used in article 6 (2) (c). They suggest replacing it by 'available' and to clarify that the intent of the text is to secure that the collateral received is available for re-hypothecation.	The EBA acknowledges that no QIS results are available on this new method. Therefore, as an alternative to selecting a 99% percentile of a non-stressed distribution, built on a "conservative average", a stressed distribution is chosen. This entails the application of stressed parameters rather than the regular level of IMM market parameters, therewith rendering the method less procyclical. Additionally, institutions will have to perform calculations for all time horizons over a 30 day period for which the counterparty credit risk exposure measure is calculated, reflecting the EBA's	Selection of a "conservative average" of a stressed distribution instead of the 99% quantile of a non-stressed distribution.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
		view that collateralised transactions maturing within 30 days have to be taken into account in the calculation of additional collateral outflows. Most probably the revised approach would lead to a somewhat lower outcome than that proposed in the CP, addressing concerns on overcalibration.	
	Most respondents suggest lowering the 99% confidence level as it is deemed too conservative. While some propose an 80% level, others suggest 95%. Furthermore, some argue that within the IMM model, from which the internal model is derived, the expectation over the positive exposure is considered, rather than a percentile. Therefore, they suggest to align the internal liquidity approach to the one applied in CCR thus basing it on Expected Liquidity Outflows. Others deem the 99% confidence internal relevant as it is also used for capital modelling purposes.	Already discussed previously	
		Already discussed previously in section 1.1. General comments on the articles, initial margins will not be taken into account.	
	Two respondents suggest the use of stressed market parameters for the calibration of the model and that a range of 95%-99% confidence level should be considered for this model depending on whether stressed or current market parameters are utilised within the model.	The decision – mentioned earlier in this statement – to allow for partial use should significantly alleviate difficulties of implementing the AMAO (called UNE in the consultation paper).	
	Some respondents suggest excluding maturing deals within the 30 days. On the other hand, another respondent would like to see a clarification of the treatment of final and partial redemption in the Internal Method definition with regards to the exclusion of final and partial cash-	Regarding minimum transfer amounts, the EBA finds it especially important that any estimate of its impact is conservative. If the effect is that it arguably leads to lower outflows, although it cannot be accurately ingrained into the model, then its effect	Clarify that if the effect of minimum transfer amounts is that it arguably leads to lower outflows, although it

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	flows.	should be zero. If it arguably leads to higher outflows, then this effect should be approximated conservatively.	cannot be accurately ingrained into the model, then its effect should be zero.
	A few respondents are concerned about the complexity of assessing effects of the initial margin used with central clearing counterparties (CCP) and would favour using approximating methods to avoid having to model the VaR calculation performed by the CCP. Another respondent suggests they should come as a deduction from the additional outflows, by any of the methodologies, since initial margins covers additional outflows due to adverse scenarios.	The EBA is sceptical about the suggested proposal and assumed effects of portfolio management. The EBA would therefore like to emphasise the importance of the aspect of path dependency in the assessment of additional outflow risk.	None
		The EBA is sceptical about the use of stress market parameters, as they have been validated for counterparty credit risk purposes and may not necessarily reflect the circumstances that the respective institution would face additional outflows.	None
	One respondent argues that some adjustments prescribed in the RTS may be immaterial and thus overly burdensome, and suggests introducing a materiality threshold such that any adjustment which relates to transactions <5% of outstanding notional should not be required as it would not significantly increase liquidity coverage requirement outflows. In particular, they argue that the following two adjustments are not necessary (1) the capture of minimum transfer amounts, which are normally very small amounts and (2) SFTs expiring outside of the 30 days, which will probably not lead to a collateral outflow or inflow .	The CRR timelines do not allow for a QIS. Note that the EBA will keep the RTS under review and monitor its impact.	None

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	Another respondent suggests adopting a Constant Level of Risk approach in the Internal Method, as it is applied in Simplified Method and Standard Method. The market risk exposure during the next 30 days should be assumed constant with the market risk exposure as of its initial value. ,i.e. constant level of risk, by applying the Internal-Model method at 1 day horizon scaled to 30 day horizon (typically by multiplying by √noth The market-risk-driven liquidity risk over the next 30 days should be considered with assuming rebalancing consistent with actual dynamic and ongoing market risk actual management. Finally, many respondents emphasise the need for a QIS to measure the impact of the RTS.		
Question 16. Please provide details of what adjustments in the implementation of your EPE model to be considered for the estimation of additional collateral outflows?	Most respondents underline that the scope of the EPE model will have to be expanded to include all trades defined by article 423(3) of CRR, in particular exchange traded derivatives and derivatives cleared through CCPs.	All derivatives are within scope of the final draft RTS	None
	Some respondents emphasise that the current internal EPE model considers master netting sets with counterparties, while the proposed model requires institutions to take into account whether the arrangements with the counterparty comply with the margining set requirements, thus leading	This is indeed correct	None Clarify that if the effect of minimum

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	to adjustments. Some respondents emphasize that the EPE model will have to be enhanced to take into account: - The inclusion of contractual arrangements that can affect additional collateral outflows such as one-sided collateralization, minimum transfer amounts, and the accompanying mitigation effects of the collateral to be received/posted with their LCR-liquidity value (rather than market values); - The set up of required methods to analyse cumulated collateral paths for each margining set.	Regarding minimum transfer amounts and, one-sided collateralization, the EBA finds it especially important that any estimate of its impact is conservative. If the effect is that it arguably leads to lower outflows, although it cannot be accurately ingrained into the model, then its effect should be zero. If it arguably leads to higher outflows, then this effect should be approximated conservatively. Regarding collateral to be received/posted, the EBA would like to emphasize that the AMAO (called UNE in the consultation paper) method does not allow for any possible increases in value of collateral or assets (in the simulated scenarios) to be taken into account.	transfer amounts and one-sided collateralisation is that it arguably leads to lower outflows, although it cannot be accurately ingrained into the model, then its effect should be zero.
	Some respondents emphasise that adjustments may be required to the treatment of SFTs and collateral already posted (if this is allowed to be included within the scope of this model): the change in value of collateral posted for SFTs should be excluded.	The EBA acknowledges that given partial use of the IMM method for counterparty credit risk is permitted, partial use under these RTS should also be facilitated.	See fourth point at start of feedback statement
	Some respondents argue that EPE models exist only in corporate and investment banks and will not be deployed at the group level. Therefore, some adjustments will be necessary to ensure the calculation of the additional outflows at the consolidated entity level in case of intra-group contracts.	The EBA acknowledges that this creates an additional burden. Also for the reason that there is no supervisory validation process for the AMAO (called UNE in the consultation paper) method itself, the EBA chooses to stick to the variables already approved by the respective supervisor in the context of the IMM method for counterparty credit risk.	Clarify that the variables of the approved IMM method have to be applied.

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	One respondent underlines that the proposed model requires that all variables that impact the value of transactions are included within the calculation, while the current internal approach does not capture all risk parameters (eg volatility skews). The suggestion is to incorporate a level of materiality to ensure only significant variables are utilised in the model		
Question 17. What are the expected implementation costs of the EPE based advanced method and what is the time you would need for implementation? If possible, please compare it to the implementation costs of the other methods	Generally, very few respondents have provided quantitative values for expected implementation costs. One respondent notes that estimations of the implementation costs are difficult to determine and another that costs will vary from firm to firm. One respondent believes that the cost of adjusting EPE models seems to be much lower than the implementation from scratch of the other methods. Some respondents emphasise that the costs, which are mainly IT, are expected to be high. A few others note that most of the potential costs depend on the amount of adjustments to be made to the EPE model, in particular the extension of the scope. In terms of timing, one respondent emphasise that implementation of this approach will take at least	The EBA acknowledges that the adjustments to be made could be significant, especially in the area of margining sets. However, given that in the final draft RTS, the EBA will allow for conditional partial use and has clarified that institutions have to stick to the variables approved for their IMM models, the implementation costs and timeline should be lower than suggested by respondents.	None

Comments	Summary of responses received	EBA analysis	Amendments to the proposals
	2 years while others believes it will take 6 months after finalisation of the legislation.		
Question 18. What impact in terms of liquidity coverage requirement do you foresee of the application of the internal model-based method on your institution?	Many respondents noted they were not able to quantify the impact of the application of the internal method. Many respondents noted that there would be a need for a QIS.	The EBA acknowledges that no QIS results are available on this new method. Therefore, as an alternative to selecting a 99% percentile of a non-stressed distribution, built on a "conservative average", a stressed distribution is chosen. This entails the application of stressed parameters rather than the regular level of IMM market parameters, therewith rendering the method less procyclical. Additionally, institutions will have to perform calculations for all time horizons over a 30 day period for which the counterparty credit risk exposure measure is calculated, reflecting the EBA's view that collateralised transactions maturing within 30 days have to be taken into account in the calculation of additional collateral outflows. Most probably the revised approach would lead to a somewhat lower outcome than that proposed in the CP, addressing concerns on overcalibration. Note that the EBA will keep the RTS under review and monitor its impact.	Selection of a "conservative average" of a stressed distribution instead of the 99% quantile of a non-stressed distribution.
Question 19. How would you view the development of a method based on VaR for the purposes of estimating additional collateral outflows? Could you review this in the context of the abovementioned	Some respondents believe that the VaR model is not appropriate for the calculation of additional collateral outflows and prefer the use of counterparty credit risk models, whereas some other respondents note that a VaR based approach would be a useful methodology. In particular, one respondent suggests the use of a historical stressed VaR and argues that	The EBA understands that views are mixed on the usefulness of VaR. The approach generally suggested is an up-scaling of daily VaR numbers. As mentioned earlier on in this statement, the EBA is sceptical about the effects of portfolio management and emphasises path dependency. For these reasons the EBA concludes that no viable VaR could be added to	None

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difficulties?	adjustments to the existing VaR model (in particular the application of margining set conditions) would not be significant and that the 30 day outflow can be calculated by analysing the peak (at relevant confidence level) of the 30 day overlapping collateral outflow scenarios. Some other respondents propose an alternative calculation process for which adjustments could be implemented in the VaR (calculate additional liquidity outflows under the assumption of constant level of risk, calculate liquidity outflow at 1 day horizon and to derive the 30 day liquidity outflows by a scaling operation). The main adjustments would include an extension of the scope and accounting for contractual arrangements that affect collateral outflows. Others believe the VaR methodology is a potentially useful methodology but consider that EPE models are more appropriate or easier to implement than VaR models would require significant adjustments, amongst which calculation at the level of the netting set and accounting for margining conditions.	the draft RTS at this moment.	
Question 20. Do you foresee any difficulties in calculating the consolidated estimates? If so, what are these difficulties and why do they arise? How	Several respondents noted a simple addition of outflows of solo entities would lead to an overestimation for intra-group transactions, where a solo application necessarily implies outflows on the same intra-group transactions. On the solo	As explained under Q1 the EBA retains treatment in the draft RTS for intra group contracts on a solo level. For the consolidated calculation the EBA however acknowledges that only one side of an intra-group transaction can face collateral outflows.	Clarify that the consolidated calculation can disregard intra-group contracts and

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material are they? What would be an appropriate alternative treatment?	entities level, this would make sense, but on the consolidated level, the aggregation would not reflect the liquidity risk experienced by a group. In this context a few respondent suggested not to require additional outflows for intra-group transactions, especially also taking into account legal entities not subject to CRR (e.g. US entities). Some respondents pointed out difficulties if different legal entities adopted different methodologies and asked how to sum up results, consider intra-group deals and split results by currencies, countries and business units for transfer pricing purposes.	For this reason the consolidated calculation can disregard intra-group contracts. Especially with the situation of partial use in mind, the EBA considers it appropriate to allow for institutions to perform the consolidated calculation by aggregating adjusted calculations for the solo entities. The adjustment would then be that for the consolidated calculation, the intra-group contracts could be removed from the calculation of the solo calculations.	that this calculation can be performed by aggregating the adjusted solo calculations.
Question 21 (in the text: Questions 21 and 22). How would you like to see the historical look-back approach calibrated? Please provide details together with a justification. Should the method be focused on calendar months or utilize a moving 30 days window? Should the method be based upon full calendar years or be moving with a 24 months window?	A majority of respondents are in favour of including the HLBA as a stand-alone method in the RTS based on the following advantages: - HLBA is a simple approach that can be easily implemented at a low cost; - it is consistent with BCBS recommendations and ensures a level playing field with third countries allowed to implement it; - it is non-parametric and does not involve making simplifications about correlations and magnitude of scenarios. Some respondents does not support this method as it has a number of limitations, with a few	The EBA acknowledges that the HLBA has some weak aspects, especially in terms of procyclicality. At the same time, the EBA values its evidence-based character. Also, the EBA considers that if the HLBA is set as a floor, the AMAO can ensure that during years of low volatility the requirement for additional collateral outflows will remain at a level to capture stressed flows, the combination of which would reduce procyclicality. Implementing it as a floor also ensures compliance with Basel. Further note that the EBA will keep the RTS under review and monitor the impact of the combination of methods.	HLBA will be obligatory for all institutions, regardless of whether an institution also implements AMAO (called UNE in the consultation paper) method. It will set a floor. The calculation will be performed by: i) collecting the amounts of collateral posted for

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	respondents suggesting that it would only be appropriate for firms with very simple portfolios or immaterial portfolios. A majority of respondents underlined that the HLBA had limitations, in particular - the HLBA is backward looking which could lead to pro-cyclicality; - historical data may not represent the risk attached to current positions and operational arrangements as the composition of portfolios may have changed; - it does not incorporate data from crisis cycles. To account for the limitations of the HLBA, some respondents suggest making the following changes: - base the calibration on a stressed period; - use a stress add-on to gross up the historical collateral outflows; - to compensate for portfolio size growth, outflows could be scaled by the size of the portfolio now divided by the portfolio then, by any changes in the absolute size of the derivatives book, or by a specific factor used as a proxy for risk		contracts under scope on a daily basis, ii) apply a 30 day moving window for the preceding 2 years to find the highest increase/decrease in the amount of collateral posted

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	; - introduce some hypothesis of management intervention in one month or changing in derivatives portfolio in particular for trading activities. One respondent suggests that a more stringent approach could be required during annual ILAAP/SREP. Some respondents suggested that it could at least provide a floor or default/fall-back approach that could be used for a period of time as institutions transition to either the simplified or standardised methodology, or even until a more appropriate method is implemented. Some respondents believe the HLBA should be consistent with the BCBS's proposal (maximum observed change over 30 day period over the last 24 months) and thus not modified. They argue that even though it is backward looking, the HLBA is based on the actual most adverse scenario and that there is no lagging effect: an increase in actual liquidity outflow will be considered in the 30 days after they materialize.		
Question 22. (in the text: Question 23) Is the method sufficiently resilient against potential future changes in volatility and against potential future changes in the size or	Others argue it is not resilient but that it is resilient enough for the next 30 calendar days. One respondent suggests that the HLBA could be used to calibrate the 99% confidence level of the UNE.	See Q21	See Q21

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characteristics of a bank's derivative portfolio? If not why and how could any such deficiency be addressed?	Major deficiencies and ways to address them are listed in the answers to question 21.		
Question 23. (in the text: Question 24) Do you agree with our analysis of the impact of the proposals in this CP? If not, can you provide any evidence or data that would explain why you disagree or might further inform our analysis of the likely impacts of the proposals?	Many respondents did not comment on the impact analysis. One respondent expected significant cost if immateriality was not recognized. A few others expect a too large impact on the liquidity coverage requirement regardless, and suggested a greater reliance on historical data such as in the HLBA. Several respondents pointed out that the restrictions on the use of the simplified method and not taking into account effects of hedges under this method would oblige institutions to opt for the standard method. Some of them would like to see a more lenient treatment for back-to-back transactions. Although the necessity of different methods with increasing complexity was understood it was criticized that this would result in discrepancies between institutions and make homogeneous comparisons impossible. One respondent criticized a lack of impact assessment in terms of competition vis-à-vis non-European banks not subject to the RTS. Some respondents recommended to use the liquidity coverage requirement observation period to conduct Quantitative Impact Studies on the	With removing the standard method and the simplified method the impact on the LCR should be arguably lower. Further note the EBA has amended the AMAO so that, instead of selecting a 99% percentile of a non-stressed distribution, is built on a "conservative average" of a stressed distribution. Most probably it would lead to a somewhat lower outcome than the CP version of the AMAO, which should address any concerns of overcalibration. Note that the EBA will keep the RTS under review and monitor its impact in order to control for undue effects. Lastly, the EBA acknowledges the usefulness of the HLBA as an evidence-based method, helpful in assuring that the additional outflow requirement will at least be equal to observed collateral outflows, albeit retroactively.	Removal of standard method and simplified method. Introduction of the HLBA as a floor.

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	proposed methodology and a cost/benefit analysis.		