

**Minutes of the European Repo Committee meeting held on 19 November, 2014 in London**

Present:	Mr. Godfried De Vidts	ICAP (Chairman)
	Mr. Constantino Toribo Garcia	Bankia
	Mr. Eugene McGrory	BNP Paribas
	Ms. Maria Arauzo Arranz	Caixabank
	Mr. Romain Dumas	Credit Suisse
	Mr. Andreas Biewald	Commerzbank
	Mr. Ronan Rowley	Deutsche Bank
	Mr. Olly Benkert	Goldman Sachs
	Mr. Jean-Michel Meyer	HSBC
	Mr. Andrea Masciovecchio	Intesa SanPaolo
	Mr. Stefano Bellani	J.P. Morgan
	Mr. Ulf Bacher	Newedge Group
	Mr. Michel Semaan	Nomura
	Mr. Guido Stroemer	UBS
On the phone:	Mr. Nicholas Hamilton	JP Morgan (ERC Ops Group Chairman)
	Mr. Kevin McNulty	ISLA
Also Present:	Mr. David Hiscock	ICMA
	Mr. Andy Hill	ICMA
	Ms. Lisa Cleary	ICMA
	Mr. Patrik Karlsson	ICMA
	Mr. Paul Richards	ICMA
Apologies:	Mr. Simon Kipping	Bank of America Merrill Lynch
	Mr. Sylvain Bojic	Société Générale
	Mr. Eduard Cia	UniCredit Bank
	Mr. Grigorios Markouizos	Citigroup
	Mr. Tony Baldwin	Daiwa Capital Markets
	Mr. Ed McAleer	Morgan Stanley (IRC Co-Chairman)
	Mr. Richard Comotto	ICMA Centre
	Ms. Lalitha Colaco Henry	ICMA

### **1. Welcome by the Chairman**

The Chairman welcomes the Committee to London and opens the meeting. The draft minutes of the last ERC Committee meeting, held on 26 September, 2014 in Munich, are unanimously approved without comment and accordingly will be published on the ICMA website in due course.

### **2. FSB regulatory framework for haircuts on non-centrally cleared securities financial transactions**

Mr Hiscock reports that the FSB published its Regulatory Framework for haircuts on non-centrally cleared SFTs. This Framework is a key part of the FSB's policy recommendations to address shadow banking risks in relation to SFTs. It consists of qualitative standards for methodologies used by market participants that provide securities financing to calculate haircuts on the collateral received; and numerical haircut floors that will apply to non-centrally cleared SFTs in which financing against collateral other than government securities is provided to entities other than banks and broker-dealers (referred to for simplicity as "non-banks").

There follows a discussion about how and when the requirements set out in the framework will be imposed. There is some suggestion that it could form part of the SFT regulation (although this is not the case in the Commission's proposal). There is also the possibility of it forming part of a standalone bank or market regulation.

The Committee discuss potential contradictions between the qualitative and quantitative standards, for example, government bonds are excluded from the haircut floors but not the qualitative methodology. The Committee discuss the impact of the requirements on capital charges and the damaging consequences of making the cost of doing business in the repo market prohibitive. The Committee agree that it is important to keep emphasising the link to market liquidity and the real economy.

Mr Hiscock reports that the FSB has also opened a new consultation, for comment by 15 December 2014, in relation to numerical haircut floors for non-bank to non-bank transactions. The Committee is asked if it would like to respond. It is suggested that further buy side input should be sought in this regard, but noted that the ERC would likely not respond.

### **3. Net Stable Funding Ratio ("NSFR")**

Mr. Benkert refers to the note attached hereto as Annex 1. A discussion follows on the questions raised in the note.

The Committee discuss the view that the NSFR is incentivising balance sheet inefficiencies and further impeding liquidity, with potentially dire consequences on market marking activity. It is queried whether the Committee wish to respond on the specific numbers set for NSFR calculation and the inconsistencies with the LCR but, as it is noted that the final endorsed standard was published by the BCBS on 31 October 2014 and therefore the NSFR is no longer in consultation stage, would they have any impact? It is suggested that Committee members speak with their primary dealer colleagues who might be able to more effectively request clarifications/ influence amendments through the DMOs. The Chairman suggests that ICMA, AFME (EPDA) and ISLA discuss this and agree on the form and source of any response.

Further detailed work at EU level will follow during 2015 when the EBA consults on technical standards for the operation of NSFR within the framework of the EU CRR. This will offer another opportunity to influence details of the regime.

#### **4. Securities Financing Transactions Regulation ("SFTR")**

Mr Hiscock provides an update in relation to the SFTR. Mr Hiscock reports that over the last couple of months, the European Council has been working on this proposal and it has now settled its political position. Revisions seen in the Italian Presidency's compromise text are not ideal, but have generally improved the text. Particular attention has been focussed on Article 15, which the Council proposes should refer to reuse rather than rehypothecation. This gives rise to some risk that it restricts the right to reuse collateral received under a GMRA repo, so it needs to be clear that a transfer of collateral under a title transfer collateral arrangement ("TTCA") – as is the case when conducting repos under GMRA – fully satisfies the notification requirements of Article 15 and leaves the securities purchaser free to use them as wished. This is fairly clear in the Council's text, particularly within the language adopted in the recitals. It is noted that it would be preferable to have the clarification regarding TTCAs in the recitals replicated in the Article wording.

Meanwhile, the new European Parliament held a first discussion of the SFTR on 4 November. The rapporteur, MEP Renato Soru (S&D, IT) and four shadow rapporteurs each spoke. Comments made concerned many of the points on which the Council has been working; and there was a new suggestion to introduce something regarding the regulation of haircuts, but this aspect is unclear for now. The Parliament's outline timetable foresees that there will be a draft report before Christmas, with consideration of amendments through January and February ahead of a vote before the end of March.

#### **5. Meeting with MEPs**

Mr Hiscock explains that on 7 November, jointly with ISLA, the ERC conducted an educational session in the European Parliament – to help those in the new European Parliament who will be working on the SFTR. The presentation provided (i) a basic picture of repo and securities lending (i.e. what they are, who does them and why); (ii) illustration of the benefits of SFTs and their importance in context of the need for collateral fluidity; (iii) introduction of some of the issues related to risks in SFTs and how they are managed; and (iv) delivery of a series of useful links to the wealth of related materials which are available on the ICMA and ISLA websites. This is the start of a process of engagement intended to ensure that the EP can conduct a well-informed debate of this important file and further discussions are already underway.

The Chairman indicates that it would be useful to organise another session for this group in January 2015, particularly on rehypothecation and reuse.

#### **6. CSD Regulation**

Mr Hill reports on the two main CSDR related work streams, responding to; (i) the proposal for a mandatory buy-in process; and (ii) the proposal for CSDs to provide a penalty mechanism which will serve as a deterrent for settlement fails. On the first point, Mr Hill notes that follow up has mainly been in the form of advocacy work, seeking the feedback of ICMA members, consulting

with the DMOs and speaking with the relevant authorities. On the proposal for a penalty mechanism, Mr Hill notes that there is debate about whether it would better take the form of a compensation system.

The Chairman noted that he had received a letter from Mr. Patrick Pearson setting out the Commission's view that Article 5(2) of the CSDR means that the opening leg of a SFT that concerns transferable securities which is executed on a trading venue must settle, at the latest, on the second business day after the trading takes place. There are no exemptions for SFTs from the T+2 requirement which means that an unintended consequence of the CSDR is that forward-forward repo cannot trade on an electronic platform. The trading platforms will shortly be writing to the Commission about this. It is hoped that the Commission may try to limit the damage in the Regulatory Technical Standards.

## **7. ERC Operations Group update**

- (a) Mr Hamilton comments on the matching and affirmation working group. In overview, nine ICMA ERC Operations Group firms form part of the working group. There is a clear need to have a comprehensive market standard of mandatory and voluntary matching fields and there is a push for a consistent automated matching and affirmation product at the vendor level. This will support the industry in the move towards automated matching and affirmation. Focus areas are (i) appropriate vendor engagement to bring together the market offerings; (ii) creation of a standard template that all vendors can support; (iii) using the market move to T+1 as a driver towards automation; and (iv) encouraging the industry to affirm and match on T+0. Targets for 2015 are (i) a consolidated template to be shared with vendors, having been approved by the ICMA ERC; (ii) collaboration across vendor platforms to establish some form of interoperability; and (iii) looking for synergies between (a) matching and affirmation and (b) transaction reporting.
- (b) Mr Hamilton then reports on the trade repository group. Three distinct requirements from the European Commission (via ESMA), Financial Stability Board (FSB) and European Central Bank (ECB) have started to firm up, but are not finalized. Firstly, European Commission requirements are for trade level data, with emphasis on re-use and haircuts, attempting to track the path a particular security takes through the market and monitor interconnectedness. The final draft legislative report is due by mid-December 2014, to be voted on by the European Parliament in March 2015. ESMA reporting is likely to go-live between 2016-2017. Secondly, the FSB requirement is for globally aggregated reporting, supplied by each respective competent authority. The hope and expectation here is that this will be met by ESMA and ECB reporting provisions, with no further FSB reporting requirements for member firms. This will be dependent on ESMA and/or the ECB settling on a format that can be readily aggregated. Thirdly, the ECB are planning to introduce a survey of the top 100 banks in 2016 (intending to front-run ESMA requirements). The ECB may be concerned by the lengthy lead-in time and complexity of ESMA requirements; and its data collection may be used to meet FSB requirements as well.
- (c) Mr Hamilton refers to work completed in relation to T2S. This exercise was very much part of a "Better Together" campaign! Collaboration, communication and consistency were the key features of the market wide work. This is the level of engagement and structure which, now we have this momentum, should continue in a number of the other future dated deliveries.

- (d) Mr Hamilton, comments that the collaboration with Rule Financial, which included a survey of market participants, has allowed a better understanding of the industry target operating model (“iTOM”) and has highlighted areas for development and harmonisation. A webinar delivered on 10 November, a replay of which can be accessed via the ICMA website, offers insight to the outputs from the work performed.

#### **8. Quantitative study on the impact of regulations on liquidity in the European repo market and paper on the interaction of regulation**

As Mr Comotto is not in attendance, the Chairman briefly reports that Mr Comotto is undertaking a study of the correlation or interaction between regulation and the behaviour of the repo markets, particularly spikes in repo rates. One preliminary observation which is of interest is that the number of incidents of spikes in the daily volatility of the repo rate has been higher in more recent months; and the magnitude of these volatility spikes appears to be increasing. It may then be that this is indicative of the repo market showing signs of stress, with a possible cause of the rate volatility spikes being a shortage of market liquidity at points in time. Further examination is being conducted to see to what extent there may be any pattern associated with these incidents, including the possibility that they may be associated with reporting dates at month and quarter ends. If the continued work can produce sufficiently robust conclusions, this will be very valuable evidence to review with regulators. The aim is to conclude the study in time for the ERC Committee meeting with the ECB on 12 January, 2015.

#### **9. ERC Secured Benchmark Working Group Update**

Mr Dumas refers the Committee to the slides presented at the morning’s ERC general meeting, attached hereto as Annex 2. Mr Dumas reports that the ERC Secured Benchmark Working Group is continuing discussions on the features of a suite of secured benchmark indices reflective of the European repo market. In doing so, a series of guiding principles for euro repo indices have been developed, which seek to establish an index that will be objective, transparent and credible. These principles consider that the index should encompass overnight and term fixing; be anchored in existing liquid markets; capture only CCP cleared transactions; represent a broad section of the market and its diversity of participants; and be governed by an industry body.

#### **10. Legal update**

Ms Cleary discusses the GMRA legal opinion exercise and the extent of the coverage of these opinions. For many years, ICMA has obtained and annually updated legal opinions on the GMRA from numerous jurisdictions worldwide. Importantly, as per the decision previously taken by the ERC, the ICMA GMRA legal opinions will no longer cover the GMRA 1995 from 2016 onwards. The opinions will continue to cover the GMRA 1995 as amended by the Amendment Agreement to the GMRA 1995 and the GMRA 2011 Protocol.

The GMRA remains the foremost agreement for documenting cross border repo transactions. It has been fostered by ICMA for over 20 years in which time the agreement has been amended and refined in consultation with the market. Such refinements have been made in response to changing market conditions, regulatory requirements and market demands. As such, the GMRA 2011 represents the most recent level of development – reflecting the most up to date ideas and methods. Time and time again we are reminded within the regulatory agenda and from an

anecdotal perspective, about the importance of keeping documentation up to date. It is important that efforts to make repo documentation even more robust are supported by the market participants who have helped to develop it. In this regard the discontinuation of coverage of the GMRA 1995 in the legal opinions should focus the market on updating their documentation, particularly in view of the impact this will have on the ability to take advantage of regulatory netting.

Secondly, Ms Cleary addresses the topic of the GMRA 2011 Protocol. ICMA published the 2011 GMRA Protocol to enable the parties to a GMRA 1995 or a GMRA 2000 to amend the terms of each such Agreement, to reflect improved default related provisions of the GMRA 2011; and to enable the parties to a GMRA 1995, a GMRA 2000 or a GMRA 2011 to insert a definition of euro in each such Agreement. In particular, the protocol allows parties to conform certain provisions existing agreements, e.g. (i) the methodology in calling an event of default; and (ii) the procedure for closing out transactions and determining the amount payable by one party to the other party, with the provisions in the GMRA 2011. The protocol also allows parties to introduce a contractual set off clause in line with that of the GMRA 2011.

Signing up to the protocol is an extremely efficient method of updating existing, out of date documentation. Accordingly, a party to an existing GMRA may adhere to the Protocol and be bound by its terms by completing a letter in the form published by ICMA and sending it to ICMA, as agent. In view of the planned change to the opinion coverage from 2016, it is increasingly important that the market considers adhering to the protocol. Its success directly correlates with the level of market adherence. ICMA are delighted to see the first ERC members adhere to the protocol and wish to assist others in doing the same. Should members have any questions about using the protocol, please do come and speak to ICMA about these.

Thirdly, Ms Cleary reports on the GMRA legal opinion exercise for 2015. ICMA are considering commissioning a GMRA opinion for Malaysia; and are in consultation with Shearn Delamore & Co to assess whether it is possible to obtain a legal opinion of sufficient legal certainty. There are legislative amendments tabled to remove some of the barriers to netting in Malaysia, but the timetable for these is not certain. Due to this, it may be that ICMA will delay obtaining the opinion until 2016. In addition, the counterparty coverage in some jurisdictions is to be extended to cover insurance companies, hedge funds and mutual funds. This will harmonise the opinion coverage across most of the 64 jurisdictions in which ICMA currently obtains opinions.

Finally, Ms Cleary turns to the topic of a “buy side annex” to the GMRA. The ERC Committee have requested that the GMRA working group consider the development of an industry standard GMRA Annex, with the aim of opening the repo market to a wider group of counterparty types – particularly buy side firms and corporate firms which may not have the capacity to negotiate long form GMRAs. The annex would set out the principal contractual terms which supplement the standard form GMRA (a “buy side annex/corporate annex”). A working group has been established to develop the idea – which is to include representatives not just from the ERC, but also from ICMA’s AMIC and CIF communities.

## **11. Elections to the ERC Committee and membership of the European Repo Council**

The Committee discuss whether changes are desirable to the current election procedure for the ERC Committee, for reasons of efficiency. After some debate it is proposed that:

1. ICMA look into the feasibility of electronic voting; and
2. Each voting delegate must vote for a minimum of 10 candidates on the ballot paper;

3. Members of the buy side constituency, who are not on the ERC Committee, should be invited to participate in meetings as observers, as and when relevant.

## **12. Regulatory update**

Mr Hiscock refers to the points made in this morning's ERC general meeting and in addition reports on a tax related point coming out of international work on Base Erosion and Profit Shifting ("BEPS"). On 16 September 2014, the OECD released its first recommendations for a coordinated international approach to combat tax avoidance by multinational enterprises. One of these first recommendations focuses on helping countries to ensure the coherence of corporate income taxation at the international level, through new model tax and treaty provisions to neutralise hybrid mismatch arrangements. This is of significance because this report says (at paragraph 56) that "... the most common transaction used to achieve a mismatch in tax outcomes under a hybrid transfer is a sale and repurchase arrangement...". Seeking to negate the tax effect of hybrid transfers achieved through the use of repos may lead to significant incremental tax compliance and reporting burdens, particularly in relation to repos between different legal entities within the same group of companies

Mr Richards refers to the Fair and Effective Wholesale Financial Markets Review, jointly led by HM Treasury, the Bank of England and the FCA, and related consultation. ICMA has already drafted a response to the latter. It does not specifically focus on repo but supports the building of a resilient economy more broadly.

## **13. The granularity of the semi-annual repo survey**

This item was not discussed due to Mr Comotto's absence.

## **14. Term sell/buy-backs**

The Committee discuss the following wording proposed to be added to the Repo Guide to Best Practice:

*Where a floating-rate security, such as an FRN, is used as collateral in a sell/buy-back, it is possible that the coupon on the security will reset during the term of the transaction. This creates a problem, as the Repurchase Price (Sell Back Price) will have been set at the start of the transaction using an assumed future coupon. For example, it may have been assumed, for the sake of simplicity, that the next coupon will be the same as the current coupon. However, the new coupon is likely to turn out to be different from the assumed coupon. The question then arises, should the difference between the new and assumed coupons be managed by making (1) a retrospective change to the Repurchase Price (Sell Back Price) or (2) a subsequent interest claim? Market practice tends towards the former method. However, this appears to contradict the terms of the GMRA Buy/Sell-Back Annex, which does not envisage a retrospective change to the Repurchase Price (Sell Back Price), which means such a change would not be enforceable under the standard annex. It is recommended that, when using a floating-rate security as collateral in a sell/buy-back, the parties should consider including a supplementary term in Annex I of the GMRA or, if that is not practicable, in Confirmations, to the effect that the Repurchase Price (Sell Back Price) will be changed to reflect the resetting of the coupon.*

It is suggested that method (1) referred to above should be presented as the best practice. Mr Comotto to liaise with Mr Stroemer on this point.

#### **15. Repo FAQs**

Mr Hiscock draws the Committee's attention to changes made to the Repo FAQs, circulated in red-line format to the Committee on 5 November 2014. It is noted that unless comments are received by the end of November, the amended version will be published and Mr Stroemer is deputed to thoroughly review the draft document with a view to highlighting any points of concern requiring further debate.

#### **16. AOB and upcoming dates**

Future **European Repo Committee meetings** have been scheduled as follows:

- (1) **12 January 2015** (10.30-13.30) – hosted by Commerzbank in Frankfurt in advance of the meeting of the Committee with the ECB (14.00-17.00).

The Chairman:

Acting Secretary:

Godfried De Vidts  
19 November 2014

Lisa Cleary

#### **Attachments**

Annex 1: Note on NSFR

Annex 2: Slides ERC Secured Benchmark Working Group



# ERC Discussion on NSFR

November 19<sup>th</sup> 2014

Basel committee issued final standard on 31<sup>st</sup> October

NSFR will be implemented by local regulators

Go live date January 1<sup>st</sup> 2018

Intention is to ensure banks hold sufficient stable funding to match long term requirements

Available Stable Funding (ASF (numerator)) measures stability of funding

Required Stable Funding (RSF (denominator)) measures funding required

ASF/RSF must be greater than or equal to 100%.

Application for repo:

	RSF	ASF	
Cash on reserve account	0%	0%	Funding from financials <6m
<6m reverse repo vs Level 1 with financial institution	10%		
<6m reverse repo vs non - Level 1 with financial institution	15%		
<6m reverse repo with non financials	50%	50%	Funding from financials inc Central Banks 6m-1y
All reverses 6-12m	50%	50%	Funding from corporates/public sector entities/multilateral & development banks <1y
All reverses > 12m	100%	100%	Liabilities >1year
Own L1	5%		
Own L2A	15%		
Own L2B	50%		

## Points for discussion:

1. Interdependent trades. Do short covers meet the criteria?
2. As it's a balance sheet view any collateral switches (or stock loans) that have different assets (eg level 1 v level 2) but net down balance sheet have no NSFR impact – should they?
3. No mention of CCPs – should they be treated like corporate/sovereigns and assigned a 50% ASF (rather than current 0%)?
4. RSF for short-dated reverses on Level 1 is high at 10% verses owning equivalent assets (5%) or cash reserves at central banks (0%) – may stifle mm flows.
5. 15% on level 2 assets seems high – all assets treated the same below level 1 (but would they then increase lower assets RSF)?
6. Impact on short-end fixed income disproportionate to longer end (eg 15% haircut) likely to impact funding
7. CCP IM has RSF of 85% - does this apply to repo IM / IM posted to repo CCPs?



# Alternatives for Repo Indices / Establishing a Standard for European Repo Indices

Romain Dumas

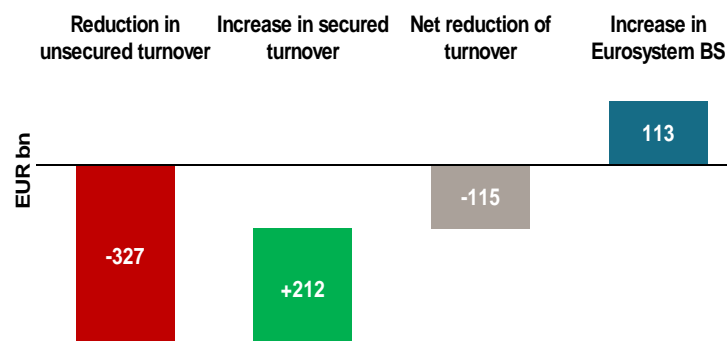
ERC, London, November 2014

## Importance of a widely accepted repo index

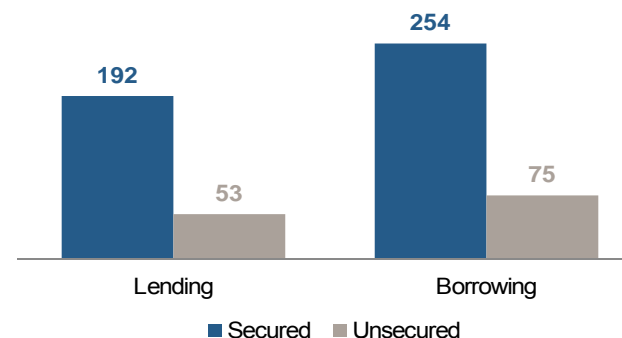
### » Significance of the European repo market

- Today, the **secured segment accounts for almost 80%** of interbank lending and borrowing transactions
- Repo markets have been able to **absorb a substantial part** of the reduction of unsecured lending/borrowing following the crisis, therefore limiting the intervention of the ECB to facilitate liquidity

#### The Repo market has lessened the burden on the ECB\*



#### Secured vs. Unsecured (volumes for 2012)\*



### » There is a need of a pan-European effort to establish a widely-accepted standard

- Increased market transparency
- Enhanced visibility for regulators
- Helping market participants **manage risks**
- Monitoring the **monetary policy transmission mechanisms**

\*Source: ICMA "The Future of the Repo Market" – June 2013 , Presentation by **Francesco Papadia**, Chairman of the Board of the Prime Collateralised Securities (PCS) and former Director General, Market Operations, European Central Bank

## A working example in the US: the DTCC GCF Repo index\*

- » The index was developed in response to concerns of the **Treasury Markets Practice Group, sponsored by the Federal Reserve Bank of New York**, regarding the **need for enhanced transparency** in the Treasury, agency debt and mortgage-backed securities markets
- » Based on an average daily **volume of close to USD 400bn** of overnight transactions
- » Based only on actual transactions
- » Fully transparent index methodology
- » Suite of 3 DTGCC GCF Repo Indices, each calculated as the **weighted average of the interest paid each day on overnight transactions** involving GCF Repos for:
  - U.S. Treasury (< 30Y maturity) (GCFRTSY Index)
  - Non-mortgage backed US agency securities (GCFRAGY Index)
  - Fannie Mae & Freddie Mac fixed rate MBS (GCFRMBS Index)
- » **Futures and swap market**
  - Bloomberg page: Tullett Prebon → Tullett Prebon → OIS → GC Index Swaps (GDCO 6793 3)
  - Bloomberg tickers: **USTA Cmdty**

\*Average daily trading in GCF Repos in 2012.

## Adapting best practices to the Euro Zone reality

- » **Key differences** from the US market
  - **Heterogeneous market:** European repo markets liquidity is along national “GC” lines and certain basket products (e.g. GC Pooling)
  - **CCP:** sovereign risks subject the CCP model to constraints unknown to the US
  - **Data ownership:** transaction data remains with inter-dealer brokers and not with CCPs
  - **GCF/DBV:** no pure GCF/DBV type of product with high turnover
- » **Several parallel initiatives**
  - Capturing different segments of the European market
  - Varying index calculation methodologies
  - Different levels of industry backing
  - In some cases, filtering algorithm to capture broader GC concept out of specific transactions
- » A working group of the **ICMA European Repo Committee** has discussed the need for, and features of, a suite of secured benchmark indices reflective of the European repo market

### Guiding Principles for Euro Repo Indices

#### Based on actual market transactions:

- ☐ Objective
- ☐ Transparent
- ☐ Credible

#### Overnight and term fixing

- ☐ Useful alternative to unsecured short term indices
- ☐ Current reality of the liquidity is on the overnight

#### Anchored in existing liquid markets

- ☐ Accurate pan-European picture
- ☐ Displays both trends and tiering

#### Capturing only centrally cleared transactions

- ☐ Accurate representation of the cost of collateral

#### Broad section of market and diversity of participants

- ☐ Broader representation of secured transactions
- ☐ Transparent

#### Governed by an industry body

- ☐ Highly representative
- ☐ Sustainability
- ☐ Experience
- ☐ Credibility

## Assessing and comparing existing initiatives for 1-day fixing

	Euro Zone			UK	US
Characteristics	Eurepo*	RepoFundsRate	GC Pooling	RONIA	GCF
Based on actual market transactions	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>
Broad section of market	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>
Anchored in existing liquid markets	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>
Capturing only centrally cleared transactions	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>
Diversity of participants	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>
Governance by industry body	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>
Pure GC basket product	<input checked="" type="radio"/> <input checked="" type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>

\*decision made to de-commission in October 2014

## Assessing and comparing existing initiatives for term fixing

	Euro Zone			UK	US
Characteristics	Eurepo	RepoFundsRate	GC Pooling	RONIA	GCF
Based on actual market transactions	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Broad section of market	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Anchored in existing liquid markets	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Capturing only centrally cleared transactions	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Diversity of participants	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Governance by industry body	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>
Pure GC basket product	<input checked="" type="radio"/> <input checked="" type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>	<input checked="" type="radio"/> <input checked="" type="radio"/> <input checked="" type="radio"/>



## Progress and discussion so far

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- » In September 2013, by invitation of the EBF/EMMI, the ERC Repo Index task force, the Eurepo steering committee and an observer from the ECB met as a working group to receive an update on the various initiatives and devise the way forward. A meeting with the EMMI Eurepo Steering Committee to discuss ATs and CCPs will be hosted by ICMA in London on the 25<sup>th</sup> of November
- » For the benefit of the wider public, it comes out as a necessity to build the index as a **unique pan-Eurozone daily index** capturing the weighted average of all centrally-cleared, electronically-transacted 1-day repo transactions
- » This is a challenge given the liquidity structure of the Euro repo markets but one that can be resolved. Extracting information from the deepest and most liquid funding market with volumes in excess of EUR 250bn transacted daily is a worthwhile goal
- » It was decided to focus on secured **funding** transactions in EUR cleared on a qualifying **CCP, electronically** transacted and collateralized by **ECB** eligible paper
  - A clear definition to capture the full substance of the Eurozone secured funding market
  - While considering only transactions with the most transparent execution mode, in line with modern standards
- » Let's note that the major private initiatives, conducted by Stoxx and ICAP Investor Services, took this on board and focus on precisely such transactions



## The way forward

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- » Secured funding transaction means a transaction for which the primary motive of the buyer / cash giver is **investing/collateralization** of cash. These can occur in **3 formats** :
  - Pure **GC basket** products, such as GC pooling, with a rule based dynamic allocation
  - **Traditional GC** trades, with a static allocation at point of trade
  - Transactions on **individual bonds which do not trade special**
  
- » Intention to capture and consolidate all qualifying transactions from every Eurozone pool of liquidity (i.e. cluster of risk)
  - **Homogeneity** of risk within **each pool**, which comes from participating to the **same default fund**
  - **Consistency** of the calculation **methodology** applied **across all pools** for a given format of transaction

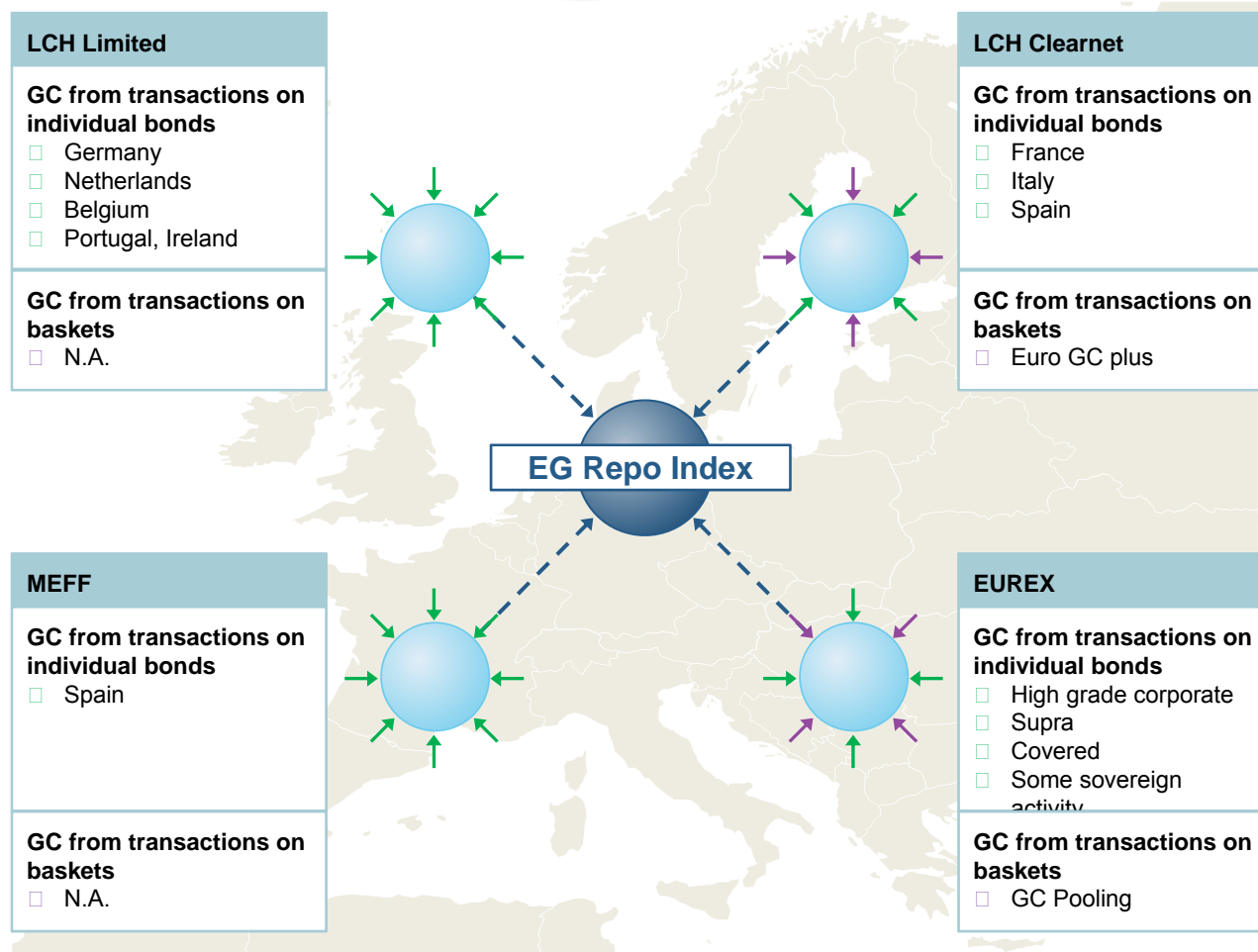
## European repo market typology




CCPs/ Cluster of Risk	GC extracted from transactions on individual bonds and traditional GC	GC basket Product
<b>LCH Limited</b>	<ul style="list-style-type: none"> <li>• Germany</li> <li>• Netherlands</li> <li>• Belgium</li> <li>• Portugal, Ireland</li> <li>• ....</li> </ul>	
<b>LCH Clearnet</b>	<ul style="list-style-type: none"> <li>• France</li> <li>• Italy</li> <li>• Spain</li> </ul>	<ul style="list-style-type: none"> <li>• Euro GC Plus</li> </ul>
<b>EUREX</b>	<ul style="list-style-type: none"> <li>• High grade corporate</li> <li>• Supra</li> <li>• Covered</li> <li>• Some sovereign activity</li> </ul>	<ul style="list-style-type: none"> <li>• GC Pooling</li> </ul>
<b>MEFF</b>	<ul style="list-style-type: none"> <li>• Spain</li> </ul>	

# Creating the Euro Global Repo Index

## Key principles

- Criteria for eligible transactions:
  - Centrally cleared
  - Electronic execution
  - ECB-eligible collateral
- Euro Global Index calculated based on sub-component representing each CCP / Risk-cluster
  - Consistent calculation method across all CCP / Risk clusters for each type of transaction (individual bonds vs. basket product)
- Governance by an industry body with broad based representation:
  - Responsible for the methodology and eligibility criteria
  - Existing index initiatives responsible for implementing method selected, each with its own expertise



 Data extracted from transactions on individual bonds to calculate sub-indices
  Data extracted from transactions on baskets to calculate sub-indices
  Sub-indices used as data to calculate the Central Index

## Selected key issues and recent developments

- » Should there be a distinction between funding and special driven transactions i.e. shall we look to filter out of the transactions on specifics the bonds trading *specials*?
  - If no filtering: risk of skewing the data set lower; but simpler and also straightforward to aggregate
  - If distinction: what should the filtering methodology be? who decides what it is? which technical bias are introduced?
- » How should the data be aggregated to create the Euro Global repo Index?
  - Should the Global Index consolidate consistently filtered data from each source or should it aggregate the raw data and then filter? No such question for the pure GC baskets products such as GC pooling, Euro GC Plus
  - Weighting of each sub component also has to be determined
- » Establishing downward compatibility between the Euro Global Index and existing initiatives
  - Highly desirable to ensure the possibility for private initiatives of compatibility with the Global Index
  - Absolutely feasible given the same rules for the eligibility of the raw data are used. The question is only on the filtering methodology if any and when transactions other than pure GC baskets are considered
- » Dynamism of private initiatives
  - RepoFunds Rate (Germany, France and Italy) all officially recognised by ISDA on 30<sup>th</sup> April 2014 with. MarketServ are due to upgrade their product in January 2015 to support trade reporting of OIS/RFR trades. **REFR Index Go**
  - Eurex launched on the 12<sup>th</sup> of November a Money Market Future on the STOXX GC Pooling Repo Index. **OME Index Go** for the Future and **SGCPDFR Index Go** for the underlying Index