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#### ISDA's response to the European Commission's Public Consultation on the Regulation of Indices

On behalf of our members, ISDA appreciates the opportunity to respond to this consultation, with the goal of contributing to a robust and stable financial market. In this response, we have limited ourselves to commenting on those issues that are directly relevant to ISDA and OTC Derivatives Markets. There are, of course, many important issues discussed in the consultation document that go beyond that scope, and we defer, in relation to those issues, to other financial market respondents with greater expertise and/or a more relevant focus. Equally, we will not address considerations of possible alternatives or successors to relevant indices (e.g. Libor or Euribor), either generically or specifically, in the case that the ultimate decision is reached that any of these indices should be discontinued.

Our responses to selected questions where ISDA does have a comment can be found in full in the accompanying Appendix.

### HIGHLIGHTS

- In relation to any transition to alternative benchmarks, there should be clear and long term arrangements in place. Failure to achieve a smooth and progressive transition will result in major market dislocation and significant "jump risk" if there is an abrupt move from old benchmarks to a successor. The rate of any transition will likely be chiefly determined by the speed of migration to an alternative in terms of liquidity, as well the extent to which market participants have amended their documentation (Q. 39).
- Regarding a hybrid methodology for calculation purposes, we generally support the use of actual trade data (where available) in benchmarks' compilation. At the same time, we believe that it will still be necessary to deploy algorithms or expert judgment to fill the gaps where no trade data exists. In fact, we would argue that expert judgment still plays a part even where actual trade data exists, given that the decision to transact the trade(s) in practice depends upon the exercise of such expert judgment (Q. 10).
- ISDA developed ISDAFIX to facilitate the determination of exercise values for cash-settled swap options. The existence of such a benchmark provides a transparent, readily available value to



which parties to a transaction can refer as a settlement rate. Without such a benchmark, it might be necessary to go through the process of calling a number of active dealers for quotes in order to settle transactions. For more information, click <u>here</u> (Q, 1).

- ISDA encourages the Commission to take account of the distinction between key public benchmarks, that are primarily used for purposes of pricing a broad range of financial instruments or contracts, and benchmarks in the broader sense (including proprietary indices). In short, not all indices should be regarded as "public goods" and this should be reflected in the design of regulation (Q. 34).
- In relation to future reforms, there should be alignment with existing regulatory initiatives. Particularly, if transactions are to be reported, then existing reporting databases, systems and reporting routes should be leveraged (Q. 41).

We have pleasure in submitting our responses, and look forward to staying very much engaged with the European Commission as regards future legislative initiatives on this topic.

Yours faithfully,

George Handjinicolaou

Deputy CEO and Head of ISDA Europe, Middle East and Africa

International Swaps and Derivatives Association, Inc. (ISDA)

### **APPENDIX LISTING ISDA<sup>1</sup>'s RESPONSES**

#### Chapter 1. Indices and Benchmarks: What they are, who produces them and for which purposes

#### (1) Which benchmarks does your organisation produce or contribute data to?

ISDAFIX is the leading benchmark for annual swap rates for swap transactions worldwide. This screen service provides average mid-market swap rates for six major currencies at selected maturities on a daily basis. ISDAFIX rates are based on a midday polling and, in some markets, an additional end-of-day polling of mid-market rates. ISDA established ISDAFIX in 1998 in co-operation with Reuters (now Thomson Reuters) and Intercapital Brokers (now ICAP plc.).

ISDA developed ISDAFIX to facilitate the determination of exercise values for cash-settled swap options. The existence of such a benchmark provides a transparent, readily available value to which parties to a transaction can refer as a settlement rate. Without such a benchmark, it might be necessary to go through the process of calling a number of active dealers for quotes in order to settle transactions. The 2006 ISDA Definitions refer specifically to ISDAFIX rates as a means of settlement of over-the-counter derivatives transactions. In the sample Swaption Confirmation in the 2006 ISDA Definitions (Exhibit II-E), for example, the parties can include 'ISDA Source' - that is, ISDAFIX - as the reference settlement rate under Settlement Terms.

ISDAFIX is also used as a reference rate for cash settlement in connection with early terminations of swap transactions. In addition, dealers often use ISDAFIX as an input when marking their swap portfolios to market.

Beyond their use in settling over-the-counter-traded transactions, ISDAFIX rates are also used as a rate or curve source in various exchange products. LIFFE, for example, uses ISDAFIX as the source of the swap curve in calculating the settlement price of its Swapnote futures contract. In addition, both the Chicago Mercantile Exchange and the Chicago Board of Trade use ISDAFIX as the settlement price in their swap futures contracts. In the United States, the Federal Reserve uses ISDAFIX as the source for USD swap rates in its H.15 Statistical Release.

At present, ISDAFIX provides rates for euro (EUR), Hong Kong dollar (HKD), Japanese yen (JPY), British pound (GBP), Swiss franc (CHF) and U.S. dollar (USD). In addition, ISDAFIX provides USD swap spreads. Contributed rates are collected by Thomson Reuters or ICAP, tabulated and then posted alongside the calculated ISDAFIX rate on the applicable Thomson Reuters screen at various times throughout the day.

For more information: http://www2.isda.org/asset-classes/interest-rates-derivatives/isdafix/

<sup>&</sup>lt;sup>1</sup> Since 1985, ISDA has worked to make the global over-the-counter (OTC) derivatives markets safer and more efficient. Today, ISDA is one of the world's largest global financial trade associations, with over 800 member institutions from 56 countries on six continents. These members include a broad range of OTC derivatives market participants: global, international and regional banks, asset managers, energy and commodities firms, government and supranational entities, insurers and diversified financial institutions, corporations, law firms, exchanges, clearinghouses and other service providers. Information about ISDA and its activities is available on the Association's web site: <a href="https://www.isda.org">www.isda.org</a>. ISDA is registered with the European Commission as an interest representative under identification number 466-43241096-93. We consent to the publication of this response.

# (2) Which benchmarks does your organization use? What do you use each of these benchmarks for? Has your organization adopted different benchmarks recently and if so why?

ISDA has more than 800 members from 50 countries on six continents. These members include a broad range of OTC derivatives market participants: global, international and regional banks, asset managers, energy and commodities firms, government and supranational entities, insurers and diversified financial institutions, corporations, law firms, exchanges, clearing houses and other service providers. As a result, our members are using a wide range of benchmarks for different purposes. Among them, the following may be noted:

- EURIBOR and LIBOR are used to price notional interbank loans as a reference for interest rate swaps, as well as to price commercial loans or be the reference interest rate in a retail mortgage or consumer credit contracts;
- EONIA, which indexes actual overnight transaction rates (in euros just as SONIA does for sterling);
- Overnight Index Swaps ('OIS') are based on such an index of overnight rates;
- ISDAFIX, to facilitate the determination of exercise values for cash-settled swap options (Please refer to question 1);
- In the commodities markets, exchange-traded benchmarks including CME/ NYMEX and ICE (Oil complex, Natural Gas, soft commodities, metals), CRB (commodities) as well as benchmarks of price reporting agencies (Platts, Argus, ICIS, McCloskey, Point Carbon), are used to price derivatives and hedging instruments. In addition to this, ISDA would like to make some general points regarding commodities markets:
  - Physical indices have a degree of subjectivity for two primary reasons: (1) the absence of standardisation in physical qualities requires an assessment of value; and (2) the fact that certain physical oils may not trade continuously, requires an assessment of where value is likely to be;
  - We support Price Reporting Agencies (PRAs) having published methodologies and some confirmation/audit of conformance to these methodologies;
  - The PRAs in energy experience competition between themselves this provides customer choice, but does mean that (insignificant) discrepancies may occur due to the subjectivities outlined above;
  - Physical market reflects the supply/demand fundamentals, and financial markets derive prices from there not vice versa.

#### (3) Have you recently launched a new benchmark or discontinued existing ones?

In general, once a market coalesces around a specific benchmark and liquidity develops, the market will stick with that benchmark. Accordingly, whilst new benchmarks are launched from time to time, they tend to be additional rather than replacements.

Additionally, some ISDA members regularly produce customized indices that are used for pricing bespoke bilateral or similar transactions among a limited number of counterparties. We note in many cases that these customized indices could fall under the definition of benchmark used in the consultation, though we believe it could be appropriate to exclude them. Examples would include customized or privately-negotiated indices, reference portfolios or baskets, defined in connection with specific issuances

of structured notes, with bespoke transactions to effect investment strategies, or with similar bilateral or limited arrangements<sup>2</sup>.

(4) How many contracts are referenced to benchmarks in your sector? Which persons or entities use these contracts? And for which purposes?

(5) To what extent are these benchmarks used to price financial instruments? Please provide a list of benchmarks which are used for pricing financial instruments and if possible estimates of the notional value of financial instruments referenced to them.

(6) How are benchmarks in your sector set? Are they based on real transactions, offered rates or quotes, tradable prices, panel submissions, samples? Please provide a description of the benchmark setting methodology.

### (7) What factors do you consider to be the most important in choosing a reliable benchmark? Could you provide examples of benchmarks which incorporate these factors?

In relation to derivatives, some of the most important factors to take into account would be liquidity of the underlying; high transparency of benchmark development and changes; good governance (i.e., a single, identified authority with specific accountability for the sound operation of the benchmark); and a methodology which suits the underlying. For physical market benchmarks, confidence is more likely to develop where underlying infrastructure is not controlled by any one or a small number of market participants. Also, political stability and transparency of government in the relevant jurisdiction can be key to fostering development of effective benchmarks in some cases.

### Chapter 2. Calculation of Benchmarks: Governance and Transparency.

## (8) What kinds of data are used for the construction of the main indices used in your sector? Which benchmarks use actual data and which use a mixture of actual and estimated data?

As noted in our response to question 1, ISDA maintains ISDAFIX, a benchmark based on a mid-day and, in some markets, end-of-day polling of mid-market rates. ISDA members also make use of the benchmarks detailed under question 2, although ISDA is not responsible for the maintenance of those benchmarks, or the methodology that underlies them.

Separately, many ISDA members maintain proprietary indices to help track the performance of a particular asset class or sector, and potentially to determine the pay-off on structured products, including exchange-traded funds (ETFs), notes, certificates and warrants. A proprietary index might reference a basket of securities relating to a particular sector or market (a basket of emerging market securities, government debt, corporate debt), or physical assets, such as commodities (precious metals, energy resources, for example), or a combination of asset classes and sectors. Typically the value of such indices is derived from market data on its constituent assets, collected and weighted according to the documented, rules-based methodology of the index. The internal governance structures designed around the

<sup>&</sup>lt;sup>2</sup> The indices or baskets come in many forms and are in many cases subject to product regulation as a result of the products with which they are used. In some cases the indices or baskets are more connected with the products they are used with and are not free-standing benchmarks which could be separately regulated.

development of these proprietary indices may require the calculation, or at least the verification, of the levels of such indices by independent third parties. The existence of such indices allows an investor to gain exposure to a given sector or class of assets (i.e., making it easier to gain exposure to multiple reference assets), whilst avoiding many of the difficulties and costs associated with arranging a direct investment in the underlying reference assets.

Finally, in relation to wholesale energy markets, indices and benchmarks produced by PRAs are based on actual transaction data, on bids and offers and on opinion obtained from a panel, in that order of preference.

## (9) Do you consider that indices that do not use actual data have particular informational or other advantages over indices based on actual data?

## (10) What do you consider are the advantages and disadvantages of using a mixture of actual transaction data and other data in a tiered approach?

At a high level with regard to methodology, we generally support the use of actual trade data (where available) in benchmarks' compilation. At the same time, we acknowledge that it will likely still be necessary to deploy algorithms or expert judgment subject to appropriate governance and systems and controls safeguards still plays a part even where actual trade data exists, given that the decision to transact the trade(s) depends upon the exercise of such expert judgment.

# (11) What do you consider are the costs and benefits of using actual transactions data for benchmarks in your sector? Please provide examples and estimates.

# (12) What specific transparency and governance arrangements are necessary to ensure the integrity of benchmarks?

We consider the following governance related criteria to be important:

- Appropriate seniority of and responsibility of staff (so less open to being influenced);
- Complaints process need for somewhere to raise concerns (independent of benchmark contributors);
- Appropriate consultation with users on changes;
- Systems and controls which lead to reliable daily operations;
- Transparency of methodology, of operation and application of any judgement.

## (13) What are the advantages and disadvantages of imposing governance and transparency requirements through regulation or self-regulation?

Governance and the application of regulation should always be considered on a careful assessment of the associated costs against the expected resulting benefits. Market impact of the index or benchmark is a further important factor and it is clear that many index/ benchmark prices have significant market impact. IOSCO has considered this balance in its review of oil price reporting agencies, in which it recommended that appropriate protections and governance are put in place through self-regulatory principles for PRA benchmark governance. PRAs are thus encouraged to comply subject to independent audit. If satisfactory compliance is not achieved, then other policy instruments, including applying a form of regulation of PRAs should be applied.

Index providers fulfill a high impact and critical role in many markets and as an association of market users, we support any measures designed to ensure that appropriate standards are achieved, provided these can be justified on a cost benefit basis.

## (14) What are the advantages and disadvantages of making contributing data or estimates to produce benchmarks a regulated activity? Please provide your arguments.

We consider regulatory burdens relating to index/benchmark production should primarily fall on the provider of the benchmark, as it has primary control over and responsibility for the final price publication. Many participants who submit to indices/ benchmarks are regulated firms themselves, so extension of regulation to further activity represents additional incremental cost. Again, we consider that any such extension should be considered on a cost-benefit basis. Benchmarks/ indices provide essential transparency to markets and it is important not to impose regulatory burdens which may deter legitimate participation in these processes.

Regulatory reporting of benchmark submissions should leverage existing trade capture and reporting routes already used by many market participants for their existing trading and/ or regulatory reporting activities.

## (15) Who in your sector submits data for inclusion in benchmarks? What are the current eligibility requirements for benchmarks' contributors?

In relation to ISDAFIX, contributor member firms are selected by ISDA in consultation with ICAP and Thomson Reuters on the basis of reputation among dealers, credit standing, scale of activity in the relevant market, and expertise in the currency concerned. Dealers that consistently fail to provide rates or provide rates that are off the market will be replaced at ISDA's discretion.

#### Rate Definition

The contributor is asked to provide a rate which is the mean of where that dealer would itself offer and bid a swap in the relevant maturity for a notional equivalent amount of US \$50 million or whatever amount is deemed market size in that currency for that tenor to an acknowledged dealer of good credit in the swap market. The rate should not be where the dealer sees mid-market away from itself, but should be a function of its own bid/offer spread.

#### Polling and Computation.

The USD contributions are collected by ICAP and the rate is calculated by Thomson Reuters, all other contributions are collected and the rate calculated by Thomson Reuters.

# Contributions collected and calculated by Thomson Reuters (CHF, EUR Euribor, EUR LIBOR, GBP, HKD, JPY):

Contributors contribute rates to Thomson Reuters in line with the rate definition above by electronic interface. Contributors are asked to provide rates for the full set of designated maturities of the given ISDAFIX currency within a polling window. Quotes may be submitted to five decimal places. The published rate will be to three decimal places. In the event of technical difficulties, the Contributor can provide their rate to Thomson Reuters via email or phone. The rates are observed and recorded at the end



of the polling window following which Thomson Reuters will calculate the ISDAFIX rates and publish them.

Thomson Reuters will calculate the ISDAFIX rate by eliminating a given number ("topping and tailing") of the highest and lowest rates submitted, and then by calculating a simple average of the remaining rates. A rate will be posted as long as a certain number of contributions ("Minimum Number of Contributions") are received.

In the event a contributor does not provide a contribution for the full set of maturities within a given currency, none of their contributed rates will be included in the ISDAFIX rates for that currency that day. During the polling window, panel members may update or amend a rate that they have contributed. Following the window, contributed rates can not be amended or withdrawn and are considered final.

Contributions collected by ICAP and the rate calculated by Thomson Reuters (USD, USD Spread): ICAP collects spread information from contributors via a secure website that contributors log into every morning. Contributors are asked to indicate the USD swap spread as of 11:00 am, in accordance with the criteria set by ISDA as detailed above. At 10:58 am, ICAP will send an email reminder to each contributor reminding them to contribute. At 11:02 am, ICAP will indicate on the secure website a USD swap spread and USD swap rate to serve as a reference point for contributors. This reference point is generated from two sources of information:

(1) Information contained on Reuters page 19901 at 11:00 am, which reflects the most recent swap spreads from completed trades and executable bids and offers in market size done/posted at ICAP.

(2) Information reflecting executed trades and executable bids and offers at 11 a.m. for US Treasury securities from ICAP's BrokerTec US Treasury electronic trading platform.

By their nature, because both sources of information reflect completed transactions and/or at-risk trading interest, ICAP considers them to be a useful and meaningful reference point for where the market may be at that point in time.

From 11:00 am to 11:15 am, contributors are able to submit their swap spread information and rate to the secure website. In terms of process, contributors may accept the reference swap spread and/or rate indicated on the website, or submit different values. During this time the ICAP swaps desk monitors dealer participation to ensure that the 10-bank minimum is met. As contributors submit spread and rate information, the values are sent to Thomson Reuters on a streaming basis.

At 11:26 am, Thomson Reuters will calculate the USD ISDA FIX rate by eliminating a given number of the highest and lowest rates submitted, and then by calculating a simple average of the remaining rates. A rate will be posted as long as the Minimum Number of Contributions is received.

## (16) How should panels be chosen? Should safeguards be provided for the selection of panel members, and if so which safeguards?

(17) How should surveys of data used in benchmarks be performed? What safeguards are necessary to ensure the representativeness and integrity of data gathered in this way?

(18) What are the advantages and disadvantages of large panels? Even in the case of large panels could one panel member influence the benchmark?

(19) What would be the main advantages and disadvantages to auditing of panels? Please provide examples.

(20) Where indices rely on voluntary contributions, do you consider that there are factors which may discourage the making of these contributions and if so why?

Please refer to answer provided in Question 34.

## (21) What do you consider to be the advantages and disadvantages of mandatory reporting of data? Please provide examples.

We acknowledge that there is a tension where indices rely on voluntary contributions, though we believe that if powers to compel participants in financial markets to make submissions to benchmarks exist, they should only be used as a last resort, and where there is a significant risk of widespread disruption. Thought should be given to which body would have power to compel an entity to make a submission to a specific index, particularly where that entity is not regulated.

If powers to compel participants in financial markets to make submissions to benchmarks are exercised, it is important that such participants can benefit from "safe harbors" for so long as they act within the scope of the rules of the relevant index.

(22) For entities contributing to benchmarks which are regulated by financial regulation, what would be the advantages and disadvantages of bringing their benchmark submissions under the scope of this framework?

(23) Do you consider that responsibility for making adjustments if inadequate data is available should rest with the contributor of the data, the index provider or the user of the index?

(24) What is the formal process that you use to audit the submissions and calculations?

(25) If there are any weaknesses identified in the audit, who are they reported to and how are they addressed? Is there a follow up process in place?

(26) How often are submissions audited, internally or externally, and by what means? Do you consider the current audit controls are sufficient? What additional validation procedures would you suggest?

(27) What are the advantages and disadvantages of a validation procedure? Please provide examples.

(28) Who should have the responsibility for auditing contributed data, the index provider or an independent auditor or supervisor?

(29) What are the advantages and disadvantages of making benchmarks a regulated activity? Please provide your arguments.



In responding to questions 25-29, we refer to our response to question 34 and our view that regulation should consider the function of a particular benchmark (governance, controls, management, conflict of interest, etc.). In respect of proprietary indices, we believe that adequate regulatory protections already exist, reflected in a number of pieces of European legislation:

- MiFID rules on suitability and appropriateness and on the management of conflicts of interest;
- Recently enhanced Prospectus Directive disclosure provisions relating to indices; and
- Recently enhanced UCITS provisions on the eligibility of a particular index.

Given that proprietary indices are today already subject to a number of governance mechanisms, the main consequence of additional rules in respect of proprietary indices (e.g. the *mandatory* use of third party calculation agents) beyond governance arrangements already in place would be to increase costs borne by the end investor or otherwise reduce investor choice, without advancing in a meaningful way the level of protection provided to the investor.

#### **Chapter 3: The Purpose and Use of Benchmarks**

## (30) Is it possible and desirable to restrict the use of benchmarks? If so, how, and what are the associated costs and benefits? Please provide estimates.

We can see no good reason to restrict the use of benchmarks since they serve to assist market liquidity and transparency. Ensuring appropriate standards so that benchmarks have integrity is the prime consideration.

## (31) Should specific benchmarks be used for particular activities? By whom? Please provide examples.

Please refer to answer provided in Question 1.

(32) Should benchmarks developed for wholesale purposes be used in retail contracts such as mortgages? How should non-financial benchmarks used in financial contracts be controlled?

(33) Who should have the responsibility for ensuring that indices used as benchmarks are fit for purpose, the provider, the user (firms issuing contracts referenced to benchmarks), the trading venues or regulators?

Responsibility should primarily rest with the provider of the benchmark since they are closest to the process and bear responsibility for their activities, subject to appropriate scrutiny from regulatory authorities (where justified on cost benefit grounds) and to appropriate due diligence from market users.

#### **Chapter 4: Provision of Benchmarks by Private or Public Bodies**

#### (34) Do you consider some or all indices to be public goods? Please state your reasons.

ISDA encourages the Commission to take account of the differences between key public benchmarks and benchmarks in the broader sense (including proprietary indices). In short, not all indices should be regarded as "public goods" and this should be reflected in the design of regulation.

In particular, proprietary indices used by ISDA members are designed to help particular clients implement specific investment strategies or achieve particular investment objectives, as discussed in our answer to question 8, rather than to capture or approximate a transaction (e.g. the cost of borrowing in the interbank market, in the case of Libor). Therefore, the policy measures that may be applied to public benchmarks are unlikely to be appropriate for private indices. For example, the level of transparency that might be expected of a public benchmark could not readily be extended to private indices, which essentially constitute intellectual property, without undermining the ability of firms to offer their clients products that offer specific exposures in a cost-effective manner. As noted above in many cases these indices are already subject to product regulation, including disclosure requirements in legislation such as the Prospectus Directive or UCITS legislation.

(35) Which role do you think public institutions should play in governance and provision of benchmarks?

(36) What do you consider to be the advantages and disadvantages of the provision of indices by public bodies?

(37) Which indices, if any, would be best provided by public bodies?

**Chapter 5: Impact of Potential Regulation: Transition, Continuity and International Issues.** 

(38) What conflicts of interest would arise in the provision of indices by public bodies? What would be the best way of avoiding these conflicts of interest?

### (39) What are the likely transition challenges, costs and timelines for relevant benchmarks? Please provide examples.

In this response, we have limited ourselves to provide comments regarding the challenges created by a transition from contracts relying on Libor to future contracts.

As the trade association for OTC derivative products, our comments below relate solely to those products, whilst recognising that changes to Libor or a transition away from it will also impact other products in other markets which often underlie OTC derivatives transactions. Within the OTC derivatives markets, interest rate derivatives are the most heavily impacted asset class. We offer some detailed analysis of how trades might be affected by changes to or a move from Libor, according to the terms of their ISDA documentation and in the wider context of incident legal risk.

The majority of OTC interest derivatives transactions use Libor rates as the reference rate for floating legs of transactions. These transactions are typically documented under an ISDA Master Agreement and a trade Confirmation, which will reference the relevant published ISDA Definitions. The Definitions give formal and detailed descriptions for all of a transaction's variables that will be referenced in the trade Confirmation. In other words, the Definitions remove the need to restate the often lengthy descriptions of commonly-used trade attributes in Confirmations. This has an important risk reducing effect in that it enables rapid (often electronic) turnaround times, given that the Confirmations can be brief in that they

refer to, rather than restate the Definitions. The main operative booklet of definitions with respect to Libor is the "2006 ISDA Definitions".

In essence the definitions of Libor rates are very much page-driven, by which we mean that the rate for (say) GBP Libor is defined as being the rate that appears on Reuters screen LIBOR01 (or an equivalent page in the case of the Bloomberg definition). Defining the rates in this way means that the Definition should be able to accommodate a certain amount of change to the rate in terms of methodology of compilation, for instance, so long as the rate still appears on the given page.

Clearly, however, there are limits to this and as changes become more economically significant, and to the extent that Libor is fundamentally changed into something else (even if its description does not change and even if it continues to fall within the strict wording of the definition), so the risk increases that parties may claim, under doctrines of frustration or otherwise, that the contract is not what they bargained for. (see below). The definition provides that where the rate is not published at all, parties will revert to the polling of specified numbers of so-called "Reference Banks" to arrive at a rate themselves.

In respect of the large "back book" of transactions, we offer now a description of how these definitions would "cope with" changes to scope or method Libor or to its disappearance. In practice the effects of any changes would be in proportion to the significance of such changes. We understand that the BBA had, prior to recent events, long been considering changes to Libor that would have included the deletion of certain currencies and tenors. We believe these changes were on the point of being put out to public consultation. As to the currencies, the discontinuation (over time) of the AUD, CAD, DKK, NZD and SEK Libor rates has been and continues to be proposed. Of these 5 currencies, ISDA only published definitions for the AUD and CAD rates. Parties using any of the other 3 rates will presumably have had to define these rates in their own bespoke documentation and would need to act in accordance with its terms in the event of discontinuation. That said, we would suspect that trade volumes here would be very low. With respect to AUD and CAD, data from the DTCC Global Trade Repository indicates there is only a handful of extant trades, meaning that the Reference Banks fall-back should work effectively i.e. that firms should be able to conduct polls, albeit manually, in order to calculate a rate.

Regarding Libor's tenors, uncertainty persists as to the future of the 12 and 6 month tenors. It should be noted that many hundreds of thousands of Libor-referencing trades, perhaps in excess of 40% of the entire Libor-referencing trade population, use the 6 month tenor. If the 6 month tenor were to be stopped, or indeed Libor were to be totally discontinued significant levels of market disruption would be introduced, given that the Reference Banks mechanism would come under strain and may not be workable in practice. This is because of the sheer number of Reference Bank polls which would need to be conducted. The party responsible for conducting the poll in respect of an affected trade is the Calculation Agent (as defined in the 2006 Definitions) and specified in the trade Confirmation. Typically in customer trades, the bank party would be the nominated Calculation Agent, however in interbank trades often provision is made for co-Calculation Agents. On any given day the Calculation Agent(s) in respect of every trade resetting against an affected Libor rate will need to conduct a poll in respect of that rate.

An initial obstacle here in the interbank market will be that the parties will need to agree upon which Reference Banks to approach. Once agreed, polling can take place, however it is possible that strictly speaking thousands of polls may need to be conducted on a trade by trade basis and it is highly unlikely the market could support this burden of activity. Even if all the polls were conducted in a timely and orderly manner, each would yield a different result. This would mean that a party with (say) 2 GBP Libor resetting trades with 2 banks would see those trades reset at different levels.

Changes would be required to the standard ISDA documentation to give effect to changes, once their details were known, or to address the consequences of the outright discontinuation of Libor, both in respect of the "back book" of legacy trades and to cover new trades on a going forward basis. The market would need to migrate to a successor rate or rates (pre-existing or otherwise) in respect of each Libor rate that was discontinued, be that a more minor rate such as AUD or a major one such as GBP. ISDA could publish Supplements to its Definitions to facilitate changes to contracts necessary to reference any newly-published successor rates.

To facilitate the use of successors in legacy trades, ISDA would likely publish a Protocol which would have the effect of amending OTC derivatives contracts between adhering parties so as to convert their back book trades to reference the agreed successors. It would be absolutely vital to have clear and long term transition arrangements in place, given that the market will take time to migrate liquidity to new rates. It is important to note that adherence to an ISDA Protocol is entirely voluntary, and market participants will only adhere if they perceive that it is in their interest to do so. For the Protocol to be as effective as possible a significant period of time is required so that as many market participants as possible can participate, and can have the opportunity to do so as they see liquidity migrating to the new rate sources. Without such transition arrangements, the ensuing market disruption could be potentially unmanageable.

We have mentioned the risk of claims of contractual frustration a number of times, and now turn to cover this in more detail in the context of OTC derivatives portfolios covered by English law-governed ISDA Master Agreements. As suggested above, there is likely to be something of a continuum from minor changes that could most likely still be regarded as falling within the existing definitions of the floating rates, through to more significant changes that could lead some market participants to claim under doctrines of contractual frustration or otherwise, that the nature of their contract had changed fundamentally from what they had originally intended. It is certainly unclear at which point one becomes the other, and we hope that changes could be managed in such a way that it is not tested.

Under the English law doctrine of frustration a contract may be discharged if broadly speaking, after its formation supervening events occur which have the effect of either (i) frustrating the contract's commercial object or purpose or (ii) making its performance impossible. It is unclear whether major changes to Libor, or its discontinuation, would be grounds for a valid claim of frustration or under some other doctrine but it will be clear those changes to or discontinuation of a rate potentially brings us into this territory and indeed some of the decided cases touch on these very points. As mentioned above, the 2006 ISDA Definitions provide a fall-back to Reference Bank polling in the event that a given rate disappears from a page, so to a degree direct contractual provision has been made for the eventuality of Libor's discontinuation. On the other hand, as noted above, that fall-back might not prove workable in practice. We believe that there is a risk that discontinuation of Libor or changes other than those that are clearly economically immaterial to its calculation, could give grounds for claims of contractual frustration. We urge the authorities to bear this in mind as they contemplate the future of Libor, both in its current form or some other, in order to avoid the major market disruption that the uncertainty of any such claims would cause.

Additional analysis would be required to assess the risk of claims under doctrines such as contractual frustration (or any local equivalent) in respect of ISDA Master Agreements governed by anything other than English law. We understand that concerns similar to those noted above could arise under New York law. New York or English law is the governing law for most OTC derivatives contracts.

# (40) How do you consider that the adoption of new benchmarks could be ensured? Is this best framed in terms of encouraging or mandating the use of particular benchmarks?

ISDA believes that there should be clear and long term arrangements in place to manage any transition to alternative benchmarks. Failure to achieve a smooth and progressive transition will result in major market dislocation and significant "jump risk" if there is an abrupt move from old benchmarks to a successor. The rate of any transition will likely be chiefly determined by the speed of migration to an alternative in terms of liquidity as well the extent to which market participants have amended their documentation.

#### (41) How can reforms of the regulation of benchmarks be most easily implemented?

There should be alignment with existing regulatory initiatives. Particularly, if transactions are to be reported, then existing reporting databases, systems and reporting routes should be leveraged. It would be highly disadvantageous to require another regulatory reporting system from market participants when in most cases they already submit to more than one. Appropriate time should be allowed for introduction of changes. Finally, we encourage policymakers to ensure international coordination and alignment of regulatory changes which relate to international markets.

(42) What positive or negative impacts, if any, do you see on small and medium-sized enterprises of the possible regulation of indices, and how could any negative impacts be mitigated?

(43) Are there other impacts which should be considered? If so please specify the nature of these impacts and provide evidence.

(44) In which countries are benchmarks used in your sector produced? From which countries are data used for the production of benchmarks in your sector sourced? In which countries are benchmarks used in your sector used?

(45) Are there non-EU benchmarks which could serve as substitutes? Are there non-EU benchmark providers which could produce similar benchmarks?

(46) Are there international benchmarks which could serve as substitutes for national benchmarks?