

**European Banking Authority ('EBA') Consultation Paper**

**On**

**Draft Regulatory Technical Standards on the conditions for assessing the materiality of extensions and changes of internal approaches when calculating own funds requirements for credit, operational and market risk under articles 138(5), 301(3)(a) and 352(3)(a) of Regulation (EU) XX/XXXX of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms ('CRR')**

**Dated 11 March 2013**

**Response of the International Swaps and Derivatives Association, Inc. (ISDA), and  
The Association for Financial Markets in Europe (AFME)**

**11 June 2013**

## A. Introduction

ISDA<sup>1</sup> and AFME<sup>2</sup> (jointly, ‘the Industry’) welcome the opportunity to comment on the above Consultation Paper (“the Paper”) issued by the EBA. The Industry highlights below a number of overarching issues regarding the Paper and relating to the materiality of extensions and changes of internal approaches, followed by answers to individual questions asked in the Paper.

We support the goal of the EBA of determining the conditions for assessing the materiality of extensions and changes to models with these draft regulatory technical standards (‘RTS’). We particularly welcome the intention of reducing the burden of preparing notifications for changes of minor importance and the flexibility proposed in Article 2, Paragraph 2(b). We do, however, share the EBA’s concern that proposals would hamper institutions’ ability to implement extensions and changes to internal models required to keep up with changing market conditions and/or changing trading strategies. Firms are also keen to avoid a material increase in costs without benefit should an operationally burdensome process be put in place that fails to focus on significant and material changes/extensions. Thus, we have made a number of suggestions that we believe reflect a more proportionate approach. We are also concerned with potentially duplicative requirements resulting from this RTS and the parallel RTS on approval processes. To some extent we reserve our views on the Assessment of Materiality as they may change as a result of the consultation on approval processes (CRR Articles 139, 301(3)(a), and 352(3)(b)). We therefore suggest re-opening this Consultation when consulting on approval processes as these should be considered in parallel. We discuss these concerns below.

## B. Unnecessary delays would hamper good risk management

In most cases, firms use the same models for risk management purposes as they do for regulatory capital purposes. The Paper sets out processes and timelines that will affect institutions’ ability to update and improve their internal models, impinging on their ability to improve their risk management and react to changing market conditions. We believe the majority of information requested could instead be delivered on a post-notification basis, as it is under many current arrangements in place today. We believe this would represent a more proportionate approach.

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<sup>1</sup> ISDA, which represents participants in the privately negotiated derivatives industry, is among the world’s largest global financial trade associations as measured by number of member firms. ISDA was chartered in 1985 and today has over 800 member institutions from 54 countries on six continents. Our members include most of the world’s major institutions that deal in privately negotiated derivatives, as well as many of the businesses, governmental entities and other end-users that rely on over-the-counter derivatives to manage efficiently the risks inherent in their core economic activities. For more information, please visit: [www.isda.org](http://www.isda.org).

<sup>2</sup> The Association for Financial Markets in Europe (AFME) advocates stable, competitive and sustainable European financial markets that support economic growth and benefit society. AFME promotes fair, orderly, and efficient European wholesale capital markets and provides leadership in advancing the interests of all market participants. AFME represents a broad array of European and global participants in the wholesale financial markets. Its members comprise pan-EU and global banks as well as key regional banks, brokers, law firms, investors and other financial market participants. AFME participates in a global alliance with the Securities Industry and Financial Markets Association (SIFMA) in the US, and the Asia Securities Industry and Financial Markets Association through the GFMA (Global Financial Markets Association). For more information please visit the AFME website, [www.afme.eu](http://www.afme.eu).

### **Delays due to the procedures**

- For material extensions and changes, the delay will in fact be much longer than the time required preparing capital impact and documentation as the proposals do not set any deadline for the Competent Authority to grant or refuse authorisation
- In case of multiple authorisations request (home/host) the situation is even less clear and we would welcome clarification. It is important that the parallel consultation on home/host guidelines clarifies how the process works and provides flexibility
- Regarding extensions and changes of lesser materiality for market risk, falling under Annex 3, Part I, Title II, and Part II, Title II, for which one month prior notice is required under the proposed RTS, we believe it creates unnecessary delays. Additionally the institution must have received prior approval from the Internal Independent Validation Team ('IIVT') in application of Article 358. We urge instead that such changes be notified on a post-notification quarterly basis as they tend to be under many current arrangements. An example of this would be proxy risk factors for where no proxy has yet been assigned – it would not be prudent to ignore the risk factor until 30 days has been reached

### **Delays due to quantitative assessment criteria**

- For market risk the 60 days impact assessment measure of materiality is impractical. The Industry thinks that an assessment period comprised between 1 and 5 days but no more than 10 days should be amply sufficient, depending on each particular situation. The proposed 60 day comparison period would impose an inappropriate level of operational burden on institutions. It would effectively require parallel running of original and revised models over an extended period. For example, capital is calculated using a 60 day history of VaR, so if there is a requirement to produce capital numbers for 60 days, then this requires a total history of 120 days of VaR. This means a 120 day delay from implementing a model change to approval, even with immediate regulatory response to the notification

### **Consequences of the proposals in the Paper**

- In the face of the delays described above, institutions' ability to implement extensions and changes to internal models will be hampered. This will be detrimental to good risk management as institutions will not be able to update and improve their models without facing the hurdle of an operationally burdensome and lengthy process. This is clearly contrary to the assumption made in the impact assessment (paragraph 16(i))
- Maintaining parallel models (one for regulatory capital and one for internal risk management) is operationally very difficult, will introduce significant operational risk, and is therefore not an economically feasible option

### **Proposals for an effective and responsive set-up**

The proposed RTS needs to balance the effective and thorough assessment of extensions and changes with the necessary responsiveness of internal models to changes in market conditions, portfolios structures or new market products. We believe the regulation should include the following elements:

- Some extensions and changes should be considered out of scope of this regulation:
  - Changes to pricing models which do not result in changes to VaR models,
  - Extensions or changes demanded by the competent authority,
  - Implementation on a timely basis of enhancements that would solely result in improved model performance (e.g. re-calibration of internal models parameters such as correlation matrices, proxies for new risk factors, ... ) based on pre-agreed methodologies
- Leverage on internal processes, including IIVT work, which includes assessment of all extensions and changes before their implementation. The majority of current formal risk management practices and internal processes already align to the spirit of the RTS
- Require a prior authorisation from the Competent Authority only in circumstances that are really material both by their nature and by their impact on own funds requirements, with the notification period in such circumstances being one-month. Continuous dialogue with the Competent Authority should be leveraged and should, when appropriate, result in an ex post notification only
- Allow for other significant extensions and changes to be implemented with no delay with a concomitant or post notification to the Competent Authority
- Set a deadline for the Competent Authority to grant or refuse authorisation (e.g. the Competent Authority should inform the bank within 10 to 20 working days whether they will review the pre notification or not for Internal Model Approaches). We assume that pre notified changes and extensions do not generally require authorisation, and that more material changes and extensions are dealt with under the normal supervisory process
- It is a common occurrence that changes to model are delayed for operational reasons. Examples are reprioritisations as a result of other implementation projects, resource constraints, need for additional testing (either of the model change or of other projects), bug fixes, IT freezes, etc. We suggest that a grace window of up to one year for implementation is left to institutions, provided that notification of such period is provided by the institution to the Competent Authority
- We understand that the CRR is not explicitly referring to the timing of notification and assume that it is therefore not in the mandate of the RTS. We believe that two categories of changes should be sufficient to achieve the EBA's stated objectives, (i) material changes requiring pre-approval and (ii) less material changes requiring post notification
- Regarding ex-post notification (Articles 4(1)(b), 6(b), and 8(b) of the draft RTS), we think a more frequent post-notification is preferable to the significant list of pre-notification changes. In our view institutions should maintain regular dialogue with Regulators and extensions and changes belonging to this category should be notified quarterly. This will allow regulators to become more familiar with the internal models and the development and evolution of risk management techniques
- Combine assessment of the quantum of change in model output and the importance of the model change to ensure that pre-approval is not being requested for models with minimal

overall RWA changes (e.g. 0.1%) or very small portfolios. Alternatively we could have a 'de minimis' category where any changes could be made for such models/portfolios

- Capital savings should not be used as a materiality measure. For example, if two firms make a change to arrive at the same model calibration then both should receive the same response. However, if firm A started with a more conservative model than B then A would have a larger reduction in capital and may get penalised - this would not be appropriate. We note in passing that the FRTB Working Group is currently planning to propose a standardised model calibration as a benchmark for cross firm comparisons of RWA and this benchmark may also be appropriate for measuring materiality of model changes. We would not, however, support use of standard rules as a benchmark since these are not appropriately risk sensitive and would generate noise in any comparison

### Quantitative assessment scope

- For Market Risk, we suggest that a Point in Time capital measure (PiTCM) be used to determine materiality but subsequently a change in capital requirement is reported for material changes/extensions. By PiTCM, we mean the sum of VaR, stressed VaR, IRC, CRM and other risk-sensitive add-ons (e.g. RniV) with multipliers as appear in the risk-sensitive part of the capital equation/model. Note that the capital requirement is an average/maximum combination of this number over 60 days / 12 weeks.

A practical process is as follows;

1. Measure PiTCM (over 5 days) – if any day breaches the threshold then the change is considered material and the change in capital requirement must be reported as part of the documentation (article 9, point 1g).
2. PiTCM must be reported and explained with supporting analysis. This is so that the ongoing impact can be understood e.g. volatility of some risk is increased and the risk is uncorrelated with the rest of the portfolio e.g. LGD for G4 Sovereigns has been increased by 10% but our exposure is small, in line with the firm's strategy.
3. Breaching the materiality threshold requires treatment under the "material change/extension" process. However, competent authorities should be at liberty to "upgrade" scrutiny in the light of an impact assessment and explain described in point 2. above.

We welcome the proposal to allow an estimate of impact (which should be accurate, but not necessarily precise) where a detailed and precise assessment (i.e. parallel run) is not economically feasible (Article 2, 2b).

- The proposed RTS require the quantitative assessment to be performed both at the consolidated level and at the level of the scope of application. We would welcome further clarity on what was intended by "scope of application"
- As above, we believe the scope of application should be the point in time capital measure (VaR, Stressed VaR, IRC and CRM with multipliers). A further split by individual desk will be irrelevant, costly in terms of workload and potentially open to manipulation

### Quantitative assessment measure

- For market risk 5 days is sufficient to identify material changes and extensions to models. Running parallel calculations of own funds for changes of lesser materiality during 60 days would be very costly for institutions
- Regarding the scope of application of the quantitative assessment, we do not understand the rationale for using a maximum rather than an average impact: an average would lead to a more statistically meaningful measurement

### Qualitative criteria

- Many of the qualitative criteria set out will spuriously identify model changes or extensions as material when in fact they are far from material. In general we think that lists of qualitative criteria are an ill-conceived way of defining materiality and instead represent a decision by the EBA that certain changes are always material, when in fact often they will not be. It should be considered whether such an approach is outside of the scope of the EBA's mandate, insofar as the approach represents a decision by the EBA about materiality rather than a set of criteria for defining materiality
- For credit risk the Paper does not adequately distinguish between (admission/behavioral) scorecards and rating models, nor between scorecards and rating models on the one hand and parameter estimation models on the other hand. Taking all of these models with their distinct model management together muddies the water and leads to the undesirable outcome that immaterial model changes which are part of daily model management and maintenance are captured whilst not leading to significant changes in capital, or to no changes at all in capital. In some of these cases, quantitative thresholds suffice. The qualitative criteria should be adapted appropriately for different types of credit risk models
- For market risk we believe that changes of data sources should not be considered a material change. They do not necessarily imply a change of model. They can happen due to discontinuity in data availability from a provider. Delays in implementing changes of data sources should be avoided in order to ensure the integrity of the calculation of own fund requirements

## C. Responses to Discussion Paper Questions

### Q1. Are the provisions included in this draft RTS that specify the principles of categorisation of extensions and changes, sufficiently clear? Are there aspects which need to be elaborated further?

- Article 2, Para 2(a): reference to the use of "most recent data" available should be replaced by a more specific requirement, such as "at the most recent quarter end".
- Article 2, Para 3: the approach appears very theoretical. When non-material changes are implemented, it will not be feasible to measure the aggregated impacts of minor changes.
- Article 2, Para 5: the reference to the non-implementation of an approved change requiring further

approval is impractical. There are often unavoidable reasons why a change may not be implemented on the specified date e.g. reprioritisation, technical failure of the final roll-out stage, IT freezes, bug fixes. A grace period, say, 12 months would be appropriate.

### **Credit Risk**

- Articles 3 and 4. The concept of the quantitative criteria for assessing changes to the IRBA appears to be too strict. The criteria should be mitigated with an appreciation of the materiality of the portfolio concerned. Significant change of the RW of a portfolio should not necessarily trigger the necessity for prior approval if the portfolio concerned is small.

- Annex 1, Part I, Title II, Point (1). We would appreciate more detail about the concept “reducing the range of application”. Changes in segmentation criteria are a common practice for financial institutions.

- Annex 1, Part I, Title II, Point (3). We have similar concerns in point (3) - more elaboration is needed for the concept of “extending the range of application”.

- Annex 1, Part I, Title II, Point (4). There is a typo in the wording – rather than “rating system” it should read “internal models approach to equity exposures”.

- Annex 1, Part II, Title I, Point (2)(d)(i) and (ii). We consider that this point may affect the day-to-day risk management of financial institutions. Changes in internal models take place frequently to improve them when deviations and flaws are identified. These changes should not be notified ex-ante (unless quantitative thresholds apply).

- Annex 1, Part II, Title I, Point (2)(f). More detail is needed about the concept of “fundamental methodology”. It is reasonable that fundamental changes should be considered material. However, care should be taken not to catch minor changes that are common during parameter updates.

- Annex 1, Part II, Title I, Point (3). Given Article 174, we understand that changes in definition of default considered as material are aimed at the definition used for managing defaulted exposures and not the one used for the design of risk models or parameter estimation. Therefore, it should be clarified if advanced models are subject to consideration.

- Annex 1, Part II, Title I, Point (4). We would appreciate more elaboration about what kind of changes are considered as “material” during the validation process.

- Annex 1, Part II, Title II, Points (2)(d) to (g). We consider that this point may affect the day-to-day risk management of financial institutions. Changes in internal models take place frequently to improve them when deviations and flaws are identified. These changes should not be notified ex-ante (unless quantitative thresholds apply).

- Annex 1, Part II, Title II, Point (2)(h). More detail about what kind of changes are considered is required. We agree on the material change categorisation in cases of substantial modifications in the parameter estimation methodology. However, slight changes in parameter updates should be outside the scope of pre-notifications (unless quantitative thresholds apply).

- Annex 1, Part II, Title II, Point (2)(k). We consider that such a modification could be considered as a usual change with minimum impact. It should be outside the pre-notification definition (unless quantitative thresholds apply).
- Annex 1, Part II, Title II, Point (3). More detail is needed about what kind of changes would be subject to ex-ante notification during the validation process.
- Annex 1, Part II, Title II, Points (4)(a), (4)(b) and (4)(c). It is not well defined which changes are referred to (or the need for ex-ante notifications). In addition, if ex-ante notification applies, more detail is needed about documentation requirements.
- Annex 1, Part II, Title II, Point (4)(d). These changes should not be in the ex-ante category, as they are part of the day-to-day process in a financial institution.
- Annex 1, Part II, Title II, Point (4)(e). These changes are considered as business as usual and should not be subject to ex-ante notification.
- Annex 1, Part II, Title II, Point (5). Stress test exercises are embedded in risk management processes of financial institutions and they are under continuous scrutiny of national supervisors. Changes in these processes should not be subject to ex-ante notification.
- Annex 1, Part II, Title II, Point (6). These changes take place frequently to improve models when deviations and flaws are identified. Hence, these changes should not be notified ex-ante (unless quantitative thresholds apply). A more useful trigger for changes to a rating system would be changes to a portfolio composition or business mix movement. The trigger should not be changes in data sourcing, use and composition as these change merely to adapt to the new profile of the bank's portfolio. Since modifications of the portfolio composition structure should have been assessed any assessment requirement related to data changes merely creates un-helpful redundancy

### **Operational Risk**

As there is a wide range of models relating to operational risk measurement, this RTS is useful in order to provide consistent and harmonized approaches for model changes or extensions. However, we would like to point out a few issues in terms of understanding & implementation as operational risk modelling is a more recent practice and is not suitable to some of the specific requests that are addressed.

1. There is a need for a distinction between quantitative (model by itself) & qualitative (global operational risk framework & governance) changes for assessing the compliance with the quantitative threshold that is proposed. Items which do not have a direct impact on own funds requirement cannot be quantitatively assessed and consequently should not be covered by the quantitative threshold provision.
2. If we understand the concern of the supervisors of avoiding slicing changes or extensions to keep them under the threshold, the proposed mechanism appears almost impossible, to implement at least for operational risk.
3. A few quantitative items seem to be better adapted to models mainly based on historical data rather than scenarios. Indeed, notifying any change in a scenario or any scenario creation/removal would be an administrative task that would add no value to supervision and create sluggishness in the risk sensitivity of the model.

## Market Risk

CRR IV Article 352(2) and Annex 3 (“Extensions and Changes to the Internal Model Approach (‘IMA’)”) clearly set out the categorisations. We believe the proposed RTS are overall relatively clear.

However, we make the following points/request clarification on:

- Article 9 – it is unclear what is meant by “volume characteristics”
- Article 7, Para 2 is unclear with regard to the average impact over 60 days (see our response to Q12).
- Annex 3, Part II, Title II (7) “changes in the definition or methodology of appropriate proxy risk factors for VaR. We understand this to refer to a change in an approach and not to mean individual choices of proxy,
- Annex 3, Part II, Title II (10) “changes in the methodology for defining appropriate proxy spreads for VaR or CVA”. We understand this to refer to a change in an approach and not to mean individual choices of proxy.
- Annex 3, Part II, Title II (14) “implementation of internally developed and implemented pricing models or use of proxy models”, We understand this does not include changes in pricing models, when a full revaluation approach is always in sync with changes in pricing models.
- Annex 3, Part II, Title II (17). “change to organisational and operational structure of risk management and internal governance process” (d) stress testing changes. We understand this to mean a change in the governance such as review and signoff, or a change in operations such as moving from Greeks to full revaluation and not changes in the definitions of individual stresses, other than significant changes in the approach to calibration affecting at least one asset class.
- Annex 3, Part II, Title II (17). “change to organisational and operational structure of risk management and internal governance process” (d) internal organisation and staff changes. We understand this does not apply to individual staff moves, but does apply to re-organisations such as moving sub-departments in/out of a market risk management function. For example it would not be practical to avoid filling a vacant position until the notification period ended.
- Annex 3, Part II, Title II (17). “change to the limit setting framework”. We assume this does not refer to any change in limit but rather whether the governance on limit setting has materially altered.
- Technical decisions, Table 5: different backstop thresholds. Option 1 is over-complicated “consolidated/stand alone, sub-consolidated and scope of application”.
- No definition is given for the “scope of application” for the quantitative assessments. We would welcome more clarity on this.
- We would welcome the RTS to clarify the timeline of the extensions and changes implementation, in particular with respect to the amount of time granted to the Competent Authority to respond to request of permission or notification.
- We would welcome clarification of the interactions between home and host regulators.

**Q2. Are the provisions included in this draft RTS on the calculation of the quantitative threshold for the IRB approach sufficiently clear? Are there aspects which need to be elaborated further?**

As clearly stated in the Paper (part 5, Technical decisions), it is expected that most of the extensions and changes to internal approaches subject to supervisory assessment should be identified in the first instance by the qualitative criteria. Considering the expectation of their very limited use, it is difficult to understand the necessity to adopt overly complex quantitative criteria. It should be acceptable for the quantitative automatic assessment to be simplified and relaxed, provided that an institution's internal process and procedures for rating systems governance and validation are rigorous and working efficiently.

From operational viewpoint, it could be very difficult to implement the quantitative assessment requirements. Institutions would have to carry out a kind of "double run": on one side for regulatory capital calculation; on another side for quantitative materiality thresholds assessment. It would be very difficult to manage such a "double run", especially on a long-term basis, and such a process may potentially create operational risk (systems, etc). Such a process would also generate considerable costs and infrastructure resources that would be necessary in order to support these requirements.

In addition, we raise several issues below:

- Situations with simultaneous changes in PD and LGD occur quite frequently. If an institution needs to change PD and LGD at the same time, how should they assess impacts of the change: taking into account the PD/LGD cumulative effect; or only assess each parameter's impact individually?
- Carrying out a reliable impact study is very complicated for corporate portfolios (expert data are often missing). In the case of retail portfolios, it would be necessary to build a specific IT environment containing a lot of information, of which there may be a lack.

**Q3. Do you support the calculation proposal of the quantitative threshold for the IRB approach in terms of design of the metrics and level of thresholds? (Please also take into account the arguments provided in Tables 2 to 5 of the Impact Assessment)**

We do not support the current approach. The quantitative impact has to be performed on 'the range of application', but the draft RTS does not provide a definition (e.g., does it mean the entity, the business line, or the portfolio?).

The materiality of the portfolio itself is not addressed. Indeed, the threshold of 15% may be reached by changes on non-material portfolios. It implies that the authorisation will be required even on very small portfolios, which unnecessarily increases the burden of the proposals for both institutions and Competent Authorities.

**Q4. Do you support for the IRB approach the three month period for notification of the changes before implementation?**

A one month period for notification of changes would be more appropriate, to mitigate the negative impact of the proposals in the Paper (i.e. a reduced ability for institutions to align models with underlying risk in a timely manner). A three month period would serve to increase the time between the beginning of the development and its implementation.

**Q5. Are the provisions included in this draft RTS on the calculation of the quantitative threshold for the AMA sufficiently clear? Are there aspects which need to be elaborated further?**

Some changes are related to qualitative items, such as the positioning of the independent risk function or to the resources allocated to the corporate risk function. There is no reasonable quantitative assessment possible for this kind of changes. This should be taken into account in Article 2(2), which requires a quantitative impact. For operational risk a quantitative impact could only be carried out for items in Annex 2 Part II, Title I Points (2) & (4) and Title II (4) & (6).

Article 2(3) appears difficult to implement for operational risk. As mentioned above, many of the items given in Annex 2 are qualitative, making it difficult to assess the aggregate impact. Also, clarity is requested about the treatment of a marginal change or extension that causes the 10% threshold to be reached. For example, if several AMA entities of small size have been subject to an AMA roll-out over the years should the last small entity, which will cause the 10% threshold to be reached, be subject to permission?

**Q6. Do you support the calculation proposal of the quantitative thresholds for the AMA in terms of design of the metrics and level of thresholds? (Please also take into account the arguments provided in Tables 2 to 5 of the Impact Assessment)**

- Annex 2, Part II, Title II, Point (1)(b): The wording is too imprecise and general. As a general statement, we do not consider this is an appropriate level of detail for this RTS.

- Annex 2, Part II, Title II, Point (2)(a): The changes in the duties & responsibilities should be significant/material (i.e. a reduction or extension in scope).

- Annex 2, Part II, Title II, Point (4)(a)(v): The case here mentioned appears to be linked to some kind of models but should not be a general statement. It concerns models based on historical data and not the ones based on scenarios. Notifying every change (upward or downward) in a scenario (which may be considered as a risk cell) would be an administrative task that would add no value to supervision and create sluggishness in capital adjustments to events.

- Annex 2, Part II, Title II, Point (5)(a)(i): In practice, large institutions define maximum thresholds individual entities should comply with, while having the possibility of setting lower thresholds if relevant. The provision of this paragraph should only apply to the group wide maximum threshold and not the individual thresholds.

- Annex 2, Part II, Title II, Point (5)(b): The wording is too imprecise and general. The notification should be limited to the validation process regarding scenarios.

**Q7. Do you support for the AMA the three month period for notification of the changes before implementation?**

A one month period for notification of changes would be more appropriate, to mitigate the negative impact of the proposals in the Paper (i.e. a reduced ability for institutions to align models with underlying risk in a timely manner). A three month period would serve to increase the time between the beginning of the development and its implementation.

**Q8. Do you support that for the AMA no quantitative differentiation between changes requiring notification prior vs. post implementation is made?**

Yes.

**Q9. Are the provisions included in this draft RTS on the calculation of the quantitative threshold for the IMA sufficiently clear? Are there aspects which need to be elaborated further?**

The proposed RTS do not provide a definition of the scope of application. We believe a natural scope of denominator that will make sense and be manageable would be the point in time capital measure (VaR, Stressed VaR, IRC or CRM with multipliers).

Title IV Article 7 clearly sets out the provisions for the calculation of the quantitative threshold. We understand that these are:

- A change of > 5% in own funds requirements for market risk at the consolidated or subsidiary level
  - A change of >10% in the model calculation result associated with the scope of the specific model.
- However, see our response to Q10.

**Q10. Do you support the calculation proposal of the quantitative thresholds for the IMA in terms of design of the metrics and level of thresholds? (Please also take into account the arguments provided in Tables 2 to 5 of the Impact Assessment)**

We would question the use of a maximum rather than an average for the metrics of the scope of application. We would also like the regulation to introduce a level of immateriality below which extensions or changes will require only post notification (e.g. below 1% of the Group own funds requirements for market risk).

Table 2: we support the inclusion of qualitative as well as quantitative criteria in order to capture significant changes in the modeling approach. Such changes may give rise to material differences in the future as a firm's portfolio mix changes.

Table 3: we advocate the exclusion of standard rules capital from the denominator of the change calculation set out in the Table on page 18. In other words, the denominator would only include "modeled capital" meaning VaR, sVaR, IRC, CRM, RniVs and any other risk-sensitive non-VaR type capital add-on that has been subject to approval by a competent authority. This represents a tightening of governance standards in the interests of avoiding a meaningless measure of materiality "polluted" by non risk-sensitive standard rules calculations. While including standard rules capital gives a meaningful measure of capital impact, it is a very poor indicator of the importance of a change in the "model" to the "model" itself.

Supposing that standard rules represent half the capital requirement the threshold should be set to 10% to be consistent with Option 1.

Article 7 1.(c)(iii). We advocate no different treatment for model changes capturing specific risk i.e. materiality should be based on the change compared to total modeled capital. The reason is to remove any possibility that a firm might attempt to manipulate the estimate of materiality by adjusting scope of applicability.

Table 5: Option 1 is over-complicated. Option 2 is open to manipulation by adjusting the scope of applicability. We recognize the disadvantage of Option 3 but feel we have addressed it by advocating the removal of standard rules capital in the denominator of the materiality measure.

**Q11. Do you support for the IMA the one month period for notification of the changes before implementation?**

We believe that a notification on release should be sufficient. A month prior notification will bring no benefit and will unduly delay extensions or changes. We believe that a Competent Authority should leverage on the IIVT authorization process rather than duplicating it. If however, subsequently, the Competent Authority rejects an extension or change, it could issue a recommendation in the usual supervisory framework.

**Q12. Do you support for the IMA the 60-day observation period for the purpose of comparing the modelling result before and after a proposed change?**

We do not support for the IMA the 60-day observation period, although we may have mis-understood the intention. The point in time capital requirement already is a 60-day average (VaR/sVaR) or 12-week average (IRC).

We believe that a three months period to perform IMA quantitative assessment is both too long and unnecessary. A reasonable period for the assessment of materiality should be maximum five days or even a point in time for low impact extensions or changes. The proposal should conciliate the assessment of extensions and changes with the necessary responsiveness of internal models to changes in market conditions, portfolios structures or new market products. Examples of cases in which the proposals would prevent effective capital level responsiveness and likely render institutions undercapitalized are:

- A Greek exit from the Eurozone
- A new basis risk arising suddenly as experienced during the crisis (within a few weeks)
- A sudden unexpected currency de-peg

**Q13. Do you support that for the IMA for those modelling approaches which are only required to be calculated once a week (stressed VaR, IRC, CRM) to compare only twelve numbers for Article 7 paragraph 1(c)(iii)?**

Yes and this is in line with the suggestion under Question 12 that the Paper makes clear that a point in time capital impact should be used reflecting a 12-week period of VaR, stressed VaR and IRC.

For institutions performing the calculations daily, even though only weekly figures are used for the own funds requirement, a materiality assessment could be done on a five consecutive days average.

**Q14. Do you support that for the IMA no quantitative differentiation between changes requiring notification prior vs. post implementation is made?**

As we do not see the benefit of prior notification and believe that notification upon implementation is sufficient, there is no need for such a distinction.

Also, as reported in our answer to Question 10 above, we support the introduction of a level of immateriality below which only annual notifications are required in all circumstances.

**Q15. Are the provisions included in this draft RTS on the documentation requirements sufficiently clear? Are there aspects which need to be elaborated further?**

Article 9, Para 1(i) is impractical. We do not believe it possible for a bank to be able to provide, 12 months in advance, details of planned changes for internal models where own funds requirements are expected to change materially other than incorporation of specific risk or new asset class extensions. Many updates are made for example depending on business or new risk factors or changing market conditions, and cannot be forecasted.

**Q16. Do you support the view that costs arising for institutions from the documentation requirements included in the draft RTS are not expected to be material? If not, could you please indicate: - the main cost driver: i) additional IT equipment, ii) additional ongoing Staff/hours, iii) other (please specify). Page 41 of 41**

**- the % increase in total yearly costs of internal models management for credit/operational/market risk induced by the proposed documentation requirements (specify whether the costs arise only for some of the risk categories covered by the provisions).**

**- indicative monetary amount of these additional costs (specifying currency and unit)**

This firm already supplies the documentation described in Article 9 of the Paper for material changes and extensions but there will be additional staff costs if requirement 1(e) [reports of ... independent review or validation] is retained for extensions and changes requiring notification before implementation and the scope of Annex 3, title 2 is interpreted at a very granular level and in particular Part II, Title II (3) extension of risk factors.

**Q17. Do you support the view that the additional costs, for institutions, of computing the quantitative impacts of the implemented model extensions/changes are expected to be non-material, given that institutions already carry out impact analysis in the current framework? If not please indicate: - the main cost driver: i) additional IT equipment, ii) additional ongoing Staff/hours, iii) other (please specify).**

**- the implied % increase in total yearly costs of internal model management for credit/operational/market risk induced by the quantitative impact analysis (specify whether the costs arise only for some of the risk categories covered by the provisions).**

**- indicative monetary amount of these additional costs (specifying currency and unit).**

We anticipate that the cost of computing full scale impacts on all changes will be very costly. It will require the setup of a new environment replicating in its entirety the live production environment. It will be a doubling of our IT equipment. To service this new environment, additional staff will be required, in number equal or nearly equal to the number of staff servicing the existing live environment.

These costs may be minimal provided that inferred or estimated impacts are allowed for smaller changes.

**Q18. Do you support the view that, for institutions, the costs of ex-ante/ex-post notification of extensions/changes are expected to be non-material? If not, please indicate:**

**- the main cost driver: i) additional IT equipment, ii) additional ongoing Staff/hours, iii) other (please specify).**

**- the % increase in total yearly costs of internal models management for credit/operational/market risk induced by the notification requirements (specify whether the costs arise only for some of the risk categories covered by the provisions).**

**- an indicative monetary amount of these additional costs (specifying currency and unit).**

The cost associated with the submission of extensions and changes before implementation for authorisation as well as ex ante or ex post individual notification is expected to be high in particular in relation with the amount of documentation. It will come on top of the additional cost incurred due to the full scale quantitative impacts (see our response to Question 17).

But more importantly, it will also increase very significantly the workload on Competent Authorities. If the proposed regulation remains as it is, Competent Authorities will face a large amount of request for authorisation and even more for notifications. We estimate that, for a single institution, a Competent Authority will receive for market risk alone double digits prior approval submissions.