Deutsche Bank

EU Transparency Register ID Number 271912611231-56

5 May 2015

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Deutsche Bank's (DB) response to the European Banking Authority's discussion paper on the future of the IRB approach

Dear Mr. Farkas,

Deutsche Bank welcomes the opportunity to comment on the European Banking Authority's (EBA) discussion paper on the future of the Internal Risk Based (IRB) approach. We appreciate the EBA consulting the industry to discuss the future developments of the IRB approach to ensure the most effective and efficient implementation as possible for both the supervisors and industry alike.

Enhancing robustness and comparability

We agree with the EBA that the IRB framework has proven its validity as a risk sensitive method of accurately measuring capital requirements and improving internal risk management practices and share the view that more work must be done to eliminate unjustified variance in the outcomes of internal model capital calculations. There have been numerous studies attempting to explain the drivers and variance in risk weighted assets calculated using bank internal models. Studies at global and European levels have proven that the vast majority of variance reflects genuine differences in risk profiles, this is a positive sign that these models are accurate and risk sensitive.

It must be kept in mind that just because a product or portfolio has the same name globally, does not mean it carries the same risk globally. There are very different risks resulting from a residential mortgage portfolio in, for example Germany, and the US. A key benefit of internal models is that these portfolios are not treated in the same way. However, as per the Basel Committee on Banking Supervision (BCBS) study on credit risk variation[1], some 25% of variance results from drivers not reflecting actual risk differences. Much of this 25% is the result of inconsistent supervisory interpretations, and will be vastly reduced by more uniform application and supervision.

The onus is on the industry to work with their regulators to eliminate the remainder. The recently published paper from the Institute of International Finance on risk sensitivity and internal models[2] provides a significant number of possible improvements in the form of harmonised definitions and practise. The EBA discussion paper also aims at addressing divergences and focuses on improving definitions and supervisory practices.

We therefore support the EBA efforts to enhance the robustness and comparability of internal risk calculations, not just for IRB models but for all internal models. We believe that enhancing the robustness and comparability of internal models will restore faith in, understanding of, and reliability of banks' internal models.

[1] http://www.bis.org/publ/bcbs256.pdf
[2] https://www.iif.com/file/6245/download?token=jacU7WKZ

In our view, this can largely be achieved by building on work already underway, particularly at the European level to benchmark and scrutinise banks' internal models. Last year's Asset Quality Review (AQR) went a long in rebuilding trust and understanding in capital levels and balance sheet quality. A similar review, including the use of a third party auditor and publication of the results, would enhance the robustness and comparability of internal models. It is in the interest of the industry to ensure credibility and trust of internal models is restored, so a genuine and deep commitment should be assured.

Developments at the Basel level

Work led by the BCBS since the financial crisis has created a vastly improved regulatory framework than existed before the crisis. The framework today is not only based on established internal models and rigorous risk mitigation, but also includes backstop provisions such as the leverage ratio which was recently strengthened and globally harmonised. The true benefits of this framework are demonstrated by the overwhelmingly positive results of recent stress tests which examine how the banking sector copes under extreme scenarios.

As stated by the EBA, the IRB approach constitutes a complex framework that allows banks to model risk and specify risk appetite in a more precise manner, which will consequently lead to a more precise calculation of capital requirements[3]. It is vital that the positive side of internal model approaches (including IRB) not be overlooked at the Basel level, when discussing the way forward on simplicity, comparability and risk sensitivity. At the same time, much of what the EBA is trying to work out in the discussion paper will be heavily influenced by the final outcome of the discussion at the Basel level. We therefore believe that it is crucial for the EBA to closely align its work with the discussions at the Basel level. Indeed, given the internal model expertise, and the high quality work being driven by EBA and the ECB in this area, EU authorities should lead the global discussions on internal models.

Improvements to the current IRB framework

The focus of the discussion paper can bring about needed improvements to the regulatory framework. The topics which will form the groundwork on which the future IRB improvements are based, are the definition of default and the LGD/PD estimates. We agree with the EBA prioritising these going forward.

In Annex I we provide more detailed answers to specific questions raised by the EBA on the definition of default and LGD/PD estimates. While we only focus our response on these key topics, we believe that the other questions raised by the EBA are important in improving the IRB framework. Our views should therefore be seen in conjunction with response letters sent by the Joint Trade Associations which we have contributed to.

Yours sincerely,

Daniel Trinder
Global Head of Regulatory Policy

[3] Future of the IRB Approach, EBA, p.8

Annex I: Deutsche Bank detailed comments key questions

1. The proposed prioritisation of regulatory products is based on the grouping of such elements that in the EBA's view can be implemented in a sequential manner. Do you agree with the proposed grouping? If not, what alternative grouping would you suggest?

Answer:
Generally we agree with the EBA's proposed sequencing. We support the view that the achievement of common assessment standards should be a high priority to address the divergence of regulatory practices across the EU. As mentioned in the Discussion Paper (DP), there is still the issue that the present draft RTSs and that the proposed timelines rely on certain definitions and interpretations which are still under development.

This is especially relevant for the Assessment Methodologies draft RTS which uses definitions and interpretations yet to be finalised. This RTS defines standards against which competent authorities should measure compliance by institutions. One example would be the definition of materiality of default that the Assessment Methodologies specifically refers to, while the final definition of common standards is only expected at a later stage. This creates a situation where competent authorities could check compliance with rules that are yet to be finalised.

Where significant implementation efforts and long grandfathering periods are involved, institutions are forced to wait until final definitions are clear before going forward with implementing changes to current approaches. To address this problem we propose clarifying that provisions either enter into force when all key definitions have been finalised, or that national practices be grandfathered until common standards come into force.

In this respect we would like to reiterate the importance of coordinating the work with the BCBS, to avoid duplicating efforts and/or introducing possible inconsistencies (especially when it comes to definitions and timelines).

2. What would you consider the areas of priorities?

Answer:
We agree with the proposed prioritisation set out in the discussion paper, which seems to be in line with expected impact of diverging practices on own funds requirements. The definition of default is the basis for all risk parameters and is therefore the most important element to work on in cooperation with the BSBC.

It would be helpful to receive clarity on the following methodological issues:

- Whether the assessment methodology will also incorporate guidance on portfolio segmentation, as this also impacts quantification of defaults.
- Does the EBA also intend to provide further guidance on definitions, or can individual banks retain individual definitions? For instance a bank - may be considered a bank based on its having a banking licence, rather than as a Broker Dealer based on its business model.
- It would also be helpful to have clarification about when should a midcap name becomes a large corporate.

We believe that the EBA's assessment of the implementation time is too optimistic. Historic data might not be adjustable to a new definition of default or may require longer a significant time for adjustment. Therefore, we also believe that this element should be treated as a high priority going forward.

3. Do you consider the proposed timeframe reasonable? In particular do you consider reasonable the proposed timeline for the implementation of the changes in the area of: a. definition of default; b. LGD and conversion factor estimation; c. PD estimation; d. treatment of defaulted assets; e. CRM?

Answer:
Clear and agreed timeframes are an essential part of the process in order for all stakeholders to prepare and plan adjustments. We therefore propose that the implementation timelines should only start once all official approval processes by European Commission, European Parliament and Council are complete.

Assuming the implementation timeframe would start after those processes are concluded, our assessment would be as follows:

- It is unrealistic that the initial assessment of all methodologies, given the volume of methodologies which need to be reapproved, can be completed by end 2015. The timelines should be revised once there is further clarity as to the scope of the assessments, including the portfolio segmentation element.
- The implementation time for the definition of default seems overly optimistic as per our answer to question 2.
- Other areas have a strong dependence on the definition of default. Given the prospect that all risk parameters have to be recalibrated to adhere with new definitions, the implementation timelines for definition of default and the other parameters need to be sequential, not parallel.

We understand the necessity of supervisors starting to apply and test the new assessment methodology. One possible practical way of handling the new standards would be to initially leave out methodologies that had been assessed in the last two years. This would allow for focus on the differences between the “old” and “new” assessment methodologies and could be embedded within institution specific transition plans.

When looking at transition periods, and in relation to our concerns on aligning current draft RTS’s with the focus of the DP, we would like to also draw your attention to our response to the "Draft Regulatory Technical Standards (RTS) on materiality threshold of credit obligation past due under Article 178 of Regulation (EU) 575/2013". In that response, we emphasised that the transitional period should not be less than 5 years.

There is a need to align EU and international timelines as much as possible to avoid duplicative or inconsistent efforts. Given the comment made by the EBA during the Public Hearing that the expected timing for the work at the BCBS level on IRBA to be finalised (i.e. in 5 years), we wonder how the timeframes of the EBA work streams interact with this work.

Lastly, alignment with the IFRS9 implementation timeline would be appreciated in respect of the provisioning for credit losses. The implementation of IFRS9 will lead to, as a minimum, a changed level for "Allowance for Loan Losses" and "impaired loan coverage ratios".

4. Are there any other aspects related with the application of the definition of default that should be clarified in the GL?

Answer:
We believe the discussion paper touches upon the correct aspects with the application of the definition of default. There are a number of areas where more clarity would be beneficial when drafting the GL:

- Asset classes with a very large number of clients. For these classes it is important to have distinct criteria, which can be automatically and technically tested in order to achieve a feasible solution.
- Days past due definition, conditions to consider a counterparty "cured", and the length of recovery (monitoring) period of a defaulted counterparty.
- Portfolio segmentation is essential.
- Assets purchased at steep discounts or which have already defaulted.
- Names which become "stale" and move from Regulatory trading to Regulatory banking book and the requirements to monitor recoveries in this space, given they often have differing work out strategies and results (even for the same counterparty).

Without sufficient detail on the GL, it is difficult to fully estimate the impact of the upcoming changes. At this stage it is clear that any changes affecting the default identification and/or sample construction (e.g. default definition, introduction of a specific cure period) will have a significant impact on IRB models.

These changes will also likely trigger extensive adjustments of historical data which may lead to additional IT implementations or process changes. In some situations the adjustment of historical data may not be possible for the entire time period. We therefore suggest that a sufficient implementation an transition period should be planned for this part in line with our comments to question three.

The alignment of default and non-performing definitions to one holistic approach in all EU regulations would be highly appreciated (e.g. IFRS, CRD, EBA ITS). Currently EBA ITS require the disclosure of non-performing exposures which are classified as performing under Basel, e.g. loans with 2 forbearance measures which were never 90 days or more overdue, have no default rating and so on. To reduce complexity, internally and also externally for analysts, it would be welcomed if the definition were aligned, at a minimum within EU rules.

5. Do you have experience with adjustments of historical data? What are the methods that you used to adjust historical data, including both internal and external data?

Answer:
As stated above, the DP provides insufficient details to fully estimate the impact of the upcoming changes, including the adjustments of historical data. Historical data might not be adjustable to a new definition of default if the required data points are not stored in existing systems. In cases where data series have to be reconstructed (possibly including manual efforts for collection), it will require a significantly longer implementation time.

More importantly, even in cases where historical data can be adjusted, the result would be suboptimal (for example it could lead to technical issues as well as possible considerable manual efforts with negative consequences on the portfolio data quality).

We would also like to refer to our response to the "Draft Regulatory Technical Standards (RTS) on materiality threshold of credit obligation past due under Article 178 of Regulation (EU) 575/2013" in which we set out which activities have to be followed internally to be able implement future changes in the IRB approach (also added to Annex II for this response). This will provide some idea for a possible approach to dealing with adjustments of historical data.

6. To what extent is it possible to adjust your historical data to the proposed concept of materiality threshold for the purpose of calibration of risk estimates?

Answer:
In certain cases, historical recalculation of default would be possible. In other cases, the required underlying information will not be available, requiring sufficient time for implementation of new definitions and data collection.

7. What is the expected materiality of the changes in your IRB models that will result from the proposed clarifications as described in section 4.3.2?

Answer:
The impact and materiality of the changes described in section 4.3.2 will depend on the concrete proposal and requirements. At this stage there are too few details provided on what the models (for example downturn LGD) should look like.

Based on the current DP we can estimate that most material changes would result from items 45-48 (treatment of multiple defaults). An introduction of a specific cure period would significantly change default rates and therefore a validation/revision of all IRB models would be required.

8. Do you consider the direction of the proposed changes adequate to address the weaknesses and divergences in the models across institutions?

Answer:
We welcome the proposed direction and appreciate that the EBA is attempting to find the correct balance between overly complex rules and sufficiently clear instructions to assure comparability.

As previously stressed we would need to assess the final texts in conjunction with any decision or guidance around portfolio segmentation and would advise caution on performing counterparty based loss comparisons across peers. Good risk mitigation and early exits along with appropriate collateral, covenants, product types, seniority and concentrations and even geographies can have a significant impact on losses.

It is important to keep in mind that divergent capital requirements do not necessarily mean that the models are weak. This is supported by the EBA report on comparability of Risk Weighted Assets and Pro-cyclicality, which states that IRB framework has proven its validity as a risk sensitive method of accurately measuring capital requirements. The report also stated that differences were, in part, also the result of different supervisory practices[4]. In relation to this, the BCBS study on credit risk variation[5] found that only 25% of variance results from drivers that do not reflect actual risk differences. Much of this 25% is the result of inconsistent supervisory interpretations, and will be vastly reduced by more uniform application and supervision.

As mentioned in our cover letter we think weaknesses and divergences can also be addressed by performing a review similar to the Asset Quality Review (AQR) in order to rebuild trust in and understand banks' internal modelling better. The EBA/ECB could undertake such a review, including

[4] https://www.eba.europa.eu/-/eba-publishes-reports-on-comparability-of-risk-weighted-assets-rwas-and-pro-cyclicality
[5] http://www.bis.org/publ/bcbs256.pdf

the use of a third party auditor and publication of the results, which will enhance the robustness and comparability of internal models.

9. Are there any other aspects related with the estimation of risk parameters that should be clarified in the EBA guidelines?

Answer:
We believe that EBA could provide more guidance on the topic of conservatism add-ons. A best practice guideline on uncertainties to cover under typical circumstances and possible related methodologies would be useful to create a better alignment across the industry.

10. Do you have dedicated LGD models for exposures in default that fulfil the requirements specified in section 4.3.4.(ii)?

Answer:
Yes, we apply the second approach as described in section 68. The requirements as outlined in 4.3.4 (ii) are fulfilled. In addition we would like to recommend to provide guidance on the determination of LGDbe. Further clarity would also be welcomed for assets purchased in default or at steep discounts where no further EL would typically be expected and/or cannot be based on a notional amount as 100% cannot be lost in such cases.

11. Do you consider the direction of the proposed changes adequate to address the weaknesses and divergences in the treatment of defaulted assets across institutions?

Answer:
Since institutions' specific approaches are not disclosed, it is difficult to assess to what extend the current requirements on treatment of defaulted assets lead to divergence. However, we believe the proposed changes should help reducing significant divergences. That being said, studies at global and European levels have proven that the vast majority of variance reflects genuine differences in risk profiles, this is a positive sign that these models are accurate and risk sensitive. As mentioned above, we believe that a more detailed and transparent assessment of bank internal models would be much welcomed in restoring trust in these models.

12. What else should be covered by the GL on the treatment of defaulted assets?

Answer:
We recommend clearly defining the feasibility to apply counterparty-specific UL vs. UL calibrated at portfolio level, to foster a consistent modelling approach across institutions.

As previously mentioned we also highly recommend aligning the definition of default in all EU regulations and refer to our previous questions on possible caveats in the DP on the GL on the treatment of defaulted assets.

13. What are the impacts for the institutions that should be considered when specifying the conditions for PPU and roll-out?

Answer:
We highly recommend maintaining PPU as there are exposures which require exemptions from IRBA, e.g.: Expiring businesses, small-size/low risk portfolios and temporarily for new business unit acquisitions. The standard approach is also used for the development of new products and where we

facilitate new business types. It would therefore be welcomed if these types of assets were formally excluded from any coverage ratio under the strict condition that solid project governance is in place.

With regard to roll-out plans, we agree that roll-out plans should be as detailed as possible with fixed and reasonable timelines. However, due to potential dependencies when implementing IRB models (for example new regulatory requirements, dependencies to other projects), the audit readiness date for still-to-be approved rating systems can change over time in comparison to the initially approved implementation plan. We therefore propose to allow for an extension of the 5-year-roll-out period under clearly specified conditions, which would provide more flexibility to the institutions to implement changes as effective and efficient as possible. Even if a comprehensive framework would be in place in order to avoid significant deviations in the respective decision of each local CA, the delegation of discretion in terms of PPU and roll-out is considered appropriate as the local CAs are supposed to have the best information on a local basis.

14. Do you expect that your organisational structure and/or allocation of responsibilities will have to be changed as a result of the rules described in section 4.3.5?

Answer:
In general, no changes are expected to be required in the existing organisational structure and/or allocation of responsibilities as a result of the rules described in section 4.3.5. Separate methodology validation and development functions are already in place alongside a dedicated validation unit with a separate and independent reporting line into senior management.

We would like to propose including a grandfathering approach, covering the existing validation function structures, until the new internal framework is approved. This would have the advantage of providing the banks with the opportunity to use existing independence structures, in agreement with the supervisors, which would otherwise be negatively impacted.

Furthermore, where changes are to be made in the organisational structure, grandfathering will contribute to an effective and efficient audit plan. Concurrent audits for multiple months would be difficult to facilitate for supervisors and banks alike both in terms of preparation, expertise and facilitating timely responses to questions.

15. Do you agree that CRM is a low priority area as regards the regulatory developments?

Answer:
The RTSs' regarding credit risk mitigation that are currently mandated by the CRR (i.e. the RTS on conditional guarantee, on the definition of 'liquid assets' and on master netting agreements under the Internal Models Approach) have a lower priority than the other aspects mentioned in the discussion paper such as the default definition, the PD and LGD estimates.

We do think that the whole topic of credit risk mitigation is an important topic in relation to the RWA calculation. The EBA should be heavily involved in the ongoing work on the Basel level on issues such as the adjustments of supervisory haircuts for financial collaterals as proposed by the Basel consultation on the Credit Risk Standardised Approach.

20. What would you consider an appropriate solution with regard to the definition and treatment (modeling restrictions) of the low default portfolios?

Answer:

We recognise the challenges of harmonisation of the treatment of low default portfolios (LDP). They are an important component for institutions' business models, allowing for further risk diversification and exploration of new opportunities in niche or expanding market segments. We would welcome an unambiguous definition taking into account quantitative measures of the default ratio along with the observed number of defaults and overall portfolio size.

For LDP we furthermore recognise that there is a benefit of the risk sensitive capital requirement. In order to retain this benefit we would favour achieving further harmonisation via publishing explicit technical standards and guidelines on LDP model development, conservatism add-ons, back testing and validation approaches.

As stated in our previous answers the "appropriate" solution also needs to be assessed in conjunction with any decision / guidance on portfolio segmentation. LDPs have gone through the appropriate risk mitigation checks and strict underwriting discipline. It would therefore be advisable that LDPs with higher than necessary RWAs are not treated more severely. We would also like to repeat that comparisons of peers on counterparty losses does not provide a correct picture. Good risk mitigation and early exits along with appropriate collateral, covenants, along with product types, seniority and concentrations and even geographies can have significant impact on losses. They are also validated regularly, so any signs of deterioration could be acted upon to change the RWA associated. If capped or flat / overly conservative LGDs are imposed, this could lead to increased risk taking vs. current underwriting standards.

21. How would you ensure appropriate use of the IRB Approach in a harmonised manner without excessive concerns of the so called 'cherry picking'?

Answer:
We are convinced that any claim of "cherry picking" of the IRB portfolio can be refuted. Adequate and robust rating models, methodology, credit processes, IT systems and data capture and control processes are in place for those portfolios. The current exemptions from IRB are truly justified as they for instance are referred to exposures for which it would be unduly burdensome to apply this approach (please refer also to answer to Q13).

23. Would the requirement to use TTC approach in the rating systems lead to significant divergences with the internal risk management practices?

Answer:
Imposing TTC requirements would lead to significant recalibration of the existing rating systems. Current rating methodologies and rating processes would require thorough revision. The actual outcome for the whole internal risk management practices is hard to predict as Point In Time rating serves as early warning indicator.

24. Do you agree that the possibility to grant permission for the data waiver should be removed from the CRR?

Answer:
We do not agree that the possibility of a data waiver should be removed. New portfolios should be eligible for the IRB approach even if no data history exists. In the case of new portfolio acquisitions in which an argumentation for the IRB approach is available (e.g. same market and same underwriting criteria), the implementation of the IRB approach should be possible. Furthermore, holding on to the data waiver would assist in a restructuring of the European banking sector, because it will allow banks

to continue to manage portfolios which they have acquired on a IRB approach basis and integrate these more effectivily into the own banking structure.

25. Are there any other aspects of the IRB Approach not discussed in this document that should be reviewed in order to enhance comparability of the risk estimates and capital requirements?

Answer:
As stated above, we support the EBA in their efforts to enhance the robustness and the comparability of internal risk estimates, not just for IRB models but for all internal models in general. We believe that enhancing the robustness and comparability of internal models will restore faith in, understanding and reliability of banks' internal models.

Even though much has been done in this area, more can be done within the Basel III regulatory framework. Stress tests in the US and EU have proven to be a highly credible way of ensuring banks can not only withstand periods of extreme stress, but that there is clarity to regulators and the market about how each bank is set to cope. The BCBS already has plans to work on a global framework to ensure that best practise from different jurisdictions is shared and incorporated globally. Stress testing provides a valuable tool, based on a comprehensive and accurate range of extreme scenarios, calibrated to historical extreme events, to capture and control risks that may not be fully captured by standard RWA. This is particularly the case when considering the most systemic banks. Stress tests additionally incorporate standardised scenarios designed by regulators, which can address variance issues in a similar way to capital floors. For those banks subject to comprehensive stress testing, it is therefore difficult to see any added value from a risk management standpoint of introducing of a separate SA floor provides an additional constraint that offers no value added.

The recent Asset Quality Review (AQR) in the EU showed the value of having third parties help to thoroughly test and scrutinise bank balance sheets. A rigorous test, accompanied by clear and detailed disclosure and benchmarking, could be applied at the global level to bank internal models. This would go much further than capital floors in ensuring the models are reliable, prudent and transparent. Industry and regulators could use such a tool to build upon work underway in various jurisdictions to enhance this and use the momentum to further harmonise the definitions, modelling practises and supervisory inconsistencies that result in excess variation. We would be very happy to dedicated resources to helping the BCBS create this type of enhanced model scrutiny.

We strongly feel that this is where the EBA and ECB should be focusing time and effort on at the Basel level, rather than reintroducing capital floors that are less comparable and risk undoing the good work to date and creating a weaker regulatory regime, and weaker banking system.

The EU authorities, given their experience with internal modelling and the work being driven by EBA and the ECB to improve the models, would therefore be in a unique position to pass their experience on at the global level and drive the international agenda.

Annex II: Transitional period/Implementation efforts

Transitional period/Implementation efforts

To account for bank-internal activities triggered by any change in the default definition, a transitional period is required. For banks operating under the Internal Ratings Based Approach (IRBA) a change in the existing materiality thresholds has a significant impact. This impact relates to IT system and process implementation efforts as well as changes in credit risk parameter settings and rating models driving the Risk Weighted Asset (RWA) levels.

Of specific note, the following activities would have to be performed:

Data basis / IT Systems

- Not all of the data will be initially available in the requisite form needed. This will require reengineering the interfaces and systems, for example in the RWA calculation, credit risk parameters and model recalibrations.
- A retroactive adjustment of historical default and non-default data would be difficult and might in some instances not be possible.

Credit Risk Parameters/Rating Models

- Validation and recalibration of credit risk parameters and rating models based on the modified default definition. This impacts a significant number of IRBA approved rating systems and credit risk parameter settings.

Process

- Implications of the re-calibrated credit risk parameter and rating models need to be assessed.
- Updating of internal and external governance process, including the approval process by supervisory authorities and use test requirements.
- Training for credit officers and users of recalibrated rating models.
- Implementation of recalibrated parameter and models - including piloting and test runs.
- Updating the respective disclosure requirements.

Therefore, the required length of a transitional period depends on four main factors. First, whether the amount overdue is already available in data bases/systems used for RWA calculation as well as credit risk parameter and model recalibrations, or whether a tactical solution to determine this amount will be allowed by supervisory authorities. Second, the necessity to adjust default and loss data histories. Third, the number of credit risk parameters and models to be validated and recalibrated. Fourth, the intensity and timelines of the supervisory approval process.

In our opinion the transitional period should allow for sufficient time to adapt to the new materiality thresholds affecting the business units, e.g. RWA changes and changes in the application process.

For these reasons a transitional period should not be less than 5 years to reflect the new materiality thresholds in all related IT systems, processes and credit risk parameter settings and rating models.

The approach to a transitional period would also have to be defined. In our view, it should be a phased-in approach. This means the new thresholds are implemented at a certain point in time, but use of the default and loss data history based on the previous threshold implementation for parameter and model calibration/validation purposes would be allowed to continue. In case the current implementation cannot be directly compared to the new one, this data history should be modified by a factor assessing the difference between the old and new default count if such a factor can be derived from the available data. If not, the usage of the existing data should still be allowed. In this case the data history window should be moved year-by-year until a time period with homogenous default definition is reached. Then the data history window can be extended again. Afterwards, rating systems would be approved in a phased approach. We believe that this recommended phased approach is reasonable even though it differs from the approach reflected in the Draft RTS that suggests submitting only one change application.