



Ref: GYG/93/H26  
June 26, 2014

**Comments on the Consultation Paper: *Draft regulatory technical standards on risk-mitigation techniques for OTC-derivative contracts not cleared by a CCP under Article 11(15) of Regulation (EU) No 648/2012***

Japanese Bankers Association

**1. Introduction**

- (1) We, the Japanese Bankers Association (JBA), would like to express our gratitude for this opportunity to comment on the consultation paper: *Draft regulatory technical standards on risk-mitigation techniques for OTC-derivative contracts not cleared by a CCP under Article 11(15) of Regulation (EU) No 648/2012*, issued by the European Banking Authority (EBA), the European Securities and Markets Authority (ESMA) and the European Insurance and Occupational Pensions Authority (EIOPA) on April 14, 2014.
- (2) The Consultation Paper (CP) clarifies and provides specific guidance on many aspects that were uncertain (e.g. initial margin (IM) models and haircuts) under the final framework on margin requirements for non-centrally cleared derivatives issued by the Basel Committee on Banking Supervision (BCBS) and the International Organization of Securities Commissions (IOSCO) on September 2, 2013 (BCBS/IOSCO Final Framework). We would like to pay our respect for the efforts made by the related authorities for their initiatives to develop more clear and specific requirements.
- (3) While many financial institutions, particularly those based in Europe, are expected to submit their comments on the CP, the JBA intends to provide comments that reflect the positions and opinions of not only Japan but also other Asian countries and those countries where collateral agreements (CSA) are less commonly used. We respectfully expect that the following comments will contribute to your further discussion on this issue.

**2. Summary**

- (1) The regulatory technical standards (RTS) will be applied to cross-border transactions between financial institutions in Japan or other Asian countries and financial institutions or non-financial companies in Europe. The RTS will also be the guidance for other authorities in their initiative to develop relevant regulations in their home jurisdiction. The CP therefore should adequately reflect the views of not only financial institutions in Europe but also those in other regions, including Asia and

South America. For example, while it would not pose a practical issue in the case of transactions executed within Europe to comply with the T+1 requirement in settling collateral, it would be considerably impractical to do so in the case of cross-border transactions involving countries with a significant time difference (e.g. a transaction between Sydney and London). Further, the CP should also give due consideration to the fact that, as compared to Europe and the U.S. where CSA originated, the use of CSA is far less common in other jurisdictions.

- (2) It is considered very difficult to satisfy the requirements under the CP until the deadline and many jurisdictions and financial institutions are likely to fail to comply with the requirements. This may result in the emergence of an unlevel playing field between those regions and financial institutions which comply and does not comply with the regulations. The margin requirements are based on the G20's international accord and should be set at a level which can be satisfied with a reasonable effort even by those jurisdictions which fall behind in terms of operation, systems, documentation framework and other relevant aspects.
- (3) The draft RTS gives tighter requirements in some areas relative to the BCBS/IOSCO Final Framework; for example, the RTS requires a day-to-day operation. Where highly necessary, such enhancement of requirements may need to be implemented. However, given that even complying with the BCBS/IOSCO Final Framework by December 2015 is a very high hurdle to overcome, it is requested that the EBA, the ESMA and the EIOPA (collectively, the ESAs) take a careful approach to strengthen the requirements in the RTS compared to those in the BCBS/IOSCO Final Framework. Further, taking into consideration that the RTS has a significant impact on cross-border transactions, it is also requested that a flexible approach will be taken; for example, permitting substituted compliance which respects the regulatory level of other jurisdictions.

### **3. Scope of entities subject to the RTS**

- (1) Application to non-financial companies (Definition of SINFE)

The CP sets forth the EUR 8 billion threshold in the Executive summary section. It is our understanding that this intends to define a systemically important non-financial entity (SINFE) as a non-financial company (NFC) with notional amount of non-centrally cleared derivatives in excess of EUR 8 billion. Please confirm whether this understanding is correct.

- (2) The third paragraph of page 7 can be interpreted as requiring EU entities to collect margin from all third-country entities, except when explicitly exempted by the EMIR or under the EUR 8 billion threshold. Moreover, if a third-country entity is a non-financial entity, the collection of margin is required even if they are below the

threshold. However, a flexible application of the RTS is requested in the case of non-financial companies, taking into consideration the factors listed below. A flexible application include: (i) the scope of application is limited to finance companies, etc. with high liquidity risk management capabilities, (ii) a sufficient transition period is given, (iii) requirements are applied in a phase-in manner, (iv) the threshold is raised, (v) a certain degree of discretion is granted to individual banks so that they can take into account regional characteristics, the extent to which the CSA is used in the jurisdiction, the creditworthiness of counterparties, the availability of alternative methods and other factors and (vi) a threshold is taken into account in the case of transactions with non-financial institutions established in those jurisdictions where substituted compliance is permitted. Further, it is uncertain when the threshold of EUR 8 billion should be applied.

- ✓ The use of CSA is less common in Asia, including Japan, and South America, particularly in the case of transactions with non-financial companies.
  - ✓ While the CSA is relatively widely used in Europe, there is a certain gap across jurisdictions.
  - ✓ In Japan, for instance, although the CSA is rarely used, there is an established market practice to accept comprehensive guarantee, which does not limit the coverage to derivatives when necessary, taking into account the counterparty's credit quality.
  - ✓ Once the CSA is entered into, the entity assumes the obligation to post collateral commensurate with the current exposure level. If the entity fails to perform its obligation, it will default. Unlike financial institutions, non-financial companies generally have a low liquidity risk management capability, as well as have insufficient margin for collateral and a weaker funding capability. Therefore, if they are forced to enter into the CSA without sufficient consideration, this may aggravate their cash position.
  - ✓ The RTS would impose excessive burden on those non-financial institutions established outside the EU if they execute transactions with EU entities, and thus may disincentivise them to engage in transactions with European financial institutions, etc.
- (3) Regardless of whether the request in the preceding paragraph will be accepted, in the absence of a consistent definition across jurisdictions on non-financial institutions subject to the RTS, financial institutions would incur burdens and costs because they need to determine such non-financial institutions and manage the assessment criteria in accordance with each jurisdiction's regulation. As each jurisdiction's proposed regulation is not yet published, it is not possible to quantitatively estimate costs. Nevertheless, it is requested that the ESAs should ensure that the definitions, particularly the definition on non-financial institutions, applied in relevant regulations

are consistent across jurisdictions, in order to maintain sound risk management and proposals aligned with internationally agreed standards.

- (4) Going forward, respective jurisdictions are expected to determine and provide the criteria to assess the entities subject to the RTS. As discussed above, it would be crucial to ensure consistency in doing so. However, even if such consistency is ensured, differences are still likely to arise across jurisdictions in terms of quantitative thresholds to assess the entities subject to the RTS and technical aspects (e.g. the scope of the group). Therefore, confusion may be caused in the process of assessing the entities subject to the RTS, especially in the early stage of the RTS implementation.

In this view, the ESAs are requested to address this concern by, for example, requiring regulatory authorities to determine the entities periodically subject to the RTS based on transaction data, etc. obtained pursuant to the reporting requirements, which are already in effect, and to post such entities on their website, etc.; or by requiring them to pre-register and publish such entities on their website, etc.

#### **4. T+1 settlement and daily operation**

- (1) Requirement for T+1 settlement and daily operation of variation margin (VM)  
(*Article 1 VM – Variation margin, CHAPTER 1*)

Certain requirements in the RTS are tighter than the BCBS/IOSCO Final Framework, which does not provide a rule concerning the settlement timing and does not require daily operation in terms of the frequency. This particularly has a great impact on cross-border practices. For example, while it would be relatively easy to settle collateral in a short period in the case of transactions within Europe, the T+1 settlement would be considerably impractical if there is a significant time difference between counterparties (e.g. a transaction between Sydney and London). Further, in the case of a financial institution, which is based in the region with a significant time difference from Europe (e.g. Asia) and is responsible for the firm-wide collateral management, it would presumably be impractical for such a financial institution and its counterparty to develop a process (e.g. to set a deadline for the instruction on cash settlement) that enables them to exchange collateral on the business day following the execution of a contract, given time required for collateral negotiation and the difference in their holidays. Consequently, EU entities will prefer transactions with those counterparties based in the same region, and may scale down cross-border transactions on a global basis. Moreover, while the settlement timing of Japanese government bonds (JGBs) was shortened from T+3 to T+2 in April 2012, the T+1 settlement is impractical. With regard to the frequency of VM operation, many local financial institutions, which usually have a lower operational capacity, still carry out

the VM operation on a weekly or monthly basis. Given this, if they are required to enter into a number of CSAs and at the same time to execute the margin operation on a daily basis, their operational burden will increase drastically. It is understandable that the T+1 settlement and daily operation is preferable for settlement and credit risk management purposes. Nonetheless, in view of current practice, the operational requirements in the RTS should not be tightened more than what are required under the BCBS/IOSCO Final Framework. If, notwithstanding the consideration of our comment, it is determined that these requirements are going to be tightened, the ESAs are requested to provide a flexibility particularly with regard to the timing of collateral exchange between counterparties with a different time zone; for example, by allowing the adoption of best practice prevailing in the market for the settlement timing.

- (2) Mandatory T+1 settlement of initial margins (IM) (para. 3, *Article 1 EIM – Initial margins*, CHAPTER 1)

Since IM requires pre-reconciliation, it is more difficult than in the case of VM to collect IM within the business day following the execution of a contract. As indicated in the appended diagram, which illustrates the IM operation using JGB, T+4 days will be necessary under current practices in the case of cross-border transactions between counterparties having a significant time difference. Further, given that IM is viewed as collateral to be collected additionally and held in preparation for a case where VM is not sufficient to cover current exposures and that the range of fluctuation is assumed to be small compared to VM, it would be acceptable to apply more relaxed requirements to IM relative to VM. In view of this, the ESAs are requested to give due consideration to business practices in finalising the RTS.

## **5. Concentration limits on collateral**

- (1) The introduction of concentration limits may: (i) result in increased collateral funding cost in the case of posting collateral, because the types of collateral will increase; and (ii) result in increased collateral management (valuation) cost in the case of collecting collateral for the same reason. In either case, operational burden will increase in collateral management activities. Therefore, those securities that can maintain a certain level of high liquidity even under stressed market conditions should be exempted from concentration limits. Since collateral with high liquidity can be disposed of in a short period, adverse effects on monetization arising from concentration on a specific type of collateral can be mitigated.
- (2) As mentioned above, in our view, securities having a certain level of high liquidity even under stressed market conditions should be exempted from concentration limits. If, however, the detailed diversification requirements on the collateral received are

applied as stipulated in the CP, thereby imposing the threshold of not exceeding 50% on the sum of the values of the securities issued by a single issuer; Japanese financial institutions will not be able to post all the collateral in the form of JGBs to EU financial institutions. According to the ISDA's estimation, almost all major participants in the Japanese market consider JGBs as eligible collateral and use it to post and collect collateral. Further, the notional value of JGBs is almost equivalent to the value of cash collateral. Similarly to Japan, there are other markets where sovereign bonds are the primary form of collateral. Limiting the use of sovereign bonds as collateral in such markets may give rise to unexpected systemic risk or depletion of liquidity, and thus the ESAs are requested to give careful consideration on the introduction of the diversification requirements. Further, according to the BCBS/IOSCO's quantitative impact study (QIS) and other estimations, the sum of collateral that will be required for IM on a global basis is expected to be tremendous. In such circumstances, if the use as collateral of such a high liquid and readily monetizable asset as sovereign bonds is limited, it is our concern that the liquidity of other assets, including cash, may be affected. The ESAs are therefore requested to carefully reconsider the introduction of concentration limits. Concentrated use of securities issued by the governments or central banks of the same jurisdiction ---as long as such securities have a certain level of high liquidity even under stressed market conditions--- would rather mitigate risk than using a pool of diversified collateral with low liquidity. Moreover, a smaller number of collateral types would reduce operational burden needed in collateral management, funding and valuation processes. All things considered, we support the idea of exempting securities issued by the governments or central banks of the same jurisdiction. Further, a flexible approach is requested to be taken by, for example, allowing the exemption of sovereign bonds with high liquidity (issued by developed countries), such as U.S. treasury bonds and JGBs, from the concentration limits.

## **6. Scope of instruments subject to the RTS – Physically-settled foreign exchange forwards and swaps**

It is uncertain whether physically-settled foreign exchange forwards and swaps should (i) be treated in accordance with the *Supervisory guidance for managing risks associated with the settlement of foreign exchange transactions*, issued by the BCBS on February 15, 2013 (BCBS Guidance) or (ii) be subject to the requirements to enter into the CSA by November 2015, similarly to other applicable derivative transactions.

Having thoroughly read the BCBS/IOSCO Final Framework and the BCBS Guidance, there is no specific rule regarding the timing to implement the VM requirements for physically-settled foreign exchange forwards and swaps. Accordingly, it is our

understanding that firms are expected to work on the implementation based on respective voluntary plans with regulators monitoring the progress of the implementation (i.e. the approach described in the above (i)). In addition, the CP stipulates in paragraph 20 c) on page 58 that “it will be beneficial if the technical standards are consistent with the BCBS-IOSCO guidance”.

On the other hand, the CP requires entities to exchange VM on physically-settled foreign exchange forwards and swaps, but not IM. (See the last sentence in the second paragraph from the bottom of page 7, paragraph (4) on page 18, paragraph 143 on page 77 and paragraph 144 on page 78.) Additionally, according to paragraph 2, *Article 1 FP – Final provisions*, on page 46, it may be interpreted that mandatory VM exchange will be applied from December 1, 2015. It is our understanding that the ESAs intend to allow entities to voluntarily implement the VM requirements in accordance with the BCBS Guidance. If however VM exchange is mandated for physically-settled foreign exchange forwards and swaps, it will mean that the RTS will introduce a tighter regulation than international accords.

Including physically-settled foreign exchange forwards and swaps into the scope of instruments subject to VM from December 2015 will lift the already high hurdle and thus is impractical. The transaction period of physically-settled foreign exchange forwards and swaps is much shorter than that of other derivatives, and hence these transactions are considered to be exposed to limited risks. Therefore, the necessity to require collateral on such contracts is low. Further, those counterparties that solely deal in physically-settled foreign exchange forwards and swaps are more diversified than those counterparties engaging in other derivative transactions. Combined with the fact that many financial institutions do not have adequate systems and operational processes and procedures yet, we consider that it is not reasonable to implement a tighter regulation than international accord, at least at this point.

Similarly to these foreign exchange forwards and swaps, it is reasonable to treat non deliverable forward and currency options in accordance with the BCBS Guidance because (i) they are often viewed as foreign exchange instruments for internal management purposes and (ii) their transaction period is generally relatively short.

## **7. The necessity of phase-in application and the transition period**

A sufficient period for preparation is necessary to ensure smooth implementation of the regulation. While the ISDA is making similar request to the U.S. authorities, we, as well, respectfully make the following requests to the European authorities.

- ✓ At least two years of preparation period should be provided after regulations are finalised in respective jurisdictions, before effectuating the VM requirements.
- ✓ A separate preparation period is requested to be granted for the IM requirements.

## 8. IM models

### (1) Level of risk capture by IM models (CHAPTER 2)

Overall, CHAPTER 2 “Margin methods” intends to measure risk at the same level as under internal models used to calculate regulatory capital. However, to ensure market liquidity, IM models need to be usable by all market participants and to be capable of analysing causes upon occurrence of disputes.

### (2) IM model approval process (box on page 29, CHAPTER 2)

The CP states that the global coordination of the model approval process would have to be tackled when the industry’s standard initial margin model (SIMM) is established. Further, the ESAs explore the possibility of allowing the use of models without prior and post approval. These, the latter in particular, are preferable for the industry and authorities across jurisdictions given that there is no sufficient time to prepare until the effective date of the RTS.

### (3) Treatment when IM models cease to comply with the requirements (*Article 1 MRM – Initial margin models*, CHAPTER 2)

There is a provision in the draft RTS, which states that counterparties shall shift to the Standardised Method if IM models do not comply with the requirements. Since the shift to the Standardised Model results in a sharp increase in the amount of margin, it is difficult to take an immediate action. Therefore, similarly to the treatment under capital requirements, the ESAs are requested to allow the calibration of the IM model by using multipliers based on the number of exceptions in backtesting if IM models cease to comply with the requirements.

### (4) Procyclicality (*Article 3 MRM – Calibration of the model*, CHAPTER 2)

Article 3 MRM sets out that initial margin models shall be calibrated based on historical data from a period of at least three years, and model parameters are required to be recalibrated at least every 6 months. Although there is an additional requirement to maintain overall proportion of stressed data to be at least 25% of the overall data set, automatic recalibration of parameters may induce procyclicality and increase liquidity risk in times of financial crisis. For parameter recalibration, a governance process needs to be established, for example, by involving a monitoring group established by an industry group.

### (5) Underlying classes (*Article 4 MRM – Primary risk factor and underlying classes*, CHAPTER 2)

The classification based on underlying classes by the type of transaction proposed in the BCBS/IOSCO Final Framework and the CP are considered to have the following issues:

- ✓ The method for classifying hybrid products (those products that rely on



underlying assets categorized into multiple classes) such as convertible bonds (which are exposed to equity, credit and interest rate risk) are uncertain. Therefore, pre-agreement needs to be reached between market participants on a classification method in details.

- ✓ In cases where interest rate or FX risk is hedged for a credit, equity or commodity transactions, hedge effect may not be taken into account for margin calculation purposes and may give rise to inappropriate incentive.

Moreover, the classification based on underlying assets by transaction type using sensitivity required under the CP may result in a different classification depending on market conditions and structure of a product even for the same type of product. This may trigger confusion in markets or reduction in liquidity of a transaction. Accordingly, if the classification based on underlying assets by transaction type will be used, rules need to be developed which ensure that the results of classification are consistent for the same type of product.

- (6) Representation of each risk by risk factors (*Article 5 MRM – Integrity of the modelling approach, CHAPTER 2*)

The CP requires using a separate risk factor for significant equity or commodity risk. If this requirement is literally applied, a considerable number of risk factors may be identified, which may impose undue burden on margin calculation and reconciliation. Since the factor model framework enables to represent individual risks using a fewer number of risk factors, it is requested not to provide detailed instructions/guidance on the modelling approach under this CP.

- (7) Consideration of “non-linear dependence” (*Article 5 MRM – Integrity of the modelling approach, CHAPTER 2*)

It is unclear whether “non-linear dependence” refers to a higher-level sensitivity such as gamma, or fat tail distribution. If this means the former, since gamma and other risk measures generated by the pricing model may more significantly differ across firms than delta (first sensitivity), this may be a cause of increasing disputes between counterparties. Additionally, because incorporating a higher-level sensitivity may increase calculation burden, use of such sensitivity may cause a problem in implementing the daily margin measurement, considering that the margin calculation is further incorporated into the internal model used for capital calculation purposes.

## **9. Eligible collateral and haircut (standard and model)**

- (1) Eligibility criteria of securities with wrong way risk (*Article 6 LEC.1 – Eligibility criteria to avoid wrong way risk, CHAPTER 3*)

The CP states that securities which may give rise to wrong way risk (risk that exposure and probability of default will simultaneously increase), which is also specified in the

BCBS/IOSCO Final Framework, is not eligible for collateral. It does not however provide specific criteria on what securities constitute collateral that give rise to wrong way risk. For instance, it is uncertain whether JGBs posted by Japanese financial institutions and USTs posted by U.S. financial institutions may be deemed as securities that cause wrong way risk. If above two securities do not qualify for eligible collateral, it may have a significant impact on liquidity as noted in the above 3. Accordingly, we respectfully request the ESAs to further clarify the criteria, and at the same time make a careful decision on this issue.

(2) Own estimates of the haircuts using the internal model-based approach (Annex III)

Given that the Final Framework did not provide any specific criteria, the CP providing criteria was a significant step forward. However, tasks to incorporate these criteria into the day-to-day risk management process, including the parallel run with the existing process, are expected to be considerable burdensome for banks. Consequently, it is requested to clarify whether these criteria can be implemented in a more flexible manner; for example, allowing a phase-in approach in order to meet these criteria. Additionally, in the absence of a standard model such as SIMM, haircut may cause disputes between counterparties. Therefore, it is requested to work on further clarification of proposed criteria (e.g. clarify a criterion in times of radical market turnaround).

(3) Approach for determining haircut under the Standardised Method

It is considered that the use of the internal-ratings-based approach adopted by individual firms in determining haircut may be a cause of intractable dispute between counterparties. To establish a framework that avoids a dispute, it is requested to specify a standard uniformly applied by each firm. Furthermore, the CP states that counterparties shall apply a haircut of 8% to the market value of the assets where the collateral currency is different from the settlement currency. However, it is unclear whether the settlement currency refers to a currency used for margin calculation on a portfolio-by-portfolio basis, or settlement currency of each transaction included in the portfolio. Therefore, it is requested to further specify cases that will be deemed as a settlement currency. For example, explicit rules is required to be provided for cases such as USD/JPY currency swap with JPY cash collateral.

The amount of IM for a portfolio comprised of multiple transactions with different settlement currencies is calculated taking into account FX risk corresponding to differences between settlement currencies of individual transactions and currencies used for IM calculation. Accordingly, FX risk will be double counted if an additional haircut is assigned based on a difference between the settlement currency and collateral currency of each transaction, and hence lack economic rationality. Additionally, allocation of the amount of IM calculated on a portfolio-by-portfolio

basis to individual transactions requires an ad-hoc logic.

#### **10. Intragroup transactions**

Since criteria for exempting intragroup transactions from the margin rules were not specified in the BCBS/IOSCO Final Framework, we highly value the CP in that provides the specific intragroup exemption procedures. However, if the examination process to determine whether to grant exemption is not flexible enough, the probability of being granted may reduce, causing applying firms to be reluctant to apply. It is therefore expected that a more flexible approach is taken, for example, not requiring an application for exemption if an intragroup transaction meets certain conditions.

#### **11. Cross-border application**

As set out in the BCBS/IOSCO Final Framework, for cross-border application purposes, an approach should be adopted, for example, which eliminates inconsistencies of regulations across jurisdictions, or which deems firms to meet the regulatory requirements of both jurisdictions when the requirements of both jurisdictions are assessed to be equivalent and one of the requirements of jurisdictions are met. Emphasis should be more placed on the concepts of equivalence and substituted compliance for effective use of cross-border application.

#### **12. Risk management procedures**

Establishment of robust internal management procedures (*Article 1 IGT – Procedure for the counterparties and the competent authorities*, Chapter 5)

Although the RTS requires robust internal management procedures to be in place, it does not provide specific examples of such procedures. It is therefore uncertain what level of robustness the RTS requires, and hence the ESAs are requested to provide specific criteria. Further, to our understanding, the RTS requires firms to set forth the methods for calculating margin and valuing collateral in the contract. Please confirm to what extent such methods should be documented in the contract. With many aspects remaining uncertain, it would be significant burden to develop contractual, operational and internal management processes within a limited timeframe, and thus some transitional measure is requested.

#### **13. Treatment of jurisdictions where the legal enforceability of netting agreements or CSAs is not confirmed**

Similarly to the treatment under the BCBS Guidance\*, the RTS should clarify that transactions with a counterparty will not be subject to the margin requirements if it is unknown whether netting arrangements or CSAs are legally enforceable in the jurisdiction

where the head office of such a counterparty is located. When a CSA is entered into with a counterparty which has its head office based in the jurisdiction where the legal enforceability of the CSA is not confirmed, there may be a possibility that collateral and exposures cannot be offset upon default of the counterparty, incurring unexpected loss. Therefore, in such cases, each firm should determine, at its discretion, whether to enter into a CSA, instead of making the conclusion of the CSA mandatory.

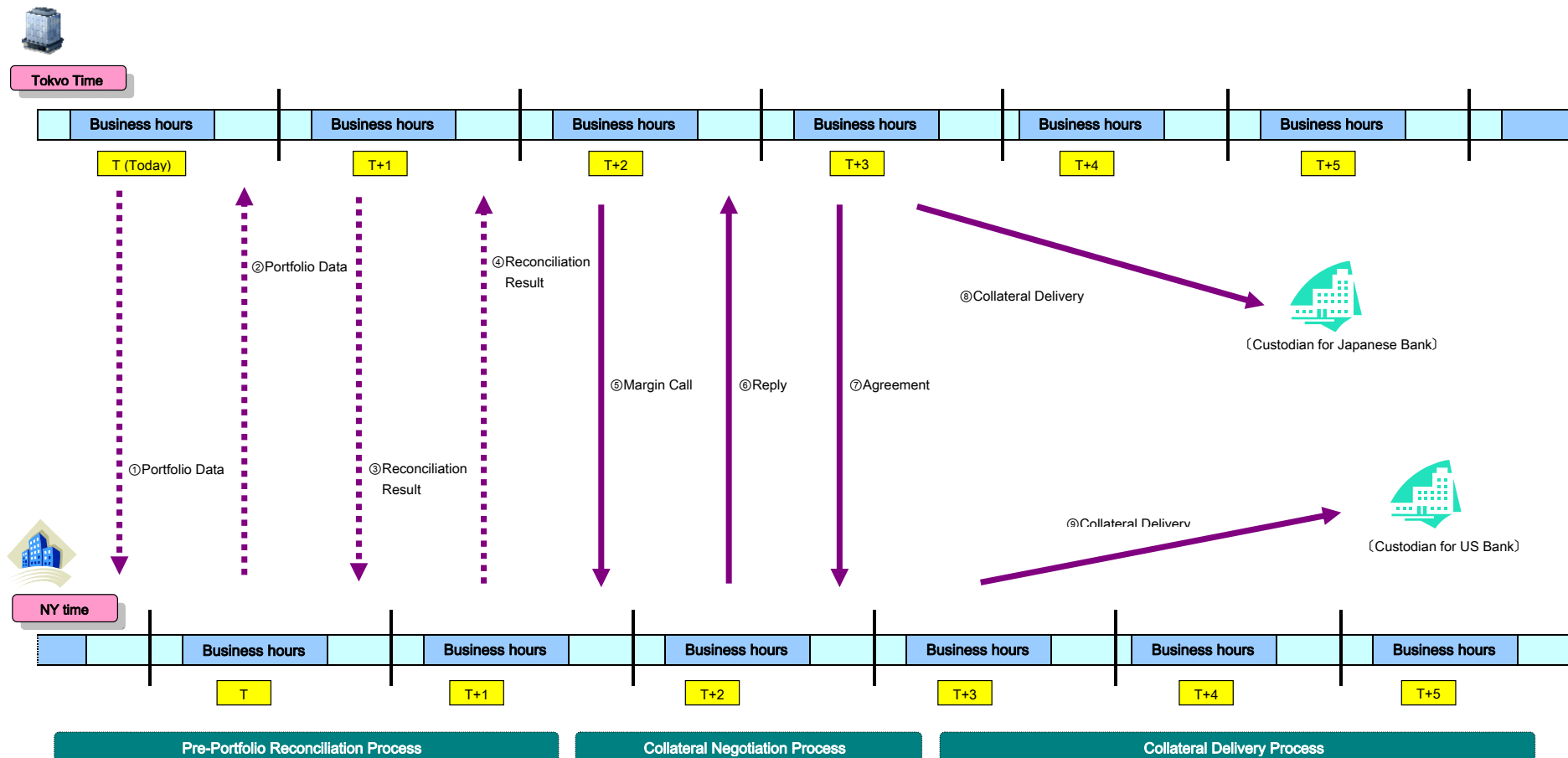
\* The BCBS Guidance stipulates, in the section “Guideline 3: Replacement cost risk” on page 15, that “A bank should use netting agreements to reduce its replacement cost risk in jurisdictions where netting is legally enforceable” (Key consideration 2), encouraging collateral exchange when netting arrangements are legally enforceable.

# [IM operation] Why T+1 as transfer timing doesn't work for Asian banks ?

(Appended Diagram)

## [Case Study]

Japanese bank located in Tokyo makes a collateral demand on US bank located in New York. All communications are made by emails



### < Note >

#### Pre-Reconciliation

- This is a new process which is required to fix the portfolio subject to IM calculation between the parties. It will take at least two days if the parties exchange the trade data by email due to the time zone difference between Tokyo and New York.
- It is assumed that the portfolio as of T-1 will be used. There is a possibility, however, that some parties cannot gather the trade data on a group basis globally and finish the IM calculation on the day T. In that case, the portfolio as of T-2 is supposed to be used inevitably.

#### Collateral Negotiation

- This process is normally made via emails. Due to the time zone difference between Tokyo and New York, the collateral details to be delivered cannot be agreed during the business hours of the day of the margin call being issued.
- The above case is the best case where no dispute occurs. In case any dispute arises, it may possibly take more few days to agree on any collateral delivery until the dispute is solved.

#### Collateral Delivery

- Delivery timing may differ depending on the collateral type (Cash, Security, etc). In case of JGB, which is most likely to be mainly used for IM by Japanese banks, it will be delivered in two days after the agreement according to the market practice as illustrated above. As for other type of collaterals such as cash, it may be able to be delivered on the following day after the agreement.