EBA/ITS/2013/09
17.12.2013

EBA FINAL draft Implementing Technical Standards

On closely correlated currencies under Article 354(3) of Regulation (EU) No 575/2013 (Capital Requirements Regulation - CRR).

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1. Executive Summary

These draft Implementing Technical Standards ('ITS') identify, in accordance with Article 354(1) of the Regulation (EU) No 575/2013 (the Capital Requirement Regulation, 'CRR'), a list of closely correlated currencies for the purposes of calculating the capital requirements for foreign-exchange risk according to the standardised rules. Positions in closely correlated currencies are subject to a 4% (instead of 8%) capital charge.

A pair of currencies is closely correlated if the probability that over a 10-day period the change in the value of an equal and opposite position in the respective currencies comes to 4% or less of the matched position is (i) at least 99%, when an observation period of three years is used and (ii) 95% when an observation period of five years is used.

In order to assess the above criteria with a confidence level of 99% the 10-day requirement is scaled down to a one day loss. This requires the maximum currency movement of 4% to be divided by the square root of 10, which results in 1.265%.

The list of closely correlated currencies will be updated yearly. This regular review will allow any additional relevant currencies as well as the latest available market data to be incorporated in the assessment. In addition to this regular update, these draft ITS include the possibility of an exceptional, urgent, update to eliminate a currency pair from the list of closely correlated currencies when market developments require such a review.

2. Background and rationale

Article 354(3) of Regulation (EU) No 575/2013 (CRR) requires the identification of relevant closely correlated currencies by the EBA. According to Article 354(1) of the CRR, a pair of currencies is deemed to be closely correlated, if the probability of a loss below 4% stemming from the change in the value of an equal and opposite position in the respective currencies, over a 10-day period is:

- at least 99%, when an observation period of three years is used;
- and 95% when an observation period of five years is used.

In order to assess the above criteria the EBA scaled down the 10-day requirement to a 1 day loss. Consequently, the assessment is based on a method that divides the maximum currency movement of 4% by the square root of 10, which results in a 1.265% daily threshold. As a result, instead of examining the probability of the maximum 10-day change in value between two currencies being 4%, these ITS apply a maximum daily change in value between a pair of currencies of 1.265%.

The above simplification or scaling down to 1 day price movements is an established practice in the market. In addition, it is generally conservative, especially for liquid instruments, such as foreign exchange. In fact, the EBA assessment concluded, in relation to several currencies, that generally there were more 'threshold breaches' when a daily 1.265% limit was used rather than a 4% limit calculated using 10-day overlapping periods.

In addition to this simplification, the effect of the interest rate differentials between the two currencies was also ignored, since it can be considered as a negligible factor, especially for 1 day price movements.

Article 354 states that the 99% or 95% confidence level has to occur on 'equal and opposite positions'. This implies that the maximum number of acceptable breaches of the 1.265% threshold has to be measured adding up the losses stemming from long and short positions in each currency. Accordingly, the 99% or 95% confidence intervals have to consider both tails of the distribution (i.e. in contrast to the calculation of the Value at Risk – VaR - where the 99% confidence interval is established on one of the tails).

On the basis of data collected from market price providers, daily percentage currency movements are determined according to the following formula, where 'exchange' refers to the 'currency pair':

$$\%\,Change \; = \ln(exchange_t) - ln(exchange_{t-1})$$

The absolute value of the resulting daily percentage change is then compared with the maximum threshold (i.e. 1.265%). Any values exceeding this threshold are computed as 'breaches' of the 4% 10-day maximum loss established in article 354(1).

The 3-year period applied for the first criterion includes in all cases more than 780 daily Profit and Loss (P&L) changes. The 5-year period used to assess the second criterion includes more than 1.300 daily P&L changes.

The number of ‘breaches’ of the 1.265% threshold allowed under the two criteria is rounded down for prudential reasons. Accordingly, the first criterion (3 year 99%) is met if there is a maximum of seven breaches (1% of 780) during the three preceding years; and the second criterion (5-year, 95%) is met if there is a maximum of 65 breaches (5% of 1.300) during the 5-year period.

Currencies assessed

Article 354(1) CRR states that institutions may provide lower own funds requirements against positions in relevant closely correlated currencies. Accordingly, these ITS comprise only those ‘pair exchange rates’ formed by combining each one of the different EU currencies with a list of non-EU currencies which National Supervisory Authorities (NSAs) have identified as relevant for their financial institutions. No currencies are explicitly excluded as the yearly update process allows the incorporation of any currencies that may become relevant for institutions in the EU.

In addition, paragraph 4 of article 354 CRR states that ‘The own funds requirement on the matched positions in currencies of Member States participating in the second stage of the economic and monetary union may be calculated as 1,6 % of the value of such matched positions.’ Thus, ‘currency pairs’ resulting from the combination of ERM II currencies (Danish Krone and Lithuanian Litas) and the euro fall outside the scope of the assessment. However, the remaining ERM II ‘currency pairs’ have to be assessed.

The EBA has assessed the correlation of each one of the currency pairs formed by the combination of the currencies listed below:

EU Currencies:

- Euro (EUR)
- Bulgarian Lev (BGN)
- Croatian Kuna (HRK)
- Czech Koruna (CZK)
- Danish Krone (DKK)
- Hungarian Forint (HUF)
- Lithuanian Litas (LTL)
- Polish Zloty (PLN)
- Romanian Leu (RON)
- Swedish Krona (SEK)
- British Pound (GBP)

Non EU Currencies:

- US Dollar (USD)
- Japanese Yen (JPY)
- Swiss Franc (CHF)
- Norwegian Krone (NOK)
- Russian Rouble (RUB)
- Turkish Lira (TRY)
- Australian Dollar (AUD)
- Brazilian Real (BRL)
- Canadian Dollar (CAD)

- Chinese Yuan (CNY)
- Hong Kong Dollar (HKD)
- Indonesian Rupiah (IDR)
- Indian Rupee (INR)
- South Korean Won (KRW)
- Mexican Peso (MXN)
- Malaysian Ringgit (MYR)
- New Zealand Dollar (NZD)
- Philippine Peso (PHP)
- Singapore Dollar (SGD)
- Thai Baht (THB)
- South African Rand (ZAR)
- Israeli New Shekel (ILS)
- Chilean Peso (CLP)
- Serbian Dinar (RSD)
- FYROM Denar (MKD)
- Albanian Lek (ALL)
- Bosnia and Herzegovina Mark (BAM)
- Arab Emirates Dirham (AED)
- Taiwanese Dollar (TWD)
- Lebanese Pound (LBP)
- Peruvian Nuevo Sol (PEN)
- Colombian Peso (COP)
- Uruguayan Peso (UYU)
- Macau Pataca (MOP)
- Moroccan Dirham (MAD)
- Angolan Kwanza (AOA)

3. EBA FINAL draft implementing Technical Standards on closely correlated currencies under Article 354(3) of Regulation (EU) No 575/2013 (Capital Requirements Regulation - CRR)

EUROPEAN COMMISSION

Brussels, XXX
[…](2012) XXX draft

COMMISSION IMPLEMENTING REGULATION (EU) No …/..

of XXX

[…]

COMMISSION IMPLEMENTING REGULATION (EU) No …/... laying down implementing technical standards with regard to closely correlated currencies according to Regulation (EU) No 575/2013 of the European Parliament and of the Council

of XXX

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 575/2013 of 26 June 2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012[1] and in particular Article 354(3) third subparagraph thereof,

Whereas:

(1) It is standard market practice to scale down the maximum loss over 10 days to a one day maximum loss, and to do this by dividing the maximum currency movement of 4% by the square root of 10. Therefore, the threshold of the maximum daily change in value within a pair of currencies should be set at 1.265%.

(2) Daily percent currency movements should be determined according to the following formula

$$\%\,Change = \ln(exchange_t) - ln(exchange_{t-1})$$

whereby ‘exchange’ refers to the relevant currency pair.

(3) The absolute value of the resulting percentage should be compared to the threshold of the maximum daily change in value within a pair of currencies of 1.265%. Any values exceeding this threshold should be computed as breaches of the 4%, 10-day maximum loss.

(4) It is necessary to define a maximum number of acceptable losses, so that the pairs of currencies exceeding such a limit would not qualify as correlated. Article 354 of Regulation 575/2013 requires the consideration of equal and opposite positions in foreign currencies, therefore the calculation of a maximum number of acceptable losses should consider jointly long and short positions in the foreign currency. Finally, it is safer, from a prudential point of view, to round down the number of breaches allowed. For all these reasons, the maximum number of breaches should be set to

[1] OJ L 176, 27.6.2013, p. 1.

seven breaches of the maximum loss during the preceding three years and to 65 breaches of the maximum loss during the preceding five years.

(5) Given that article 354(1) of Regulation 575/2013 refers to 'relevant' closely correlated currencies, only those 'pair exchange rates' formed by combining each one of the different EU currencies with a list of non-EU currencies relevant for financial institutions in the EU should be assessed against the criteria for identifying closely correlated currencies.

(6) Besides all EU currencies, which are obviously relevant as currencies of Member States of the EU, other non-EU currencies should be included in the assessment, given their relevance for institutions' portfolios in the EU. Further, given the requirements of Article 354 of Regulation 575/2013 regarding the relevant observation periods, only currencies for which a five-year daily data series is available from a trustworthy source should be taken into account when considering the currencies to be included in the assessment.

(7) However, Article 354(4) of Regulation 575/2013 establishes a specific treatment for the currency pairs formed by currencies from Member States participating in the second stage of the economic and monetary union ('ERM II') against the euro and between themselves. Therefore, the above-mentioned pairs should not be considered as 'relevant', but the rest of the pairs formed by ERM II currencies should be considered 'relevant'.

(8) As a result of the above, the correlation of each one of the currency pairs formed by the combination of the following currencies should be assessed.

EU Currencies: Euro (EUR), Bulgarian Lev (BGN), Croatian Kuna (HRK), Czech Koruna (CZK), Danish Krone (DKK), Hungarian Forint (HUF), Lithuanian Litas (LTL), Polish Zloty (PLN), Romanian Leu (RON), Swedish Krona (SEK), British Pound (GBP).

Non-EU Currencies: US Dollar (USD), Japanese Yen (JPY), Swiss Franc (CHF), Norwegian Krone (NOK), Russian Rouble (RUB), Turkish Lira (TRY), Australian Dollar (AUD), Brazilian Real (BRL), Canadian Dollar (CAD), Chinese Yuan (CNY), Hong Kong Dollar (HKD), Indonesian Rupiah (IDR), Indian Rupee (INR), South Korean Won (KRW), Mexican Peso (MXN), Malaysian Ringgit (MYR), New Zealand Dollar (NZD), Philippine Peso (PHP), Singapore Dollar (SGD), Thai Baht (THB), South African Rand (ZAR), Israeli New Shekel (ILS), Chilean Peso (CLP), Serbian Dinar (RSD), FYROM Denar (MKD), Albanian Lek (ALL), Bosnia and Herzegovina Mark (BAM), Arab Emirates Dirham (AED), Taiwanese Dollar (TWD), Lebanese Pound (LBP), Peruvian Nuevo Sol (PEN), Colombian Peso (COP), Uruguayan Peso (UYU), Macau Pataca (MOP), Moroccan Dirham (MAD), Angolan Kwanza (AOA).

(9) Foreign exchange movements can affect the relationship among currencies and the characterisation of certain currency pairs as correlated, according to the criteria of Article 354(1) of Regulation 575/2013. Therefore, the list of correlated currencies should be updated annually, to incorporate any additional currencies as well as data series resulting from each new calendar year of history. This additional data should cover the calendar year calculated backwards starting on October 1st of the year preceding the update.

(10) The updating of the list of correlated currencies constitutes a revision of this Regulation, therefore it should be carried out in accordance with the process described in Article 354(3) of Regulation 575/2013 and Article 15 of Regulation 1093/2010.

(11) It is necessary to inform the industry in advance of the revised list of correlated currencies, in order to allow for any preparations that institutions might need to make before they apply it. Therefore revised versions of this Regulation should be published at the end of each year, with the view to entering into force on January 1st of the following year.

(12) In certain cases, market developments might require the review of the previous identification of two currencies as closely correlated. Therefore there is the need to allow for an exceptional, urgent update of the list of correlated currencies, aimed at eliminating a currency pair from the list of closely correlated currencies, and therefore for immediately eliminating the preferential treatment allowed to such currencies. As there is no such urgency in the case of updating the list to take into account of new currencies, updates to the list with the view to adding new currencies should always be done via the regular update process.

(13) This Regulation is based on the draft implementing technical standards submitted by the European Supervisory Authority (European Banking Authority) to the Commission.

(14) The European Supervisory Authority (European Banking Authority) has conducted open public consultations on the draft implementing technical standards on which this Regulation is based, analysed the potential related costs and benefits and requested the opinion of the Banking Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1093/2010.

HAS ADOPTED THIS REGULATION:

Article 1 – Closely correlated currencies

The pairs of currencies that meet the requirements of Article 354(1) of Regulation 575/2013 are contained in Annex I.

Article 2- Final provision

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

For the Commission
The President

On behalf of the President
[Position]

ANNEX 1
<u>(An updated version of the annex, dated 13 May 2015, is available as separate document)</u>

Part 1- List of Closely correlated currencies against the Euro (EUR)
Albanian Lek (ALL), Bosnia and Herzegovina Mark (BAM), Bulgarian Lev (BGN), Czech Koruna (CZK), British Pound (GBP), Croatian Kuna (HRK), Moroccan Dirham (MAD), Romanian Leu (RON), Swedish Krona (SEK) , Singapore Dollar (SGD).

Part 2- List of Closely correlated currencies against the Bulgarian Lev (BGN)
Albanian Lek (ALL), Bosnia and Herzegovina Mark (BAM), Czech Koruna (CZK), Danish Krone (DKK), Croatian Kuna (HRK), Lithuania Litas (LTL), Moroccan Dirham (MAD), Romanian Leu (RON), Singapore Dollar (SGD), Euro (EUR).

Part 3- List of Closely correlated currencies against the Croatian Kuna (HRK)
Albanian Lek (ALL), Bosnia and Herzegovina Mark (BAM), Bulgarian Lev (BGN), Czech Koruna (CZK), Danish Krone (DKK), British Pound (GBP), Lithuania Litas (LTL), Moroccan Dirham (MAD), Romanian Leu (RON), Singapore Dollar (SGD), Euro (EUR).

Part 4- List of Closely correlated currencies against the Czech Koruna (CZK)
Bosnia and Herzegovina Mark (BAM), Bulgarian Lev (BGN), Danish Krone (DKK), Croatian Kuna (HRK), Lithuania Litas (LTL), Euro (EUR).

Part 5- List of Closely correlated currencies against the Danish Krone (DKK)
Albanian Lek (ALL), Bosnia and Herzegovina Mark (BAM), Bulgarian Lev (BGN), Czech Koruna (CZK), British Pound (GBP), Croatian Kuna (HRK), Moroccan Dirham (MAD), Romanian Leu (RON), Swedish Krona (SEK), Singapore Dollar (SGD).

Part 6- List of Closely correlated currencies against the Hungarian Forint (HUF)
None.

Part 7- List of Closely correlated currencies against the Lithuanian Litas (LTL)
Albanian Lek (ALL), Bosnia and Herzegovina Mark (BAM), Bulgarian Lev (BGN), Czech Koruna (CZK), British Pound (GBP), Croatian Kuna (HRK), Moroccan Dirham (MAD), Romanian Leu (RON), Swedish Krona (SEK), Singapore Dollar (SGD).

Part 8- List of Closely correlated currencies against the Polish Zloty (PLN)

None.

Part 9- List of Closely correlated currencies against the Romanian Leu (RON)
Albanian Lek (ALL), Bosnia and Herzegovina Mark (BAM), Bulgarian Lev (BGN), Danish Krone (DKK), Croatian Kuna (HRK), Lithuanian Litas (LTL), Moroccan Dirham (MAD), Euro (EUR).

Part 10- List of Closely correlated currencies against the Swedish Krona (SEK)
Bosnia and Herzegovina Mark (BAM), Danish Krone (DKK), Lithuanian Litas (LTL), Norwegian Krone (NOK), Euro (EUR).

Part 11- List of Closely correlated currencies against the British Pound (GBP)
Bosnia and Herzegovina Mark (BAM), Danish Krone (DKK), Croatian Kuna (HRK), Lithuanian Litas (LTL), Moroccan Dirham (MAD), Singapore Dollar (SGD), Thai Baht (THB), Taiwanese Dollar (TWD), Euro (EUR).

Part 12- List of Closely correlated currencies against the US Dollar (USD)
Arab Emirates Dirham (AED), Angolan Kwanza (AOA), Chinese Yuan (CNY), Hong Kong Dollar (HKD), Lebanese Pound (LBP), Macau Pataca (MOP), Peruvian Nuevo Sol (PEN), Philippine Peso (PHP), Singapore Dollar (SGD), Thai Baht (THB), Taiwanese Dollar (TWD).

Part 13- List of Closely correlated currencies against the Japanese Yen (JPY)
None.

Part 14- List of Closely correlated currencies against the Swiss Franc (CHF)
None.

Part 15- List of Closely correlated currencies against the Norwegian Krone (NOK)
Swedish Krona (SEK).

Part 16- List of Closely correlated currencies against the Russian Rouble (RUB)
None.

Part 17- List of Closely correlated currencies against the Turkish Lira (TRY)
None.

Part 18- List of Closely correlated currencies against the Australian Dollar (AUD)
None.

Part 19- List of Closely correlated currencies against the Brazilian Real (BRL)
None.

Part 20- List of Closely correlated currencies against the Canadian Dollar (CAD)
Singapore Dollar (SGD).

Part 21- List of Closely correlated currencies against the Chinese Yuan (CNY)
Arab Emirates Dirham (AED), Angolan Kwanza (AOA), Hong Kong Dollar (HKD), Lebanese Pound (LBP), Macau Pataca (MOP), Peruvian Nuevo Sol (PEN), Philippine Peso (PHP), Singapore Dollar (SGD), Thai Baht (THB), Taiwanese Dollar (TWD), US Dollar (USD).

Part 22- List of Closely correlated currencies against the Hong Kong Dollar (HKD)
Arab Emirates Dirham (AED), Angolan Kwanza (AOA), Chinese Yuan (CNY), Lebanese Pound (LBP), Macau Pataca (MOP), Peruvian Nuevo Sol (PEN), Philippine Peso (PHP), Singapore Dollar (SGD), Thai Baht (THB), Taiwanese Dollar (TWD), US Dollar (USD).

Part 23- List of Closely correlated currencies against the Indonesian Rupiah (IDR)
None.

Part 24- List of Closely correlated currencies against the Indian Rupee (INR)
None.

Part 25- List of Closely correlated currencies against the South Korean Won (KRW)
None.

Part 26- List of Closely correlated currencies against the Mexican Peso (MXN)
None.

Part 27- List of Closely correlated currencies against the Malaysian Ringgit (MYR)
Philippine Peso (PHP), Taiwanese Dollar (TWD).

Part 28- List of Closely correlated currencies against the New Zealand Dollar (NZD)
None.

Part 29- List of Closely correlated currencies against the Philippine Peso (PHP)
Angolan Kwanza (AOA), Chinese Yuan (CNY), Hong Kong Dollar (HKD), Lebanese Pound (LBP), Macau Pataca (MOP), Malaysian Ringgit (MYR), Peruvian Nuevo Sol (PEN), Thai Baht (THB), Taiwanese Dollar (TWD), US Dollar (USD).

Part 30- List of Closely correlated currencies against the Singapore Dollar (SGD)
Bosnia and Herzegovina Mark (BAM), Bulgarian Lev (BGN), Canadian Dollar (CAD), Chinese Yuan (CNY), Danish Krone (DKK), British Pound (GBP), Hong Kong Dollar (HKD), Croatian Kuna (HRK), Lebanese Pound (LBP), Lithuanian Litas (LTL), (LVL), Moroccan Dirham (MAD), Macau Pataca (MOP), Peruvian Nuevo Sol (PEN), Thai Baht (THB), Taiwanese Dollar (TWD), US Dollar (USD), Euro (EUR).

Part 31- List of Closely correlated currencies against the Thai Baht (THB)
Arab Emirates Dirham (AED), Angolan Kwanza (AOA), Chinese Yuan (CNY), British Pound (GBP), Hong Kong Dollar (HKD), Lebanese Pound (LBP), Moroccan Dirham (MAD), Macau Pataca (MOP), Peruvian Nuevo Sol (PEN), Philippine Peso (PHP), Singapore Dollar (SGD), Taiwanese Dollar (TWD), US Dollar (USD).

Part 32- List of Closely correlated currencies against the South African Rand (ZAR)
None.

Part 33- List of Closely correlated currencies against the Israeli New Shekel (ILS)
None.

Part 34- List of Closely correlated currencies against the Chilean Peso (CLP)
None.

Part 35- List of Closely correlated currencies against the Serbian Dinar (RSD)
None.

Part 36- List of Closely correlated currencies against the FYROM Denar (MKD)
None.

Part 37- List of Closely correlated currencies against the Albanian Lek (ALL)
Bosnia and Herzegovina Mark (BAM), Bulgarian Lev (BGN), Danish Krone (DKK), Croatian Kuna (HRK), Lithuanian Litas (LTL), Moroccan Dirham (MAD), Romanian Leu (RON), Euro (EUR).

Part 38- List of Closely correlated currencies against the Bosnia and Herzegovina Mark (BAM)
Albanian Lek (ALL), Bulgarian Lev (BGN), Czech Koruna (CZK), Danish Krone (DKK), British Pound (GBP), Croatian Kuna (HRK), Lithuanian Litas (LTL), Moroccan Dirham (MAD), Romanian Leu (RON), Swedish Krona (SEK), Singapore Dollar (SGD), Euro (EUR).

Part 39- List of Closely correlated currencies against the Arab Emirates Dirham (AED)
Angolan Kwanza (AOA), Chinese Yuan (CNY), Hong Kong Dollar (HKD), Lebanese Pound (LBP), Macau Pataca (MOP), Peruvian Nuevo Sol (PEN), Thai Baht (THB), Taiwanese Dollar (TWD), US Dollar (USD).

Part 40- List of Closely correlated currencies against the Taiwanese Dollar (TWD)
Arab Emirates Dirham (AED), Angolan Kwanza (AOA), Chinese Yuan (CNY), British Pound (GBP), Hong Kong Dollar (HKD), Lebanese Pound (LBP), Macau Pataca (MOP), Malaysian Ringgit (MYR), Peruvian Nuevo Sol (PEN), Philippine Peso (PHP), Singapore Dollar (SGD), Thai Baht (THB), US Dollar (USD).

Part 41- List of Closely correlated currencies against the Lebanese Pound (LBP)
Arab Emirates Dirham (AED), Angolan Kwanza (AOA), Chinese Yuan (CNY), Hong Kong Dollar (HKD), Macau Pataca (MOP), Peruvian Nuevo Sol (PEN), Philippine Peso (PHP), Singapore Dollar (SGD), Thai Baht (THB), Taiwanese Dollar (TWD), US Dollar (USD).

Part 42- List of Closely correlated currencies against the Peruvian Nuevo Sol (PEN)
Arab Emirates Dirham (AED), Angolan Kwanza (AOA), Chinese Yuan (CNY), Hong Kong Dollar (HKD), Lebanese Pound (LBP), Macau Pataca (MOP), Philippine Peso (PHP), Singapore Dollar (SGD), Thai Baht (THB), Taiwanese Dollar (TWD), US Dollar (USD).

Part 43- List of Closely correlated currencies against the Colombian Peso (COP)
None.

Part 44- List of Closely correlated currencies against the Uruguayan Peso (UYU)
None.

Part 45- List of Closely correlated currencies against the Macau Pataca (MOP)
Arab Emirates Dirham (AED), Angolan Kwanza (AOA), Chinese Yuan (CNY), Hong Kong Dollar (HKD), Lebanese Pound (LBP), Peruvian Nuevo Sol (PEN), Philippine Peso (PHP), Singapore Dollar (SGD), Thai Baht (THB), Taiwanese Dollar (TWD), US Dollar (USD).

Part 46- List of Closely correlated currencies against the Moroccan Dirham (MAD)
Albanian Lek (ALL), Bosnia and Herzegovina Mark (BAM), Bulgarian Lev (BGN), Danish Krone (DKK), British Pound (GBP), Croatian Kuna (HRK), Lithuania Litas (LTL), Romanian Leu (RON), Singapore Dollar (SGD), Thai Baht (THB), Euro (EUR).

Part 47- List of Closely correlated currencies against the Angolan Kwanza (AOA)
Arab Emirates Dirham (AED), Chinese Yuan (CNY), Hong Kong Dollar (HKD), Lebanese Pound (LBP), Macau Pataca (MOP), Peruvian Nuevo Sol (PEN), Philippine Peso (PHP), Thai Baht (THB), Taiwanese Dollar (TWD), US Dollar (USD).

4. Accompanying documents

4.1 Cost- Benefit Analysis / Impact Assessment

Identification of the problem: Banks' positions denominated in foreign currencies are subject to additional capital requirements, although in some cases these currencies are closely correlated among themselves. For these currencies, the additional capital requirements to cover foreign exchange risk are disproportional to the actual risk undertaken because the foreign exchange movements are low. Market risk internal models, used for capital calculations, already reflect this lower volatility, whilst the standardised approach treats all FX exposures as if they were equally risky.

The CRD III (Annex III paragraph 3.1) has already provided a special treatment for 'closely correlated currencies', however, it was left to the discretion of the 'competent authorities' to implement it. As a result, there is no common list of closely correlated currencies among the EU member states, resulting in lack of harmonisation across the EU.

Regulatory objectives:

The impact assessment has been carried out bearing in mind that the general objective of 'guaranteeing the international competitiveness of EU banking sector (G-3)'[2] is met.

The operational objective to be met is to develop a harmonised set of provisions in the area of capital requirements which includes the following '*Specific objectives':*

- Prevent regulatory arbitrage opportunities (S-3);
- Reduce compliance burden (S-5);
- Enhance level playing field (S-6);
- Enhance supervisory cooperation and convergence (S-7)

The implementation of these ITS will increase the risk-sensitivity of the standardised approach, aligning it more closely to the capital requirement that would result from an internal model.

Currency assessment update process (set of options on the frequency of update):
The EBA considered the following set of options to decide on the frequency of updating the list of closely correlated currencies:

- A permanent list that will be updated only when sudden and very large currency movements take place.
- A list that will be regularly updated and will be urgently updated when sudden and very large currency movements take place.

[2] For more information refer to the 'Commission Staff Working Paper – Impact Assessment' accompanying the document 'Regulation of the European Parliament and the Council Regulation on prudential requirements for the credit institutions and investment firms' (http://ec.europa.eu/internal_market/bank/docs/regcapital/CRD4_reform/IA_regulation_en.pdf)

It was decided by the EBA that, ***because of the volatile market conditions***, the list of closely correlated currencies should be updated regularly. For every currency pair the data series will be updated by incorporating a natural year of history beginning on 1 October of the previous year and ending on 30 September of the current year. The EBA has decided that the process should be conducted annually, during the fourth quarter of each natural year.

By the end of the third quarter of each natural year, NSAs should identify the currencies, if any, that have not been included in the previous year's list of currencies to be assessed, despite being relevant for their financial institutions. These currencies will be incorporated in the list of currencies to be assessed provided there is a 5-year daily data series available from a trustworthy source.

In addition to this 'regular' update, it is necessary to establish an 'urgent' update process. If, due to exceptional market conditions, there are indications that two currencies, previously identified as closely correlated, are no longer correlated, the EBA will perform an assessment for that currency pair. If the assessment confirms that they are no longer closely correlated, the EBA will update the list and submit it to the Commission for urgent approval.

This urgent process will be applicable only if there is an urgent need to eliminate a currency pair from the list of closely correlated currencies; new currencies will always be incorporated using the regular update process.

Scope of application (set of options):

The EBA considered the following options before deciding on the scope of application of the list of closely correlated currencies:

- Assessment of the entire universe of currency pairs
- Assessment of only those currency pairs which are deemed relevant for the EU banks.

The intention of the EU banking regulation is to mitigate the risks undertaken by banks sufficiently. Article 354(1) refers to 'relevant' closely correlated currencies; in other words, those currencies that the EU banks have not invested in, or invested immaterial amounts, are not included in the assessment which leads to the list of closely correlated currencies.

The EBA has decided not treat 'pegged' currencies differently for the purposes of these ITS. A currency 'pegged' to another currency is considered a unilateral political decision (by a country) which could be promptly reversed should the market conditions not allow for the pre-set foreign exchange rate. For this reason, the EBA decided not to treat them differently but, instead, to assess them as free floating currencies. Should they comply with the requirements for closely correlated currencies, they will be included in the list.

The Level 1 text (Article 354.2) establishes a specific treatment for currencies subject to a 'legally binding intergovernmental agreement'; however, the definition of 'legally binding intergovernmental agreement' is outside the ITS scope (Article 354.3).

Any currency pair not explicitly assessed would be considered as not closely correlated from a regulatory perspective.

The scope of currencies assessed is not limited to the initial list identified by members. The number of assessed currencies may be increased if needed. The yearly update process allows any missing currencies to be incorporated into the assessment.

Specific technical decisions (set of options): Article 354.1 of the CRR states that for the calculation of the FX capital charges under the standardised approach:

- Institutions may provide lower own funds requirements (4% instead of 8%) against positions in closely correlated currencies.

- A pair of currencies is deemed to be closely correlated only if the likelihood of a loss — calculated on the basis of daily exchange-rate data for the preceding three or five years — occurring on equal and opposite positions in such currencies over the following 10 working days, which is 4 % or less of the value of the matched position in question (valued in terms of the reporting currency) has a probability of at least:

    - 99%, when an observation period of three years is used, and
    - 95%, when an observation period of five years is used.

The two criteria are complementary. The application of a 5-year period ensures that the two currencies have been relatively stable for a long period of time, whereas the 3-year 99% is a more stringent yardstick that ensures that there has been a strong relationship between both currencies in the recent past.

The EBA had to take a technical decision on how to carry forward the currency correlation assessment described in the mandate. It has been decided that the most conservative approach will be chosen. The technical options considered for the assessment of the most conservative approach, utilising the 3- or 5-year dataset, were the following:

- The use of non-overlapping 10-day observations of the foreign exchange returns. The expected change for the pertinent confidence level will be compared with the 4% threshold.
- The use of daily observations of the foreign exchange returns. The expected change for the pertinent confidence level will be compared with the threshold of 4% scaled down by the square root of 10 (which is equivalent to comparing the 10-day expected change with the 4% threshold)
- The use of overlapping 10-day observations of the foreign exchange returns. The expected change for the pertinent confidence level will be compared with the 4% threshold.

The first option above, although the most straightforward and more justifiable, does not provide enough observations for the statistical analysis. Thus, the EBA decided to exclude it from the analysis and compare the two remaining options.

The EBA scaled down the 10-day loss threshold to a 1-day loss threshold by dividing the maximum currency movement of 4% by the square root of 10, which results in 1.265%. This is a commonly used statistical practice. As a result, instead of examining the probability of the maximum 10-day change in the foreign exchange rate (return) between two currencies being 4%, the ITS examine the maximum daily change in foreign exchange rate (return) between two currencies as being 1.265%.

The above simplification or scaling down to daily price movements is an established practice in the market. In addition, it is generally conservative, especially for liquid assets, such as currency holdings.

To prove that the proposed approach is conservative enough, the EBA conducted an assessment analysing 32 currency pairs against the euro over a 3-year period. When conducting this exercise, the EBA decided to ignore the effect of interest rate differentials between two currencies, since it is considered to be a negligible factor, especially for daily foreign exchange movements.

According to the results (see table below) in general there were more ‘threshold breaches’ when a daily 1.265% limit was used rather than a 4% limit calculated using 10-day overlapping periods. For only 6 out of the 32 currency pairs was the 10 day period more conservative. Moreover, if a 10 day overlapping period had been directly applied three more currencies (SEK, GBP and NOK) would have met the 3-year 99% criterion.

Currencies		Number exceptions	Currencies		Number exceptions	Currencies		Number exceptions	Currencies		Number exceptions
BGN	1 Day	45	SEK	1 Day	12	TRY	1 Day	23	KRW	1 Day	49
	10 Day	44		10 Day	1		10 Day	34		10 Day	27
CZK	1 Day	4	GBP	1 Day	17	AUD	1 Day	45	MXN	1 Day	63
	10 Day	1		10 Day	7		10 Day	41		10 Day	46
DKK	1 Day	0	USD	1 Day	45	BRL	1 Day	66	MYR	1 Day	27
	10 Day	0		10 Day	44		10 Day	47		10 Day	25
HUF	1 Day	52	JPY	1 Day	96	CAD	1 Day	44	NZD	1 Day	55
	10 Day	42		10 Day	80		10 Day	38		10 Day	70
LVL	1 Day	0	CHF	1 Day	37	CNY	1 Day	42	PHP	1 Day	24
	10 Day	0		10 Day	37		10 Day	36		10 Day	22
LTL	1 Day	0	NOK	1 Day	10	HKD	1 Day	41	SGD	1 Day	14
	10 Day	0		10 Day	1		10 Day	43		10 Day	9
PLN	1 Day	36	HRK	1 Day	0	IDR	1 Day	48	THB	1 Day	25
	10 Day	20		10 Day	0		10 Day	27		10 Day	34
RON	1 Day	4	RUB	1 Day	22	INR	1 Day	32	ZAR	1 Day	71
	10 Day	0		10 Day	24		10 Day	32		10 Day	77

Implementation and on-going costs: the cost of implementing this technical standard (i.e. announcing and updating the lists of currencies) is estimated to be minimal, since the procedure will be more or less automated. Subject to lower foreign exchange volatility risk, a small reduction in capital requirements, for banks applying standardised rules for market risk, is expected.

The regular update of the list of closely correlated currencies will create a permanent involvement of EBA resources. The EBA should update the list of currencies to reflect the changing economic and financial conditions. However, this involvement would not require the engagement of additional resources, as the process would take place on a yearly basis and be automated. As a result, the regular procedure for updating the list of ‘closely correlated currencies’ is not expected to produce any material cost for the regulatory authorities.

On the other hand, the necessity to establish an urgent procedure to ‘expel’ from the list the currencies that are no longer closely correlated, due to sudden and very large foreign exchange movements, implies a continuous monitoring of market developments by the EBA staff. This on-going monitoring of market developments is expected to create some burden in terms of additional time needed to evaluate the movements and make the relevant proposals for ‘retaining’ or ‘expelling’ a currency from the list. Despite the continuous monitoring, this process, by itself, is not expected to create significant direct cost because a the high level of standardisation will be developed over time.

4.2 Views of the Banking Stakeholder Group (BSG)

No feedback was received from the BSG.

4.3 Feedback on the public consultation and on the opinion of the BSG

No feedback was received.