BANK OF ENGLAND
PRUDENTIAL REGULATION AUTHORITY

OWN ESTIMATES OF VOLATILITY ADJUSTMENTS UNDER THE FINANCIAL COMPREHENSIVE METHOD: CRR ARTICLE 225

Guidance on completion of template

The following template must be completed, together with the CRR permission application form, by a firm applying for Article 225 permission. The second column should be used to indicate whether the minimum standard is met. All standards must be met before permission will be granted. The third column requires a brief description of how the minimum standard is met.

Application Details	
	Signature
Attestation by a Significant Influence Function (SIF) of compliance with the relevant CRR requirements.	

Factors demonstrating CRR standard is met		
CRR Standard	**Meets Standard? (Yes/No)**	**Firm Analysis** *Please demonstrate using examples where appropriate how the minimum standards are met. This should include links to additional documentation (e.g. details of methodology; spreadsheet of comparative volatility estimates) where necessary.*
Section 1: Categorisation of securities		
For debt securities that have a credit assessment from an ECAI equivalent to investment grade or better, is a volatility estimate for each category of security is calculated? Give details.		
For debt securities that have a credit assessment from an ECAI equivalent to below investment grade, and for other eligible collateral, are the volatility adjustments for each individual item calculated? Give details.		
Is volatility of the collateral or foreign exchange mismatch estimated without taking into account any correlations between the unsecured exposure, collateral or exchange rates?		

How are relevant categories of securities determined? Does it take into account the type of issuer of the security, the external credit assessment of the securities, their residual maturity, and their modified duration? Give details.		
Are Volatility estimates representative of the securities included in each category?		
Section 2: Calculation of volatility adjustments (article 225(2))		
The calculation is based on a 99th percentile, one-tailed confidence interval		
The calculation is based on the following liquidation periods (and provide detail on which categories of securities the volatility adjustments are calculated for using these periods):		
(i) 20 business days for secured lending transactions;		
(ii) 5 business days for repurchase transactions, insofar as transactions involve the transfer of commodities or guaranteed rights relating to title to commodities and securities lending or borrowing transactions		
(iii) 10 business days for other capital market driven transactions;		
Where volatility adjustment numbers are calculated in accordance with shorter or longer liquidation periods but scaled up or down to the minimum liquidation periods set out in Article 225(2)(b), using the square root of time formula set out in Article 225(2)(c).		

Provide detail on which categories of securities the volatility adjustments are calculated for in this manner.		
The liquidity of lower quality assets is taken into account.		
The liquidation period is adjusted upwards in cases where there is doubt concerning the liquidity of the collateral.		
Historical data that may understate potential volatility is identified and is dealt with by means of a stress scenario.		
The length of the historical observation period institutions use for calculating volatility adjustments is at least one year.		
Where a weighting scheme or other methods for the historical observation period is used, the length of the effective observation period is at least one year.		
The data sets and calculated volatility adjustments are updated at least once every three months.		
Data sets are also reassessed whenever market prices are subject to material changes.		
Indicate whether intend to use an internal model for which an IMA Permission has already been granted by the PRA under article 363 of the CRR for the calculation of own estimates of volatility adjustments (if not, further information as set out in (a) – (c) below should be provided).		
(a) Provide documentation of methodologies used to calculate own estimates of volatility, and confirm that this meets the requirements set out in this Section 2.		
(b) Demonstrate that the unit in charge of the design and implementation of the own estimates of		

volatility adjustments is independent from business trading units		
(c) Give details of ongoing program of validation and back-testing which the firm uses to reassure itself with the appropriateness of own estimates of volatility and continued compliance with the standards required by Article 225		
Section 3: Estimation of volatility adjustments (Article 225(3))		
Volatility estimates are used in the day-to-day risk management process including in relation to internal exposure limits.		
If the liquidation period used by an institution in its day-to-day risk management process is longer than that set out in article 225(2)(b) for the type of transaction in question, volatility adjustments are scaled up in accordance with the square root of time formula set out in article 225(2)(c).		
There are procedures for monitoring and ensuring compliance with documented set of policies and controls for the operation of the system for the estimation of volatility adjustments and for the integration of such estimations into its risk management process.		
An independent review of the system for the estimation of volatility adjustments is carried out regularly within the institution's own internal auditing process.		
A review of the overall system for the estimation of volatility adjustments and for the integration of those adjustments into the institution's risk management process takes		

place at least once a year.		
The subject of that overall system review includes at least the following:		
(i) the integration of estimated volatility adjustments into daily risk management;		
(ii) the validation of any significant change in the process for the estimation of volatility adjustments;		
(iii) the verification of the consistency, timeliness and reliability of data sources used to run the system for the estimation of volatility adjustments, including the independence of such data sources;		
(iv) the accuracy and appropriateness of the volatility assumptions		
Section 4: Further evidence of compliance with art 225		
Give details of the ongoing program of validation which the firm uses to reassure itself with the appropriateness of own estimates of volatility and continued compliance with the standards required by article 225.		
Please provide a comparison between own estimates of volatility (as-of the previous period for regulatory reporting of own funds requirements) and supervisory volatility adjustments set out in article 224 for all types of financial collateral used. Confirm that such a comparison is carried out at least annually, as of 31st March.		
Please provide the following as evidence of the impact (as-of the previous period for regulatory reporting of own funds requirements) on own funds requirement of using own estimates of volatility		

compared to supervisory volatility adjustments set out in article 224: For the three most recent quarter end dates, please provide the following. (a) Total Pillar 1 own funds requirements calculated using (i) supervisory volatility adjustments; and (ii) own-estimates volatility adjustments; and (b) Own funds requirements for Pillar 1 Counterparty default risk calculated using (i) supervisory volatility adjustments; and (ii) own-estimates volatility adjustments. (c) Own funds requirements for Pillar 1 CCP default risk calculated using (i) supervisory volatility adjustments; and (ii) own-estimates volatility adjustments. (d) Own funds requirements for Pillar 1 CVA risk calculated using (i) supervisory volatility adjustments; and (ii) own-estimates volatility adjustments. Confirm that such a comparison is carried out at least annually, as of 31st March.		