

BANK OF ENGLAND PRUDENTIAL REGULATION AUTHORITY

ANNEX XXII - Disclosure of the use of the IRB Approach to credit risk (excluding counterparty credit risk)

Table UK CRE – Qualitative disclosure requirements related to IRB Approach. Flexible table.

 Institutions shall apply the instructions provided below in this Annex in order to complete table UK CRE as presented in Annex XXI to this Implementing Regulation, in application of points (a) to (f) of Article 452 of Regulation (EU) 575/2013¹ ("CRR").

Row reference	Legal refe	rences and instructions
	Explanatio	on
(a)	Point (a) of Article 452 CRR	When disclosing information on the scope of the competent authority's permission of approach or approved transition in accordance with point (a) of Article 452 CRR, institutions shall describe the main characteristics of the rating systems used under the IRB Approach for which the permission has been granted by a competent authority and the types of exposures covered by these rating systems. Institutions shall also describe the types of exposures for which they have permission to use permanent partial use of the Standardised Approach in accordance with Article 150 CRR and which are under their IRB roll-out plans in accordance with Article 148 CRR. The description shall be provided at the group level.
(b)	Point (c)(i)-(iv) of Article 452 CRR	 The description of the control mechanisms for rating systems shall cover the estimation of risk parameters, including internal model development and calibration, as well as controls in the application of the models and changes to rating systems. In accordance with point (c)(i)-(iv) of Article 452 CRR the description of the role of the functions referred to above shall also include: (i) the relationships between the risk management function and the internal audit function, (ii) the processes and methods for the reviews of the rating systems, including regular reviews of estimates in accordance with point (c) of Article 179(1) CRR and validations, (iii) the procedures and organisational arrangements to ensure the independence of the function in charge of reviewing the models (validation function) from the functions responsible for model development and calibration,

¹ REGULATION (EU) 2019/876 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 May 2019 amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No 648/2012 (OJ L 150/1, 7.6.2019, p.204)

		(iv) and the procedure to ensure the accountability of the functions in charge of developing and reviewing the models.
(c)	Point (d) of Article 452 CRR	Institution shall specify the role of the functions involved in the model development, calibration, approval and subsequent changes of the rating systems.
(d)	Point (e) of Article 452 CRR	Institutions shall disclose the scope and main content of management reporting related to IRB models referred to in Article 189 CRR, as well as addressees and frequency of such reporting.
(e)	Point (f) of Article 452 CRR	The disclosure of the internal rating systems by exposure class shall include the number of key models used in each exposure class with respect different types of exposures, with a brief description of the main differences among the models within the same exposure class. It shall also include a description of the main characteristics of the key approved models, in particular: (i) the definitions, methods and data for estimation and validation of PD, including estimation and validation of PDs for low default portfolios, any applicable regulatory floors, and the drivers for differences observed between PD estimates and actual default rates at least for the last three years; (ii) where applicable, the definitions, methods and data for the estimation and validation of LGD, including estimation and validation of downturn LGD, information on how LGDs are estimated for low default portfolio, and the average time lapse between the default event and the closure of the exposure; (iii) the definitions, methods and data for estimation and validation of conversion factors, including assumptions employed in the derivation of those estimates.

Template UK CR6 – IRB approach – Credit risk exposures by exposure class and PD range. Fixed template.

Institutions shall apply the instructions provided below in this Annex in order to complete template UK CR6 as presented in Annex XXI to this Implementing Regulation, in application of point (g)(i)-(v) of Article 452 CRR, in order to provide information on the main parameters used for the calculation of capital requirements for IRB approach. Information disclosed in this template shall not include data on specialised lending referred to in Article 153(4) CRR. This template excludes counterparty credit risk (CCR) exposures (Chapter 6 of Title II of Part Three CRR), securitisation exposures and equity exposures.

Column	Legal references and instructions
reference	Explanation
а	PD range:
	This is a fixed PD range which shall not be altered.
	In case that the data on defaulted exposures in accordance with Article 178 CRR is further broken down in accordance with possible definitions for categories of defaulted exposures, the definitions and amounts for categories of defaulted exposures shall be explained in an accompanying narrative.
	Exposures shall be allocated to an appropriate bucket of the fixed PD range based on the PD estimated for each obligor assigned to this exposure class (without considering any substitution effects due to CRM). All defaulted exposures shall be included in the bucket representing PD of 100%.
b	On-balance sheet exposures:
	Exposure value calculated in accordance with Article 166(1) to (7) CRR without taking into account any credit risk adjustments and any conversion factors.
С	Off-balance sheet exposures pre-conversion factors (CCF):
	Exposure value in accordance with Article 166(1) to (7) CRR, without taking into account any credit risk adjustments and any conversion factors, neither own estimates nor conversion factors specified in Article 166(8) CRR, or any percentages specified in Article 166(10) CRR.
	Off balance sheet exposures comprise all committed but undrawn amounts and all off-balance sheet items, as listed in Annex I CRR.
d	Exposure weighted average CCF:
80,5	For all exposures included in each bucket of the fixed PD scale, the average conversion factor used by institutions in their calculation of risk-weighted exposure amounts, weighted by the off-balance sheet exposure pre-CCF as disclosed in column c.
е	Exposure value post CCF and post CRM:
	Exposure value in accordance with Article 166 CRR
	This column includes the sum of exposure value of on-balance sheet exposures and off-balance sheet exposures post conversion factors and percentages in accordance with Article 166(8) to (10) CRR.
f	Exposure weighted average PD (%):

	For all exposures included in each bucket of the fixed PD range, the average PD estimate of each obligor, weighted by the exposure value post-CCF and CRM as disclosed in column e.
g	Number of obligors:
	The number of legal entities or obligors allocated to each bucket of the fixed PD range, which were separately rated, regardless of the number of different loans or exposures granted.
	Joint obligors shall be treated the same as for the purpose of PD calibration. Where different exposures to the same obligor are separately rated, they shall be counted separately. Such situation may take place within the retail exposure class if the definition of default is applied at the level of individual credit facility in accordance with the last sentence of Article 178(1) CRR, or if separate exposures to the same obligor are assigned to different obligor grades in accordance with the second sentence of point (e) of Article 172(1) CRR in other exposure classes.
h	Exposure weighted average LGD (%):
	For all exposures included in each bucket of the fixed PD range, the average of the LGD estimates for` each exposure, weighted by the exposure value post-CCF and post-CRM as disclosed in column e.
	The LGD disclosed shall correspond to the final LGD estimate used in the calculation of risk weighted amounts obtained after considering any CRM effects and downturn conditions where relevant. For retail exposures secured by immovable properties the LGD disclosed shall take into account the floors specified in Article 164(4) CRR.
	In the case of exposures subject to the double default treatment the LGD to be disclosed shall correspond to the one selected in accordance with Article 161 (4) CRR.
80,5	For defaulted exposures under A-IRB Approach, provisions laid down in point (h) of Article 181(1) CRR shall be considered. The LGD disclosed shall correspond to the estimate of LGD in-default in accordance with the applicable estimation methodologies.
i	Exposure-weighted average maturity (years):
	For all exposures included in each bucket of the fixed PD range, the average maturity of each exposure, weighted by the exposure value post-CCF as disclosed in column e.
	The value of maturity disclosed reflects Article 162 CRR. The average maturity is disclosed in years.
	This data shall not be disclosed for the exposure values for which the maturity is not an element in the calculation of risk weighted exposure

	amounts in accordance with Chapter 3 of Title II of Part Three CRR. This means that this column shall not be filled in for the exposure class "retail".
j	Risk weighted exposure amount after supporting factors:
	For exposures to central governments and central banks, institutions and corporates, the risk weighted exposure amount calculated in accordance with Article 153(1) to (4) CRR. For retail exposures, the risk weighted exposure amount calculated in accordance with Article 154 CRR.
	The SME-supporting factor in accordance with Article 501 CRR and the supporting factor for Infrastructure Projects in accordance with Article 501a CRR shall be taken into account.
k	Density of risk weighted exposure amounts:
	Ratio between the sum of risk weighted exposure amounts after supporting factors as disclosed in column j and the exposure value as disclosed in column e.
1	Expected loss amount
	The expected loss amount calculated in accordance with Article 158 CRR.
	The expected loss amount to be disclosed shall be based on the actual risk parameters used in the internal rating system approved by the respective competent authority.
m	Value adjustments and provisions:
	Specific and general credit risk adjustments in accordance with the Commission Delegated Regulation (EU) 183/2014 ² , additional value adjustments in accordance with Articles 34 and 110 CRR, as well as other own funds reductions related to the exposures allocated to each bucket on the fixed PD range. These value adjustments and provisions are those considered for the implementation of Article 159 CRR.
	General provisions shall be disclosed by assigning the amount pro rata – in accordance with the expected loss of different obligor grades.
20	
Row	Legal references and instructions
reference	Explanation

² COMMISSION DELEGATED REGULATION (EU) No 183/2014 of 20 December 2013 supplementing Regulation (EU) No 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms, with regard to regulatory technical standards for specifying the calculation of specific and general credit risk adjustments (OJ L57/3, 27.2.2014)

Exposure class X	Where institutions have received permission to use own LGDs and conversation factors for the calculation of risk-weighted exposure amounts, they shall disclose the information required in this template separately for the exposure classes subject to that permission (A-IRB). For the exposure classes for which the institution does not have permission to use own estimates of LGD and conversion factors (F-IRB) the institution shall disclose the information on the relevant exposures separately using the F-IRB template.
A-IRB	Exposure class X
	For each exposure class listed in Article 147(2) CRR, with the exceptions indicated above, institutions shall disclose a separate template, with a further breakdown for the following exposure classes:
	- within the exposure class 'exposures to corporates' (point (c) of Article 147(2) CRR), breakdown into:
	a. exposures to corporates – SME, in accordance with internal classification of exposures to corporates based on the risk management policies;
	b. exposures to corporates – specialised lending, in accordance with Article 147(8) CRR;
	c. exposures to corporates – other.
	- within the exposure class "retail exposures" (point (d) of Article 147(2) and Article 147(5) CRR), breakdown into:
	a. Retail exposures – SME secured by immovable property collateral (point (d) of Article 147 (2) CRR in conjunction with Article 154(2) and (3) CRR);
	b. Retail exposures – SME other;
	c. Retail exposures – non-SME secured by immovable property collateral (point (d) of Article 147 (2) CRR in conjunction with Article 154(3) CRR);
	d. Retail exposures – Qualifying revolving (point (d) of Article 147 (2) CRR in conjunction with Article 154(4) CRR);
	e. Retail exposures – non-SME other.
<i><</i> 0	The total exposures row shall be included at the end of each separate template per exposure class.
F-IRB	Exposure class X
	For each exposure class listed in Article 147(2) CRR, with the exceptions indicated above, institutions shall disclose a separate template, with a further breakdown for the following exposure classes:
	- within the exposure class 'exposures to corporates' (point (c) of Article 147(2) CRR), breakdown into:

a. exposures to corporates – SME, in accordance with internal classification of exposures to corporates based on the risk management policies;
b. exposures to corporates – specialised lending, in accordance with Article 147(8) CRR;
c. exposures to corporates – other.

Template UK CR6-A – IRB Approach – Scope of the use of IRB and SA approaches. Fixed template

- 3. Institutions calculating the risk-weighted exposure amounts under the IRB Approach to credit risk shall apply the instructions provided below in this Annex in order to complete template UK CR6-A as presented in Annex XXI to this Implementing Regulation, in application of point (b) of Article 452 CRR.
- 4. For the purpose of this template, institutions shall allocate their exposures subject to the Standardised Approach laid down in Chapter 2 of Title II of Part Three or to the IRB Approach laid down in Chapter 3 of Title II of Part Three to the exposure classes as defined under the IRB Approach. This template excludes counterparty credit risk (CCR) exposures (Chapter 6 of Title II of Part Three CRR), and securitisation exposures.
- 5. Institutions shall explain in the accompanying narrative to the template any material difference between the exposure value as defined in Article 166 for IRB exposures as disclosed in column a of the template and the exposure value for the same exposures in accordance with Article 429(4) CRR, as disclosed in columns b and d.

Legal references and instructions		
Column	Explanation	
reference		
a	Exposure value as defined in Article 166 CRR for exposures subject to IRB approach	
C_{3}	Institutions shall disclose in this column the exposure value as defined in Article 166 CRR, only for those exposures under the IRB approach.	
b	Total exposure value for exposures subject to the Standardised approach and to the IRB approach:	
	Institutions shall use the exposure value in accordance with Article 429(4) CRR to disclose the total exposure value, including both the exposures under the standardized approach and the exposures under the IRB approach.	
С	Percentage of total exposure value subject to the permanent partial use of the SA (%):	
	Part of exposure for each exposure class subject to the Standardised Approach (exposure subject to the Standardised Approach laid down in Chapter 2 of	

d	Title II of Part Three, in accordance with the scope of permission for permanent partial use of the Standardised Approach received from a competent authority in accordance with Article 150 CRR), over the total exposure in that exposure class as disclosed in column b. Percentage of total exposure value subject to IRB Approach (%):
	Part of exposure for each exposure class subject to the IRB approach (exposure subject to the IRB Approach laid down in Chapter 3 of Title II of Part Three over the total exposure in that exposure class), respecting the scope of permission received from a competent authority to use the IRB Approach in accordance with Article 143 CRR, over the total exposure in that exposure class as disclosed in column b. This shall include both exposures where institutions have the permission to use their own estimation of LGD and conversion factors or not (F-IRB and A-IRB), including supervisory slotting approach for specialized lending exposures and equity exposures under the simple risk weight approach.
е	Percentage of total exposure value subject to a roll-out plan (%):
	Part of exposure for each asset class subject to the sequential implementation of IRB approach pursuant to Article 148 CRR, over the total exposure in that exposure class as disclosed in column b. This shall include:
	 both exposures where institutions plan to apply IRB approach with or without their own estimation of LGD and conversion factors or without (F-IRB or A-IRB)
	 Immaterial equity exposures not included in columns c and d
	 exposures already under F-IRB where an institution is planning to apply A-IRB in the future.
	 specialised lending exposures under the supervisory slotting approach not included in column d.

Row	Legal references and instructions
number	Explanation
Exposure classes	Institutions shall include the information in template CR 6-A by exposure classes, in accordance with the breakdown of exposure classes included in the rows of the template.

Template UK CR7 – IRB approach – Effect on the Risk Weighted Exposure amounts of credit derivatives used as CRM techniques. Fixed template.

6. Institutions shall apply the instructions provided below in this Annex in order to complete template UK CR7 as presented in Annex XX1 to this Implementing Regulation, in application of point (j) of Article 453 CRR. Institutions shall supplement the template with a narrative to explain the effect of credit derivatives on risk weighted exposure amounts. This template excludes counterparty credit risk (CCR) exposures (Chapter 6 of Title II of Part Three CRR), securitisation exposures, other non-credit obligation assets and equity exposures.

Column	Legal references and instructions
reference	Explanation
а	Pre-credit derivatives risk weighted exposure amount:
	Hypothetical risk weighted exposure amount calculated the actual RWEA assuming only the absence of recognition of the credit derivative as a CRM technique as specified in Article 204 CRR. The amounts shall be presented in the exposure classes relevant for the exposures to the original obligor.
b	Actual risk weighted exposure amount:
	Risk weighted exposure amount calculated taking into account the impact of the credit derivatives. Where institutions substitute the risk weight or the risk parameters of the obligor with the risk weight or risk parameters of the protection provider, the risk weighted exposure amounts shall be presented in the exposure class relevant for direct exposures to the protection provider.

Row	Legal references and instructions	
reference	Explanation	
1 to 9	Institutions shall include the breakdown of pre-credit derivatives risk weighted exposure amount and actual risk weighted exposure by exposure class, in accordance with the exposure classes listed in Article 147 CRR with further breakdown as included in the template, and separately for exposures under FIRB approach and exposures under AIRB approach. Institutions shall disclose under rows 1 and 6 the subtotals for FIRB exposures and for AIRB exposures.	
	Institutions shall disclose further breakdown for exposure class 'exposures to corporates' (point (c) of Article 147(2) CRR) in accordance with the below :	
	a. exposures to corporates – SME, in accordance with internal classification of exposures to corporates based on the risk management policies;	
$\langle O \rangle$	b. exposures to corporates – specialised lending, in accordance with Article 147(8) CRR, excluding specialised lending exposures under the slotting approach;	
	c. exposures to corporates – other.	
	Institutions shall disclose further breakdown for exposure class "retail exposures" (point (d) of Article 147(2) and Article 147(5) CRR) Institutions shall disclose further breakdown for:	
	a. Retail exposures – SME secured by immovable property collateral (in conjunction with Article 154(2) and (3) CRR);	

	b. Retail exposures – non-SME secured by immovable property collateral (in conjunction with Article 154(3) CRR);
	c. Retail exposures – Qualifying revolving (in conjunction with Article 154(4) CRR);
	d. Retail exposures – SME other;
	e. Retail exposures – non-SME other.
10	TOTAL EXPOSURES (including FIRB exposures and AIRB exposures)
	Total pre-credit derivatives risk weighted exposure amount, and total actual risk weighted exposure amount for all IRB exposures (including FIRB and AIRB).

Template UK CR7-A IRB approach – Disclosure of the extent of the use of CRM techniques

7. Institutions shall apply the instructions provided below in this Annex in order to complete template UK CR7-A as presented in Annex XXI to this Implementing Regulation, in application of point (g) of Article 453 CRR separately for exposures under A-IRB and F-IRB. In case an item of funded credit protection applies to more than one exposure, the sum of the exposures considered secured by it may not exceed the value of the item of the credit protection.

Column	Legal references and instructions
reference	Explanation
a	Total exposures: Exposure value (post conversion factors) in accordance with Articles 166 to 167 CRR. Exposures shall be disclosed in accordance with the exposure class applicable to the obligor, without taking into account any substitution effects due to the existence of a guarantee. Institutions applying the simple risk weight approach also consider the offsetting provisions referred to in Article 155(2) CRR.
b	FCP - Part of exposures covered by financial collateral (%):
$\langle \mathcal{O} \rangle$	Percentage of exposures secured by financial collateral over total exposures as disclosed in column a.
	Financial collateral, including cash collateral, debt securities, and gold, as listed in Articles 197 and 198 CRR, shall be included in the numerator where all the requirements laid down in Article 207 (2) to (4) CRR are met. The value of collateral disclosed shall be limited to the value of the exposure at the level of an individual exposure.
	When own estimates of LGD are used: financial collateral taken into account in the LGD estimates in accordance with points (e) and (f) of Article 181 (1) CRR. The amount to be disclosed shall be the estimated market value of the collateral.

с	FCP - Part of exposures covered by other eligible collaterals (%)
	Percentage of exposures secured by other eligible collateral over total exposures as disclosed in column a. The values disclosed in this column shall be the sum of the values disclosed in columns d to f.
	Where own estimates of LGD are not used: Article 199 (1) to (8) CRR and Article 229 CRR.
	Where own estimates of LGD are used: other collateral taken into account in the LGD estimates in accordance with points (e) and (f) of Article 181 (1) CRR.
d	FCP - Part of exposures covered by immovable property collaterals (%):
	Percentage of exposures secured by immovable property collateral including leasing in accordance with Article 199(7) CRR over total exposures as disclosed in column a.
	Immovable property collateral shall be included in the numerator where they meet all the eligibility requirements laid down in Article 208(2) to (5) CRR.
	Leasing on immovable property shall be included in the numerator where they meet all the eligibility requirements laid down in Article 211 CRR. The value of collateral disclosed shall be limited to the value of the exposure at the level of an individual exposure.
е	Part of exposures covered by Receivables (%)
	Percentage of exposures secured by receivables in accordance with Article 199 (5) CRR over total exposures as disclosed in column a. Receivables shall be included in the numerator where they meet all the eligibility requirements laid down in Article 209 CRR. The value of collateral disclosed shall be limited to the value of the exposure at the level of an individual exposure
f	Part of exposures covered by Other physical collateral (%)
	Percentage of exposures secured by other physical collateral including leasing of those collaterals in accordance with Article 199 (6) and (8) CRR over total exposures as disclosed in column a.
$\partial_{\mathbf{y}}$	Other physical collateral shall be included in the numerator where they meet all the eligibility requirements laid down in Article 210 CRR. The value of collateral disclosed shall be limited to the value of the exposure at the level of an individual exposure
g	FCP - Part of exposures covered by Other funded credit protection (%)
	Percentage of exposures secured by other FCP over total exposures as disclosed in column a. The values disclosed in this column shall be the sum of the values disclosed in columns h, i and j
h	FCP - Part of exposures covered by cash on deposit (%):
	Percentage of exposures secured by cash or cash assimilated instruments held by third party institution over total exposures as disclosed in column a.

	In accordance with point (a) of Article 200 CRR: other funded credit protection includes ash on deposit with, or cash assimilated instruments held by third party institution in a non-custodial arrangement and pledged to the lending institution. The value of collateral disclosed shall be limited to the value of the exposure at the level of an individual exposure.
i	FCP - Part of exposures covered by life insurance policies (%):
	Percentage of exposures secured by life insurance policies over total exposures as disclosed in column a.
	In accordance with point (b) of Article 200 CRR, other funded credit protection includes life insurance policies pledged to the lending institution. The value of collateral disclosed shall be limited to the value of the exposure at the level of an individual exposure.
j	FCP - Part of exposures covered by instrument held by a third party (%):
	Percentage of exposures secured by collateral in the form of instruments held by a third party over total exposures as disclosed in column a.
	Part of exposures covered by instruments issued by a third party over total exposures. In accordance with point (c) of Article 200 CRR, this includes instruments issued by a third party institution which will be repurchased by that institution on request. The value of collateral disclosed shall be limited to the value of the exposure at the level of an individual exposure. The percentage shall exclude those exposures covered by instruments held by a third party where, following Article 232 (4) CRR institutions treat instruments repurchased on request that are eligible under point (c) of Article 200 CRR as a guarantee by the issuing institution.
k	UFCP - Part of exposures covered by guarantees (%):
	Percentage of exposures secured by guarantees over total exposures as disclosed in column a.
	The guarantees shall meet the requirement laid down in Articles 213, 214, 215 and, when relevant, 217 and 232(4) CRR. The value of guarantees disclosed shall be limited to the value of the exposure at the level of an individual exposure.
	UFCP - Part of exposures covered by credit derivatives (%):
$\langle O \rangle$	Percentage of exposures secured by credit derivatives over total exposures as disclosed in column a.
	Credit derivatives include the following:
•	- credit default swaps
	- total returns swaps
	- credit linked notes to the extent of their cash funding.
	These instruments shall meet the requirement laid down in Articles 204(1) and (2), 213, 216, and when relevant, 217 CRR. The value of credit derivatives disclosed shall be limited to the value of the exposure at the level of an individual exposure.

m	RWEA without substitution effects (reduction effects only):
	The risk-weighted exposure amounts calculated in accordance with points (a) and (f) of Article 92(3) CRR, including any reduction of RWEA due to the existence of funded or unfunded credit protection, including where the PD and LGD or the risk weight is substituted due to the existence of unfunded credit protection. Nevertheless, in all cases, including where substitution approach is used, exposures are disclosed in the original exposure classes applicable to the obligor.
n	RWEA with substitution effects (both reduction and substitution effects): The risk-weighted exposure amounts calculated in accordance with Article 153 to 157 CRR, including any reduction of RWEA due to the existence of funded or unfunded credit protection. Where the PD and LGD or the risk weight is substituted due to the existence of unfunded credit protection, exposures are disclosed in the exposure class applicable to the protection provider.

Row	Legal references and instructions
reference	Explanation
	This disclosure shall be made separately for exposures under A-IRB approach, F-IRB approach as well as specialised lending under the slotting approach and equity exposures.
	Institutions shall include the information on credit risk mitigation techniques
A-IRB	included in this template by exposure class, in accordance with the
	exposure classes listed in Article 147 CRR with further breakdown for
	exposure class 'Corporates' (point (c) of Article 147(2) CRR) in accordance
	with the below :
	a. exposures to corporates – SME, in accordance with internal classification of exposures to corporates based on the risk management policies;
	b. exposures to corporates – specialised lending, in accordance with Article 147(8) CRR excluding specialised lending exposures under the slotting approach;
	c. exposures to corporates – other.
	Institutions shall disclose further breakdown for exposure class "Retail" (point (d) of Article 147(2) and Article 147(5) CRR) Institutions shall disclose further breakdown for:
	a. Retail exposures – SME secured by immovable property collateral (in conjunction with Article 154(2) and (3) CRR);
	b. Retail exposures – non-SME secured by immovable property collateral (in conjunction with Article 154(3) CRR);

ſ	
	c. Retail exposures – Qualifying revolving (in conjunction with Article 154(4) CRR);
	d. Retail exposures – SME other;
	e. Retail exposures – non-SME other.
F-IRB	Institutions shall include the information on credit risk mitigation techniques included in this template by exposure class, in accordance with the exposure classes listed in Article 147 CRR with further breakdown for exposure class 'Corporates' (point (c) of Article 147(2) CRR) in accordance with the below : a. exposures to corporates – SME, in accordance with internal classification of exposures to corporates based on the risk management policies; b. exposures to corporates – specialised lending, in accordance with Article 147(8) CRR excluding specialised lending exposures under the slotting approach; c. exposures to corporates – other.

Template UK CR8 – RWEA flow statements of credit risk exposures under the IRB approach. Fixed template.

- 8. Institutions shall apply the instructions provided below in this Annex in order to complete template UK CR8 as presented in Annex XXI to this Implementing Regulation, in application point (h) of Article 438 CRR. The information disclosed in this template excludes counterparty credit risk (CCR) exposures (Chapter 6 of Title II of Part Three CRR).
- 9. Institutions shall disclose the flows of RWEA as the changes between the risk-weighted exposure amounts at the end of the disclosure reference date (as specified below in row 9) and the risk-weighted exposure amounts at end of the prior disclosure reference date (as specified below in row 1; in the case of quarterly disclosures, end-of-quarter prior to the quarter of the disclosure reference date). Institutions may complement their Pillar 3 disclosures by disclosing the same information for the three previous quarters.
- 10. Institutions shall supplement the template with a narrative commentary to explain figures diclosed in row 8 of the template, i.e. any other drivers that contribute significantly to RWEA variations.

Column	Legal references and instructions
reference	Explanation
а	Total risk weighted exposure amount for credit risk calculated under the IRB Approach, taking into account supporting factors in accordance with Articles 501 and 501a CRR.

Row	Legal references and instructions
number	Explanation
1	Risk weighted exposure amount at the end of the previous disclosure period
2	Asset size (+/-):
	Change in the risk weighted exposure amount between the end of the previous disclosure period and the end of the current disclosure period, due to asset size, i.e. organic changes in book size and composition (including the origination of new businesses and maturing loans) but excluding changes in book size due to acquisitions and disposal of entities. Increases in risk weighted exposure amounts shall be disclosed as a positive amount and decreases in risk weighted exposure amounts shall be disclosed as a negative amount.
3	Asset quality (+/-):
	Change in the risk weighted exposure amount between the end of the previous disclosure period and the end of the current disclosure period, due to asset quality, i.e. changes in the assessed quality of the institution's assets due to changes in borrower risk, such as rating grade migration or similar effects.
	Increases in risk weighted exposure amounts shall be disclosed as a positive amount and decreases in risk weighted exposure amounts shall be disclosed as a negative amount.
4	Model updates (+/-): Change in the risk weighted exposure amount between the end of the previous disclosure period and the end of the current disclosure period, due to model updates, i.e. changes due to implementation of new models, changes in the models, changes in model scope, or any other changes intended to address model weaknesses.
	Increases in risk weighted exposure amounts shall be disclosed as a positive amount and decreases in risk weighted exposure amounts shall be disclosed as a negative amount.
5	Methodology and policy (+/-):
	Change in the risk weighted exposure amount between the end of the previous disclosure period and the end of the current disclosure period, due to methodology and policy i.e. changes due to methodological changes in calculations driven by regulatory policy changes, including both revisions to existing regulations and new regulations, excluding changes in models, which are included in row 4.
	Increases in risk weighted exposure amounts shall be disclosed as a positive amount and decreases in risk weighted exposure amounts shall be disclosed as a negative amount.

6	Acquisitions and disposals (+/-):
	Change in the risk weighted exposure amount between the end of the previous disclosure period and the end of the current disclosure period, due to acquisitions and disposals, i.e. changes in book sizes due to acquisitions and/or disposals.
	Increases in risk weighted exposure amounts shall be disclosed as a positive amount and decreases in risk weighted exposure amounts shall be disclosed as a negative amount.
7	Foreign exchange movements (+/-):
	Change in the risk weighted exposure amount between the end of the previous disclosure period and the end of the current disclosure period, due to foreign exchange movements, i.e. changes arising from foreign currency translation movements.
	Increases in risk weighted exposure amounts shall be disclosed as a positive amount and decreases in risk weighted exposure amounts shall be disclosed as a negative amount.
8	Other (+/-):
	Change in the risk weighted exposure amount between the end of the previous disclosure period and the end of the current disclosure period, due to other drivers.
	This category shall be used to capture changes that cannot be attributed to any other category. Institutions shall further describe any other material drivers of risk weighted amounts movements over the disclosure period included in this row in the accompanying narrative for this template.
	Increases in risk weighted exposure amounts shall be disclosed as a positive amount and decreases in risk weighted exposure amounts shall be disclosed as a negative amount.
9	Risk weighted exposure amount at the end of the disclosure period

Template UK CR9 – IRB approach – Back-testing of PD per exposure class. Fixed template.

- 11. Institutions shall apply the instructions provided below in this Annex in order to complete template UK CR9 as presented in Annex XXI to this Implementing Regulation, in application of point (h) of Article 452 CRR. When an institution makes use of both FIRB approach and AIRB approach, it shall disclose two separate sets of templates, one for FIRB and one for AIRB, with one template per exposure class in each set.
- 12. Institution shall consider the models used within each exposure class and they shall explain the percentage of risk weighted exposure amount of the relevant exposure class covered by the models for which back-testing results are disclosed here.

- 13. Institutions shall explain, in the accompanying narrative, the total number of obligors with short-term contracts at the disclosure date, indicating which exposure classes feature a larger number short-term contract obligors. Short-term contracts refer to contracts whose residual maturity is less than 12 months. Institutions shall also explain if there are overlapping windows in the calculation of long run average PD rates.
- 14. This template excludes counterparty credit risk (CCR) exposures (Chapter 6 of Title II of Part Three CRR), securitisation posistions, other non credit-obligation assetsand equity eposures..

Column	Legal references and instructions
reference	Explanation
a (A-IRB)	Exposure classes:
	For each exposure class listed in Article 147(2) CRR, institutions shall disclose a separate template, with a further breakdown for the following exposure classes:
	- within the exposure class 'exposures to corporates' (point (c) of Article 147(2) CRR), breakdown into:
	a. exposures to corporates – SME, in accordance with internal classification of exposures to corporates based on the risk management policies;
	b. exposures to corporates – specialised lending, in accordance with Article 147(8) CRR;
	c. exposures to corporates – other.
	- within the exposure class "retail exposures" (point (d) of Article 147(2) and Article 147(5) CRR), breakdown into:
	a. Retail exposures – SME secured by immovable property collateral (point (d) of Article 147 (2) CRR in conjunction with Article 154(2) and (3) CRR);
	b. Retail exposures – non-SME secured by immovable property collateral (point (d) of Article 147 (2) CRR in conjunction with Article 154(3) CRR);
50	c. Retail exposures – Qualifying revolving (point (d) of Article 147 (2) CRR in conjunction with Article 154(4) CRR);
	d. Retail exposures – SME other;
	e. Retail exposures – non-SME other.
a (F-IRB)	Exposure classes
	For each exposure class listed in Article 147(2) CRR, institutions shall disclose a separate template, with a further breakdown for the following exposure classes:

	- within the exposure class 'exposures to corporates' (point (c) of Article 147(2) CRR), breakdown into:
	a. exposures to corporates – SME, in accordance with internal classification of exposures to corporates based on the risk management policies;
	b. exposures to corporates – specialised lending, in accordance with Article 147(8) CRR;
	c. exposures to corporates – other.
b	PD range:
	This is a fixed PD range which shall not be altered.
	Exposures shall be allocated to an appropriate bucket of the fixed PD range based on the PD estimated at the beginning of the disclosure period for each obligor assigned to this exposure class (without considering any substitution effects due to CRM). All defaulted exposures shall be included in the bucket representing PD of 100%.
c, d	Number of obligors at the end of the previous year:
	Two sets of information are required:
	(i) the number of obligors at the end of the previous year (column C);
	Number of obligors at the end of the year subject to disclosure. In both cases all obligors carrying a credit obligation at the relevant point in time shall be included.
	Institutions shall disclose the number of legal entities or obligors allocated to each bucket of the fixed PD range by the end of the previous year, which were separately rated, regardless of the number of different loans or exposures granted.
Ś	Joint obligors shall be treated the same as for the purpose of PD calibration. Where different exposures to the same obligor are separately rated, they shall be counted separately. Such situation may take place within the retail exposure class, where the definition of default is applied at the level of individual credit facility in accordance with the last sentence of Article 178(1) CRR. Such situation can also take place if separate exposures to the same obligor are assigned to different obligor grades in accordance with second sentence of point (e) of Article 172(1) CRR in other exposure classes.
	(ii) of which number of obligors that defaulted during the year preceding the disclosure date (Column d): this is a subset of column C and represents the number of obligors which defaulted during the year. Defaults shall be determined in accordance with Article 178 CRR. Each defaulted obligor shall be counted only

	once in the numerator and denominator of the one-year default rate calculation, even if the obligor defaulted more than once during the relevant one-year period.
е	Observed average default rate:
	Arithmetic average of one-year default rates as defined to in point (78) of Article $4(1)$ CRR, observed within the available dataset.
	When calculating one-year default rates institutions shall ensure both of the following:
	(a) that the denominator consists of the number of non-defaulted obligors with any credit obligation observed at the beginning of the one-year observation period (beginning of the previous disclosure period, i.e. beginning of the year prior to the disclosure reference date); in this context a credit obligation refers to both of the following: (i) any on-balance sheet item, including any amount of principal, interest and fees; (ii) any off-balance sheet items, including guarantees issued by the institution as a guarantor.
	(b) that the numerator includes all those obligors considered in the denominator that had at least one default event during the one-year observation period (year prior to the disclosure reference date).
	Institutions shall choose an appropriate approach between an approach based on overlapping or one-year time windows an approach based on non-overlapping one-year time windows, to calculate the observed average default rate.
f	Exposure weighted average PD (%):
	Exposure weighted average PD (%) as disclosed in column f of template UK CR6.
	For all exposures included in each bucket of the fixed PD range, the average PD estimate of each obligor, weighted by the exposure value post-CCF and CRM as disclosed in column e of template UK CR6.
g	Average PD at the disclosure date (%):
$O_{\mathbf{y}}$	Arithmetic average of PD at the beginning of the disclosure period of the obligors that fall within the bucket of the fixed PD range and counted in d (average weighted by the number of obligors).
h	Average historical annual default rate (%):
	The simple average of the annual default rate of the five most recent years (obligors at the beginning of each year that are defaulted during that year/total number of obligors at the beginning of the year) is a minimum. The institution may use a longer historical period that is consistent with the institution's actual risk management practices. If the institution uses a longer historical period they should explain and clarify this in the accompanying narrative to the template.

Template UK CR9.1 – IRB approach– Back-testing of PD per exposure class (only for PD estimates in accordance with point (f) of Article 180(1) CRR

- 15. In addition to template UK CR9, institutions shall disclose information included in template UK CR9.1 in case that they apply point (f) of Article 180(1) CRR for PD estimation and only for PD estimates in accordance with the same Article. Instructions are the same than for template UK CR9, with the following exceptions:
 - a. Under column b institutions shall disclose the PD ranges in accordance with their internal grades that they map to the scale used by the external ECAI, instead of a fixed external PD range.
 - b. Institutions shall disclose one column for each ECAI considered following point (f) of Article 180(1) CRR. Institutions shall include in these columns the external rating to which their internal PD ranges are mapped.