

---

# HOW TO UNDERSTAND THE HARMONISED ANNEX?

May 2020



# DISCLAIMER AND LIST OF ABBREVIATIONS

## IMPORTANT NOTICE:

The information and guidance provided in this document are intended to contribute to a better understanding of the Harmonised Annex. Certain unessential aspects of the calculation methodology adopted and the mathematical operations performed in this document may slightly differ from those adopted and performed in the corresponding steps under the SRB Calculation Tool. The figures provided in this document are for illustrative purpose only and do not correspond to the relevant numbers for the 2020 contributions.

This document is intended purely as a guidance tool – only the text of the applicable EU legislation has legal force and is liable to create rights and obligations for individuals. This guidance is not intended to be relied upon for purposes other than description, nor should be regarded as creating any enforceable right or expectation. The views expressed in this guidance shall not be construed as binding the Single Resolution Board and are without prejudice to the position that it might take, or has previously taken, in other contexts. Neither the Single Resolution Board nor any person acting on behalf of the Single Resolution Board may be held accountable for the use which might be made of the information included therein. As this guidance reflects the state of the art at the time of its drafting, it should be regarded as a 'living tool' and its content may be subject to modifications without notice.

## List of abbreviations:

- CIR shall be read as Council Implementing Regulation (EU) 2015/81.
- DR shall be read as Commission Delegated Regulation (EU) 2015/63.
- MD stands for 2020 Master Decision and refers to the Decision of the Single Resolution Board of 15 April 2020 on the calculation of the 2020 ex-ante contributions to the Single Resolution Fund (SRB/ES/2020/24).

## INTRODUCTION: TYPES OF HARMONISED ANNEXES (1/2)

### A. Lump sum – small institutions paying a lump-sum contribution

<b>2020 SRF Data Reporting Form</b>	<i>The contributions of these institutions are calculated in accordance with Article 10 of Commission Delegated Regulation 2015/63 (“DR”). In case an institution qualifies for lump-sum contribution, the field 2B2 in the 2020 SRF Data Reporting Form is prefilled with “Yes”. These institutions need to fill in Tab 1 “General information” and sections A and B of Tab 2 “Basic annual contribution” .</i>
<b>2020 Master Decision</b>	<i>Please refer to section 5 “Calculation methodology”, sub-section 5.3 “Lump-sum contributions for small institutions” in the 2020 Master Decision (“MD”).</i>

### B. Article 10(7) – institutions that have opted for the alternative calculation under Art. 10(7) DR

<b>2020 SRF Data Reporting Form</b>	<i>When an institution qualifies for lump-sum contribution, in accordance with Article 10(7) it can also opt for the calculation of an alternative contribution amount. In such case, institution needs to fill in “Yes” in field 2B3 in the 2020 SRF Data Reporting Form, and provide all necessary additional information in section C of Tab 2 “Basic annual contribution” and Tab 3 “Deductions”.</i>
<b>2020 Master Decision</b>	<i>Please refer to section 5 “Calculation methodology”, sub-section 5.3 “Lump-sum contributions for small institutions” in the MD.</i>

# INTRODUCTION: TYPES OF HARMONISED ANNEXES (2/2)

## C. Basic - Mortgage credit institutions financed by covered bonds and investment firms authorized to carry out only limited services and activities

<b>2020 SRF Data Reporting Form</b>	<p><i>When an institution is a mortgage credit institution financed by covered bonds<sup>1</sup> or an investment firm authorized to carry out only limited services and activities<sup>2</sup> fields 1C10 or 1C8, respectively, are filled with “Yes” in the 2020 SRF Data Reporting Form. In case their size does not allow them to qualify for lump-sum contribution, a special calculation method is applied:</i></p> <ul style="list-style-type: none"><li><i>For mortgage credit institutions financed by covered bonds: 50% is applied on their Basic Annual Contribution</i></li><li><i>For investment firm authorized to carry out only limited services and activities: the contribution amount is equal to their Basic Annual Contribution</i></li></ul> <p><i>These institutions need to fill in only Tab 1 “General information”, Tab 2 “Basic annual contribution” and Tab 3 “Deductions”.</i></p>
<b>2020 Master Decision</b>	<ul style="list-style-type: none"><li><i>For mortgage credit institutions financed by covered bonds: please refer to section 5 “Calculation methodology”, sub-section 5.6 “Mortgage credit institutions financed by covered bonds which, according to national law, are not allowed to receive deposits” in the MD.</i></li><li><i>For investment firms authorized to carry out only limited services and activities: please refer to section 6 “Investment firms with limited services and activities” in the MD.</i></li></ul>

## D. Risk Adjusted and Article 8(5)– institutions paying a contribution that has been calculated applying a risk adjustment factor

<b>2020 SRF Data Reporting Form</b>	<p><i>These institutions should fill in all Tabs in the 2020 SRF Data Reporting Form.</i></p>
<b>2020 Master Decision</b>	<p><i>Please refer to section 5 “Calculation methodology”, sub-section 5.2 “Calculation of the risk-adjusted contributions”. For institutions whose total assets are above EUR 1 bn, but equal to, or less than, EUR 3 bn, please refer to sub-section 5.5 “Partial lump-sum contributions” in the MD. For small institutions that have a risk profile that is disproportionate to their small size, please refer to sub-section 5.4 “Small institutions that have a risk profile that is disproportionate to their small size” in the MD.</i></p>

<sup>1</sup> mortgage credit institution financed by covered bonds' means institutions referred to in Article 45(3) of Directive 2014/59/EU.

<sup>2</sup> investment firm authorized to carry out only limited services and activities' means investment firms as defined in point (2) of Article 4(1) of Regulation (EU) No 575/2013 that is subject to the initial capital requirement laid down in Article 28(2) of Directive 2013/36/EU, which fall within the definition of Article 96(1)(a) or (b) of Regulation (EU) No 575/2013 or which carry out activity 8 of Annex I Section A of Directive 2004/39/EC but which do not carry out activities 3 or 6 of Annex I Section A of that Directive. This investment firm shall also be covered by the consolidated supervision of the parent undertaking carried out by the ECB in accordance with Article 4(1)(g) of Regulation (EU) No 1024/2013.

# A. LUMP-SUM

## Example A.1: 2020 ex-ante contribution calculated for small institutions paying a lump-sum contribution

### Determination of size of the institution (field codes refer to the 2020 SRF reporting form)

Total liabilities	2A1	310,000,000.0000
- Own funds	2A2	50,000,000.0000
- Covered deposits	2A3	200,000,000.0000
<b>Total</b>		<b>60,000,000.0000</b>

### When is an institution eligible for lump-sum?

- Total Assets < **€1bn**; and
- Base (total liabilities – own funds – covered deposits) of an institution ≤ **€300m**

### Calculation of final amount to be paid

Gross contribution

2,000.00

### How is the gross contribution determined?

Base of institution	Gross contribution
base ≤ €50m	1,000 €
€50m < base ≤ €100m	2,000 €
€100m < base ≤ €150m	7,000 €
€150m < base ≤ €200m	15,000 €
€200m < base ≤ €250m	26,000 €
€250m < base ≤ €300m	50,000 €

### Note:

Since certain investment firms, which are authorized to carry out only limited services and activities, are not subject to, or may be exempted from, certain capital and liquidity requirements, the Commission Delegated Regulation (EU) 2015/63 does not apply to them. In order to be able to, nevertheless, calculate the required contribution for these institutions, the SRB defined a risk adjustment methodology. For those investment firms, whose total liabilities less own funds less covered deposits are less than or equal to EUR 300,000,000, the lump-sum methodology of Article 10 of the Commission Delegated Regulation (EU) 2015/63 is used, without, however, applying the maximum amount (EUR 1,000,000,000) on the total assets. For other investment firms, the contribution amount is equal to the Basic Annual Contribution (see slide 7).

## B. ARTICLE 10(7)\*

### CALCULATION DETAILS

(Institutions that have opted for the alternative calculation under Art. 10(7) DR)

Ex-ante contribution to the Single Resolution Fund for the 2020 contribution period

#### Example B.1: 2020 ex-ante contribution calculated for lump-sum institution that opted for the alternative calculation

##### Calculation of gross contribution

	SRMR (80%)	BRRD (20%)
<b>STEP 1</b> <i>Lump sum amount</i>	50,000.00	50,000.00
<b>STEP 2</b> Relevant target (as above)	7,100,000,000.0000	300,000,000.0000
BAC numerator (as above)	252,000,000.0000	252,000,000.0000
BAC denominator (as above)	37,000,000,000,000.0000	200,000,000,000.0000
<i>Outcome of alternative calculation</i>	48,356.76	378,000.00
<b>STEP 3</b> <i>Lower of the two amounts</i>	48,356.76	50,000.00
<b>STEP 4</b> <b>2020 contribution</b>	<b>48,685.41</b>	

##### How is the 2020 contribution calculated?

For lump-sum institutions that have opted for an alternative calculation, the 2020 ex-ante contribution is determined by comparing the lump sum amount to the alternative calculation (sub-section 5.3 paragraph (56) of MD).

**STEP 1:** determine the **lump-sum amount** based on institution's base (i.e. total liabilities – own funds – covered deposits)

**STEP 2:** calculate the **alternative amount** in SRMR and BRRD:

$$target \times \frac{B_n}{\sum_{p=1}^N B_p}$$

Ex:

- In SRMR:  $7,100,000,000 \times 252,000,000 / 37,000,000,000,000 = \mathbf{48,356.76}$
- In BRRD:  $300,000,000 \times 252,000,000 / 200,000,000,000 = \mathbf{378,000.00}$

**STEP 3:** choose the **lower of the two amounts** (i.e. lump sum or alternative) in SRMR and BRRD

Ex:

- In SRMR:  $\min[50,000.00 ; 48,356.76] \rightarrow 48,356.76$
- In BRRD:  $\min[50,000.00 ; 378,000.00] \rightarrow 50,000.00$

**STEP 4:** determine the **2020 contribution** by applying the relative weights: 80% - SRMR and 20% - BRRD

$$\text{Ex: } 0.80 \times 48,356.76 + 0.20 \times 50,000 = \mathbf{48,685.41}$$

##### Legend:

- $B_n$  is the BAC numerator
- $\sum_{p=1}^N B_p$  is the BAC denominator
- target* is the original target excluding the lump-sum contributions

\* Institutions that have opted for the alternative calculation under Article 10(7) DR.

# C. BASIC

**CALCULATION DETAILS**  
 (Investment firms with limited services and activities)  
 Ex-ante contribution to the Single Resolution Fund for the 2020 contribution period

**CALCULATION DETAILS**  
 (Mortgage credit institution financed by covered bonds)  
 Ex-ante contribution to the Single Resolution Fund for the 2020 contribution period

## Example C.1: 2020 ex-ante contribution calculated for investment firms with limited services and activities

### Calculation of gross contribution

**STEP 1** Relevant target (as above)  
 BAC numerator (as above)  
 BAC denominator (as above)  
 Outcome calculation

	SRMR (80%)	BRRD (20%)
Relevant target (as above)	6,100,000,000.0000	200,000,000.0000
BAC numerator (as above)	750,000,000.0000	750,000,000.0000
BAC denominator (as above)	15,000,000,000,000.0000	350,000,000,000.0000
Outcome calculation	305,000.00	428,571.43
<b>2020 contribution</b>	<b>329,714.29</b>	

**STEP 2** 2020 contribution

**STEP 2:** determine the 2020 contribution by applying the relative weights: 80% - SRMR and 20% - BRRD

Ex:  $0.80 \times 305,000 + 0.20 \times 428,571.43 = 329,714.29$

### How is the 2020 contribution calculated?

For investment firms with limited services and activities that do not qualify for a lump sum, the contribution is equal to their Basic Annual Contribution (section 6 paragraph (63) (b) of MD):

$$target \times \frac{B_n}{\sum_{p=1}^N B_p}$$

**STEP 1:** calculate the basic annual contribution in SRMR and BRRD:

Ex:

- In SRMR:  $6,100,000,000 \times 750,000,000 / 15,000,000,000,000 = 305,000.00$
- In BRRD:  $200,000,000 \times 750,000,000 / 350,000,000,000 = 428,571.43$

## Example C.2: 2020 ex-ante contribution calculated for mortgage credit institutions financed by covered bonds

### Calculation of gross contribution

**STEP 1** Relevant target (as above)  
 BAC numerator (as above)  
 BAC denominator (as above)  
 Outcome calculation

	SRMR (80%)	BRRD (20%)
Relevant target (as above)	6,100,000,000.0000	200,000,000.0000
BAC numerator (as above)	750,000,000.0000	750,000,000.0000
BAC denominator (as above)	15,000,000,000,000.0000	350,000,000,000.0000
Outcome calculation	152,500.00	214,285.71

**STEP 2** 2020 contribution

**STEP 2:** determine the 2020 contribution by applying the relative weights: 80% - SRM and 20% - BRRD

Ex:  $0.80 \times 152,500 + 0.20 \times 214,285.71 = 164,857.14$

### How is the 2020 contribution calculated?

For mortgage credit institutions financed by covered bonds that do not qualify for a lump sum, the contribution is calculated using only 50% of their Basic Annual Contribution (sub-section 5.6 of MD):

$$target \times \frac{B_n}{\sum_{p=1}^N B_p} \times \frac{1}{2}$$

**STEP 1:** calculate the basic annual contribution in SRMR and BRRD:

Ex:

- In SRM:  $6,100,000,000 \times 750,000,000 / 15,000,000,000,000 \times \frac{1}{2} = 152,500.00$
- In BRRD:  $200,000,000 \times 750,000,000 / 350,000,000,000 \times \frac{1}{2} = 214,285.71$

Repeat STEPS 1 and 2 as for investment firms with limited services and activities, but note that for mortgage credit institutions financed by covered bonds, in order to calculate the "Outcome calculation" 50% of the Basic Annual Contribution is taken into account.

# D. RISK ADJUSTED AND ARTICLE 8(5)\*

CALCULATION DETAILS (Article 8.5)

Ex-ante contribution to the Single Resolution Fund for the 2020 contribution period

CALCULATION DETAILS (Risk Adjusted)

Ex-ante contribution to the Single Resolution Fund for the 2020 contribution period

## Example D.1: Calculation of the Risk Adjustment Factor (1/2)

Risk-adjustment factor (field codes refer to the 2020 SRF reporting template)

	Weight	STEP 1		Sign (DR, Annex I, Step 4.1)	STEP 2	
		Number of bins (DR, Annex I, Step 2)	Bin number (DR, Annex I, Step 2)		Score of bin (TRI) (DR, Annex I, Step 4.2)	
<b>PILLAR I: Risk exposure</b> <b>50.00%</b>						
Leverage ratio	33.33%	19	1	-		1.0000
CET1 ratio (CET1 capital / Total Risk Exposure)	33.33%	20	13	-		631.9474
Total Risk Exposure / Total Assets	33.33%	21	5	+		800.2000
<b>PILLAR II: Stability and variety of sources of funding</b> <b>20.00%</b>						
Liquidity Coverage Ratio	100%	21	15	-		700.3000
<b>PILLAR III: Importance of an institution to the stability of the financial system or economy</b> <b>10.00%</b>						
Share of interbank loans and deposits in the EU	100%	20	4	+		842.2632
<b>PILLAR IV: Additional risk indicators</b> <b>20.00%</b>						
Risk weighted assets for market risk divided by Total Assets	5%	21	1	+		1000.0000
Risk weighted assets for market risk divided by CET1	5%	20	1	+		1000.0000
Risk weighted assets for market risk divided by total risk exposure	5%	19	1	+		1000.0000
Off-balance sheet nominal amount divided by Total Assets	5%	21	6	+		750.2500
Off-balance sheet nominal amount divided by CET1	5%	19	7	+		667.0000
Off-balance sheet nominal amount divided by total risk exposure	5%	19	19	+		1.0000
Derivatives exposure divided by Total Assets	5%	21	1	+		1000.0000
Derivatives exposure divided by CET1	5%	19	14	+		278.5000
Derivatives exposure divided by total risk exposure	5%	19	14	+		278.5000
Membership in an Institutional Protection Scheme	1C4	Yes	45%			
IPS bin		2.0000				
Multiplier factor for the IPS indicator		777.8000				
Extent of previous extraordinary public financial support	4D17	No	10%	+		1000.0000
<b>Calculation of SRM risk-adjustment factor</b>						
Pillar I - Composite Indicator (DR, Annex I, Step 5)		477.6680				
Pillar II - Composite Indicator (DR, Annex I, Step 5)		700.3000				
Pillar III - Composite Indicator (DR, Annex I, Step 5)		842.2632				
Pillar IV - Composite Indicator (DR, Annex I, Step 5)		748.7725				
Composite Indicator (DR, Annex I, Step 5)		597.0829			Minimum FCI	66.397703393189
Final Composite Indicator (FCI) (DR, Annex I, Step 5)		402.9171			Maximum FCI	961.431578011444
Risk Adjustment Factor (DR, Annex I, Step 6)		<b>1.063189532847</b>				

### How is the Risk Adjustment Factor calculated?

For risk-adjusted institutions, the basic annual contributions of the institutions are further adjusted in proportion to their risk profile (subsection 5.2 of MD).

**STEP 1:** following the “Discretization of the Indicators” in Annex I Step 2 of the DR, a number of bins per indicator is determined and institutions are assigned to one of these bins according to the value taken by their risk indicator. Institutions with the lowest value of the raw indicators are assigned to the first bins and institutions with the highest value to the last bin.

Ex. In Pillar I, indicator “Leverage ratio”, there are 19 bins. Based on the value of the leverage ratio raw indicator, the institution was placed in bin 1 (hence, it has the lowest value of the raw indicators).

**STEP 2:** rescaling of indicators (including the assigned sign) is performed by applying the following formulas:

$$\begin{cases} (1000 - 1) \cdot \frac{I_{k,n} - \min_n I_{k,n}}{\max_n I_{k,n} - \min_n I_{k,n}} + 1 & \text{if sign} = '-' \\ 1001 - ((1000 - 1) \cdot \frac{I_{k,n} - \min_n I_{k,n}}{\max_n I_{k,n} - \min_n I_{k,n}} + 1) & \text{if sign} = '+' \end{cases}$$

Ex: In Pillar I:

- “CET1 ratio” with negative sign:  $(1000 - 1) \times (13-1)/(20-1) + 1 = 999 \times 12/19 + 1 = 631.9474$
- “TRE/TA” with positive sign:  $1001 - ((1000 - 1) \times (5-1)/(21-1) + 1) = 1001 - (999 \times 4/20 + 1) = 1001 - 200.8000 = 800.2000$

\* Mid-size institutions as defined in Article 8(5) of CIR.

**Note:** The steps described in these slides do not correspond to steps in Annex I of the DR.

# D. RISK ADJUSTED AND ARTICLE 8(5)

## Example D.1: Calculation of the Risk Adjustment Factor (2/2)

Risk-adjustment factor (field codes refer to the 2020 SRF reporting template)

	Weight	STEP 1		STEP 2		Score of bin (TRI) (DR, Annex I, Step 4.2)
		Number of bins (DR, Annex I, Step 2)	Bin number (DR, Annex I, Step 2)	Sign (DR, Annex I, Step 4.1)		
<b>PILLAR I: Risk exposure</b>	<b>50.00%</b>					
Leverage ratio	33.33%	19	1	-		1.0000
CET1 ratio (CET1 capital / Total Risk Exposure)	33.33%	20	13	-		631.9474
Total Risk Exposure / Total Assets	33.33%	21	5	+		800.2000
<b>PILLAR II: Stability and variety of sources of funding</b>	<b>20.00%</b>					
Liquidity Coverage Ratio	100%	21	15	-		700.3000
<b>PILLAR III: Importance of an institution to the stability of the financial system or economy</b>	<b>10.00%</b>					
Share of interbank loans and deposits in the EU	100%	20	4	+		842.2632
<b>PILLAR IV: Additional risk indicators</b>	<b>20.00%</b>					
Risk weighted assets for market risk divided by Total Assets	5%	21	1	+		1000.0000
Risk weighted assets for market risk divided by CET1	5%	20	1	+		1000.0000
Risk weighted assets for market risk divided by total risk exposure	5%	19	1	+		1000.0000
Off-balance sheet nominal amount divided by Total Assets	5%	21	6	+		750.2500
Off-balance sheet nominal amount divided by CET1	5%	19	7	+		667.0000
Off-balance sheet nominal amount divided by total risk exposure	5%	19	19	+		1.0000
Derivatives exposure divided by Total Assets	5%	21	1	+		1000.0000
Derivatives exposure divided by CET1	5%	19	14	+		278.5000
Derivatives exposure divided by total risk exposure	5%	19	14	+		278.5000
Membership in an Institutional Protection Scheme	1C4	Yes	45%			777.8000
IPS bin		2.0000				
Multiplier factor for the IPS indicator		777.8000				
Extent of previous extraordinary public financial support	4D17	No	10%	+		1000.0000
<b>Calculation of SRM risk-adjustment factor</b>						
<b>STEP 3</b> Pillar I - Composite Indicator (DR, Annex I, Step 5)						477.6680
Pillar II - Composite Indicator (DR, Annex I, Step 5)						700.3000
Pillar III - Composite Indicator (DR, Annex I, Step 5)						842.2632
Pillar IV - Composite Indicator (DR, Annex I, Step 5)						748.7725
<b>STEP 4</b> Composite Indicator (DR, Annex I, Step 5)						597.0829
<b>STEP 5</b> Final Composite Indicator (FCI) (DR, Annex I, Step 5)						402.9171
<b>STEP 6</b> Risk Adjustment Factor (DR, Annex I, Step 6)						1.063189532847
				Minimum FCI		66.397703393189
				Maximum FCI		961.431578011444

### How is the Risk Adjustment Factor calculated?

**STEP 3:** aggregate the indicators within each pillar through a weighted arithmetic average to calculate the Composite Indicator.

Ex: Pillar I Composite Indicator is calculated as follows:  
 $(1/3 \times 1) + (1/3 \times 631.9) + (1/3 \times 800.2) = 477.6680$

**STEP 4:** compute the Composite Indicator by aggregating the pillars through a weighted geometric average (weight of Pillar I - 5/10, Pillar II - 2/10, Pillar III - 1/10 and Pillar IV - 2/10).

Ex:  $477.6680^{(5/10)} \times 700.3000^{(2/10)} \times 842.2632^{(1/10)} \times 748.7725^{(2/10)} = 597.0829$

**STEP 5:** define the Final Composite Indicator as  $FCI = 1000 - CI$  so that institutions with higher risk profiles get a higher FCI (i.e. closer to 1000).

Ex:  $1000 - 597.0829 = 402.9171$

**STEP 6:** rescale the Final Composite Indicator over the range [0.8;1.5] by applying the following formula:

$$\tilde{R}_n = (1.5 - 0.8) \cdot \frac{FCI_n - \min FCI_n}{\max_k FCI_k - \min FCI_n} + 0.8$$

Ex:  $(1.5 - 0.8) \times (402.9171 - 66.3977) / (961.4316 - 66.3977) + 0.8 = 0.7 \times 336.5194 / 895.0339 + 0.8 = 1.063189532847$

# D. RISK ADJUSTED

## Example D.2: 2020 ex-ante contribution calculated for risk-adjusted institution that does not qualify for Art. 8(5) of CIR

### Calculation of gross contribution (DR, Annex I, Step 6)

- STEP 1**
- (a) Relevant target (as above)
  - (b) BAC numerator (  $B_n$ , as above)
  - (c) BAC denominator\*
  - (d) Risk Adjustment Factor (  $\tilde{R}_n$ , as above)
  - (e) Sum of risk adjusted BACs\*\*
- Outcome calculation\*\*\*

	SRMR (80%)	BRRD (20%)
(a) Relevant target	5,100,000,000.0000	100,000,000.0000
(b) BAC numerator	900,000,000.0000	900,000,000.0000
(c) BAC denominator*	13,000,000,000,000.0000	300,000,000,000.0000
(d) Risk Adjustment Factor	1.063189533	1.443210000
(e) Sum of risk adjusted BACs**	18,700,000,000,000.0000	4,000,000,000,000.0000
Outcome calculation***	260,964.70	32,472.23

**STEP 2 2020 contribution**

**215,266.21**

### What is the sum of risk adjusted BACs?

The sum of risk adjusted BACs can be expressed in the following formula:

$$\sum_{p=1}^N B_p * \tilde{R}_p$$

Ex: hypothetical environment with only three institutions

	BAC	RAF	BAC x RAF
Bank A	900	0.9	810
Bank B	500	1.35	675
Bank C	750	1.5	1,125
<b>SUM</b>	<b>2,150</b>		<b>2,610</b>

→ The sum of risk adjusted BACs: 810 + 675 + 1,125 = 2,610

### How is the 2020 contribution calculated?

The 2020 contribution of risk-adjusted institutions depends on the relevant target, relative size of its basic annual contribution and its risk:

$$Target * \frac{\frac{B_n}{\sum_{p=1}^N B_p} * \tilde{R}_n}{\sum_{p=1}^N \left( \frac{B_p}{\sum_{q=1}^N B_q} * \tilde{R}_p \right)} = (a) * \frac{(b)}{(c)} * (d) = \frac{(e)}{(c)}$$

**STEP 1:** calculate the **contribution amount** in SRMR and BRRD.

Ex:

- In SRMR:  $5,100,000,000 \times (900,000,000/13,000,000,000,000) \times 1.063189532847 / (18,700,000,000,000/13,000,000,000,000) = 260,964.70$
- In BRRD:  $100,000,000 \times (900,000,000/300,000,000,000) \times 1.443210000 / (4,000,000,000,000/300,000,000,000) = 32,472.23$

**STEP 2:** determine the **2020 contribution** by applying the relative weights: 80% - SRMR and 20% - BRRD

Ex:  $0.80 \times 260,964.70 + 0.20 \times 32,472.23 = 215,266.21$

# D. ARTICLE 8.5

## Example D.3: 2020 ex-ante contribution calculated for risk-adjusted institution that qualifies for Art. 8(5) of CIR

### Basic Annual Contribution (BAC): numerator (field codes refer to the 2020 SRF reporting template)

Total liabilities	2A1	2,000,000,000.0000
- Own funds	2A2	200,000,000.0000
- Covered deposits	2A3	800,000,000.0000
<b>Sub total</b>		<b>1,000,000,000.0000</b>
+/- Derivative adjustment (If applicable; see last page)		65,000,000.0000
- Deductions (If applicable; see last page)		15,000,000.0000
- Liabilities treated according to Art. 8(5) CIR		300,000,000.0000
<b>STEP 1 BAC Numerator</b>		<b>750,000,000.0000</b>

### How is the 2020 contribution calculated?

In accordance with Art. 8(5) of Council Implementing Regulation (EU) 2015/81, the 2020 contribution of institutions whose total assets are above €1 bn, but equal to, or less than, €3 bn pay a lump-sum of €50,000 for the first €300 m of total liabilities excluding own funds and covered deposits. For the remaining total liabilities, institutions contribute in accordance with the risk-adjusted regime of the DR.

**STEP 1:** calculate the **BAC numerator\*** by excluding liabilities treated in accordance with Art. 8(5).

Ex.  $\max(2,000,000,000 - 200,000,000 - 800,000,000 + 65,000,000 - 15,000,000 - 300,000,000; 0) = 750,000,000$

**STEP 2:** calculate the **contribution amounts** in SRMR and BRRD.

$$Target * \frac{\frac{B_n}{\sum_{p=1}^N B_p} * \tilde{R}_n}{\left(\frac{B_p}{\sum_{q=1}^N B_q} * \tilde{R}_p\right)} = (a) * \frac{(b)}{(c)} * \frac{(d)}{(e)}$$

Ex:

- In SRMR:
  - For the first 300 m: 50,000
  - For the remaining 750 m:  $5,100,000,000 \times (750,000,000 / 13,000,000,000,000) \times 1.063189532847 / (18,700,000,000,000 / 13,000,000,000,000) = 217,470.59$
  - Total:  $50,000 + 217,470.59 = 267,470.59$
- In BRRD:
  - For the first 300 m: 50,000
  - For the remaining 750 m:  $100,000,000 \times (750,000,000 / 300,000,000,000) \times 1.443210000000 / (4,000,000,000,000 / 300,000,000,000) = 27,060.19$
  - Total:  $50,000 + 27,060.19 = 77,060.19$

### Calculation of gross contribution (DR, Annex I, Step 6)

	SRMR (80%)	BRRD (20%)
<b>STEP 2</b> (a) Relevant target (as above)	5,100,000,000.0000	100,000,000.0000
(b) BAC numerator (B <sub>n</sub> , as above)	750,000,000.0000	750,000,000.0000
(c) BAC denominator*	13,000,000,000,000.0000	300,000,000,000.0000
(d) Risk Adjustment Factor (R̃ <sub>n</sub> , as above)	1.063189532847	1.443210000000
(e) Sum of risk adjusted BACs**	18,700,000,000,000.0000	4,000,000,000,000.0000
Outcome calculation***	267,470.59	77,060.19

Of which: EUR 50.000 for liabilities treated in accordance with Article 8(5) CIR

### STEP 3 2020 contribution

**229,388.51**

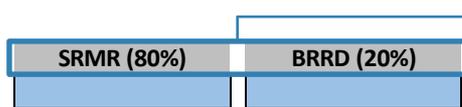
**STEP 3:** determine the **2020 contribution** by applying the relative weights: 80% - SRMR and 20% - BRRD

Ex:  $0.80 \times 267,470.59 + 0.20 \times 77,060.19 = 229,388.51$

\*In the calculation, the BAC numerator cannot be valued below zero in order to avoid obtaining negative amounts.

## E. SRM AND BRRD CALCULATION DETAILS

### Example E.1: SRM and BRRD calculation details



#### Why are there two calculation methods?

During the transitional period, the ex-ante contributions are calculated in accordance with the adjusted methodology laid down in Article 8(1) of the Council Implementing Regulation (EU) 2015/81. (27) For the 2020 contribution period, for all institutions (section 5 of MD):

- 20% of the annual contributions were calculated in accordance with Article 103 of Directive 2014/59/EU and Article 4 of Commission Delegated Regulation (EU) 2015/63 (“National Base” or, in the annexes “BRRD”), and
- 80% of the annual contributions were calculated in accordance with Articles 69 and 70 of Regulation (EU) No 806/2014 and Article 4 of Council Implementing Regulation (EU) 2015/81 (“Euro Area Base” or, in the annexes, “SRMR”).

Ex: For risk-adjusted institutions the risk adjustment factor is calculated twice: on the National Base and the Euro Area Base. Therefore, institutions’ basic annual contributions are adjusted in proportion to their risk profile twice: on the National Base and the Euro Area Base (which might result in different contributions). The final contribution is then weighted 20% on the National Base contribution and 80% on the Euro Area Base contribution.

#### Note:

For the calculation of the part of the annual contributions in the National Base, only data from institutions that are authorised in the territory of that participating Member State are taken into account, while data from institutions that are authorised in the territories of other participating Member States are not considered. Consequently, the target used for this calculation is defined on a National Base taking into account only the covered deposits of the credit institutions in the relevant participating Member State. In the same way, the relative riskiness and the relative size of an institution are assessed only in comparison with the riskiness and the size of institutions authorised in the territory of the same participating Member State. For the calculation of the part of annual contributions in the Euro Area Base, data from all institutions authorised in the territories of all participating Member States are taken into account. Consequently, the annual target level is defined based on the covered deposits of all credit institutions established in the participating Member States, and the relative riskiness and size of the institutions are assessed in comparison with all such institutions. The methodology for calculating the contributions is the same in both calculations.

## F. BASIC ANNUAL CONTRIBUTION

Example F.1: How are the intermediate steps for Basic Annual Contributions calculated? *Applicable for 10.7, Basic, Risk Adjusted institutions, and Article 8.5*

Input values used in the calculation (field codes refer to the 2020 SRF data reporting form) in addition to the ones mentioned above to identify the BAC

Adjustment of liabilities arising from derivative contracts (excluding credit derivatives)		
2C1	Liabilities arising from all derivative contracts (excluding credit derivatives) valued in accordance with the	60,000,000.0000
2C2	Accounting value of liabilities arising from all derivative contracts (excluding credit derivatives) booked on-	45,000,000.0000
2C3	Accounting value of liabilities arising from all derivative contracts (excluding credit derivatives) held off-balance	5,000,000.0000
<b>Derivative adjustment (-2C2+max(2C1;0.75*(2C2+2C3))</b>		<b>15,000,000.0000</b>

Deductions according to Article 5(1) of Delegated Regulation 2015/63		
3A8	Total deductible amount of qualifying liabilities related to clearing activities	0.0000
3B8	Total deductible amount of qualifying liabilities related to CSD activities	0.0000
3C8	Total deductible amount of qualifying liabilities that arise by virtue of holding client assets or client money	0.0000
3D8	Total deductible amount of qualifying liabilities that arise from promotional loans	0.0000
3E11	Total deductible amount of assets and liabilities arising from qualifying IPS liabilities	50,000.0000
3F11	Total deductible amount of assets and liabilities arising from qualifying intragroup liabilities	100,000.0000
<b>Total deductions</b>		<b>150,000.0000</b>

How is the derivative adjustment calculated?

Derivative adjustment is calculated by taking fields 2C1, 2C2 and 2C3 in the 2020 SRF Data Reporting Form and applying the following formula (subsection 5.1 of MD):

$$- \text{ONBS} + \max[\text{LR}; 0.75 \times (\text{ONBS} + \text{OFFBS})]$$

which means that accounting value of liabilities arising from derivative contracts booked on balance sheet is deducted (- ONBS) and replaced with the highest of either on- and off-balance sheet liabilities arising from derivative contracts valued in accordance with the leverage ratio methodology or 75% of the sum of on- and off- balance sheet accounting value of liabilities arising from derivative contracts (+ max[LR; 0.75 x (ONBS + OFFBS)]).

$$\text{Ex: } - 45,000,000 + \max[60,000,000 ; 37,500,000] = 15,000,000$$

How is the total deduction amount calculated?

The total deduction amount is calculated by taking fields 3A8, 3B8, 3C8, 3D8, 3E11 and 3F11 in the 2020 SRF Data Reporting Form and summing up all amounts.

$$\text{Ex: } 50,000 + 100,000 = 150,000$$

# F. BASIC ANNUAL CONTRIBUTION

Example F.2: What is taken into account when calculating Basic Annual Contributions? *Applicable for 10.7, Basic, Risk Adjusted institutions, and Article 8.5*

## Calculation method & relevant target level

	SRMR	BRRD
Target relevant for the calculation method	7,100,000,000.0000	300,000,000.0000

### What is the relevant target level?

The total amount of contributions to the Fund for the 2020 ex-ante contribution period (the “annual target level”) was set at 1/8th of 1.25% of the covered deposits of all credit institutions authorised in the participating Member States in 2019 (section 4 of MD).

## Basic Annual Contribution (BAC): numerator (field codes refer to the 2020 SRF reporting template)

Total liabilities	2A1	4,000,000,000.0000
- Own funds	2A2	400,000,000.0000
- Covered deposits	2A3	1,600,000,000.0000
<b>Sub total</b>		<b>2,000,000,000.0000</b>
+/- Derivative adjustment (If applicable; see last page)		15,000,000.0000
- Deductions (If applicable; see last page)		150,000.0000
<b>BAC Numerator</b>		<b>2,014,850,000.0000</b>

### How is the BAC numerator calculated?

The institution’s BAC numerator (sub-section 5.1 of MD) takes into account data provided in Tabs 2 & 3 of the 2020 SRF Data Reporting Form. The BAC numerator is calculated by applying the following adjustments (if applicable) to institution’s **total liabilities**:

- subtracting **own funds**
- subtracting **covered deposits**
- adding or subtracting **derivative adjustment**
- subtracting **deductions** (exclusions described in Article 5(1) of DR)

Ex:  $4,000,000,000 - 400,000,000 - 1,600,000,000 + 15,000,000 - 150,000 = 2,014,850,000$

## Basic Annual Contribution (BAC): denominator

	SRMR	BRRD
Sum of the relevant BACs	15,000,000,000,000.0000	2,000,000,000,000.0000

The target level relevant for the calculation method is determined in accordance with Annex I, Step 6 of DR, which means that the amount referred in these fields will be different depending if the institution:

- Qualifies for a lump-sum treatment, but opted for an alternative calculation in accordance with Art. 10(7) of DR;
- Identified itself as mortgage credit institutions financed by covered bonds or investment firm authorized to carry out only limited services and activities;
- Qualifies for a risk adjusted contribution calculation.

### What is the sum of the relevant BACs? $\sum_{p=1}^N B_p$

The sum of relevant BACs for the calculation method will be different depending on whether the institution:

- Qualifies for a lump-sum treatment, but opted for an alternative calculation in accordance with Art. 10(7) of DR;
- Identified itself as mortgage credit institutions financed by covered bonds or as investment firm authorized to carry out only limited services and activities;
- Qualifies for a risk adjusted contribution calculation.

## H. OTHER INPUT VALUES USED IN THE CALCULATION

Example H.1: What are the additional input values used to perform the calculations? *Applicable for Risk Adjusted institutions and Article 8.5*

Other input values used in the calculation		
1D1	Start date of supervision (only filled if in the course of 2019)	
1E1	Reference date for reporting form	31/12/2018
4A7	Leverage ratio	0.0600
4A14	CET1 capital	200,000,000.0000
4A15	Total Risk Exposure	10,000,000,000.0000
4A16	CET1 ratio (CET1 capital / Total Risk Exposure)	0.0200
4A17	Total assets	30,000,000,000.0000
4A18	Total Risk Exposure / Total Assets	0.3333
4B6	Liquidity Coverage Ratio	1.0000
4C6	Interbank loans	3,000,000,000.0000
4C7	Interbank deposits	7,000,000,000.0000
4C8	Share of interbank loans and deposits in the EU	10,000,000,000.0000
4D1	Risk exposure amount for market risk on traded debt instruments	50,000,000.0000
4D4	Risk weighted assets for market risk divided by Total Assets	0.0017
4D3	Risk weighted assets for market risk divided by CET1	0.2500
4D2	Risk weighted assets for market risk divided by total risk exposure	0.0050
4D5	Total off-balance sheet nominal amount	4,000,000,000.0000
4D8	Off-balance sheet nominal amount divided by Total Assets	0.1333
4D7	Off-balance sheet nominal amount divided by CET1	20.0000
4D6	Off-balance sheet nominal amount divided by total risk exposure	0.4000
4D9	Total derivative exposure	80,000,000.0000
4D10	Of which: derivatives cleared through a central counterparty (CCP)	0.0000
4D13	Derivatives exposure divided by Total Assets	0.0027
4D12	Derivatives exposure divided by CET1	0.4000
4D11	Derivatives exposure divided by total risk exposure	0.0080
4D17	Does the institution meet the three conditions of 'public financial	No

What are the additional input values used to perform the calculations?

Each Harmonized Annex includes input data used in the calculation. In the case of risk adjusted and Article 8.5 institutions, all data points used to determine the institutions' risk adjustment factor, including the raw values but also the calculated ratios used to assign the institution to its bin (Annex I DR Step 2), are presented at the end of the Harmonized Annex.

## H. CALCULATION OF FINAL AMOUNT TO BE PAID

### Example H.1: How to get to the “Final amount to be paid”? *Applicable to all institutions*

#### Calculation of final amount to be paid

2020 contribution	2,000,000.00
Deduction of 2015 contribution	250,000.00
+/- 2015 data restatements	50,000.00
+/- 2016 data restatements	150,000.00
+/- 2017 data restatements	- 50,000.00
+/- 2018 data restatements	- 20,000.00
+/- 2019 data restatements	50,000.00
+ Adjustment for newly supervised	N/A

#### Final amount to be paid

**1,930,000.00**

#### How to get to the final amount to be paid?

The final amount to be paid is determined by taking 2020 ex-ante contribution calculated (sections 5 & 6 of MD) and applying the following adjustments (if applicable):

- subtracting part of 2015 contribution paid by the institution (section 7 of MD)
- adding or subtracting adjustment related to data restatements (section 9 of MD)

Ex:  $2,000,000 - 250,000 + 50,000 + 150,000 - 50,000 - 20,000 + 50,000 = 1,930,000$

### Example H.2: How is the “Adjustment for newly supervised” institutions determined? *Applicable to all institutions*

#### Calculation of final amount to be paid

2020 contribution	2,000,000.00
+ Adjustment for newly supervised	1,000,000.00
<b>Final amount to be paid</b>	<b>3,000,000.00</b>

**Input values used in the calculation (field codes refer to the 2020 SRF data reporting form) in addition to the ones mentioned above to identify the BAC**

#### Other input values used in the calculation

1D1	Start date of supervision (only filled if in the course of 2019)	05/06/2019
-----	--	------------

#### How is the adjustment for newly supervised institutions determined?

In accordance with Article 12(1) DR, the partial contributions for 2019 (of institutions that are newly supervised in the year 2019) are determined by considering the amount of 2020 ex-ante contributions by reference to the number of full months of the contribution period for which the institution was supervised.

Ex: if the start date of supervision is 5 June 2019, the institution was supervised for 6 full months →  $2,000,000 * (6/12) = 1,000,000$

### Example H.3: How is the “Possible IPC amount” determined? *Applicable to all institutions*

#### Calculation of final amount to be paid

2020 contribution	2,000,000.00
Deduction of 2015 contribution	250,000.00

#### Final amount to be paid

**1,750,000.00**

#### Possible IPC amount

**262,500.00**

#### How is the IPC amount determined?

Pursuant to the Decision of the Board of 17 December 2019 on the 2020 policy concerning irrevocable payment commitments (SRB/ES/SRF/2019/18), such amount was calculated as **15% of the total payment obligation** of each institution.

Ex:  $1,750,000 \times 0.15 = 262,500$

# I. ADDITIONAL INFORMATION ON THE RISK INDICATORS UNDER THE SRM

Example I.1: What additional information is provided on the risk indicators? *Applicable for Risk Adjusted institutions and Article 8.5*

## Additional information on the risk indicators under the SRMR

PILLAR I: Risk exposure		Min	Max	Median	Mean
4A7	Leverage ratio	0.0022	10.0318	0.0789	0.1023
4A16	CET1 ratio (CET1 capital / Total Risk Exposure)	0.0663	12.7400	0.1579	0.2065
4A18	Total Risk Exposure / Total Assets	0.0007	443.4624	0.5256	0.7787
PILLAR II: Stability and variety of sources of funding					
4B6	Liquidity Coverage Ratio	0.0000	999,999.9999	1.6931	1,863.1565
PILLAR III: Importance of an institution to the stability of the financial system or economy					
4C8	Share of interbank loans and deposits in the EU	0.0000	651,933,203,280.0000	515,017,556.0000	15,571,468,599.7330
PILLAR IV: Additional risk indicators					
4D4	Risk weighted assets for market risk divided by Total Assets	0.0000	17.3893	0.0000	0.0146
4D3	Risk weighted assets for market risk divided by CET1	0.0000	14.2917	0.0000	0.0533
4D2	Risk weighted assets for market risk divided by total risk exposure	0.0000	2.4870	0.0000	0.0095
4D8	Off-balance sheet nominal amount divided by Total Assets	0.0000	156.8638	0.1646	0.2747
4D7	Off-balance sheet nominal amount divided by CET1	0.0000	77.4064	1.9304	2.3731
4D6	Off-balance sheet nominal amount divided by total risk exposure	0.0000	9.3564	0.3093	0.3819
4D13	Derivatives exposure divided by Total Assets	0.0000	18.0075	0.0012	0.0225
4D12	Derivatives exposure divided by CET1	0.0000	23.6823	0.0137	0.2090
4D11	Derivatives exposure divided by total risk exposure	0.0000	10.1729	0.0022	0.0430

The descriptive statistics (minimum, maximum, median, mean) presented in the last section of the Harmonized Annex enable institutions to picture the distribution of each risk indicator and to have a better understanding of the bin to which they have been allocated when calculating the ex-ante contributions at Euro Area Base (SRMR). The statistics of the calculations in the summary and collective form that were shared together with the documentation on the 2020 ex-ante contributions provide further details on the discretization step of the non-binary risk indicators performed calculating the ex-ante contributions at Euro Area Base.