

Pursuant to Article 44 paragraph (2) item 3) of the Central Bank of Montenegro Law (OGM 40/10, 6/13, 70/17, 125/23) and Article 117 of the Law on Credit Institutions (OGM 72/19, 8/21, 24/25), the Council of the Central Bank of Montenegro, at its meeting held on 25 July 2025, passed the following

**DECISION
AMENDING THE DECISION ON MINIMUM STANDARDS
FOR RISK MANAGEMENT IN CREDIT INSTITUTIONS**

Article 1

In the Decision on Minimum Standards for Risk Management in Credit Institutions (OGM 134/21, 62/24), in Article 3 item 4) the word: "containment" shall be replaced by the following: "treatment".

At the end of item 46), a full-stop shall be replaced by semicolon and six new items shall be added, worded as follows:

„47) **environmental, social and governance risk** (ESG risk) means the risk of any negative financial impact on an institution stemming from the current or prospective impact of environmental, social or governance (ESG factors) on that institution's counterparties or invested assets, and which materialises through the traditional categories of financial risks;

48) **environmental risk** means the risk of any negative financial impact on a credit institution stemming from the current or prospective impact of environmental factors on that credit institution's counterparties or invested assets, including both physical risk and transition risk;

49) **physical risk**, as part of the environmental risk, means the risk of any negative financial impact on a credit institution stemming from the current or prospective impact of the physical effects of environmental factors on that credit institution's counterparties or invested assets;

50) **transition risk**, as part of the environmental risk, means the risk of any negative financial impact on a credit institution stemming from the current or prospective impact of the transition to an environmentally sustainable economy on that credit institution's counterparties or invested assets;

51) **social risk** means the risk of any negative financial impact on a credit institution stemming from the current or prospective impact of social factors on its counterparties or invested assets;

52) **governance risk** means the risk of any negative financial impact on a credit institution stemming from the current or prospective impact of governance factors on that credit institution's counterparties or invested assets.“.

Article 2

In Article 4 paragraph (2) item 1) after the word: “system” a comma and the following shall be added: “as well as persons who replace them”.

Item 5) shall be amended to read:

“5) regularly measure or assess and control the risks to which it is exposed in its operations, whereby the risk measurement and assessment procedures must include adequate quantitative and qualitative methods of risk measurement and assessment that will enable the detection of changes in the credit institution's risk profile, including the emergence of new risks, provided that the measurement and assessment of risk exposure must not be based solely on model outcomes or quantitative data;”.

After item 6) a new item shall be added worded as follows:

„6a) assess risks that could materialise over a longer period of time (including digitalisation-related risks, climate-related financial risks and potential new risks that may emerge) and, where possible, use scenario analysis as a tool;”.

Article 3

In Article 6 paragraph (1) item 4) shall be amended to read:

„4) internal limits and effective controls (including limits and controls regarding the quality, reliability and relevance of data, as well as in the part of the validation procedure related to the use of models for identifying and measuring credit risk);”.

After item 4) a new item shall be added, worded as follows:

„4a) procedures for risk treatment and monitoring;”.

Article 4

In Article 7 paragraph (4) item 8) a full-stop at the end of the text shall be replaced by semicolon and a new item shall be added, worded as follows:

„9) determine and assess risks of the prevention of money laundering and terrorist financing that are connected with new product or business practice and establish measures that may be taken for the purpose of reducing those risks.”.

Article 5

In Article 10 paragraph (1) after the word: “organisationally” a comma and the following shall be added: “up to the management board level”.

After paragraph (4) a new paragraph shall be added, worded as follows:

„(5) A credit institution shall not carry out impairment or provisions for credit exposures within the activity of contracting transactions.”.

Article 6

In Article 12 paragraph (3) after the words: “credit institutions” a comma and the following shall be added: “or where a debtor is a consumer, additional criteria in accordance with the regulations governing the consumer protection.”.

After paragraph (5) a new paragraph shall be added, worded as follows:

“(6) A credit institution shall, when granting credit exposures, apply guidelines referred to in Annex 1 which is attached to this Decision and makes an integral part thereof.”

Article 7

In Article 13 after paragraph (5) a new paragraph shall be added, worded as follows:
“(6) A credit institution shall, when monitoring credit exposures, apply guidelines referred to in Annex 1 of this Decision.”

Article 8

In Article 16 after paragraph (4) a new paragraph shall be added worded as follows:
„(5) A credit institution shall take into account regulations governing the consumer protection in its policy for dealing with non-performing loans granted to consumers which has been determined in the Guidelines for managing non-performing and forbore exposures, which are provided in Annex 2 of this Decision and make an integral part thereof.“

Current paragraph (5) shall become paragraph (6).

Article 9

In Article 17 after paragraph (4) a new paragraph shall be added, worded as follows:
“(5) A credit institution shall, based on the performance results of the forbearance measures, regularly update its policy for dealing with restructured loans, established in items 140 and 141 of the Guidelines referred to in Annex 2 of the Decision.“

In paragraph (7) the words: “paragraphs (1) to (6)” shall be replaced by the following: “paragraphs (1) to (7)“, and the words: “Annex 1” shall be replaced by the following: “Annex 2”.

Current paragraphs (5) to (7) shall become paragraphs (6) to (8).

Article 10

After Article 23 a new Chapter and a new Article shall be added, worded as follows:

“IIIa. ESG RISK MANAGEMENT

ESG risk management

Article 23a

A credit institution shall, as a part of risk management system, have strategies, policies and systems in place for identifying, measuring, managing and monitoring short-term, medium-term and long-term ESG risks, in accordance with the Guidelines for ESG risk management in a credit institution referred to in Annex 3 which is attached to this Decision and makes an integral part thereof.“

Article 11

In Article 24 after paragraph (1) a new paragraph shall be added, worded as follows:
„(2) Operational separation of the transaction contracting activities from the activities of the treasury back office referred to in paragraph (1) of this Article shall include the establishment of appropriate security and work procedures, as well as access rights to information technologies, including the physical separation of the aforementioned functions.“

Article 12

In Article 31 item 4) a comma and the following: “or to contain risk” shall be deleted.

Article 13

In Article 62 paragraph (4) shall be deleted.

Current paragraphs (5) to (11) shall become paragraphs (4) to (10).

Article 14

In Article 70 after paragraph (1) a new paragraph shall be added worded as follows:
“(2) In using models for measuring IRRBB components, a credit institution shall ensure realistic assumptions so that the result of models would reflect actual level of risks taken, and that:

- 1) management board and senior management of the credit institution understand limitations and uncertainties regarding the results of the models and risks related with their use; and
- 2) validation and testing of models is performed regularly and independently.“.

Current paragraphs (2) to (6) shall become paragraphs (3) to (7).

Article 15

In Article 71 paragraph (2) shall be amended, worded as follows:

“(2) A credit institution using internal systems for measuring IRRBB should, in order to ensure that the material aspects of the IRRBB have been adequately captured, take into consideration methods, but it should not limit to them, listed in Annex 4 of this Decision that is attached and makes an integral part thereof.”

Article 16

In Article 74, paragraph (2), item 1), the changes have been made in Montenegrin language with no relevance to the English translation.

In paragraph (3), in the introductory sentence, the changes have been made in Montenegrin language with no relevance to the English translation.

Article 17

In Article 78 paragraph (2) in the introductory sentence the changes have been made in Montenegrin language with no relevance to the English translation.

In paragraph (4) item 7) the words: “Article 103” shall be replaced by the following: “Article 119”.

In paragraph (7) and in other provisions of this Decision the words: “Annex 1b item 1” shall be replaced by the following: “Annex 5”.

In paragraph (10) the changes have been made in Montenegrin language with no relevance to the English translation.

Article 18

In Article 78d paragraph (2) in the first sentence the words: “Decision on Capital Adequacy of Credit Institutions” shall be replaced by the following: “Decision on the Criteria and the Manner of Classification of Assets and Calculation of Provisions for Potential Loan Losses of Credit Institutions”.

Article 19

In Article 78i paragraph (4) in the introductory sentence the words: “currency denomination” shall be replaced by the following: “and the currency in which they are denominated”.

In item 1) indent 3 the words: “Households – Mortgages” shall be replaced by the following: “mortgage loans to natural persons”.

In indent 4 the words: “Households – Credit (non-mortgage)” shall be replaced by the following: “loans to natural persons other than mortgage loans”.

In item 2) indent 1 the words: “Non-Financial Corporates” shall be replaced by the following: “non-financial large clients”.

In indent 2 the word: “Households” shall be replaced by the following: “natural persons”.

Article 20

In Article 78nj after paragraph (4) Table 1 shall be amended to read:

“Table 1: Specified size of interest rate shocks $R_{(shocktype,c)}^-$ ”

	ARS	AUD	BGN	BRL	CAD	CHF	CNY	CZK	DKK	EUR	GBP
Parallel	400	350	250	400	200	175	225	200	200	225	275
Short	500	425	350	500	275	250	300	250	250	350	300
Long	300	300	150	300	175	200	150	100	150	200	250

	HKD	HRK	HUF	IDR	INR	JPY	KRW	MXN	PLN	RON	RUB
Parallel	225	250	300	400	325	100	225	400	250	350	400
Short	275	400	450	500	475	100	350	500	350	500	500
Long	200	200	200	350	225	100	225	200	150	250	300

	SAR	SEK	SGD	TRY	USD	ZAR
Parallel	275	275	175	400	200	325
Short	375	425	250	500	300	500
Long	250	200	225	300	225	300

ARS	Argentine Peso	IDR	Indonesian Rupiah
AUD	Australian Dollar	INR	Indian Rupee
BGN	Bulgarian Lev	JPY	Japanese Yen
BRL	Brazilian Real	KRW	South Korean Won
CAD	Canadian Dollar	MXN	Mexican Peso
CHF	Swiss Franc	PLN	Poland Zloty
CNY	Chinese Yuan	RON	Romanian Leu
CZK	Czech Koruna	RUB	Russian Rubble
DKK	Danish Krone	SAR	Saudi Riyal
EUR	Euro	SEK	Swedish Krona
GBP	Pound sterling	SGD	Singapore Dollar
HKD	Hong Kong Dollar	TRY	Turkish Lira
HRK	Croatian Kuna	USD	United States Dollar

HUF	Hungarian Forint	ZAR	South African Rand
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Article 21

In Article 78o paragraph (1) shall be amended worded as follows:

“(1) To calibrate specified sizes for interest rate shocks for currencies not referred to in Table 1 referred to in Article 78nj of this Decision, the following shall apply:

- 1) a credit institution shall first calculate the daily average interest rate by collecting a 20-year time series of daily “risk-free” interest rates, without credit institution-specific or entity-specific credit spreads or liquidity spreads, for each currency for the maturities 3 months, 6 months, 1 year, 2 years, 5 years, 7 years, 10 years, 15 years and 20 years;
- 2) using the time series of the interest rates levels at each tenor point k and for each currency c , a new time series of rate changes $\Delta R_{k,c}$ is calculated for a moving time window of $h=6$ months (125 days);

$$\Delta R_{k,c}(t) = R_{k,c}(t) - R_{k,c}(t - h)$$

- 3) for each scenario i and currency c , the average of the rate changes across the corresponding time buckets in Table 1 is taken, where N_i represents the number of time buckets;

$$\Delta R_{i,c}(t) = \frac{1}{N_i} \sum_k \Delta R_{k,c}(t)$$

Table 1: Average interest rate change by time bucket

Scenario	Average interest rate series	Time buckets
Parallel	$\Delta R_{parallel,c}(t)$	3m, 6m, 1 Y, 2 Y, 5 Y, 7 Y, 10 Y, 15 Y, 20 Y
Short-term	$\Delta R_{short,c}(t)$	3m, 6m, 1 Y
Long-term	$\Delta R_{long,c}(t)$	10 Y, 15 Y, 20 Y

- 4) the 99.9th percentile value of the absolute value of $\Delta R_{i,c}$ over the period from 2000 to 2023, denoted $[\Delta R_{i,c}(t)]$, is used for the interest rate shock of scenario i for currency c ;

$$S_{i,c} = P_{99,9}(|\Delta R_{i,c}(t)|)$$

- 5) a credit institution applies a floor of 100 bp and variable caps (denoted as \bar{C}_i), those caps being 500 bp for the short-term, 400 bp for the parallel and 300 bp for the long-term interest rate shock scenario. The change in the interest rate shock for scenario i and currency c can be defined as:

$$\bar{S}_{i,c} = \max \{100, \min\{S_{i,c}, \bar{C}_i\}\}$$

where $\bar{C}_i = \{400, 500, 300\}$, for $i = \text{parallel, short and long, respectively}$;

6) the values referred to in item 5) are rounded to the nearest multiple of 50 bps.”

Article 22

Article 78p shall be amended, worded as follows:

“For each currency *c* the specified size of the parallel, short and long shocks to the “risk-free” interest rate, the following parameterisations of the six supervisory shock scenarios shall be applied:

- 1) *parallel shock for currency c*: A constant parallel shock up or down across all time buckets:

$$\Delta S_{parallel,c}(t_k) = \pm \bar{S}_{parallel,c}$$

- 2) *short rate shock for currency c*:

$$\Delta S_{short,c}(t_k) = \pm \bar{S}_{short,c} \cdot \alpha_{short}(t_k); \quad \alpha_{short}(t_k) = e^{-\frac{t_k}{4}}$$

where t_k is the midpoint (in time) of the k th time bucket.

- 3) *long rate shock for currency c*:

$$\Delta S_{long,c}(t_k) = \pm \bar{S}_{long,c} \cdot \alpha_{long}(t_k) = \pm \bar{S}_{long,c} \cdot \left(1 - e^{-\frac{t_k}{4}}\right)$$

- 4) *rotation shocks for currency c*:

$$\Delta S_{steepener,c}(t_k) = -0.65 \cdot |\Delta S_{short,c}(t_k)| + 0.9 \cdot |\Delta S_{long,c}(t_k)|$$

$$\Delta S_{flattener,c}(t_k) = +0.8 \cdot |\Delta S_{short,c}(t_k)| - 0.6 \cdot |\Delta S_{long,c}(t_k)|$$

Article 23

In Article 78r item 2) the words: “Article 103” shall be replaced by the following: “Article 119”.

In item 7) the words: “Decision on Capital Adequacy of Credit Institutions” shall be replaced by the following: “Decision on the Criteria and the Manner of Classification of Assets and Calculation of Provisions for Potential Loan Losses of Credit Institutions”.

Article 24

In Article 78t paragraph (2) formulae shall be amended as follows:

$$\frac{NII_{shock} - NII_{baseline\ scenario}}{Tier\ 1\ capital} < -5\%$$

Article 25

In Article 78u paragraph (8) the words: "Article 103" shall be replaced by the following: "Article 119".

Article 26

Annexes 1 to 1b shall be replaced by Annexes 1 to 5 and read:

Article 27

This Decision shall enter into force on the eighth day following that of its publication in the "Official Gazette of Montenegro", and it shall apply as of 1 January 2026, except for the provisions of Article 23a of this Decision that shall apply as of 1 January 2027.

THE COUNCIL OF THE CENTRAL BANK OF MONTENEGRO

**CHAIRPERSON
GOVERNOR**

Irena Radović, m.p.

Decision number: 0101-5891-13/2025
Podgorica, 25 July 2025

ANNEX 1

GUIDELINES FOR LOAN ORIGINATION AND MONITORING

I. SUBJECT MATTER AND DEFINITIONS

1. These guidelines establish best practices that a credit institution applies when approving and monitoring loans.
2. The terms used in these guidelines have the following meanings:
 - 1) **loan decision maker** means a credit or other committee and individual employees with delegated loan decision-making powers, as set out within the loan decision-making framework specified in the credit institutions' policies and procedures;
 - 2) **commercial real estate** means any real estate that is not residential immovable property;
 - 3) **ESG sustainable lending** means lending to finance environmentally sustainable economic activities; it is part of the wider concept of 'sustainable finance', meaning any financial instrument or investment, including equity, debt, guarantee or a risk management tool, issued in exchange for the delivery of financing activities that meeting criteria for being environmentally sustainable;
 - 4) **project finance** means the financing of all activities of the debtor involved in projects in which the repayment of debtor's loan is primarily dependent on the cash flow from sales of the project, and all the assets of the project are pledged to the credit institution financing the project;
 - 5) **single customer view** means a single, consistent view of all of a customer's assets and liabilities held at a credit institution on a consolidated basis, including information on all financial commitments, including their repayment history at the credit institution;
 - 6) **source of repayment capacity** means the borrower's total funds, cash flow and payment behaviour considerations, at the moment of the loan origination, covering all sources of cash inflows (such as income, regular private transfers — alimonies, rental income from real estate property, income from financial investments, income from private businesses or partnerships, income from other sources), funds (such as saving accounts, investment products) and regular expenses.

II. INTERNAL MANAGEMENT DURING LOAN ORIGINATION AND MONITORING

2.1. Credit risk management and risk culture

2.1.1. Responsibilities of the governing body

3. The management body, in accordance with the responsibilities prescribed by the Law on Credit Institutions, regarding the loan origination, should:
 - 1) approve the credit institution's credit risk management strategy within the framework of the risk management strategy, as well as the business strategy, to ensure that they are in line with the credit institution's risk appetite framework, capital and liquidity planning, and are in line with the internal capital adequacy assessment process (ICAAP) and the internal liquidity adequacy assessment process (ILAAP), where relevant;
 - 2) set the credit risk appetite within the overall risk appetite framework, including credit-granting standards, qualitative parameters, quantitative indicators and limits, as well as escalation thresholds, without business performance biases;
 - 3) approve the framework for the credit approval process, including, when relevant, the internal structures for credit granting and monitoring, and defining delegated decision-making authorities;
 - 4) ensure an effective oversight of credit risk quality, in particular at the point of credit granting, and provisioning and impairment;
 - 5) ensure adequate credit approval, monitoring and control processes, for the purposes of effective credit risk management;
 - 6) ensure that all employees involved in credit risk taking, and the managing, monitoring and controlling of credit risk have appropriate qualifications, resources and experience;
 - 7) set, approve and oversee the implementation of the credit institution's risk culture, as well as core values and expectations regarding credit risk;
 - 8) ensure that the remuneration framework (including all relevant performance targets, and the performance assessment framework for credit decision-makers) is aligned with the credit risk and credit risk appetite.

2.1.2. Credit risk culture

4. A credit institution should develop a credit risk culture as part of the overall risk culture through policies, communication and employee training.
5. The credit risk culture should an adequate „tone from the top“ and ensure that a loan is granted to a borrower who, to the credit institution's best knowledge at the time of granting the loan, will be able to meet the terms and conditions of the loan agreement, and is secured, where relevant, by sufficient and appropriate collateral, and where applicable, taking into account the impact on the capital and profitability of the credit institution and sustainability and ESG-related factors.

6. A credit institution should ensure that the credit risk culture is effectively implemented at all levels and that all employees involved in the risk-taking and credit risk management processes are fully aware of it and they will be held accountable for their actions.
7. A credit institution should adopt policies and processes to monitor compliance with the credit institution's credit risk culture of all employees involved in the process of granting, monitoring and controlling loans (e.g. employee self-assessment). In situations in which there are noted deficiencies in the credit culture, evidenced either via a credit institution's self-assessment or via supervisory actions, the credit institution should take well-defined, outcome-driven and timely actions to remediate these deficiencies. The credit risk strategy, credit policies and procedures should be tailored to mitigate any potential negative effects arising from a poor credit culture.

2.2. Risk appetite, credit risk strategies and limits

8. The credit risk appetite, credit risk strategy and overall credit risk policy should be aligned with the overall risk appetite framework of the credit institution. The credit institution's risk appetite should determine the scope and direction of the credit institution's credit risk, the composition of the loan portfolio, including its concentration and diversification objectives in relation to business lines, geographies, economic sectors and products.
9. Risk appetite should be implemented using appropriate credit risk metrics and limits. These metrics and limits should cover key aspects of credit risk appetite, as well as customer segments, currency, collateral types and credit risk mitigation instruments. Where relevant, credit metrics should be a combination of backward-looking and forward-looking indicators and should be tailored to the business model and complexity of the credit institution.
10. A credit institution should ensure that risk appetite and related metrics and limits are appropriately cascaded down within the credit institution, including all relevant group entities, business lines and units bearing credit risk.
11. For the purposes of managing concentration risk, a credit institution should set quantitative internal credit risk limits for its overall credit risk, as well as portfolios with common credit risk characteristics, sub-portfolios and individual borrowers. In the case of group entities and connected parties, the limits should also take into account the consolidated and sub-consolidated position and the position of individual entities at the consolidated and sub-consolidated level.

2.3. Credit risk policies and procedures

12. A credit institution should establish in its credit risk policies and procedures the criteria for identifying, assessing, approving, monitoring, reporting and mitigating

credit risk, as well as the criteria for measuring value adjustments for accounting purposes and for the purposes of determining capital adequacy. The credit institution should document and regularly update the established framework.

13. The objective of credit risk policies and procedures should promote a proactive approach to monitoring loan quality, identifying loan deterioration at an early stage, and managing the overall loan quality and associated risk profile of the portfolio, including through new loan-granting activities.
14. Credit risk policies and procedures should cover all lending activities, asset classes, customer segments, products and specific credit exposures, credit risk management practices, as well as responsibilities and controls.
15. Credit risk policies and procedures should include specific lending policies and procedures with sufficient granularity to capture the specific business lines of the credit institution, for different sectors, in line with their complexity and size, and the risks of different market segments associated with credit exposure.
16. Within the framework of credit risk policies and procedures, it is necessary to specify:
 - 1) policies and procedures and rules for loan approval and decision-making, including appropriate levels of decision-making determined in accordance with risk appetite and limits;
 - 2) criteria for approving loans, taking into account the items from Part A of these guidelines;
 - 3) requirements for handling the information and data needed for the assessment of creditworthiness, as specified in section 3.1. of these guidelines;
 - 4) requirements for the creditworthiness assessment, including sensitivity analysis, as set out in section 3.2. of these guidelines;
 - 5) requirements for exposure aggregation and credit risk limits and the management of credit risk concentrations;
 - 6) requirements and procedures regarding the acceptance and use of collateral and credit risk mitigation measures to determine their effectiveness in minimising the inherent risk of credit exposures — such requirements and procedures should be specific to an asset class-specific and product type-specific and should take into account the type, size and complexity of the credit exposures being granted;
 - 7) conditions for the application of the automated decision-making procedure in the loan approval process, including identifying products, segments and limits for which automated decision-making is allowed;
 - 8) a risk-based approach, addressing possible deviations from standard credit policies and procedures and loan approval criteria, including:
 - a) conditions defining the approval process for deviations and exceptions as well as specific requirements regarding the required documentation;
 - b) criteria for rejections and criteria for the escalation of exceptions to higher decision-making levels (including overdrafts, overrules, exposures

- possibly approved as an exception to general lending standards and other non-standard forms of business within the framework of a special approval process at higher decision-making levels);
- c) criteria for the monitoring of circumstances and conditions for an exceptional loan-granting decision. This includes the criteria for their review by the relevant functions during the regular review of the application and compliance with policies and limits;
 - 9) criteria relating to what should be documented and recorded as part of the loan approval process, including sampling and audit requirements — criteria include, at a minimum, criteria for meeting the loan application, qualitative and quantitative decision/analysis, and all supporting documentation that served as the basis for approving or rejecting the loan application;
 - 10) criteria for monitoring the loan approval process — the internal control framework should cover all stages after loan approval;
 - 11) where applicable, the criteria set out in sections 2.3.2, 2.3.3, 2.3.4, 2.3.5 and 2.3.6 of these guidelines;
 - 12) the criteria set out in sections 2.3.1 and 2.3.7 of these guidelines.
17. Within its credit risk policies and procedures and in order to strengthen the credit risk strategy, a credit institution should also take into account the principles of responsible lending, and in particular:
- 1) it should consider the specific situation of the borrower, such as fair treatment of debtors who are in a difficult economic situation;
 - 2) it should design credit products that are offered to consumers in a responsible manner.
18. For credit products offered to consumers, a credit institution should ensure that the criteria for approving credit do not create undue hardship and over-indebtedness for borrowers and their households.
19. In its credit risk policies and procedures relating to loan decision-making referred to in point 16 indent 1) of these Guidelines and creditworthiness assessments as referred to in point 16 indent 4) of these Guidelines, a credit institution should also specify the use of any automated models in the creditworthiness assessment and loan decision-making process in a manner appropriate to the size, type and complexity of the credit exposure and the type of borrower. In particular, the credit institution should establish appropriate governance systems regarding the design and use of such models, as well as the management of model risk, taking into account the criteria set out in section 2.3.4 of these guidelines.
20. A credit institution should ensure that credit risk policies and procedures are designed to minimise the risk of internal or external fraud in the credit approval process. The credit institution should establish appropriate processes to monitor any suspicious or fraudulent behaviour.

21. A credit institution should regularly review credit risk policies and procedures, and for this purpose, clearly identify the functions and employees responsible for maintaining specific policies and procedures in force, as well as their roles and responsibilities in this regard.

2.3.1. Policies and processes related to the prevention of money laundering and terrorist financing

22. A credit institution should determine in its policies how it will identify, assess and manage the risks of money laundering and terrorist financing (ML/TF) to which it is exposed as a result of its credit granting activities, and in particular it should:
 - 1) at the level of its business, it identifies, assesses and manages the risk of money laundering and terrorist financing associated with the type of clients it serves, the credit products it offers, the geographical areas to which it is exposed, as well as the distribution channels it uses;
 - 2) at the level of an individual relationship, identifies, assesses and manages the money laundering and terrorist financing risk associated with that relationship — as part of this, the credit institution should:
 - a) consider the purpose of the loan;
 - b) consider the extent to which the connection of a natural or legal person, who is neither a borrower nor a credit institution, to the credit exposure gives rise to an increased risk of money laundering and terrorist financing;
 - 3) In situations where a risk of money laundering and terrorist financing associated with an individual relationship has been identified, the credit institution should use risk-sensitive measures to determine whether the funds used to repay the loan, including cash or equivalents provided as collateral, are from legal sources. When considering the legality of the source of funding, the credit institution should take into account the activity that generated the funds and whether that information is credible and consistent with the credit institution's knowledge of the customer and their professional activity.
23. A credit institution should establish internal processes to ensure that information obtained for the purposes of creditworthiness assessment, such as the information specified in Section 3.1 of these guidelines and in Part B of these Guidelines, is also available in its anti-money laundering and terrorist financing processes.
24. A credit institution should have policies and procedures in place to ensure that loans are disbursed in accordance with the credit decision and the loan agreement. It should also ensure that appropriate controls are in place to identify, assess and manage money laundering and terrorist financing risks, and that relevant documentation is maintained in accordance with the credit institution's obligations under AML/CFT regulations.

2.3.2. Leveraged transactions

25. A credit institution should have, as part of its policies and procedures, a comprehensive definition of leveraged transactions that takes into account the degree of leverage of the borrower and the purpose of the transaction. This definition should encompass all lines of business and units that bear credit risk.
26. The scope and implementation of the definition of leveraged transactions implemented by a credit institution should be reviewed regularly to ensure that no unjustified exclusion occurs.
27. A credit institution should define its risk appetite and strategy for leveraged transactions in a manner that encompasses all relevant business units involved in such operations. A credit institution should determine the types of leveraged transactions it is prepared to enter into, as well as acceptable values for parameters such as credit rating, probability of default, level of collateral coverage and degree of leverage, also at sector level, where applicable.
28. A credit institution should define its risk appetite for syndicated leveraged transactions and set out a comprehensive framework for limits, including specific limits on risk taken and a granular set of sub-limits, detailing the maximum limits and the nature of the transactions in which the credit institution is prepared to participate.
29. A credit institution should establish a robust governance structure for leveraged transactions to enable comprehensive and consistent oversight of all leveraged transactions it approves, syndicates or purchases, including, where applicable, joint investments, as well as standard bilateral loans granted to micro, small and medium-sized enterprises, as well as to large enterprises.
30. A credit institution should ensure that all leveraged transactions are appropriately reviewed, in line with their risk appetite, strategies and policies, and approved by the relevant credit decision makers. For transactions involving syndication and risk assumption, the credit institution should establish separate approval requirements and processes.

2.3.3. Technology-enabled innovations in loan approval

31. When using technological innovations for the purpose of approving loans, the credit institution must:
 - 1) within the risk management and control framework, appropriately capture the inherent risks associated with the use of technology-enabled innovations, commensurate with the business model, credit risk exposure, complexity of methods and scope of use of technology-enabled innovation;
 - 2) ensure that the management body has sufficient understanding of the application of technology-enabled innovation, their limitation and impact on credit approval procedures;

- 3) understand the underlying models used, including their capabilities, assumptions and limitations, ensuring that they are traceable, auditable, and robust and resilient;
- 4) ensure the suitability of the model, taking into account the stated tasks and other criteria, such as its performance and use. If explanations are needed during the use of the model, the development of an interpretable model should be considered;
- 5) understand the quality of data and inputs to the model, detects and prevents bias in the loan decision-making process, ensuring that appropriate safeguards are in place to ensure the confidentiality, integrity and availability of information and systems;
- 6) ensure continuous monitoring of the model's functionality, including the validity and quality of its results, and timely taking of appropriate corrective measures in case of detection of certain concerns in the model's operation (e.g. deterioration of quality or deviations from expected behaviour).

2.3.4. Models for creditworthiness assessment and loan decision-making

32. When using automated models for creditworthiness assessment and loan decision-making, a credit institution should understand the models it uses and their methodology, inputs, assumptions, limitations and results, i.e. it should establish the following:
 - 1) internal policies and procedures to detect and prevent bias and ensure the quality of input data;
 - 2) measures to ensure traceability, auditability, and robustness and resilience of inputs and outputs;
 - 3) internal policies and procedures that ensure regular assessment of the quality of model results, by applying measures appropriate to the use of the model, including retrospective testing of model performance;
 - 4) control mechanisms, model overrides and escalation procedures within the regular loan decision-making process, including qualitative approaches, qualitative risk assessment tools (including expert judgment and critical analysis), as well as quantitative limits.
33. The credit institution should have appropriate documentation relating to the model, including:
 - 1) methodologies, assumptions and data inputs as well as an approach to detecting and preventing bias, as well as ensuring the quality of input data;
 - 2) the use of model outputs in the decision-making process and monitoring the effects of those automated decisions on the overall quality of the portfolio or products in which those models are used.

2.3.5. ESG factors

34. A credit institution should incorporate ESG factors and associated risks into its risk appetite and risk management policies, as well as into credit risk policies and procedures that apply a holistic approach.
35. The credit institution should take into account the risks associated with ESG factors on the financial conditions of borrowers, and in particular the potential impact of environmental factors and climate change, in their credit risk appetite, policies and procedures. The risks of climate change for the financial performance of borrowers can primarily materialise as physical risks, such as risks to the borrower that arise from the physical effects of climate change, including liability risks for contributing to climate change, or transition risks (e.g. risks to the borrower that arise from the transition to a low-carbon and climate-resilient economy). In addition, other risks can occur, such as changes in market and consumer preferences and legal risks that may affect the performance of underlying assets.

2.3.6. Environmentally sustainable lending

36. A credit institution that originate or plan to originate environmentally sustainable loan exposures should develop, as part of their credit risk policies and procedures, specific details of their environmentally sustainable lending policies and procedures, covering the granting and monitoring of such loans, so that these policies and procedures shall, in particular:
 - 1) contain a list of projects and activities, as well as the criteria that the credit institution considers acceptable for environmentally sustainable lending or a reference to the relevant existing standards for environmentally sustainable lending, which define what type of lending is considered to be environmentally sustainable;
 - 2) define the process by which a credit institution assesses that the proceeds from environmentally sustainable credit products it has approved are used for environmentally sustainable activities. In the case of granting loans to businesses, the process should include:
 - a) collecting information on climate and environmental or otherwise sustainable business objectives of borrowers;
 - b) assessing the compliance of borrowers' financing projects with eligible environmentally sustainable projects or activities and related criteria;
 - c) ensuring that borrowers have the willingness and capacity to adequately monitor and report on the allocation of revenues for environmentally sustainable projects or activities;
 - d) monitoring, on a regular basis, that the proceeds are being properly allocated (which may consist of requiring borrowers to provide updated information on the use of the proceeds until the relevant credit exposure is repaid).

37. A credit institution should align its policies and procedures for environmentally sustainable lending with its overall objectives, strategies and policies related to sustainable finance. In particular, a credit institution should establish qualitative and, where appropriate, quantitative objectives to support the development and integrity of its environmentally sustainable lending activities and assess the extent to which such development is consistent with, or contributes to, overall climate and environmentally sustainable objectives.

2.3.7. Data infrastructure

38. A credit institution should have an appropriate data infrastructure, as well as relevant policies and procedures to support the loan approval process, as well as to manage credit risk and monitor credit exposures throughout their life (e.g. loan approval and creditworthiness assessment, risk assessment, credit verification and monitoring). The data infrastructure should ensure the continuity, integrity and security of information on the exposure, borrower and collateral, from the time of approval and throughout the life of the credit exposure.
39. The data infrastructure should be detailed and sufficiently granular to capture specific loan-by-loan information, in particular actual loan-granting criteria applied at the point of origination, allowing data regarding the borrower to be linked with data regarding collateral, to support the effective monitoring of credit risk (see Chapter VI of these Guidelines) and enable effective audit trailing, operational and credit performance and efficiency measurement, as well as the tracking of policy deviations, exceptions and overrides (including loan/transaction rating or scoring overrides).

2.4. Loan decision-making

40. A credit institution should establish a clear and well-documented framework for loan decision-making that should contain clearly defined responsibilities for loan decision-making within the credit institution, including a description of the hierarchy of credit decision-makers and their positions within the credit institution's organisational and business structure and their reporting lines.
41. The organisational structure of loan decision-makers should be aligned and integrated with the risk appetite, policies and limits and should reflect the credit institution's business model. Loan decision-makers should be hierarchically distributed within the credit institution's organisational and business structure so that the established decision-making levels reflect the risk appetite and limits and are aligned with objective criteria, including risk indicators.
42. The loan decision-making framework should clearly define the decision-making powers and limitations of each decision-maker and any automated models for the purpose of making loan decisions in accordance with the criteria for such models set out in Section 2.3.4 of these Guidelines. Those powers and limitations should

take into account the characteristics of the credit portfolio, including its concentration and diversification objectives across business lines, geographic areas, sectors and products, as well as credit limits and maximum exposures. The credit institution should, where applicable, set time limits for delegated powers or the extent of delegated approvals.

43. When delegating loan decision-making authority and limits to employees, a credit institution should take into account the specificities of the credit products subject to that individual decision-making, including their size and complexity, and the types and risk profiles of the borrowers. The credit institution should also ensure that those employees are appropriately trained and have relevant professional knowledge and experience in relation to the specific authority delegated to them.
44. The loan decision-making framework should take into account the specifics of credit products and borrowers, including the type of product, the size of the loan exposure or limit, and the borrower's risk profile.
45. The framework should also establish the working methods of credit committees and the roles of their members, including, where applicable, aspects such as voting procedures (unanimous decision or simple majority vote).
46. The credit institution should specify escalation procedures for all decision-making levels in the event of a negative opinion from the involved risk function, as well as the manner in which the management body will be involved.

2.4.1. Objectivity and impartiality in the loan decision-making process

47. A credit institution should ensure that loan decision-making is impartial and objective, i.e. that decision-makers are free from conflicts of interest, in accordance with the *Decision on the Governance System in a Credit Institution*. A credit institution should ensure that any individual involved in the loan decision-making process, such as employees and members of the management body, does not participate in loan decision-making if any of the following events occur:
 - 1) any person involved in the loan decision-making process has a personal or professional relationship (outside of a professional relationship when representing a credit institution) with the borrower;
 - 2) any person involved in the loan decision-making process has an economic or any other interest, including a direct or indirect, actual or potential, financial or non-financial interest related to the borrower;
 - 3) any person involved in the loan decision-making process has undue political influence or a political relationship with the borrower.
48. Without prejudice to the internal governance structure of the credit institution for the implementation of the loan decision-making framework, the credit institution should have in place policies, procedures and organisational controls that guarantee and ensure objectivity and impartiality in the loan decision-making

process. Those policies, procedures and organisational controls, including any mitigating measures, should be clearly defined and understandable and should address potential conflicts of interest. The credit institution should ensure effective control over the decisions taken by credit decision-makers, including the granting of loans, in order to ensure their objectivity and impartiality.

2.5. Credit risk management and internal control frameworks

49. In accordance with the *Decision on Governance Arrangements in a Credit Institution*, a credit institution should establish a strong and comprehensive internal control framework, including credit risk management (respecting, among other things, the principles of accountability, segregation and independence of functions and responsibilities), review and accuracy of results.
50. Credit risk management and internal credit risk control should be integrated into the overall governance and internal control frameworks as well as into the organisational and decision-making structure of the credit institution. The credit institution should ensure that the internal control framework, including credit risk management, supports sound and appropriate credit risk underwriting, analysis and monitoring throughout the loan exposure life cycle, including product design and development, sales and administration.
51. A credit institution should establish regular and transparent reporting mechanisms so as to provide the management body, the risk committee, and all relevant units or functions with reports in a timely, accurate and concise manner on the basis of which they can take adequate and effective actions within their responsibilities, in order to enable the identification, measurement or assessment, monitoring and management of credit risk (see Chapter VI of these Guidelines).
52. A credit institution should define in a clear and transparent manner the allocation of responsibilities and authorities within the organisation, within and between business lines, units and functions, including risk management. To this end, a credit institution should clearly define the functions responsible for carrying out the various tasks related to the assumption of credit risk and the loan decision-making process, determined in a manner that does not lead to conflicts of interest and ensures effective credit risk management.
53. The business lines and units whose activities give rise to credit risk should be primarily responsible for managing the credit risk arising from those activities throughout the loan life cycle. These business lines and units should implement appropriate internal controls to ensure compliance with internal policies and relevant external requirements.
54. A credit institution should have a risk management function, in accordance with the *Decision on Governance Arrangements in a Credit Institution*, which is responsible for ensuring the implementation of appropriate credit risk controls. The

risk management function should be independent of the units responsible for contracting transactions.

55. For the purposes of item 52 of these Guidelines, a credit institution should consider the following areas/tasks:
- 1) developing and maintaining processes and procedures for approving and monitoring loans;
 - 2) defining and developing processes, mechanisms and methodologies for credit risk appetite, credit risk strategy and policies (including the overall process for policies and procedures that are communicated throughout all layers of the credit institution) as well as business strategy;
 - 3) designing and implementing an appropriate framework for making credit decisions in accordance with these guidelines;
 - 4) designing, establishing and implementing credit risk monitoring and reporting, including early warning systems, monitoring of the credit portfolio and overall risk, including in relation to ICAAP and all applicable regulatory metrics, e.g. large exposure rules;
 - 5) conducting creditworthiness assessments and credit risk analyses for rating or assignment;
 - 6) providing an independent/second opinion on creditworthiness assessment and credit risk analysis for the purpose of making credit decisions, specifying in which circumstances, taking into account the specifics of the loan exposure, its size and the risk profile of the borrower, such an independent/second opinion is relevant;
 - 7) assessing the appropriateness of the impairment amount in accordance with the relevant accounting framework;
 - 8) developing new credit products, taking into account the requirements for the new product approval process and continuously monitoring the suitability of credit products;
 - 9) management of the debtor's outstanding obligations in the early stage of arrears and non-performing exposures, as well as the approval and monitoring of restructuring measures, in accordance with the Guidelines for the management of non-performing and restructured exposures given in Annex 1 of this Decision (in connection with consumer lending, such tasks may include partnering with independent debt settlement advisory service providers when applicable);
 - 10) conducting stress testing on the entire credit portfolio, as well as on relevant sub-portfolios and geographical segments;
 - 11) monitoring individual exposures through regular credit reviews in accordance with the requirements of Chapter VI of these Guidelines, including reviews of a sample of credit products;
 - 12) ensuring the integrity and reliability of the internal rating assignment process, as well as the integrity and reliability of the rating scale and rating assignment process used by the credit institution, for those credit institutions applying the standardized approach;

- 13) performing quality checks on credit ratings, taking into account an appropriate sample size and ensuring that credit risk is properly identified, measured, monitored and managed within the credit institution's business activities, as well as that regular reports are submitted to the credit institution's management body.

2.6. Resources and skills

56. A credit institution should have sufficient resources and employees in the organisational units where credit risk-taking activities are carried out, in particular for loan decision-making, credit risk management and internal control. The organisational structure should be periodically reviewed to ensure that there are adequate resources, competencies and expertise within the credit risk management function for the effective management of credit risk.
57. A credit institution should ensure that employees involved in the loan approval process, in particular in the decision-making process, risk management and internal control, have an appropriate level of experience, skills and competences related to lending.
58. Employees involved in the loan approval process, including loan decision-making, credit risk management and internal control, should frequently undergo appropriate training that covers changes in the applicable legal and regulatory frameworks. Training should be consistent with the credit management culture and business strategy of the credit institution and should be conducted regularly to ensure that all relevant employees have adequate skills and are familiar with the credit institution's credit policies, procedures and processes.

2.7. Remuneration

59. In accordance with the *Decision on Remuneration in Credit Institutions*, the remuneration policies and practices of credit institutions should be consistent with the credit risk management approach, risk appetite and strategies and should not create a conflict of interest. The remuneration policies and practices applied to employees, and in particular employees involved in loan approval, credit administration and monitoring, should be consistent and should not provide incentives for risk-taking that exceed the credit institution's risk appetite, and should be aligned with the credit institution's business strategy, objectives and long-term interests. In addition, remuneration policies and practices should include measures to manage conflicts of interest in order to protect consumers from undue harm arising from the remuneration of employees in organisational units responsible for contracting transactions.
60. A credit institution's remuneration policies and practices should in particular ensure that the performance and risk measurement process used to determine the variable remuneration of staff involved in loan approval includes appropriate

measures of loan quality that are consistent with the credit institution's risk appetite.

III. LOAN ORIGINATION PROCEDURES

3.1. Information and documentation

61. A credit institution should have sufficient, accurate and up-to-date information and data necessary to assess the creditworthiness and risk profile of borrowers before concluding a loan agreement.
62. For the purposes of assessing the creditworthiness of individuals, a credit institution should have at its disposal and use information supported by necessary and appropriate evidence regarding at least:
- 1) the purpose of the loan, when relevant for the type of product;
 - 2) employment;
 - 3) repayment capacity;
 - 4) household members and dependents;
 - 5) financial obligations and costs for their servicing;
 - 6) regular expenses;
 - 7) collateral (for secured loans);
 - 8) other risk mitigation instruments such as guarantees, when applicable.
- The credit institution may consider using the specific information, data and evidence listed in Part B of these Guidelines.
63. For the purposes of assessing the creditworthiness of micro, small, medium and large enterprises, a credit institution should have at its disposal and use information supported by necessary and appropriate evidence, at least in relation to:
- 1) the purpose of the loan, when relevant for the type of product;
 - 2) income and cash flow;
 - 3) financial condition and liabilities, including pledged assets and contingent liabilities;
 - 4) business model and, where relevant, corporate structure;
 - 5) business plans supported by financial projections;
 - 6) collateral (for secured loans);
 - 7) other risk mitigation instruments, such as guarantees, when applicable;
 - 8) legal documentation specific to the type of product (e.g. permits, contracts).
- The credit institution may consider using the specific information, data and evidence listed in Part B of these Guidelines.
64. A credit institution may use already available information and data for existing clients and borrowers, when such information and data are relevant and up-to-date.

65. If information and data are not immediately available, the credit institution should collect the necessary information and data from borrowers and/or third parties, including relevant databases.
66. If the credit institution has concerns about the accuracy and reliability of information and data, it is necessary to conduct necessary checks and reasonable inquiries with the borrower and third parties (e.g. employer, public authorities, relevant databases) and take appropriate steps to verify the information and data collected.
67. A credit institution should have an accurate single customer overview that enables it to assess the borrower's ability to service and repay its financial obligations. Such a single customer overview should apply to individual borrowers, households, where appropriate, and to members of consolidated groups for companies. The single customer overview should be supplemented by information provided by the borrower on assets and liabilities held with other credit institutions or with other creditors.
68. If the borrower is likely to encounter financial difficulties in meeting its obligations under the loan agreement, the credit institution should require the borrower to provide documentation demonstrating realistic projections of its ability to maintain solvency. In this case, information from third parties, such as auditors and other experts, as well as information from the borrower itself, may be used.
69. If the loan agreement includes third-party guarantees, the credit institution should have sufficient information and data necessary to assess the guarantee and, where relevant, the financial condition of the guarantor.
70. If the borrower is a member of a group of connected persons, the credit institution should collect the necessary information about the relevant connected persons, especially if the repayment relies on cash flow originating from other connected persons in the same group.
71. A credit institution should document the information and data leading to the approval of a loan, including the activities and assessments they have conducted, and keep that documentation in an accessible form (readily accessible to the Central Bank).

3.2. Assessment of the debtor's creditworthiness

3.2.1. General provisions for lending to natural persons

72. The credit institution should analyse the borrower's credit application to determine that the application is consistent with the credit institution's risk appetite, policies, loan approval criteria, limits and relevant indicators, as well as with any applicable macroprudential measures.

73. In accordance with relevant consumer protection regulations, the credit institution should assess the borrower's ability and prospects to meet the obligations under the loan agreement, including in particular an assessment of the borrower's repayment capacity, taking into account the specifics of the loan, such as the nature, maturity and interest rate.
74. Collateral should not be the main criterion for granting a loan and cannot in itself justify the granting of any loan agreement. Collateral may be considered a secondary source of collection for the credit institution in the event of default or a significant deterioration in the borrower's risk profile, and not a primary source of repayment, except where the loan agreement provides that repayment of the loan is based on the sale of the collateral or available liquid collateral.
75. When assessing the creditworthiness of a borrower, a credit institution should take into account relevant factors that could affect the borrower's current and future repayment capacity, and should take care not to cause financial difficulties and over-indebtedness. These factors include the servicing of other obligations, their remaining duration, interest rates and outstanding amounts, as well as repayment behaviour, e.g. evidence of previous regularity in paying obligations.
76. If a loan application is submitted jointly by several borrowers, the credit institution should conduct a creditworthiness assessment based on the joint repayment ability of those borrowers.
77. If the loan agreement includes any form of third-party guarantee, it is necessary to assess the level of protection provided by that guarantee and, if relevant, to carry out an assessment of the creditworthiness of the guarantor by applying the relevant provisions of these guidelines, depending on whether the guarantor is a natural or legal person.
78. To assess the borrower's ability to meet the obligations under the loan agreement, the credit institution should adopt appropriate methods and approaches, which may include models, as long as they are consistent with these guidelines. The choice of appropriate and adequate method depends on the level of risk, size and type of loan.

3.2.2. Lending to natural persons in relation to residential immovable property

79. Where necessary, particularly in the case of borrowers who are self-employed or have seasonal or other irregular income, the credit institution should conduct reasonable inquiries and take reasonable steps to verify information on repayment capacity.
80. If the loan term extends past the borrower's expected retirement age, a credit institution should take appropriate account of the adequacy of the borrower's likely

source of repayment capacity and ability to continue to meet obligations under the loan agreement in retirement.

81. The credit institution should ensure that the borrower's ability to meet the obligations under the loan agreement is not based on an expected significant increase in the borrower's income, unless there is sufficient evidence to that effect from the documentation.
82. When assessing the borrower's ability to meet the obligations under the loan agreement, the credit institution should take into account both pre-determined costs and other non-discretionary costs, such as the borrower's existing obligations, including appropriate justification and consideration of the cost of living.
83. As part of the assessment of creditworthiness, the credit institution should conduct sensitivity analysis that reflect potential negative events in the future, including reductions in income, increases in interest rates in the case of a loan agreement with a variable interest rate, a one-time payment or a delay in the payment of principal or interest.
84. In the case of foreign currency loans, the credit institution should also include in the assessment of the borrower's ability to meet its obligations potential adverse exchange rate scenarios between the currency in which the borrower generates income and the currency of the loan. The credit institution should consider and assess all hedging strategies and existing hedges, including natural hedges, to mitigate foreign exchange risk.
85. For loan agreements related to real estate that explicitly state that the borrower or a member of his family may not use the real estate as his place of residence (e.g. in purchase-to-let agreements), the credit institution should apply the criteria set out in section 3.2.3 of these Guidelines.

3.2.3. Lending to natural persons with other types of collateral

86. In relation to loan agreements secured by immovable property, other than those covered by Section 3.2.2 of these Guidelines, the credit institution should apply, in addition to the provisions of Section 3.2.1 of these Guidelines, the provisions set out in this Section.
87. If the property is still being constructed and intended to provide income to the owner in the form of rent or profits from the sale, the credit institution should assess the development phase and the phase after the completion of the development, when the project converts into an income-producing property. For the purposes of such loan agreements, the credit institution should establish that:
 - 1) the borrower has a plausible plan related to the project, including estimates of all costs associated with construction;

- 2) the borrower has access to builders, architects, engineers and contractors participating in the development;
 - 3) the borrower has obtained or is able to obtain in the future all necessary permits and certificates for the development, in accordance with the planned dynamics of the project.
88. For loan agreements that relate to an immovable property that explicitly state that the immovable property is not to be occupied as a place of residence by the borrower or a family member (i.e. buy-to-let agreements), a credit institution should assess the relationship between the future rental income from the immovable property and the borrower's ability to meet obligations.
89. As part of the creditworthiness assessment, the credit institution should conduct sensitivity analyses to take into account possible future adverse market and idiosyncratic events, which are relevant to the type and purpose of the loan. Such events may include a decrease in income, an increase in interest rates in the case of variable rate loan agreements, negative amortisation of the loan, a one-off principal repayment or a deferral of principal or interest payments and, where relevant, a decrease in the marketability of the property, an increase in the vacancy rate of property available for rent, as well as a decrease in rental prices for similar properties. The credit institution should also consider the consequences of foreign exchange risk, as provided for in item 84 of these Guidelines.

3.2.4. Unsecured lending to natural persons

90. Where necessary, particularly in the case of borrowers who are self-employed or have seasonal or other irregular income, the credit institution should conduct reasonable inquiries and take reasonable steps to assess and verify their repayment capacity.
91. The credit institution should ensure that the borrower's ability to meet the obligations under the loan agreement is not based on an expected significant increase in the borrower's income, unless there is sufficient evidence to that effect from the documentation.
92. The credit institution should, as part of the creditworthiness assessment, conduct sensitivity analyses that reflect potential adverse future events specific to the type of loan. Where applicable, the credit institution should also consider the consequences of foreign exchange risk, as provided for in item 84 of these guidelines.

3.2.5. Lending to micro and small enterprises

93. The credit institution should assess the borrower's current and future ability to meet the obligations under the loan agreement. The credit institution should analyse the borrower's credit application to ensure that it is consistent with the credit

- institution's risk appetite, policies, loan approval criteria, limits and relevant metrics, as well as with any applicable macroprudential measures.
94. A credit institution should consider that the primary source of repayment is cash flow from the borrower's normal business activities and, when applicable and consistent with the purpose of the loan, any proceeds from the sale of assets.
95. When assessing the creditworthiness of a borrower, the credit institution should place emphasis on the borrower's realistic and sustainable future income and future cash flow, rather than on the available collateral. Collateral should not in itself be the main criterion for granting a loan and cannot in itself justify the approval of any loan agreement. Collateral should be considered a secondary source of collection for the credit institution in the event of default or a significant deterioration in the borrower's risk profile, and not a primary source of repayment, except where the loan agreement provides that the repayment of the loan is based on the sale of the collateral or on available liquid collateral.
96. When assessing creditworthiness, the credit institution should:
- 1) analyse the financial position and credit risk of the borrower, as set out below;
 - 2) analyse the borrower's business model and strategy, as set out below;
 - 3) determine and assess the borrower's credit scoring or internal rating, where applicable, in accordance with the credit risk policies and procedures;
 - 4) consider all the borrower's financial commitments, such as drawn and undrawn committed facilities with institutions, including working capital facilities, credit exposures of the borrower and the past repayment behaviour of the borrower, as well as other obligations arising from tax or other public authorities or social security funds;
 - 5) when relevant, assess the structure of the transaction, including the risk of structural subordination and related terms, e.g. covenants, and, if applicable, third-party guarantees and collateral structure.
97. The credit institution should carry out the creditworthiness assessment in relation to the specificities of the loan, such as nature, maturity and interest rate.
98. For assessing the borrower's ability to meet obligations under the loan agreement, institutions should adopt suitable methods and approaches, which may include models, as long as these guidelines are met. The selection of the suitable and adequate method should depend on the risk level, size and type of loan.
99. If the borrower is a member of a group of related parties, the credit institution should carry out an assessment on an individual basis and, where applicable, at group level, especially if repayment relies on cash flow originating from other related parties. If the borrower is a member of a group of related parties connected to central banks and states, including the central government, regional government units and local self-governments and public sector entities, the credit institution should evaluate that entity on an individual basis.

100. For lending activities with cross-border elements (e.g. trade finance, export finance), the credit institution should take into account the political, economic and legal environment in which the foreign counterparty of the institution's client operates. The credit institution should assess the buyer's ability to transfer funds, the supplier's capacity to deliver the order, including its capacity to meet the applicable local legal requirements, and the supplier's financial capacity to handle possible delays in transaction.
101. The credit institution should assess the borrower's exposure to ESG factors, in particular environmental factors, and climate change impacts, as well as the adequacy of the mitigation strategies identified by the borrower. This analysis should be carried out at the level of each borrower, however, where relevant, the credit institution may also consider carrying out such analysis at the portfolio level.
102. In order to identify borrowers that are exposed, directly or indirectly, to increased risk associated with ESG factors, the credit institution should consider using heat maps that highlight, for example, climate-related and environmental risks of individual economic (sub-)sectors in a chart or on a scaling system. For loans or borrowers associated with a higher ESG risk, a more intensive analysis of the actual business model of the borrower is required, including a review of current and projected greenhouse gas emissions, the market environment, supervisory ESG requirements for the companies under consideration and the likely impacts of ESG regulation on the borrower's financial position.

3.2.5.1. Analysis of the borrower's financial position

103. For the purposes of analysing the borrower's financial position as part of the creditworthiness assessment as set out above, the credit institution should consider the following:
 - 1) current and projected financial condition, including balance sheets, repayment capacity to meet contractual obligations, including possible adverse events and, where relevant, capital structure, working capital, income and cash flow;
 - 2) where relevant, the borrower's leverage level, dividend distribution, actual and estimated/forecast capital expenditures as well as the cash turnover ratio and its compliance with the loan exposure under consideration;
 - 3) where applicable, the probability of default, based on a credit score or internal rating;
 - 4) the use of adequate financial metrics and indicators specific to the asset class or product type, consistent with the credit institution's risk appetite, policies and limits set in accordance with sections 2.2 and 2.3 of these Guidelines, including taking into account the metrics in Part C of these Guidelines to the extent that they are applicable and appropriate to the specific credit proposal.
104. The credit institution should ensure that the financial projections used in the analysis are realistic and reasonable. These projections/forecasts should be based

at least on a projection of financial data based on historical data. The credit institution should assess whether these projections are in line with the credit institution's economic and market expectations. Where the credit institution has serious doubts as to the reliability of these financial projections, it should independently carry out projections of the borrower's financial condition and repayment capacity.

105. Where applicable, when granting credit to holding companies, the credit institution should assess the financial condition of the holding company as a separate entity, e.g. on a consolidated basis, and as a stand-alone entity, if the holding company itself is not an operating company or the credit institution does not have guarantees from the operating companies of that holding company.
106. When assessing the financial condition of the borrower, the credit institution should assess the sustainability and feasibility of its future repayment capacity under potentially adverse conditions that are relevant to the type and purpose of the loan and that may occur during the life of the loan agreement. These events may include a decrease in income and other cash flows, an increase in interest rates, a delay in the payment of principal or interest, a deterioration in market and operating conditions for the borrower, as well as changes in foreign exchange rates, where relevant.

3.2.5.2. Analysis of the borrower's business model and strategy

107. The credit institution should assess the borrower's business model and strategy, including in relation to the purpose of the loan.
108. The credit institution should assess the knowledge, experience and capacity to manage the borrower's business activities, as well as the assets or investments related to the loan agreements (e.g. specific assets for a commercial real estate loan).
109. The credit institution should assess the feasibility of the business plan and related financial projections in accordance with the specifics of the sector in which the borrower operates.
110. The credit institution should assess which key contracts, customers or suppliers the borrower relies on and how they affect cash flow generation, including any potential concentrations.
111. The credit institution should assess whether there is any potential dependence of the borrower on key persons and, if necessary, together with the borrower, determine possible mitigating measures.

3.2.5.3. Valuation of guarantees and collateral

112. The credit institution should review any pledged collateral used for risk mitigation purposes against the collateral requirements set out in the credit institution's risk appetite, its risk management policies and procedures, including valuation and ownership, and verify all relevant documentation (e.g. whether the assets are registered in the appropriate registers).
113. The credit institution should assess all guarantees, contractual covenants, asset repossession clauses and debt servicing agreements used for risk mitigation purposes.
114. When relevant for making credit decisions, a credit institution should assess the capital and creditworthiness of the borrower, through instruments such as mortgage collateral and repayment guarantees from external sources.
115. If the loan agreement includes any form of third-party guarantee, the credit institution should assess the level of protection provided by that guarantee and, where relevant, carry out an assessment of the guarantor's creditworthiness by applying the relevant provisions of these guidelines, depending on whether the guarantor is a natural or legal person. The assessment of the guarantor's creditworthiness should be proportionate to the size of the guarantee in relation to the loan and the type of guarantor.

3.2.6 Lending to medium and large enterprises

116. The credit institution should assess the borrower's current and future ability to meet the obligations under the loan agreement. The credit institution should also analyse the borrower's credit application to ensure that the application is consistent with the credit institution's risk appetite, policies, loan approval criteria, limits and relevant metrics, as well as with any applicable macroprudential measures.
117. The credit institution should take into account that the cash flow from the usual business activities of the borrower and, when applicable and in accordance with the purpose of the loan, any income from the sale of assets, constitute the primary sources of repayment.
118. When assessing the creditworthiness of a borrower, the credit institution should focus on the borrower's realistic and sustainable future income and future cash flow, rather than on the available collateral. Collateral should not be the main criterion for granting credit and cannot in itself justify the granting of any loan agreement. Collateral should be considered a secondary source of collection for the credit institution in the event of default or a significant deterioration in the risk profile, and not a primary source of repayment, except where the loan agreement

provides that the repayment of the loan is based on the sale of the collateral or on available liquid collateral.

119. When conducting a creditworthiness assessment, a credit institution should:
 - 1) analyse the financial condition and credit risk of the borrower, as set out below;
 - 2) analyse the borrower's organizational structure, business model and strategy, as set out below;
 - 3) determine the borrower's credit rating or assess the internal rating, where applicable, in accordance with credit risk policies and procedures;
 - 4) take into account all financial obligations of the borrower, such as all drawn and undrawn credit lines in institutions, including working capital lines, the borrower's loan exposures, the borrower's previous repayment behaviour, as well as other obligations to tax or other public authorities or social security funds;
 - 5) assess the structure of the transaction, including the risk of structural subordination and related conditions, e.g. contractual obligations and, if applicable, third party guarantees and collateral structure.
120. The credit institution should conduct a creditworthiness assessment considering the specifics of the loan, such as type, maturity and interest rate.
121. The credit institution should assess the borrower's exposure to ESG factors, in particular those related to the environment and the impact on climate change, as well as the adequacy of the mitigation strategies identified by the borrower.
122. If the borrower is a member of a group of related entities, the credit institution should conduct an assessment at an individual level and, where appropriate, at a group level, in particular if the repayment relies on cash flows originating from other related entities. If the borrower is a member of a group of related entities that are related to central banks and sovereigns, including central governments, regional or local government units and public sector entities, the credit institution should assess that entity on an individual basis.
123. In credit activities with cross-border elements (e.g. trade finance, export finance), the credit institution should take into account the political, economic and legal environment in which the foreign counterparty of the credit institution's client operates. The credit institution should assess the potential of the buyer to transfer funds, the ability of the supplier to deliver the order, including its ability to comply with applicable legal requirements, and the financial capacity of the supplier to withstand possible delays in the transaction.
124. In order to identify borrowers that are exposed, directly or indirectly, to increased risk associated with ESG factors, the credit institution should consider using heat maps that highlight, for example, climate-related and environmental risks of individual economic (sub-)sectors in a chart or on a scaling system. For loans or borrowers associated with a higher ESG risk, a more intensive analysis of the

actual business model of the borrower is required, including a review of current and projected greenhouse gas emissions, the market environment, on the borrower's financial position.

3.2.6.1. Analysis of the borrower's financial position

125. For the purposes of analysing the borrower's financial position as part of the creditworthiness assessment as specified above, the credit institution should consider the following:
- 1) current and projected financial position, including balance sheets and capital structure, working capital, revenues, cash flow and repayment capacity to meet contractual obligations, e.g. debt servicing capacity, including possible adverse events (see sensitivity analysis) — items to be analysed should include, inter alia, free cash flow available to service debt under the loan exposure in question;
 - 2) net operating income and profitability, particularly in relation to interest-bearing debt;
 - 3) the borrower's leverage level, dividend distribution, and actual and projected capital expenditures, as well as the cash turnover ratio and its compliance with the loan exposure under consideration;
 - 4) the exposure profile to maturity in relation to potential market movements (e.g. foreign currency exposures and exposures secured by a mortgage repayment plan);
 - 5) where applicable, the probability of default, based on a credit score or internal rating;
 - 6) the use of adequate financial metrics and indicators, as well as metrics and indicators specific to the asset class or product type, in accordance with the credit institution's risk appetite, policies and limits set in accordance with sections 2.2 and 2.3 of these Guidelines, including taking into account the metrics from Part C to the extent that they are applicable and appropriate to the specific credit proposal.
126. The credit institution should be satisfied that the projections used in the analysis are realistic and reasonable and in line with the credit institution's economic and market expectations. Where the credit institution has serious doubts as to the reliability of those financial projections, it should make its own projections of the borrower's financial condition and repayment capacity and, where relevant, use its own projections to cross-check the projections provided by the borrower.
127. The credit institution should also assess the borrower's ability to generate profits in the future, in order to measure the impact of retained earnings and the consequent impact on capital, especially in cases where the borrower has not been able to achieve a positive financial result over a period of time.
128. The credit institution should conduct an assessment of the borrower's cash conversion cycle to measure the time it takes to convert investments into

inventories and to convert other input resources into cash through the sale of its specific goods and services. The credit institution should understand the borrower's cash conversion cycle to assess working capital needs and determine fixed costs to assess the continued ability to repay loan exposures over time.

129. The credit institution should, where relevant, assess those financial metrics against the metrics and limits set in its own risk appetite, credit risk policies and limits, in accordance with sections 2.2 and 2.3 of these Guidelines.
130. When granting loans to holding companies, the credit institution should assess the financial condition of the holding company both as a separate entity, e.g. on a consolidated basis, and as an individual entity, if the holding company itself is not an operating company or if the credit institution does not have guarantees from the operating companies of that holding company.

3.2.6.2. Sensitivity analysis when assessing creditworthiness

131. The credit institution should assess the sustainability and feasibility of the borrower's financial position, as well as its future repayment capacity under potentially adverse conditions that may arise during the life of the loan agreement. For this purpose, the credit institution should carry out a single or multi-factor sensitivity analysis, taking into account market and idiosyncratic events, or a combination of any of them.
132. The sensitivity analysis should account for all general and asset class and product-specific aspects that may have an impact on the creditworthiness of the borrower.
133. When carrying out a sensitivity analysis of the borrower's repayment capacity in negative future conditions, the credit institution should take into account the following events that are most relevant for the borrower's specific circumstances and business models:
 - 1) Idiosyncratic events:
 - a) a serious but possible decline in the borrower's revenue or profit margins;
 - b) a serious but possible operational loss event;
 - c) the occurrence of severe but plausible management problems;
 - d) the failure of significant trading partners, customers or suppliers;
 - e) a severe but plausible reputational damage;
 - f) a severe but plausible outflow of liquidity, changes in funding or an increase in a borrower's balance sheet leverage;
 - g) adverse movements in the price of assets to which the borrower is predominantly exposed (e.g. as raw material or end product) and foreign exchange risk;
 - 2) Market events:
 - a) a severe but plausible macroeconomic downturn;
 - b) a severe but plausible downturn in the economic sectors in which the borrower and its clients are operating;

- c) significant change in political, regulatory and geographical risk;
- d) a severe but plausible increase in the cost of funding, e.g. an increase in the interest rate by 200 basis points on all credit exposures of the borrower.

3.2.6.3. Analysis of the borrower's business model and strategy

- 134. The credit institution should assess the borrower's business model and strategy, including in relation to the purpose of the loan.
- 135. The credit institution should assess the borrower's knowledge, experience and capacity to manage business activities, assets or investments related to the loan agreement (e.g. specific property for a commercial real estate loan).
- 136. The credit institution should assess the feasibility of the business plan and associated financial projections in line with the specifics of the sector in which the borrower operates.
- 137. The credit institution should assess the borrower's reliance on key contracts, customers or suppliers and how they affect cash flow generation, including any concentrations.

3.2.6.4. Valuation of guarantees and collateral

- 138. The credit institution should review any pledged collateral against the collateral requirements set out in the credit institution's risk appetite, risk management policies and procedures, including the valuation and ownership, and verify all relevant documentation (e.g. whether the property is registered in the appropriate registers).
- 139. The credit institution should assess all guarantees, covenants, negative pledge clauses and debt service agreements that are used for the purposes of risk mitigation. The credit institution should also consider if the value of the collateral is in some way correlated to the borrower's business or capacity to generate cash flow.
- 140. The credit institution should assess the borrower's capital and credit enhancements, such as mortgage insurance, take-out commitments and repayment guarantees from external sources.
- 141. If a loan agreement involves any form of guarantees from third parties, the credit institution should assess the level of protection provided by the guarantee and, if relevant, conduct a creditworthiness assessment of the guarantor, applying the relevant provisions of these guidelines, depending on whether the guarantor is a natural person or a legal person. The creditworthiness assessment of the guarantor should be proportionate to the size of the guarantee in relation to the loan and the type of guarantor.

142. If, in the syndicated lending or project finance transactions, the payment streams pass through a third party to the transactions, e.g. a designated agent, the credit institution (or mandated lead arrangers or their nominated agents) should assess the soundness of the agent. For cross-border lending and project finance transactions, the agent should be the sole issuer of any guarantees, letters of credit or similar documents issued on behalf of the supplier in the transaction.

3.2.7. Commercial immovable property lending

143. When assessing the creditworthiness of a borrower in cases of commercial immovable property lending, in addition to the general criteria for assessing creditworthiness in accordance with Sections 3.2.5 and 3.2.6 of these Guidelines, the credit institution should also apply the criteria set out in this Section. When assessing the creditworthiness of a borrower in cases of commercial immovable property lending that will be used by a borrower who owns the property for the purposes of his business, the credit institution should apply only the criteria set out in Sections 3.2.5 and 3.2.6 of these Guidelines.
144. The credit institution should assess and verify the borrower's experience with respect to the type, size and geographic location of the commercial immovable property. When the borrower is a special purpose vehicle sponsored by another entity, the credit institution should assess the sponsoring entity's experience with respect to the type, size and geographic location of the commercial immovable property.
145. The credit institution should carry an assessment of the income-producing capacity of the property and an assessment of the prospect of refinancing. These assessments should take into account the committed term of the commercial immovable property loan specified in the loan application.
146. When assessing the borrower's repayment capacity, the credit institution should, where relevant, assess:
- 1) cash flow sustainability;
 - 2) the quality of the tenant, the impact of changes to current rental income on the loan repayment schedule, lease terms, maturities and conditions, and the tenant's payment history, if already in place;
 - 3) reletting prospects, the cash flow required to service the loan in accordance with the loan agreement if there are needs for reletting; if applicable, immovable property yields during periods of economic downturn and fluctuations in rental income over time, to assess the presence of excessively compressed yields;
 - 4) required capital expenditure for the immovable property throughout the term of the loan.
147. When assessing the prospects of reletting any immovable property, the credit institution should consider the tenants' demand for that immovable property, taking into account the supply of comparable immovable properties, the conditions and

specifications of the immovable property, the location of the immovable property and the distance from relevant infrastructure serving the immovable property.

148. For the purposes of sensitivity analysis under adverse market and idiosyncratic events, the credit institution should, in addition to the events specified in Sections 3.2.5 and 3.2.6 of these Guidelines, take into account the following, as applicable:
- 1) reletting, including changes in rental prices, lease length in relation to the loan repayment period, increasing vacancy rates of rental properties, maintenance and refurbishment costs, rent-free periods and rental incentives;
 - 2) risks and delays associated with refinancing;
 - 3) capital expenditure risk;
 - 4) other relevant criteria.

3.2.8 Lending for immovable property development

149. When assessing the borrower's creditworthiness in cases of lending for immovable property development, in addition to the general conditions for creditworthiness assessment prescribed in Sections 3.2.5 and 3.2.6 of these Guidelines, the credit institution should apply the conditions specified in this Section.
150. The creditworthiness assessment should cover, in accordance with the loan life cycle, the development phase, including its stages, where relevant, and the post-construction phase, when the project is converted into a commercial immovable property loan. In this second phase (post-construction), the borrower's creditworthiness is assessed as if it were a commercial immovable property loan, in accordance with the provisions of these Guidelines.
151. In assessing creditworthiness during the construction phase, the credit institution should ensure that the borrower:
- 1) has a feasible business plan, which includes a rationale for construction and a projection of all construction-related costs, certified by an independent expert;
 - 2) has access to builders, architects, engineers and contractors for immovable property construction;
 - 3) has obtained or is able to obtain in the future all necessary permits and certificates for construction, at all stages of project implementation and before the disbursement(s) of the tranche(s).
152. The credit institution should ensure that the calculation of construction-related costs includes a contingency for possible cost overruns. Contingency plans should be included in the credit limit or capital. The credit institution should assess the borrower's cash reserves and liquidity profile to ensure that the borrower has the capacity to finance contingency plans for possible cost overruns and delays, if any, beyond the planned amount for contingency plans.
153. The credit institution should assess the feasibility of each projected net sale, in terms of the value and volume of sales as well as the timing.

154. The credit institution should conduct site visits, where relevant, accompanied by an appropriately qualified person to verify the main components of the site, including access and site specifics, and file a summary of such visits in the borrower file.
155. In addition to assessing the creditworthiness of the borrower, the credit institution should, where relevant (e.g. in cases of calls for additional funds on behalf of collateral), assess the investors investing capital in the project, with a focus on assessing their financial situation, relevant professional knowledge and experience with similar projects, as well as the alignment of interests between the investor investing capital for the project and the credit institution offering credit for the same project.

3.2.9. Leveraged transactions

156. When assessing the creditworthiness of the borrower in cases of leveraged transactions, in addition to the general requirements for assessing creditworthiness set out in Sections 3.2.5 and 3.2.6 of these Guidelines, the credit institution should, in the credit approval process, recognise excessive levels of leverage at the time of approval of the loan, which is defined as the ratio of total debt to earnings before interest, tax and depreciation (EBITDA). Transactions with excessive levels of leverage should be exceptional (and should be consistent with the credit institution's risk appetite) and should lead to the delegation of credit approval authority and escalation in the context of the credit institution's risk management.
157. The credit institution should conduct a comprehensive assessment of the borrower's ability to repay or reduce the level of leverage to sustainable debt levels within a reasonable period of time.

3.2.10. Project finance

158. When assessing the creditworthiness of a borrower in cases of project finance, in addition to the general requirements for assessing creditworthiness prescribed in Sections 3.2.5 and 3.2.6 of these Guidelines, the credit institution should follow the specific criteria set out in this Section.
159. The lending institution should assess the primary source of loan repayment, which is the income generated from the asset (project) being financed. The lending institution should assess the cash flow associated with the project, including future revenue generation capacity after the project is completed, taking into account applicable regulatory or legal constraints (e.g., price regulation, rate of return regulation, and environmental regulations that affect the profitability of the project).
160. The credit institution providing the project credit should, to the extent possible, ensure that all project assets, as well as current and future cash flows and accounts, are pledged in its favour or in the favour of the agent/sponsor in the case

of a syndicated/joint loan. If a special purpose vehicle is established for the project, shares in that special purpose vehicle should be pledged to the credit institution, so that the credit institution/agent can take ownership of that vehicle if necessary. In the case of syndicated/joint loans, the access of each creditor to the pledged funds and assets should be regulated by agreements between the creditors.

161. In assessing the construction phase of the project, the credit institution should determine that the borrower:
 - 1) has a feasible business plan that includes a rationale for construction and a projection of all costs associated with construction that has been verified by an independent expert;
 - 2) has access to builders, architects, engineers and project contractors;
 - 3) has or is able to obtain all necessary permits and approvals for construction in the future, as the project progresses.
162. The credit institution should ensure that the construction-related cost estimate submitted by the borrower includes a contingency for possible cost overruns. Contingency plans should be included in the credit limit or capital. The credit institution should assess the level of cash reserves and liquidity profile of the borrower or equity investor to ensure that the borrower or equity investor has the capacity to finance contingency plans for possible cost overruns and delays, if any, beyond the planned contingency amount.
163. In addition to assessing the borrower's creditworthiness, the credit institution should assess the investors who invest capital in the project and, in doing so, focus, where relevant, on assessing their financial condition, relevant knowledge and experience in similar projects, as well as their ability and willingness to support the project throughout its duration.

3.3. Loan decision and loan agreement

164. In order to perform a reliable and accurate assessment of creditworthiness, a credit institution should prepare relevant documentation of credit decisions and credit agreements in a manner that helps identify and prevent misinterpretation of information by the borrower, credit intermediary or credit institution employee involved in the assessment of the application.
165. The creditworthiness assessment carried out in accordance with the provisions of Section 3.2 of these Guidelines should be adequately documented and serve as a basis for the credit decision maker to approve or reject the credit application. The documented results of the creditworthiness assessment should be such that they can justify proposals for the approval or rejection of the credit application.
166. The decision to approve or reject a credit application (credit decision) should be made by the relevant credit decision maker, in accordance with the policies and procedures and management systems prescribed in Section 2.3 of these Guidelines.

167. The credit decision should be clear and well-documented and include all terms and conditions for the credit agreement and loan disbursement, including those to mitigate risks identified in the creditworthiness assessment, such as ESG risks.
168. In the credit decision, the credit institution should clearly specify the maximum period of its validity. If the approved transaction is not completed within that period, a new credit proposal should be submitted for approval.
169. The credit institution should not conclude a loan agreement with the borrower unless it has confirmed that all the preconditions and conditions set out in the loan decision have been met. The loan disbursement shall be made only after the conclusion of the loan agreement.

IV. PRICING

170. Pricing frameworks should reflect the risk appetite and business strategy of the credit institution, including profitability and risk aspects. The pricing of loans should be linked to the characteristics of the credit product and take into account competition and prevailing market conditions. The credit institution should also define its pricing approach by type of borrower, credit quality and borrower riskiness (in the case of individual pricing) where appropriate. The credit institution should ensure that the pricing framework is well documented and supported by appropriate governance structures, which are responsible for maintaining the overall pricing framework and for individual pricing decisions, where relevant.
171. The credit institution should consider differentiating its pricing frameworks, depending on the type of loan and borrower. For consumers and micro and small enterprises, pricing should be based more on the portfolio and product, while for medium-sized and large enterprises, pricing should be based more on the type of transaction and type of loan.
172. A lending institution should establish specific approaches for pricing promotional loans when the risk-based and performance-based considerations outlined in this Section are not fully applied.
173. The credit institution should consider, and reflect in the pricing of the loan, all relevant costs until the next interest rate or maturity date, including:
 - 1) the cost of capital (taking into account regulatory and economic capital) that should result from the existing capital allocation, in accordance with established divisions, e.g. geographical division, division by business lines and products;
 - 2) the cost of funding, which should correspond to the key characteristics of the loan, e.g. the expected duration of the loan, taking into account not only contractual terms, but also behavioural assumptions, e.g. the risk of early repayment;

- 3) operational and administrative costs that should result from cost allocation;
 - 4) credit risk costs calculated for different homogeneous risk groups, taking into account historical experience of recognizing credit risk losses and, where relevant, applying an expected loss model;
 - 5) all other actual costs associated with the loan in question, including tax matters, where relevant;
 - 6) competition and prevailing market conditions, especially in the lending segment and for certain credit products.
174. For the purposes of pricing and measuring profitability, including cross-subsidies between loans or business units/business lines, a credit institution should consider and take into account risk-adjusted performance measures, in a manner that is proportionate to the size, type and complexity of the loan and the risk profile of the borrower. Such performance measures may include economic value added (EVA), return on risk-adjusted capital (RORAC) and risk-adjusted return on capital (RAROC), return on risk-weighted assets (RORWA), return on total assets (ROTA) and other measures that are relevant to the characteristics of the loan. Risk-adjusted performance measures may also depend on and reflect the credit institution's capital planning strategies and policies.
175. The credit institution should transparently document and review the basic framework for cost allocation. The credit institution should establish a fair allocation of costs within the organization to ensure that these business lines and, to the extent possible, individual loans, accurately reflect the expected return commensurate with the risk taken.
176. The credit institution should apply ex ante transaction tools and regular ex post monitoring to link transaction risk, pricing and expected overall profitability, including business lines and product lines, at an appropriate level. All material transactions that are carried out below cost should be reported and adequately justified, in accordance with the policies and procedures established by the credit institution. The monitoring process should provide input for reviewing the adequacy of the overall pricing from a business and risk perspective. The credit institution should take action, as necessary, to ensure alignment with objectives and risk appetite.

V. VALUATION OF IMMOVABLE AND MOVABLE PROPERTY

5.1. Valuation at the point of origination

177. Where a credit exposure is secured by collateral in the form of immovable or movable property, the credit institution should ensure that the valuation of the collateral is carried out accurately at the time of approval. The credit institution should establish internal policies and procedures for the valuation of collateral, which, inter alia, define the approaches and methodologies for the valuation of the value to be applied by the valuer, as well as the use of advanced statistical models for each type of collateral. The credit institution should ensure that these

approaches comply with the requirements of Article 265 of the *Decision on Capital Adequacy of Credit Institutions* and are adequate in relation to the type and potential value of the collateral and that they are consistent with the loan agreements and with the policies and procedures for credit risk management and the conditions specified in Section 5.4. of these Guidelines.

178. Where applicable, the credit institution should take into account ESG factors that affect the value of collateral, for example the energy efficiency of buildings.

5.1.1. Immovable property collateral

179. At the time of approving credit exposure, the credit institution should ensure that the value of all collateral in the form of immovable property is assessed by an internal or external valuer who will conduct a property tour that includes an assessment of the interior and exterior of the property.

180. As an exception to item 179 of these Guidelines, for the purposes of assessing the value of residential immovable property in well-developed and mature immovable property markets, the value can be determined by an assessment without visiting the property (English: desktop valuation), which is carried out by an internal or external valuer with the support of advanced statistical models. The valuer, in doing so, retains the responsibility for the valuation, while advanced statistical models, which meet the requirements of Section 5.4 of these Guidelines, including the reliability measure related to the valuation proposal and other relevant property-specific information, should serve as support tools. In this case, the valuation proposal should be evaluated, reviewed and approved by an internal or external valuer who should understand all the input values and assumptions taken into account in the model. If the confidence measure within the advanced statistical model shows a low level of confidence and/or other relevant property-specific information creates uncertainty about the valuation proposal, the valuer should choose another valuation method instead of a no-visit appraisal.

181. When a credit institution uses external valuers, it should define a list of accepted external valuers. The composition of the list of valuers should ensure that the valuers have relevant expertise in the relevant segments of the real estate sector.

182. The credit institution should ensure that valuers provide an impartial, clear, transparent and objective assessment of the value of the immovable property, and each assessment should include a final report that includes the necessary information about the assessment process and the property. The assessment report should clearly state who commissioned the assessment and that the assessment was requested for the purpose of applying for a loan, renewing or changing the terms of the agreement. The assessment should be carried out (internal assessment) or commissioned (external assessment) by the credit

institution or the collateral agent (in the case of syndicated loans), unless it is the subject of a request by the borrower.

183. At the end of the valuation process, the credit institution should ensure that it has received a clear and transparent valuation report for each asset used as collateral, documenting all elements and parameters that determine the value of the collateral, including all information necessary and sufficient for an easy understanding of those elements and parameters, and in particular:
- 1) reference value of collateral;
 - 2) approaches, methodology and key parameters and assumptions used for valuation;
 - 3) a description of the collateral, including its current use or multiple uses, if applicable, as well as the type and quality of the property, including its age and condition;
 - 4) a description of the location of the collateral, local market conditions and liquidity;
 - 5) legal and factual characteristics of collateral;
 - 6) all known circumstances that may affect the value in the short term, including drawing attention to and commenting on any issues that affect the degree of certainty or uncertainty.
184. The credit institution should critically review the value estimates it receives from the valuer, with particular focus on aspects such as understandability (whether the approaches and assumptions are clear and transparent), the prudence of the assumptions (e.g. regarding cash flows and discount rates) and the clear and reasonable identification of comparable immovable properties used as benchmarks.

5.1.2. Movable property collateral

185. At the time of approval, the credit institution should ensure that an internal or external valuer assesses the value of all collateral in the form of movable property by applying an appropriate and prudent approach that is proportionate to the nature, type and complexity of the collateral, using appropriate advanced statistical models that meet the requirements of Section 5.4 of these Guidelines or other standard methods, such as indexation, taking into account the market value specified in Article 265 paragraph 8 of the *Decision on Capital Adequacy of Credit Institutions*.
186. When applicable, the credit institution should, in its policies and procedures, determine approaches for the purposes of these valuations, and establish internal thresholds and limits above which an individual valuation of movable assets as collateral is required at the time of approval, which should be performed by a valuer.

187. When a credit institution uses the services of external valuers, it should define a list of accepted external valuers for the specific type of property used as collateral, which is acceptable to the credit institution. The services of experts from the list of valuers should be used by the credit institution to assess the value of collateral in the form of large and complex movable assets, such as vessels, aircraft and industrial plants and machinery.
188. For collateral in the form of movable property that is subject to individual valuation by a valuer, the credit institution should ensure that the valuation report is clear and transparent and that all elements and parameters determining the value of the collateral are stated, as specified in item 183 of these Guidelines.
189. For movable assets subject to valuation according to statistical models, the credit institution should ensure that it has obtained a clear and transparent model output, stating the value of the collateral. The credit institution should understand the methodologies, key parameters, assumptions and limitations of the models used.
190. A credit institution should have appropriate IT processes, systems and capacities, as well as sufficient and accurate data for the purposes of any assessment based on a statistical model.

5.2. The process of monitoring and revaluation

5.2.1. Immovable property collateral

191. When monitoring the value of assets in accordance with Article 246, paragraphs 3 to 6 of the Decision on capital adequacy of credit institutions, a credit institution, for the purposes of these Guidelines, should establish policies and procedures that determine the approach and frequency of monitoring collateral in the form of immovable property. Those policies and procedures should, where relevant, take into account the following elements:
 - 1) type of property;
 - 2) quality of the loan secured by the asset;
 - 3) the status of the property's construction;
 - 4) property value;
 - 5) assumptions made in the assessment;
 - 6) changes in market conditions.
192. The credit institution should determine the appropriate frequency of monitoring the value of collateral, taking into account the type and value of collateral at the time of loan approval and, in relation to the loan agreement, take into account the following:
 - 1) the frequency of monitoring immovable property (assets) and parts of immovable property under construction (e.g. with unfinished buildings, the frequency is higher than with similar completed immovable property and parts of immovable property);
 - 2) the frequency of monitoring immovable property and parts of immovable

- property that have a high book value or a high LTV ratio, which is higher than similar immovable property and parts of immovable property with a low book value or a low LTV ratio;
- 3) The frequency of monitoring loans secured by immovable property or parts of immovable property that have lower credit quality is higher than the frequency of monitoring similar loans secured by immovable property or parts of immovable property of higher credit quality.
193. The credit institution should ensure that all indices and statistical models used to monitor the value of collateral are sufficiently granular and that the methodology is appropriate to the type of asset and credit product and based on a sufficiently long time series of analysed empirical evidence on previous transactions and valuations of collateral or similar collateral.
194. The credit institution should establish policies and procedures for the revaluation of immovable property collateral, which prescribe the revaluation approaches (e.g. valuation without visiting the property, drive-by valuation, property tour including interior and exterior valuation, statistical models) for the different types of real estate used as collateral, ensuring that the approach or combination of approaches is in accordance with the regulations and proportionate to the type and potential values of the collateral, as well as in relation to the loan agreement. The credit institution should also determine specific triggers (e.g. change in valuation assumptions) that indicate that a revaluation of the collateral is required.
195. When the conditions for verification in accordance with the provisions of Article 246 paragraphs (4) to (6) of the *Decision on Capital Adequacy of Credit Institutions* are met, the credit institution should update the value of the immovable property used as collateral by a revaluation carried out by a valuer with the possibility of using appropriate advanced statistical models when those models meet the conditions set out in Section 5.4. of these Guidelines and take into account the individual characteristics of the property and the geographical area. The credit institution should not use those models as the only means of revaluation.
196. When the conditions for monitoring in accordance with the provisions of Article 246 paragraphs (4) to (6) of the *Decision on Capital Adequacy of Credit Institutions* are not met, the credit institution may update the value of the immovable property used as collateral either through a re-evaluation carried out by a valuer or using the results of appropriate statistical models that meet the requirements of Section 5.4 of these Guidelines and take into account the individual characteristics of the property and the geographical area.

5.2.2. Movable property collateral

197. For the monitoring of collateral in the form of movable property, the credit institution may rely on appropriate statistical models and indices. For the re-evaluation of

movable property collateral, the credit institution may rely on the assessment of the valuer, statistical models and indices.

198. In its policies and procedures, the credit institution should establish the approach for using the services of valuers or statistical models, define the approach that is most appropriate for the specific type of collateral (e.g. valuation without visiting the property, valuation only of the exterior of the property, a property visit that includes an assessment of the interior and exterior of the property) for re-valuations performed by valuers, and determine the frequency of monitoring and re-valuation of movable property collateral.
199. The credit institution's policies and procedures should include, when applicable, criteria for individual value monitoring and re-evaluation of movable property collateral by a valuer who possesses the necessary qualifications, skills and experience. In proportion to the type, nature and complexity of collateral in the form of movable assets, such as aircraft, ship fleet, plant and machinery, those criteria should be related at least to its value at the stage of approval, life expectancy, condition of tangible assets, such as depreciation and maintenance, as well as the necessity of physical verification and certification.
200. A credit institution should have appropriate IT processes, systems, capabilities and sufficient data for the purposes of any statistical model-based or index-based revaluation.

5.3. Criteria for valuers

201. The credit institution should be sure that the valuer performing the valuation or re-valuation:
 - 1) is professionally competent and meets all national or international requirements and accepted professional standards applicable to valuers or to the performance of specific tasks in relation to valuations;
 - 2) has the appropriate technical skills and experience to perform the task;
 - 3) has the necessary knowledge, i.e. knowledge of the subject of the valuation, the relevant property market and the purpose of the valuation.
 - 4) is independent of the credit decision process.
202. The credit institution should ensure that the valuer's fee or salary and the result of the valuation are not linked in a way that creates a conflict of interest.
203. The credit institution should assess the performance of the valuers, in particular the accuracy of the resulting valuations, e.g. by back-testing the value of collateral using advanced statistical models. As part of these assessments, the credit institution should also consider the concentration of valuations performed by particular valuers and the fees paid to particular valuers.

204. In order to sufficiently mitigate any potential conflict of interest, a credit institution should take reasonable steps, e.g. through contractual provisions, to ensure that valuers who will carry out the actual valuation of a particular asset and their close relatives meet the following requirements:
- 1) they are not involved in the assessment, decision, or administration of the loan application;
 - 2) they are not guided by and are not influenced by the borrower's creditworthiness;
 - 3) they have no actual or potential conflict of interest in relation to the property in question, the process and the result of the valuation;
 - 4) they have no direct or indirect interest in the property being valued;
 - 5) they are not in any way related to either the buyer or the seller of the property;
205. The credit institution should ensure appropriate rotation of valuers and define the number of consecutive individual valuations of the same property that can be carried out by the same valuer. Any further re-valuations exceeding that number should lead to rotation of valuers which should result in the appointment of another internal or external valuer.

5.4. Criteria for advanced statistical models for valuation

206. A credit institution should establish in its policies and procedures the criteria for the use of advanced statistical models for the valuation, re-valuation and monitoring of collateral values. These policies and procedures should take into account the evidence of the performance of such models, the use of property-specific variables, the use of minimally available and accurate information, and the uncertainty of the models.
207. The credit institution should ensure that the advanced statistical models used are:
- 1) immovable property and location specific and sufficiently granular;
 - 2) valid, accurate and subject to reliable and regular retrospective testing against actually recorded transaction prices;
 - 3) based on a sufficiently large and representative sample, based on established transaction prices;
 - 4) based on the latest high-quality data.
208. When using these advanced statistical models, the ultimate responsibility for the adequacy and performance of the model lies with the credit institution, and the valuer should be responsible for the estimated value obtained by applying an advanced statistical model. The credit institution should understand their methodology, input data and assumptions of the models used. The credit institution should ensure that the documentation of the model is up to date.
209. A credit institution should have appropriate information processes, systems and capabilities, as well as sufficient and accurate data for the purposes of any collateral valuation based on a statistical model or revaluation.

VI. MONITORING FRAMEWORK

6.1. General provisions of the credit risk monitoring framework

210. A credit institution should have a reliable and effective monitoring framework, supported by an appropriate data infrastructure, to ensure that information on credit risk exposures, borrowers and collateral is relevant and up-to-date, and that external reporting is reliable, complete, up-to-date and timely.
211. The monitoring framework should enable a credit institution to manage and monitor its credit risk exposures in accordance with its risk appetite, strategy, policies and procedures at the portfolio level and, where relevant and material, at the individual exposure level.
212. A credit institution should ensure that the credit risk monitoring framework is well defined and documented, integrated into the credit institution's risk management and control frameworks and that it enables the monitoring of all credit exposures throughout their life cycle.
213. When developing and implementing its credit risk monitoring framework, a credit institution should take into account:
 - 1) that the framework and data infrastructure provide the ability to collect and automatically compile credit risk data without unnecessary delay, with little reliance on manual processes;
 - 2) that the framework and data infrastructure enable the generation of granular risk data that is consistent with the credit institution's risk management purpose, but can also meet the Central Bank's requirements for regular supervisory and statistical reporting, as well as for stress testing purposes.
 - 3) that the framework and data infrastructure enable effective monitoring of all credit exposures and collateral and enable monitoring of the credit decision-making process;
 - 4) that the credit institution's data framework and infrastructure ensure that an appropriate reporting time series is maintained for existing exposures, new lending and early warning indicators over their risk planning horizon.
214. The credit risk monitoring process should result in regular feedback to adjust/check risk appetite, policies and limits.
215. The credit risk monitoring framework should include the following:
 - 1) borrowers' regularity in repaying loans, including any deviations, such as late, missed or partial payments;
 - 2) credit risk associated with the borrower and the transaction in relation to:
 - a) individual credit exposures and loss given default, where applicable;
 - b) individual borrowers, including their exposure value, probability of default (PD) and credit rating, where applicable;

- c) a group of connected persons;
 - d) portfolio;
 - 3) credit risk per geographic area and economic sector of ultimate exposure, where applicable;
 - 4) impairments, reversals of impairments, write-offs and other decisions regarding adjustments to the value of credit exposures.
216. The monitoring framework and data infrastructure should enable the credit institution to monitor the credit decision-making process, including monitoring and reporting on all credit decisions, exceptions to credit policies and escalation to higher levels of decision-making in the credit approval process. To this end, within the monitoring framework, the credit institution should ensure the implementation and application of relevant key risk indicators that are specific to the type of asset or at the portfolio level, in order to determine the risk profile of the credit portfolio and the credit institution.
217. The credit institution should ensure that the credit risk monitoring framework and data infrastructure also enable a single customer view.
218. As part of its credit risk monitoring and reporting, a credit institution should identify the relevant drivers of its overall credit risk, as well as the credit risk in its portfolios and sub-portfolios, taking into account macroeconomic (including demographic) factors and the fact that credit risk drivers may change over time. Credit risk drivers should be measured, analysed and monitored, and the credit risk management function should regularly report the results of the analysis to the management body.
219. When monitoring credit risk, a credit institution should have appropriate methodologies and practices that enable the aggregation of credit risk exposures across business lines, portfolios, sub-portfolios, products, industries and geographical segments and support the identification of credit risk concentrations. A credit institution should ensure that credit risk data and data infrastructure meet the following requirements:
- 1) depth and breadth, so that all significant risk factors are covered — this should, inter alia, enable the grouping of exposures according to shared credit risk characteristics, such as the institutional sector to which the borrower belongs, the purpose of the transaction and the geographical area of the borrower/collateral, and thus enable group analysis to identify the entity's exposure to these significant risk factors;
 - 2) accuracy, integrity, reliability and timeliness of data;
 - 3) consistency, being based on common sources of information and uniform definitions of terms used for credit risk management and, where possible, in accounting;
 - 4) traceability, so that the source of information can be identified.

220. A credit institution should ensure that operational metrics related to credit risk management are appropriate for its credit profile and are applied proportionately. This includes any changes in the definitions of key lending indicators, material changes to rating scales or scoring systems or credit risk policies/frameworks that help define/measure credit risk, and changes to product terms to avoid breaches of policy or exceptions.

6.2 Monitoring of credit exposures and borrowers

221. As part of the monitoring of credit exposures and borrowers, a credit institution should monitor all credit exposures and credit lines, whether the borrower meets its repayment obligations, as set out in the loan agreement, and whether it complies with the conditions set at the time of loan approval, such as adherence to key lending indicators and contract provisions.
222. The credit institution should also monitor whether the borrower and collateral are in compliance with the credit risk policies and conditions set at the time of loan approval, e.g. whether the value of collateral and other instruments to improve its creditworthiness is in compliance with the credit risk policies, whether all applicable contractual provisions remain in force and whether there have been adverse developments in these factors or other factors affecting the risk profile of the borrower and/or loan products.
223. A credit institution should continuously monitor and assess the quality of credit exposures and the financial situation of borrowers to ensure that subsequent changes in credit risk, with respect to the initial recognition of credit exposures, can be identified and quantified.
224. Ongoing monitoring should be based on internal information on credit exposures and borrowers' repayment performance, as well as the use of external sources (e.g. credit bureau, directly from the borrower), when relevant.
225. The credit institution should also monitor concentration measures against the values it has defined in its risk appetite, policies and procedures, including, where relevant, by product, geography, industry, collateral characteristics (type, location), as well as the quality of the portfolio, sub-portfolio and exposure.
226. A credit institution that engages in syndicated leveraged transactions should implement internal standards and monitoring functions for those activities. The credit institution should identify failed transactions related to syndicated financing – that is, transactions that are not syndicated within 90 days of the commitment date. The credit institution should establish a framework for dealing with such “open transactions” in terms of retention strategy, bookkeeping and accounting practices, classification and subsequent calculation of capital requirements.

6.3 Regular credit review of borrowers

227. The credit institution should conduct regular credit reviews on borrowers that are at least medium-sized or large undertakings, in order to identify any changes in their risk profile, financial position or creditworthiness compared to the criteria and assessment at the time of loan approval, as well as to review and update all relevant internal credit ratings/scores.
228. The process and frequency of the review should be specific and proportionate to the type and risk profile of the borrower, as well as the type, size and complexity of the credit product and should be defined in appropriate policies and procedures. The credit institution should conduct more frequent reviews if it identifies a deterioration in credit and asset quality. The overall credit risk monitoring framework and data infrastructure should enable the credit institution to verify that regular credit reviews are being conducted in accordance with credit risk policies and procedures and to identify deviations/exceptions that should be flagged for further monitoring.
229. For this purpose, the credit institution should, where applicable, periodically update relevant financial information about the borrower and assess new information in accordance with the creditworthiness assessment criteria established in accordance with Section 2.3 of these Guidelines. The collection and assessment of that information should support the credit institution in identifying early warning signs of deterioration in credit quality.
230. The credit institution should conduct periodic reviews to assess the risk of borrower default and the potential need for migration between risk categories and risk ratings.
231. Credit reviews of borrowers should include an assessment of existing debt and sensitivity to external factors, such as exchange rate volatility, if applicable, which may affect the amount of debt and repayment capacity, and also in accordance with the requirements of the sensitivity analysis, as set out in Section 3.2.6 of these Guidelines.
232. The credit institution should regularly assess the risks associated with the refinancing of existing debt, monitoring loans with bullet/balloon repayment terms separately from other loans. The credit institution should analyse the potential impact on the borrower's inability to roll over/refinance existing debt, and include, among other things, the macroeconomic forecast of future events and access to capital markets as well as other types of debt structures. The credit institution should monitor the borrower's ability to repay or refinance debts throughout the life cycle of the loan, and not only when the borrower is approaching the end of the loan maturity.
233. Regular credit risk reviews should take into account both the individual and overall risk profile of exposures, including relevant macroeconomic factors and specific

economic sectors or activities and how these indicators may affect repayment capacity.

234. If applicable, the credit institution should review the guarantor under the credit exposure agreement. In addition to the assessment of the guarantor's permanent creditworthiness, an analysis of effectiveness of a guarantee should also take into account the enforceability and the time needed to realise the guarantee.
235. In addition to monitoring credit and financial metrics, a credit institution should consider information related to qualitative indicators that could have a significant impact on loan repayment. These indicators may include information on the quality of management, agreements/disagreements between owners, the owner's commitment to the borrower, projected market growth, the undertaking's pricing power, the structure and flexibility of costs, the trend, size and nature of capital expenditures, as well as research and development expenditures, and the allocation between debt holders and debt service providers within the consolidated group of institutions.

6.4. Monitoring of covenants

236. Where relevant and applicable to specific credit agreements, the credit institution should monitor and follow up on requirements of collateral insurance, in accordance with credit agreements or requirements of credit facilities.
237. Where applicable, the credit institution should monitor whether borrowers comply with the covenants agreed in the loan agreements. The borrower's compliance with the covenants, of the agreement, as well as the timely submission of certificates of compliance with the provisions of the agreement, where applicable, should be used as an early warning tool. Early detection of deviations is essential to protect the credit institution's position vis-à-vis the borrower and other potential creditors. Ongoing monitoring of the financial covenants, of the agreement should include all relevant indicators specified in the agreement (e.g. net debt/EBITDA, interest coverage ratio, debt service coverage ratio (DSCR)).
238. The credit institution should also monitor the non-financial covenants, of the contract, not only by collecting covenant certificate, where applicable, but also in other ways, for example through close contact between the borrower and the client executive.

6.5. Use of early warning indicators/watchlists in credit monitoring

239. A credit institution, as part of its monitoring framework, should develop, maintain and regularly assess relevant quantitative and qualitative early warning indicators based on an appropriate IT and data infrastructure that would enable timely detection of increased credit risk at the level of their overall portfolio, as well as sub-portfolios, industries, geographic areas and individual exposures.

240. Early warning indicators should have defined trigger levels that are aligned with the risk appetite, credit risk strategy and policies. It is also necessary to define procedures for escalation, including defining responsibilities for further actions. These escalation procedures should also include specifying exposures or borrowers that will be subject to special monitoring, i.e. a watch list.
241. The early warning indicator framework should include a description of the relevance of the indicators in relation to transaction characteristics and types of borrowers or, where applicable, to homogeneous groups of portfolios.
242. When identifying events that trigger early warning indicators at the level of an individual exposure, portfolio, sub-portfolio or group of borrowers, the credit institution should apply more frequent monitoring and, where appropriate, consider placing them on a special watch list and taking pre-defined mitigating measures and procedures. Monitoring of that special watch list should result in special reports that are regularly reviewed by the head of the risk management function, the heads of the functions involved in credit approval and the management body.
243. As part of its ongoing credit risk monitoring, a credit institution should consider the following signs of deterioration in credit quality:
 - 1) adverse macroeconomic events (including, but not limited to, economic developments, changes in legislation and technological threats to industries) that affect the future profitability of industries, geographic segments, groups of borrowers or individual corporate borrowers, as well as increased risk of unemployment for groups of individuals;
 - 2) known adverse changes in the borrower's financial position, such as a significant increase in the amount of debt or a significant increase in the debt service ratio;
 - 3) a significant decline in turnover or, generally, recurring cash flow (including the loss of a major contract/client/tenant);
 - 4) a significant reduction in operating margins or income;
 - 5) a significant deviation in actual earnings compared to forecasts or a significant delay in the business plan of the project or investment;
 - 6) changes in the credit risk of a transaction that would make the terms of the contract significantly different if the transaction were re-approved or re-issued at the reporting date (such as increased amounts of collateral or guarantees required, or greater coverage of the borrower with fixed income);
 - 7) an actual or expected significant decline in the external credit rating of the host transaction, or other market indicators of credit risk for the particular transaction or a similar transaction with the same expected maturity;
 - 8) changes in market access conditions, deterioration in financing conditions or known reductions in financial support provided by third parties to the borrower;
 - 9) a slowdown in the borrower's business or a tendency for the borrower's business to deteriorate that may cause a significant change in the borrower's ability to meet its obligations;

- 10) a significant increase in economic or market instability that may have a negative impact on the borrower;
- 11) for collateralised transactions, a significant deterioration in the ratio of the transaction amount to the value of the collateral due to adverse developments in the value of the collateral, or due to stagnation or an increase in the outstanding amount of the exposure due to established payment terms (such as an extension of the grace period, increased or flexible instalments, extended terms);
- 12) a significant increase in credit risk for other transactions of the same borrower or significant changes in the borrower's expected behaviour, when known;
- 13) a significant increase in credit risk due to difficulties within a group to which the borrower belongs, such as residents of a particular geographical area, or significant adverse developments in economic activity in the borrower's sector, or increased difficulties within a group of related borrowers to which the borrower also belongs;
- 14) a known legal proceeding that can significantly affect the borrower's financial position;
- 15) failure to provide timely confirmation of compliance with the contract, requests for exemption or breaches of the contract provisions, at least as regards the financial provisions of the contract, where applicable;
- 16) adverse migrations in the credit institution's internal credit risk assessment/risk class at the aggregate level of the credit portfolio or in specific portfolios/segments;
- 17) an actual or expected downgrade of the credit rating/risk classification of a transaction or borrower or a downgrade of the behavioural score used for internal credit risk assessment;
- 18) concerns expressed in reports by the institution's or borrower's external auditors;
- 19) one or more products associated with the borrower are more than 30 days past due.

6.5.1. Follow-up and escalation process on triggered early warning indicators

244. Once an early warning indicator for further monitoring and investigation is triggered, the credit institution should act immediately in accordance with its policies and procedures, in accordance with Section 2.3 of these Guidelines. The authorized functions should conduct an analysis to assess the seriousness of the event that triggered the indicators and propose appropriate action and follow-up actions. The analysis conducted in accordance with the relevant policies and procedures is then submitted, without delay, to the authorised credit decision makers.
245. The relevant credit decision makers should, based on the above analysis and other relevant available information, decide what the appropriate next steps are. The decision should be documented and communicated to the relevant members of the credit institution for action and follow-up.

246. The triggering of early warning indicators should lead to increased frequency in the review process, including discussions and decisions by credit decision makers, as well as more intensive collection of information from the borrower. The information collected should be sufficient to support more frequent credit checks of the borrower.

PART A – LOAN GRANTING CRITERIA

This Section of the Guidelines sets out a series of criteria that a credit institution should take into account when developing and documenting loan granting criteria.

A.1 Granting loans to individuals (consumers)

- 1) Customer acceptance criteria, i.e. customer types, customer age limits, customer credit record;
- 2) Definition of acceptable income;
- 3) Minimum requirements for collateral;
- 4) Minimum requirements for guarantees;
- 5) Maximum loan amounts;
- 6) Maximum loan maturity dates;
- 7) Requirements related to the method of repayment (including the type of interest rate for loans);
- 8) Risk-based limits (concentration, product type, etc.);
- 9) Acceptable loan-to-value (LTV) ratio limits (for secured lending);
- 10) Acceptable loan-to-income (LTI) ratio limits;
- 11) Acceptable debt-to-income (DTI) ratio limits;
- 12) Acceptable income-to-total-credit-obligation (DSTI) ratio limits (including for gross income, income after taxes and premiums, income after financial expenses, income after regular other expenses);
- 13) Acceptable maximum size of loan to repayment capacity (LSTI ratio);
- 14) Compliance policy with applicable macroprudential requirements.

A.2 Lending to micro, small, medium-sized and large enterprises

- 1) Specifications of geographic markets and economic sectors;
- 2) Criteria for customer acceptance, i.e. for certain probabilities of default, external rating systems, customer types, track record, etc.;
- 3) Minimum requirements for revenue, cash flow and financial projections;
- 4) Minimum requirements for collateral;
- 5) Minimum requirements for guarantees and credit enhancements;
- 6) Minimum requirements for contractual covenants;
- 7) Requirements for the drawdown of the loan to the borrower;
- 8) Maximum loan amounts;
- 9) Maximum loan maturity dates;
- 10) Repayment schedules and eligibility standards and limitations for non-standard repayment schedules;
- 11) Risk-based limits (by concentration, type of product, etc.);
- 12) Acceptable loan-to-value ratio limits (for secured lending);

- 13) Acceptable debt-servicing coverage ratio limits;
- 14) Acceptable interest coverage ratio limits;
- 15) Acceptable limits of the ratio of total debt in relation to earnings before interest, taxes and depreciation (EBITDA);
- 16) Acceptable leverage ratio limits;
- 17) Acceptable debt-to-equity ratio limits;
- 18) Acceptable loan-to-cost ratio limits;
- 19) Acceptable cash-flow-to-debt-service ratio limits;
- 20) Acceptable return on equity ratio limits;
- 21) Acceptable capitalisation rate (net operating income/market value) limits;
- 22) Standards to address and mitigate risks associated with environmental risk;
- 23) Compliance policy with applicable macroprudential requirements.

A.3 Loans for the purchase of commercial immovable property

In addition to the general criteria for lending to micro, small, medium-sized and large enterprises, set out in Part A.2 of these Guidelines, the credit institution should determine the following product-specific criteria:

- 1) specific forms of commercial immovable property that the credit institution intends to finance (offices, retail facilities, industrial buildings and collective housing units, whose owners are not households, nor do they reside in them; they can be defined as land and building(s) on that land, which generate profit or income from capital gains or rentals);
- 2) the minimum level of capital that the borrower needs to provide and the market value of the commercial immovable property encumbered by the mortgage;
- 3) risk-based limits on speculative construction lending;
- 4) standards for assessing the various stages of development/construction of commercial immovable property in relation to loan disbursement;
- 5) minimum standards regarding requirements for performance and payment guarantees and for title insurance;
- 6) minimum standards for ensuring a minimum level of construction supervision through contractually defined presence and on-site visits by appropriately experienced professionals, e.g. architects, surveyors and site managers;
- 7) minimum standards for the effective assessment of the adequacy and experience of all contractors or suppliers of materials;
- 8) minimum standards for pre-contracts for the lease/sale of commercial immovable property.

PART B – Information and data for the creditworthiness assessment

This part of the Guidelines provides a set of information, data and evidence that a credit institution should take into account when collecting information for the purposes of assessing creditworthiness. Where relevant and appropriate, e.g. when using automated models in credit granting, a credit institution may use other types/sources of information and data of an economic or financial nature that are necessary for the assessment.

A. Consumer lending

- 1) Evidence of identification;
- 2) Evidence of residence;
- 3) Where applicable, information on the purpose of the loan;
- 4) Where applicable, evidence of eligibility for the purposes of the loan;
- 5) Evidence of employment, including type, sector, status (e.g. full-time, part-time, contract employee, self-employed) and duration of employment contract;
- 6) Evidence of income or other sources of repayment (including annual bonus, commission, overtime, where applicable) covering a reasonable period, including payslips, current bank account statements, and audited or professionally verified accounts (for self-employed persons);
- 7) Information on financial assets and liabilities;
- 8) Information on other financial commitments, such as child maintenance, education fees and alimonies, if relevant;
- 9) Information on household composition and dependants
- 10) Evidence of tax status;
- 11) Where applicable, evidence of life insurance for the named borrowers;
- 12) Credit registry data that includes information on financial obligations and outstanding debts;
- 13) Information on the collateral;
- 14) Evidence of ownership of the collateral;
- 15) Evidence of the value of the collateral;
- 16) Evidence of insurance of the collateral;
- 17) Information on guarantees, other credit risk mitigating factors and guarantors, if any;
- 18) Lease agreement or evidence of potential rental income for buy-to-let loans, if applicable;
- 19) Permits and cost estimates, if applicable, for loans for immovable property building and for immovable property refurbishment.

B.2 Lending to micro, small, medium-sized and large enterprises

- 1) Information on the purpose of the loan;
- 2) Where relevant, evidence of the purpose of the loan;
- 3) Financial statements and accompanying notes on an individual entity and on a consolidated basis (balance sheet, income statement, cash flows) covering a reasonable period and having been audited or professionally reviewed, where applicable;
- 4) The borrower's business plan and its compliance with the purpose of the loan;
- 5) Financial forecasts (balance sheet, income statement, cash flows);
- 6) Evidence of tax status and tax liabilities;
- 7) Credit registry data;
- 8) Information on external credit rating, where applicable;
- 9) Information on existing covenants and the borrower's compliance with them, where applicable;
- 10) Information on major litigation involving the borrower at the time of application;
- 11) Information on the collateral;
- 12) Evidence of ownership of the collateral;
- 13) Evidence of the value of the collateral;
- 14) Evidence of insurance of the collateral;
- 15) Information on the enforceability of collateral;
- 16) Information on guarantees, other credit risk mitigating factors and guarantors, if any;
- 17) Information on the ownership structure of the borrower.

B.3. Commercial immovable property lending

In addition to the items listed in Part B.2. of these Guidelines, the credit institution shall also take into account:

- 1) Information on rent amounts, occupancy rates and tenants, including contracts for specific immovable property related to the purpose of the loan;
- 2) Information on the type of immovable property portfolio;
- 3) Evidence of occupancy rates and turnover rates in the market, by immovable property type, age and location of the property;
- 4) Evidence of the amount of rent according to the type of immovable property, age of the immovable property and location;
- 5) Information on main tenants by immovable property type, age and location;
- 6) Justification for the immovable property associated with the loan, supported by a review of the market supply and demand for that location by a reputable immovable property agent with relevant expertise;
- 7) Evidence of the value of collateral and separate immovable property units as

collateral, where applicable.

B.4 Immovable property development lending

In addition to the items listed in Part B.2. of these Guidelines, the credit institution shall also take into account:

- 1) Evidence of experience on similar projects and with similar types of assets, such as offices, retail premises and industrial properties;
- 2) Information on each ongoing project in which the borrower is participating;
- 3) Evidence of planning and construction permit;
- 4) Information about builders, architects, engineers and contractors;
- 5) Evidence of contracts with contractors and relevant construction documentation, including information on penalties, guarantees and the amount of cost overruns;
- 6) Information on the reasons for construction, supported by a review of the supply and demand in the market for that location by a reputable real estate agent with relevant expertise;
- 7) Evidence of cost estimates and a chronological construction plan, including contingencies and possible overruns of planned construction costs.

B.5. Project finance

In addition to the items listed in Part B.2. of these Guidelines, the credit institution shall also take into account:

- 1) Information on the business plan associated with the project;
- 2) Evidence of experience in similar projects;
- 3) Information on each ongoing project in which the borrower is participating;
- 4) Evidence of planning and building permits related to the project;
- 5) Information about builders, architects, engineers and contractors;
- 6) Evidence of contracts with contractors and relevant construction documentation, including information on penalties, guarantees and contingencies and possible cost overruns;
- 7) Information on the rationale for the development, supported by a location-specific review of supply and demand in the market for that location by a reputable real estate agent with relevant expertise;
- 8) Evidence of cost estimates and a chronological construction plan, including reserves for contingencies during construction, certified by a qualified and reputable surveyor (or similar).

PART C – Metrics for loan granting and monitoring

This part of the Guidelines sets out a set of loan-specific metrics that a credit institution should consider when assessing creditworthiness and monitoring credit risk. Where relevant and more appropriate, a credit institution may use other metrics for this purpose.

C.1. Lending to individuals (consumers)

- 1) LTI ratio;
- 2) DTI ratio;
- 3) LSTI ratio;
- 4) DSTI ratio;
- 5) LTV ratio.

C.2. Lending to micro, small, medium-sized and large enterprises

- 1) Capital ratio (shareholder capital in relation to total assets);
- 2) (Long-term) debt-to-equity ratio;
- 3) Total debt to earnings before interest, taxes, depreciation and amortization (EBITDA) ratio;
- 4) Debt yield (net operating income/loan amount);
- 5) Total interest/EBITDA;
- 6) The value of a business undertaking (the sum of the market value of common shares, the market value of preferred shares, the market value of debt, minority interests less cash and investments);
- 7) Capitalization rate (net operating income/market value);
- 8) Asset quality;
- 9) Total Debt Service Coverage Ratio (DSCR);
- 10) Cash debt coverage ratio (operating cash flow relative to the undertaking's average current liabilities over a given period);
- 11) Total current assets in relation to total short-term debt;
- 12) Future cash flow analysis;
- 13) Property yield;
- 14) Debt repayment;
- 15) Loan-to-cost ratio (LTC);
- 16) Interest coverage ratio;
- 17) Return on equity ratio (net income after interest and taxes in relation to average shareholder equity);
- 18) Return on invested capital;
- 19) Net profit margin.

C.3 Immovable property development lending

- 1) Ratio of fixed assets in relation to capital;
- 2) LTV ratio;
- 3) Location and quality of real estate;
- 4) Loan-to-cost ratio (LTC);
- 5) Loan repayment coverage ratio for commercial immovable property loans;
- 6) Occupancy rate trends;
- 7) Rental income versus interest expense on commercial real estate loans.

C.4. Leveraged finance, asset-based lending and project finance

- 1) Value of acquired goodwill;
- 2) LTV ratio;
- 3) Adherence to the business plan;
- 4) Leverage ratio (total debt ratio to earnings before interest, taxes, depreciation and amortization (EBITDA));
- 5) Repayment capacity.

ANNEX 2

GUIDELINES ON MANAGEMENT OF NON-PERFORMING AND FORBORNE EXPOSURES

I. SUBJECT MATTER, SCOPE AND DEFINITIONS

1. These guidelines specify sound risk management practices for credit institutions for managing non-performing exposures (NPLs), forborne exposures (FBEs) and foreclosed assets.
2. A credit institution with a gross NPL ratio equal to or greater than 5% on consolidated, sub-consolidated or solo level should apply chapters II and III of these guidelines to the entities that have NPL ratios exceeding the set threshold.
3. Where a credit institution has a gross NPL ratio below the 5% level but has a high share or material amount of NPLs in an individual portfolio or individual portfolios with a specific concentration of NPLs in a geographical region, an economic sector or a group of connected clients, it shall apply chapters II and III at the level of these portfolios.
4. Where signs of deteriorating assets quality has been determined, a credit institution whose gross NPL ratio is below the threshold specified in item 2 of these guidelines shall apply provisions of these guidelines. For the purposes of identifying whether the deterioration of asset quality has been occurred, a credit institution shall consider the following elements and their interaction:
 - a) increased inflows of NPLs;
 - b) a high or increased level of FBEs;
 - c) a high or increased level of foreclosed assets;
 - d) low coverage ratios;
 - e) breached early warning indicators;
 - f) an elevated Texas ratio;
 - g) the quality and appropriateness of workout activity.
5. A credit institution shall apply these guidelines in the manner that is appropriate to its size and internal organisation, and the nature, scope and complexity of its activities.
6. Terms and definitions applied in this guidelines shall have the following meaning:
 - 1) **Cure period** – a 12-month period since the date defined in Article 36 paragraph (2) of the Decision on the criteria and the manner of classification of assets and calculation of provisions for potential loan losses of a credit institution;
 - 2) **EBITDA** - earnings before interest, taxes, depreciation and amortisation;
 - 3) **Forbearance measures** - concessions by a credit institution towards an obligor that is experiencing or is likely to experience difficulties in meeting its financial commitments. A concession may entail a loss for the lender and shall refer to either of the following actions:

- a modification of the terms and conditions of a debt obligation, where such modification would not have been granted had the obligor not experienced difficulties in meeting its financial commitments;
 - a total or partial refinancing of a debt obligation, where such refinancing would not have been granted had the obligor not experienced difficulties in meeting its financial commitments;
- 4) **Forborne exposures** - exposures in respect to which forbearance measures have been applied;
 - 5) **Foreclosed assets** - assets obtained by taking possession of collateral and which remain recognised on the balance sheet. Foreclosed assets can be obtained through judicial procedures, through bilateral agreement with the borrower or through other types of collateral transfer from the borrower to the credit institution. Foreclosed assets may include financial and non-financial assets and should include all collateral obtained irrespective of accounting classification;
 - 6) **Immovable property** - immovable property as defined in Article 228 of the Decision on Capital Adequacy;
 - 7) **Liquidation cost** - liquidation costs are defined as the cash outflows incurred during collateral execution and the sales process and include:
 - all applicable legal costs;
 - selling costs, taxes and other expenses;
 - any additional maintenance costs to be incurred by the credit institution in relation to the repossession and disposal of the collateral;
 - any cash inflows up to the date of liquidation;
 - 8) **Movable property** - movable property as defined in Article 230 of the Decision on Capital Adequacy;
 - 9) **NPL ratio (NPL %)** - the gross NPLs and advances divided by the gross total loans and advances;
 - 10) **NPL framework** - policies, processes, controls and systems for risk management of NPLs;
 - 11) **Portfolio** - a group of exposures with similar credit risk characteristics;
 - 12) **Probation period** - one year period after the expiry of cure period after the forbearance measures were extended;
 - 13) **Risk appetite framework** - the overall approach, including policies, processes, controls and systems, through which risk appetite is established, communicated and monitored. It includes a risk appetite statement, risk limits and an outline of the roles and responsibilities of those overseeing the implementation and monitoring of the risk appetite framework. It should consider material risks to the credit institution, as well as to its reputation with depositors, investors and customers. Risk appetite framework aligns with the bank's strategy;

- 14) **Texas ratio** - Texas ratio: a ratio comparing the stock of NPLs with a credit institution's equity. NPLs (gross carrying amount) over equity and accumulated impairments.

II. NPL STRATEGY

7. A credit institution shall have in place an adequate framework to identify, measure, manage, monitor and mitigate NPLs, including through workout activities.
8. In the development and implementation of its NPL strategy a credit institution shall take into account relevant consumer protection considerations and requirements, and ensure fair treatment of consumers.

2.1. Developing NPL strategy

9. A credit institution should establish an NPL strategy to target a time-bound reduction of NPLs over a realistic but sufficiently ambitious time horizon (NPL reduction targets).
10. The NPL strategy should lay out the credit institution's approach and objectives regarding effective management to maximise recoveries and ultimately a reduction in NPL stocks in a clear, credible and feasible manner for each relevant portfolio.
11. The following steps should form the core building blocks of the development and implementation of the NPL strategy:
- 1) assessment of the operating environment and external conditions (see chapter 2.2 of these Guidelines);
 - 2) development of the NPL strategy over short-, medium- and long-term time horizons (see chapter 2.3 of these Guidelines);
 - 3) implementation of the operational plan (see chapter 2.4 of these Guidelines);
 - 4) fully embedding the NPL strategy into the management processes of the credit institution, including regular review and independent monitoring (see chapter 2.5 of these Guidelines).
12. When a credit institution develops its NPL strategy, it should also consider policies that aim to ensure the fair treatment of borrowers.

2.2. Assessing the operating environment

13. In the formulation and execution of an appropriate NPL strategy, a credit institution shall complete an assessment of the following elements:
- 1) internal capabilities to effectively manage and reduce NPLs;
 - 2) external conditions and operating environment;
 - 3) the capital implications of the NPL strategy.

2.2.1 Internal capabilities/self-assessment

14. A credit institution should perform a comprehensive self-assessment to evaluate the actual situation and the procedures to be taken internally to address any gaps in the internal capabilities to manage NPLs.
15. A credit institution shall fully understand and assess:
 - 1) the magnitude and drivers of their NPLs:
 - the size and evolution of NPL portfolios at an appropriate level of granularity, which requires an appropriate grouping of the exposures, as outlined in part 3.2.3 of these Guidelines;
 - the drivers of NPL inflows and outflows, by portfolio where relevant;
 - other potential correlations and causations.
 - 2) the outcomes of NPL actions taken by the credit institution in the past:
 - the types and nature of actions implemented, including forbearance activities;
 - the effectiveness of those activities and related drivers.
 - 3) their operational capacities (processes, tools, data quality, IT/automation, employees/expertise, decision-making, internal policies and any other relevant area for the implementation of the strategy) in relation to the various procedures involved in the process, including but not limited to:
 - early identification of NPLs;
 - forbearance activities;
 - impairments and write-offs;
 - collateral valuations;
 - recovery, legal process and foreclosure;
 - management of foreclosed assets, where relevant;
 - reporting and monitoring of NPLs and of the effectiveness of NPL workout solutions.
16. A credit institution shall perform a comprehensive self-assessment covering at least the items listed in item 16 of these Guidelines on an annual basis to determine strengths, significant gaps and areas of improvement required to reach NPL reduction targets.
17. A credit institution should consider seeking expert views on their operational capabilities to manage NPLs from the credit institution's risk management and control functions or from external sources on a periodic basis.

2.2.2 External conditions and operating environment

18. When establishing the NPL strategy and associated NPL reduction targets, a credit institution should consider the following factors, and depending on their change, consider the updating of the established NPL strategy:
 - 1) macroeconomic conditions, such as developments in the real estate market (if

relevant) and its specific relevant sub-segments. If there is a specific sectoral concentration in the credit institution's non-performing loan portfolio, it is necessary to conduct a detailed and ongoing analysis of developments in that sector;

- 2) external stakeholder assessments (rating agencies, market analysts, clients, etc.) regarding the acceptable level of non-performing loans and provisions, in order to determine how far and how quickly credit institutions should reduce their portfolio of non-performing loans;
- 3) investor demand for non-performing loans, including developments and dynamics in domestic and international markets for the sale of non-performing loan portfolios;
- 4) maturity of the non-performing loan servicing industry, i.e. availability and coverage of specialised servicers;
- 5) regulatory and legal framework. A credit institution should understand the legal proceedings associated with the collection of non-performing loans for different types of assets and different jurisdictions. In particular, a credit institution should assess the average duration of such proceedings, the average financial outcomes, the order of collection of different types of exposures and the associated results of the order of collection outcomes for the duration of legal proceedings, the impact of the types of collateral and the order of collection from collateral, as well as guarantees on the outcomes of the duration of legal proceedings, the effect of consumer protection issues, as well as the average total costs associated with such proceedings. When establishing a strategy for non-performing loans, a credit institution should also consider regulations governing consumer protection, especially when it comes to exposures secured by residential real estate;
- 6) the impact of impairment and write-off of non-performing loans on taxes.

2.2.3 Capital implications of the NPL strategy

19. A credit institution should be able to calculate a detailed assessment of the impact of the planned strategy from capital, risk exposure amount, profit or loss, and impairment perspectives for each of the reduction drivers, and they should assess whether the bank has identified a strategic process to resolve any shortfalls under different economic scenarios. The assessment criteria, underlying assumptions and implications should be aligned with the risk appetite framework as well as with the internal capital adequacy assessment process (ICAAP).
20. A credit institution should include suitable actions in their capital planning to ensure that the level of available capital will enable a sustainable reduction of NPLs on the balance sheet.

2.3 Development of the NPL strategy

21. The NPL strategy should encompass, at a minimum, time-bound quantitative NPL targets and foreclosed assets targets, supported, where appropriate, by a corresponding comprehensive operational plan.
22. The development of the NPL strategy should be informed by a self-assessment process and an analysis of the strategic options for the implementation of the NPL strategy.
23. The NPL strategy and operational plan should be defined and approved by the management body and reviewed at least annually.

2.3.1 Strategy implementation options

24. A credit institution should consider including a combination of strategies and options in the NPL strategy to achieve their objectives over the short, medium and long term.
25. In order to successfully operationalise the NPL strategy, a credit institution should consider at least the following non-mutually exclusive implementation options for different portfolios and under different conditions:
 - 1) Hold/forbearance strategy: suitable workout strategy and forbearance options. The hold strategy option is strongly linked to the credit institution's operating model, forbearance and borrower assessment expertise, operational NPL management capabilities, outsourcing of servicing and write-off policies;
 - 2) Active portfolio reductions: sales, securitisation or, in the case of NPLs that are deemed unrecoverable, write-offs. This option is strongly linked to adequacy of impairments, collateral valuations, quality of exposure data and investors' demand for NPLs;
 - 3) Change of type of exposure or collateral, including foreclosure, debt to equity swapping, debt to asset swapping or collateral substitution;
 - 4) Legal options: including insolvency proceedings or out-of-court solutions.
26. A credit institution should identify medium- and long-term strategy options for NPL reductions that may not be achievable immediately, for example due to a lack of immediate NPL investor demand, which might change in the medium to long term. The operational plan may therefore need to allow for such changes and require preparations for them, for example by enhancing the quality of NPL data in order to be ready for future investor transactions.
27. When a credit institution concludes that none of the above options will lead to a sufficient NPL reduction in the medium to long term for certain portfolios or individual exposures, this should be clearly reflected in a timely impairment and write-off approach.

28. A credit institution aiming to engage in complex processes, such as NPL risk transfer and securitisation transactions, should conduct robust risk analysis and have adequate risk control processes in place.

2.3.2 Targets

29. Before commencing the short- to medium-term target-setting process, a credit institution should establish a view of reasonable long-term NPL levels, both at portfolio level and at aggregate level. A credit institution should take into account historic or international benchmarks in order to define reasonable long-term NPL levels.
30. A credit institution should include, at a minimum, clearly defined realistic yet ambitious quantitative targets in their NPL strategy, including for foreclosed assets, where relevant. These targets should lead to a concrete reduction, gross and net of impairments, in NPLs, at least in the medium term. While expectations about changes in macroeconomic conditions, when based on solid external forecasts, can play a role in determining target levels, they should not be the sole driver of the NPL reduction targets established.
31. A credit institution should establish targets as followings:
- 1) by time horizons (short-term (indicative one year), medium-term (indicative three years) and possibly long-term);
 - 2) by main portfolios (e.g. retail mortgage, retail consumer, retail, small and medium-sized enterprises (SMEs), corporate, large corporate, commercial real estate);
 - 3) by implementation options (e.g. cash recoveries from a hold strategy, collateral reposessions, recoveries from legal proceedings, revenues from sales of NPLs or write-offs).
32. The NPL targets for credit institutions should at a minimum include a projected absolute or relative NPL reduction, both gross and net of impairments, not only on an overall basis but also for the main NPL portfolios. Where foreclosed assets are material, a foreclosed assets strategy should be defined or, at least, foreclosed assets reduction targets should be included in the NPL strategy.

2.3.3 Operational plan

33. A credit institution should align its NPL targets with more specific operational objectives, which should be developed through a set of smaller operational objectives, whereby the credit institution may, if it deems it appropriate, introduce additional monitoring indicators as additional objectives. For example, if a credit institution plans to reduce a certain amount of NPLs, it should detail the planned effects of reducing that amount of NPLs for different portfolios on a periodic basis

over the course of one year by projecting the NPL ratio and the NPL coverage percentage.

34. The NPL strategy of the credit institution should be supported by an operational plan, which should be defined, approved and reviewed by the management body.
35. The operational plan should clearly define how the credit institution will operationally implement its NPL strategy over a time horizon of at least one to three years (depending on the type of operational measures required).
36. The NPL operational plan should contain at least:
 - 1) clear time-bound objectives and goals;
 - 2) activities to be carried out on a portfolio basis;
 - 3) governance arrangements and structures, including responsibilities and reporting mechanisms for activities and outcomes;
 - 4) quality standards to ensure successful outcomes;
 - 5) employee and resource requirements;
 - 6) required technical infrastructure and an enhancement plan;
 - 7) granular and consolidated budget requirements for the implementation of the NPL strategy;
 - 8) plans for communication with internal and external stakeholders (e.g. with regard to sales, servicing, efficiency initiatives).
37. The operational plan should have a specific focus on internal factors that could present impediments to the successful delivery of the NPL strategy.

2.4 Implementing the operational plan

38. The implementation of the NPL strategy operational plan should rely on suitable policies and procedures, clear ownership and appropriate governance structures, including escalation procedures, and the operational plan should incorporate wide-ranging change management measures in order to embed the NPL workout framework as a key element in the corporate culture.

2.5 Embedding the NPL strategy

39. A credit institution should embed the NPL strategy in processes at all levels of the organisation, including strategic and operational levels.
40. A credit institution should emphasise to all relevant employees the key components of the NPL strategy in line with the approach taken to the credit institution's overall strategy and in particular the risk management strategy. This is especially important if the implementation of the NPL strategy will involve wide-ranging changes to business procedures.

41. A credit institution should provide clearly define and document the roles, responsibilities and formal reporting lines for the implementation of the NPL strategy and operational plan.
42. A credit institution should provide employees and management involved in NPL workout activities with clear individual (or team) goals and incentives geared towards reaching the targets agreed in the NPL strategy and operational plan. Related remuneration policies, career development objectives and performance monitoring frameworks should take the NPL targets into account in order to ensure the full engagement of employees and management with NPL reduction and should also have regard to the fair treatment of consumers. The incentive scheme for employees and managers in the loan origination/business units should also take into account the feedback from the workout activities and the quality of the credit institution's exposures in order to disincentivise excessive risk taking.
43. All relevant components of the NPL strategy should be fully aligned with and integrated into the business plan and budget of the credit institution, including all the relevant costs associated with the implementation of the operational plan, and also potential losses stemming from NPL workout activities.
44. The NPL strategy should be fully embedded in the risk management framework. In that context, special attention should be paid to:
 - 1) internal capital adequacy assessment process (ICAAP): all relevant components of the NPL strategy should be fully aligned with and integrated into the ICAAP. A credit institution should prepare quantitative and qualitative assessments of NPL developments under base and stressed conditions including the impact on capital planning.
 - 2) risk aversion framework (RAF): RAF and NPL strategies are closely interlinked. In this regard, there should be clearly defined RAF metrics and limits, approved by the management body, that are in alignment with the core elements and targets forming part of the NPL strategy.
 - 3) Recovery plan: where NPL-related indicator levels and actions form part of the recovery plan, A credit institution should ensure that they are in alignment with the NPL strategy targets and operational plan.
45. A credit institution should ensure a high level of monitoring and oversight by the risk management functions in respect of the formulation and implementation of the NPL strategy and operational plan.

III. NPL GOVERNANCE AND OPERATIONS

46. In order for credit institution to be able to address its NPL issues in an efficient and sustainable manner, an appropriate governance structure and operational set-up should be in place.

47. In the implementation of its NPL governance and operations, a credit institution should take into account relevant consumer protection considerations and requirements, and ensure fair treatment of consumers.

3.1 Steering and decision-making

48. The overarching strategy of a credit institution and its implementation should cover the NPL strategy and operational plan, which should therefore be set, approved and reviewed by the management body. In particular, the management body should:
- 1) approve annually and regularly review the NPL strategy and operational plan in line with the overall risk strategy;
 - 2) oversee the implementation of the NPL strategy;
 - 3) define quantitative and qualitative management objectives and incentives for NPL workout activities;
 - 4) monitor on a quarterly basis progress made in comparison with the targets defined in the NPL strategy and operational plan;
 - 5) define adequate approval processes for NPL workout decisions (for large NPLs, these should involve the approval of the management body);
 - 6) approve NPL-related policies (including those listed in Part D of these guidelines) and processes, review them at least annually and proceed with any necessary amendments, ensuring that the policies and processes are completely understood by the employees;
 - 7) ensure sufficient internal controls on NPL management processes, with a special focus on activities linked to NPL classifications, impairments, write-offs, collateral valuations and the sustainability of forbearance solutions;
 - 8) have sufficient knowledge, experience and expertise with regard to the management of NPLs.
49. A credit institution should establish and document clearly defined, efficient and consistent decision-making procedures, with adequate second line of defence involvement at all times.

3.2 NPL operating model

3.2.1 NPL workout units

50. A credit institution should establish dedicated NPL workout units (NPL WUs) that are independent from loan origination activities. This separation of duties approach should encompass not only client relationship activities (e.g. negotiation of forbearance solutions with clients) but also the decision-making process. In this context, credit institution should consider implementing dedicated decision-making bodies related to NPL workout (e.g. an NPL committee).
51. Where overlaps with the decision-making bodies, managers or experts involved in the loan origination process are unavoidable, the institutional framework and internal

controls should ensure that any potential conflicts of interest are sufficiently mitigated.

52. A credit institution should have arrangements in place to ensure that regular feedback between loan origination units and NPL WUs is established.
53. When designing an appropriate NPL WU structure, a credit institution should take into account the specificities of their main NPL portfolios, including the type of exposure (retail, SME, corporate) and the type of collateral.
54. A credit institution should consider designing automated processes for NPL WUs for homogeneous retail NPL portfolios. For corporate NPL portfolios, where relevant, and depending on the sectoral concentration of the NPLs, A credit institution should consider a relationship management approach with sectoral specialisation of NPL WU employees. For sole traders and micro-enterprises, a combination of automated elements and a relationship management approach should be considered.
55. Smaller and less complex credit institution may have in place dedicated workout functions proportionate to their size, nature, complexity and risk profile and should ensure that the design of such functions prevents and eliminates conflict of interest in the management of NPLs.
56. For proportionality purposes, smaller and less complex credit institution, as an alternative to establishing dedicated decision-making bodies related to NPL workout, may cover the necessary requirements in their existing credit or risk committees, as long as conflicts of interest are sufficiently mitigated.

3.2.2 Alignment with the NPL life cycle

57. NPL WUs should be set up to ensure that NPL workout activities and borrower engagements are tailored to the phases of the NPL life cycle.¹
58. A credit institution should set up different NPL WUs for the different phases of the NPL life cycle and also for different portfolios, if appropriate. All applicable workout stages should receive adequate focus and should be equipped with sufficiently specialised employees.
59. A credit institution should consider the following phases in the NPL life cycle, taking into account also the specificities of the products and the nature of the arrears:
 - 1) Early arrears (up to 90 days past due)²: during this phase, the focus should be on initial engagement with the borrower for early recoveries and on collecting information to enable a detailed assessment of the borrower's circumstances (e.g. financial position, status of loan documentation, status of collateral, level

¹ This also encompasses assets not classified as non-performing exposures – such as early arrears (≤ 90 days), forborne exposures and foreclosed assets – that play an essential role in the NPL workout process.

² Unlikely to pay exposures could be part of either early arrears or NPL WUs, depending on their complexity.

of cooperation, etc.). The type of exposure and collateral should ultimately determine the most suitable workout strategy, which may involve forbearance measures with a short-term time horizon, to be applied when necessary (including during this initial period, where appropriate), with the aim of stabilising the financial position of the borrower before establishing a suitable workout strategy. In addition, the credit institution should, where appropriate, seek options to improve its position while taking into account the rights and interests of consumers (e.g. by signing new loan documents, perfecting outstanding collateral, minimising cash leakage, taking additional collateral if available). A dedicated arrears management policy should contain guidance on the overall NPL workout procedures and responsibilities, including handover triggers.

- 2) Late arrears over 90 days past due / forbearance: a credit institution should implement and formalise forbearance arrangements with borrowers in this phase. Forbearance arrangements should be put into place only where the credit institution is satisfied that the borrower can afford to make the repayments. A forbearance arrangement should be monitored for at least one year, given the increased risk, before it can eventually be transferred out of the NPL WUs if no further NPL triggers are observed.
- 3) Liquidation / debt recovery / legal cases / foreclosure: if no viable forbearance solution has been found due to the borrower's financial circumstances or cooperation level, a credit institution should perform a cost-benefit analysis of different liquidation options, including in-court and out-of-court procedures, having regard also to the interests of the borrower. Based on this analysis, a credit institution should speedily proceed with the chosen liquidation option, supported by legal and business liquidation expertise. A credit institution that is engaged in extensive use of external experts should ensure that sufficient internal control mechanisms are in place to ensure an effective and efficient liquidation process. NPLs that have been categories as such for a long period of time should be given special attention in this regard. A dedicated debt recovery policy should contain guidance on liquidation procedures.

60. Managing foreclosed assets (or other assets stemming from NPLs): collateral repossession generally commences after other attempts by the credit institution to collect the outstanding amounts have failed. The credit institution should have a policy in place that describes the recovery process for foreclosed assets, covering in particular the procedures of repossession, valuation of the collateral and realisation of various types of collateral through appropriate means.

3.2.3 Grouping exposures

61. A credit institution shall group exposures based on identified shared credit risk characteristics. Homogeneous portfolios should be built up in order to tailor treatments specifically to NPLs. A credit institution should consider designing customised processes for each portfolio, with a dedicated expert team taking ownership of each. NPL portfolios should be analysed with a high degree of granularity, resulting in clearly defined borrower sub-portfolios. For these analyses,

a credit institution should develop appropriate management information systems and sufficiently high data quality.

62. A list of potential selection criteria for grouping retail NPLs into portfolios is contained in Part A of these guidelines.
63. For corporate NPL portfolios, grouping by asset class or sector (e.g. commercial real estate, land and development, shipping, trading businesses) should be considered a key driver for NPL WU specialisation. These portfolios should then be further divided in line with the NPL strategy and the level of financial difficulty to ensure that workout activities are sufficiently focused.

3.2.4 Human resources

64. A credit institution should have in place an appropriate organisational structure relative to their business model and taking into account their risks, including risks stemming from NPLs. A credit institution therefore should devote an appropriate and proportionate amount of management attention and resources to the workout of NPLs and to internal controls on related processes.
65. Based on the findings of the credit institution's NPL self-assessment on capabilities, as referred to in part 2.2.1 of these Guidelines, a credit institution should regularly review the adequacy of their internal and external NPL workout resources and address any human resourcing gaps in a timely fashion.
66. As workout activities may place significant demands on resources, a credit institution should consider if it is appropriate to choose to use fixed-term contracts, internal/external outsourcing or joint ventures for NPL workout activities. However, the final responsibility for these activities remains with the credit institution. In the event that outsourcing is used, a credit institution should ensure that such outsourcing is arranged in accordance with the applicable legislation or regulatory requirements.
67. In case of outsourcing NPL workout activities, a credit institution shall act in line with the regulations governing outsourcing.
68. A credit institution should build up the relevant expertise required for the defined NPL operating model, including the NPL WUs and internal control functions.
69. Employees allocated to key NPL workout tasks should have specific NPL expertise and experience.
70. A credit institution should implement adequate and dedicated NPL training, including on consumer protection, and should design employee development plans to build in-house expertise using available talent.

71. Where it is not possible or efficient to build in-house expertise and infrastructure, the NPL WUs should have easy access to qualified independent external resources (e.g. property appraisers, legal advisors, business planners, industry experts) or to dedicated NPL servicing companies.
72. A credit institution, in alignment with the overall NPL strategy and operational plan, should implement an appraisal system tailored to the requirements of the NPL WUs. The appraisal system should be mainly linked to the quantitative elements of the credit institution's NPL targets but may also include qualitative elements (level of technical abilities relating to the analysis of financial information and data received, structuring of proposals, quality of recommendations or monitoring of restructured cases, as well as effective negotiation skills). The performance of the NPL WU employees should be regularly monitored and measured against these targets either on an individual basis or at team level, as appropriate.
73. The performance measurement framework for the management body and relevant managers should include specific indicators linked to the targets defined in the credit institution's NPL strategy and operational plan. The weights given to these indicators within the overall performance measurement framework should be proportionate to the severity of the NPL issues faced by the credit institution.
74. Addressing early warnings signals and indicators should be encouraged by a credit institution through the remuneration policy and incentives framework in order to ensure that pre- arrears are efficiently addressed and NPL inflows thus effectively reduced.

3.2.5 Technical resources

75. In terms of adequate technical infrastructure, a credit institution should ensure that all NPL- related data are centrally stored in robust and secure IT systems and that they are complete and up to date throughout the NPL workout process.
76. An adequate technical infrastructure should enable NPL WUs to:
 - 1) Access all relevant data and documentation, including:
 - current NPL and early arrears (≤ 90 days) borrower information, including automated notifications;
 - exposure, collateral and guarantee information linked to the borrower or connected clients;
 - monitoring tools with the IT capabilities to track forbearance performance and effectiveness;
 - status of workout activities and borrower interaction, as well as details on forbearance measures agreed;
 - foreclosed assets, where relevant;
 - tracked cash flow of the loan and collateral;
 - sources of underlying information and complete underlying documentation;

- where relevant, access to central credit registers, land registers and other external data sources.
- 2) Efficiently process and monitor NPL workout activities, including:
- automated workflows throughout the entire NPL life cycle;
 - an automated monitoring process for loan status, ensuring correct flagging of NPLs and forborne exposures;
 - incorporated warning signals;
 - automated quantitative reporting throughout the NPL workout life cycle as a basis for the analyses to be provided to NPL WU management, the management body and other relevant managers, as well as the Central Bank;
 - performance analyses of workout activities by NPL WUs, sub-teams and experts (e.g. cure/success rate, rollover information, effectiveness of restructuring options offered, cash collection rate, vintage analyses of cure rates, promises kept rate at call centre, etc.);
 - evolution monitoring of portfolios, sub-portfolios, cohorts and individual borrowers.
- 3) Define, analyse and measure NPLs and related borrowers:
- recognise NPLs and measure impairments;
 - perform suitable NPL portfolio analyses and store outcomes for each borrower;
 - support the assessment of the borrower's personal data, financial position and repayment ability, at least for non-complex borrowers;
 - conduct calculations of (i) the net present value and (ii) the impact on the capital position of the credit institution for each restructuring option and/or any likely restructuring plan under any relevant legislation (e.g. foreclosure law, insolvency law) for each borrower.
77. The adequacy of the technical infrastructure, including data quality, should be assessed by an independent internal or external audit function on a regular basis.

3.3 Control framework

78. The management body should be responsible for establishing and monitoring the adequacy and effectiveness of the internal control framework. In particular, effective and efficient internal control processes should be implemented for the NPL workout framework in order to ensure full alignment between the NPL strategy and operational plan on the one hand and the credit institution's overall business strategy, including the NPL strategy and operational plan, and risk appetite on the other hand.
79. Internal control functions should regularly review written reports on NPL management highlighting major identified deficiencies, and for each new identified major deficiency, the relevant risks involved, an impact assessment, recommendations and corrective measures to be taken.

80. The heads of internal control functions should regularly report to the management body to raise concerns and warn, where appropriate, when specific developments affect or may affect the credit institution.
81. The management body should follow up on the findings of the internal control functions in a timely and effective manner and require adequate remedial actions, whereat a formal follow-up procedure on findings and corrective measures taken should be put in place.
82. The internal controls function should involve all three lines of defence. The roles of the different functions involved should be assigned and documented clearly to avoid gaps or overlaps. Key outcomes of second- and third-line activities as well as defined mitigating actions and progress on those needs should be reported to the management body regularly.
83. In the implementation of the control framework, larger and more complex credit institutions should apply all three lines of defence; the second line of defence does not have to be NPL specific and may be performed by the credit risk (control) function.
84. In the implementation of the control framework, smaller and less complex credit institutions do not necessarily have to have three fully fledged NPL-specific lines of defence, but they have to ensure that any conflict of interest is sufficiently mitigated.

3.3.1 First line of defence controls

85. A credit institution should ensure that the first line of defence is embedded into the procedures and processes of the operational units, mainly the NPL WUs that actually own and manage the credit institution's risks in the specific context of NPL workout.
86. In order to ensure that adequate control mechanisms are implemented, a credit institution should have internal policies in place on the NPL workout framework. The managers of the operational units are responsible for ensuring that these internal policies are implemented, including through their incorporation into IT procedures. Part D of these Guidelines sets out key elements of NPL framework-related policies that should be implemented in credit institutions.

3.3.2 Second line of defence controls

87. Second line of defence functions should perform controls on a continuous basis to check that NPL management in the first line of defence is operating as intended. To adequately perform their control tasks, second-line functions require a strong degree of independence from functions performing business activities, including the NPL WUs, and should have sufficient resources. They should have an adequate number of qualified employees. The qualifications of employees should be

reassessed on an ongoing basis, and employees should receive training as necessary.

- 88.** The second line of defence controls the implementation of risk management measures by the NPL WUs and should have a special focus on:
- 1) monitoring and measuring of NPL-related risks on a granular and aggregate basis, including in relation to internal/regulatory capital adequacy;
 - 2) reviewing the performance of the overall NPL operating model, as well as its elements (e.g. NPL WU management/employees, outsourcing/servicing arrangements, NPL reduction targets and early warning mechanisms);
 - 3) assuring quality across NPL loan processing, monitoring/reporting (internal and external), forbearance, impairments, write-offs, collateral valuation and NPL reporting (in order to fulfil this role, second-line functions should have sufficient power to intervene ex ante on the implementation of individual workout solutions);
 - 4) reviewing the alignment of NPL-related processes with internal policy and public guidance, most notably related to NPL classification, provisioning, write-offs, collateral valuations, forbearance and early warning mechanisms.
- 89.** Risk management and compliance functions should also provide guidance on the process of designing and reviewing NPL-related policies, in particular with a view to incorporating best practices for addressing problems identified in the past. In addition, the activities of the second line of defence should be carried out continuously and include at least the following activities:
- Reviewing the status of early warning system indicators and the measures taken on their basis;
 - Monitoring whether the actions taken are in accordance with internal policies, taking into account the timeliness and type of actions taken;
 - Periodically monitoring whether the early warning system indicators are effective, i.e. to what extent non-performing loans are detected (or not detected) at an early stage, with information on the results obtained being forwarded directly to the organisational unit responsible for the early warning system.

3.3.3 Third line of defence controls

- 90.** The internal audit function should have sufficient NPL workout expertise to perform its periodic control activities on the efficiency and effectiveness of the NPL framework, including the first- and second-line controls.
- 91.** The internal audit function should perform regular assessments to monitor adherence to internal NPL-related policies (see Part D of these Guidelines), which should also include random and unannounced inspections and credit file reviews.
- 92.** In determining the frequency, scope and scale of the controls to be carried out, a credit institution should take into account the level of NPLs and whether significant irregularities and weaknesses have been identified by recent audits.

93. Based on the results of its controls, the internal audit function should make recommendations to the management body, bringing possible improvements to their attention.

3.4 Monitoring of NPLs and NPL workout activities

94. The monitoring systems should be based on the NPL targets approved in the NPL strategy and related operational plan, which are subsequently cascaded down to the operational targets of the NPL WUs, with feedback loops to pricing of credit risk and provisioning. A related framework of NPL-related key performance indicators (KPIs) should be developed to allow the management body and other relevant managers to measure progress.
95. A credit institution should define and monitor NPL-related KPIs. The NPL-related KPIs, should include, but not necessarily be limited to (see also Part B of these guidelines):
- a) NPL metrics;
 - 2) borrower engagement and cash collection;
 - 3) forbearance activities;
 - 4) liquidation activities;
 - 5) other (e.g. NPL-related profit and loss items, foreclosed assets, outsourcing activities).

3.4.1 NPL metrics

96. A credit institution should closely monitor the relative and absolute levels of NPLs and FBEs, as well as acquired assets (or other assets stemming from NPL activities) and early arrears less than 90 days, in their books.
97. A credit institution should carry out such monitoring activities at transaction/borrower level, and portfolio or sub-portfolio levels, as appropriate, considering aspects such as business line, borrower segment, geographical area, products, concentration risk, level of collateralisation and type of collateral provided, and debt-service ability.
98. A credit institution should monitor the level of impairments of NPLs in order to provide the management body with comprehensive information on coverage. The analysis should include data on the aggregate level as well as the levels for different NPL portfolios. The selection of NPL portfolios should consider aspects such as type of exposure, including secured/unsecured, type of collateral and guarantees, geographical area, number of years since NPL classification, time to recovery, and the use of the going and gone concern approach. Coverage movements should also be monitored and reductions clearly explained. Texas ration ensures the connection between non-performing exposures and capital thus representing another useful KPI.

99. A credit institution should benchmark indicators related to the NPL ratio and coverage against the available indicators of peers in order to provide the management body with a clear picture of the competitive position and potential shortcomings.
100. A credit institution should monitor their deviations from the budget, in order for the management body to understand the drivers of significant deviations from the plan.
101. Key figures on NPL inflows and outflows should be included in periodic reporting to the management body, including transfers from/to NPLs, non-performing FBEs, NPLs under probation, performing FBEs and early arrears (≤ 90 days past due).
102. A credit institution should consider the potential benefit of establishing migration matrices to track the inflow of exposures into or outflow from the non-performing loans. Migration matrices can be broken down to track the gradual movement of loans from the performing category to the non-performing stage (from 0 to 30 days past due, from 31 to 60, from 61 to 90, etc.).
103. A credit institution should estimate the migration rates and the quality of the performing exposures month by month, so that actions can be prioritised and taken promptly to inhibit deterioration of portfolio quality. Migration matrices can be further broken down by exposure type (retail mortgage, consumer, real estate), by business unit or by other sub-portfolio to identify whether the driver of the flows can be attributed to a specific sub-portfolio.
104. In its monitoring activities, a credit institution should use internal information (e.g. from internal score systems) and external information (e.g. from rating agencies, credit bureaus, specialised sector research or macroeconomic indicators for specific geographical areas) and should refer to a particular point in time or observation period. Part C of these guidelines includes examples of such internal and external information.

3.4.2 Borrower engagement and cash collection

105. Once NPL WUs have been established, key operational performance metrics should be implemented to assess the units' or employees' efficiency relative to average performance and/or standard benchmark indicators. These key operational measures should include at least the following:
 - scheduled vs. actual borrower engagements;
 - percentage of engagements converted to a payment or promise to pay;
 - cash collected in absolute terms and cash collected vs. contractual cash obligation split by:
 - cash collected from customer payments;
 - cash collected from other sources (e.g. collateral sale, salary garnishments, bankruptcy proceedings);
 - promises to pay secured and promises to pay kept vs. promises to pay due;

- total and long-term forbearance solutions agreed with the borrower (count and volume).

If such indicators do not exist or they are not available, key operational measures should be monitored by comparing the actual results with the objectives set in the credit institution's operational plan related to non-performing loans.

3.4.3 Forbearance activities

- 106.** To resolve or limit the impact of NPLs, a credit institution should explore the possibilities with regard to granting forbearance measures.
- 107.** A credit institution should monitor two aspects of restructuring activities: efficiency and effectiveness. Efficiency mainly refers to the volume of credit lines for which restructuring is offered and the time required to negotiate with the debtor, while effectiveness refers to the degree of success of the restructuring options, i.e. whether the debtor has fulfilled the revised/amended contractual obligations.
- 108.** The main objective of forbearance measures should be the return of the borrower to a sustainable performing repayment status, taking into account the amount due and minimising expected losses. This objectives should take into account the importance of ensuring the fair treatment of consumers and compliance with any consumer protection requirements that may be applicable.
- 109.** The credit institution should monitor forbearance activities to ensure that the final outcome of the restructuring measures is the return of the debtor to a regular repayment status, and not the postponement of the assessment of the exposure as uncollectible or the postponement of the impairment. In this regard, the credit institution should monitor and separate long-term (sustainable structural) solutions from short-term (temporary) solutions. Modification of terms and refinancing may change at all stages of the loan life cycle, and for this reason it is necessary for the credit institution to monitor restructuring activities in the case of both performing and non-performing loans.

3.4.4 Liquidation activities

- 110.** If no sustainable forbearance solution can be reached, a credit institution should still resolve the NPL. This solution may involve initiating legal procedures, foreclosing assets, debt to asset/equity swap, disposal of credit facilities by sale, transfer to an asset management company or securitisation.
- 111.** Liquidation activities should be monitored by the credit institution to help inform strategies and policies.
- 112.** A credit institution should monitor disposals and monitor realised sales/transfer prices against net carrying amounts.

113. A credit institution should monitor the volumes and recovery rates of legal and foreclosure cases. Performance in this regard should be measured against set targets, in terms of number of months/years and loss to the institution. In monitoring the actual loss rate, a credit institution is expected to build historical time series for each loan portfolio to back up the assumptions used for impairment review purposes and stress test exercises.
114. For exposures covered by collateral or another type of guarantee, a credit institution should monitor the time period needed to liquidate the collateral or to enforce a guarantee. A credit institution should also monitor potential forced sale haircuts upon liquidation and developments in certain markets (e.g. property markets) to obtain an outlook on potential recovery rates.
115. Monitoring the recovery rates from foreclosure and other legal proceedings should help a credit institution to reliably assess whether the decision to foreclose will provide a higher net present value than pursuing a forbearance option. The data regarding the recovery rates from foreclosures should be monitored on an ongoing basis and feed into potential amendments to a credit institution's strategies for handling their debt recovery/enforced collection portfolios.
116. A credit institution should also monitor the average duration of legal procedures recently completed and the average amounts recovered (including related recovery costs) from these completed procedures.
117. A credit institution should carefully monitor cases where the debt is swapped with an asset or equity of the borrower, at least by using volume indicators by type of assets, and ensure compliance with any limits set by the relevant national regulations on holdings. The use of this approach as a forbearance measure should be backed by a proper business plan and limited to assets in relation to which the institution has sufficient expertise and the market realistically allows the determined value to be extracted from the asset in the short to medium term. The credit institution should also make sure that the valuation of the assets is carried out by qualified and experienced appraisers.

3.4.5 Other monitoring items

118. A credit institution should monitor and report to their management bodies the amount of interest income stemming from NPLs. In addition, a distinction should be made between the interest payments on NPLs actually received and those not actually received. The evolution of loss allowances and the related drivers should also be monitored.
119. If foreclosure is a part of a credit institution's NPL strategy, it should also monitor the volume, ageing, coverage and flows of foreclosed assets (or other assets stemming from NPLs) at a sufficient level of granularity to take into account material types of assets. The performance of the foreclosed assets vis-a-vis the predefined

business plan should be monitored and reported to the management body and other relevant managers on an aggregate level.

- 120.** The management body, relevant management body working bodies and organisational units should receive periodic reports on the status of early warning indicators for segments where downward trends are expected, as well as at the obligor/exposure level for large exposures. This reporting should also include portfolio movements over the period, for example the effects of monthly migrations from one category of past due obligations to another (no delinquency ($K=0$), $0 < K \leq 30$, $30 < K \leq 60$, $60 < K \leq 90$, $K > 90$). Indicators of the effectiveness of early warning indicators should also be provided.
- 121.** Other aspects that may be relevant to a credit institution's reporting on non-performing loans include the efficiency and effectiveness of outsourcing/servicing arrangements. The indicators used in this section may be similar to those used to monitor the efficiency and effectiveness of internal NPL collection units, possibly at a lower level of granularity.

3.5. Early warning signals (*watch list*)

3.5.1. Early warning process

- 122.** In order to monitor and prevent deterioration in loan quality, a credit institution should implement certain procedures to identify and manage potential non-performing loans at an early stage.

3.5.2. Early warning system/indicators

- 123.** The credit institution should develop an appropriate set of early warning indicators for each portfolio.
- 124.** Key early warning indicators should be calculated at least monthly. The exception is certain specific early warning indicators (e.g. industry/segment/portfolio or borrower level research), which may be less frequently available.
- 125.** In order to identify early signals of deterioration in quality clients, the credit institution should monitor loans at two separate levels: at the portfolio level and at the transaction/borrower level.

3.5.3. Early warning indicators at the transaction/borrower level

- 126.** The credit institution should include early warning indicators at the transaction/borrower level in the loan monitoring process, so that collection actions can be activated immediately. The credit institution should also include early

warning indicators at the transaction/borrower level in the reporting system, so that they serve as an indicator for monitoring quality loans.

127. Early warning indicators, which should be determined on the basis of internal and external inputs/information, should refer to a specific point in time or observation period. Examples of early warning indicators may include internal ratings (including behavioural ratings), external ratings published by credit rating agencies, specialised sector surveys or macroeconomic indicators for companies operating in specific geographical areas.
128. The early warning system should analyse a wide range of inputs and produce clear outputs in the form of triggers for different types of early warning signals and measures. Part C provides examples of early warning indicators that a credit institution may use as inputs to its early warning system.

3.5.4. Early warning indicators at the portfolio level

129. In addition to early warning indicators at the borrower level, a credit institution should also determine early warning indicators at the portfolio level. The first step in this process involves segmenting the credit risk portfolio into different categories, for example by business lines or clients, geographic area, products, concentration risks, level of collateralisation and type of collateral provided or debt servicing capacity.
130. For each sub-category, the credit institution should conduct a separate sensitivity analysis based on internal and external information (e.g. market reviews in a specific sector or area conducted by external service providers) to identify the parts of the portfolio that could be affected by potential shocks. This analysis should at least allow for classification into risk grades. Policies should provide for a set of measures that increase in intensity as the expected risk increases. The credit institution should then establish specific early warning indicators for each risk category in order to detect potential credit deterioration before it has negative effects at the transaction level.

IV FOREBEARANCE

Forbearance measures should aim to return the borrower to a sustainable performing repayment status, taking into account the amount due and minimising expected losses.

131. When deciding on which steps or forbearance measures to take, a credit institution should take into account the interests of consumers and comply with consumer protection requirements.

132. A credit institution should monitor the efficiency and effectiveness of forbearance activities.

4.1 Forbearance measures and their viability

133. A credit institution should consider applying a combination of different forbearance measures, including short-term and long-term measures, depending on the nature and maturity structure of the credit exposures. Possible forbearance measures are presented in the table below. A package of long-term measures may include short-term measures, for example interest-only payments, reduced repayment amounts, grace periods or capitalisation of past due liabilities, which are time-limited, as previously mentioned.

Forbearance measure	Description	Viability and other important considerations
Sort-term measures		
Interest only	During a defined short-term period, only interest is paid on credit facilities and no principal repayment is made. The principal amount thus remains unchanged and the terms for the repayment structure are reassessed at the end of the interest-only period, subject to the assessed repayment ability.	<p>This measure should be considered viable only if the credit institution can demonstrate (based on reasonable documented financial information) that the financial difficulties experienced by the borrower are of a temporary nature and that after the defined interest-only period the borrower will be able to service the loan at least to the extent of the previous repayment ability.</p> <p>The measure should generally not exceed a period of 24 months and, in the case of construction of commercial property and project finance, 12 months.</p> <p>Once the defined period of this forbearance measure is over, a credit institution should reassess the borrower's debt-servicing capacity in order to proceed with a revised repayment schedule (that is able to account for the unpaid capital element during this interest-only period).</p> <p>In most cases, this measure will be offered in combination with other measures of a longer-term nature to compensate for the temporary lower repayments (e.g. extension of maturity).</p>

Forbearance measure	Description	Viability and other important considerations
Reduced payments	Decrease in the amount of repayment instalments over a defined short-term period in order to accommodate the borrower's affected cash flow situation, before continuing with the repayments on the basis of projected repayment ability. The interest remains to be paid in full.	See: "Interest only" If the amount of the payment reduction is moderate and all other conditions mentioned above are met, this measure could be applied for a period longer than 24 months.
Grace period/payment moratorium	An agreement allowing the borrower a defined delay in fulfilling the repayment obligations, usually with regard to the principal and interest.	See: "Interest only"
Arrears/interest capitalisation	Forbearance of arrears and/or accrued interest arrears by the addition of those unpaid amounts to the outstanding principal balance for repayment under a sustainable rescheduled programme.	<p>The measure should be granted/considered viable only where the institution has assessed that the borrower's verified income/expenditure levels (based on reasonable documented financial information) and the proposed revised repayments are sufficient to enable the borrower to service the revised loan repayment on a principal and interest basis for the duration of the revised repayment schedule, and where the institution has formally sought confirmation that the borrower understands and accepts the capitalisation conditions.</p> <p>Arrears capitalisation should be provided only selectively in cases where the recovery of historical arrears or payments due under the contract is not possible and capitalisation is the only option realistically available.</p> <p>A credit institution should generally avoid offering this measure to a borrower more than once, and the measure should be applied only to arrears that do not exceed a predefined size relative to the overall principal (which should be defined in the credit institution's forbearance policy).</p> <p>A credit institution should assess the percentage of arrears being capitalised compared with the principal and interest repayments as adequate and appropriate for the borrower.</p>

Forbearance measure	Description	Viability and other important considerations
Long-term measures		
Interest rate reduction	Permanent (or temporary) reduction in interest rate (fixed or variable) to a fair and sustainable rate.	<p>Exposures with high interest rates are one of the common causes of financial distress. The financial difficulties of a borrower may partly derive from the fact that the interest rates are excessively high compared with the income of the borrower or from the fact that the evolution of interest rates, as opposed to a fixed rate, has resulted in the borrower receiving finance at an exorbitant cost, compared with prevailing market conditions. In such cases, an interest rate reduction could be considered.</p> <p>However, the credit institution should take care that the interest rate they offer to debtors sufficiently covers the associated credit risk.</p> <p>This measure could be applied also as a short-term measure.</p>
Extension of maturity/term;	Extension of the maturity of the loan (i.e. of the last contractual loan instalment date), which allows a reduction in instalment amounts by spreading the repayments over a longer period.	<p>If the borrower is subject to a compulsory retirement age, term extension should be considered viable only where the institution has assessed and can demonstrate that the borrower can, through a pension or other sources of verified income, service the revised loan repayments on an affordable basis.</p> <p>Term extension should be considered viable only where it is in line with the life cycle of existing collaterals or proper substitution of the existing collaterals occurs.</p>
Additional collateral	<p>Additional liens on unencumbered assets are obtained as additional collateral from the borrower in order to compensate for the higher risk exposure and as part of the restructuring process.</p> <p>Note: The acceptance of additional collateral does not mean that certain clients/exposures will automatically be classified as "restructured", although in most cases this coincides with the undertaking of</p>	<p>This measure is not a viable standalone forbearance measure as it does not in itself resolve the presence of arrears on a loan. It usually aims to improve or cure LTV ratio covenants.</p> <p>Additional collateral may take many forms, such as a pledge on a cash deposit, assignment of receivables or a new/additional mortgage on immovable property.</p> <p>A credit institution should value second and third liens on assets as well as personal guarantees with care.</p>

Forbearance measure	Description	Viability and other important considerations
	forbearance measures.	
Sale by agreement/assisted sale	The credit institution and the borrower agree to voluntarily dispose of the secured asset(s) to partially or fully repay the debt.	<p>Credit institutions should restructure any residual debt post the assisted sale with an appropriate repayment schedule in line with the borrower's reassessed repayment ability.</p> <p>For forbearance measures that may require the sale of the property at the end of the term, credit institutions should conservatively consider the future approach to any shortfall that could remain after the sale of the property and address it as early as possible.</p> <p>For exposures that are repaid by repossession of collateral at a predefined moment, the repossession does not constitute a forbearance measure unless it is exercised ahead of the predefined moment due to financial difficulties.</p>
Rescheduled payments	The existing contractual repayment schedule is adjusted to a new sustainable repayment programme based on a credible, current and forecasted assessment of the borrower's cash flow.	<p>Different repayment options may include:</p> <ol style="list-style-type: none"> 1. partial repayment: when a payment is made against the exposure, for example from a sale of assets that is lower than the outstanding balance. This option is applied to significantly reduce the exposure at risk and to enable a sustainable repayment programme for the remaining outstanding amount. This option should be preferred to the bullet and step-up options described below. 2. balloon or bullet payments: when the rescheduled repayment ensures a large payment of the principal at a later date before loan maturity. This option should be used/considered viable only in exceptional circumstances and when the institution can duly demonstrate future cash flow availability by the borrower to meet the balloon or bullet payment; 3. step-up payments: credit institutions should consider a solution including this option viable only when it can ensure, and is able to demonstrate, that there is good reason to expect that future increases in payments can be met by the borrower.
Conversion of currency	When the currency of the exposure is aligned with the	Credit institution should explain fully to borrowers the risks of foreign exchange

Forbearance measure	Description	Viability and other important considerations
	currency of the cash flow.	and should also refer to currency conversion insurance.
Other alteration of contract conditions/covenants	When the credit institution discharges the borrower of covenants or conditions included in a loan agreement not listed above.	
Refinancing/new credit facilities	Providing new financing arrangements in order to support the recovery of a distressed borrower.	<p>This is usually not a viable standalone forbearance measure; it should be combined with other forbearance measures addressing existing arrears. It should be applied only in exceptional cases.</p> <p>New credit facilities may be granted that may entail the pledging of additional collateral. In the case of inter-creditor arrangements, the introduction of covenants may be necessary to compensate for the additional risk incurred by the credit institution.</p> <p>This measure may be more suitable for corporate exposures; a thorough assessment of the borrower's ability to pay should be performed, including sufficient involvement of independent sectoral experts to judge the viability of business plans and cash flow projections provided. This measure should be considered viable only when the thorough affordability assessment demonstrates repayment capacity in full.</p>
Debt consolidation	Combining multiple exposures into a single exposure or a limited number of exposures.	<p>This is usually not a viable standalone forbearance measure; it should be combined with other forbearance measures addressing existing arrears.</p> <p>This measure is particularly beneficial in situations where combining collateral and secured cash flow provides greater overall collateral coverage for the entire debt, for example, by minimising cash leaks or by facilitating reallocation of cash flow surplus between exposures.</p>

Forbearance measure	Description	Viability and other important considerations
Partial or total debt forgiveness	The credit institution forfeits the right to legally recover part or the whole of the amount of the debt outstanding from the borrower.	<p>This measure should be used where the credit institution agrees to a 'reduced payment in full and final settlement' whereby the credit institution will forgive all of the remaining debt if the borrower repays the reduced amount of the principal balance within an agreed timeframe.</p> <p>Credit institution should apply debt forgiveness options carefully, since the possibility of forgiveness can give rise to moral hazard and thus might encourage 'strategic defaults'. Therefore, a credit institution should define specific forgiveness policies and procedures to ensure strong controls are in place.</p>

134. Short-term restructuring measures include temporary restructuring of repayment terms implemented with the aim of resolving financial difficulties in the short term, but are not aimed at resolving outstanding liabilities, except in combination with appropriate long-term measures. Short-term measures are generally implemented by a credit institution for a period shorter than two years, or, in the case of project financing and construction of commercial real estate, one year.

135. A credit institution should consider forbearance measures with time horizons not greater than two years (and, where appropriate, for other forbearance measures) when the borrower meets the following criteria:

- 1) the borrower has experienced an identifiable event that has caused temporary liquidity constraints. Evidence of such an event should be demonstrated in a formal manner with clear evidence showing that the borrower's income will recover fully or mostly in the short term, or on the basis of the credit institution concluding that a long-term forbearance solution was not possible due to temporary financial uncertainty of a general or borrower-specific nature. The form of evidence to be provided for this purpose should be proportionate to the nature, maturity and value of the credit facility in question.
- 2) the borrower had been fulfilling contractual obligations prior to the event.
- 3) the borrower has clearly demonstrated willingness to cooperate with the credit institution.

136. The contractual terms for any forbearance measure should ensure that the credit institution has the right to review the agreed forbearance measures if the situation of the borrower improves and more favourable conditions for the credit institution (with regard to the forbearance or the original contractual conditions) can therefore be enforced; to this end, the contract should indicate the specific changes to the forbearance measure to be applied as a consequence of specific improvements in the situation of the borrower. A credit institution should also consider including strict

consequences, such as a requirement for additional collateral, in the contractual terms for borrowers who fail to comply with the forbearance agreement.

4.1.1 Viable versus non-viable forbearance

137. A credit institution should distinguish between viable forbearance measures contributing to reducing the borrower's exposure and non-viable forbearance measures.

138. A credit institution should consider the following factors when assessing the viability of forbearance measures:

a) For long-term forbearance measures:

- 1) the credit institution can demonstrate (based on objectively verifiable evidence) that the borrower has the capacity for the forbearance measure, i.e. full repayment is expected;
- 2) the resolution of outstanding arrears is fully or mostly addressed and a significant reduction in the borrower's balance in the medium to long term is expected;
- 3) in cases where previous forbearance measures have been granted, including any previous forbearance measures considered in the long run, the credit institution should ensure that additional internal controls are implemented to ensure that this subsequent forbearance treatment meets the viability criteria outlined below. These controls should include, at a minimum that such cases are explicitly brought to the attention of the risk control function ex ante. Furthermore, the explicit approval of the relevant senior decision-making body should be sought;

b) for short-term forbearance measures:

- 1) the credit institution is able to demonstrate (based on objectively verifiable evidence) that the borrower has the capacity for the forbearance measure, i.e. full repayment is expected;
- 2) short-term forbearance measures are applied temporarily and the credit institution is able to demonstrate based on objectively verifiable evidence, that the borrower demonstrates the ability to repay the original or agreed modified amount on a full principal and interest basis commencing from the end of the short-term temporary arrangement expiry date;
- 3) the measure does not result in multiple consecutive forbearance measures having been granted to the same exposure.

139. The assessment of viability should be based on the financial characteristics of the borrower and the forbearance measure to be granted at that time. The viability assessment should take place irrespective of the source of forbearance. Different sources for forbearance measures are, inter alia, the borrower using a forbearance clause embedded in a contract, bilateral negotiation of forbearance between a

borrower and a credit institution and a public forbearance scheme extended to all borrowers in a specific situation.

4.2 Sound forbearance processes

4.2.1 Forbearance policy

140. A credit institution should develop a policy on their forbearance activities, which should cover:

- 1) the process and procedures for granting forbearance measures, including responsibilities and decision-making;
- 2) a description of available forbearance measures, including those embedded in contracts;
- 3) information requirements for assessing the viability of forbearance measures;
- 4) documentation of forbearance measures granted;
- 5) the process and metrics for monitoring the efficiency and effectiveness of forbearance measures.

141. A credit institution should regularly review their forbearance policies and options based on the collective monitoring of the performance of different forbearance measures, including the examination of potential causes and instances of re-defaults.

4.2.2 Efficiency and effectiveness of forbearance activities

142. A credit institution should monitor the quality of forbearance activities to make sure that they are not used to delay an assessment that the exposure is uncollectable. The monitoring should cover forbearance activities relating to both performing and non-performing exposures and differentiate between types of forbearance measures and portfolios.

143. A credit institution should measure the efficiency of the process for granting forbearance measures and monitor the duration of the decision-making process and the volumes of forbearance measures at each stage of the granting process.

144. A credit institution should monitor effectiveness of forbearance measures granted. This monitoring should measure the degree of success of the forbearance measure and whether the modified contractual obligations of the borrower are met and the exposure is performing. The following metrics by portfolio and by type of forbearance measure should be used:

- 1) Forbearance cure rate and rate of exposure being reclassified as non-performing: a credit institution should conduct a vintage analysis and monitor the behaviour of FBEs from the date of modification to determine the cure rate. This analysis should be conducted separately for cured exposures with and without forbearance measures.

- 2) Type of forbearance measure: a credit institution should clearly define which types of forbearance measures are defined as short-term versus long-term solutions. Individual characteristics of forbearance agreements should be flagged and stored in the IT systems and periodic monitoring should provide the management body and other relevant managers with a clear view on what proportion of forbearance solutions agreed are (1) of a short-term versus long-term nature; and (2) have certain characteristics (e.g. payment holidays \geq 12 months, increase of principal, additional collateral, etc.).
 - 3) Cash collection rate: a credit institution should monitor cash collected from FBE. Cash collection could be monitored against the actual to contractual cash flow ratio, and in absolute terms. These two metrics may provide information to the credit institution for liquidity planning purposes and the relative success of each forbearance measure.
 - 4) Write-off: In certain cases, as part of a forbearance solution, a credit institution may proceed with a forbearance option that involves partial or full NPL write-off. Any NPL write-off associated with the granting of these types of forbearance should be recorded and monitored against an approved loss budget. In addition, the net present value loss associated with the decision to write off unrecoverable loans should be monitored against the cure rate per loan segment and per restructuring solution offered to help better inform the institutions' forbearance strategy and policies
- 145.** A credit institution should monitor indicators relating to forbearance activities using a meaningful breakdown, which could include the type and duration of arrears, the type of exposure, the probability of recovery, the size of the exposures or the total amount of exposures to the same borrower or group of connected clients, and the number of forbearance solutions applied in the past.

4.2.3 Assessing the borrower's repayment capacity

- 146.** Before granting any forbearance measures, a credit institution should assess the borrower's repayment capacity. This should include an adequate assessment of the borrower's financial situation, based on sufficient information and taking into account relevant factors such as the debt-servicing capacity and overall indebtedness of the borrower or the property/project.
- 147.** The assessment of the debtor's ability to repay should be based on the debtor's current and conservatively estimated future ability to repay all its obligations. In this regard, assumed future increases in the debtor's ability to service its debt should be credible and conservative.
- 148.** The credit institution should also use external sources of information, for example credit registry data, to gather information on the debtor's overall indebtedness and to analyse its broader behavioural profile.

149. The assessment of the debtor's ability to repay should be based on adequately documented and verified amounts of the debtor's income and expenditure. The credit institution should demonstrate that it has applied a sufficiently conservative approach in relation to the variable elements of current income that have been taken into account

4.2.4 Standardised forbearance products and decision trees

150. A credit institution should have adequate policies and procedures in place with a range of sustainable and effective solutions for the borrower when granting forbearance. The grouping of exposures into portfolios should be reflected in these policies and procedures, to enable a credit institution to adopt different forbearance measures for different segments of borrowers and tailor measures to them.
151. A credit institution should consider developing decision trees and standardised forbearance measures for portfolios of homogeneous borrowers with less complex exposures. Decision trees may help in determining and implementing appropriate and sustainable forbearance strategies for specific portfolios of borrowers in a consistent manner based on approved criteria.

4.2.5 Comparison with other NPL workout options

152. A credit institution should use a net present value approach to determine the most suitable and sustainable workout option for borrowers' varied circumstances, having regard to the fair treatment of the consumer, and should compare the net present value of the envisaged forbearance measure with the net present value of repossession and other available liquidation options. The parameters used in the calculation, such as the assumed liquidation time horizon, discount rate, cost of capital and liquidation cost, should be based on observed empirical data.

4.2.6 Forbearance targets and monitoring

153. A credit institution should ensure that the forbearance contracts and documentation include a well-defined borrower target schedule, detailing all necessary targets to be achieved by the borrower in order to repay the exposure over the course of the contract term. These targets should be credible, be appropriately conservative and take account of any potential deterioration in the borrower's financial situation. The performance of the forborne borrower, including the borrower's compliance with all agreed targets, should be closely monitored by the NPL WU responsible for granting the forbearance, at least for the duration of the probation period.

V. NPL RECOGNITION

154. This chapter sets out the key elements of governance and operations in relation to NPL recognition.

5.1 Past due criterion

155. A credit institution should recognise exposures as being past due in accordance with Article 218 of the *Decision on Capital Adequacy of Credit Institutions*.

5.2 Indications of unlikelihood to pay

156. A credit institution should recognise exposures as unlikely to pay and identify indications of unlikelihood to pay in accordance with Article 218 of the *Decision on Capital Adequacy of Credit Institutions*.

157. A credit institution should monitor the repayment capacity of borrowers. In the case of corporate borrowers, this should be assessed at least annually and at key reporting dates at which financial data are available. A credit institution should collect the latest financial information from corporate borrowers in a timely fashion. The non-provision or the unreasonably late provision of information may be seen as a negative sign with regard to the borrower's creditworthiness. In the case of non-corporate borrowers, a credit institution should monitor payment performance and any signs of financial difficulties that may have an impact on repayment capacity. For borrowers on a watch list or with a weak rating, more frequent review processes should be in place, depending on the materiality, the portfolio and the borrower's financial standing. The regular assessment of the borrower's repayment capabilities should also apply to bullet loans, because these loans represent a higher level of risk than a loan subject to regular amortisation and also because continuous payment by the borrower of the interest amounts due is not sufficient reason to assume that the final bullet repayment of the loan will take place.

5.3 Forbearance and performing status

5.3.1 Forbearance

158. For the purpose of implementing forbearance measures, a credit institution should be able to identify signs of possible future financial difficulties at an early stage. In order to do so, the assessment of the financial situation of the borrower should not be limited to exposures with apparent signs of financial difficulties. An assessment of financial difficulties should also be conducted for exposures with regard to which the borrower does not have apparent financial difficulties but in relation to which market conditions have changed significantly in a way that could impact the

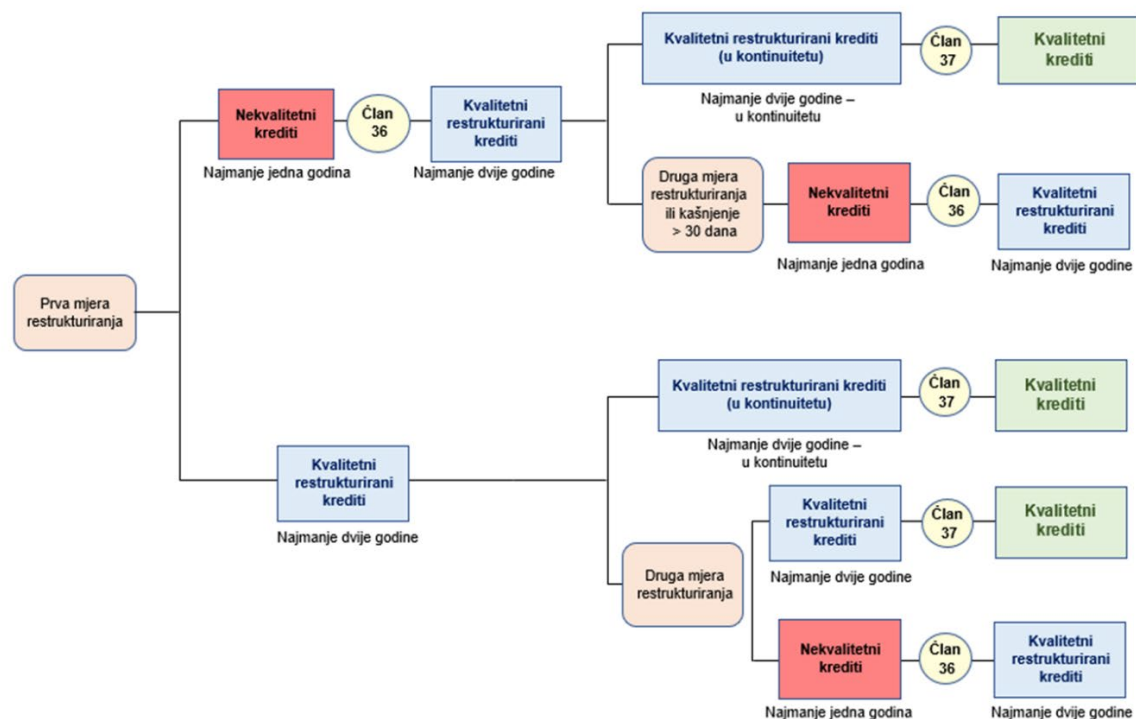
borrower's ability to repay (e.g. bullet loans the repayment of which will depend on the sale of immovable property or foreign currency loans).

- 159.** The assessment of any financial difficulties on the part of a borrower should be based on the situation of the borrower only, disregarding collateral or any guarantees provided by third parties. When assessing the financial difficulties of the borrower, A credit institution should consider at least the following rebuttable circumstances:
- 1) borrower/exposure is more than 30 days past due during the three months prior to its modification or refinancing;
 - 2) increase in probability of default (PD) of credit institution's internal rating class during the three months prior to its modification or refinancing;
 - 3) presence on a watch list during the three months prior to its modification or refinancing.
- 160.** Exposures should not be identified as forborne when concessions are made to borrowers who are not in financial difficulties. A credit institution should distinguish, based on a detailed financial assessment, between renegotiations or rollovers granted to borrowers not in financial difficulties and forbearance measures.
- 161.** Granting new conditions such as a new interest rate more favourable than the rate borrowers with a similar risk profile could obtain may be considered an indication of such a concession when the credit institution determines that the reason for the new rate is the financial difficulties of the borrower. The provision of more favourable new conditions than those practised by the market should not be considered a prerequisite for the identification of concessions and therefore forbearance. When a borrower is in financial difficulties, a change in conditions in line with what other borrowers with a similar risk profile could get from the credit institution should qualify as a concession, including when borrowers are included in public forbearance schemes that are offered by the credit institution.
- 162.** Borrowers may request modifications in the contractual conditions of their loans without facing or being about to face difficulties in meeting their financial commitments. A credit institution should perform an assessment of the borrower's financial situation when such modifications to contractual conditions have an impact on payment performance.

5.3.2 Classification of FBEs as non-performing

- 163.** Forbearance measures may be applied to both performing and non-performing exposures. When approving forbearance measures for performing exposures, a credit institution should assess whether such measures lead to the need to classify the exposure as non-performing. However, approving forbearance measures for non-performing exposures does not remove their non-performing status: the exposures must continue to be classified as non-performing for at least one year

from the moment defined in Article 36 paragraph (2) of the *Decision on the Criteria and the Manner of Classification of Assets and Calculation of Provisions for Potential Loan Losses of Credit Institutions*, i.e. during the recovery period. An illustration of the classification of restructured loans is provided below..



164. When assessing if FBEs should be classified as non-performing, a credit institution should assess if exposures:

- 1) are supported by inadequate payment plans (either initial or subsequent payment plans, as applicable) that encompass, inter alia, a repeated failure to comply with the payment plan, changes to the payment plan to avoid breaches or the payment plan's resting on expectations that are not supported by macroeconomic forecasts or by credible assumptions on the repayment capability or willingness of the borrower;
- 2) include contract terms that delay the time for the regular repayment instalments on the transaction, in such a way that its assessment for a proper classification is hindered, such as when grace periods of more than two years for the repayment of the principal are granted;
- 3) include de-recognised amounts that exceed the accumulated credit risk losses for NPLs with a similar risk profile.

5.3.3 Cure/exit from non-performing status

165. A credit institution should reclassify NPLs, including FBEs into performing in accordance with Articles 35 to 37 of the *Decision on the Criteria and the Manner of Classification of Assets and Calculation of Provisions for Potential Loan Losses of Credit Institutions*.
166. A credit institution should perform a financial analysis of the borrower to establish the absence of concerns regarding the borrower's ability to pay its credit obligations.
167. A credit institution' policies for the reclassification of non-performing FBEs should specify practices for dispelling concerns regarding the borrower's ability to comply with the post- forbearance conditions. These policies should establish criteria in terms of payments made during the cure period of at least one year and define the borrower's ability to comply with post- forbearance conditions (to the extent that full repayment of the debt is likely) without being reliant on the realisation of collateral at least by demonstrating payments of a not insignificant amount of principal. These policies should require payments of both principal and interest.
168. In addition, where a borrower has other exposures to a credit institution that are not the subject of a forbearance measure, the credit institution should consider the impact and the performance of these exposures in its assessment of the borrower's ability to comply with post-forbearance conditions. The consideration of arrears should not change the level of application of non-performing status. Only exposures to which forbearance measures have been applied should be identified as FBEs.

5.3.4 Identification of exposures as performing FBEs

169. Once FBEs are classified as performing, either because they have met the conditions for being reclassified from the non-performing category or because the granting of forbearance measures did not lead to the classification of the exposure as non-performing, they should continue to be identified as forborne until all the conditions for the discontinuation of the classification of exposures as forborne have been met.
170. A credit institution' policies for identifying performing FBEs should specify practices for dispelling concerns regarding the borrower's financial difficulties. A credit institution' policies should require the borrower to have settled, by means of regular payments, an amount equal to all the amounts (principal and interest) that were previously past due or de-recognised at the time of the concession, or to otherwise demonstrate its ability to comply with the post- forbearance conditions under alternative objective criteria that include a repayment of principal.

171. A credit institution shall classify performing FBEs that have been reclassified out of the non-performing category to the non-performing category. The same should apply when these exposures become more than 30 days past due.

5.4 Consistent application of definition of non-performing loans

172. A credit institution should adopt adequate mechanisms and procedures for the harmonised implementation of the definition of default referred to in Article 218 of the *Decision on Capital Adequacy of Credit Institutions* in all subsidiary undertakings and branches. This will ensure that the identification of NPLs is consistent at entity and banking group levels.

173. A credit institution's policies should ensure consistent treatment of individual clients and groups of connected clients as defined in the Law and Annex 1 of the *Decision on Large Exposures of Credit Institutions*.

174. In view of possible contagion, a credit institution should, whenever feasible, apply a group perspective when assessing the status of a borrower's exposure as non-performing, unless it is affected by isolated disputes that are unrelated to the solvency of the counterparty.

175. A credit institution should keep a register of all criteria for classifying exposures to its debtors.

VI. NPL IMPAIRMENT AND WRITE-OFFS

176. This chapter sets out the key elements of governance and operations in relation to NPL impairment measurement and write-offs.

177. A credit institution should estimate loss allowances for NPLs and FBEs subject to impairment.

6.1 NPL write-offs

178. A credit institution shall recognise uncollectability in the appropriate period through loss allowances or write-offs. When the credit institution has no reasonable expectation of recovering contractual cash flow of the exposure it should lead to a partial or full write-off of the exposure (IFRS 9.B3.2.16.r).

179. A write-off may be done before legal actions against the borrower to recover the debt have been concluded in full. A write-off should not be considered to mean that the credit institution has forfeited the legal right to recover the debt; a credit institution's decision to forfeit the legal claim on the debt is debt forgiveness.

180. Write-offs constitute a de-recognition event (IFRS 9.5.4.4). If cash or other assets are eventually collected, these collections should be directly recognised as income in the statement of profit or loss.
181. A credit institution should maintain detailed records of all NPL write-offs performed on a portfolio-level basis.

6.2 NPL impairment and write-offs

182. A credit institution should include in their internal policies guidance on the timeliness of impairments and write-offs, acknowledging external circumstances and factors such as ongoing judicial procedures.
183. In particular for exposures or parts of exposures that are not covered by collateral, a credit institution should consider suitable maximum periods for full impairment, coverage and write-off.
184. For parts of exposures covered by collateral, the establishment of a minimum impairment level should take the type of collateral into account.
185. A credit institution should apply empirical evidence when calibrating the impairment and write-off periods.
186. When assessing the recoverability of NPLs and in determining internal NPL write-off approaches, a credit institution should pay particular attention to the cohorts listed below, as they may have higher levels of permanent uncollectability.
- 1) exposures with prolonged arrears: different thresholds may be appropriate for different portfolios. A credit institution should assess the recoverability of NPLs if the borrower has been in arrears for a prolonged period of time. If, following this assessment, it is concluded that there is no reasonable expectation of recovering an exposure or part of an exposure, a full or partial write-off should be performed;
 - 2) exposures under an insolvency procedure: where the collateralisation of the exposure is low, legal expenses often absorb a significant portion of the proceeds from the bankruptcy procedure, and therefore estimated recoveries can be expected to be very low;
 - 3) a partial write-off may be justified when there is evidence that the borrower is unable to repay the amount of the exposure in full, meaning that there is a reasonable expectation of recovering a part of the exposure.

6.3 Impairment and write-off procedures

- 187.** A credit institution should adopt, document and adhere to sound policies, procedures and controls for assessing and measuring loss allowances and write-off on NPLs.
- 188.** A credit institution should back-test their loss allowance estimations against actual losses.
- 189.** The policy on write-offs should include indicators used to assess expectations of recovery and detailed information on those exposures that have been written off but are still subject to enforcement activity.
- 190.** Exposures should primarily be written off when the write-off is justified by the impossibility of their collection in accordance with the internal write-off policy, and not only with the aim of reaching a certain level of non-performing loans or maintaining a certain level of coverage ratio.
- 191.** A credit institution's internal audit function should verify the methodologies used to identify NPL impairments and write-offs.
- 192.** Credit institutions should internally document their write-off policies, including indicators used to assess collection expectations. In addition, data on financial assets that have been written off but are still subject to enforcement proceedings should be provided. In order to ensure full transparency of write-offs, credit institutions should maintain separate records of all non-performing loans written off at portfolio level.

VII. COLLATERAL VALUATION OF IMMOVABLE AND MOVABLE PROPERTY

- 193.** This chapter sets out the key elements for collateral valuation of immovable and movable property pledged for NPLs.

7.1 Governance, procedures and controls

7.1.1 General policy and procedures

- 194.** A credit institution should have in place a written policy and procedures governing the valuation of property collateral. The policy and procedures should be fully aligned with the credit institution's RAF.
- 195.** The policy and procedures should cover the valuation of all immovable and movable property collateral irrespective of its eligibility for prudential purposes in accordance

with the requirements of Articles 246 and 248 of the *Decision on Capital Adequacy of Credit Institutions*.

- 196.** The policy and procedures should be approved by the management body and should be reviewed at least on an annual basis.

7.1.2 Monitoring and controls

- 197.** A credit institution should monitor and review the valuations performed by internal or external appraisers on a regular basis as set out in this chapter of the guidelines.

- 198.** A credit institution should develop and implement a robust internal quality assurance policy and procedures for valuations conducted internally and externally, considering the following:

- 1) the quality assurance process should be carried out by a function that is independent from the function conducting the initial valuation, loan processing, loan monitoring and the underwriting process;
- 2) the independence of the external appraiser selection process should be tested on a regular basis as part of the quality assurance process;
- 3) an appropriate, similar sample of internal and external valuations should be compared with market observations on a regular basis;
- 4) back-testing of both internal and external valuations should be carried out on a regular basis;
- 5) the quality assurance process should be based on an appropriate sample size.

- 199.** The internal audit function should regularly review the consistency and quality of the valuation policy and procedures, the independence of the appraiser selection process and the appropriateness of the valuations carried out by both external and internal appraisers.

7.1.3 Individual valuation of immovable property and use of indexation

- 200.** A credit institution should monitor the value of immovable property collateral on a frequent basis and at a minimum as specified in Article 246 of the *Decision on Capital Adequacy of Credit Institutions*.

- 201.** Indexation or similar methods may be used to monitor the value of a collateral and identify the collaterals requiring revaluation. This should be in line with the institution's policy and provided that the collateral to be assessed is susceptible to accurate assessment by such methods.

- 202.** Indices used to carry out this indexation may be internal or external as long as they are:

- 1) reviewed regularly, with the results of this review being documented and readily available, and with the review cycle and governance requirements being clearly defined in a policy document approved by the management body;
- 2) sufficiently granular, with the methodology being adequate and appropriate for the type of collateral in question;
- 3) based on a sufficient time series of observed empirical evidence of actual property transactions.

203. Valuations and revaluations of immovable property collateral should be performed on an individual and a property-specific basis. Valuations and revaluations of immovable property collateral should not be carried out using a statistical model as the sole means of undertaking the review of the property valuation.

7.1.4 Appraisers

204. All valuations of immovable property, including updated valuations, should be performed by an independent and qualified appraiser, internal or external, who possesses the necessary qualifications, ability and experience to execute a valuation, as specified in Article 246 paragraphs (4) to (6) and Article 265 of the *Decision on Capital Adequacy of Credit Institutions*.

205. When establishing cooperation with external independent and qualified appraisers, a credit institution should define the criteria for their selection in accordance with items 194 to 198 of these Guidelines and assess their performance on an ongoing basis and make a decision with which appraiser it should continue the cooperation.

206. A credit institution should ensure that engaged external appraisers have adequate and valid professional indemnity insurance.

207. The credit institution should ensure that each engaged external qualified appraiser:

- 1) is professionally competent and has at least the minimum educational level that meets any requirements for carrying out valuations of assets pursuant to the applicable regulations;
- 2) has appropriate technical skills and experience to perform the assignment;
- 3) is familiar with, and able to demonstrate ability to comply with, any laws, regulations and property valuation standards that apply to the appraiser and the assignment;
- 4) has the necessary knowledge of the subject of the valuation, the relevant property market and the purpose of the valuation.

208. Engaged external appraisers should contain expertise in various areas of the property sector appropriate to the lending business of the credit institution and the location of lending.

- 209.** In order to mitigate any conflict of interest sufficiently, a credit institution should ensure that all internal and external appraisers who are going to carry out the actual appraisal of a given property and their first-degree relatives meet the following requirements:
- 1) they are not involved in the loan processing, loan decision or credit underwriting process;
 - 2) they are not guided or influenced by the borrower's creditworthiness;
 - 3) they do not have an actual or potential, current or prospective conflict of interest regarding the result of the valuation;
 - 4) they do not have an interest in the property;
 - 5) they are not a connected person to either the buyer or the seller of the property;
 - 6) they provide an impartial, clear, transparent and objective valuation report;
 - 7) the fee they receive is not linked to the result of the valuation.
- 210.** A credit institution should ensure adequate rotation of appraisers, i.e. two sequential individual valuations of the immovable property by the same appraiser should result in the rotation of the appraiser, resulting in the appointment of either a different internal appraiser or a different external appraisal provider.

7.2 Frequency of valuations

- 211.** For prudential purposes, a credit institution should update valuations of all secured exposures in accordance with the requirements of Article 246 paragraph (3) and Article 248 item 3) of the *Decision on Capital Adequacy of Credit Institutions*.
- 212.** The group of collaterals that are subject to individual valuations and revaluations on a regular basis should be updated at the time when the exposure is classified as non-performing and at least annually while it continues to be classified as such. A credit institution should make sure that, for the collateral subject to indexation or other similar methods, the indexation is updated at least annually.
- 213.** For properties with an updated individual valuation that has taken place within the past 12 months (in line with all the applicable principles and requirements as set out in this chapter), the property value may be indexed up to the period of the impairment review.
- 214.** A credit institution should carry out more frequent monitoring where the market is subject to significant negative changes and/or where there are signs of significant decline in the value of the individual collateral.
- 215.** A credit institution should define criteria in their collateral valuation policy and procedures for determining if a significant decline in collateral value has taken place. Where possible, these will include quantitative thresholds for each type of collateral, based on the observed empirical data and any relevant qualitative credit institution

experience, bearing in mind relevant factors such as market price trends or the opinion of independent appraisers.

- 216.** A credit institution should have appropriate processes and systems in place to flag outdated valuations and to trigger valuation reports.

7.3. Valuation methodology

7.3.1 General considerations

- 217.** A credit institution should have defined collateral valuation approaches for each collateral product type; these should be adequate and appropriate for the type of collateral in question.
- 218.** All immovable property collateral should be valued on the basis of market value or mortgage lending value, as specified under Article 265 of the *Decision on Capital Adequacy of Credit Institutions*.
- 219.** Movable property should be valued at its market value.
- 220.** For movable property, a credit institution should, in accordance with the requirements of Article 237 paragraph (9) of the *Decision on Capital Adequacy of Credit Institutions*, periodically assess the liquidity of the property. If there is material volatility in the market prices, the credit institution should demonstrate that the valuation of the collateral is sufficiently conservative.
- 221.** For movable property, a credit institution should, in accordance with the requirements of Article 248 of the *Decision on Capital Adequacy of Credit Institutions*, conduct a sufficient legal review confirming the enforceability of the collateral, including an assessment of the legal right to enforce and liquidate the collateral in the event of default, within a reasonable timeframe.
- 222.** A credit institution should not use overall valuations based only on the discounted replacement cost. For income-generating properties, a market-comparable or discounted cash flow approach can be used.
- 223.** Property collateral should be valued in accordance with applicable international, European and national standards.

7.3.2 Expected future cash flow

- 224.** A credit institution should estimate discounted cash flow in a prudential manner and in line with applicable accounting standards.

- 225.** A credit institution should, when calculating the discounted cash flow, take into account cases where:
- 1) the operating cash flow of the borrower continues and can be used to repay the financial debt, and collateral may be exercised to the extent that it does not influence operating cash flow; and
 - 2) the operating cash flow of the borrower ceases and collateral is exercised.
- 226.** Where the estimation is based on the assumption that the operating cash flow of the borrower will continue, including cash flow being received from the collateral, updated and reliable information on cash flow is required.
- 227.** When the estimation is based on the assumption that the operating cash flow of the borrower will cease, the future sale proceeds from collateral execution should be adjusted to take into account the appropriate liquidation costs and market price discount. Liquidation costs are defined as the cash outflows incurred during collateral execution and the sales process and include: all applicable legal costs; selling costs, taxes and other expenses; any additional maintenance costs to be incurred by the credit institution in relation to the repossession and disposal of the collateral; as well as any cash inflows up to the date of liquidation.
- 228.** In addition to the above liquidation costs, a market price discount, if appropriate, should be applied to the updated valuation as outlined below.
- 229.** The property price at the time of liquidation should take into account current and expected market conditions.
- 230.** Time-to-sale considerations in connection with the disposal of mortgaged properties should also be included, based on debt enforcement practices and experiences from judicial proceedings at national level and on empirical evidence, and back-tested accordingly. These considerations should include any operational costs or capital expenditures to be incurred before the time of sale.
- 231.** The execution of collateral may include both consensual and non-consensual (forced) liquidation strategies.
- 232.** The liquidation cost discount should reflect the manner of collateral execution, i.e. whether it is consensual or non-consensual.
- 233.** The market price discount should reflect the liquidity of the market and the liquidation strategy. It should not reflect fire sale conditions unless the anticipated liquidation strategy actually involves a fire sale.
- 234.** A credit institution should apply adequate market price discounts for the purposes of IFRS 9, for the calculation of regulatory capital and for risk control purposes. A market price discount may be close to zero only for highly liquid and non-distressed collateral types that are not affected by any significant correlation risks.

- 235.** A credit institution should develop their own liquidation cost and market price discount assumptions based on observed empirical evidence. If insufficient empirical evidence is available, discount assumptions should be based on, at a minimum, liquidity, passage of time, and the quality/ageing of the appraisal.
- 236.** If a credit institution faces the situation of a frozen property market and only a small number of properties have been sold or the sales history has to be considered insufficient, a more conservative market price discount should apply.

7.4 Further considerations on estimating cash flow from property collateral liquidation

- 237.** In estimating cash flow from property collateral liquidation, a credit institution should use appropriate and credible assumptions. In addition, a credit institution should pay attention to the requirements for valuing cash flow under IFRS 13 on fair value measurements.
- 238.** In particular, credit institution should comply with the following requirements:
- 1) it must determine the assumed time of disposal taking into account current and expected market conditions as well as the underlying national legal framework regarding the disposal of mortgaged properties;
 - 2) it must ensure that the property price used to determine the estimated market value of property collateral at the point of liquidation is not based on macroeconomic projections/assumptions that are more optimistic than the projections produced by the relevant authorities and organisations such as International Monetary Fund (IMF) and the European System of Central Banks (ESCB)/ the European Systemic Risk Board (ESRB), and therefore does not assume an improvement on the current market conditions;
 - 3) it must ensure that income from property collateral is not assumed to increase from the current levels unless there is an existing contractual arrangement for such an increase. Moreover, current income from property should be adjusted when calculating cash flow in order to reflect the expected economic conditions. A credit institution should consider whether it is appropriate to project a flat income in a recessionary environment in which vacant properties are increasing and/or demand for transportation is decreasing, putting downwards pressure on income;
 - 4) a hold strategy on property collateral is not acceptable. A hold strategy is defined as holding the asset at above market value assuming that the asset will be sold after the market recovers.
- 239.** When using the value of collateral in assessing the recoverable amount of the exposure, at least the following should be documented:
- 1) how the value was determined, including the use of appraisals, valuation assumptions and calculations;

- 2) the supporting rationale for adjustments to appraised values, if any;
- 3) the determination of selling costs, if applicable;
- 4) the assumed timeline to recover;
- 5) the expertise and independence of the appraiser.

- 240.** When the observable market price is used to assess the recoverable amount of the exposure, the amount, source and date of the observable market price should also be documented.
- 241.** A credit institution should be able to substantiate the assumptions used when assessing the recoverable amount by providing to the Central Bank, if requested, details on the property market value, the market price discount, legal and selling expenses applied, and the term used for the time to liquidation.
- 242.** A credit institution should be able to fully justify their assumptions, both qualitatively and quantitatively, and explain the drivers of their expectations, taking past and current experience into account.

7.5 Back-testing

- 243.** A credit institution should demonstrate via sound back-testing that the assumptions used when assessing the recoverable amount were reasonable and grounded in observed experience. In this context, A credit institution should regularly back-test their valuation history (last valuation before the exposure was classified as non-performing) against their sales history (net sales price of collateral).
- 244.** Depending on the size and business model of the credit institution, it should differentiate by collateral type, valuation model/approach, type of sale (voluntary/forced) and region for its back-testing process. The back-testing results should be used to determine haircuts on collateral valuations supporting exposures remaining on the balance sheet.
- 245.** Alternatively, a credit institution using the advanced internal ratings based (A-IRB) approach may use secured loss given default (LGD) to determine haircuts.

7.6 IT database requirements in respect of collateral

- 246.** A credit institution should have databases of transactions to enable the proper assessment, monitoring and control of credit risk, to respond to requests from management and the Central Bank, and to enable the provision of information in periodic reports and other timely and comprehensive documentation. In particular, databases should comply with the following requirements:
- 1) sufficient depth and breadth, in that they cover all the significant risk factors;
 - 2) accuracy, integrity, reliability and timeliness of data;

- 3) consistency – they should be based on common sources of information and uniform definitions of the concepts used for credit risk control;
- 4) traceability, such that the source of information can be identified.

247. These databases should include all the relevant information on properties and other collateral for the credit institution's transactions and on the links between collateral and specific transactions.

7.7 Valuation of foreclosed assets

248. A credit institution should strongly consider classifying foreclosed assets as non-current assets held for sale under IFRS 5. This accounting treatment implies that the asset must be available for immediate sale in its present condition (IFRS 5.7), that the management body should approve an individual plan to sell the asset within a short timeframe (normally one year) and that an active sales policy should be pursued (IFRS 5.8); thus, it favours recoveries.

249. Foreclosed assets received should be valued at the lower of:

- 1) the amount of the financial assets applied, treating the asset foreclosed or received in payment of debt as collateral;
- 2) the fair value of the repossessed asset, less selling costs.

250. When fair value is not obtained by reference to an active market but is based on a valuation technique (either level 2 or level 3), some adjustments are necessary, in particular as a result of two factors:

- 1) the condition or location of the assets. Risk and uncertainty regarding the asset should be incorporated in the fair value estimation;
- 2) the volume or level of activity of the markets in relation to these assets. The credit institution's previous experience of the entity in realisations and of the differences between amounts arrived at using the valuation technique and the final amounts obtained in realisations should be incorporated into the calculation. The assumptions made in order to measure this adjustment may be documented, and should be available to the Central Bank on request. Illiquidity discounts may be considered.

251. When a credit institution's foreclosed assets are still under construction and it is decided to complete construction before selling the asset, they should demonstrate the merits of such a strategy and the cost should not exceed the fair value less costs to complete and sell the asset taking into account an appropriate illiquidity discount as described above.

252. When a foreclosed asset has exceeded the average holding period for similar assets for which active sales policies are in place, a credit institution should revise the illiquidity discount applied in the valuation process described above, increase it accordingly. In these circumstances, the credit institution should refrain from

recognising write-backs/reversals of existing accumulated impairment on the asset, as its prolonged presence on the balance sheet provides evidence that the credit institution is unable to sell the asset at an increased valuation.

- 253.** The frequency of valuation of foreclosed assets and the applicable procedures should follow the treatment of immovable property as set out in parts 7.1.2 and 7.2 of these Guidelines.

Part A: Sample criteria for grouping retail NPLs

1. Natural or legal person:

- a) retail borrower
- b) sole trader
- c) small business or group of professionals
- d) SME (overlaps with corporates).

2. Arrears bucket / days past due (dpd) (the higher the level of arrears the narrower the range of possible solutions):

- a) early arrears (> 1 dpd and ≤ 90 dpd);
- b) late arrears (> 90 dpd and < 180 dpd);
- c) debt recovery unit (> 180 dpd, including also legal cases (borrowers in relation to whom legal actions have taken place or are in progress)).

3. Re-restructured cases (restructured loans with arrears, indicative of persistent repayment problems and/or failure of restructuring solution offered):

- a) number of previous restructurings.

4. Exposure balance:

- a) high value
- b) low value
- c) multiple exposures.

5. Level of risk (based on credit institution's assessment / behaviour scoring / internal behaviour data / transaction history / credit rating). Clients with better payment histories are more likely to respond positively to restructuring offers:

- a) very high
- b) high
- c) medium
- d) low.

6. Based on borrower's behaviour:

- a) seasonal repayments
- b) cooperative versus non-cooperative (if the debtor is unwilling to cooperate, they should be assigned to the non-performing loans collection unit):
 - number of kept/broken promises,
 - number of unsuccessful contact attempts,
 - date of the last successful contact.

:

7. Purpose of credit facility (by product):
 - a) principal private residence loan
 - b) secondary home/holiday home loan
 - c) investment property loan/buy-to-let loan
 - d) personal loan
 - e) overdraft account
 - f) leased asset
 - g) credit card
 - h) sole trader, micro-enterprise or SME loan:
 - for the set-up of the business (premises; infrastructure or machinery renovations)
 - working capital.
8. Loan currency.
9. Loan interest rate (interest rate reduction consideration for loans burdened by high interest rates, if possible).
10. Borrower outlook (borrower's age, health, employment type and history, employment prospects, professional skills, industry).
11. Country of residence / incorporation:
 - a) residents;
 - b) non-residents.
12. Location of the underlying collateral:
 - a) rural versus urban,
 - b) prime location, city centre, outskirts, etc.
13. Type of underlying collateral:
 - a) land:
 - building plot
 - agricultural land
 - b) building:
 - house
 - shop
 - factory.
14. Based on the loan-to-value (LTV) ratio:

- a) for low LTV loans, sale of underlying collateral may be the preferred option, unlike for high LTV loans.

15. Hardship cases (e.g. health problems, separation, divorce).

16. Borrower's creditworthiness assessment:

- a) can afford loan repayment versus cannot afford it;
b) income less expenditure versus reasonable living expenses versus loan instalment.

Part B: Benchmarks for NPL monitoring metrics

B.1. NPL metrics

1. NPL level and flows

- NPL stock/total volume of NPLs
- NPE stock + foreclosed assets + performing forbore/total volume of exposures + foreclosed assets
- Quarterly flow of NPLs (+/-)/total NPL stock
- Quarterly flow of NPEs (+/-)/total NPE stock
- Quarterly flow from performing exposure (PE) to NPL
- Quarterly flow from performing FBE to NPL
- Quarterly flow from NPL to PE
- Quarterly flow from NPL to performing FBE
- Quarterly flow from performing FBE to PE
- Quarterly flow from PE to performing FBE

2. Impairments

- Quarterly increase in stock of loss allowances
- Quarterly level of reversal of impairments
- Quarterly change in stock of loss allowances (+/-)/total NPL stock
- Accumulated total provisions/total NPL stock
- By cohort (e.g. number of years since NPL classification, secured/unsecured)

3. Loss budget

- total loss as a result of forbearance activity;

- total loss versus budget

B.2. Collection activities

1. Employees activity

- Number of borrower engagements per quarter versus plan
- Number of borrower engagements leading to forbearance agreement
- Number of borrower engagements leading to cash recovery

2. Cash recovery

- Quarterly cash recovery from NPEs/total NPE stock
- Quarterly cash recovery from interest on NPEs/total NPE stock
- Quarterly cash recovery from commissions and fees on NPEs/total NPE stock
- Quarterly cash recovery from property-related liquidations, also as a percentage of total NPE stock
- Quarterly cash recovery from non-property-related liquidations, also as a percentage of total NPE stock
- Quarterly cash recovery from sales of NPEs, also as a percentage of total NPE stock
- Quarterly cash recovery from NPEs, also as a percentage of total NPE stock

B.3. Forbearance activities

1. Debt forgiveness

- Quarterly debt forgiveness
- Quarterly debt forgiveness/specific assigned provisions
- Quarterly debt forgiveness/total NPE stock

2. Accounting write-offs

- Quarterly accounting write-offs (full and partial)
- Quarterly accounting write-offs (full and partial)/individually assessed stock of loss allowances
- Quarterly accounting write-offs (full and partial)/total NPE stock

3. Forbearance activity

- Value of NPEs currently in forbearance
- Value of recently agreed forbearance solutions by characteristics (e.g. payment holiday > 12 months)
- Value of loans currently in forbearance/total NPE stock
- Value of PEs currently in forbearance
- Quarterly non-performing FBEs/total NPE stock
- Total non-performing FBEs/total NPE stock
- Value of non-performing FBEs currently experiencing financial difficulties

4. Re-default rate

- Cure rate
- Re-default rate on non-performing FBEs
- Re-default rate on performing FBEs

5. Debt/asset swap

- Quarterly debt to equity swaps, also as a percentage of total NPE stock
- Quarterly debt to asset swaps, also as a percentage of total NPE stock

6. Legal activities

- Value and number of loans currently in legal activity
- Value and number of assets recently foreclosed
- Quarterly value and number of loans newly entering legal activity
- Quarterly value and number of loans exiting legal activity
- Average duration of legal procedures recently closed
- Average amounts recovered from legal procedures recently closed (including total costs)
- Loss rate on loans exiting legal activity

B.4 Profits and loss (P&L) items stemming from NPEs

1. Interest from NPEs

- Interest payments recognised on NPEs in the P&L
- Percentage of recognised interest payments from NPEs actually received

Part C: Examples of early warning indicators

C.1. Borrower-level early warning indicators from external sources

1. External sources

- Debt and collateral increase in other credit institutions
- Past due or other non-performing classifications in other credit institutions
- Guarantor default
- Debt in private central register (if any)
- Legal proceedings
- Bankruptcy
- Changes in undertaking structure (e.g. merger, capital reduction)
- External rating assigned and trend therein
- Other negative information regarding major borrowers/counterparties of the borrower/suppliers

C.2. Borrower-level early warning indicators from internal sources

1. Business undertakings

- Negative trend in internal rating
- Unpaid cheques
- Significant change in liquidity profile
- Liabilities (leverage) (e.g. equity/total < 5% or < 10%)
- Number of days past due
- Number of months with any overdraft/overdraft exceeded
- Profit before taxes/revenue (e.g. ratio < -1%)
- Continued losses
- Continued excess in commercial paper discount
- Negative own funds
- Payment delays
- Decrease in turnover
- Reduction in credit lines related to trade receivables (e.g. year-on-year variation, 3 year average/1 year average)
- Unexpected reduction in undrawn credit lines (e.g. undrawn amount/total credit line)
- Negative trend in behavioural scoring
- Negative trend in PD and/or internal rating

2. Natural persons

- Negative trend in behavioural scoring
- Negative trend in PD and/or internal rating
- Mortgage loan instalment > x credit balance
- Mortgage and consumer credit days past due
- Decrease in the credit balance > 95% in the last 6 months
- Average total credit balance < 0.05% of total debt balance
- Forborne
- Citizenship and related historic loss rates
- Decrease in payroll in the past 3 months
- Unemployment
- Early arrears (e.g. 5–30 days past due, depending on portfolio/borrower types)
- Reduction in bank transfers in current accounts
- Increase in loan instalment over the payroll ratio
- Number of months with any overdraft exceeded

C.3. Portfolio-level early warning indicators

a. Portfolio distribution

- Size distribution and concentration level
- Top x (e.g. 10) groups of connected clients and related risk indicators
- Asset class distribution
- Breakdown by industry, sector, collateral type, country, maturity, etc.

2. Risk parameters

- PD/LGD evolution (overall and per portfolio)
- PD/LGD forecasts and projections
- Overall expected losses
- Default exposure

3. Stock of loss allowances

- Stocks and flows of loss allowances (overall and per portfolio)
- Volumes of and trends in significant risk provisions at individual level

4. NPE/forbearance status/foreclosure

- NPE volume by category (> 90 days past due, loss allowances, etc.)
- Forbearance volume and grouping of exposures (restructuring, workout, forced prolongation, other modifications, deferrals, > 90days past due, loan loss provisions)
- Foreclosed assets on total exposures
- NPE ratio without foreclosed assets
- NPE ratio with foreclosed assets
- NPE coverage (loss allowances, collateral, other guarantees)

C.4. Specific type of borrower/sector early warning indicators

1. Legal activities

- Value and number of loans currently in legal activity
- Value and number of assets recently foreclosed
- Quarterly value and number of loans newly entering legal activity
- Quarterly value and number of loans exiting legal activity
- Average duration of legal procedures recently closed
- Average amounts recovered from legal procedures recently closed (including total costs)
- Loss rate on loans exiting legal activity

2. Other early warning indicators for specific types of debtors/sectors:

- data on indices (GDP, securities market indices, commodity prices, etc.);
- real estate: real estate-related indices (segment, region, cities, rural areas, etc.).

Part D: Common NPL-related policies

A credit institution should develop, regularly review and monitor operations in accordance with its policies related to the NPL management framework.

A credit institution should establish the following policies, taking into account the principle of proportionality, aiming to achieve the implementation of the strategy of the credit institution (including its NPL strategy and operational plan where relevant).

D.1. Arrears management policy

This policy should set out the credit institution's NPL operating model (see chapter 3.2 of these guidelines), including at least the following elements:

- 1) the structure and responsibilities of the NPE WUs, with clear handover triggers and a link to the grouping of exposures (see chapter 3.2.3 of these guidelines);
- 2) the procedure to be followed by the functions involved, to include at a minimum:
 - a) the procedure and handover criteria to be followed for each stage of arrears, early arrears and late arrears (stage before past due unpaid obligations arise, early-stage past due unpaid obligations (≤ 90 days), and late-stage past due unpaid obligations (> 90 days));
 - b) the procedure to be followed where a borrower is classified as non-cooperating and/or non-viable, and the criteria for the borrower to be classified as such;
 - c) the communication with the borrower at each procedure, which should be aligned with the legislative framework of the country of operation (e.g. code of conduct);
 - d) monitoring tools and methods to be applied;
- 3) the human and technical resource requirements;

- 4) the reports to be produced internally for monitoring purposes and for regular updates to the management body.

D.2. Forbearance policy

The credit institution should, through its forbearance policy (described in Section 4.2.1 of these guidelines), define the framework for approving forbearance measures for debtors who are experiencing financial difficulties or may experience them in the future. For this purpose, it should set out at least the following:

- 1) the necessary financial and non-financial documentation to be requested and provided by the different types of borrowers in order for the responsible credit officer to demonstrate repayment capacity on a principal and interest basis;
- 2) the minimum key financial repayment capacity metrics and ratios to be applied by the credit officer, detailed on a portfolio-/product-/sector-specific basis, in order to fully assess the borrower's repayment capacity;
- 3) the process for determining and implementing the most appropriate forbearance solution for a borrower:
 - for retail customers, decision trees are to be used. For non-retail borrowers, if a decision tree approach is not appropriate, then the policy should provide clear instructions to the credit officer on how to assess the suitability of a forbearance treatment;
 - in the case of borrowers for whom no solution can be reached (non-viable and/or non-cooperating borrowers), a time-bound process and procedure should be established for the transfer of these borrowers to the NPL WUs responsible for liquidation.
- 4) a toolkit of forbearance measures with short-term and long-term time horizons, as outlined in chapter IV of these guidelines;
 - Each forbearance proposal should undergo a credit re-approval process for the debtor, in order to determine a sustainable debt structure and to demonstrate the capacity to repay interest and principal;
- 5) clear instructions to the credit officer regarding the requirements for revaluation of collateral in line with chapter 7 of these guidelines;
- 6) the decision-making process, approval levels and procedures for each type of forbearance measure and size of exposure;
- 7) the process and procedure for the monitoring of the forbearance solutions granted and borrower performance following the completion of a restructuring, including frequency of the review of the borrower, the re-default definition, the process for reassessment and requirements for reporting of re-defaults;
- 8) the pricing policy for each forbearance measure and type of borrower.

For all items referred to in paragraph (1), items 2) to 8) of this section, the credit institution should develop sector-specific guidelines related to the identification of key financial indicators and ratios on a sectoral basis (SMEs and corporates). For example, in the hotel sector, the assessment may include average daily rates, revenue per available accommodation unit, number of overnight stays, fixed costs as a percentage of total costs, variable costs as a percentage of total costs, etc.

D.3. Debt recovery/enforcement policy

The NPL WUs responsible for debt recovery should take the most appropriate actions in a timely manner to effectively reduce NPLs over a defined time horizon. The debt recovery policy, in accordance with the NPL strategy, should address, at a minimum:

- 1) The range of available options for each collateral type. Indicatively, the following could be considered (not in any particular order):
 - voluntary asset sale (borrower re-engages and agrees to sell the asset);
 - forced asset sale via receivers/court proceedings (assets are not held on the balance sheet of the credit institution);
 - foreclosure of asset (assets are held on the balance sheet of the credit institution);
 - debt collection (internal or external);
 - debt to asset/equity swap;
 - sale of loan/loan portfolio to a third party.
- 2) the procedure to be followed to select the most appropriate recovery option and the team of internal and external experts to be involved in taking the decision;
- 3) the recovery option should take into account the existence of collateral, type of legal documentation, type of borrower, local market conditions and macroeconomic outlook, the legislative framework in place, and potential historical recovery rates for each option versus the costs involved for each option;
- 4) a clear definition of non-cooperating borrowers or a link to related policies including such a definition;
- 5) a clearly defined approval process for each stage of the debt recovery process for the different recovery options available to the credit institution;
- 6) the role of risk control and internal audit departments in the procedure and in the monitoring process.

With respect to the liquidation of collateral, the following should be defined in the policy:

- 1) the valuation approach to be followed in respect of the asset (in line with chapter 7.7 of these Guidelines) including the liquidation costs to be applied. The

liquidation costs should be in line with requirements set out in chapter 7.4 of these Guidelines;

- 2) involvement of internal or external experts;
- 3) limits
 - to the amount of assets that can be held by the credit institution at any point of time, taking into account the large exposure limits specified in the Law on Credit Institutions and industry concentration risk, for example in the real estate sector;
 - to the amount of repossessed or foreclosed assets that can be acquired by the credit institution within a certain time period;
- 4) the procedure to be followed post repossession or foreclosure to develop and implement a sale strategy, and the unit within the credit institution responsible for undertaking the management of the assets concerned (this may also be defined in a separate foreclosed/repossessed asset policy).

A credit institution should consider the interaction with other creditors for NPL borrowers with multiple creditors, usually corporate borrowers. Therefore, a credit institution should put in place a clear procedure for negotiating and interacting with other financial institutions (or other third parties) to whom the borrower is indebted.

D.4. Non-performing loan classification policy and impairment policy

A credit institution should adopt, document and implement reliable methodologies that implement policies, processes, procedures and controls for the assessment and measurement of impairment losses on non-performing loans.

A credit institution should also take into account contractual obligations relating to expected cash flows before considering their inclusion in discounted cash flows.

D.5. Write-off policy

A credit institution should adopt a write-off policy in order to assess the collectability of non-performing loans in a timely manner.

Specific and clear rules should be introduced to ensure that their application is aligned with the credit institution's strategic planning, while an ongoing control mechanism should be established to ensure that write-offs are carried out properly and with particular care.

Write-off policies/procedures should, as a minimum, include the following:

- the approach to write-off that should be applied to individual portfolios/exposure categories, i.e. under what conditions or circumstances a write-off should be carried out;
- specifying whether it is permissible to adapt the approach to individual cases and which procedures should be applied in such cases;

- supporting documentation that should support the decision on loan write-off;
- specifying whether the maximum allowable amount of write-off will be determined per debtor or group of related clients or per portfolio;
- restrictions on granting loans related to write-offs.

D.6. Policy for problem debtors with non-performing loans at several credit institutions

If debtors have non-performing loans at several credit institutions (usually companies), the credit institution should foresee interaction with other creditors. For the above reason, it is desirable to introduce clear procedures for negotiations and interaction with other credit institutions (or other third parties) with which the debtor is indebted.

D.7. Collateral policies

Given the importance of credit risk mitigation in the NPL workout process, credit institutions should develop clear and consistent collateral policies, including policies for foreclosed assets. These policies should comprehensively cover the management, valuation and reporting of all collateral types. Given the complexity and specialisation of some types of collateral, credit institutions should seek external expertise in drafting and reviewing these policies. A credit institution should ensure a consistent approach to managing and valuing similar collateral across the portfolio, as per chapter 7 of these Guidelines.

D.8. NPL monitoring policy

A credit institution should establish a dedicated policy d specifying, inter alia:

- 1) the types of actions required in response to the different types of findings;
- 2) escalation procedures;
- 3) key elements, frequency and recipients of the reporting;
- 4) handover criteria/a link to NPL procedures.

D.9. Outsourcing/NPL servicing policy

A credit institution should establish a dedicated policy for the outsourcing of services to third parties if this is relevant. This needs to include the required procedures for the selection of outsourcing partners, the required legal contract content and the decision-making process for outsourcing agreements, as well as the monitoring of those agreements.

ANNEX 3

Guidelines on ESG risk management in credit institution

I. Subject matter, scope and definitions

1. These Guidelines shall govern in more detail the ESG risk management system in a credit institution, as a part of robust governance system that a credit institution shall have in place in accordance with Article 104 of the Law on Credit Institutions (OGM 72/19, 8/21, 24/25) – hereinafter: the Law.

The ESG risk management system shall cover:

- a) minimum standards and reference methodologies for the identification, measurement, management and monitoring of ESG risks;
- b) qualitative and quantitative criteria for the assessment of the impact of ESG risks on the risk profile and solvency of a credit institution in the short, medium and long term.

For the purposes of these Guidelines, “ESG” means an integrated set of environmental, social and governance aspects that are relevant for the identification, assessment and management of risks, as well as for making strategic, investment and supervisory decisions, in accordance with applicable regulatory requirements in the field of sustainable finance.

II. Reference methodology for the identification and measurement of ESG risks

2.1. Materiality assessment

3. As part of the reference methodology for credit institution’s identification and measurement of ESG risks to be included in their strategies and internal procedures, a credit institution shall provide for the regular performance of a materiality assessment of ESG risks at least every year, except for small and non-complex credit institutions that may perform materiality assessment every two years or more frequently if needed, in case of a material change to their business environment related to ESG factors, such as significant new public policies or shifts in the credit institution’s business model, portfolios or operations.

4. A credit institution shall perform materiality assessment of ESG risks referred to in item 3 of these Guidelines, as a credit institution-specific assessment which provided the credit institution with a view on the financial materiality of ESG risks for its business model and risk profile, supported by a mapping of ESG factors and transmission channels to traditional financial risk categories.

5. The materiality assessment of ESG risks referred to in item 3 of these Guidelines should be consistent with other materiality assessments conducted by the credit

institution, in particular those made for the purpose of disclosing material sustainability risks in accordance with the regulation governing the financial reporting, where applicable, and should be integrated into the ICAAP materiality assessment.

6. A credit institution shall, when performing materiality assessment of ESG risks, use a risk-based approach that takes into account the likelihood of occurrence and the potential magnitude of the financial effects of ESG risks in the short and medium term and over a long-term horizon of at least 10 years.

7. With a view to comprehensively assessing the materiality of ESG risks, a credit institution shall ensure that the scope of their materiality assessment sufficiently reflects the nature, size and complexity of their activities, portfolios, services, and products, and a credit institution shall consider the impact of ESG risks on all traditional financial risk categories to which they are exposed, including credit, market, liquidity, operational (including litigation), reputational, business model and concentration risks.

8. For the purposes of materiality assessment, a credit institution shall, when determining the material ESG risks, consider both their impacts on financial risk categories and the amounts and/or shares of exposures, revenues and profits exposed to the risks.

9. With regard to the materiality assessment of environmental risks, a credit institution shall use both qualitative and quantitative information and consider a sufficiently large scope of environmental factors that includes at least climate-related factors, degradation of ecosystems and biodiversity loss.

A credit institution shall assess transition and physical risk drivers, taking into account, where applicable and to the extent possible the following:

1) for transition risks:

- the key economic sectors funded by a credit institution or in which the credit institution's counterparty has its principal activities;
- ongoing and potential future material changes in public policies, technologies and market preferences (e.g. new environmental regulations or tax incentives, development of innovative low-carbon technologies, shifts in consumer or investor demand);
- with respect to climate-related risks:
 - a) exposures towards sectors that contribute highly to climate change by a separate regulation, with particular consideration given to exposures towards fossil fuel sector entities;
 - b) the degree of alignment or misalignment of portfolios with the relevant regulatory objectives of the jurisdictions where they operate – for small and non-complex credit institutions at least on the basis of a high-level qualitative assessment;

2) for physical risks:

- the geographical areas in which key assets of counterparties (e.g. production sites) and, in particular for real estate exposures, physical collateral is located;

- the vulnerability level to environmental hazards (e.g. temperature-related, wind-related, water-related, solid mass-related hazards) associated with different climate scenarios and transition pathways, or for small and non-complex credit institutions, associated with at least one adverse scenario.

10. A credit institution shall substantiate and document as part of their ICAAP their materiality assessments of ESG risks, including methodologies and thresholds used, inputs and factors considered and main results and conclusions reached, including non-materiality conclusions.

11. A credit institution shall develop and implement measurement methods, risk management arrangements in accordance with Subtitle 2.2 and Chapter III of these Guidelines that are commensurate with and informed by the outcomes of the materiality assessment.

To this end, a credit institution shall have more extensive and sophisticated arrangements for ESG risks identified as material.

In turn, the ESG risk measurement methodologies and ESG risk monitoring metrics used by credit institution shall support and inform the regular updates of the materiality assessment.

A small and non-complex credit institution may apply less extensive and sophisticated arrangements, which however shall be commensurate with the results of their materiality assessment of ESG risks.

2.2 Identification and measurement of ESG risks

2.2.1 General principles

12. As part of the minimum standards to identify and measure ESG risks, a credit institution's internal procedures should include tools and methodologies to assess ESG risk drivers and their transmission channels into the different prudential risk categories and financial risk metrics affecting the credit institution's exposures, including with a forward-looking perspective.

13. To ensure a proper identification and management of ESG risks, a credit institution shall consider the potential impact of these risks in the short, medium and long term.

A credit institution shall ensure that the level of granularity and accuracy of data points, quantification tools, methods and indicators used by a credit institution take into account their materiality assessment and their size and complexity and generally be higher for the short and medium term.

Long-term time horizons should at least be considered from a qualitative perspective and

support strategic assessments and decision-making.

14. With regard to environmental risks, a credit institution shall ensure that its internal procedures and methodologies allow credit institution to:

- 1) quantify climate-related risks, such as by estimating the probabilities of materialisation and magnitude of financial impacts stemming from climate-related factors;
- 2) properly understand the financial risks that may result from other types of environmental risks, such as those stemming from the degradation of nature, including biodiversity loss and the loss of ecosystem services, or the misalignment of activities with actions aimed at protecting, restoring, and/or reducing negative impacts on nature;
- 3) establish key risk indicators (KRIs) covering at least short- and medium-term time horizons and a scope of exposures and portfolios determined in line with the results of the materiality assessment.

15. With regard to social and governance risks, where quantitative information is initially lacking, a credit institution shall ensure that its internal procedures provide for methods that start by evaluating qualitatively the potential impacts of these risks on the operations of, and financial risks faced by, the credit institution, and it shall progressively develop more advanced qualitative and quantitative measures.

A credit institution shall gradually enhance their approaches in line with regulatory, scientific, data availability and methodological progress.

16. With regard to the interactions between the different categories of, respectively, environmental, social and governance risks, a credit institution shall ensure in its internal procedures that each category of risk is first assessed taking into account its specific characteristics, before considering potential interconnections and interdependencies in the measurement of these risks.

2.2.2 Data processes

17. A credit institution shall provide in its internal procedures the implementation of sound information management systems to identify, collect, structure and analyse the data that is necessary to support the assessment, management and monitoring of ESG risks, which shall be implemented across the credit institution as part of the overall data governance and IT infrastructure.

A credit institution shall regularly review their practices to ensure they remain up to date with public (e.g. increased data availability due to regulatory initiatives) and market developments and should have in place arrangements to assess and improve data quality.

18. A credit institution shall ensure in its internal procedures the collection and use of the information needed to assess, manage, and monitor the current and forward-looking ESG

risks they may be exposed to via their counterparties, by aiming at collecting client- and asset-level data at an appropriately granular level.

19. A credit institution shall ensure that its internal procedures are built on both internally and externally available ESG data, including by regularly reviewing and making use of sustainability information disclosed by their counterparties,.

20. A credit institution shall assess which other sources of data would effectively support the assessment, management and monitoring of ESG risks, such as information obtained through engagement with clients and counterparties as part of new and existing business relationships, or third-party data.

When a credit institution uses services of third-party providers to gain access to ESG data, a credit institution shall ensure they have a sufficient understanding of the sources, data and methodologies used by data providers, including their potential limitations.

21. Where the quality or availability of data is initially not sufficient to meet risk management needs, a credit institution shall assess these gaps and their potential impacts on its activities and risk profile.

A credit institution shall take and document remediating actions, including the use of estimates or proxies, e.g. based on sectoral- and/or regional-level characteristics and, when feasible, making adjustments to account for counterparty-specific aspects.

A credit institution shall seek to reduce the use of estimates and proxies over time as ESG data availability and quality improve.

22. With a view to collecting data referred to in item 18) of these Guidelines, a credit institution shall consider, for large corporate counterparties collecting or obtaining the following data points, where applicable:

- 1) for environmental risks, where applicable and to the extent possible:
 - geographical location of key assets (e.g. production sites) and exposure to environmental hazards (e.g. temperature-related, wind-related, water-related, solid mass-related hazards) at the level of granularity needed for appropriate physical risk analysis, and availability of insurance;
 - current and, if available, targeted greenhouse gas (GHG);
 - independency on fossil fuels, either in terms of economic factor inputs or revenue base;
 - energy and water demand and/or consumption, either in terms of economic factor inputs or revenue base;
 - level of energy efficiency for real estate exposures and the debt servicing capacity of the counterparty;
 - the current and anticipated financial effects of environmental risks and opportunities on the counterparty's financial position, financial performance and cash flows;
 - transition-related strategic plans, including transition plan for climate change

mitigation;

2) for social and governance risks:

- alignment with the OECD Guidelines for Multinational Enterprises, UN Guiding Principles on Business and Human Rights and International Labour Organisation Declaration on Fundamental Principles and Rights at Work;
- negative material impacts on own workers, workers in the value chain, affected communities and consumers/end-users including information on due diligence efforts or processes to avoid and remediate such impacts.

23. For exposures towards other types of counterparties than large corporates, a credit institution shall:

- 1) determine the data points needed for the identification, measurement and management of ESG risks, considering the list provided in item 22) of these Guidelines to support that assessment;
- 2) where needed to address data gaps, use expert judgment, qualitative data, portfolio-level assessments and proxies in line with item 21 of these Guidelines.

2.2.3 Main features of reference methodologies for the identification and measurement of ESG risks

24. A credit institution shall in its internal procedures should provide for a combination of risk assessment methodologies, including exposure-based, sector-based, portfolio-based, and scenario-based methodologies, as set out in items 25 to 36 of these Guidelines, so that the combination of methodologies allows a credit institution to comprehensively assess ESG risks over all relevant time horizons.

In particular, a credit institution shall at least use exposure-based methods to obtain a short-term view of how ESG risks are impacting the risk profile and the profitability of their counterparties, use sector-based, portfolio-based and scenario-based methods to support the medium-term planning process and the definition of risk limits and risk appetite for steering the credit institution towards its strategic objectives, and assess through scenario-based methods their sensitivities to ESG risks across different time horizons including long-term ones.

2.2.3.1. Exposure-based methods

25. At an exposure-based level, in line with with items 101 and 121 of Annex 1 to this Decision, a credit institution shall have internal procedures in place to assess the exposure of their counterparties' activities and key assets to ESG factors, in particular environmental factors and the impact of climate change, and the appropriateness of the mitigating actions.

To this end, a credit institution shall ensure that ESG factors, in particular environmental factors, are properly reflected in their internal risk classification procedures, are taken into account in the overall assessment of default risk of a borrower and, where justified by their materiality, are embedded into the risk indicators, internal credit scoring or rating

models, as well as into the valuation of collateral.

26. With regard to the assessment of environmental risks at exposure level, a credit institution shall include in its internal procedures a set of risk factors and criteria that capture both physical and transition risk drivers.

For large institutions, this includes, where applicable, the following criteria, to the extent possible:

- 1) the degree of vulnerability to environmental hazards, taking into account the geographical location of the key assets of counterparties and guarantors, or of the physical collateral backing the exposures, considering both on-balance sheet and off-balance sheet exposures;
- 2) the degree of vulnerability to transition risks, taking into account relevant technological developments, the impact of applicable or forthcoming environmental regulations affecting the sector of activity of the counterparty, the current and if any targeted GHG emissions in absolute and, where relevant, intensity value of the counterparty, the impact of evolving market preferences, and the level of energy efficiency in the case of residential or commercial real estate exposures together with the debt service capacity of counterparties;
- 3) the exposure of the counterparty's business model and/or supply chain to critical disruptions due to environmental factors such as the impact of biodiversity loss, water stress or pollution;
- 4) the exposure of the counterparty to reputational and litigation risks taking into account completed, pending or imminent litigation cases related to environmental issues;
- 5) the (planned) maturity or term structure of the exposure or asset;
- 6) risk-mitigating factors, such as private or public insurance coverage, for example based on applicable national catastrophe schemes or similar frameworks, and the capacity of the counterparty to ensure resilience to transition and physical risks including through forward-looking transition planning.

27. Where data needed to assess certain criteria is not yet available, such as for smaller corporate counterparties, a credit institution shall follow the steps outlined in items 20, 21 and 23 of these Guidelines.

28. With regard to the assessment of social and governance risks at exposure level, a credit institution shall implement due diligence processes with a view to assessing the financial impacts stemming from, and the vulnerability of counterparties' business model to, social and governance factors, taking into account the adherence of corporate counterparties to social and governance standards such as those mentioned in item 22 sub-item 2 indent 1 of these Guidelines, the exposure of the counterparty to litigation risk driven by social or governance issues, as well as the applicable legislation in the jurisdiction where the counterparty operates.

2.2.3.2. Sector-based, portfolio-based and portfolio alignment methodologies

29. A credit institution shall provide in its internal procedures sector-based and portfolio-based methodologies, in particular heat maps that highlight ESG risks of individual economic (sub-) sectors in a chart or on a scaling system as referred to regulation governing risk management in credit institution in accordance with items 102 and 124 of Annex 1 of this Decision.

A credit institution shall establish methodologies to allow to map their portfolios according to ESG risk drivers and identify any concentration towards one or more type(s) of ESG risks.

30. With regard to non-climate related ESG factors, a large credit institution shall develop:

- 1) methods to identify sectors that are highly dependent on, or have significant impact on, ecosystem services, and tools to measure the financial impact of nature degradation and actions aimed at protecting, restoring and/or reducing negative impacts on nature;
- 2) approaches to measuring the positive or adverse impacts of their portfolios on the achievement of the UN Sustainable Development Goals and evaluating potential related financial risks.

31. With regard to climate-related risks, A credit institution shall provide in its internal procedures for the use of at least one portfolio alignment methodology to assess on a sectoral basis the degree of alignment of institution's portfolios with climate-related pathways and/or benchmark scenarios.

A credit institution shall also consider assessing the alignment at counterparty level e.g. by comparing the GHG emissions intensity of a given counterparty with an applicable sectoral benchmark.

32. For the purposes of item 31 of these Guidelines, a credit institution shall use scenarios that are science-based, relevant to sectors of economic activity and the geographical location of their exposures, up to date and originating from national, EU or international organisations such as national environmental agencies, Joint Research Centre of the EU Commission, the International Energy Agency, Network for Greening the Financial System, International Panel on Climate Change.

Sectoral decarbonisation pathways should be consistent with the applicable policy objective, such as the EU objective to reach net-zero GHG emissions by 2050 and to reduce emissions by 55% by 2050 compared to the 1990 level, or any national objective where applicable.

33. For the purposes of item 31 of these Guidelines, a credit institution shall determine the appropriate scope of the portfolio alignment assessments and the degree of sophistication of the methodologies used based on the characteristics of their portfolios, the results of their materiality assessment and their size and complexity.

A small and non-complex credit institution may use representative samples of exposures in their portfolios to undertake portfolio alignment assessments.

34. A credit institution shall justify and document their methodological choices including the choice of scenario(s) and the base year, the selection of sectors and, for small and non-complex credit institution, the identification of a representative sample of exposures, as well as any significant methodological change over time.

When data needed to measure alignment is missing, institutions should follow the steps set out in items 20, 21 and 23 of these Guidelines.

35. A credit institution shall consider insights gained from climate portfolio alignment methodologies to:

- 1) assess and monitor climate-related transition risks stemming from misalignments of counterparties and/or portfolios with EU, Member State or third-country regulatory objectives and pathways consistent with applicable climate goals, and potential related financial risks;
- 2) inform their decision-making process on the formulation and implementation of their risk appetite, business strategy and transition planning including regarding prioritisation of engagement with certain counterparties.

2.2.3.3. Scenario-based methodologies

36. A credit institution shall provide, in its internal procedures, the use of scenario-based analyses to test their resilience to ESG risks, starting with climate-related risks, under various scenarios

III. Minimum standards and reference methodology for the management and monitoring of ESG risks

3.1 ESG risk management principles

37. For the purposes of integrating ESG risks into the institution-wide risk management framework in accordance with Articles 104 and 105 of the Law, a credit institution consider the role of ESG risks as potential drivers of all traditional categories of financial risks, including credit, market, operational (including litigation), reputational, liquidity, business model, and concentration risks.

38. A credit institution shall embed ESG risks within their regular risk management systems and processes ensuring consistency with their overall business and risk strategies, and a fully integrated approach where ESG risks are properly captured and considered as part of risk management strategies, policies and limits.

Where a credit institution has in place specific arrangements for ESG risks, they shall ensure this is reflected in, and feeds into, the regular risk management framework.

39. A credit institution shall develop a robust and sound approach to managing and mitigating ESG risks over the short and medium term and over a long-term horizon of at least 10 years, taking into account the principles outlined in item 13 of these Guidelines.

40. A credit institution shall determine which combination of risk management and mitigation tools would best contribute to this, by considering a range of tools, including the following to the extent possible:

- 1) engagement with counterparties aiming at better understanding the risk profile of the counterparty and at ensuring consistency with the credit institution's risk appetite and strategic objectives, in particular by:
 - determining the scope of counterparties with whom to engage, taking into account the outcomes of the materiality assessment and of the risk measurement process;
 - establishing a dialogue with those counterparties referred to in indent 1 of this sub-item to review their resilience towards ESG risks, taking into account the sectoral legislation that affects those counterparties and any transition plan they have developed;
 - where relevant and possible, providing relevant information and advice to clients on the assessment or mitigation of ESG risks they are exposed to; and
 - considering a range of counterparty-specific actions, such as adjustment to product offering, agreement on a plan and remedial actions to support transition efforts and an enhanced resilience of the counterparty, or as a last resort cessation of the relationship when continuation is considered incompatible with the credit institution's planning and risk appetite.
- 2) adjusting financial terms (e.g. including contractually-agreed safeguards and corrective measures), conditions (e.g. tenor) and/or pricing based on ESG risk-relevant criteria and the institution's risk strategy and internal capital policy;
- 3) considering ESG risks when developing sectoral policies and when setting global, regional and sectoral risk limits, exposure limits and deleveraging strategies;
- 4) diversification of lending and investment portfolios based on ESG risk-relevant criteria, e.g. in terms of economic sectors or geographical areas;
- 5) other risk management tools deemed appropriate in line with the institution's risk appetite, such as a possible reallocation of financing between and within sectors to-wards exposures more resilient to ESG risks.

3.2 Strategies and business models

41. A credit institution shall account for ESG risks when developing and implementing their overall business and risk strategies, which should include to the extent possible the following activities:

- 1) understanding and assessing the business environment in which they operate, and how they are exposed to structural changes in the economy, financial system, and competitive landscape over the short, medium and long term as a result of ESG factors;
- 2) understanding and assessing how ESG risks, in particular environmental risk drivers including transition and physical risks, can have an adverse impact on the

- viability of their business model and sustainability of their business strategy, including profitability and revenue sources, over the short, medium and long term;
- 3) considering how these ESG risks, in particular environmental risk drivers including transition and physical risks, may affect their ability to achieve their strategic objectives and remain within their risk appetite;
 - 4) formulating, implementing and monitoring plans and targets as set out in the Law.

42. For the purposes of item 41 of these Guidelines and with a view to ensuring sufficiently informed strategies, institutions should consider insights gained from a combination of forward-looking risk assessment methods, including:

- 1) portfolio alignment methodologies, as described in Subtitle 2.2 of these Guidelines;
- 2) environmental risk scenario analyses, taking into account the (potential) business environment(s) in which they might be operating in the short, medium and long term, including a time horizon of at least 10 years;
- 3) climate or environmental stress tests performed by the credit institution.

43. A credit institution shall have a comprehensive understanding of their business model, strategic objectives and risk strategy from an ESG risk perspective and should ensure that their governance, transition planning process and risk management framework, including risk appetite, are adequate to implement them.

3.3 Risk appetite

44. A credit institution shall ensure that their risk appetite clearly defines and addresses ESG risks to which a credit institution is exposed based on the materiality assessment.

A credit institution shall specify, within their risk appetite, the level and types of ESG risks institutions are willing to assume in their portfolio, including as regards the portfolio's concentration and diversification objectives.

A credit institution shall ensure that the risk appetite is consistent with the credit institution's strategic objectives and commitments.

45. A credit institution shall implement the risk appetite with the support of ESG-related KRIs, including e.g. potential limits, thresholds or exclusions.

For the determination of relevant and appropriate KRIs, a credit institution shall consider the results of their materiality assessment and the specific features of their business model, taking into account relevant business lines, activities, products, and exposures towards economic sectors and geographies, including jurisdictions and more granular geographical areas.

A credit institution shall consider the metrics listed in Subtitle 3.7. of these Guidelines when determining which selected KRIs to use in their risk appetite framework.

46. A credit institution shall ensure that all relevant group entities and business lines and

units bearing risk properly understand and implement the credit institution's risk appetite in terms of ESG risks.

In particular in large credit institution risk limits should be set at different levels within the credit institution, ensuring consistency with the overall risk appetite, and should anchor ESG risk considerations in relation to the products or financial instruments issued, originated or held by the credit institution, client segments, type of collateral and risk mitigation instruments.

47. A credit institution shall ensure that its risk appetite and associated KRIs are subject to monitoring and escalation processes as set out in item 76 of these Guidelines.

3.4 Internal culture, capabilities and controls

48. A credit institution shall develop on an ongoing basis their capabilities to identify, assess, monitor, manage and mitigate ESG risks as appropriate.

49. A credit institution shall ensure, as part of their training policy, that their management body and employees are adequately trained to understand the implications of ESG factors and ESG risks with a view to fulfilling their responsibilities effectively.

50. A credit institution shall ensure that the policies and procedures on training activities are kept up to date and take into account scientific and regulatory developments, and that the procedure for managers should take into account that knowledge of ESG factors and ESG risks is relevant for the assessment of the suitability of members of the management body and for key function holders.

51. A credit institution shall ensure that the sound and consistent risk culture that accounts for ESG risks implemented within the credit institution in accordance with the regulation governing the governance arrangements in a credit institution include clear communication from the management body ('tone from the top') and appropriate measures to promote knowledge of ESG factors and ESG risks across the credit institution, as well as awareness of the credit institution's ESG strategic objectives and commitments.

52. A credit institution shall incorporate ESG risks into their internal control frameworks across the three lines of defence, so that the internal control framework includes a clear definition and assignment of ESG risk responsibilities and reporting lines.

53. A credit institution shall ensure that the first line of defence is responsible for undertaking assessments of ESG risks, taking into account materiality and proportionality considerations, during the client onboarding, credit application, credit review and, where relevant, investing processes, and in ongoing monitoring and engagement with existing clients.

A credit institution shall ensure that the employees in the first line of defence have an

adequate understanding and knowledge to be able to identify potential ESG risks.

54. As part of the activities of the second line of defence, a credit institution shall ensure the following:

- 1) the risk management function is responsible for undertaking ESG risk assessment and monitoring independently from the first line of defence, including by ensuring adherence to the risk limits, questioning and where necessary challenging the initial assessment conducted by the business relationship officers;
- 2) the compliance function oversees how the first line of defence ensures adherence to applicable ESG risk legal requirements and internal policies, and should advise the management body and other relevant staff on measures to be taken to ensure such compliance. In addition, in relation to the sustainability claims and/or commitments made by the institution, it should provide advice on the reputational and conduct risks associated with the implementation or failure to implement such claims and/or commitments;
- 3) the compliance function and the risk management function are consulted for the approval of new products with ESG features or for significant changes to existing products to embed ESG aspects.

55. As third line of defence, the internal audit function shall provide an independent review and objective assurance of the quality and effectiveness of the overall internal control framework and systems in relation to ESG risks, including the first and second lines of defence and the ESG risk governance framework.

3.5 ICAAP and ILAAP

56. A credit institution shall incorporate material ESG risks and their impacts on financial risk categories into their ICAAP to assess, and maintain on an ongoing basis, the amounts, types and distribution of internal capital that they consider adequate to cover the nature and level of ESG risks, taking into account the short, medium and long term.

57. When a credit institution takes into account longer time horizons for the coverage of ESG risks, these time horizons shall be used as a source of information to ensure a sufficient understanding of the potential implications of ESG risks for capital planning within the regular ICAAP time horizons.

A credit institution shall ensure that the time horizons considered for the determination of adequate internal capital to cover ESG risks should be consistent with the time horizons used as part of the credit institutions' overall ICAAP.

A credit institution shall ensure that the ICAAP is sufficiently forward-looking and where a credit institution assesses that risks should not be covered by capital but be mitigated through other tools or actions, it should be explained.

58. A credit institution shall use insights gained from their risk assessment methodologies, including those referred to in Subtitle 2.2 of these Guidelines, to identify and measure

internal capital needs for exposures or portfolios assessed as more vulnerable to ESG risks, taking into account the differing levels of availability and maturity of quantification methodologies for environmental risks compared to social and governance risks.

59. With regard to environmental risks, a credit institution shall include in their ICAAP a forward-looking view of their capital adequacy under an adverse scenario that includes specific environmental risks elements.

In addition, a credit institution shall specify any changes to the credit institution's business plan or other measures derived from climate or environmental risks stress testing and/or reverse stress testing.

60. A credit institution shall incorporate material environmental risks and their impacts on liquidity in their internal liquidity adequacy assessment process (ILAAP) over appropriate time horizons within the scope of the ILAAP coverage.

61. A credit institution shall include in their ICAAP and ILAAP frameworks a description of the risk appetite, thresholds and limits set for, respectively, material ESG risks and material environmental risks and their impacts on their solvency or liquidity, as well as the process applied to keeping these thresholds and limits up to date.

A credit institution shall provide sufficient contextual information to understand their analysis of the capital and liquidity implications of, respectively, ESG and environmental risks, including by providing clarity on the methodologies used and underlying assumptions.

62. When integrating ESG risks into their ICAAP and environmental risks in their ILAAP, a credit institution shall ensure that the complexity of the processes and the degree of sophistication of the methodologies used by credit institution take into account their size and complexity and the results of their materiality assessment.

3.6 Policies and procedures for financial risk categories

63. A credit institution shall understand and manage the current and potential future impact of ESG risks on their exposures to credit risk, on the valuation of their positions subject to market risk, in particular for prudent valuation purposes, on their liquidity risk profile and buffers, on their operational (including litigation) risks, and on reputational risks, including through the use of forward-looking analyses.

3.6.1 Credit risk

64. For the purposes of integrating ESG risks into credit risk policies and procedures, a credit institution shall ensure that their credit sectoral policies, reflecting ESG risks, are cascaded down and translated into clear origination criteria available to business lines staff and credit decision-makers, and should ensure that ESG risks are embedded into the credit risk monitoring framework.

65. With regard to environmental risks, a credit institution shall include in their policies and procedures a combination of qualitative and quantitative aspects, and based on their materiality assessment and their risk appetite, institutions should set quantitative credit risk metrics covering the most significant client segments, types of collateral and risk mitigation instruments.

3.6.2 Market risk

65. With respect to market risk, a credit institution shall consider how ESG risks could affect the value of the financial instruments in their portfolio, evaluate the potential risk of losses on their portfolio and increased volatility in their portfolio's value, and establish effective processes to control or mitigate the associated impacts as part of their market risk management framework including where needed reviewing the trading book risk appetite and setting internal limits for positions or client exposures.

3.6.3 Liquidity and funding risk

67. With respect to liquidity and funding risk, a credit institution shall at least consider how ESG risks could affect net cash outflows (e.g. increased drawdowns of credit lines) or the value of assets that constitute their liquidity buffers and, where appropriate, incorporate these impacts into the calibration of their liquidity buffers or their liquidity risk management framework.

68. In addition, with regard to environmental risks, a credit institution shall consider how these risks could affect the availability and/or stability of their funding sources and take them into account in their management of funding risk, by considering different time horizons and both normal and adverse conditions, which reflect among others the potential impacts of environmental risks on reputational risks, a situation of hampered or more expensive access to market funding and/or accelerated deposit withdrawals caused by ESG factors.

3.6.4 Operational and reputational risks

69. With respect to operational risk, a credit institution shall consider how ESG risks could affect the different regulatory operational risk event types in accordance with the regulation governing the capital adequacy of credit institutions, and their ability to continue providing critical operations and should incorporate material ESG risks in their operational risk management framework.

70. With regard to environmental risks, a credit institution shall:

- 1) identify and label losses related to environmental risks in their operational losses registers, in line with the risk taxonomy and methodology to classify the loss events;
- 2) develop processes to assess and manage the likelihood and impact of environment-related litigation risks;

- 3) use scenario analysis to determine how physical risk drivers can impact their business continuity; and
- 4) take material environmental risks into account when developing business continuity plans.

71. With respect to reputational risks, a credit institution shall consider and manage the impact of ESG risks on their reputation, including by considering potential risks associated with lending to and investing in businesses which may be prone to ESG-related controversies, such as violations of social or human rights. Institutions should also consider, where applicable, the reputational risks associated with the failure to deliver on their sustainability commitments or transition plans, or with the (perceived) lack of credibility of such commitments and plans.

72. As part of their management of conduct, litigation and reputational risks, a credit institution shall have in place sound processes to identify, prevent and manage risks resulting from greenwashing or perceived greenwashing practices taking into account the best practices on greenwashing monitoring and supervision.

To this end, a credit institution shall take all necessary steps to ensure that sustainability-related communication is fair, clear, and not misleading, and that sustainability claims are accurate, substantiated, up to date, provide a fair representation of the credit institution's overall profile or the profile of the product, and are presented in an understandable manner.

The obligation referred to in paragraph 2 of this item shall be done at both the credit institution level (e.g. in relation to sustainability commitments including forward-looking targets) and the product or activity level (e.g. in relation to products and activities marketed as sustainable), including by monitoring legal developments, market practices, and controversies around alleged greenwashing practices.

3.6.5 Concentration risk

73. With respect to concentration risk, A credit institution shall consider and manage the risks posed by concentrations of exposures or collateral in single counterparties, interdependent counterparties or in certain industries, economic sectors, or geographic regions which may present a higher degree of vulnerability to ESG risks. To identify ESG-related concentration risks, a credit institution shall consider the size and/or shares of their exposures that may be affected by ESG risks relative to total exposures and as a proportion of Tier 1 capital.

A credit institution shall take into account several ESG factors amongst which GHG emissions, sectoral characteristics, vulnerability of geographical areas to physical risks, and social or governance deficiencies or controversies identified in jurisdictions where exposures or collateral are located, as well as the availability of risk mitigating factors.

A credit institution shall assess if and how ESG-related concentration risk aggravates the

prior financial vulnerability of exposures.

3.7 Monitoring

74. A credit institution shall monitor ESG risks through effective internal reporting frameworks that convey appropriate information and aggregated data to senior management and the management body, such as by integrating ESG risks into regular risk reports.

75. A credit institution shall monitor ESG risks on a continuous basis and ensure that they maintain an institution-wide view, adequately covering the nature, size and complexity of their activities, as well as, for the most significant portfolios determined on the basis of the materiality assessment, a portfolio view of their vulnerability to ESG risks.

A credit institution shall implement granular and frequent monitoring of counterparties, exposures, and portfolios assessed as materially exposed to ESG risks, including through incorporating considerations of ESG risks into the credit risk monitoring process of retail counterparties and into regular credit reviews for medium-sized and large counterparties and/or by increasing the frequency and granularity of these reviews due to ESG risks.

76. A credit institution shall set early warning indicators and thresholds and should have in place procedures to escalate alerts, deviations and breaches and to take corrective and/or mitigation actions in case limits are exceeded, including through adaptations to business strategy and risk management tools.

77. A credit institution shall monitor a range of backward- and forward-looking ESG risk metrics and indicators.

Large credit institutions should monitor at least the following indicators, where applicable and to the extent possible:

- 1) amount and share of exposures to, and income (interest, fee and commission) stemming from, business relationships with counterparties operating in sectors that highly contribute to climate change which are listed in sectors A to H and sector L of statistical classification of activities of Montenegro.

A credit institution shall use a sectoral differentiation that is as granular as possible. In particular, the degree of granularity should allow the credit institution to monitor the amount and share of exposures to, and income stemming from, relationships with specific counterparties, such as fossil fuel sector entities and/or companies excluded from benchmarks as laid down in separate regulations;

- 2) portfolio alignment metrics showing at a sectoral level the extent to which exposures and production capacities operated by clients are, or are projected to be, (mis-)aligned with a pathway consistent with the applicable climate legal and regulatory objective, such as reaching net-zero GHG emissions by 2050, based on alignment metrics relevant to the selected sectors and using methods described in Section 2.2.3.2 of these Guidelines.

A credit institution shall complement these indicators with information related to

the assessment of potential financial risk impacts resulting from misalignments.

- 3) financed GHG emissions with a breakdown by scope 1, 2 and 3 emissions in absolute value and, where relevant, intensity relative to units of production or revenues, split by sectors, using a sectoral differentiation that is as granular as possible and at least for selected sectors determined on the basis of the materiality assessment.

A credit institution shall complement these metrics with qualitative or quantitative information and criteria supporting the interpretation of their evolution over time, including e.g. a temporary increase due to the provision of transition finance to GHG-intensive counterparties, and identifying the underlying drivers of the changes in emissions.

Examples of methodologies or databases that may support a credit institution when computing these metrics include the Global GHG Accounting and Reporting Standard for the Financial Industry, developed by the Partnership for Carbon Accounting Financials, and the Carbon Disclosure Project.

- 4) the level of progress achieved in the implementation of key financing strategies determined by the institution to ensure its resilience to ESG risks and preparedness for the transition towards a more sustainable economy, e.g. by monitoring financial flows towards financial assets or counterparties that share a common set of characteristics relevant to the credit institution's targets or risk appetite in relation to ESG risks.
- 5) client engagement metrics providing information about:
 - the percentage of counterparties for which an assessment of ESG risks has been performed, also as regards their transition strategies and, where available, transition plans and their consistency with the institution's objectives, specifying the scope of selected sectors, products and business lines covered by these assessments;
 - the results and outcomes of such engagement such as the positive (or any sub-classification within that category) or negative (or any sub-classification within that category) assessments of these counterparties' adaptability and resilience to the transition to a sustainable economy, the alignment progress against the credit institution's targets and objectives, and follow-up actions taken by the credit institution.
- 6) breakdown of portfolios secured by real estate according to the level of energy efficiency of the collateral;
- 7) the ratio of financing of low-carbon energy supply technologies in relation to the financing of fossil-fuel energy supply technologies;
- 8) the ratio of environmentally sustainable exposures financing activities that contribute or enable the environmental objective of climate change mitigation in relation to the GHG-intensive exposures;
- 9) levels of physical risk the credit institution is exposed to, and their impact on financial risks, by considering several scenarios and all hazards relevant to the credit institution's activity, supplemented with information on the progress achieved in the implementation of risk mitigation measures;
- 10) measures of concentration risk related to physical risk drivers (e.g. measurement of exposures and/or collateral in high flood risk, water-stressed or wildfire risk

- areas) and transition risk drivers (e.g. exposures to sectors with elevated transition risks), by using a sufficiently granular geographical split of exposures;
- 11) amount of historical losses related to ESG risks and, based on scenario-types methods, forward-looking estimate(s) of exposures-at-risk and potential future financial losses related to ESG risks;
 - 12) a measure of ESG-related reputational risk tracking how regulation, communication, commitments or public controversies regarding current and future business-related activities impact directly or indirectly the institution, by considering interactions with operational risk and strategic and business model risks, such as loss of business opportunities or strategic partnerships;
 - 13) any ESG-related litigation claims in which the credit institution has been, is or may become involved in, based on available information;
 - 14) the status of ESG risk-related capacity building, such as the percentage of employees who have received specific training;
 - 15) metrics related to non-climate related factors such as portfolio-level dependencies and impacts on ecosystem services, or exposures to counterparties with material dependencies or negative impacts on biodiversity, taking into account both sectoral and geographical location information;
 - 16) progress against all of the credit institution's targets set in relation to ESG risks including a declaration with regard to the sustainability commitments made by the credit institution.

78. A small and non-complex credit institution shall monitor a range of indicators included under item 77 of these Guidelines, selected on the basis of the results of their materiality assessment, and should take steps to expand the list of monitored indicators over time.

79. A credit institution shall have clear and well-documented methodologies pertaining to their monitoring metrics and indicators, and when data needed to compute metrics is initially missing, a credit institution shall follow the steps set out in items 20, 21 and 23 of these Guidelines.

ANNEX 4

IRRBB MEASUREMENT METHODS (NON-EXHAUSTIVE LIST)

Cash flow modelling	Metric	Description	Risks captured	Limitations of metric
Unconditional cash flows (it is assumed that the maturity of cash flows is independent of the specific interest rate scenario)	Net Interest Income-based: •Gap analysis: Repricing gap •Focus on net interest income (NII) component: Change of NII	Gap analysis allocates all relevant interest rate sensitive instruments into predefined time buckets according to their repricing or maturity dates, which are either contractually fixed or based on behavioural assumptions. It calculates the net positions ('gaps') in each time bucket. It approximates the change in net interest rate income ensuing from a yield curve shift by multiplying each net position with the corresponding interest rate change.	Gap risk (only parallel risk)	<ul style="list-style-type: none"> • The metric approximates the gap risk only linearly. • It is based on the assumption that all positions within a particular time bucket mature or reprice simultaneously. • It fails to measure basis and option risk.
	Economic value: <ul style="list-style-type: none"> • Duration analysis: Modified duration/PV01 of equity 	<p>The modified duration approximates the relative change in the net present value of a financial instrument due to a marginal parallel shift of the yield curve by one percentage point. The modified duration of equity measures the exposure of an institution to gap risk in its non-trading book. PV01 of equity is derived from the modified duration of equity and measures the absolute change of the equity value resulting from a 1 basis point (0.01%) parallel shift of the yield curve.</p> <p>The starting point is the allocation of all cash flows of interest rate sensitive instruments into time buckets. For each instrument type, an appropriate yield curve is selected. The modified</p>	Gap risk (only parallel risk)	<ul style="list-style-type: none"> • The metric only applies to marginal shifts of the yield curve. In the presences of convexities, it may underestimate the effect of larger interest rate movements. • It only applies to parallel shifts of the yield curve.. • It fails to measure option risk and captures basis risk at best partially.

Cash flow modelling	Metric	Description	Risks captured	Limitations of metric
		<p>duration of each instrument is calculated from the change of its net present value due to a 1 percentage point parallel shift of the yield curve. The modified duration of equity is determined as the modified duration of assets times assets divided by equity minus the modified duration of liabilities times liabilities divided by equity.</p> <p>PV01 of equity is obtained by multiplying the modified duration of equity by the value of equity (i.e., assets minus liabilities) and dividing by 10 000 to arrive at the value change per basis point.</p>		
	<p>Partial modified duration/partial PV01</p>	<p>The partial modified duration of an instrument for a specific time bucket is calculated as the modified duration above, except that not the entire yield curve is shifted in parallel, but only the yield curve segment corresponding to the time bucket. These partial measures show the sensitivity of the market value of the banking book to a marginal shift of the yield curve in particular maturity segments. To each time bucket's partial measure a different magnitude of a shift can be applied, such that the effect of a change of the yield curve's shape can be computed for the entire portfolio.</p>	<p>Gap risk (parallel and non-parallel risk)</p>	<ul style="list-style-type: none"> • The metric only applies to marginal interest rate changes. In the presence of convexity, the metric may underestimate the effect of larger interest rate movements.. • It fails to measure the basis and option risk..

Cash flow modelling	Metric	Description	Risks captured	Limitations of metric
<p>Cash flows partially or fully conditional on interest rate scenario (it is assumed that the timing of cash flows of options, of instruments with embedded, explicit options and – in more sophisticated approaches – of instruments of which the maturity depends on clients' behaviour, is modelled conditional on the interest rate scenario)</p>	<p>Net Interest Income-based: <u>Focus on net interest income (NII) component:</u></p> <ul style="list-style-type: none"> • Change of NII 	<p>The change of NII is an earnings-based metric and measures the change of the net interest income over a particular time horizon (usually 1-5 years) resulting from a sudden or gradual interest rate movement. The starting point is the mapping of all cash flows of interest rate sensitive instruments to (granular) time buckets (or using the exact repricing dates of individual positions in more sophisticated systems).</p> <p>The base scenario for the calculations reflects the institution's current corporate plan to project the volume, pricing and repricing dates of future business transactions. The interest rates used to calculate future cash flows in the base scenario are derived from forward rates, appropriate spreads or market expected rates for different instruments.</p> <p>In assessing the possible extent of NII changes, banks use assumptions and models to predict the path of interest rates, the maturing of existing assets, liabilities and off-balance-sheet items, and their potential replacement.</p> <p>Net interest income-based metrics can be differentiated according to the sophistication of projecting future cash flows: simple run-off models assume that existing assets and liabilities mature without replacement; constant balance sheet models</p>	<p>Gap risk (parallel and non-parallel), basis risk and, provided all cash flows are modelled scenario dependent, also option risk</p>	<ul style="list-style-type: none"> • Sensitivity of the outcome to the modelling and behavioural assumptions. • Complexity.

Cash flow modelling	Metric	Description	Risks captured	Limitations of metric
		<p>assume that maturing assets and liabilities are replaced by comparable instruments; while the most complex dynamic cash flow models reflect business responses to differing interest rate environments in the size and composition of the banking book.</p> <p>All earnings-based metrics can be used in a scenario or stochastic analysis. Earnings at risk (EaR) is an example of the latter, which measures the maximum NII change at a given confidence level.</p>		
	<p>Economic value: Focus on economic value of equity (EVE)</p> <ul style="list-style-type: none"> • Change in EVE 	<p>The change in EVE is the change in the net present value of all cash flows originating from banking book assets, liabilities and off-balance-sheet items resulting from a change in interest rates, assuming that all banking book positions run off. The interest rate risk can be assessed by the ΔEVE for specific interest rate scenarios or by the distribution of ΔEVE using Monte Carlo or historical simulations. Economic value at risk (EVaR) is an example of the latter, which measures the maximum equity value change for a given confidence level.</p>	<p>Gap risk (parallel and non-parallel), basis risk and, if all cash flows are modelled scenario dependent, also option risk</p>	<ul style="list-style-type: none"> • Sensitivity of the outcome to the modelling and behavioural assumptions. • Stochastic metrics, which apply distributional assumption, may fail to capture tail risks and nonlinearities. • Full revaluation Monte Carlo approaches are computationally demanding and may be difficult to interpret ('black-box'). • Complexity

1. Repricing time buckets:

Time buckets (M=month; Y=year)	Midpoint of time bucket (tk) (in years)
Overnight (O/N)	0,0028
> O/N ≤ 1 M	0,0417
> 1 M ≤ 3 M	0,1667
> 3 M ≤ 6 M	0,375
> 6 M ≤ 9 M	0,625
> 9 M ≤ 12 M	0,875
> 12 M ≤ 18 M	1,25
> 18 M ≤ 2 Y	1,75
> 2 Y ≤ 3 Y	2,5
> 3 Y ≤ 4 Y	3,5
> 4 Y ≤ 5 Y	4,5
> 5 Y ≤ 6 Y	5,5
> 6 Y ≤ 7 Y	6,5
> 7 Y ≤ 8 Y	7,5
> 8 Y ≤ 9 Y	8,5
> 9 Y ≤ 10 Y	9,5
> 10 Y ≤ 15 Y	12,5
> 15 Y ≤ 20 Y	17,5
> 20 Y	25

2. Length of time buckets referred to in Article 81 paragraph (4) item 2) of this Decision are as follows:

Time buckets (M=month; Y=year)	Length of time buckets (in years)
Overnight (O/N)	0
> O/N ≤ 1 M	1/12
> 1 M ≤ 3 M	2/12
> 3 M ≤ 6 M	3/12
> 6 M ≤ 9 M	3/12
> 9 M ≤ 12 M	3/12
> 12 M ≤ 18 M	6/12
> 18 M ≤ 2 Y	6/12
> 2 Y ≤ 3 Y	1
> 3 Y ≤ 4 Y	1
> 4 Y ≤ 5 Y	1
> 5 Y ≤ 6 Y	1
> 6 Y ≤ 7 Y	1
> 7 Y ≤ 8 Y	1
> 8 Y ≤ 9 Y	1
> 9 Y ≤ 10 Y	5
> 10 Y ≤ 15 Y	5
> 15 Y ≤ 20 Y	5
> 20 Y	10

3. Reference term time buckets:

Time buckets (M=month; Y=year)	Midpoint of time bucket (in years)
> O/N ≤ 12 M	1
> 12 M ≤ 1,5 Y	1,25
> 1,5 Y ≤ 2 Y	1,75
> 2 Y ≤ 3 Y	2,5
> 3 Y ≤ 4 Y	3,5
> 4 Y ≤ 5 Y	4,5
> 5 Y ≤ 6 Y	5,5
> 6 Y ≤ 7 Y	6,5
> 7 Y ≤ 8 Y	7,5
> 8 Y ≤ 9 Y	8,5
> 9 Y ≤ 10 Y	9,5
> 10 Y ≤ 15 Y	12,5
> 15 Y ≤ 20 Y	17,5
> 20 Y	25

4. For the purposes of Articles 78h paragraph (1), 78i paragraph (2), 78j paragraph (1), 78l paragraph (1) and 78k paragraph (1), the following repricing time buckets shall be used in case of different net interest rate horizons:

Time buckets (M=month; Y=year)	net interest rate horizons
> O/N. ≤ 12 M	1
> O/N ≤ 1,5 Y	1,5
> O/N ≤ 2 Y	2
> O/N ≤ 3 Y	3
> O/N ≤ 4 Y	4
> O/N ≤ 5 Y	5
> O/N ≤ 6 Y	6
> O/N ≤ 7 Y	7

Time buckets (M=month; Y=year)	net interest rate horizons
> O/N ≤ 8 Y	8
> O/N ≤ 9 Y	9
> O/N ≤ 10 Y	10
> O/N ≤ 15 Y	15
> O/N ≤ 20 Y	20
> 20 Y	25

5. Prescribed slotting simplified standardised approach

1) Slotting of non-maturity deposits under the baseline scenario:

Time buckets (M=month; Y=year)	retail transactional deposits	Other retail deposits	wholesale non- financial deposits
Overnight (O/N)	30,77%	46,15%	61,54%
> O/N ≤ 1 M	1,15%	1,00%	0,80%
> 1 M ≤ 3 M	2,31%	2,00%	1,60%
> 3 M ≤ 6 M	3,46%	2,99%	2,40%
> 6 M ≤ 9 M	3,46%	2,99%	2,40%
> 9 M ≤ 12 M	3,46%	2,99%	2,40%
> 12 M ≤ 1,5 Y	6,92%	5,98%	4,81%
> 18 M ≤ 2 Y	6,92%	5,98%	4,81%
> 2 Y ≤ 3 Y	13,85%	11,97%	9,62%
> 3 Y ≤ 4 Y	13,85%	11,97%	9,62%
> 4 Y ≤ 5 Y	13,85%	5,98%	-

Note: for other retail deposits, the scenario forecasts time buckets up to 4.5 years.

2) Slotting of non-maturity deposits under the decrease of short-term interest rates scenario

Time buckets(M=month; Y=year)	retail transactional deposits	Other retail deposits	wholesale non-financial deposits
Overnight (O/N)	10,00%	30,00%	50,00%
> O/N ≤ 1 M	1,50%	1,30%	1,04%
> 1 M ≤ 3 M	3,00%	2,59%	2,08%
> 3 M ≤ 6 M	4,50%	3,89%	3,12%
> 6 M ≤ 9 M	4,50%	3,89%	3,12%
> 9 M ≤ 12 M	4,50%	7,78%	3,12%
> 12 M ≤ 1,5 Y	9,00%	7,78%	6,25%
> 18 M ≤ 2 Y	9,00%	7,78%	6,25%
> 2 Y ≤ 3 Y	18,00%	15,55%	12,51%
> 3 Y ≤ 4 Y	18,00%	15,55%	12,51%
> 4 Y ≤ 5 Y	18,00%	7,78%	-

Note: for other retail deposits, the scenario forecasts time buckets up to 4.5 years

3) Slotting of non-maturity deposits under the increase of short-term interest rates scenario:

Time buckets(M=month; Y=year)	retail transactional deposits	Other retail deposits	wholesale non- financial deposits
Overnight (O/N)	51,54%	62,31%	73,08%
> O/N ≤ 1 M	0,81%	0,70%	0,56%
> 1 M ≤ 3 M	1,62%	1,39%	1,12%
> 3 M ≤ 6 M	2,42%	2,09%	1,68%
> 6 M ≤ 9 M	2,42%	2,09%	1,68%
> 9 M ≤ 12 M	2,42%	2,09%	1,68%
> 12 M ≤ 1,5 Y	4,85%	4,19%	3,37%
> 18 M ≤ 2 Y	4,85%	4,19%	3,37%
> 2 Y ≤ 3 Y	9,69%	8,38%	6,73%
> 3 Y ≤ 4 Y	9,69%	8,38%	6,73%
> 4 Y ≤ 5 Y	9,69%	4,19%	-

Note: for other retail deposits, the scenario forecasts time buckets up to 4.5 years.