2016 AQR, Stress testing and recovery plan

"Preparation is essential to achieving results"

Bulgarian National Bank

Contents

Asset Quality Review (AQR)

A. Definition

► The process reflects the key characteristics of the different asset portfolios, in order to evaluate the *quality* of the bank's assets

   ► Processes, policies and accounting review focuses on examining credit policies

   ► Loan tape brings to light the general outline of each portfolio

   ► Loan file review involves checks at bank's premises of physical files, aiming to assess the actual quality of the portfolio

B. Purpose

► Understanding the portfolio asset mix and its respective quality

► Understanding the need for adjustments to categorization

► To serve as the basis for the stress test

C. Key work-blocks

► Each of the elements in the process is further outlined on the next slides

Processes, policies and accounting (PP&A)
Data integrity validation (DIV)
Credit file review (CFR)

Stress Test (ST)

A. Definition

► The running of the test is about quantifying and extrapolating future losses under a baseline and an adverse macroeconomic scenario

   ► Top-down tests

      ► Consider system-level data (not in-depth bank-level breakdown) and same level assumptions

      ► Applying methods, uniform to all banks

   ► Bottom-up tests

      ► Extracting detailed data at a bank-level

      ► Commonly, more precise than top-down as it uses loan-by-loan data

      ► Calculations are aggregated to system-level results

B. Purpose

► Provide a loan loss estimate for each portfolio, in order to estimate the capital required to maintain a specific capital ratio under baseline and adverse scenarios

C. Key work-blocks

Loss absorption capacity
Capital needs (under the specified scenario)

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Work-block	Summary of work
1. Processes, policies and accounting review (PP&A)	The review will cover policies around valuation of assets, with particular focus on credit policies and the Bank's definition of forbearance and NPEs.
2. Loan tape creation and data integrity validation (DIV)	DIV will be performed on loan tapes provided by the Bank to assess data quality. DIV testing will be pre-programmed to ensure maximum efficiency.
3. Sampling	The sample selected will be representative of the in-scope portfolio, and samples per bucket will be selected at random.
4. Credit File Review (CFR)	A classification and impairment review will be performed as necessary. The approach will factor complexities associated with the nature of the Bank's portfolio.
5. Collateral and real estate valuation	Where applicable, collateral or on-balance sheet real estate will be valued, according to the AQR methodology.

Phases of the Asset Quality Review (AQR)
...will concentrate on those elements of individual banks' balance sheets that are believed to be most risky or non-transparent.

Work-block

Summary of work

6. Projection of findings of the Credit File Review

Projections of CFR findings will be applied to the wider portfolio. Anomalous findings will be excluded from projections to ensure a homogenous extrapolation.

7. Collective provision analysis

The AQR methodology challenger model will be calculated and comparative analysis will take place to identify shortcomings with the Bank's model.

8. Level 3 fair value exposures review

A revaluation of the significant level 3 exposures will be performed along with a qualitative trading book review if this is applicable.

9. Determine AQR adjusted CET1 ratio

Findings from the previous work-blocks will be applied to the Bank's Common Equity Tier 1 ratio, to determine supervisory measures, if any.
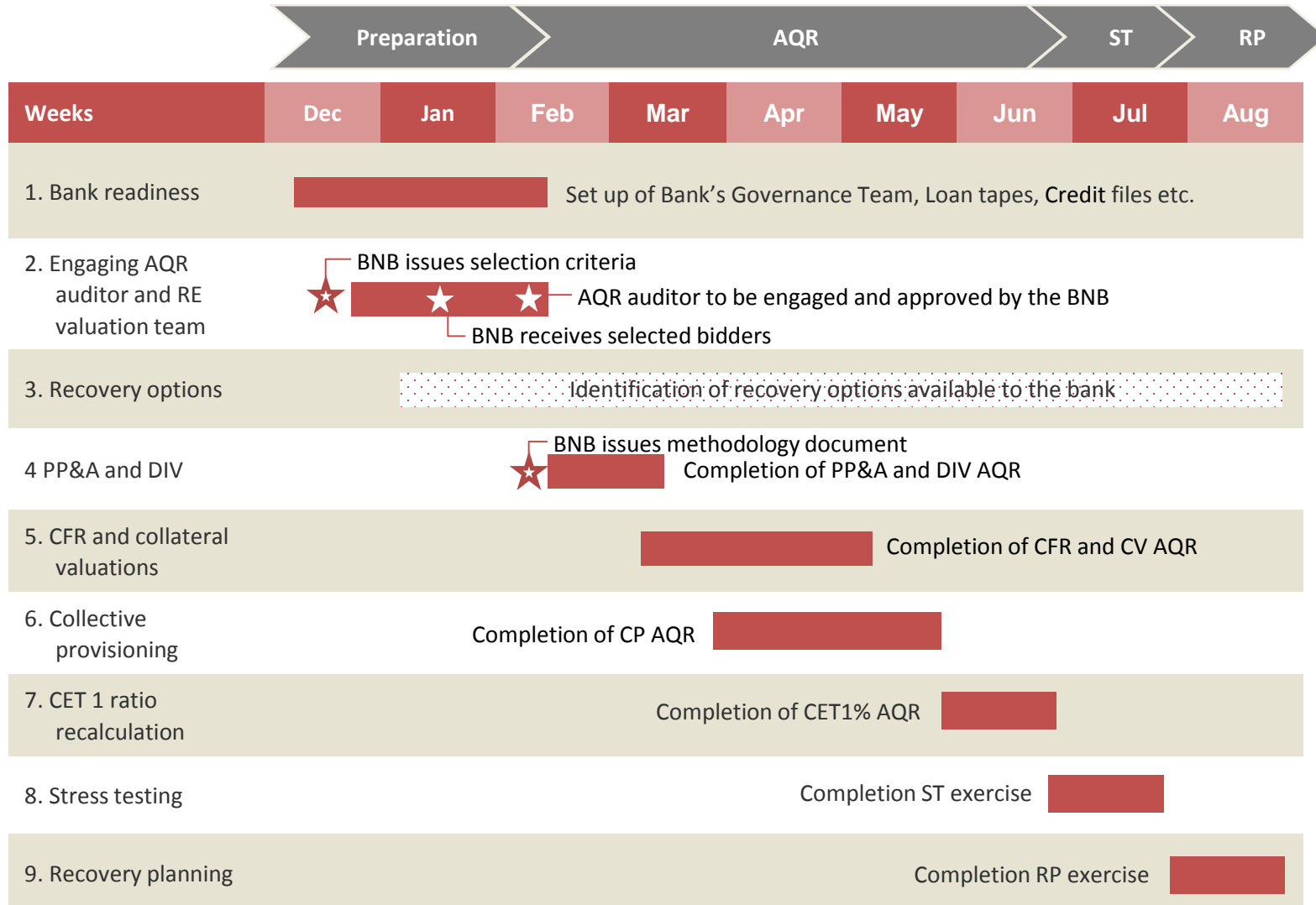
10. Quality assurance

A robust Quality Assurance framework will be applied internally and will ensure that the 4 eyes principle is implemented for all relevant work and deliverables.

Project timeline

Project timelines are tight, therefore it is key that you initiate readiness and procurement of an AQR auditor immediately

	Preparation	AQR	ST	RP

Weeks	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug

1. Bank readiness — Set up of Bank's Governance Team, Loan tapes, Credit files etc.

2. Engaging AQR auditor and RE valuation team
- BNB issues selection criteria
- AQR auditor to be engaged and approved by the BNB
- BNB receives selected bidders

3. Recovery options — Identification of recovery options available to the bank

4 PP&A and DIV
- BNB issues methodology document
- Completion of PP&A and DIV AQR

5. CFR and collateral valuations — Completion of CFR and CV AQR

6. Collective provisioning — Completion of CP AQR

7. CET 1 ratio recalculation — Completion of CET1% AQR

8. Stress testing — Completion ST exercise

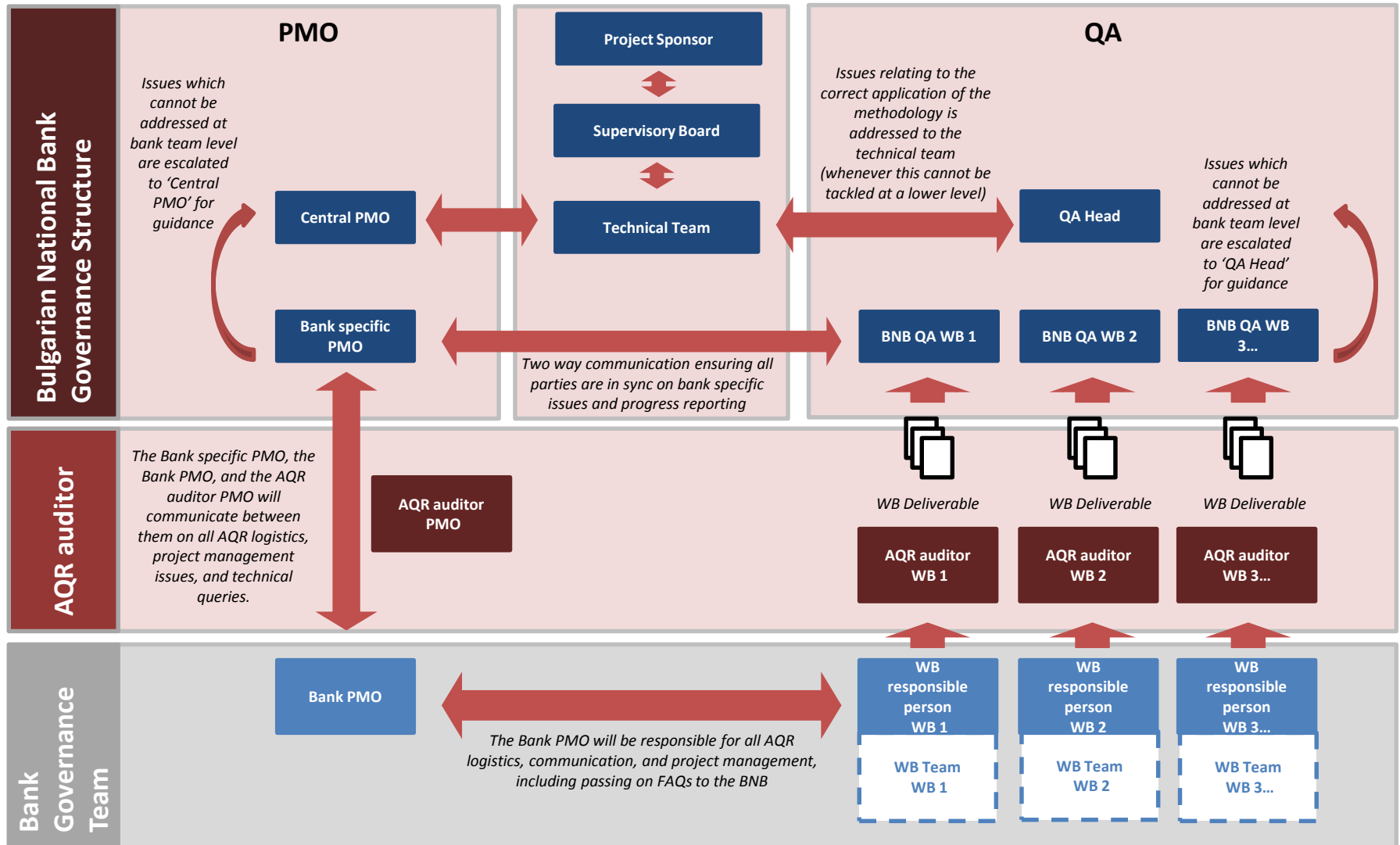**9. Recovery planning** — Completion RP exercise

- Bulgarian legislation requires that the exercise is complete by August;

- Good data tapes are necessary to a successful exercise and positive results;

- You will need to engage an AQR auditor and real estate valuation team.

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PMO

QA

Issues which cannot be addressed at bank team level are escalated to 'Central PMO' for guidance

Project Sponsor

Supervisory Board

Central PMO

Technical Team

Issues relating to the correct application of the methodology is addressed to the technical team (whenever this cannot be tackled at a lower level)

QA Head

Issues which cannot be addressed at bank team level are escalated to 'QA Head' for guidance

Bulgarian National Bank Governance Structure

Bank specific PMO

BNB QA WB 1

BNB QA WB 2

BNB QA WB 3...

Two way communication ensuring all parties are in sync on bank specific issues and progress reporting

AQR auditor

The Bank specific PMO, the Bank PMO, and the AQR auditor PMO will communicate between them on all AQR logistics, project management issues, and technical queries.

AQR auditor PMO

WB Deliverable

WB Deliverable

WB Deliverable

AQR auditor WB 1

AQR auditor WB 2

AQR auditor WB 3...

Bank Governance Team

Bank PMO

WB responsible person WB 1

WB responsible person WB 2

WB responsible person WB 3...

WB Team WB 1

WB Team WB 2

WB Team WB 3...

The Bank PMO will be responsible for all AQR logistics, communication, and project management, including passing on FAQs to the BNB

What you need to prepare for the exercise
Quality loan tapes, files, and collective provisioning models are all essential to ensuring successful results

Loan Tapes - ECB manual WB 2

- All subsequent AQR work-blocks are performed based on data in the loan tapes

- Each in-scope portfolio consists of six data tapes, three as at the AQR date and three for prior year

- Debtor tape contains 18 fields, facility tape contains 41 fields, collateral tape contains 13 fields

Comprehensive Credit Files - ECB manual WB 4

- Files for non-retail business are at debtor level, retail business at facility level

- See appendix for minimum info on file

- Default NPE classification in the event of a lack of information on file

- If impaired, the lack of information on file will result in adverse provisioning

Complete Collateral Files - ECB manual WB 5

- In the case of a gone concern review, all immovable property held as collateral will need to be valued independently

- If there is no sufficient information on file, a value of 0 will be allocated and provisioning will be applied accordingly

- Valuations carried out, as at or after December 1st 2015 will not be accepted

Robust Collective Provisioning Model - ECB manual WB 7

- The first step of the collective provisioning work-block will include a review of the collective provisioning methodology used by the bank

- Your collective provisioning will need to tie in to your financials and regulatory reporting templates, and you will need to justify your model methodology

- Absence of justification will likely result in higher challenger model provisions

Key project governance and contacts

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