MREL, TLAC and Banking Resolution

We give you an overview of the latest Basel proposals.
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Preface
Due to size, complexity, and interconnectedness banks could not undergo regular insolvency proceedings within the financial crisis of 2007. Instead, governmental bailouts were required, because the consequences of massive bank failures were deemed unforeseeable. Concepts and legal frameworks that would have allowed for a structured process on resolving institutions were not in place.

Core objective of the following regulatory initiatives in this regard is to ensure that possible bank resolutions in the future are feasible and realistic – without requiring the government and finally the taxpayer to cover losses – regardless of the size of an institution.

On a global level, the Financial Stability Board (FSB) took a leading role in pushing the topic forward. In 2014, the ‘Principles on Loss-Absorbing and Recapitalisation Capacity of G-SIBs in Resolution’ – also referred to as “TLAC” – introduced the concept of an additional liability requirement for the largest institutions on a worldwide level. These TLAC propositions are being adapted to the EU by means of the current CRR II consultation. The key element of the concept is the so called “bail-in” tool, that aims at requiring institutions’ creditors to participate in the institution’s losses and thus at banning the danger of another public “bail-out”.
In Europe, the Banking Recovery and Resolution Directive (BRRD) forms the legal basis for banking resolution proceedings, bringing along an entirely new regulatory set-up. Within the Eurozone, this is complemented by the Single Resolution Mechanism (SRM), that installs the Single Resolution Board (SRB) as the competent resolution authority for significant institutions, comparable to the role of the ECB as the competent supervisory authority. While the ECB and the national competent authorities are responsible for the “going-concern” supervision, the SRB and the national resolution authorities focus on the task of crisis prevention and management.

The BRRD introduced an approach that is similar to TLAC, but can be applied to basically all institutions in the European Union, not only systemically important ones: Minimum requirement on own funds and eligible liabilities – also referred to as MREL. Both approaches, TLAC and MREL focus on the same key aspect: increasing the loss absorption capacity in the banking sector by means of a binding minimum ratio for loss absorbing liabilities.

The implementation of the resolution regime affects institutions to a vast extent: recovery and resolution concepts need to be developed and to be kept up to date. This requires supervisors and resolution authorities to develop a thorough
understanding of the respective institution: business model, key functions, group relations and contractual interconnections.

As a consequence, banks need to be able to draw a clear and transparent picture of their business functions and report it to the resolution authorities. This is complemented by a huge amount of additional information and data requirements that will form the basis for the supervisors to fulfill their tasks. Apart from that, institutions need to deal with strategic questions: existing group structures and business functions assessed as critical might be put in question. Funding and capital costs will increasingly reflect investors’ risk of being bailed-in and will have to be considered for business decisions.

This booklet will help you to gain an overview of the proposed rules in order to prepare for the challenging tasks ahead.

Kind regards,

Martin Neisen
Global Basel IV Leader

Stephan Lutz
Co-Lead National Capital Impact, Capital Planning and Strategy
Legal background
The implementation of a resolution regime in the context of Basel III and Basel IV

Basel III as an amendment of Basel II was initially published in 2010 and transferred into binding European Law via the Capital Requirements Regulation (CRR). While the existing risk measurement rules have only been changed selectively (e.g. by the introduction of a CVA risk capital charge) the regulation of own funds has been subject to a significant change. The overall objective was to increase banks’ resilience in times of stress by various means: increasing the capital basis including the introduction of capital buffers, the application of strict criteria on capital instruments and the extension of existing deduction rules.

In contrast, the current reforms known as Basel IV focus on on the revision of the existing risk measurement methods. Within Pillar I, the standardised approaches are vastly changed (CR-SA, OpRisk) or completely replaced (Market Risk Positions, Counterparty Credit Risk), while the use of internal model is significantly reduced.
(IRBA, AMA) or subject to a fundamental methodological change (Expected shortfall instead of VaR for market risk measurement). This is complemented by additional risk measurements such as the explicit inclusion of the Interest Rate Risk in the Banking Book in Pillar II and a proposal for the measurement of step-in risk.

These revisions are clearly aiming at further strengthening the banks’ resilience in a going concern situation. Meanwhile, the time horizon of banking supervision is extended to severe crisis and gone-concern situations in a bank’s lifecycle. The Banking Recovery and Resolution Directive introduces the new concept of banking resolution that is meant as an alternative to existing insolvency proceedings. The overall objective is, on one hand, to establish a structured process that is especially designed for the resolution of a bank and allows to minimise losses, to limit
spill-over effects on other financials as well as on the real economy, and to help avoid under all circumstances the necessity of another public bail-out. The most important tool to achieve this is to include debt instruments in the absorption of occurring losses. As it is deemed to be the opposite of a bail-out, it has become known as bail-in.

In order to enable such a bail-in in an efficient manner, the existing regulatory ratios are complemented by new ones: TLAC and MREL. While aiming at a gone-concern situation, they are still closely linked to the going-concern oriented Basel III/Basel IV rules. The risk measurement for solvency purposes serves as the basis for the estimation of the MREL/TLAC needed.
Fig. 1 Basel III, Basel IV and the resolution regime

Going-Concern

Gone-Concern

MREL/TLAC Additional capital requirements

Basel III Increase in capital quality and overall capital basis

Basel IV Revision of existing risk measurement approaches

Resolution Planning Identification of critical business functions

Eligible liabilities

Own Funds

Tier 2
AT1
CET1

Risk weighted assets

Credit Risk + Market Risk + Counterparty Credit Risk + OpRisk + CVA risk

Credit Risk
Market Risk
Counterparty Credit Risk
OpRisk
CVA risk
Solving the too big to fail problem: a framework for crisis prevention and crisis management is implemented

Although going beyond an exclusively going-concern oriented supervision, the new recovery and resolution framework still clearly focusses on crisis prevention and management. That means that – despite of providing supervisors with the instruments for a bank’s resolution – it implements various measures to avoid a resolution.

The resolution regime implemented in the EU via the BRRD is based on three core pillars covering different stages on a bank’s way into a stress or crisis situation.

Recovery and resolution planning: Banks and supervisors are obliged to prepare themselves for stress situations within their normal course of business. The bank itself is required to develop a recovery plan, based on a profound organisational and business model analysis, that identifies critical functions and core business units, and establishes measures and processes that ensure an efficient recovery.
once the bank faces a stress situation. The supervisors – or, more precisely, the newly established resolution authorities – have to develop an institution specific resolution plan. MREL and TLAC play an important role in this context, as they make sure that once a resolution becomes necessary, sufficient liabilities are available to allow for an effective resolution without having to recur to state aid.

In times of stress, the measures defined in the recovery plan apply. In addition, supervisors are authorised to intervene in the institutions operative business to an extended degree by so called “early intervention measures”. These can include drastic actions such as extraordinary meetings of the bank’s shareholders, removing one or more members of the management board, changes to the business strategy, or changes to the legal structure of the bank, e.g. by changing the management function.
When a crisis scenario can nevertheless not be avoided, the third stage of supervisory action becomes relevant and the resolution regime applies. In this case, the resolution authority takes over and implements the resolution strategy as defined in the resolution plan. Eligible liabilities are likely to be used for loss absorption and recapitalisation of the institution.
Institution’s independence

Recovery and resolution planning
Preparatory measures by institutions and authorities

Recovery
Early intervention by the competent authority

Resolution
Implementation of the resolution plan by the resolution authority

Objective

- Sound understanding of organisational structure and critical business functions
- Ensure sufficient level of loss absorption

Normal scenario

- Re-install stability of the institution/group

Stressed scenario

- Minimise losses for the public sector
- Control potential spill-over effects on the financial sector and the real economy

Crisis scenario

Fig. 2 Crisis prevention and management

MREL, TLAC and Banking Resolution 17
The bail-in tool is the central instrument to generate additional capital in case of a resolution

Own funds (Common Equity Tier 1, Additional Tier 1 and Tier 2) remain the primary source of loss absorption. For the case a resolution is deemed necessary, own funds are supplemented by other liabilities that may be subject to a bail-in.

In a bail-in scenario, instruments can be written down or converted into CET1 instruments. Depending on the preferred resolution strategy, the generated capital can be used for the recapitalisation of the bank or a bridge institution.

The guiding principle when carrying out a bail-in is ‘NCWO’ – ‘No Creditor Worse Off’. A resolution is a bank sector specific substitute for normal insolvency proceedings. As such, it is supposed to reduce overall losses compared to an insolvency. While investors might participate in these potential benefits to a different degree, it should be avoided that a creditor suffers a greater loss in resolution than he would in an insolvency. That is why subordinated instruments – that are likely to suffer significant losses in an insolvency – play a crucial role in a resolution scenario.
Fig. 3 Bail-in ranking of liabilities

- Own Funds
  - CET1
  - AT1
  - T2

- Subordinated liabilities
- Other eligible liabilities
- Deposits, not covered and not preferential
- Contributions, Deposit Guarantee Scheme
The minimum capital ratios are extended: TLAC and MREL ensure there are sufficient liabilities available in a bail-in scenario

Fig. 4 TLAC and MREL

- Global concept initiated by the Financial Stability Board (FSB)
- Introduced into European law via CRR amendment
- Applicable for G-SIs
- Standardised minimum requirement
- Investments in TLAC (‘TLAC holdings’) instruments limited
- At least semi-annual reporting
MREL

- European initiative introduced via the BRRD
- General requirement for all CRR institutions
- Level defined on a case-by-case decision by resolution authority
- No concrete provision for treatment of investments in MREL (‘MREL holdings’)
- At least annual reporting

MREL

- Minimum requirement to be fulfilled
- Bail-in concept as a basis requirement
- Common criteria for eligible liabilities
- Common criteria for instruments that are excluded from a bail-in
- RWA-based ratio with a floor based on the Leverage Ratio Exposure
- Requirement to be fulfilled on group and single entity level depending on the resolution strategy defined by resolution authorities
- Own funds serve as a basis for loss absorption
- Reporting and disclosure requirements to be fulfilled
TLAC and MREL implementation in the EU
A new group of regulatory stakeholders: national and supranational resolution authorities

Fig. 5 Resolution Authorities

Eurozone

Banking Recovery and Resolution Directive (BRRD)

Single Resolution Mechanism Regulation (SRM-R)

Single Resolution Board (SRB)

Significant Institutions

Resolution Colleges

European Central Bank (ECB)

National Resolution Authorities (NRAs)

Less Significant Institutions

Non-Eurozone

National implementation

Significant Institutions

Less Significant Institutions

National Competent Authorities (NCAs)

Supervisory Colleges
Similar to the ECB, the SRB takes over the supervision of significant institutions for resolution purposes

While the Banking Recovery and Resolution Directive establishes a completely new layer of banking regulation, the list of supervisory authorities is amended, as well. As part of the national BRRD implementation, each EU member state has designated a national resolution authority.

Meanwhile on a Eurozone level, the Single Supervisory Mechanism (SSM) has been complemented by the Single Resolution Mechanism (SRM), represented by the newly founded Single Resolution Board (SRB). Being the resolution equivalent to the ECB it is directly responsible for the largest and internationally active banks in the Eurozone. In order to deal with international banking groups (Eurozone/Non-Eurozone as well as EU/third country), resolution colleges have been set up.

“The Single Resolution Board has been created to respond to the Euro area crisis and establishes one of the pillars of the Banking Union. By avoiding bail-outs and worst-case scenarios, the SRB will put the banking sector on a sounder footing – only then can we achieve economic growth and financial stability” – Elke König, Chair of the SRB

**SRB/NRA tasks**
- Draft resolution plans for (significant) institutions
- Evaluation on resolution strategy
- Identification of impediments for resolution
- Setting minimum requirement for eligible liabilities (MREL)
- Implement early intervention measures
- Initiate resolution
- Apply resolution tools
- Cooperate with national authorities
The CRR II (consultation) package contains a BRRD update for a harmonised TLAC and MREL implementation

The TLAC requirement is set for G-SIIs only and will reach a general level of 18% of risk weighted assets (RWA) and 6.75% of the leverage ratio exposure in 2021 following a three-year transitional period. Holdings of TLAC instruments issued by other G-SIIs have to be deducted from own TLAC. Material subsidiaries of non-EU-G-SIIs need to comply with an individual minimum requirement corresponding to 90% of the EU-G-SII level.

The MREL rules basically remain in the BRRD, but are modified significantly. The measurement is aligned with TLAC, using the RWA and the LR exposure as a denominator, instead of total liabilities. In contrast to TLAC, MREL will be set individually for each bank: it consists of a loss absorption amount for all banks, and a recapitalisation amount for those banks that, according to the resolution plan, are not to be wound up in a normal insolvency proceeding.
### The new legal set-up

<table>
<thead>
<tr>
<th>CRR</th>
<th>BRRD</th>
<th>CRD</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLAC minimum requirement for G-SIIs in the EU</td>
<td>MREL minimum requirement for all resolution entities and subsidiaries</td>
<td>Buffer requirements</td>
</tr>
<tr>
<td>Eligibility criteria for TLAC and MREL</td>
<td>Institution specific adjustments for TLAC</td>
<td>MREL and TLAC are relevant for the determination of the maximum distributable amount (MDA)</td>
</tr>
<tr>
<td>Deduction rules for investments in TLAC instruments for G-SIIs (TLAC-holdings)</td>
<td>Additional guidance (add-on) for MREL and TLAC</td>
<td></td>
</tr>
<tr>
<td>TLAC reporting &amp; disclosure</td>
<td>MREL reporting and disclosure</td>
<td></td>
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</tbody>
</table>
**Several steps to assess eligibility of liabilities: criteria aligned for MREL and TLAC**

Based on the total liabilities, the eligibility and exclusion criteria need to be checked for each single contract – comparable to the process followed in an insolvency scenario.

**Assessment against exclusion criteria (Art. 72a CRR)**

Certain instruments are excluded from a bail-in and cannot count for TLAC & MREL. A list of excluded instruments is defined in the CRR:

- Covered deposits
- Deposits org. maturity < 1 year
- Deposits eligible for deposit guarantee
- Secured liabilities
- Liabilities stemming from insolvency protected client assets/moneys
- Fiduciary liabilities
- Institution liabilities with original maturity < 7 days
- System operator liabilities w. remaining maturity < 7 days
- Tax liabilities
- Employee liabilities
- Critical service liabilities
- Liabilities to deposit guarantee schemes
- Liabilities from derivatives
- Structured liabilities

**Fixed principal amount repayable at maturity can be included**

- MREL only
Eligibility criteria are mainly comparable to own funds criteria; the assessment requires a detailed functional and technical breakdown of the balance sheet.

Assessment against eligibility criteria (Art. 72b CRR)

Liabilities need to fulfil a list of criteria in order to be eligible for TLAC & MREL:
- Instruments fully paid-up
- Not purchased by resolution entity/group/related entity
- Purchase not financed by resolution entity
- Subordinated
- Not guaranteed or secured by group member
- Not subject to set-off/netting rights
- No incentives for early redemption
- No early redemption clause for investor
- Call option only for issuer and subject to supervisory approval
- Repayment cannot be accelerated
- Interest independent from credit standing
- Point-of-non-viability clause (PONV)

Increase credibility of bail-in

- Statutory subordination by (insolvency) law
- Structural subordination via specific group structures
- Contractual subordination via inclusion of bail-in clauses legal documentation
How much MREL/TLAC is needed?

Fig. 8 RWA based calibration of TLAC and MREL

\[
\text{TLAC}^1 = 18\% \text{ Art. 92a CRR}^2 + \text{Individual add-on Art. 45d 1(b) BRRD} + \text{Loss absorption guidance Art. 45e 1(a) BRRD} + \text{Market confidence buffer Art. 45e 1(b) BRRD}
\]

\[
\text{MREL} = \max. 2x 8\% \text{ Art. 45c 3(a) BRRD} + \text{Pillar II Requirement Art. 45c 3(a) BRRD} + \text{Loss absorption guidance Art. 45e 1(a) BRRD} + \text{Market confidence buffer Art. 45e 1(b) BRRD}
\]

1 Floor: 6.75% Leverage ratio exposure
2 legal references refer to CRR II, BRRD II and CRD V proposals as of November 2016
**The minimum requirements have to be fulfilled on group and single entity level**

Resolution strategies will be developed on group and on single entity level based on resolution authorities’ discretion. Resolution entities and groups will be determined by the RAs, based on the consolidation for regulatory and accounting purposes. A banking group with just one resolution entity would follow a single point of entry (SPE) approach to resolution, while two or more resolution entities would lead to a multiple point of entry (MPE) approach.

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**Fig. 9 Example for a Multiple Point of Entry resolution strategy**

![Diagram](image)

1. Single Point of Entry would require a consolidated minimum requirement on the Parent level only
Interconnectedness: investments in other TLAC holdings are subject to deduction rules – currently applicable for G-SIIs only

One objective within a resolution scenario is the limitation of contagion risk. Therefore, TLAC requirements contain an incentive to reduce banking interconnectedness.

The approach, initially suggested by the Basel Committee on Banking Supervision, defines two steps:

**Step 1**
Calculation of TLAC holdings on a gross basis and assessment against a 5% CET1 threshold

**Step 2**
If the 5% threshold in Step 1 is exceeded – inclusion of excess in existing 10% threshold for investments in Financial Sector Entities

The EBA recommends the introduction of MREL holding rules. Possible options are a harmonisation with G-SII approach for TLAC holdings or the definition of specific large exposure limits for MREL investments.
Fig. 10  Deduction rules for TLAC holdings acc. to Art. 72e CRR II

Scenario 1

- **TLAC Investments (gross)**
  - **Step 1**
    - 5% TLAC threshold
- **Step 2**
  - 10% threshold for investments in FSE

Scenario 2

- **Step 1**
  - x% spill over
- **Step 2**
  - Corresponding Deduction approach
  - Deduction amounts
**Frequency and variety of regulatory publications highlights the importance and complexity of the new regulatory field**

**Fig. 11 Timeline of regulatory publications**

- 2014
  - EBA: several RTS and guidelines for recovery plans (07/2014)
  - Banking Resolution and Recovery Directive – BRRD (05/2014)
  - Single Supervisory Mechanism (SSM) starts operating (11/2014)

- 2015
  - FSB: TLAC principles and term sheet final (11/2015)
  - BCBS (d342): TLAC holdings draft (11/2015)
  - EBA: Draft ITS (2015/06) on procedures, forms and templates for resolution plans (07/2015)
  - EBA: Final draft RTS (05/2015) on MREL criteria (07/2015)
  - EBA: Guidelines (06/2015) on critical functions and significant business activities (05/2015)
BCSB (d387): TLAC holdings final (10/2016)
SRB: Start operation (01/2016)
SRB: 1st data collection on eligible liabilities as of YE 2015
EU-Com: DR (2016/680) on Exclusions from Bail-in (02/2016)
SRB: 2nd data collection on eligible liabilities as of YE 2016
Submission of data for resolution planning and MREL (05/2017)
EU-Com: CRR, CRD & BRRD update (11/2016)
EU-Com: DR (2016/1450) on MREL (05/2016)
EU-Com: DR (2016/1712) Data on financial contracts (06/2016)
EU-Com: IR (2016/911) Group financial support (06/2016)
EU-Com: DR (2016/962) on reporting for resolution planning (06/2016)
EBA: Final report on MREL (12/2016)
FSB: Principles on internal TLAC draft (12/2016)
EU-Com: DR (2016/1401) Valuation of liabilities from derivatives (05/2016)
EBA: Draft report on MREL (06/2016)
EU-Com: DR (2016/1450) on MREL (05/2016)
EU-Com: DR (2016/680) on Exclusions from Bail-in (02/2016)
Submission of data for resolution planning and MREL (05/2016)
Practical impacts
**Action required: strategic impacts to be analysed, planning and massive data requirements to be implemented**

The introduction of the new resolution regime leads to several new requirements and efforts for institutions that affect different areas within the organisation.

The RWA based view of going-concern supervision will be expanded with a detailed focus on the liability side. Not own funds only will serve as the capital category available for loss absorption, but basically all liabilities and all investors face the risk of participating in a loss once their liability is classified as eligible for a bail-in.

The asset side will stay in focus as well. Several key questions need to be answered: What are critical functions within a banking group? What is the result of the resolvability assessment of the resolution authorities? What is the level of eligible liabilities required and where in the group do they need to be held? What data is required and what database can be used or implemented in order to provide the regulator with new information? What are strategic impacts on the group structure, on the funding capacity and the cost side?
Resolvability

The resolvability of an institution is carried out by the Resolution Authority. It is mainly based on information provided by the institution itself and will likely take into account the institutions’ own assessment within its recovery plan.

Strategy

Resolvability issues and MREL requirements will have a strategic impact that has to be assessed throughout the bank.

Data

The initial and ongoing supervision by the RA will lead to a whole new reporting and massive additional data requirements.

Practical implications

Quantitative MREL Reporting

Planning & Steering of MREL liabilities

Requirements from Resolution Planning
MREL requirements will be determined by Resolution Authorities based on the resolvability assessment

Comprehensive data requests from Resolution authorities need to be answered.

A set of standardised minimum information institutions have to provide on request, is defined in DR 2016/962 and can be amended by the Resolution Authority if deemed necessary.

The main challenges in establishing operational continuity during resolution need to be assessed by the Resolution Authority:
• Access to market infrastructures and interbank business
• Availability of employees and data
• Continuity of critical functions
• Impact on Service and Supplier contracts
• Access to IT systems and licences
• Liquidity and financial sources
Fig. 13 Resolvability assessment

MREL requirement

Preferred resolution strategy

Separability of critical functions

Operational continuity in resolution

Evaluation of resolvability
Institutions have to provide extensive information to the Resolution Authorities for their resolvability assessment

**Fig. 14 Information for resolution plans acc. to Implementing Regulation 2016/1066**

<table>
<thead>
<tr>
<th>Template</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Organisational structure</td>
<td>Group structure, holdings and participations</td>
</tr>
<tr>
<td>(2) Governance and management</td>
<td>Overview on business activities and licenses of relevant entities</td>
</tr>
<tr>
<td>(3) Critical functions and core business lines</td>
<td>Definition of critical/significant business lines</td>
</tr>
<tr>
<td>(4) Critical counterparties</td>
<td>List of relevant business partners for asset and liability side including possible consequences of a default of the counterparty (loss in funding or neg. impact on CET1)</td>
</tr>
<tr>
<td>(5) Structure of liabilities</td>
<td>Breakdown of liabilities on products and counterparties (“SRB data collection light”) for the determination of eligible liabilities</td>
</tr>
<tr>
<td>(6) Pledged collateral</td>
<td>Overview on collateral pledged (identification of counterparty and country of counterparty)</td>
</tr>
</tbody>
</table>

Enhanced SRB requests in 2017

SRB data collection on business functions “Critical Functions report”
<table>
<thead>
<tr>
<th>Template</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>(7) Off-balance-sheet</td>
<td>Breakdown of off-balance sheet information (assets and liabilities)</td>
</tr>
<tr>
<td>(8) Payment, clearing and</td>
<td>Dependencies on system providers; type of membership and possible</td>
</tr>
<tr>
<td>settlement systems</td>
<td>replacement of the functions</td>
</tr>
<tr>
<td>(9) Information systems</td>
<td>Inventory on IT systems and mapping to critical/significant business</td>
</tr>
<tr>
<td></td>
<td>line in order to assess possible effects on functions and identification of</td>
</tr>
<tr>
<td></td>
<td>relevant systems</td>
</tr>
<tr>
<td>(10) Interconnectedness</td>
<td>Overview on internal dependencies and connections</td>
</tr>
<tr>
<td>(11) Authorities</td>
<td>List of competent authorities (ongoing supervision, resolution authorities,</td>
</tr>
<tr>
<td></td>
<td>relevant deposit guarantee scheme)</td>
</tr>
<tr>
<td>(12) Legal impact of resolution</td>
<td>List of contracts with third parties that might be affected in case of a</td>
</tr>
<tr>
<td></td>
<td>resolution; statement to effect of terminated contract on resolution</td>
</tr>
<tr>
<td></td>
<td>required</td>
</tr>
</tbody>
</table>

Enhanced SRB requests in 2017
SRB data collection on Financial Market Infrastructures “FMI report”
In 2016, eight new reporting sheets have been introduced by the SRB – the starting point for an ongoing reporting on eligible liabilities

Existing reporting requirements focus on the evaluation of risk positions and therefore on the asset structure of institutions.

Due to its role, the SRB requires a detailed insight into the liability structure in order to assess the implication of a resolution scenario for the investors and for the determination of eligible liabilities. The reporting template for 2017 was extended to ten sheets, strengthening the focus on intragroup relations.
### Fig. 15 Liability Data Report (SRB 2017)

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
<th>Effort/Complexity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liability Structure (A)</strong></td>
<td>Central reporting sheet „Liability structure“ including a detailed breakdown on liabilities excluded from bail-in, product types, counterparties, residual maturities; starting point for the assessment of potential MREL volume</td>
<td>5</td>
</tr>
<tr>
<td><strong>Own Funds (A)</strong></td>
<td>Regulatory capital and RWA</td>
<td>3</td>
</tr>
<tr>
<td><strong>Intragroup (G)</strong></td>
<td>All liabilities and guarantees within a group</td>
<td>4</td>
</tr>
<tr>
<td><strong>Securities (G)</strong></td>
<td>All Securities + 31 additional qualitative information on contract level</td>
<td>5</td>
</tr>
<tr>
<td><strong>Deposits (G)</strong></td>
<td>All unsecured deposits with a remaining maturity &gt;1year + 13 additional qualitative information on contract level</td>
<td>4</td>
</tr>
<tr>
<td><strong>Financial liabilities (G)</strong></td>
<td>All other liabilities + 21 additional qualitative information on contract level</td>
<td>5</td>
</tr>
<tr>
<td><strong>Derivatives (G)</strong></td>
<td>All Netting sets + 14 additional qualitative information on contract level</td>
<td>4</td>
</tr>
<tr>
<td><strong>Secured Finance (G)</strong></td>
<td>All Repo-transactions + 10 additional qualitative information on contract level</td>
<td>4</td>
</tr>
</tbody>
</table>

**Aggregated data (A)**

**Granular data (G)**
Complex reporting sheets, high data quality expectations and possible ad-hoc-requests require a powerful and flexible IT solution

Fig. 16 Key challenges and take aways from the data collection 2016

- Consolidated and single entity view require double reporting for subsidiaries
- Introduction of new definitions: insolvency ranking and structured products need translation into operative criteria
- Comprehensive database that can serve as a basis for the breakdowns for required accounting standards (IFRS, local GAAP, notional), call options, accrued interest, product details, technical identification of excluded instruments needs to be found
- Contract data gain importance: master agreements for derivatives and SFT, bail-in clauses in single issuances – is a contract data base available?
- Complexity due to required reconciliation of single data to rows and columns in the liability data sheet
- Governance: explicit management requirement to be familiar with reported data
- Detailed questions from the SRB/instructions partly not sufficiently specific
Key updates in 2017
- Additional sheets & qualitative information
- No limitation to largest transactions
- No prioritisation – all information expected

- Detailed breakdown of product types, counterparties, maturities require single contract data
- Availability of Carrying Amount and Outstanding Amount (adjusted notional amount)
  Availability of qualitative information: within single data sheets information that have not been relevant in the existing regulatory reporting requirements (exchanges instruments are listed on) incl. additional data for instruments eligible as own fund
- Consistency with other reporting requirements (FinRep; Asset encumbrance, NSFR, FinRep, Own Funds); validation rules not known
- Consequences in case of unavailable information: higher MREL requirement?
- Missing transparency on final reporting: scope, templates, frequencies, disclosure, MREL holdings
- High efforts for manual completion/timeline for automated solutions not sufficient
**Outlook and challenges ahead: the reporting regime is just getting started**

**Fig. 17 SRB timeline for liability data reporting**

<table>
<thead>
<tr>
<th>Time</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15.5.2016/15.6.2016</td>
<td>15.5.2017</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scope</th>
<th>Initial templates</th>
<th>Amended templates 2.0</th>
<th>Amended templates 3.0</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quality</th>
<th>Ad-hoc character</th>
<th></th>
<th>All information; option: audited figures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Format</th>
<th>.xls</th>
<th>.xls or .xbrl</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Indicative target ratio on group level</th>
<th>Target ratio group and single entity level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Announced by SRB
- PwC experts’ assumption
Stricter deadline for future reporting date
Finalisation of templates; ad-hoc requests
Higher data quality expectations
Submission of standardised technical format
Binding minimum requirement to be fulfilled and monitored

- 30.4.2018
  - All information; option: audited figures
  - .xbrl
- 31.3.2019
  - Compliance with phase-in ratio
MREL & TLAC have a significant strategic impact and should be included in a bank’s (capital) planning and communication strategy

Fig. 18 MREL management

Advanced capital and funding planning

- Adaptation of capital and funding planning necessary to cover MREL requirements and handle phase-in
- Consideration of increased funding costs in overall ALM planning and funds transfer pricing mechanisms
- Consideration of increased issuance costs for legal opinions and increased marketing effort
- Determination of point of non-viability in the terms & conditions explicitly required
- Communication strategy for MREL eligible instruments (e.g. disclosure of MREL requirement, buffer to requirement etc.) necessary to address investors’ needs
- Reflection of new structure of balance sheet in risk bearing capacity and ICAAP
MREL management options

- Decreasing MREL requirement by improving resolvability (e.g. by operational separation and pre-funding of critical functions)
- Adjustment of overall risk profile
- Adjustment of terms & conditions for issuances
- Roll-over management for subordinated debt
- Active asset liability management to optimise asset side
- Improvement of investor communication and disclosure
Our services
PwC has all the tools in place to support you in all resolution related tasks with a comprehensive approach

**Fig. 19 Comprehensive approach**

<table>
<thead>
<tr>
<th>Key objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resolvability</strong></td>
</tr>
<tr>
<td>Resolution Planning information</td>
</tr>
<tr>
<td>Government structure, asset structure and contractual relations</td>
</tr>
<tr>
<td>- Transparency on business functions and dependencies</td>
</tr>
<tr>
<td>- Roles, responsibilities and processes for provision of information defined</td>
</tr>
<tr>
<td>- Consistency with recovery planning</td>
</tr>
<tr>
<td><strong>Data</strong></td>
</tr>
<tr>
<td>Reporting on eligible liabilities</td>
</tr>
<tr>
<td>Liability data</td>
</tr>
<tr>
<td>- Database with data on single contract level for all liabilities on group and single entity level</td>
</tr>
<tr>
<td>- Additional data feeds for qualitative information integrated</td>
</tr>
<tr>
<td>- Flexible and ad-hoc reporting function in preparation for supervisory requests</td>
</tr>
<tr>
<td><strong>Strategy</strong></td>
</tr>
<tr>
<td>Planning &amp; Steering</td>
</tr>
<tr>
<td>Issuance of instruments</td>
</tr>
<tr>
<td>- Integration of eligible liabilities in capital and funding planning process</td>
</tr>
<tr>
<td>- Strategic options for increase of eligible instruments identified</td>
</tr>
<tr>
<td>- Forecast and scenario function implemented</td>
</tr>
</tbody>
</table>
### Resolvability Assessment

**Preliminary Assessment:**
- Provision of valuation relevant information on resolution date
- Latest information on valuation of assets and liabilities

### Liability Data

**Information requirement**
- Identification of liabilities:
  - Provision of a list with all liabilities on resolution date
  - Mapping of bail-in relevant data characteristics to liabilities

### Implementation plan

**Development of models for the manual or automated provision of information to determine**
- Economic losses
- Shareholder value (market value of equity)
- Hypothetical insolvency assets and costs and satisfaction rate
- RWA after application of resolution measures
- Transformation of losses in balance-based approach

**Development of manual processes for information gathering (interim solution):**
- Drafting procedure logic
- Ensuring process stability
- Ensuring availability of resources

**Development of automated provision of information:**
- Implementation in processes and systems

### Target image

**Ad-hoc-provision of all valuation relevant information on resolution date within a time frame of significantly less than 24 hours (quality assured and automated)**

**Ad-hoc-provision of all relevant third-party claims on resolution date within a time frame of significantly less than 24 hours (quality assured and automated)**

### Integration in strategy, planning and IT architecture

- Definition of responsibilities and internal reporting lines for information deliveries
- Implementation of stable and automated processes, harmonised with existing IT infrastructure
- Definition of target process and technical solutions for forecast and scenario calculations

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**Fig. 20 Project and implementation tasks**
**Our Expertise**

Whether regarding the Basel Committee, EU-regulation or national legislation – we use our established know-how of the analysis and implementation of new supervisory regulation to provide our clients with high-quality services. Embedded into the **international PwC network**, we have access to the extensive knowledge of our experts around the world.

**PwC’s Global Basel IV Initiative** was established to support you in all aspects of getting compliant with the new regulatory requirements in the context of MREL, TLAC and Banking Resolution.

PwC can draw on long lasting experience of implementing new regulatory requirements by supporting a number of banks in completing quantitative impact studies prior to the implementation of **Basel II and Basel III** and by the functional and technical implementation of the final regulations. The PwC-tools used during the QIS are flexible and will be updated automatically in case of new consultations by the Basel Committee.
About us
PwC helps organisations and individuals create the value they’re looking for. We’re a network of firms in 157 countries with more than 195,000 people who are committed to delivering quality in assurance, tax and advisory services. Tell us what matters to you and find out more by visiting us at www.pwc.com. Learn more about PwC by following us online: @PwC_LLP, YouTube, LinkedIn, Facebook and Google+.
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