

Thematic Review on Bank Resolution Planning

Peer Review Report

29 April 2019

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Foreword

Financial Stability Board (FSB) member jurisdictions have committed, under the FSB Charter and in the *FSB Framework for Strengthening Adherence to International Standards*,¹ to undergo periodic peer reviews. To fulfil this responsibility, the FSB has established a regular programme of country and thematic peer reviews of its member jurisdictions.

Thematic reviews focus on the implementation and effectiveness across the FSB membership of international financial standards developed by standard-setting bodies and policies agreed within the FSB in a particular area important for global financial stability. Thematic reviews may also analyse other areas important for global financial stability where international standards or policies do not yet exist. The objectives of the reviews are to encourage consistent cross-country and cross-sector implementation; to evaluate (where possible) the extent to which standards and policies have had their intended results; and to identify gaps and weaknesses in reviewed areas and to make recommendations for potential follow-up (including through the development of new standards) by FSB members.

This report describes the findings of the third peer review on resolution regimes, including the key elements of the discussion in the FSB Resolution Steering Group and the FSB Standing Committee on Standards Implementation (SCSI). It is the fourteenth thematic review conducted by the FSB, based on the objectives and guidelines for the conduct of peer reviews set forth in the April 2017 version of the *Handbook for FSB Peer Reviews*.² The analysis and conclusions of this peer review reflect information as of January 2019 unless otherwise noted.

The draft report for discussion by SCSI was prepared by a team chaired by Stefan Gannon, (Hong Kong Monetary Authority), comprising Lori Bittner (US Office of the Comptroller of the Currency), Nicola Brink (South African Reserve Bank), Mathieu George (French Prudential and Resolution Authority), Minke Gort (De Nederlandsche Bank), Chris Gower (Australian Prudential Regulation Authority), Bruce Hickey (US Federal Deposit Insurance Corporation), Kathrin Lohmann (Single Resolution Board), Mike Mercer (Canada Deposit Insurance Corporation), Thomas von Lüpke (Federal Financial Supervisory Authority, Germany) and Ruth Walters (Bank for International Settlements – Financial Stability Institute). Samuel Smith (until November 2018), Karen Gallagher-Teske (since December 2018) and Costas Stephanou (FSB Secretariat) provided support to the team and contributed to the preparation of the peer review report.

¹ See http://www.fsb.org/2010/01/r_100109a/.

² See <http://www.fsb.org/2017/04/handbook-for-fsb-peer-reviews-2/>.

Definitions of key terms used in the report³

“Bail-in” – restructuring mechanisms (howsoever labelled) that enable loss absorption and the recapitalisation of a bank in resolution or the effective capitalisation of a bridge institution through the cancellation, write-down or termination of equity, debt instruments and other senior or subordinated unsecured liabilities of the bank in resolution, and the conversion or exchange of all or part of such instruments or liabilities (or claims thereon) into or for equity in or other instruments issued by that bank, a successor (including a bridge institution) or a parent company of that bank.

“Bank” – any financial institution that takes deposits or repayable funds from the public and is classified under the jurisdiction’s legal framework as a deposit-taking institution, or the holding company of such a financial institution.

“Bank in resolution” – a bank in relation to which resolution powers are being exercised. Where resolution powers have been or are being exercised in relation to a bank, that bank is considered to be “in resolution” for as long as it remains subject to measures taken by or otherwise under the control of a resolution authority or remains in insolvency proceedings initiated in conjunction with resolution.

“Bridge institution/bank” – an entity that is established to temporarily take over and maintain certain assets, liabilities and operations of a failed bank as part of the resolution process.

“Cooperation agreement” – agreements between home and relevant host authorities that need to be involved in the planning and crisis resolution stages.

“Crisis Management Group (CMG)” – arrangements comprising home and key host authorities of G-SIBs with the objective of enhancing preparedness for, and facilitating the management and resolution of, a cross-border financial crisis affecting the firm.

“Critical functions” – activities performed by a bank for third parties, where failure would lead to disruption of services critical to the functioning of the real economy and for preserving financial stability.⁴

“Critical shared services” – An activity, function or service performed by either an internal unit, a separate legal entity within the group or an external provider, performed for one or more business units or legal entities of the group, the failure of which would lead to the collapse of (or present a serious impediment to the performance of) critical functions.

“D-SIB” – a bank designated by a national authority as domestically systemically important.⁵

“Domestic bank” – a bank that is headquartered in a local jurisdiction.

“Early termination rights” – contractual acceleration, termination or other close-out rights (for example, under financial contracts), including cross-default rights, held by counterparties

³ The definitions are largely based on the 2016 FSB *Key Attributes Assessment Methodology for the Banking Sector* (<http://www.fsb.org/2016/10/key-attributes-assessment-methodology-for-the-banking-sector/>).

⁴ See the FSB *Guidance on Identification of Critical Functions and Critical Shared Services* (http://www.fsb.org/2013/07/r_130716a/, July 2013).

⁵ See the Basel Committee on Banking Supervision’s *A framework for dealing with domestic systemically important banks* (<https://www.bis.org/publ/bcbs233.pdf>, October 2012).

of a bank that may be triggered on the occurrence of an enforcement or credit event set out in the contract.⁶

“Exchange mechanic” – the mechanism to facilitate at an operational level the write-down and/or conversion into equity of the instruments and liabilities subject to bail-in, including the listing and trading treatment of affected securities following entry into resolution, the notification of affected creditors and the issuance of equity to the creditors subject to bail-in.

“Financial contract” – any contract that is explicitly identified under the legal framework of the jurisdiction as subject to defined treatment in resolution and insolvency for the purposes of termination and netting. Typically, financial contracts include contracts for the purchase or sale of securities; derivatives contracts; commodities contracts; repurchase agreements; and similar contracts or agreements.

“Financial market infrastructure (FMI)” – a multilateral system among participating financial institutions, including the operator of the system, used for the purposes of, clearing, settling or recording payments, securities, derivatives or other financial transactions. It includes payment systems, central securities depositories, securities settlement systems, central counterparties and trade repositories.⁷

“FMI intermediary” – an entity that provides clearing, payment, securities settlement and/or custody services to other firms in order to facilitate the firms’ direct or indirect access to an FMI.

“Foreign-owned bank” – a subsidiary or branch of a bank headquartered in another (foreign) jurisdiction.

“Group” – a parent company (which may be a holding company) and its direct and indirect subsidiaries, both domestic and foreign.

“G-SIB” – a bank designated by the FSB as globally systemically important.⁸

“Holding company” – an operating or non-operating company that owns and controls one or more banks. This concept covers direct, intermediate and ultimate control.

“Home jurisdiction” – the jurisdiction where the operations of a bank or financial group are supervised on a consolidated basis.

“Legal framework” – the comprehensive legal system for a jurisdiction established by any combination of the following: a constitution; primary legislation enacted by a legislative body that has authority in respect of that jurisdiction; subsidiary legislation (including legally binding regulations or rules) adopted under the primary legislation of that jurisdiction; or legal precedent and legal procedures of that jurisdiction.

“Loss-absorbing capacity” – resources to facilitate a recapitalisation or orderly wind down of the bank (or of part of the bank) and avoid the need for a bail-out with public funds.

“Multiple point of entry” – the application of resolution powers to different parts of the group by two or more resolution authorities acting in a coordinated way.

⁶ For example, see §§ 5(a) (vii) and 6 of 2002 ISDA Master Agreement; section 10 of Global Master Repurchase Agreement 2000.

⁷ As defined in the April 2012 CPMI-IOSCO *Principles for financial market infrastructures* (<http://www.bis.org/cpmi/publ/d101a.pdf>).

⁸ The list of G-SIBs was first published by the FSB in November 2011 and is updated on a yearly basis.

“Non-CMG host” – authorities in jurisdictions where a G-SIB has a systemic presence, but that do not participate in the G-SIB’s CMG.

“Other banks” – banks that are not G-SIBs or D-SIBs but that are considered to be potentially systemic in failure, or for which resolution planning is otherwise conducted.

“Public sector backstop funding mechanism” – for each jurisdiction, the public sector authority(s) and/or mechanism(s) authorised to provide temporary liquidity funding to a bank in resolution, including resolution funds, deposit insurance funds, resolution authorities, central banks and/or finance ministries, as applicable.

“Resolution” – the exercise of resolution powers, including in particular the exercise of a resolution power specified in KA 3, by a resolution authority in respect of a bank that meets the conditions for entry into resolution, with or without private sector involvement, with the aim of achieving the statutory objectives of resolution set out in KA 2.3. The exercise of resolution powers may include or be accompanied by an insolvency proceeding with respect to the bank in resolution (for example, to wind up parts of that bank).

“Resolution authority” – a public authority that, either alone or together with other authorities, is responsible for the resolution of banks established in its jurisdiction (including resolution planning functions). References in this document to a “resolution authority” should be read as “resolution authorities” in appropriate cases.

“Resolution plan” – the plan that is developed and maintained for an individual bank, intended to facilitate the effective use of resolution powers in relation to the bank and to protect critical functions.

“Resolution regime” – the elements of the legal framework and the policies governing resolution planning and preparing for, carrying out and coordinating resolution, including the application of resolution powers.

“Resolvability assessment” – an evaluation of the feasibility of resolution strategies and their credibility in relation to a bank, in light of the likely impact of its failure on the financial system and the overall economy.

“Single point of entry” – the application of resolution powers to the top of a group by a single national resolution authority.

“Supervisor” or “supervisory authority” – the authority responsible for the supervision or oversight of a bank. References include, as relevant, prudential and business or market conduct supervisors.

“Systemically significant or critical / systemic in failure” – a bank is systemically significant or critical if its failure could lead to a disruption of services critical for the functioning of the financial system or real economy.

“Valuation” – processes used in connection with the application of resolution powers, or prior to the application of resolution powers to, for example, estimate losses, determine write-down and conversion rates and/or assess the value that that creditors and shareholders would recover in a counterfactual insolvency for the purposes of the “no creditor worse off than in liquidation” safeguard in KA 5.

Abbreviations⁹

BRRD	Bank Recovery and Resolution Directive (EU)
BU	Banking Union (EU)
CBR	Combined Buffer Requirement (EU)
CMG	Crisis management group
CoAg	Institution-specific cooperation agreement
CRD	Capital Requirements Directives (EU)
CRR	Capital Requirements Regulation (EU)
DFA	Dodd-Frank Act (United States)
D-SIB	Domestic systemically important bank
EU	European Union
FMI	Financial Market Infrastructure
FSB	Financial Stability Board
G-SIB	Global systemically important bank
G-SIFI	Global systemically important financial institution
ISDA	International Swaps and Derivatives Association
KAs	Key Attributes of Effective Resolution Regimes for Financial Institutions (FSB)
LAC	Loss-absorbing capacity
LSI	Less significant institution (EU)
MIS	Management information system
MoU	Memorandum of Understanding
MPE	Multiple point of entry
MREL	Minimum requirement for own funds and eligible liabilities (EU)
NCWO	No Creditor Worse Off
NRA	National resolution authority (EU)
PIA	Public Interest Assessment
RCA	Default Recapitalisation Amount (RCA)
RRP	Recovery and resolution plan
RWAs	Risk-weighted assets
SCSI	Standing Committee on Standards Implementation (FSB)
SI	Significant institution (EU)
SIFI	Systemically important financial institution
SPE	Single point of entry
SRF	Single Resolution Fund (EU/BU)
SRM	Single Resolution Mechanism (EU/BU)
SRMR	Single Resolution Mechanism Regulation (EU)
TLAC	Total loss-absorbing capacity
UK	United Kingdom
US	United States

⁹ See Annex B for the abbreviations of national authorities mentioned in this report.

Executive Summary

Resolution planning frameworks have been adopted in most, but not all, FSB jurisdictions. Sixteen jurisdictions – including all home authorities of global systemically important banks (G-SIBs) – have a process in place to prepare and maintain resolution plans and strategies for banks that could be systemically significant or critical if they fail (‘systemic in failure’). Three of these 16 jurisdictions have introduced a resolution planning framework since the 2016 thematic peer review. The remaining eight jurisdictions should introduce a resolution planning framework as a matter of priority, since it would facilitate the effective use of powers and tools in their resolution regime and, where applicable, on a cross-border basis.

Resolution planning is most advanced in home jurisdictions of G-SIBs. Home authorities for these institutions have developed resolution strategies (largely based on bail-in), and many of them introduced requirements on loss-absorbing capacity (LAC) and made progress in addressing barriers to resolvability. Crisis Management Groups (CMGs) have been established for all G-SIBs, and institution-specific cooperation agreements (CoAgs) have been signed for all but five of them. Home authorities of G-SIBs also tend to be more advanced in resolution planning for domestic systemically important banks (D-SIBs) and, where relevant, other banks. In five other jurisdictions (Brazil, Hong Kong, Mexico, Russia, Singapore) the authorities are also progressing resolution planning for their D-SIBs, but work in most cases is at an early stage given the recent adoption of their respective frameworks.

Proportionality in resolution planning has involved tailoring the scope or intensity of requirements, as well as determining the resolution strategy and tools to achieve the resolution objectives. On scope, some jurisdictions require resolution planning for all banks (European Union (EU), Hong Kong, Mexico) but plan to use insolvency in appropriate cases; others for only G-SIBs and/or D-SIBs (Brazil, China, Japan, Russia, Singapore, Switzerland); while a few jurisdictions follow a mixed approach, e.g. covering banks above a certain asset size (United States (US)) or other banks on a discretionary basis (Canada). On intensity, some jurisdictions (e.g. EU) explicitly provide for a proportionate application of certain requirements relating to resolution planning. These include the frequency of resolution plan review, data reporting requirements, and the content of plans. These requirements tend to vary the most for banks other than G-SIBs and D-SIBs (“other banks”), since resolution planning work for D-SIBs – at least in G-SIB home jurisdictions – largely mirrors what is being done for G-SIBs. More broadly, many authorities operate under the general principle that the choice of resolution strategies and tools should not go beyond what is necessary to achieve the resolution objectives and should be proportionate to the nature of the bank in question.

Notwithstanding the progress made to date, important work remains to ensure that resolution plans can be fully put into effect. Work on advancing the necessary conditions for operationalising resolution strategies is most advanced for G-SIBs and includes guidance; operational plans to demonstrate how the preferred resolution strategy is legally and operationally feasible; handbooks or playbooks; and simulations. However, challenges remain in ensuring that resolution can be conducted effectively, with comparatively less progress made overall on issues such as funding in resolution, valuation and developing effective cross-border cooperation and information sharing arrangements. Resolution planning work for other banks is generally at an earlier stage, reflecting the focus of international attention to date on G-SIBs.

As authorities expand resolution planning work beyond G-SIBs, they should consider how to adapt existing FSB guidance to D-SIBs and other banks. This is because, while these banks are typically less complex, they vary more in size, business activities, funding and ownership structures. Resolution planning work may need to be tailored to these banks' profiles, covering topics that are of particular relevance for them. For example, if resolution strategies for these banks are based on a transfer of assets and liabilities to a bridge bank or third party acquirer, planning should cover topics for operationalising transfers, such as the identification of potential acquirers, asset separation and establishment of data rooms.

The remainder of the Executive Summary describes the main findings for each area covered by the peer review and concludes with recommendations to address identified issues.

Bank resolution planning frameworks and resolvability assessment powers (section 2)

- Reforms are ongoing or planned in six jurisdictions that do not have resolution planning frameworks (Australia, Indonesia, Korea, Saudi Arabia, South Africa and Turkey), while the remaining two jurisdictions (Argentina and India) do not report any plans to introduce such frameworks.
- There is considerable variation in the scope and intensity of resolution planning arrangements across jurisdictions, especially for other banks. On scope, while jurisdictions have used similar factors for determining systemic importance of an institution in failure, they came to different conclusions regarding the range of banks subject to resolution planning. On intensity, some jurisdictions – particularly those that have 'cast the net wide' by applying resolution planning to all banks or to certain banks other than G/D-SIBs – provide for a proportionate application of certain requirements.
- Banks generally provide information to resolution authorities for purposes of resolution planning. In some cases (e.g. Canada, China, Switzerland, US) banks are responsible for developing parts or all of the resolution plan.
- Most of the jurisdictions (13 of 16) engaged in resolution planning also conduct resolvability assessments. The resolution regimes in 12 jurisdictions include an explicit power to require banks to make changes to improve resolvability. Only two jurisdictions report that the power has been used in practice, though some other jurisdictions report that banks have made changes following dialogue with the relevant authorities without the formal exercise of the power.
- In eight jurisdictions, almost all of which are home jurisdictions of G-SIBs, a resolution plan has been developed for all banks for which resolution planning is required. Most progress in preparing plans has been made for the largest and most systemic banks.
- Authorities are disclosing increasingly detailed general information about resolution frameworks and approaches to resolution, but bank-specific disclosures are limited.

Development of bank resolution strategies and plans (section 3)

- In almost all jurisdictions carrying out resolution planning, the process includes the identification of a bank's critical functions and critical shared services.
- These authorities use a range of information sources for resolution planning, including from the normal supervisory process; recovery plans and, in some cases, resolution plans prepared by banks; publicly available information; and resolution-specific

reporting (fixed submission requirements and ad hoc requests). Resolution planning data requirements in some jurisdictions depend on the size and complexity of the bank. Challenges in data collection are linked to the maturity of the planning process.

- Resolution planning is typically based on the identification of a single (or preferred) resolution strategy for a given bank. Proceedings under the applicable insolvency regime, including but not limited to liquidation, is one of the resolution strategies in some jurisdictions.
- Approaches to resolution strategies and tools for larger and more systemic banks (e.g. G-SIBs and D-SIBs) generally focus on keeping the bank's structure and operations intact upon entry into resolution. For many other banks, jurisdictions report that the primary focus is on maintaining continuity of critical functions.
- Work to operationalise resolution strategies has so far mostly focused on bail-in strategies for larger banks, and is at an early stage for other strategies.
- Experience with actual resolution cases remains limited. All reported cases involved the use of transfer powers in some form. Some of the lessons drawn by resolution authorities from these cases relate to the timely availability of bank data; the desirability of an alternative strategy or back-up plan in case the preferred strategy cannot be implemented; and the need for adequate liquidity in resolution. A common lesson in all cases was the limited time for executing the resolution actions and hence the need to undertake sufficient preparatory work and coordination between relevant authorities.

Actions to ensure effective resolution (section 4)

- To date there is a significant variance across jurisdictions in terms of applying policies to address identified barriers to resolvability in day-to-day resolution planning work.
- Requirements for external total loss-absorbing capacity (TLAC) for G-SIBs are already in place in six jurisdictions that are either home to G-SIBs (Canada, Japan, Switzerland, United Kingdom (UK) and US) or host a G-SIB with a multiple point-of-entry (MPE) resolution strategy (Hong Kong). LAC requirements are also in place for all banks (including G-SIBs and D-SIBs) in the EU based on the Minimum Requirement for own funds and Eligible Liabilities (MREL) framework. Implementation of other aspects of the TLAC standard – such as internal TLAC, disclosure requirements and regulations on G-SIB holdings of TLAC – is less advanced.
- Some jurisdictions have adopted external LAC requirements for all banks (Banking Union, Hong Kong, UK), but can set the amount and quality (required subordination) on a case-by-case basis taking into account the resolution strategy; others apply them solely to D-SIBs (Canada, Japan, Switzerland); while others do not apply them for such banks (Brazil, Mexico, Singapore, US).
- Very few jurisdictions rely on a statutory framework for cross-border recognition of foreign resolution actions. For temporary stays on early termination rights, 11 jurisdictions indicate that they would rely on contractual recognition for the enforceability in foreign jurisdictions of stays imposed under their resolution framework. That includes most G-SIB home jurisdictions, where substantial progress has been made through the ISDA Resolution Stay Protocol and supporting regulations.

- All jurisdictions engaged in resolution planning have worked or are working with banks to develop arrangements to support operational continuity of critical shared services in resolution. Jurisdictions that are most advanced are those that are home to G-SIBs.
- Work to evaluate funding needs and identify sources of funding in resolution is progressing, but in many cases is still at an early stage. Many jurisdictions – including several not yet engaged in resolution planning – have temporary public sector backstop funding mechanisms that could provide temporary liquidity to a bank in resolution.
- Many jurisdictions are engaged in work on continuity of access to financial market infrastructures (FMIs), but in most cases this is at an early stage and focused on G-SIBs. The work in these jurisdictions involves mapping the FMIs to which the banks need access in resolution and the development of contingency plans by those banks.
- Work on valuation is generally less advanced than other resolution planning work. Only a few jurisdictions (Banking Union, UK, US) have developed the conceptual framework and specified the information required for performing valuation and take it into account in resolution planning.

Cross-border cooperation in bank resolution planning (section 5)

- Authorities in only Canada, the EU and Japan maintain resolution-specific cross-border coordinating arrangements for banks other than G-SIBs. Bilateral contacts and non-resolution-specific arrangements (e.g. supervisory colleges) are used in some cases, although the extent of resolution discussion in those forums varies.
- FSB jurisdictions that participate in CMGs or non-G-SIB coordinating arrangements as host report that participation has helped advance their local resolution planning. Hosts identify various issues that they would like to be addressed as a priority in CMGs and non-G-SIB arrangements, including the interaction between local and group resolution plans, allocation of home and host responsibilities in resolution, and operationalisation of LAC and bail-in.
- Few jurisdictions report facing challenges to information sharing. The degree to which home authorities share resolution plans and resolvability assessments with CMG host authorities varies, and several host jurisdictions report that they would find it useful to receive more detailed information about resolution plans.
- Only 5 G-SIB home authorities have established cooperation arrangements with non-CMG host authorities. Notwithstanding this, few non-CMG host FSB jurisdictions report that they need more information on resolution planning for G-SIBs that operate within their territory. This may be linked to the focus of the peer review (so it may not be appropriate to extrapolate this finding to non-FSB host jurisdictions) or to the fact that some G-SIB host jurisdictions are still developing their resolution planning frameworks and are not yet in a position to engage as needed with home authorities.

Recommendations

Based on the above findings of the peer review, there are three sets of recommendations for implementation by the FSB itself or relevant member jurisdictions.

Recommendation 1: Further adoption and operationalisation of resolution planning frameworks

FSB jurisdictions should undertake the following actions to adopt and operationalise their resolution planning framework consistent with the *Key Attributes* and relevant FSB guidance:

- a. Adopt resolution planning frameworks, covering at a minimum domestically incorporated banks that could be systemic in failure;
- b. Adopt resolvability assessment frameworks to inform resolution planning and provide powers to require banks to take measures to improve resolvability;
- c. Continue to work on making resolution strategies and plans operational, including by identifying obstacles and requiring banks to make changes to improve their resolvability; developing playbooks to lay out the operational steps for executing resolution strategies; and advancing work on resolution funding and valuation;
- d. (home authorities) Review and further develop proportionate resolution-related cooperation and information sharing arrangements with host authorities:
 - i. for non-G-SIBs that are subject to resolution planning and have operations in foreign jurisdictions that are material to the group;
 - ii. for G-SIBs that have systemic presence in foreign jurisdictions but where the host authorities are not represented on the CMG.
- e. (host authorities) Participate in cross-border coordinating arrangements and, for non-CMG hosts, engage with home authorities on the group resolution strategy.

By June 2020 the jurisdictions identified in this report as not having a resolution planning framework should report to the FSB what actions they have undertaken, or plan to undertake (including implementation timeframes), in order to adopt such a framework.

Recommendation 2: Work to support resolution planning for banks other than G-SIBs

The FSB will undertake work to support member authorities' resolution planning for banks other than G-SIBs that could be systemic in failure, reflecting their less complex nature and the potential need to tailor resolution planning in keeping with the principle of proportionality. Such work could include:

- a. sharing of experiences and lessons learned from resolution planning for such banks;
- b. consideration of how to adapt expectations set out in existing FSB guidance on resolution planning for such banks; and
- c. targeted work on topics of particular relevance for these banks, such as the development of resolution strategies that are more likely to be chosen for these entities.

Recommendation 3: Enhancing cross-border cooperation and information sharing for resolution planning purposes

The FSB, working with relevant authorities and other bodies as appropriate, will promote the sharing of general bank resolution planning experiences and practices (e.g. via targeted workshops and outreach through FSB regional consultative groups) in enhancing cooperation and information-sharing arrangements, particularly for non-G-SIBs and with non-CMG host jurisdictions for G-SIBs.

1. Introduction

Background

In November 2011, the FSB issued the *Key Attributes of Effective Resolution Regimes for Financial Institutions* (Key Attributes or KAs) as part of the package of policy measures to address the moral hazard risks posed by systemically important financial institutions (SIFIs).¹⁰ The *Key Attributes*, which were endorsed by the G20 Leaders at the Cannes Summit, set out the core elements of effective resolution regimes that apply to any financial institution that could be systemically significant or critical in the event of failure. Since 2011 the FSB has developed further guidance on the implementation of the *Key Attributes*.¹¹

Resolution regimes have been identified as a priority area under the FSB *Coordination Framework for Implementation Monitoring*.¹² As a result, the implementation of the *Key Attributes* by FSB jurisdictions is subject to intensive monitoring and detailed reporting through regular progress reports and peer reviews. To ensure timely and effective implementation, the FSB agreed to carry out an iterative series of peer reviews in this area. The first two reviews were published in April 2013 and March 2016 respectively, and included recommendations to address implementation gaps and weaknesses in FSB jurisdictions.¹³ This report presents the findings and recommendations of the third thematic peer review on resolution regimes, which focuses on bank resolution planning.

Objectives and scope of the review

The objective of this peer review is to evaluate implementation by FSB jurisdictions of the resolution planning standard set out in KA 11 and in associated guidance in relation to banks. Given the links between resolution planning and resolvability assessments, the review also covers the use of resolvability assessments for resolution planning purposes and of powers to require changes to a firm's business practices, structure or organisation to improve resolvability, as set out in KA 10. Consistent with the *Key Attributes*, the peer review covers resolution planning for all domestically incorporated banks that could be systemically significant or critical if they fail ('systemic in failure'), i.e. G-SIBs, D-SIBs and any other banks that could be systemic in failure and are included in resolution planning at a jurisdictional level.¹⁴

¹⁰ In October 2014, the FSB published sector-specific implementation guidance (covering financial market infrastructures, insurers and the protection of client assets in resolution), which has been incorporated as annexes to the Key Attributes. See <http://www.fsb.org/2014/10/key-attributes-of-effective-resolution-regimes-for-financial-institutions-2/>.

¹¹ See <http://www.fsb.org/what-we-do/policy-development/effective-resolution-regimes-and-policies/understanding-the-key-attributes/>.

¹² See http://www.fsb.org/wp-content/uploads/r_111017.pdf.

¹³ See <http://www.fsb.org/2013/04/fsb-thematic-review-on-resolution-regimes/> and <http://www.fsb.org/2016/03/second-thematic-review-on-resolution-regimes/> respectively.

¹⁴ D-SIBs refers to the set of institutions formally designated in their home jurisdiction based on the October 2012 Basel Committee on Banking Supervision (BCBS) framework – see *A framework for dealing with domestic systemically important banks* (<https://www.bis.org/publ/bcbs233.pdf>).

The aim of the review is not to assess compliance with the *Key Attributes* or assign grades, but rather to: evaluate progress since the second resolution peer review; take stock of resolution planning practices (focusing in particular on banks other than G-SIBs); highlight practices and lessons of experience on bank resolution planning including implementation challenges; identify the extent to which proportionality considerations are reflected in resolution planning for different banks; and identify material inconsistencies or gaps common across jurisdictions and make recommendations to address them in order to promote effective implementation.

The primary sources of information for the review were the responses by FSB member jurisdictions to a questionnaire, including follow-up with jurisdictions for clarifications or additional information. The review also made use of official sector reports (e.g. FSB country peer reviews and progress reports) and other documents relating to resolution regimes in FSB jurisdictions. The review team also sought input from relevant stakeholders through a request for public feedback posted on the FSB website¹⁵ as well as through an industry roundtable – held in October 2018 in London – to exchange views on implementation experiences and challenges with respect to resolution planning.

In carrying out this work, the peer review team used the essential criteria and explanatory notes in the October 2016 FSB *Key Attributes Assessment Methodology for the Banking Sector* as a reference to evaluate the degree to which resolution planning frameworks are consistent with the relevant KA provisions. However, the team did not assess whether jurisdictions are compliant with the resolution planning standard set out in KA 11.

The report is structured as follows:

- Section 2 examines the extent to which resolution planning and resolvability assessment frameworks have been adopted (or are planned) in FSB jurisdictions;
- Section 3 provides an overview of progress and challenges in the development of bank resolution strategies and resolution plans, for those jurisdictions identified in section 2 as having a resolution planning framework;
- Section 4 describes resolution planning actions to identify and remove barriers to resolvability, for those jurisdictions identified in section 2 as having a resolution planning framework; and
- Section 5 describes arrangements for cross-border cooperation and information sharing on resolution planning for G-SIBs and other banks that could be systemic in failure.

For Banking Union jurisdictions that are FSB members (France, Germany, Italy, Netherlands and Spain), sections 3 and 4 reflect the allocation of responsibilities under the Single Resolution Mechanism (SRM) by describing resolution planning practices of both the Single Resolution Board (SRB) and of Banking Union national resolution authorities (see Box 2 for details).

Annex A provides a reference to the relevant provisions of the *Key Attributes*, Annex B provides a list of abbreviations of financial authorities in FSB jurisdictions, and Annexes C to J consist of tables in support of the analysis in the report.

¹⁵ See <http://www.fsb.org/2018/06/fsb-launches-thematic-peer-review-on-bank-resolution-planning-and-invites-feedback-from-stakeholders/>.

2. Bank resolution planning frameworks and resolvability assessments

Resolution planning frameworks

Most FSB jurisdictions have already adopted resolution planning frameworks. Sixteen jurisdictions¹⁶ – including all home authorities of G-SIBs – have a process in place for resolution planning that involves the preparation and maintenance of resolution plans and strategies for banks that are systemic in failure.¹⁷ This represents an increase of three jurisdictions since the March 2016 FSB *Thematic Review on Resolution Regimes* (hereafter referred to as the 2016 Thematic Review). Hong Kong introduced requirements for resolution planning and resolvability assessments in 2017. In Brazil, the authorities prepare resolution plans for D-SIBs using supervisory powers, though a legal framework for resolution planning has yet to be introduced. In Singapore, resolution planning was already being conducted at the time of the 2016 Thematic Review through the use of supervisory powers, but the framework was formalised in 2017 with the introduction of explicit requirements.¹⁸ Some other jurisdictions undertake planning in their supervisory or crisis management activities that is relevant for resolution, but do not develop or maintain resolution plans for banks that could be systemic in failure, or interact with such banks for this purpose. The limited progress in recent years reflects the largely unchanged legal and institutional framework for resolution across FSB jurisdictions.¹⁹

Reforms to introduce bank resolution planning frameworks are ongoing in some – but not all – FSB jurisdictions without such a framework (see Annex C).²⁰ Of the eight jurisdictions that do not have a resolution planning framework in place, six of them²¹ report that they have ongoing or planned reforms to their regimes to address this gap. Two of those jurisdictions are at a more advanced stage since they have already published draft legislation and initiated work to establish the framework (South Africa) or have published policy proposals (Korea). Reforms in the other three jurisdictions (Australia, Saudi Arabia and Turkey) remain

¹⁶ Brazil, Canada, China, France, Germany, Hong Kong, Italy, Japan, Mexico, Netherlands, Russia, Singapore, Spain, Switzerland, UK, US. The SRM provides the relevant resolution planning framework (for significant banks and cross-border banks) in five of those jurisdictions – France, Germany, Italy, Netherlands and Spain – that are part of the Banking Union in the EU; see Box 2 and https://ec.europa.eu/info/business-economy-euro/banking-and-finance/banking-union/single-resolution-mechanism_en.

¹⁷ This does not necessarily imply that all of these jurisdictions are fully compliant with KA 11, based on the criteria set out in the FSB *Key Attributes Assessment Methodology for the Banking Sector*.

¹⁸ For details, see the February 2018 FSB peer review reports of Hong Kong (<http://www.fsb.org/2018/02/peer-review-of-hong-kong/>) and Singapore (<http://www.fsb.org/2018/02/peer-review-of-singapore/>).

¹⁹ The few changes include Hong Kong, which introduced a comprehensive cross-sectoral resolution regime in 2017, and several other jurisdictions which have augmented existing resolution frameworks with new resolution tools. See the November 2018 FSB *Seventh Report on the Implementation of Resolution Reforms* (<http://www.fsb.org/2018/11/fsb-2018-resolution-report-keeping-the-pressure-up/>) for details.

²⁰ Of the jurisdictions that already have a resolution planning framework, Brazil reports that it intends to introduce legislation for resolution planning, while the resolution framework in the EU will be updated.

²¹ Australia, Indonesia, Korea, Saudi Arabia, South Africa and Turkey. In four of those cases (Korea, Turkey, Saudi Arabia, South Africa), planned reforms also cover the introduction of powers to require changes to improve resolvability.

under discussion. There is some uncertainty as to the timeline for the adoption of planned reforms, particularly since in some cases those reforms appear to be at a similar stage as reported in the 2016 Thematic Review.²² Even after the adoption and implementation of the planned reforms described in Annex C, two jurisdictions²³ will not have a framework for resolution planning or resolvability assessments or any plans to introduce such a framework.

There is considerable variation in the way resolution planning has been implemented across FSB jurisdictions. The *Key Attributes* provide that jurisdictions should put in place an ongoing process for resolution planning that covers, at a minimum, domestically incorporated firms that could be systemically significant or critical if they fail. Jurisdictions have adopted frameworks that vary in terms of their planning requirements. By way of example, Boxes 1 and 2 describe the resolution planning framework in the US and the Banking Union respectively.

Box 1: Resolution planning in the United States

Title I of the Dodd-Frank Act (DFA) requires bank holding companies over a certain asset size (see Table 1) to submit resolution plans to the Federal Deposit Insurance Corporation (FDIC) and the Federal Reserve Board. The plan must describe the company's strategy for rapid and orderly resolution under bankruptcy law in the event of material financial distress or failure of the company while substantially mitigating the risk that the failure would have serious adverse effects on financial stability in the US. These plans are required to provide a broad range of information relevant to resolution planning and implementation including, for example, information about the firm's organisational structure; its core business lines and critical functions; capital structure and funding sources; payment, clearing, and settlement systems; as well as cross-border activities. In addition, the FDIC requires insured depository institutions over a certain asset size to provide similar information to the FDIC.

Title II of the DFA established the Orderly Liquidation Authority, which gives the FDIC authority to manage the orderly failure of any financial institution whose resolution in bankruptcy could pose a risk to the financial system. The FDIC fulfils its mandate as resolution authority under Title II by, among other things, undertaking institution-specific resolution planning to develop strategies for the largest US financial institutions that address the orderly resolution of the firm in a manner that mitigates systemic risk without exposing taxpayers to loss and provide for optionality with respect to exit from the resolution process. These plans address continuity of critical operations, funding, and other matters consistent with the standards in the *Key Attributes* and its Annexes.

Scope and intensity of resolution planning requirements

Proportionality in resolution planning has involved tailoring the scope or intensity of requirements, as well as determining the strategy and tools to achieve the resolution objectives. Resolution planning requirements may be tailored in scope (that is, the range of banks for which resolution planning is required) or intensity (that is, the extent and detail of the requirements) with the aim of alleviating regulatory burden where appropriate. More

²² For example, policy proposals in Korea were published in October 2015 but a draft law has not yet been submitted to the legislature, while reforms are still being discussed in Saudi Arabia and Turkey.

²³ Argentina and India. A draft bill to reform the resolution regime and introduce resolution planning requirements was withdrawn by the Indian government in 2018.

broadly, many authorities operate under the general principle that the choice of resolution strategies and tools for individual banks should not go beyond what is necessary to achieve the resolution objectives and should be proportionate to the nature of the bank in question. This may be particularly relevant where resolution planning is required for a wide range of banks.²⁴

Box 2: Resolution planning in the Banking Union

In the EU, there is a single framework for resolution under the Bank Recovery and Resolution Directive (BRRD). Within the Banking Union (BU), the BRRD and the Single Resolution Mechanism Regulation (SRMR) require resolution planning for all banks. The authority that is responsible for resolution planning in the Banking Union may vary between the Single Resolution Board (SRB) and the national resolution authorities (NRAs) in each participating Member State. In addition, the scope of resolution planning can differ between banks.

The SRB is directly responsible for resolution planning for all the banks that are significant institutions (SIs) subject to consolidated supervision by the European Central Bank (ECB). In addition, the SRB covers less significant institutions (LSIs) as long as they are established in more than one jurisdiction member of the Banking Union. As of end-2017, the SRB is responsible for resolution planning for 127 banks in the BU. The NRAs are responsible for the remaining ~5,500 LSIs that are established in only one jurisdiction member of the Banking Union.

The responsible authority will first determine whether a bank will be taken into resolution or put into insolvency in the event of failure. This is done through the application of an ex ante public interest assessment (PIA) that will be repeated once the bank is actually deemed ‘failing or likely to fail’. As part of this assessment, the SRB or the NRA verifies whether national insolvency proceedings would achieve the resolution objectives to the same extent as the use of resolution tools. The resolution objectives are: ensuring continuity of critical functions, avoiding adverse effects on financial stability, protecting public funds by minimising reliance on public support, protecting deposit guarantee scheme-covered deposits and protect client funds and client assets.

If the SRB or NRA determines that the PIA is met by the bank in question, resolution powers will be applied to the bank upon failure, meaning that a detailed resolution plan is necessary covering the resolution strategy, resolution tools, resolvability assessment and identification of impediments to resolution. Banks that do not meet the PIA will be liquidated through normal insolvency proceedings. For these banks, the resolution plan may focus mostly on matters that need to be arranged to assist the liquidation (i.e. availability of single customer view to enable swift depositor pay-outs).

For LSIs or other banks whose failure is perceived to have a more limited impact on the financial system, the SRB and NRAs may tailor planning requirements to the size and complexity of the bank through the application of ‘simplified obligations’. ‘Simplified obligations’ can be applied to the content and detail of resolution plans, the frequency plans are updated and information requirements.

The range of banks that should be subject to resolution planning varies widely across jurisdictions (see Table 1 and Graphs 1-2). Some jurisdictions apply resolution planning to all banks (EU, Hong Kong, Mexico);²⁵ other jurisdictions only apply it to G-SIBs and/or D-SIBs (Brazil, China, Japan, Russia, Singapore, Switzerland); while a few jurisdictions follow

²⁴ For example, the principle of proportionality is an explicit element of the EU framework and resolution authorities are required to take it into account in exercising their functions and powers under that regime.

²⁵ Mexico is the only jurisdiction where resolution planning is reported to take place only for the deposit-taking entity; all other jurisdictions report that they engage in resolution planning for the entire corporate group.

a mixed approach, e.g. by employing an asset size threshold that captures both G-SIBs and some other large banks (US)²⁶ or by extending resolution planning to other banks on a discretionary basis as deemed necessary by the resolution authority (e.g. Canada). This difference in scope is partly due to the fact that some jurisdictions, including those requiring resolution planning for all banks, contemplate insolvency proceedings as one of the tools in their framework, and the nature of their planning for such banks reflects that (see section 3). By contrast, other jurisdictions do not include in their framework banks that are expected to be wound up under the applicable insolvency regime.

Table 1: Scope of resolution planning in FSB jurisdictions

Jurisdictions	G-SIBs	D-SIBs	Other banks
<i>Resolution planning for all banks</i>			
SRM members (France, Germany, Italy, Netherlands, Spain), UK	Yes	Yes	Yes (all)
Hong Kong, Mexico	N/A	Yes	Yes (all)
<i>Resolution planning for G-SIBs, D-SIBs and other selected banks</i>			
United States	Yes	N/A	Yes (assets >US\$250bn and certain banks with assets between US\$100bn and US\$250bn) ²⁷
Canada	Yes	Yes	Yes (mid-sized institutions)
<i>Resolution planning for only G-SIBs and D-SIBs</i>			
Switzerland	Yes	Yes	No
Japan	Yes	If necessary	No
China	Yes	N/A ²⁸	No
Brazil, Russia, Singapore	N/A	Yes	No

²⁶ US regulators can also require resolution planning by banks within a range of asset size below this threshold provided that regulators have determined that doing so is appropriate to address financial stability risks or safety and soundness concerns and has taken into consideration the firm's capital structure, riskiness, complexity and other factors.

²⁷ The Economic Growth, Regulatory Relief, and Consumer Protection Act (EGRRCPA) of 2018 amended section 165 of the DFA to increase the threshold of application of enhanced prudential standards (including on resolution planning – see Box 1) to large bank holding companies. Eighteen months after the date of enactment of EGRRCPA, bank holding companies with total consolidated assets of less than US\$250 billion will not be subject to section 165 of the DFA, provided that the Federal Reserve Board may apply any enhanced prudential standard to a bank holding company with between US\$100 billion and US\$250 billion in total consolidated assets if it determines that application of the prudential standard is appropriate to prevent or mitigate risks to the financial stability of the US, or to promote safety and soundness.

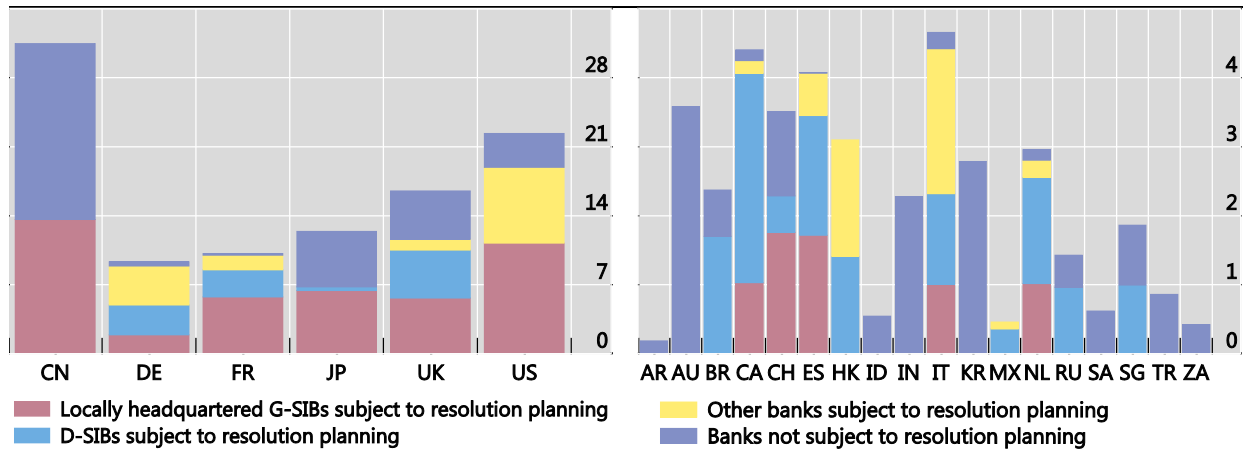
²⁸ The *Guidelines on Improving Regulation of Systemically Important Financial Institutions*, released jointly by the PBC, CBIRC and CSRC in November 2018 specify that a special resolution mechanism applies to SIFIs in China. However, the list of SIFIs (including D-SIBs) has not yet been determined.

Graphs 1 and 2: Scope of resolution planning in FSB jurisdictions (as of end-2017)

Resolution planning coverage of the banking sector by jurisdiction

Banking sector assets, in trillions of US dollars

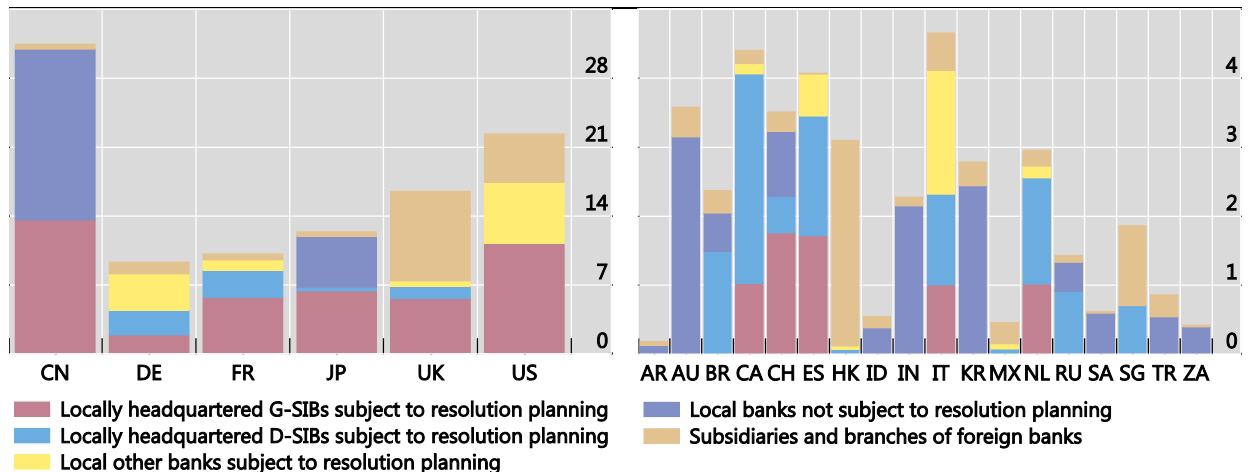
Graph 1



Resolution planning coverage among domestic banks by jurisdiction

Banking sector assets, in trillions of US dollars

Graph 2



The first graph shows different types of banks subject to resolution planning in each jurisdiction (in terms of the proportion of banking sector assets), irrespective of whether these banks are domestically headquartered or foreign-owned. Foreign-owned banks shown as not subject to resolution planning in a jurisdiction may still be subject to such planning in their home jurisdiction. The branches of foreign-owned banks in EU jurisdictions are assumed not to be subject to resolution planning by national resolution authorities.

The second graph shows different types of locally headquartered banks and the extent to which they are subject to resolution planning. The graph also shows, solely for comparison purposes, the subsidiaries and branches of foreign banks in each jurisdiction.

Note that 'banking sector assets' in both graphs includes the foreign assets of domestically headquartered banks and may not therefore be an accurate measure of domestic banking sector size or fully comparable across jurisdictions due to double counting.

Data as of December 2017 except for Germany (December 2016), Japan (September 2017) and US (March 2018 for US G-SIBs).

G-SIBs = global systemically important banks. D-SIBs = domestic systemically important banks. AR = Argentina, AU = Australia, BR = Brazil, CA = Canada, CH = Switzerland, CN = China, DE = Germany, ES = Spain, FR = France, HK = Hong Kong, ID = Indonesia, IN = India, JP = Japan, KR = Korea, MX = Mexico, NL = Netherlands, RU = Russia, SA = Saudi Arabia, SG = Singapore, TR = Turkey, UK = United Kingdom, US = United States, ZA = South Africa.

Source: FSB peer review questionnaire responses.

On intensity, some jurisdictions – particularly those that have ‘cast the net wide’ by applying resolution planning to all banks (e.g. EU) – explicitly provide for a proportionate application of certain requirements. These include, for example, the frequency of resolution plan review, data reporting requirements, and the content of resolution plans. These requirements tend to vary the most for banks other than G-SIBs and D-SIBs, since resolution planning work for D-SIBs – at least in G-SIB home jurisdictions – largely mirrors what is being done for G-SIBs.²⁹

Resolution planning arrangements

Fourteen of the jurisdictions that have a resolution planning framework report that it is based on a requirement imposed by law, statute, supervisory rules or regulations, while two (Brazil and Canada)³⁰ report that they undertake resolution planning as a matter of practice in the absence of a legal requirement (see Annex D). Ten jurisdictions report that the contents of resolution plans are set out in rules, guidance or policies.³¹

The primary authority responsible for resolution planning is the supervisory authority, the deposit insurer, or a separate resolution authority. Most of the jurisdictions engaged in resolution planning report that where the resolution function is contained within an authority with broader functions, it is organised in a specific unit, although several of these jurisdictions also report that staff from other units of that authority provide subject matter and/or firm-specific expertise. The number of staff dedicated to resolution planning varies significantly, reflecting the extent to which resolution planning has advanced, the organisational set-up and the number of banks for which resolution planning is undertaken in the particular jurisdiction. Some jurisdictions highlight the importance of adequate resources and expertise in the resolution authority to be able to develop effective and feasible resolution plans.

Banks generally provide information to resolution authorities for purposes of resolution planning (see section 3), though in some cases (e.g. Canada, China, Switzerland, US) banks are responsible for developing parts or all of the resolution plan. Supervisory authorities (where these differ from the resolution authority) also play a role in resolution planning, although the nature of this role differs among jurisdictions. In some cases (e.g. Japan, US) the supervisory authority is involved in the development or review of resolution plans. In other cases (e.g. Banking Union members, Hong Kong, UK), the supervisory authorities are consulted in connection with the development of resolution plans.

In nearly all jurisdictions engaged in resolution planning, resolution plans are reviewed on an annual basis or upon a material change at the bank. One exception to this is Mexico, where resolution plans are reviewed as necessary but not on a statutorily required schedule. In most cases, resolution plans are developed and reviewed entirely by staff – senior level managers or

²⁹ One difference between G-SIBs and D-SIBs in those jurisdictions is the additional G-SIB requirements stemming from the *Key Attributes* (i.e. establishment of CMGs and signing of institution-specific CoAgs).

³⁰ Canada is currently consulting on by-law requirements that would formalise the Canada Deposit Insurance Corporation’s (CDIC) existing resolution planning guidance and practices for banks.

³¹ Banking Union (France, Germany, Italy, Netherlands and Spain), Canada, Mexico, Switzerland, UK, US.

heads of division – within the relevant authority(ies). However, three jurisdictions³² report that external experts are or have been used to assist with the drafting or review of resolution plans.

Resolvability assessments and powers to require changes to improve resolvability

Most of the jurisdictions (13 out of 16) engaged in resolution planning also conduct resolvability assessments.³³ In 12 of those jurisdictions, the power to undertake resolvability assessments is set forth in law, statute, supervisory rules or regulations, the exception being Canada where resolvability assessments are undertaken as a matter of practice. The range of banks subject to resolvability assessments mirrors those subject to resolution planning, except in Canada (where resolvability assessments are undertaken for G-SIBs and D-SIBs but not for other banks subject to resolution planning).

Nine jurisdictions³⁴ report that the aspects covered in resolvability assessments are set forth in rules, guidance or policies, whereas four jurisdictions³⁵ report that resolvability assessments are undertaken in accordance with the *Key Attributes* (see Annex E).

The resolution regimes in 12 jurisdictions³⁶ include an explicit power for the resolution authority to require banks to make changes where necessary to improve resolvability. Eight jurisdictions³⁷ report that banks have rights of review or appeal with respect to the exercise of the power to require changes. Two jurisdictions³⁸ report that the power to require changes at a bank has been used in practice. In one case a bank was directed to take measures to remove impediments to resolvability arising from operational dependencies and a shortage of loss-absorbing capacity. In the other case, a bank was directed to take measures to improve its criteria for legal entity rationalisation and to incorporate its mapping of critical services into its efforts to rationalise legal entities. Some other jurisdictions report that firms have made changes to improve resolvability following dialogue with the relevant authorities without the formal exercise of the power.

Status of resolution planning

In half of the 16 jurisdictions carrying out resolution planning, a first iteration of a resolution plan has been developed as of end-2017 for all banks for which such planning is required (see Graphs 3 and 4). This information provides a basic measure of the progress made with respect to bank-specific resolution planning. In eight jurisdictions,³⁹ a resolution

³² Canada, Netherlands (for banks under its remit) and Switzerland.

³³ Brazil, Mexico and Russia do not conduct resolvability assessments.

³⁴ Banking Union (France, Germany, Italy, Netherlands and Spain), Canada, Hong Kong, UK, US.

³⁵ China, Japan, Singapore and Switzerland.

³⁶ Australia, Banking Union (France, Germany, Italy, Netherlands and Spain), Hong Kong, Japan, Singapore, Switzerland, UK, US. In some other jurisdictions (e.g. Argentina, Brazil and China), supervisory authorities have some powers to require supervised institutions to make changes to their business organisation and legal structure, but the purposes for and circumstances under which authorities can exercise such powers vary.

³⁷ Australia, France, Hong Kong, Italy, Netherlands, Singapore, Switzerland, UK.

³⁸ UK, US.

³⁹ Brazil, Canada, China, Japan, Spain (including for SRB banks), Switzerland, UK, US.

plan has been developed for all – or substantially all – of the banks for which resolution planning is required under the applicable framework. Almost all of these jurisdictions are home to G-SIBs. The progress made by these jurisdictions is not surprising, considering that some of them were also among those most affected by the global financial crisis and therefore had incentives to promptly adapt their legal frameworks and commence resolution planning for systemic banks.

In two jurisdictions that carry out resolution planning, few bank-specific resolution plans have been developed as of end-2017. In the case of Hong Kong, this is because such requirements were only recently introduced following reforms to the resolution regime, and the resolution authority is now beginning the process of developing such plans. In the case of Mexico, resolution plans have been developed for 13 of the 48 banks for which resolution planning is required.

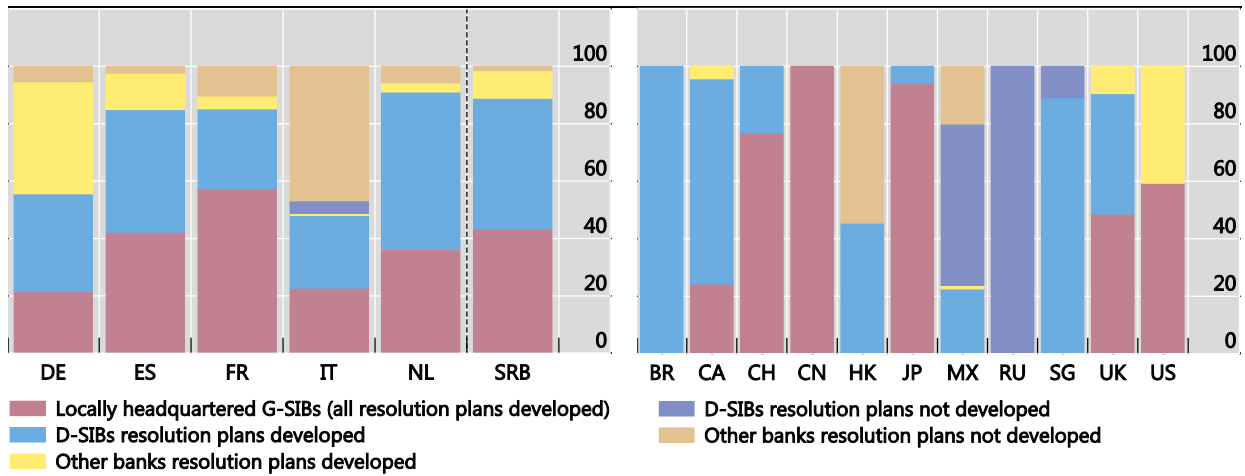
Most progress in preparing resolution plans has been made for the largest and most systemic banks. At the aggregate level across all FSB jurisdictions, a first iteration of a resolution plan has been developed for banks accounting for around 95% of the on-balance sheet assets of all banks for which resolution planning is required. This includes all G-SIBs; D-SIBs accounting for around 94% of the on-balance sheet assets of all D-SIBs subject to resolution planning; and other banks accounting for around 80% of the aggregate on-balance sheet assets of other banks subject to resolution planning. These percentages are much smaller if measured in terms of number of banks subject to resolution planning, given that in some jurisdictions (e.g. EU member states) resolution plans are required for all banks.

Graph 3 and 4: Status of resolution planning in FSB jurisdictions (as of end-2017)

Status of resolution plans by jurisdiction (based on bank assets)

Per cent of assets of all banks subject to resolution planning

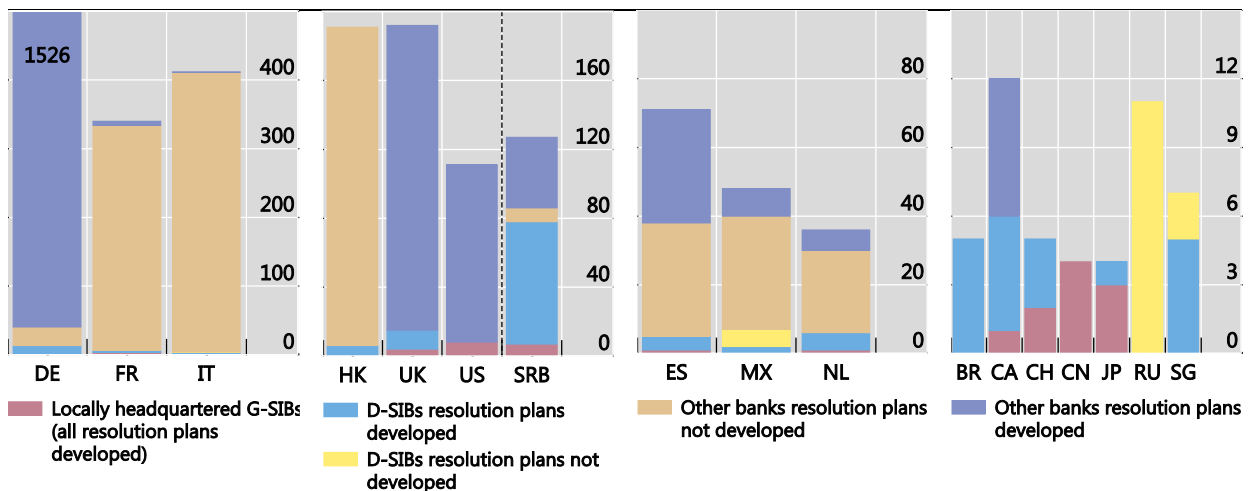
Graph 3



Status of resolution plans by jurisdiction (based on number of banks)

Number of banks

Graph 4



The graphs only show the jurisdictions engaged in, and the relevant banks in those jurisdictions subject to, resolution planning. Resolution plans developed means that (at least) a first iteration of the resolution plan was developed as of end-2017. The graphs do not differentiate between resolution plans developed for domestically headquartered vs foreign-owned banks. Resolution planning for many smaller banks involves plans that are based on proceedings under the applicable insolvency regime as the preferred resolution strategy. The figures in each Banking Union member state (France, Germany, Italy, Netherlands and Spain) show both banks subject to resolution planning by the Single Resolution Board (SRB) and those subject to resolution planning by the national resolution authority. The figures for the SRB (covering banks from all Banking Union member states and not just those are FSB jurisdictions) are shown separately in both graphs for information.

Note that 'bank assets' in Graph 3 includes the foreign assets of domestically headquartered banks and may not therefore be fully comparable across jurisdictions due to double counting of assets held in foreign subsidiaries and branches of those banks.

Data as of December 2017 except for Japan (September 2017) and US (March 2018 for US G-SIBs).

G-SIBs = global systemically important banks. D-SIBs = domestic systemically important banks. BR = Brazil, CA = Canada, CH = Switzerland, CN = China, DE = Germany, ES = Spain, FR = France, HK = Hong Kong, IT = Italy, JP = Japan, MX = Mexico, NL = Netherlands, RU = Russia, SG = Singapore, SRB = Single Resolution Board (Banking Union), UK = United Kingdom, US = United States.

Source: FSB peer review questionnaire responses.

Public disclosure

Authorities are disclosing increasingly detailed general information about resolution frameworks and approaches to resolution, but bank-specific disclosures are limited.

Twelve jurisdictions⁴⁰ report that authorities make general (i.e. not firm-specific) public disclosures regarding resolution planning and/or resolvability assessments. Three jurisdictions⁴¹ report that authorities make firm-specific public disclosures regarding resolution planning and/or resolvability assessments. Seven jurisdictions⁴² report that banks make institution-specific public disclosures regarding resolution planning and/or resolvability assessments.

General disclosures made by authorities focus on the resolution framework, the authorities' approaches to resolution planning, and the choice of resolution strategies.

For example, in Hong Kong and the UK, these disclosures are generally made in connection with the policy development process. In the US, general disclosures are made in connection with policy development but are also integrated into the resolution planning process and, in this regard, generally follow the cycle of plan submission and review. Some authorities have also disclosed information on the framework for resolvability assessments. For example, in the Banking Union, Hong Kong and the UK, information on the resolvability assessment framework is included in resolution planning approach/guidance documents.

Bank-specific disclosures vary by jurisdiction.

In the US, firms are legally required to prepare a public section of their Title I resolution plans to inform public understanding of the firm's strategy for resolution under the US Bankruptcy Code.⁴³ These public sections cover a broad array of areas, including steps taken by the bank to improve resolvability, information on intra-group financial and operational interconnectedness, the firm's liquidity resources and loss-absorbing capacity, and the firm's strategy for each material entity in resolution, in addition to a description of the organisation upon completion of the resolution process. In the UK, the Bank of England (BoE) published indicative loss-absorbing capacity requirements for UK G-SIBs and D-SIBs. Bank-specific disclosures made by firms themselves generally focus on TLAC and MREL requirements (see section 4). Some G-SIBs have also voluntarily disclosed the authorities' resolution strategy, but rarely disclose the steps they have taken with respect to resolvability.

⁴⁰ Banking Union (France, Germany, Italy, Netherlands and Spain), Canada, Hong Kong, Japan, Singapore, Switzerland, UK, US.

⁴¹ Switzerland, UK, US.

⁴² Banking Union (France, Germany, Italy, Netherlands and Spain), Switzerland, US.

⁴³ See <https://www.federalreserve.gov/supervisionreg/resolution-plans.htm>.

3. Development of bank resolution strategies and plans

Critical functions and critical shared services

In almost all jurisdictions carrying out resolution planning, the process includes the identification of a bank's critical functions and critical shared services. In 15 of the 16 jurisdictions (the exception being Russia),⁴⁴ the resolution strategy for a bank is informed by the identification of critical functions as part of the resolution planning process. In some cases these are identified by the authorities themselves (China, Mexico), while in others the banks carry out an initial identification that is subsequently assessed by the authorities (Banking Union, Canada, Hong Kong, Japan, Singapore, Switzerland, UK, US). Critical shared services are identified in 15 of these jurisdictions (the exception being Russia) and often feeds into the work to ensure operational continuity in resolution (see section 4).

Jurisdictions highlight a number of common challenges in identifying critical functions and critical shared services across banks, including:

- ensuring sufficient data availability, quality and reliability (completeness), as the level of aggregation of information can sometimes be misleading and result in incorrect determinations of critical functions;
- avoiding inconsistencies among the critical functions identified in recovery and resolution plans that could risk undermining the efficacy of resolution plans;
- setting appropriate (qualitative) criteria taking into account the specificities of the bank and the jurisdiction to help determine critical functions;
- determining the level at which the impact of discontinuation of critical functions and shared services should be assessed (e.g. at group level or at entity level),⁴⁵ and
- taking fully into account the criticality of the function in the host jurisdiction.

Resolution planning data requirements

A range of information sources is used by authorities that engage in resolution planning. This includes supervisory information collected as part of the normal supervisory process (which is the primary source of information in China); firms' recovery plans; publicly available information; and resolution-specific reporting covering both fixed submission requirements and ad hoc information requests. Most jurisdictions use a combination of these information sources (e.g. Banking Union, Brazil, Hong Kong, Japan, Mexico, Singapore, UK). In Canada, Switzerland and the US, information in resolution plans prepared by banks is also used as a basis for resolution planning.

⁴⁴ The Bank of Russia reports that it receives information on a credit institution's critical functions and critical shared services within the normal supervisory process. In addition, the description of critical functions and critical shared services has to be included in credit institutions' recovery plans according to a regulation entered into force from January 2019. However, the identification of critical functions in the framework of a formal resolution planning process is not part of the new regulation.

⁴⁵ To this end, one jurisdiction reported that it is assessing financial stability impact on a regional basis.

All authorities that engage in resolution planning collect information from banks specifically for this purpose. The level and types of data vary by jurisdiction from general supervisory information to specific requests (e.g. templates) and requirements for submission of recovery or resolution plans. The latter are considered necessary as general supervisory information may not provide the required level of specificity (e.g. information at a legal entity level).

Resolution planning data requirements are determined in some jurisdictions based on the size and complexity of the bank. All G-SIBs and D-SIBs are required to provide operational, structural and financial reporting as part of general supervisory submissions or through special information requests. Some authorities, such as the SRB, require all banking groups to complete specific templates for the purposes of collecting resolution information. Data requirements for other banks in some jurisdictions (e.g. Banking Union and UK) are adjusted by resolution authorities to reflect their characteristics and more limited impact of their failure (e.g. use of simplified templates or templates specific for smaller banks, limitations on data requested). The required frequency of submission of information for resolution purposes varies, including with respect to proportionality considerations. For example, the Banking Union, China and Japan may require information annually; Hong Kong requests information at least every two years; while the UK requests resolution information packs to be submitted every five years for banks subject to simplified reporting obligations (however, the UK expects firms to be able to produce such packs annually if required).

Challenges in the collection of data vary by jurisdiction and are linked to the maturity of the resolution planning process. As experience with resolution planning increased, data requests have evolved and are now more focused on specific needs and facts to enhance the planning process. Several jurisdictions, including some with more established resolution frameworks, note the need for clearly defining and communicating information needs and expectations.⁴⁶ In the Banking Union, standardised templates are being used to address this issue and certain banks have established dedicated teams for the preparation of submissions and reporting to resolution authorities. This is seen as a particular challenge for those non-G-SIBs that lack the operational capacity to establish dedicated resolution planning teams. Several other jurisdictions note that management information system (MIS), technology and reporting practices need to be enhanced to provide the relevant data or information, for example on a legal entity basis.⁴⁷

Resolution strategies and choice of resolution tools

Resolution planning is typically based on the identification of a single (or preferred) resolution strategy for a given bank. Resolution authorities in some jurisdictions have published their approaches to determining appropriate resolution strategies based on specific considerations and criteria (see Box 3 on the UK). In some other cases, authorities also seek to

⁴⁶ This includes the Banking Union (France, Germany, Italy, Netherlands and Spain), Hong Kong, Mexico and Singapore.

⁴⁷ This is also reflected in banks' low level of compliance with the BCBS principles, issued in January 2013, with the aim of strengthening banks' risk data aggregation capabilities and internal risk reporting practices. See the June 2018 BCBS report on *Progress in adopting the "Principles for effective risk data aggregation and risk reporting"* (http://www.fsb.org/2013/01/cos_130109/ and <https://www.bis.org/bcbs/publ/d443.htm>).

ensure that they have flexibility to apply a different resolution strategy if the preferred strategy cannot be implemented, by identifying alternative strategies and ensuring that the structure and organisation of the bank would not prevent those strategies from being implemented.

Resolution strategies and the choice of resolution tools are generally based on the type, size, complexity and significance of a bank. Most jurisdictions report considerations related to the characteristics of the bank (i.e. structure, interconnectedness), resolution objectives and circumstances at the time of failure. In particular, consideration is given to the systemic nature of firms and factors such as bank structures, critical functions and geographical reach. The general principle of proportionality – that the tools chosen should not go beyond what is needed to achieve the intended objectives – may also lead resolution authorities to adopt different resolution strategies and tools for smaller, as opposed to larger (and most systemic) banks.

To date, approaches to resolution strategies and tools for larger and more systemic banks (e.g. G-SIBs and D-SIBs) have generally focused on keeping the bank’s structure and operations intact upon entry into resolution.⁴⁸ The complexity and cross-border nature of many of these banks make it difficult to use resolution strategies that aim to break the bank up at the point of resolution (though this could still be a consequence of any restructuring following the resolution action). In most cases a single point of entry (SPE) combined with a bail-in is preferred for G-SIBs and most D-SIBs, as this enables the resolution authority to stabilise the firm and provide for continuity of its critical functions by keeping operational subsidiaries open.⁴⁹

For many other banks, jurisdictions report that the primary focus is on maintaining continuity of critical functions.⁵⁰ These banks typically have a smaller number of critical functions and less complex structures and operations. As a result, resolution strategies and tools that allow for the transfer of certain assets and liabilities (i.e. those necessary for the continued provision of critical functions) to a third party acquirer or a bridge bank are more likely to be considered for these banks. Such a transfer strategy may be accompanied by an orderly wind-down or liquidation of the remainder of the bank and/or alongside a bail-in.

The application of the insolvency regime is a potential resolution strategy in some jurisdictions. In certain cases, particularly for jurisdictions that apply resolution planning to all banks (see section 2), insolvency proceedings – including, but not limited to, liquidation and winding up – is the preferred or default strategy provided that such proceedings would not be a threat to financial stability and other resolution objectives are not put at risk.⁵¹ Ten

⁴⁸ Such an approach was identified by, for example, the Banking Union (France, Germany, Italy, Netherlands and Spain) China, Hong Kong, Japan, Mexico, Switzerland, UK and US.

⁴⁹ As noted in the November 2018 FSB *Seventh Report on the Implementation of Resolution Reforms* (ibid), the resolution strategy is based on a SPE approach for 26 of the 28 G-SIBs.

⁵⁰ Such an approach was identified by, for example, the Banking Union (France, Germany, Italy, Netherlands and Spain), Hong Kong, Mexico and UK.

⁵¹ EU jurisdictions (France, Germany, Italy, Netherlands, Spain, UK), Switzerland, US. For example, the DFA in the US establishes a statutory preference for bankruptcy proceedings for all firms, including G-SIBs, and has required resolution plans describing how such proceedings could occur without adversely impacting US financial stability (see Box 1).

jurisdictions⁵² consider the bank’s systemic importance, including whether it provides critical functions, in selecting this strategy. Other objectives include the need to protect depositors and to ensure that insolvency proceedings would have no negative impact on financial stability. In the case of the Banking Union, this strategy applies to banks that do not meet the public interest test; experience thus far suggests that this category includes a large majority of banks under the remit of the national resolution authority (LSIs), as opposed to the SRB. Insolvency plus transfer or pay-out of insured deposits is also the preferred resolution strategy for the smallest banks in the UK.

Box 3: UK approach to determining resolution strategies

The UK resolution framework includes statutory objectives and powers to allow authorities to take action – if necessary before a bank is insolvent – to minimise any wider consequences of its failure for financial stability and ensure confidence in the financial system. In accordance with the BRRD, two conditions must be met before a bank may be placed into resolution: the supervisor must determine the bank is ‘failing or likely to fail’, and the Bank of England (BoE) must determine that it is not likely any other action will be taken to prevent failure. Once these conditions are met, the BoE must also confirm that resolution meets the statutory objectives and is in the public interest and, when making that assessment, it must consider whether the resolution objectives would be met to the same extent using an insolvency procedure.

The BoE foresees firms having one of three resolution strategies, as summarised in the table below.

Resolution Tool	When Used	Justification	Outcome
Bail-in	Largest and most complex UK firms Indicative balance sheet size of £15–£25 billion Applicable to UK G-SIBs and D-SIBs and a number of other medium size firms	BOE recognises that a sale may not be feasible for large firms Most of the largest UK firms have complex and highly interconnected legal and operational structures	Enables a firm to be recapitalised Defers immediate need to find another buyer for its business or to split up operations
Partial Transfer	Smaller and medium size firms which meet the public interest test for use of resolution tools	Appropriate for firms that provide significant amounts of transactional banking services or other critical functions and for which a sale to another firm is feasible	Transfers preferred deposits (per the creditor hierarchy) to a private sector purchaser or temporarily to a bridge bank before onward sale Insolvency procedure for the remainder of the firm that is not transferred
Insolvency	Smallest firms not supplying large scale transactional accounts or other critical functions	Size and complexity of the firm does not justify use of resolution tools	Insolvency procedure applied Business and assets are sold or wound up after protected depositors paid or accounts transferred to another institution

⁵² Banking Union jurisdictions for banks under their remit (France, Germany, Italy, Netherlands and Spain), Brazil, Hong Kong, Mexico, Switzerland, UK.

Exit strategies form part of resolution plans in most cases, and depend on the tools applied. Twelve jurisdictions⁵³ note that resolution plans include an exit strategy. This is particularly the case for G-SIB resolution plans. In the case of bail-in, the exit strategy would depend on the scope and nature of potential restructuring options (orderly wind down, sale/divestiture, de-risking, other), and include a high level timeframe for the sequencing of options. In the case of use of transfer and bridge bank tools, exit is generally achieved by the transfer of the business to a third party acquirer. In some cases where resolution planning is at an early stage (e.g. Brazil), exit strategies have not been identified yet.

Actions to facilitate the execution of resolution strategies

Work to operationalise resolution strategies has so far mostly focused on bail-in strategies for larger banks, and is at an early stage for other strategies. In some jurisdictions the resolution planning framework entails the development of an operational plan that demonstrates how the preferred strategy is legally and operationally feasible.⁵⁴ In a number of cases this includes the development of handbooks or playbooks.⁵⁵ Several jurisdictions are working to provide guidance or internal guidelines on the operationalisation of resolution strategies, covering aspects such as regulatory approvals, licensing of bridge banks, bail-in implementation including associated valuation and compensation arrangements, and communications arrangements. Authorities are also using workshops or industry working groups to discuss topics such as: (i) the operational steps and players to operationalise bail-in; (ii) issues related to liabilities; and (iii) setting-up concrete procedures and exchange mechanics. One jurisdiction (UK) noted that, in the case of bail-in, the relevant preparatory steps are broadly the same regardless of the size of the bank, but substantially more complex in cross-border cases and if coordination is required with FMIs and authorities in different jurisdictions and time zones. In general, authorities indicate that substantial work remains to be done to ensure bail-in strategies can be credibly executed including the development of, for example, the valuation framework to inform and support application of bail-in, processes to suspend or cancel listing of securities and to transfer governance and control rights etc. Work on the operationalisation of resolution strategies that focuses on the sale of the whole business or transfer of assets and liabilities, including the use of asset management vehicles, is generally at an earlier stage, even in jurisdictions where resolution planning is more advanced. This is not surprising given the initial focus of resolution authorities on resolution planning for G-SIBs, for which bail-in is at the core of the resolution strategies.

Resolution simulations have been carried out in some jurisdictions including the Banking Union (SRB), Canada, Mexico, Netherlands and the UK. Such exercises have covered, among other issues, the payout of insured deposits for a resolution plan that involves insolvency; determination of any applicable ‘least cost’ rule in the choice of measures to be taken; and preparations in the run-up to a resolution. In Canada, simulations to test decision-making and

⁵³ Banking Union (France, Germany, Italy, Netherlands and Spain), Canada, China, Mexico, Singapore, Switzerland, UK, US.

⁵⁴ Banking Union (France, Germany, Italy, Netherlands and Spain), Canada, Mexico, UK, US.

⁵⁵ Banking Union (France, Germany, Italy, Netherlands and Spain), Japan, UK, US.

inter-agency cooperation (covering both D-SIBs and mid-size banks) have been carried out at the board level of the authorities, and standby arrangements have been put in place with professional services firms to operationally assist authorities across several key areas. Some other jurisdictions that are not engaged in resolution planning have conducted crisis management simulations that consider aspects related to resolution, such as the implementation of transfer powers.

At a general level the main operational challenges or impediments to executing resolution strategies include: maintaining access of a bank in resolution to key FMIs; ensuring financial resilience of shared service companies; early termination clauses; and establishing information systems and capabilities necessary to generate the information needed to support the execution of the strategy. Other challenges include data availability; time constraints in carrying out the steps needed to implement bail-in while coordinating with all relevant stakeholders; and meeting disclosure requirements. Certain types of banks may also pose specific challenges, in particular those with different legal or ownership characteristics that may create additional complexities in the execution of the resolution strategy (e.g. state-owned banks, financial conglomerates and cooperative banks). One jurisdiction (Netherlands) noted that the feasibility of a transfer strategy depends on the quality of the assets available at the time of resolution.

Lessons learned

Jurisdictions report both positive and negative factors from their experience in carrying out resolution planning. Key factors for success identified include the level of the banks' engagement with and understanding of resolution and resolvability issues (which tends to be higher for G-SIBs); the issuance of guidance and direct feedback to banks in order to set resolution planning expectations; experience gained from work to make resolution tools operational (e.g. in terms of identifying critical functions); and the level of cooperation between home and host authorities. Some of the challenges identified involve difficulties in verifying, analysing and cross-checking the information in submitted templates due to data sharing and quality issues; legal restrictions on exchange of resolution-related information across authorities and jurisdictions; limitations on the applicability of certain resolution tools for banks other than G-SIBs, given their broader range of ownership and financial structures; and carrying out resolution planning in areas where guidance was not yet available (with some jurisdictions developing policy in parallel with actual planning).

Experience with actual resolution cases remains limited. Six resolution cases (excluding those involving insolvency proceedings) were reported across three jurisdictions by the end of 2017. In five of these cases, no resolution plan was in place at the time the bank failed. The reported cases included: a D-SIB, in which the sale of business was chosen after write-down and conversion of capital instruments; four mid-size banks, for which resolution (in the form of bridge banks and an asset management vehicle) was applied to avoid any spill-overs associated with their joint failure; and one small bank that was resolved using sale of business combined with a bridge bank (which was subsequently sold).

Lessons drawn by resolution authorities from these cases include:

- Timely availability of granular data about bank liabilities is crucial to obtain an accurate picture of the situation at the point of resolution and to allow the resolution authority to take appropriate action.

- Cooperation between relevant domestic and foreign supervisory and resolution authorities is key, even for banks that are not G-SIBs;
- An alternative strategy or back-up plan is advisable, in case the preferred strategy cannot be implemented;
- Adequate liquidity for the bank in resolution needs to be ensured.

A common lesson in all cases was the limited time for executing the resolution actions and hence the need to undertake sufficient preparatory work and coordination between authorities.

4. Resolution planning actions to identify and remove barriers to resolvability

The FSB has identified certain barriers to resolvability to be addressed through the implementation of policies that both support and inform resolution planning in relevant areas (such as loss-absorbing capacity, cross-border enforceability of resolution actions, operational continuity, temporary funding in resolution, continuity of access to FMIs, and valuation capability). To date there is a significant variance across jurisdictions in terms of their engagement on these areas in the course of resolution planning, reflecting the fact that jurisdictions are at different stages of progress in their planning efforts. As a result, several jurisdictions have not yet applied these policies in their day-to-day resolution planning work. This section describes jurisdictions' progress in implementing formal policies in these areas and, where available, how they are being applied in the context of resolution planning.

Loss absorbing capacity⁵⁶

The FSB's TLAC standard defines a minimum requirement for the instruments and liabilities that G-SIBs should have readily available to enable authorities to implement an orderly resolution.⁵⁷ An entity to which resolution tools will be applied under the resolution strategy is expected to maintain external loss-absorbing and recapitalisation capacity (external TLAC) and preposition a portion of it at its material sub-groups or subsidiaries during normal times (internal TLAC). The remaining portion (surplus TLAC) should be readily available at the resolution entity to recapitalise subsidiaries where needed. G-SIBs identified by the FSB before the end of 2015 (and that continue to be designated thereafter) were expected to comply with the FSB TLAC standard from 1 January 2019.⁵⁸

Requirements for external TLAC for G-SIBs are already in place in a number of jurisdictions, but implementation of other aspects of the TLAC standard remains uneven. Requirements on external TLAC have been finalised in six jurisdictions that are either home to G-SIBs (Canada, Japan,⁵⁹ Switzerland, UK and US) or host a G-SIB with a MPE resolution strategy (Hong Kong), while proposals have been issued in the Banking Union.⁶⁰ No policy proposals have been issued in China, which is subject to an extended conformance period.

⁵⁶ Consistent with the definition of key terms at the beginning of this report, LAC refers to resources to facilitate a recapitalisation or orderly wind down of the bank (or of part of the bank) and avoid the need for a bail-out with public funds. TLAC refers to the LAC necessary to comply with the FSB's TLAC standard.

⁵⁷ See the November 2015 *TLAC Principles and Term Sheet* (<http://www.fsb.org/2015/11/total-loss-absorbing-capacity-tlac-principles-and-term-sheet/>) for details.

⁵⁸ G-SIBs newly designated between 2016 and before the end of 2018 and that continue to be designated thereafter are expected to meet minimum TLAC requirements by 1 January 2022. Firms that are designated as G-SIBs thereafter are expected to meet minimum TLAC requirements within 36 months from their date of designation. Firms that are currently headquartered in an emerging market economy and designated as G-SIBs are expected to comply with the minimum TLAC requirements starting from 2025 at the latest; an acceleration of the calendar for these firms is possible under the TLAC standard should certain thresholds be met.

⁵⁹ In Japan, TLAC regulations are finalised and effective from 31 March 2019.

⁶⁰ LAC requirements are in place for all banks (including G-SIBs and D-SIBs) in the Banking Union based on the MREL framework.

Implementation of internal TLAC is at an earlier stage, with only two jurisdictions (UK and US) having finalised internal TLAC requirements. The Banking Union has issued policy proposals, while several G-SIB host jurisdictions (e.g. Brazil, Mexico, Singapore) are still considering how to set internal TLAC requirements. Implementation of other aspects of the TLAC standard such as disclosure requirements and regulations on G-SIB holdings of TLAC are less advanced, with only two jurisdictions (Hong Kong and Switzerland) having finalised requirements.⁶¹

Jurisdictions have taken different approaches on whether to introduce external LAC requirements for banks other than G-SIBs (see Box 4 and Annex F).⁶² In FSB jurisdictions that are EU member states, the MREL requirement under the SRMR/BRRD applies to all banks and has already been applied to banks under the SRB remit as part of resolution planning.⁶³ For the other banks under the remit of individual Banking Union resolution authorities, policies are being developed to determine MREL requirements specific to their resolution strategy. Canada has finalised LAC requirements that came into effect in 2018 and will apply to D-SIBs (as well as the Canadian G-SIB). Hong Kong's LAC rules, which came into operation in December 2018, allow for the imposition of LAC requirements on any locally-incorporated banks (with total consolidated assets of at least HKD 300 billion) whose preferred resolution strategy contemplates the application of a stabilisation tool (e.g. bail-in, bridge bank, transfer etc.). Switzerland has, as of January 2019, imposed LAC requirements to all of its D-SIBs. Japan extended TLAC requirements to one of its D-SIBs. In the US, TLAC is being implemented only for G-SIBs. In other jurisdictions that are engaged in resolution planning (e.g. Brazil, Mexico, Singapore) there are no external LAC requirements foreseen as part of resolution planning, though in some cases internal TLAC requirements are planned for material host subsidiaries of G-SIBs.

The relationship between LAC and resolution planning and strategy also varies between jurisdictions. Some jurisdictions consider that the amount of external LAC required is not dependent on the particular bank's resolution strategy (e.g. US). In other jurisdictions, determining domestic LAC requirements is part of the resolution planning process (e.g. Banking Union, Hong Kong, UK); these jurisdictions have introduced mechanisms to adjust the amount of LAC both for G-SIBs and other banks according to the resolution strategy. The Banking Union intends to calibrate its LAC requirements to a level sufficient to support the chosen resolution strategy and tools. However, the TLAC standard is applied as a floor when determining the LAC in the resolution plans for G-SIBs. LAC requirements may be adjusted upwards as a consequence of the existence of obstacles to resolution. In the Banking Union and the UK, downwards adjustments are possible within certain limits to take into account the

⁶¹ See the November 2018 FSB *Seventh Report on the Implementation of Resolution Reforms* (ibid) for details. In the EU a new legislative package implementing the TLAC rules and an updated MREL policy framework will be published in mid-2019.

⁶² Banking Union (France, Germany, Italy, Netherlands and Spain), Canada, Hong Kong, UK. APRA also recently issued a discussion paper that outlines a proposed approach to loss-absorbing capacity in Australia (see <https://www.apra.gov.au/increasing-loss-absorbing-capacity-adis-support-orderly-resolution>).

⁶³ MREL has the same objective as the FSB's TLAC standard for G-SIBs but with some differences, e.g. in relation to calibration, subordination, eligible instruments and basis of requirements. Reforms are underway as part of revisions to BRRD to implement TLAC with the MREL framework. See <https://srb.europa.eu/en/content/mrel>.

use of specific resolution tools such as the transfer of assets or businesses. For banks for which liquidation is the preferred resolution strategy, jurisdictions have either not imposed specific requirements (Hong Kong) or set LAC at the level of the regulatory capital requirement in the resolution plans (Banking Union, UK). Full subordination of LAC is required in the UK for all institutions for which bail-in is the preferred resolution strategy. In the Banking Union, a minimum level of subordinated instruments is required for some banks in order to improve their resolvability and in accordance with the ‘no creditor worse off’ (NCWO) principle. In Hong Kong, relevant instruments must be contractually or structurally subordinated in order to be eligible as LAC.

Box 4: Determination of LAC requirements in Hong Kong and Canada

In order to set LAC requirements for banks under their remit, including D-SIBs, Hong Kong and Canada have developed policies intended to determine LAC in the context of resolution planning.

Hong Kong

Under Hong Kong’s LAC rules that came into operation on 14 December 2018,⁶⁴ it is only where the preferred resolution strategy for a bank contemplates the application of one or more stabilisation options that external LAC requirements can be imposed. The determination of a LAC requirement is intended to make resolution planning credible. The setting of internal LAC requirements will be driven by materiality thresholds, also set out in the LAC rules. In addition, the Hong Kong Monetary Authority (HKMA) has published a LAC code of practice chapter⁶⁵ which clarifies that in any case no banks with total consolidated assets below HKD 300 billion will be subject to LAC requirements. Hong Kong’s external LAC debt instruments will be subject to minimum denomination restrictions, and the sale and distribution of such instruments will be limited to ‘professional investors’ (i.e. not permitted to ordinary/retail investors) due to the loss-absorbing characteristics of such instruments.

External LAC requirements

Scope	<ul style="list-style-type: none"> All locally-incorporated banks for which the preferred resolution strategy contemplates the use of resolution tools (subject to a HKD 300 billion total consolidated assets threshold to be set out in a code of practice chapter).
Quantum	<ul style="list-style-type: none"> 2 x capital requirement, HKMA can vary up or down to reflect, e.g. partial property transfer vs bail-in resolution strategy. For G-SIBs, LAC requirements can be no lower than minimum requirements in the FSB’s TLAC Term Sheet.
Eligibility	<ul style="list-style-type: none"> Regulatory capital and debt instruments that meet specified eligibility criteria, including a remaining contractual maturity of at least one year, being subordinated to depositors and general creditors (or structurally subordinated), and clearly subject to the application of the resolution powers of the HKMA.

Internal LAC requirements

Scope	<ul style="list-style-type: none"> All locally-incorporated banks identified as material subsidiaries in a resolution group (for which the resolution entity can be inside or outside Hong Kong).
Quantum	<ul style="list-style-type: none"> Scaled at 75%-90% of what that entity’s external LAC requirement would have been if it had been a resolution entity, the default starting point being 75%. HKMA recognises the efficiency benefits of having non-pre-positioned resources readily available to be deployed to wherever in a banking group they

⁶⁴ See [https://www.hkma.gov.hk/media/eng/doc/key-functions/banking-stability/resolutions/Financial_Institutions_\(Resolution\)\(Loss-absorbing_Capacity_Requirements-Banking_Sector\)_Rules_20181214.pdf](https://www.hkma.gov.hk/media/eng/doc/key-functions/banking-stability/resolutions/Financial_Institutions_(Resolution)(Loss-absorbing_Capacity_Requirements-Banking_Sector)_Rules_20181214.pdf).

⁶⁵ See https://www.hkma.gov.hk/media/eng/doc/key-functions/banking-stability/resolutions/LAC-1_Resolution_Planning-LAC_Requirements_ENG.pdf.

	may be needed, and establishes a link between the availability of a group's non pre-positioned LAC and the scaling of internal LAC requirements.
Eligibility	<ul style="list-style-type: none"> Same as for external LAC, but in addition contractual terms must specify write down and/or conversion into equity upon notification of non-viability from the HKMA (joint trigger with home resolution authority for internal LAC issued cross-border).

Canada

Canadian G/D-SIBs became subject to external LAC requirements on 23 September 2018 in conjunction with the implementation of the statutory bail-in regime. G/D-SIBs have until 1 November 2021 to fully meet their minimum LAC requirements. Canada's LAC Guideline⁶⁶ provides for external LAC requirements only, but Canada is considering the development of a policy on guidance on internal LAC. At this time, it is expected that future guidance would be limited to subsidiaries of foreign G-SIBs where Canadian authorities are host authorities. With respect to Canadian D-SIBs/G-SIBs, the distribution of LAC is being considered as part of resolution planning efforts, as it will be dependent on the resolution strategy determined in the plan, but no formal guidance is currently contemplated.

External LAC requirements

Scope	<ul style="list-style-type: none"> All Canadian G-SIBs/D-SIBs
Quantum	<ul style="list-style-type: none"> Equivalent to the minimum LAC ratios applicable to a G-SIB in the lowest G-SIB bucket under the FSB TLAC standard: a risk-based LAC ratio of 21.5% risk-weighted assets (RWAs) (i.e. 18% RWAs plus the 2.5% Capital Conservation Buffer and a 1% SIB surcharge) and a minimum LAC Leverage Ratio of 6.75%.
Eligibility	<ul style="list-style-type: none"> Regulatory capital instruments and eligible bail-in debt (instrument is subject to a permanent conversion – in whole or in part – into common shares). The inclusion of regulatory capital instruments as LAC is limited by provisions in OSFI's TLAC Guideline equivalent to those set out in section 7 of the FSB's TLAC Term Sheet. Prospective bail-in debt will only count towards LAC where it is directly issued by the parent bank, i.e. the resolution entity (that is, 'indirect' issuance by subsidiaries or special purpose vehicles are ineligible).

Challenges to determining and implementing LAC requirements within the context of resolution planning include:

- Lack of issuance track record and market appetite for debt issued in small quantities, as well as reliance on deposit-based funding models, for some (particularly smaller) banks.
- Modification of issuance structures to ensure LAC is issued from the resolution entity (e.g. migration of debt issuance from operating companies to holding companies).
- Recognition of bail-in for foreign law governed LAC. Some jurisdictions deal with this issue by allowing only liabilities issued under domestic law to count toward TLAC requirements (e.g. US), whereas others permit issuance under foreign law provided adequate contractual clauses are in place (e.g. EU).

⁶⁶ See <http://www.osfi-bsif.gc.ca/Eng/fi-if/rg-ro/gdn-ort/gl-ld/Pages/tlac.aspx>.

- The existence of certain clauses, such as acceleration clauses, which would normally disqualify the liability from counting towards TLAC. In some cases (e.g. US), existing liabilities with such clauses will be grandfathered.
- Operational difficulties in setting up a holding company (Hong Kong).
- The existence of LAC cross-holdings that could create or exacerbate contagion risk.

These challenges have a direct impact on resolution planning, as the inability of banks to comply with the LAC requirement may mean that the institution is not fully resolvable under some resolution strategies, such as bail-in.

Internal TLAC is considered as the most challenging part of the TLAC standard to implement in the context of resolution planning, as it potentially involves both setting requirements with consultation between home and host authorities and modifying the issuance strategy of groups (limiting external issuances by material subsidiaries). Determining the management and location of surplus TLAC is also cited as a challenge.

Cross-border enforceability of resolution actions

Many jurisdictions are progressing work on contractual approaches to cross-border enforceability of stays and bail-in in connection with resolution planning, since reliance on statutory frameworks for cross-border recognition is not common. Only six of the 16 jurisdictions where resolution planning is carried out⁶⁷ indicate that they would rely on statutory frameworks in foreign jurisdictions for cross-border enforceability of temporary stays on early termination rights, and only three of them⁶⁸ would rely on this option for cross-border enforceability of bail-in. Given that statutory recognition is not limited to G-SIBs, this option is also available to D-SIBs and other banks should the need arise. In some of these jurisdictions contractual approaches are still pursued, e.g. as a backstop. The limited reliance on statutory recognition frameworks in foreign jurisdictions reflects the fact that recognition may be subject to conditions that introduce an element of uncertainty about whether resolution actions would be recognised in a specific case.

For temporary stays on early termination rights, 12⁶⁹ jurisdictions indicate that they would rely on contractual approaches to recognise the cross-border application of their stay powers. These include, in particular, most home jurisdictions for G-SIBs, where substantial progress has been made through the implementation of the ISDA Resolution Stay Protocol and the development of supporting regulations. All G-SIBs (except those headquartered in China and the newly identified G-SIB in Canada) have adhered to the ISDA Resolution Stay Protocol, which addresses close-out risk for foreign law governed financial contracts between G-SIBs, and supporting regulations to address close-out risk for other counterparties have been finalised in France, Germany, Italy, Japan, Switzerland, UK and US.⁷⁰ Several host jurisdictions are also

⁶⁷ France, Hong Kong, Netherlands, Singapore, Switzerland, UK.

⁶⁸ Hong Kong, Netherlands, UK.

⁶⁹ Banking Union (France, Germany, Italy, Netherlands and Spain), Canada, Hong Kong, Japan, Singapore, Switzerland, UK, US.

⁷⁰ See the November 2018 FSB *Seventh Report on the Implementation of Resolution Reforms* for details.

in the process of developing regulations regarding contractual recognition of resolution stays. Some jurisdictions mention that banks other than G-SIBs and D-SIBs are mostly domestic and thus contract outside their jurisdiction infrequently, if at all. For those institutions, jurisdictions tend not to put additional requirements in place.

Thirteen jurisdictions⁷¹ indicate that they would rely on contractual recognition to facilitate cross-border enforceability of bail-in. Some jurisdictions (Brazil, Japan and South Africa) are considering requiring banks to use contractual recognition clauses for the cross-border enforceability of bail-in.

Other approaches include limiting the inclusion of foreign law governed liabilities in regulatory capital or LAC requirements, with a view to ensuring that liabilities in scope of bail-in are issued domestically under national law (e.g. Australia, China and US). One jurisdiction (Indonesia) indicates that it does not expect problems of cross-border enforceability to arise as bail-inable debt is expected to be issued only within its jurisdiction.

Challenges to cross-border enforceability of resolution actions that have been identified in resolution planning include:

- the role of the courts (in particular, whether they will accept contractual recognition clauses) and interaction with administrative resolution powers;
- operational issues relating to the bail-in process (legal and reporting issues, robustness of foreign resolution regimes as regards bail-in powers);
- market practices and understanding of the use of contractual recognition provisions in the case of resolution measures, including the willingness of (non-financial) counterparties to agree to the contractual recognition clauses;
- the operation of recognition of bail-in in practice (timeliness, competing regulatory requirements, understanding of regulation on contractual recognition, impracticability of wide scope of requirement to include bail-in contractual recognition clauses); and
- coordination and information exchange with other jurisdictions during the bail-in process.

Operational continuity

All jurisdictions engaged in resolution planning have worked or are working with banks to develop arrangements to support operational continuity of critical shared services in resolution. Jurisdictions that are home to G-SIBs are most advanced in putting in place such arrangements as part of their resolution planning efforts. G-SIBs – on their own accord or because of requirements set by authorities – have taken various steps to support operational continuity, including improving the resiliency of cross-border service delivery models and strengthening contractual arrangements (intragroup and third party) that govern the provision

⁷¹ Banking Union (France, Germany, Italy, Netherlands and Spain), Canada, Hong Kong, Japan, Singapore, South Africa, Switzerland, Turkey and UK.

of critical shared services. The steps taken to date are generally consistent with the FSB guidance in this area.⁷²

A key step taken by many jurisdictions in connection with resolution planning is to require banks to identify their critical shared services necessary to maintain the provision or facilitate the orderly wind-down of the firm's critical functions in resolution. However, only Japan, the UK and the US⁷³ have published guidance on arrangements to support operational continuity in resolution (largely reflecting key elements from the FSB guidance). Hong Kong is planning to issue policy standards on operational continuity and a further seven jurisdictions⁷⁴ have issued firm-specific guidance or internal guidance on assessing measures that support operational continuity.

Three jurisdictions that do not have a resolution planning process in place⁷⁵ report that they are taking steps as part of the wider regulatory framework to put in place arrangements to support operational continuity, though the scope of work and alignment with arrangements in the FSB guidance is unclear.

Key challenges identified by jurisdictions in this area include:

- mapping of critical services to critical functions;
- the capability of banks to produce data in an efficient and timely manner;
- banks' complexity and interdependencies between multiple legal entities; and
- contractual challenges including termination clauses and cross-default provisions.

Temporary funding in resolution

All jurisdictions engaged in resolution planning are progressing work on funding in resolution, but in many cases this work is still at an early stage. While the FSB's *Guiding Principles on Temporary Funding Needed to Support the Orderly Resolution of a G-SIB* was published in August 2016,⁷⁶ additional guidance on *Funding Strategy Elements of an Implementable Resolution Plan* was only published in June 2018.⁷⁷ Therefore, funding needs and sources in resolution are still being evaluated by relevant banks and authorities in many jurisdictions. Resolution planning work to date has focused on banks' capabilities to support monitoring, reporting and estimating funding needs in resolution as well as identifying firm assets and private market sources to be relied upon as preferred sources of funding in resolution.

⁷² See the August 2016 FSB *Guidance on Arrangements to Support Operational Continuity in Resolution* (<http://www.fsb.org/2016/08/guidance-on-arrangements-to-support-operational-continuity-in-resolution/>).

⁷³ See <https://www.fdic.gov/resauthority/2018subguidance.pdf>.

⁷⁴ Banking Union (France, Germany, Italy, Netherlands, Spain), Canada, Switzerland.

⁷⁵ Argentina, Indonesia and Turkey.

⁷⁶ See <http://www.fsb.org/2016/08/guiding-principles-on-the-temporary-funding-needed-to-support-the-orderly-resolution-of-a-global-systemically-important-bank-g-sib/>.

⁷⁷ See <http://www.fsb.org/2018/06/funding-strategy-elements-of-an-implementable-resolution-plan-2/>.

For example, the Banking Union and Switzerland have developed liquidity templates for G-SIBs and D-SIBs to evaluate liquidity needs in resolution.

Quantification of liquidity needs is a central component of resolution planning. For example in Canada, G/D-SIBs are required to undertake a scenario and sensitivity analysis at material legal entities as part of their annual planning submissions. In the US, banks are expected to have an appropriate model and process for estimating and maintaining sufficient liquidity at (or readily available to) material entities and a methodology for estimating the liquidity needed to successfully execute the resolution strategy.

Some jurisdictions have considered the cross-border aspects of temporary funding, including strategies to maintain adequate liquidity in different currencies.⁷⁸ For example, in the Banking Union, this analysis is ongoing for some banks (mainly G-SIBs), but for other banks the analysis is at an early stage.

Many jurisdictions⁷⁹ - including several that are not yet engaged in resolution planning⁸⁰ - have temporary public sector backstop funding mechanisms that could provide temporary liquidity in resolution. The mechanisms and authority responsible for such sources of temporary funding vary widely across jurisdictions and include central banks, resolution funds, finance ministries and deposit insurance funds (see Annex G). Most jurisdictions did not specify the role (if any) that public sector backstop funding mechanisms play in developing effective resolution strategies and plans.

Some jurisdictions have developed specific public sector backstop funding mechanisms to provide temporary liquidity in resolution. These include the US with the Orderly Liquidation Fund, and the Banking Union with the SRB's Single Resolution Fund (SRF).⁸¹ The Monetary Authority of Singapore (MAS) has the power to set up an ex-post resolution fund that can provide temporary liquidity to support the timely implementation of resolution measures.⁸² MAS expects the resolution fund to be used only when it is necessary to support orderly resolution, and only after private sources of funding has been exhausted. Legislative amendments to implement this arrangement are expected to come into force by the end of 2018.

In some other jurisdictions central banks have amended their existing mechanisms to enable liquidity support for banks in resolution. For example, in Canada the central bank amended its emergency liquidity assistance framework to allow temporary, short-term liquidity support in resolution. Similarly, in the UK the BoE has established a 'Resolution Liquidity Framework' that enables lending to banks within a resolution led by the BoE. Such liquidity

⁷⁸ China, France, Germany, Hong Kong, Italy, Japan, Netherlands, Singapore, Spain, Switzerland, UK, US.

⁷⁹ Australia, Argentina, Banking Union (France, Germany, Italy, Netherlands and Spain), Brazil, Canada, China, Hong Kong, India, Indonesia, Japan, Korea, Singapore, Russia, South Africa, Switzerland, Turkey, UK, US.

⁸⁰ Australia, Argentina, India, Indonesia, Korea, South Africa, Turkey.

⁸¹ See <https://srb.europa.eu/en/content/single-resolution-fund>. However, the use of the fund will not be taken into account in resolution planning.

⁸² See the February 2018 FSB peer review report of Singapore for details (<http://www.fsb.org/2018/02/peer-review-of-singapore/>).

support may be secured against a wide range of collateral, building on the collateral eligible in the BoE's published funding facilities as set out in the "Red Book".⁸³

Whether new or amended liquidity mechanisms are in place, resolution planning continues to be critical in evaluating the quantum, quality and availability of collateral to determine the feasibility of drawing on such funding in support of orderly resolution strategies.

Key challenges and related actions (planned or taken) in response by jurisdictions in the course of resolution planning include the capability of firms to produce data in an efficient and timely manner and the development of resolution-specific liquidity stress scenarios and testing.

Continuity of access to FMIs

Many jurisdictions are engaged in work on continuity of access to FMIs, including as part of recovery planning, but in most cases this is at an early stage and focused on G-SIBs.

Thirteen of the 16 jurisdictions⁸⁴ engaged in resolution planning reported steps taken or planned to address continuity of access to FMIs. Most jurisdictions are in the early stages of implementing the FSB guidance in this area.⁸⁵ Work on continuity of access to FMIs is not necessarily solely connected to resolution planning, and in some cases (e.g. Australia and Russia) is being taken forward as part of recovery planning.

The focus of resolution planning work in these jurisdictions is on mapping the FMIs to which the banks need access in resolution and the development of contingency plans by those banks (Canada, China, Japan, Banking Union, Singapore, Switzerland, UK, US). Playbooks are being developed in this context in two jurisdictions (UK and US). Another approach taken is to actively engage with local FMIs to ensure their rules are aligned with the resolution framework (Hong Kong).

In jurisdictions that engage in resolution planning for D-SIBs and other banks systemic in failure, continuity of access to FMIs is part of the analysis but mostly pursued on a case-by-case basis as needed. For some jurisdictions that have developed resolution plans focused on purchase and assumption or liquidation strategies for other banks, ensuring continuity of access in resolution is considered to be of limited relevance as the acquirer is expected to facilitate this or access is no longer needed (France, Netherlands).

Key challenges identified by jurisdictions in connection with resolution planning include:

- engaging with FMIs to remove unilateral termination rights;
- financing requirements (and determining the amount required) for the bank to keep access to FMIs during resolution;
- arrangements for FMI intermediaries, especially since those arrangements tend to be bespoke;

⁸³ See <https://www.bankofengland.co.uk/-/media/boe/files/markets/sterling-monetary-framework/red-book>.

⁸⁴ Banking Union (France, Germany, Italy, Netherlands and Spain), Canada, China, Hong Kong, Japan, Singapore, Switzerland, UK, US.

⁸⁵ See the July 2017 FSB *Guidance on Continuity of Access to FMIs for a Firm in Resolution* (<http://www.fsb.org/2017/07/guidance-on-continuity-of-access-to-financial-market-infrastructures-fmis-for-a-firm-in-resolution-2/>).

- dependence on the implementation of arrangements by the provider of the FMI services, which may be located abroad; and
- determination of proportionate requirements for ensuring access to FMIs for smaller banks that are systemic in failure and do not have resolution strategies that rely on the long-term continuation of the bank.

Valuation capability

Work on valuation is generally less advanced than other resolution planning work. There is significant variation in the inclusion of valuation in resolution planning and in the assessment of the operational capabilities to ensure the valuation process will be effective in the case of a resolution. At this stage, only a small number of jurisdictions (Banking Union,⁸⁶ UK and US)⁸⁷ have developed the conceptual framework and specified the information required for performing valuation and take it into account in resolution planning (e.g. adaptation of the type of valuations conducted and assumptions based on the resolution strategy pursued). Relevant regulations will be enhanced with more detailed guidelines in the Banking Union and in the UK, whereas the US has issued guidance following each cycle of resolvability assessments. Work is ongoing in other jurisdictions (e.g. Singapore and South Africa). Some other jurisdictions have not started developing a valuation framework or defined their requirements and do not take valuation into account during the resolution planning process, in some cases because they are waiting for resolution strategies to first be put in place. One jurisdiction (Mexico) reports that it developed its own valuation tools for some asset classes, such as loans.

Progress has been made in a small number of jurisdictions on the operational capabilities of banks to support the valuation process. In the UK, a policy on valuation capabilities to support resolution has been published,⁸⁸ and firms are now expected to enhance their capabilities to support valuations. The approach adopted by the US for its G-SIBs involves raising the level of expectations in terms of valuation capabilities and preparedness after each resolvability assessment cycle, with the findings of the previous cycle being used for enhancing guidance. As a result, the US authorities report that, compared to the first review of the resolution plans in 2012, significant progress has been made on topics such as the description of the firm's valuation processes for collateral or outstanding obligations under inter-affiliate and third-party derivatives contracts upon a close out event, and operational capabilities or the ability to provide reliable information.⁸⁹ Other authorities have included valuation in their

⁸⁶ See the EBA's final draft of the *Regulatory Technical Standards on valuation for the purposes of resolution and on valuation to determine difference in treatment following resolution* (June 2017, <https://eba.europa.eu/documents/10180/1853532/Final+draft+RTSs+on+valuation+in+resolution+%28EBA-RTS-2017-05+%26+EBA-RTS-2017-06%29.pdf>) and the *Draft Handbook on valuation for purposes of resolution* (November 2018, <https://eba.europa.eu/documents/10180/2120596/2018+11+12+-+Draft+Valuation+Handbook+-+clean.pdf>), and the SRB *Framework on Valuation* (February 2019, https://srb.europa.eu/sites/srb-site/files/framework_for_valuation_feb_2019_web_0.pdf).

⁸⁷ See <https://www.federalreserve.gov/supervisionreg/srletters/sr1401a1.pdf>.

⁸⁸ See *The Bank of England's policy on valuation capabilities to support resolvability* (June 2018, <https://www.bankofengland.co.uk/paper/2018/the-boes-policy-on-valuation-capabilities-to-support-resolvability>).

⁸⁹ See <https://www.federalreserve.gov/supervisionreg/resolution-plans.htm>.

resolvability assessment process (SRB), but without setting deadlines for compliance with requirements. The SRB will define and develop a standardised set of data required for valuation. One jurisdiction (Hong Kong) reports that it intends to include valuation in its resolvability assessment process once resolution strategies have been set. Other jurisdictions (Canada, Japan) have initiated a self-assessment process with banks to determine the valuation capabilities available, but without specifying the results or the consequences of that process.

5. Cross-border cooperation in bank resolution planning

This section describes the arrangements for cross-border cooperation and information sharing on resolution planning for G-SIBs and other cross-border banks (or banking groups) that could be systemic in failure. To the extent that it covers arrangements maintained by home authorities, it focuses only on those 16 jurisdictions that have a process in place for resolution planning. However, the participation of host authorities in such arrangements is not necessarily dependent on a process for resolution planning being in place in the host jurisdiction. Where the section reports on host participation, the analysis covers all FSB jurisdictions.

CMGs for G-SIBs

CMGs are maintained for all G-SIBs designated in 2017.⁹⁰ In one case, the CMG is formally supplemented by a regional CMG. The number of host jurisdictions represented in CMGs varies from zero (where the CMG is composed of only domestic authorities) to seven to eight (if one includes observers). In most cases, participating jurisdictions are represented by several authorities, including typically both supervisory and resolution authorities.

In all CMGs co-chaired by the SRB and the ECB, the EBA attends as an observer. National resolution authorities (NRAs) and national competent authorities of EU member states can be invited to those CMGs if the need arises.

Cross-border coordinating arrangements for non-G-SIBs

The *Key Attributes* only require CMGs for G-SIFIs. However, as set out in the FSB *Key Attributes Assessment Methodology for the Banking Sector*, home authorities should maintain appropriate and proportionate arrangements for cross-border cooperation and information sharing with host authorities to support effective resolution planning for other cross-border banks that could be systemic in failure.⁹¹

Some form of resolution-specific cross-border coordinating arrangement is maintained for non-G-SIBs in Canada, the EU and Japan (see Annex H).⁹²

- In Canada, cross-border coordinating arrangements that are functionally analogous to CMGs are maintained for its five D-SIBs. Membership is based on the Canadian authorities' assessment of the materiality of host jurisdictions to resolution of the group (for example, provision of critical functions or shared services, proportion of the group's consolidated assets located or revenue generated locally). The CDIC has also established an outreach programme to engage with host jurisdictions that do not participate in those arrangements, but where the D-SIB has operations that may be locally systemic.

⁹⁰ See the November 2018 FSB *Seventh Report on the Implementation of Resolution Reforms* (ibid) for details.

⁹¹ See EC 11.9 and EN 11(c) of the methodology document (<http://www.fsb.org/wp-content/uploads/Key-Attributes-Assessment-Methodology-for-the-Banking-Sector.pdf>).

⁹² Of the 16 FSB jurisdictions currently engaged in resolution planning, three (China, Mexico, Switzerland) report they do not have banks other than G-SIBs that are systemically significant in another jurisdiction, so that cross-border cooperation arrangements are not required.

- In Japan, there is a coordination arrangement for one D-SIB that has significant cross-border activity and is subject to resolution planning. Membership is based on the importance of the bank's local entities and the scale of its operations in the participating host jurisdictions.
- In the EU, resolution colleges are required by the BRRD for all cross-border EU banking groups. There are currently 19 resolution colleges led by the SRB for banks other than G-SIBs within the SRM,⁹³ and three led by the BoE in the UK. The colleges provide a forum for information sharing and decision-making about group resolution planning. Membership is specified by Article 88(2) of the BRRD and comprises relevant authorities in all EU member states where the group has subsidiaries in consolidated supervision or has significant branches. Non-EU resolution authorities may be included as (non-voting) observers, provided they are subject to confidentiality requirements that are equivalent to those of EU authorities. The EU resolution colleges, include binding and non-binding mediation procedures to resolve disagreements between EU jurisdictions.

Broadly, the jurisdictions involved in resolution-related arrangements are the same as those represented in the supervisory colleges for the banks in question, although the authorities that participate may vary.

Three home jurisdictions of cross-border systemic banks use bilateral contacts with host jurisdictions rather than multilateral arrangements.⁹⁴ Depending on the circumstances, bilateral arrangements may be an appropriate and proportionate form of coordination for non-G-SIBs. For example, the only D-SIB in Hong Kong that is not a subsidiary of a G-SIB is systemic in just one host jurisdiction, and the bilateral cooperation between the home and host authorities covers resolution planning. The Netherlands (for cross-border banks that are not within the remit of the SRB) and the US (for banks other than G-SIBs) consider bilateral contact to be the most efficient means of cross-border cooperation and information sharing. In the case of the Netherlands, this involves small banks subject to resolution planning that have cross-border activities considered significant by the host authorities in at least one other jurisdiction. Bilateral contact allows the Dutch authorities to delve deeper into the specifics of the bank's operation in the host jurisdiction, and is considered a more efficient arrangement than setting up a separate college if it is a small bank whose activity is outside the EU. In the case of the US, bilateral engagement with certain hosts that have specific, narrow issues to discuss is typically considered the most efficient and direct means of coordination.

Three jurisdictions⁹⁵ report the use of non-resolution-specific arrangements for cross-border cooperation on resolution, although the extent and depth of resolution discussion in these forums varies. Brazil and Singapore use supervisory colleges to exchange information and views on resolution of their D-SIBs, while the Trans-Tasman Council on Banking Supervision is a forum where the Australian and New Zealand authorities address, among other things, general crisis management and resolution-related issues for the four Australian D-SIBs

⁹³ Individual FSB jurisdictions within the Banking Union report that all nationally domiciled banks with cross-border operations are covered by the SRM.

⁹⁴ Hong Kong, Netherlands and the US.

⁹⁵ Australia, Brazil, Singapore.

that operate in both jurisdictions. However, the resolution discussions under these arrangements are not based on individual resolution plans and only a limited amount of institution-specific resolution-related information is shared.

From a host perspective, 10 jurisdictions (counting the Banking Union as a single jurisdiction)⁹⁶ report one or more D-SIBs that are foreign-owned, but half of those do not currently participate in any form of resolution-related cross-border coordinating arrangements (see Annex I). Within the EU, cross-border arrangements are in place (in the form of EU resolution colleges) for G-SIBs and other banks that are headquartered in a non-EU jurisdiction and have subsidiaries within the BU as well as in another EU member state.

Several jurisdictions report plans to establish cross-border coordinating arrangements for non-G-SIBs. The most concrete plans are reported by Germany, where resolution colleges will be established for cross-border banks not within the SRB remit. In other cases, plans are more contingent and without a clear timeframe. Brazil and South Africa currently discuss resolution related issues in supervisory colleges, but plan to establish more resolution-specific arrangements in future. In some instances, progress depends on finalisation of the national legal framework for resolution planning, to provide a legal basis for resolution planning and the cross-border sharing of information between resolution authorities.⁹⁷

Issues covered and experience of participation from a host perspective

There is broad consistency in the types of issues covered in CMGs and non-G-SIB coordinating arrangements. Most relevant home authorities⁹⁸ report that some or all of the following issues have been covered: actions that would be desirable for host authorities to take, or refrain from taking, in support of the resolution strategy; coordination of actions by home and host authorities in the event of a resolution; and cross-border enforceability of resolution actions. Other issues addressed include challenges in the application of MPE resolution strategies, and LAC requirements for such firms.

FSB jurisdictions that participate in CMGs or non-G-SIB coordinating arrangements as hosts generally report that participation has helped advance resolution planning for the relevant banks at a local level. Factors cited as supporting local planning include:

- further understanding of the connections between the local operations and the wider group and cross-border provision of critical shared services;
- greater alignment of local planning with the group resolution plan;
- improved understanding of barriers to resolution from a cross-border perspective and group-wide actions needed to remove them;
- articulation between group and local level implementation in areas such as funding and governance;

⁹⁶ Argentina, Banking Union (France, Germany, Italy, Netherlands and Spain), Brazil, Hong Kong, Indonesia, Mexico, Russia, Singapore, Turkey, UK.

⁹⁷ Korea, South Africa and Turkey.

⁹⁸ Australia, Canada, Hong Kong (in relation to its regional CMG), Japan, Banking Union (SRM), Switzerland.

- assistance in developing local and group-wide approaches and actions to improve resolvability;
- host feedback for home authorities to better structure resolution plans and ensure effective documentation; and
- opportunities to develop relationships and ongoing engagement with other resolution authorities.

From a host perspective, FSB jurisdictions identify a number of priority issues for CMGs and non-G-SIB to be addressed in coordinating arrangements. These include:

- further work on the interaction between local and group resolution plans and how to ensure that group resolution approaches adequately protect financial stability in host jurisdictions;
- home expectations about host actions in a resolution and allocation of responsibilities in resolution;
- matters relating to cross-border effectiveness and enforceability of resolution decisions, including supporting supervisory actions necessary to give effect to foreign resolution actions; and
- a clearer mapping of progress in removing barriers to resolvability.

A number of jurisdictions refer to TLAC or MREL and how to make bail-in operational. These included questions such as: scaling and prepositioning of internal TLAC; trigger arrangements between home and host authorities; mechanisms for up-streaming losses and down-streaming resources; determination of material sub-groups; and the availability of LAC resources to non-material subsidiaries. Several also refer to issues that are or have been the subject of FSB work, such as operational continuity, valuation, funding and liquidity, and the orderly wind-down of the derivatives and trading book activities.

Information sharing for resolution-related purposes

Information sharing in CMGs is based on CoAgs, which are in place for all but five G-SIBs (one of which is the new G-SIB designated in late 2017, for which the home authority is in the process of establishing a CoAg).⁹⁹ One jurisdiction (Hong Kong) that is home to a resolution entity for a G-SIB with a MPE strategy also intends to develop a CoAg for its regional CMG for that G-SIB.

For non-G-SIBs, development of institution-specific agreements for sharing resolution-related information is at an early stage, largely because resolution planning for these banks is still immature in most jurisdictions. Home authorities that maintain CMGs or cross-border coordinating arrangements for non-G-SIBs primarily rely on memoranda of understanding (MoUs) to support the exchange of resolution-related information with the participating host authorities. For example, Canada has MoUs with most authorities that participate in cooperative arrangements for its D-SIBs. The SRB relies on written arrangements

⁹⁹ As far as the other four CoAgs are concerned, agreement on their text has been reached in CMGs and the SRB (as the home authority of those G-SIBs) invited the relevant non-EU authorities to start the authorisation procedure to accede to the CoAgs.

and procedures for the operation of resolution colleges in accordance with the BRRD, and also has bilateral arrangements with six non-EU resolution authorities (as of January 2019) that provide a framework for information-sharing and cooperation for resolution-related purposes. The UK uses MoUs along with other arrangements such as CoAgs, non-disclosure agreements and supervisory information-sharing agreements to share resolution-related information with host authorities. Singapore¹⁰⁰ and South Africa rely on supervisory MoUs with host authorities, including resolution authorities, but these are more focused on supervisory coordination and do not generally provide for resolution-specific coordination and information sharing.

Very few jurisdictions report having experienced challenges to information sharing for G-SIBs or other cross-border banks, and those reported are of a procedural nature. These include, for example, delay to the finalisation of CoAgs arising from the internal processes of host authorities (UK), or the need to perform equivalence assessments of the confidentiality regimes of third countries as a pre-condition for information sharing under the applicable legal framework (SRB). The low reporting of challenges in information sharing may be attributed to the fact that institution-specific resolution plans for banks other than G-SIBs are still relatively underdeveloped and untested in a crisis, and information needs may therefore still be unclear. Moreover, CMGs and other coordinating arrangements generally comprise a small number of jurisdictions that will typically already have well-developed supervisory relationships in place, and their confidentiality frameworks are likely to be mutually familiar.

The extent and depth of resolution-related information that is shared with host authorities varies. Most home authorities that maintain CMGs or non-G-SIB coordinating arrangements report that they have shared information in relation to resolution planning and obstacles to resolvability with host authorities. However, only two home jurisdictions¹⁰¹ share full resolution plans and resolvability assessments. Others that have developed resolution plans share key points rather than the full plan.¹⁰² The US authorities provide information on resolution planning at their CMGs and share portions of the Title I resolution plans prepared by bank holding companies and the resolution plans prepared by insured depository institutions with individual host authorities on request.

Several host authorities that participate in CMGs or non-G-SIB arrangements report that they would find it useful to receive full resolution plans or access to detailed or specific information and supporting analysis.¹⁰³ Hong Kong notes that in some cases more clarity would be desirable about how the group strategy would be implemented locally or regionally. Korea indicates that it received the resolution plan through the CMG for a hosted G-SIB but had requested further information about the allocation of surplus TLAC across the group in order to assess the adequacy of local internal TLAC. The responses of the UK and US

¹⁰⁰ Singapore has a supervisory MoU that provides for resolution-specific coordination and information sharing and is in the process of negotiating supervisory MoUs with other key host authorities to include such clauses (where the supervisory authority is also the resolution authority) or resolution-specific MoUs (where the supervisory and resolution authorities in the host jurisdictions are separate entities).

¹⁰¹ Switzerland and UK. The SRB also shares full resolution plans and resolvability assessments, but only with EU college members in resolution colleges.

¹⁰² Canada, Banking Union (SRB), Hong Kong, Japan and Singapore (in the context of supervisory colleges).

¹⁰³ Brazil, Korea and Banking Union (SRB).

– which are major G-SIB home jurisdictions – suggest that the information currently received in their capacity as host is adequate.

Cooperative arrangements with non-CMG host authorities

The *Key Attributes* recognise that in the establishment and operation of CMGs, a balance needs to be struck between efficiency and inclusiveness. Accordingly, the membership of CMGs is generally limited to those core jurisdictions and authorities that are material for a group-wide resolution of the firm. However, if membership is limited in that way, it is possible that some jurisdictions, where operations of the firm are locally systemic but not material in the context of the overall group, will not be represented in the CMG. The *Key Attributes* therefore also require cooperation and information sharing between CMGs and jurisdictions where the firm has a systemic presence locally but that do not participate in the CMG (‘non-CMG host jurisdictions’).¹⁰⁴ In November 2015, the FSB published guidance on cooperation and information sharing with non-CMG host jurisdictions that covered, among other things, identification of such jurisdiction, forms of cooperation arrangements and information that might be exchanged.¹⁰⁵

Five G-SIB home authorities have established cooperation arrangements with non-CMG host authorities.¹⁰⁶ The form of these arrangements varies:

- Canada uses a single annual ‘Recovery and Resolution Outreach Panel’ to engage with host jurisdictions where a Canadian D-SIB has operations that are potentially locally systemic.
- Switzerland has established cooperation agreements for each of its two G-SIBs with Asian resolution and supervisory authorities, and also maintains a regional Asia-Pacific regional college (covering both G-SIBs) that meets annually to discuss topics that enhance preparedness for, and facilitate crisis management, recovery and resolution of, these banks.
- The BoE in the UK adopts two broad forms of arrangements. For one G-SIB, a regional CMG is in place, where discussion and information-sharing focuses on issues that are relevant for the application of the resolution strategy in that region. Non-public information may be shared in this forum. For other G-SIBs, the BoE engages with non-CMG host jurisdictions on the resolution strategy, and arrangements to support continuity of operations in those host jurisdictions, in the context of the firms’ global supervisory colleges, which have a wider membership than the CMGs. In those cases,

¹⁰⁴ KA 8.1 specifies that CMGs should cooperate closely with non-CMG host authorities. KA 11.8 states that non-CMG host authorities have access to recovery and resolution plans and information on measures that could have an impact on their jurisdiction. KA 9.1(iii) stipulates that, as well as dealing with information exchange between members of the CMG, CoAgs should set out the processes for information sharing with non-CMG host authorities.

¹⁰⁵ See the FSB *Guidance on Cooperation and Information Sharing with Host Authorities of Jurisdictions where a G-SIFI has a Systemic Presence that are Not Represented on its CMG* (November 2015, <http://www.fsb.org/2015/11/guidance-on-cooperation-and-information-sharing-with-host-authorities-of-jurisdictions-where-a-g-sifi-has-a-systemic-presence-that-are-not-represented-on-its-cmg/>).

¹⁰⁶ Canada, Japan, Switzerland, United Kingdom and US.

college meetings provide a forum for open discussion and an opportunity for non-CMG host to challenge the home authorities on how the resolution strategy would affect local operations. In addition, the BoE uses bilateral contacts to discuss specific issues or address questions from individual non-CMG host authorities.

- The US authorities rely on multilateral and bilateral engagement with host authorities that is reflected in formal statements of cooperation and MoUs to promote information sharing and coordination on supervisory and resolution issues, which vary in form and objectives depending on the host authority in question.
- Hong Kong, as a host authority for a G-SIB with a multiple point of entry resolution strategy, has established jointly with the relevant home authority a regional G-SIB CMG for the non-CMG host authorities in the region, and hosts annual meetings, supplemented by calls with individual authorities.

These arrangements share the same broad objectives: to communicate information about the resolution strategy for the G-SIB; to obtain information from the non-CMG host authorities about the G-SIB's operations in their own jurisdictions; and to coordinate with those host jurisdictions on aspects of resolution planning for the G-SIB and its resolvability. By contrast, the arrangements established by the Japanese authorities comprise provisions in MoUs in which the parties undertake to provide information about proposed crisis management arrangements on request and to communicate in a crisis.

Five FSB jurisdictions have identified the local operations of foreign G-SIBs as systemic but do not participate in the CMGs of those G-SIBs (see Annex J).¹⁰⁷ Authorities from only one of these jurisdictions (Argentina) participate in some form of cooperative arrangement with the home authority. The BoE has notified the home authority of its assessment and is seeking access to the CMG of the G-SIB in question. Most FSB jurisdictions¹⁰⁸ report that they have assessed whether they are host to locally systemic G-SIB operations. It is not clear whether this picture of non-CMG hosts among the FSB membership is complete, or whether other jurisdictions might in due course assess hosted G-SIB operations as locally systemic.¹⁰⁹

Only five host FSB jurisdictions report that they need additional information to understand the likely impact of the G-SIB's resolution strategy.¹¹⁰ This suggests that the majority of FSB host jurisdictions are currently satisfied with the information they receive. This may be due to the fact that FSB jurisdictions are more likely to be included in CMGs, or have the networks to obtain information compared to non-CMG host jurisdictions that are outside the FSB membership. It may not, therefore, be safe to extrapolate this finding more widely to other non-FSB member jurisdictions. Another possible explanation is that the

¹⁰⁷ Argentina, Indonesia, Russia, Turkey and UK.

¹⁰⁸ Argentina, Australia, Banking Union (France, Germany, Italy, Netherlands and Spain), Hong Kong, Indonesia, Mexico, Russia, Singapore, Switzerland, Turkey, UK.

¹⁰⁹ The peer review does not cover non-FSB jurisdictions that have carried out such an assessment, or that consider that G-SIB operations are locally systemic but do not receive resolution-related information from the home authority. The conclusions about the extent to which non-CMG host jurisdictions participate in cooperative arrangements are, therefore, necessarily partial and incomplete, particularly if the concept of 'non-CMG host' is more relevant to smaller jurisdictions.

¹¹⁰ Argentina, Australia, China, Germany and Indonesia.

question is premature for some G-SIB host jurisdictions that are still developing their resolution planning frameworks and might not yet be in a position to make an informed or comprehensive assessment of the information from, or types of engagement that will be needed with, home authorities.

Annex A: Relevant Provisions of the Key Attributes

10. Resolvability assessments¹¹¹

10.1 Resolution authorities should regularly undertake, at least for G-SIFIs, resolvability assessments that evaluate the feasibility of resolution strategies and their credibility in light of the likely impact of the firm's failure on the financial system and the overall economy. Those assessments should be conducted in accordance with the guidance set out in I-Annex 3.

10.2 In undertaking resolvability assessments, resolution authorities should in coordination with other relevant authorities assess, in particular:

(i) the extent to which critical financial services, and payment, clearing and settlement functions can continue to be performed;

(ii) the nature and extent of intra-group exposures and their impact on resolution if they need to be unwound;

(iii) the capacity of the firm to deliver sufficiently detailed accurate and timely information to support resolution; and

(iv) the robustness of cross-border cooperation and information sharing arrangements.

10.3 Group resolvability assessments should be conducted by the home authority of the G-SIFI and coordinated within the firm's CMG taking into account national assessments by host authorities.

10.4 Host resolution authorities that conduct resolvability assessments of subsidiaries located in their jurisdiction should coordinate as far as possible with the home authority that conducts resolvability assessment for the group as a whole.

10.5 To improve a firm's resolvability, supervisory authorities or resolution authorities should have powers to require, where necessary, the adoption of appropriate measures, such as changes to a firm's business practices, structure or organisation, to reduce the complexity and costliness of resolution, duly taking into account the effect on the soundness and stability of ongoing business. To enable the continued operations of systemically important functions, authorities should evaluate whether to require that these functions be segregated in legally and operationally independent entities that are shielded from group problems.

11. Recovery and resolution planning

11.1 Jurisdictions should put in place an ongoing process for recovery and resolution planning, covering at a minimum domestically incorporated firms that could be systemically significant or critical if they fail.

11.2 Jurisdictions should require that robust and credible RRP, containing the essential elements of Recovery and Resolution Plans set out in I-Annex 4, are in place for all G-SIFIs and for any other firm that its home authority assesses could have an impact on financial stability in the event of its failure.

¹¹¹ The peer review only covers elements of KA 10 on resolvability assessments to the extent that they are relevant for resolution planning.

11.3 The RRP should be informed by resolvability assessments (see Key Attribute 10) and take account of the specific circumstances of the firm and reflect its nature, complexity, interconnectedness, level of substitutability and size.

11.4 Jurisdictions should require that the firm's senior management be responsible for providing the necessary input to the resolution authorities for (i) the assessment of the recovery plans; and (ii) the preparation by the resolution authority of resolution plans.

Recovery plan

[...]

Resolution plan

11.6 The resolution plan is intended to facilitate the effective use of resolution powers to protect systemically important functions, with the aim of making the resolution of any firm feasible without severe disruption and without exposing taxpayers to loss. It should include a substantive resolution strategy agreed by top officials and an operational plan for its implementation and identify, in particular:

- (i) financial and economic functions for which continuity is critical;
- (ii) suitable resolution options to preserve those functions or wind them down in an orderly manner;
- (iii) data requirements on the firm's business operations, structures, and systemically important functions;
- (iv) potential barriers to effective resolution and actions to mitigate those barriers;
- (v) actions to protect insured depositors and insurance policy holders and ensure the rapid return of segregated client assets; and
- (vi) clear options or principles for the exit from the resolution process.

11.7 Firms should be required to ensure that key Service Level Agreements can be maintained in crisis situations and in resolution, and that the underlying contracts include provisions that prevent termination triggered by recovery or resolution events and facilitate transfer of the contract to a bridge institution or a third party acquirer.

11.8 At least for G-SIFIs, the home resolution authority should lead the development of the group resolution plan in coordination with all members of the firm's CMG. Host authorities that are involved in the CMG or are the authorities of jurisdictions where the firm has a systemic presence should be given access to RRPs and the information and measures that would have an impact on their jurisdiction.

11.9 Host resolution authorities may maintain their own resolution plans for the firm's operations in their jurisdictions cooperating with the home authority to ensure that the plan is as consistent as possible with the group plan.

Regular updates and review

11.10 Supervisory and resolution authorities should ensure that RRPs are updated regularly, at least annually or when there are material changes to a firm's business or structure, and subject to regular reviews within the firm's CMG.

11.11 The substantive resolution strategy for each G-SIFI should be subject, at least annually, to a review by top officials of home and relevant host authorities and, where appropriate, the review should involve the firm's CEO. The operational plans for implementing each resolution strategy should be, at least annually, reviewed by appropriate senior officials of the home and relevant host authorities.

11.12 If resolution authorities are not satisfied with a firm's RRP, the authorities should require appropriate measures to address the deficiencies. Relevant home and host authorities should provide for prior consultation on the actions contemplated.

Annex B: Abbreviations for financial authorities in FSB jurisdictions cited in this report

Argentina

SEDESA Seguro de Depósitos S.A., deposit insurance scheme

Australia

APRA Australian Prudential Regulation Authority, integrated financial regulator

RBA Reserve Bank of Australia, central bank

Brazil

BCB Central Bank of Brazil, central bank and banking supervisor

Canada

CDIC Canada Deposit Insurance Corporation, deposit insurer and resolution authority

OSFI Office of the Superintendent of Financial Institutions, prudential supervisor

China

PBC People's Bank of China, central bank

CBIRC China Banking and Insurance Regulatory Commission

European Union

SRB Single Resolution Board (part of SRM together with the Banking Union national resolution authorities)

France

ACPR Autorité de Contrôle Prudentiel et de Résolution, prudential supervisor and resolution authority (part of SRM)

Germany

BaFin Federal Financial Supervisory Authority, integrated financial regulator and resolution authority (part of SRM)

Hong Kong

HKMA Hong Kong Monetary Authority, monetary authority, banking supervisor and bank resolution authority

India

RBI Reserve Bank of India, central bank and banking supervisor

Indonesia

BI Bank Indonesia, central bank

LPS Indonesian Deposit Insurance Corporation, deposit insurer

Italy

BoI Bank of Italy, central bank, national resolution authority and banking supervisor (part of SRM)

Japan

JFSA Japan Financial Services Agency, integrated financial regulator

DICJ Deposit Insurance Corporation of Japan, deposit insurer

Korea

KDIC Korea Deposit Insurance Corporation, deposit insurance and bank resolution agency

Mexico

IPAB Institute for the Protection of Banking Savings, deposit insurance and bank resolution authority

Netherlands

DNB De Nederlandsche Bank, central bank, national resolution and deposit insurance authority and integrated financial regulator (part of SRM)

Russia

BoR Bank of Russia, central bank, resolution authority (with DIA) and banking supervisor

DIA State Corporation Deposit Insurance Agency, deposit insurance and bank resolution authority (with BoR)

Singapore

MAS Monetary Authority of Singapore, central bank, integrated financial regulator and resolution authority

South Africa

SARB South African Reserve Bank, central bank

Spain

BoS Bank of Spain, central bank, also responsible for resolution planning (part of SRM)

FROB Spanish executive resolution authority (part of SRM)

Switzerland

SNB Swiss National Bank, central bank

FINMA Financial Market Supervisory Authority, integrated financial regulator

Turkey

SDIF Savings Deposit Insurance Fund, deposit insurance and bank resolution authority

United Kingdom

BoE Bank of England, central bank, resolution authority

United States

FDIC Federal Deposit Insurance Corporation, deposit insurance and bank resolution agency

FRB Federal Reserve Board, central bank and prudential supervisor

Annex C: Planned reforms to bank resolution planning frameworks

Jurisdiction	Scope of reforms	Current stage	Expected finalisation
<i>Final legislation, rules or regulations have been approved but are not yet in force</i>			
Russia	Develop resolution plans on the basis of recovery plans submitted by D-SIBs under existing legal framework	Draft regulation	2019
<i>Reforms issued for consultation or submitted to the legislature</i>			
EU	Update four pieces of legislation (BRRD, SRMR, CRR, CRD) and adopt new secondary legislation. Introduce TLAC standard into EU law and adapt the existing MREL requirement. Amend provisions on contractual recognition of stay powers and bail-in.	Political agreement in December 2018	2019
Korea	Introduce resolution planning requirements and resolvability assessments.	Reform or policy proposals published	Not known
South Africa	Introduce resolution planning requirements, additional resolution powers, resolvability assessments, provision for cross-border cooperation and powers to require changes to improve resolvability.	Draft legislation published following public consultation	2019
<i>Reforms under discussion</i>			
Australia	A crisis management prudential standard including recovery and resolution planning and LAC requirements, and accompanying guidance, are under development.	Under development	Discussion paper planned for 2019
Brazil	Introduce resolution planning requirements, resolvability assessments and powers to require changes to improve resolvability.	Draft legislation prepared	Not known
Indonesia	Introduce a roadmap for the development of resolution framework, establish dedicated working group on bank resolution planning, conduct pilot project to require D-SIBs to submit resolution plan in 2019H2, and finalise regulation on bank resolution planning by the end of 2019.	Under development	By 2019
Saudi Arabia	Introduce resolution planning requirements, resolvability assessments and powers to require changes to improve resolvability.	Draft legislation prepared	By 2020
Turkey	Introduce resolution planning requirements, resolvability assessments and powers to require changes to improve resolvability.	Draft legislation prepared	Not known
<i>No reforms planned</i>			
Argentina	Certain D-SIBs are required to submit information for resolution planning purposes but there is no resolution planning framework at present.		
India	A draft bill to reform the resolution regime and introduce resolution planning requirements was withdrawn by the Indian government in 2018.		

Annex D: Overview of resolution planning frameworks

Jurisdiction	Source	Scope	Frequency of review	Content of resolution plans set out in rules, guidance or policies	External experts used to assist in development/review of resolution plans	Primary sources of resolution planning data	Primary authority responsible for resolution planning (see Annex B)
Brazil	Supervisory powers	D-SIBs	Annually	No	No	Supervisory process	BCB
Canada	By-law in place	G-SIBs, D-SIBs and other institutions as deemed necessary by CDIC	Annually	Yes	Yes	Bank resolution plans and/or recovery plans	CDIC
China	Regulatory framework and guidelines	G-SIBs (and D-SIBs in the future)	Annually	Yes	No	Supervisory process and bank submissions	PBC/CBIRC
France	Statute	All banks ¹	At least annually and after material firm changes	Yes	No	Bank recovery plans, separate data requests	SRB/ACPR
Germany	Statute	All banks ¹	At least annually and after material firm changes	Yes	No	Bank recovery plans, separate data requests	SRB/BaFin
Hong Kong	Statute	All banks	At least annually	No	No	Periodic submissions or separate data requests	HKMA
Italy	Statute	All banks ¹	At least annually and after material firm changes	Yes	No	Bank recovery plans, separate data requests	SRB/Bank of Italy
Japan	Supervisory guidelines	G-SIBs and D-SIBs (if necessary)	At least annually and after material firm changes	No	No	Periodic submissions or separate data requests	JFSA
Mexico	Statute & guidelines	All banks	As necessary	Yes	No	Periodic submissions or separate data requests	IPAB
Netherlands	Statute	All banks ¹	At least annually and after material firm changes	Yes	Yes (for banks under its remit)	Bank recovery plans, separate data requests	SRB/DNB
Russia	Statute	D-SIBs	At least annually	No	No	Supervisory process	Bank of Russia
Singapore	Statute	D-SIBs	At least annually and after material firm changes	No	No	Periodic submissions or separate data requests	MAS

Jurisdiction	Source	Scope	Frequency of review	Content of resolution plans set out in rules, guidance or policies	External experts used to assist in development/review of resolution plans	Primary sources of resolution planning data	Primary authority responsible for resolution planning (see Annex B)
Spain	Statute	All banks ¹	At least annually and after material firm changes	Yes	No	Bank recovery plans, separate data requests	SRB/BoS
Switzerland	Statute	G-SIBs and D-SIBs	At least annually and after material firm changes	Yes	Yes	Bank resolution plans and/or recovery plans	FINMA
UK	Statute	All banks	At least annually and after material firm changes	Yes	No	Periodic submissions or separate data requests	BoE
US	Statute (Title I plans), no requirement but done in practice (Title II plans)	G-SIBs and other banks with assets > US\$250 billion and certain banks between US\$100 billion and US\$250 billion	Firm-developed plan: annually with extensions as appropriate. Agency-developed plans: ongoing basis	Yes	No	Bank resolution plans and/or recovery plans	FDIC

Notes:

- 1 This includes the SRB for: (i) banks that are considered significant or in relation to which the ECB has decided to exercise directly all of the relevant supervisory powers (SIs); and (ii) cross-border groups, where both the parent and at least one subsidiary bank are established in two different participating Member States of the Banking Union and national resolution authorities for Less Significant Institutions (LSIs).

Annex E: Resolvability assessments and powers to require banks to make changes to improve their resolvability

Jurisdiction	Source	Scope	Aspects covered set forth in rules, guidance, or policies	Power to require changes to improve resolvability
Australia				Yes
Banking Union (SRM)	Law, statute, supervisory rules, or regulations	All banks (SIs and other cross-border banks)	Yes	Yes
Canada	Undertaken as a matter of practice	G-SIBs and D-SIBs	Yes	No
China	Law, statute, supervisory rules, or regulations	G-SIBs (and D-SIBs in the future)	Yes	No
France	Law, statute, supervisory rules, or regulations	All banks (non-cross-border LSIs)	Yes	Yes
Germany	Law, statute, supervisory rules, or regulations	All banks (non-cross-border LSIs)	Yes	Yes
Hong Kong	Law, statute, supervisory rules, or regulations	All banks	Yes	Yes
Italy	Law, statute, supervisory rules, or regulations	All banks (non-cross-border LSIs)	Yes	Yes
Japan	Law, statute, supervisory rules, or regulations	G-SIBs and D-SIBs (if necessary)	Yes	Yes
Netherlands	Law, statute, supervisory rules, or regulations	All banks (non-cross-border LSIs)	Yes	Yes
Singapore	Law, statute, supervisory rules, or regulations	D-SIBs ¹	No	Yes
Spain	Law, statute, supervisory rules, or regulations	All banks (non-cross-border LSIs)	Yes	Yes
Switzerland	Law, statute, supervisory rules, or regulations	G-SIBs and D-SIBs	Yes	Yes
UK	Law, statute, supervisory rules, or regulations	All banks	Yes	Yes
US	Law, statute, supervisory rules, or regulations	G-SIBs and other banks with assets > US\$250 billion, and certain banks between US\$100-250 billion	Yes	Yes

Notes: Only FSB jurisdictions that carry out resolvability assessments or have powers to require changes to improve resolvability are included in this table. SI = Significant institution (EU). LSI = Less significant institution (EU).

¹ In the case of Singapore, while resolvability assessments are currently performed only for D-SIBs, MAS' powers extend to all banks.

Annex F: LAC requirements for banks other than G-SIBs

Jurisdiction	Scope	RWA / Leverage requirement	Flexibility / adaptation to the resolution strategy	Eligibility criteria	Entry into force	Comments
Canada	D-SIBs	21.5% RWA (i.e. 18% RWA plus 2.5% Capital Conservation Buffer and a 1% surcharge) and a minimum TLAC Leverage Ratio of 6.75%.		Regulatory capital instruments and eligible bail-in debt (subject to permanent conversion – in whole or in part – into common shares).	Until 1 November 2021	D-SIBs have voluntarily agreed not to distribute bail-in debt to retail investors in the primary market.
Banking Union	All institutions	Default Loss Absorption Amount [= Pillar 1 (P1) + Pillar 2 Requirement (P2R) + Combined Buffer Requirement (CBR)] + Default Recapitalization Amount (RCA) [= P1 + P2R] + Default Market Confidence Charge [= CBR – 125 basis points]	P1 + P2R + CBR when preferred resolution strategy is liquidation. On a bank-by-bank basis, the SRB may allow (with due justification) 3 possible adjustments to the RWA basis: 1) effect of balance sheet depletion; 2) use of recovery options; and 3) restructuring plan divestments and sales. In case of transfer strategies, the SRB will apply a scaling factor of minus 20% of the total assets applied to the RWA basis of the RCA amount.	Subordinated and senior debt. Banks without colleges that are considered as other systemically important institutions (O-SIIs) ¹¹² are expected to fulfil a minimum percentage of subordinated instruments equal to 12% of RWA plus the CBR, pending further assessment of NCWO risks.	Binding MREL targets are set with a bank-specific transition period up to a maximum of 4 years.	Reference to a 8% of Total Liabilities + Own funds benchmark
Hong Kong	All locally-incorporated banks whose	Twice the higher of capital or leverage ratio requirements.	Up/down flexibility, depending on resolution tools	Subordinated debt only, unless structurally	Within 24 months of being	Sale and distribution only permitted to

¹¹² O-SIIs are institutions that, due to their systemic importance, are more likely to create risks to financial stability. The EBA methodology for O-SII identification reflects the principles in the BCBS framework for D-SIBs.

	preferred resolution strategy contemplates use of stabilisation tools.		to be used and other relevant factors.	subordinated (i.e. issued from clean holding company).	classified as resolution entities, or over longer period if specified.	'Professional Investors'. Rules came into operation on 14 December 2018.
Japan	Certain D-SIBs deemed i) of particular need for cross-border resolution and ii) of particular systemic significance.	From 31 March 2021 to 30 March 2024, 16% of RWA and 6% of TLAC Leverage Ratio. From 31 March 2024, 18% of RWA and 6.75% of TLAC Leverage Ratio. (excluding capital buffer)		Regulatory capital instruments and eligible bail-in debt (same as TLAC eligible instrument for G-SIBs).	31 March 2019	At present, 1 D-SIB will be subject to the rule from 31 March 2021.
Switzerland	D-SIBs	Gone concern capital requirements + 40% of going-concern requirements for Swiss G-SIBs, resulting in 18% RWA (incl. 4.86% buffer) and 6.3% Leverage Ratio (incl. 1.5% buffer)		Regulatory capital instruments and eligible bail-in bonds.	1 January 2019, with phase-in of the gone concern capital requirements component from 2019-26.	
UK	All firms subject to a resolution strategy.	Interim requirement: higher of $2xP1 + P2A$ or $2x$ leverage ratio. Full requirement: higher of $2x(P1 + P2A)$ or $2x$ leverage ratio	Quantum dependent on whether the preferred resolution strategy for a firm is bail-in, partial transfer, or insolvency.	Full subordination for all bail-in firms Subordination may not be necessary for any partial transfer or insolvency firms (only deposits or other preferred liabilities would be transferred.	Interim requirements to take effect in 2019-20, before the full requirements apply from 1 January 2022.	

Annex G: Overview of public funding backstop mechanisms

Jurisdiction	Funding source(s)	Responsible authority	Applicable firms	Funding basis
Argentina	Central bank facilities	BCRA	Authorised financial entities	Collateralised
Australia	Central bank facilities	RBA	Authorised deposit taking institutions	Collateralised
Banking Union	Central bank facilities (ordinary operations, ELA) ¹	ECB, national central banks	Financially sound financial institutions	Collateralised
	Single Resolution Fund ¹	SRB	Banks within the Banking Union that are put in resolution	Collateralised or uncollateralised
Brazil	Discount facility	Central Bank	Authorised institutions	Collateralised
Canada	Emergency Lending Assistance	Bank of Canada	Canadian banks	Collateralised
	Deposit insurance fund and/or CDIC borrowing authority	CDIC	Canadian banks	Collateralised or uncollateralised
China	Central bank facilities and deposit insurance fund	PBC	All chartered banking institutions; insured deposit-taking banking institutions	Collateralised or uncollateralised
Hong Kong²	Resolution funding account ³	HKMA	Banks	Collateralised or uncollateralised
India	Central bank facilities	RBI	Banks	Collateralised
Indonesia	Government	LPS	Banks	Collateralised or uncollateralised
Japan	Deposit insurance fund	DICJ	Specified bridge holding company	Collateralised or uncollateralised
Korea	Deposit insurance fund	KDIC	Eligible financial institutions ⁴	Collateralised or uncollateralised

Mexico	Central bank facilities	Banco de México	Banks whose banking license has not been revoked (even if undergoing a resolution process)	Collateralised
Russia	Central bank facilities	Bank of Russia/State Corporation Deposit Insurance Agency	Banks	Collateralised or uncollateralised
Saudi Arabia	N/A	N/A	N/A	N/A
Singapore	Resolution fund	MAS	Singapore-incorporated banks and foreign-owned banks ⁵	Collateralised or uncollateralised
South Africa	Reserves	South African Reserve Bank	All banks	Collateralised
	Committed Liquidity Facility	South African Reserve Bank	Banks that apply for a contractual facility and for which a facility is granted at a fee	Collateralised
	Emergency Liquidity Assistance	South African Reserve Bank	Any financial institution, at the discretion of the SARB and against collateral	Collateralised
Switzerland	ELA	SNB	Swiss banks that are systemic and solvent	Collateralised
Turkey	Central bank facilities/Treasury funding	Central bank/SDIF	All banks for open bank assistance/banks transferred to the SDIF whose all or majority of shares owned by the SDIF for resolution funding	Collateralised or uncollateralised
UK	Resolution Liquidity Framework and Central bank facilities	BoE	Banks, building societies and investment firms	Collateralised
US	Orderly Liquidation Fund	US Treasury and FDIC	Financial companies for which the FDIC has been appointed receiver under Title II of the Dodd Frank Act	Collateralised or uncollateralised

Notes:

- 1 These funding sources are not considered for the purposes of resolution planning in the Banking Union.
- 2 Bespoke resolution funding facilities have yet to be established. For Hong Kong, provisions relating to resolution funding arrangements are set out in the statutory resolution regime, but the operational facilities have yet to be designed.

- 3 Resolution funding account is an account into or from which a range of moneys related to the making of a stabilisation option/resolution are paid as defined in section 176 of the Financial Institutions (Resolution) Ordinance in Hong Kong.
- 4 KDIC-insured financial institutions under the Depositor Protection Act (including deposit-taking institutions such as banks; financial holding companies, securities companies, insurance companies; and branches and subsidiaries of foreign-owned banks operating in Korea).
- 5 Foreign-owned banks include the subsidiary or branch in Singapore, including where MAS has recognised or supported resolution measures taken by a foreign home authority in a group-wide resolution in respect of a subsidiary or branch in Singapore of the foreign-owned bank.

Annex H: Cross-border coordinating arrangements for non-G-SIBs by home authorities

Jurisdiction (non-G-SIB home)	Cross-border coordination arrangements maintained?	Reason for not maintaining cross-border coordinating arrangements for non-G-SIBs	Other means for cross-border resolution coordination?
Brazil	No	Resolution legal reforms still pending. Working on project to develop regional cooperation framework for the planning and execution of resolution measures.	Supervisory colleges ¹
Canada	Yes, for D-SIBs		
China	No	Most Chinese non-G-SIBs do not have cross-border activities. The authorities maintain close bilateral dialogue and crisis management cooperation with the authorities of host jurisdiction where they have significant cross-border operations.	MoUs
SRM	Yes, resolution colleges ²		
France	No	Maintained by SRB	No
Germany	No	Resolution colleges for relevant institutions maintained by SRB. European resolution colleges for some German cross-border banks outside of SRB remit to be set up in 2019-2020.	No
Hong Kong	No	There is only one D-SIB that is not part of a G-SIB. The HKMA maintains close bilateral dialogue with the authorities of the host jurisdiction where it has significant cross-border operations.	Bilateral contacts
Italy	No	Maintained by SRB	No
Japan	Yes, for one D-SIB		
Mexico	No	Mexican D-SIBs do not have any significant foreign operations.	No
Netherlands	No	Maintained by SRB. Most Dutch banks not within SRB remit do not have cross-border activities. For those that do, DNB uses bilateral contacts.	Bilateral contacts
Russia	No	Limited cross-border presence of Russian D-SIBs.	Supervisory college
Singapore	No	Discuss resolution-related matters in supervisory college meetings.	Supervisory college ³
Spain	No	Maintained by SRB	No
Switzerland	No	Swiss D-SIBs do not have significant cross-border operations – small, non-material entities only.	No
UK	Yes, resolution colleges ²		
US	No	Found bilateral engagement to be most efficient and effective means of cross-border coordination.	Bilateral contacts

Notes: This table shows only the cross-border coordinating arrangements for the 16 FSB jurisdictions (including the SRM in the Banking Union) that have in place a process for resolution planning that involves the preparation and maintenance of resolution plans and strategies for banks that are systemic in failure.

- 1 Brazil reported that general resolution issues are raised in supervisory colleges. Resolution-specific coordinating arrangements are planned but not currently in place.
- 2 Under the BRRD, resolution colleges are required when a parent undertaking established in a Banking Union Member State has at least one subsidiary falling into the scope of Article 2 SRMR or a significant branch of a credit institution in a non-Banking Union Member State.
- 3 Singapore reports that significant elements of institution-specific resolution plans, such as the resolution strategy and key points of resolvability assessments, are shared in its supervisory college.

Annex I: Host participation in cross-border coordinating arrangements for their foreign-owned D-SIBs

Jurisdiction	No. of foreign owned D-SIBs (of which: G-SIBs)	Legal form	Member of cross-border coordinating forum?
Argentina	2 (1)	Subsidiaries	No
Brazil	1 (1)	Subsidiary	Yes (CMG)
EU – Banking Union	10 (3)	Subsidiaries	Yes (non-BU resolution colleges)
Hong Kong	5 (5)	Subsidiaries	Yes (CMGs)
Indonesia	5 (1)	Subsidiaries	No
Mexico	5 (3)	Subsidiaries	Yes (CMGs)
Russia	3 (2)	Subsidiaries	No
Singapore	4 (3)	Subsidiaries and branches	Yes (CMGs)
Turkey	2 (1)	Subsidiaries	No
UK	9 (8)	Subsidiary	Yes

Note: In the case of the Banking Union, this refers to D-SIBs that are headquartered outside Banking Union jurisdictions (whether in another EU member state or elsewhere).

Annex J: Non-CMG host jurisdictions with systemic G-SIB presence and their participation in cooperation and information sharing arrangements with home authorities

Jurisdiction	Locally systemic G-SIB presence? (number of G-SIBs)	Notified home?	Cooperation and information sharing arrangements with G-SIB home authorities	Desired changes or additional information (if any)
Argentina	Yes (1)	Yes	Supervisory colleges (no resolution-specific information shared)	Satisfied with current arrangements: local subsidiaries are autonomous for resolution-planning purposes.
Indonesia	Yes (1)	No	No	More information and involvement
Russia	Yes (2)	TBD	No	
Turkey	Yes (1)	No	No	Regulation on resolution planning not been enacted yet, so no information sharing and interactions with G-SIB home on resolution planning.
UK	Yes (10) ¹	Yes	No	Engaging with home for access to CMG.

Notes: The table features only those FSB jurisdictions reporting that a foreign G-SIB has a local systemic presence without participation by national authorities in the G-SIB’s CMG. For Banking Union jurisdictions (France, Germany Italy, Netherlands, Spain), the assessment of whether the local operations of non-Banking Union G-SIBs are systemic is carried out by the SRB in consultation with the relevant national authorities. The SRB reports that there are no G-SIBs having a systemic presence within the territory of the Banking Union for which it does not participate in the CMG. If the local G-SIB entity is not classified as a significant institution by the ECB or a cross-border bank, it falls within the remit of the national EU resolution authorities rather than the SRB. However, no Banking Union member state has identified any such entities as locally systemic.

1 The number of locally systemic foreign G-SIBs in the UK in this table (10) differs from the number of D-SIBs belonging to foreign G-SIBs in Annex I (8) because this table also includes systemically important branches of foreign (non-EU) G-SIBs operating in the UK.