

## **II-Annex 1: Resolution of Financial Market Infrastructures (FMIs) and FMI Participants**

Part I of this Annex (“Resolution of Financial Market Infrastructures”) provides guidance on the implementation of the *Key Attributes of Effective Resolution Regimes for Financial Institutions* (the ‘*Key Attributes*’, KAs) in relation to resolution regimes for systemically important FMIs.

Part II of this Annex (“Resolution of FMI Participants”) deals with the resolution of FMI participants that could be systemically significant or critical in the event of failure.

### **I. Resolution of Financial Market Infrastructures**

The *Key Attributes* state that FMIs – defined to include payment systems, central securities depositories (CSDs), securities settlement systems (SSSs), central counterparties (CCPs) and trade repositories (TRs) – should be subject to resolution regimes that apply the objectives and provisions of the *Key Attributes* in a manner appropriate to FMIs and their critical role in financial markets (KA 1.2).

This guidance supplements the *Key Attributes* – which apply generally to resolution regimes for all systemically significant or critical financial institutions, including FMIs - by indicating how particular KAs, or elements of particular KAs, should be interpreted when applying to resolution regimes for FMIs or specific classes of FMI. The presumption is that all FMIs are systemically important or critical, at least in the jurisdiction where they are located, typically because of their critical roles in the markets they serve. However, an authority may determine that an FMI in its jurisdiction is not systemically important or critical and, therefore, not subject to the *Key Attributes*. The scope of the guidance is aligned with that of the CPSS-IOSCO *Principles for financial market infrastructures* (PFMI)<sup>13</sup> and makes clear that FMIs owned and operated by central banks are not subject to the *Key Attributes*.

Where relevant, this guidance sets out specific features of resolution regimes appropriate for different types of FMIs. This Annex should be read with the *Key Attributes*, and the guidance on individual KAs should be considered in conjunction with the KA to which it relates. The Annex does not replace the *Key Attributes*, and there should be no inference that a particular KA or element of a KA does not apply to an FMI simply because there is no supporting provision in this Annex.<sup>14</sup>

This Annex should also be read alongside PFMI which require systemically important FMIs to have a comprehensive and effective recovery plan.<sup>15</sup> More specifically, the PFMI require

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<sup>13</sup> <http://www.bis.org/cpmi/publ/d101.htm>

<sup>14</sup> Where components of this Annex have been deemed important for purposes of assessing compliance with the *Key Attributes*, those components are explicitly reflected in the Key Attributes Assessment Methodology.

<sup>15</sup> Further guidance on the recovery planning process and the content of recovery plans is set out in the CPMI-IOSCO report on Recovery of financial market infrastructures. [To add hyperlink when guidance is published.]

FMIs to establish explicit rules and procedures that address fully any credit losses they may face as a result of any individual or combined default by participants with respect to any of their obligations to the FMI; how potentially uncovered credit losses would be allocated; and how financial resources that the FMI may deploy during a stress event are replenished.<sup>16</sup> The PFMI also require FMIs to establish explicit rules and procedures that enable the FMI to effect same-day, and where appropriate, intra-day and multi-day settlement of payment obligations on time following any individual or combined default among its participants.<sup>17</sup>

Nevertheless, there may be circumstances where resolution of the FMI is necessary. Entry into resolution should be possible, subject to determination by the relevant authorities, if the recovery plan and any rules and procedures for loss allocation have failed to return the FMI to viability or have not been implemented in a timely manner, or the relevant regulator, oversight, supervisory, or resolution authority determines that, even though the plan may not yet have been fully implemented or exhausted, recovery measures are not reasonably likely to return the FMI to viability or would otherwise be likely to compromise financial stability. This requires FMIs to be subject to resolution regimes that apply the objectives and provisions of the *Key Attributes* in a manner as appropriate to FMIs and their critical role in financial markets (KA 1.2).

## 1. Objectives (KA Preamble)

1.1 An effective resolution regime for FMIs should pursue financial stability and allow for the continuity of critical FMI functions without exposing taxpayers to loss, either by restoring the ability of the FMI to perform those functions as a going concern or ensuring the performance of those functions by another entity or arrangement coupled with the orderly wind-down of the FMI in resolution. It should, as applicable, aim to:

- (i) achieve continuity and timely completion of critical payment, clearing, settlement and recording functions;
- (ii) facilitate the timely settlement of obligations of the FMI;
- (iii) maintain continuous access of participants to securities or cash accounts provided by the FMI and securities or cash collateral posted to and held by the FMI that is owed to such participants;
- (iv) avoid any disruption in the operation of links between the FMI in resolution and other FMIs that would have a material negative effect on financial stability or the functioning of markets; and
- (v) safeguard, preserve and enable continuous processing of, and access to, data stored in a TR.

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<sup>16</sup> Principle 4, Key Consideration 7.

<sup>17</sup> Principle 7, Key Consideration 10.

## **2. Scope of resolution regimes for FMIs (KA 1)**

### *Application to systemically important FMIs*

- 2.1** FMIs that are systemically important should, irrespective of their licensing status (for example, FMIs licensed as banks), be subject to a resolution regime that applies the *Key Attributes* in a manner appropriate to the specific characteristics of the type of FMI in question and its critical role in financial markets. The resolution regime should include the features that are relevant to the specific types of FMI covered by the scope of that regime.
- 2.2** The *Key Attributes* and Guidance set out in this Annex do not apply to FMIs owned and operated by central banks.

### *Systemic importance*

- 2.3** Authorities should have regard to the presumptions set out in paragraph 1.20 of the CPSS-IOSCO *Principles for Financial Market Infrastructures*<sup>18</sup> regarding the systemic importance of FMIs.

## **3. Resolution authority<sup>19</sup> for FMIs (KA 2)**

### *Statutory objectives*

- 3.1** As part of its statutory objectives and functions, an authority responsible for the resolution of FMIs should be guided in the exercise of its resolution powers by the specific objectives of pursuing financial stability and maintaining continuity of the critical functions of an FMI in resolution without losses for taxpayers (see KA 2.3 (i) and paragraph 1.1), in addition to the other relevant general objectives set out in KA 2.3.

### *Appointment of an administrator, conservator or other official*

- 3.2** The resolution of an FMI may be carried out by the resolution authority directly or through a special administrator, conservator, receiver or other official with similar functions. A special administrator, conservator, receiver or other official should be guided by the objectives specified in paragraphs 1.1 and 3.1 (including those set out in KA 2.3) when carrying out that resolution.

### *Resolution authority expertise*

- 3.3** The staff of the resolution authority should have the necessary knowledge and expertise regarding systemically important FMIs. Where the resolution authority is separate from the supervisory authority, it should have the ability to draw on the expertise of the latter.

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<sup>18</sup> <http://www.bis.org/cpmi/publ/d101.htm>

<sup>19</sup> Consistent with KA 2.1, references to “resolution authority” include references to more than one authority where two or more authorities are responsible for exercising resolution powers under the resolution regime.

### ***Consultation and cooperation with central banks and other authorities***

- 3.4** Where the central bank is not also the resolution authority, supervisory or oversight authority of an FMI that settles through, or is otherwise linked to, systems operated by the central bank, the resolution authority or appointed administrator should consult and cooperate with the central bank when planning or carrying out the resolution of that FMI.
- 3.5** The resolution authority or appointed administrator should consult any other market regulatory authority where the services of the FMI are material for the adequate functioning of the capital markets that are overseen by that authority.

## **4. Resolution powers for FMIs (KA 3)**

### ***Choice of resolution powers***

- 4.1** The choice of resolution powers that are applied to an FMI should take into account:
- (i) the type of FMI and the critical functions that it provides;
  - (ii) the risk profile of the FMI, including its exposure to credit, liquidity and general business risks and, in particular, whether it takes credit risk through exposures to its participants as principal;
  - (iii) the FMI's capital structure, available assets, default resources and loss allocation arrangements;
  - (iv) any recovery measures taken by the FMI;
  - (v) in the case of an FMI that has rules-based loss allocation procedures, the extent to which those procedures have not been exhausted before entry into resolution;
  - (vi) the type of the stress (for example, credit losses or liquidity shortfalls) and its source (for example, stress arising from participant default or from other causes, such as, business, operational or other structural weaknesses); and
  - (vii) the market structure in which it operates (for example, the existence of alternative providers).
- 4.2** The choice of resolution powers should take into account the expected impact of those powers on direct and indirect FMI participants, any linked FMIs and third parties, regardless of where they are located, and the expected impact on financial markets more widely.

### ***Entry into resolution (KA 3.1)***

- 4.3** Entry into resolution should be possible when an FMI is, or is likely to be, no longer

viable or no longer able to meet applicable legal or regulatory requirements on a continuing basis, and has no reasonable prospect of returning to viability within a reasonable timeframe through other actions that could be taken by the FMI (that do not themselves compromise financial stability). Entry into resolution should be possible, in particular, if:

- (i) recovery measures available to the FMI, including the use of its available assets and default resources and the application of any loss allocation rules, are exhausted and have failed to return the FMI to viability and continuing compliance with applicable legal and regulatory requirements, or are not being implemented in a timely manner; or
- (ii) the relevant oversight, supervisory or resolution authority determines that the recovery measures available to the FMI are not reasonably likely to return the FMI to viability within the timeframe required to enable continued compliance with applicable legal and regulatory requirements, or that they are otherwise likely to compromise financial stability.

***Implementation of loss allocation rules and procedures prior to entry into resolution***

**4.4** Where the FMI has rules and procedures for loss mutualisation or allocation, those rules and procedures should generally be exhausted prior to the entry into resolution of the FMI unless it is necessary or appropriate for achieving the resolution objectives (paragraph 3.1.) to initiate resolution before those rules and procedures have been exhausted. Where any such rules and procedures have not been exhausted prior to entry into resolution, the resolution authority should have the power to enforce implementation of those rules and procedures (see paragraph 4.9 (i)).

***Continuity upon entry into resolution***

**4.5** Settlement finality rules should continue to apply in resolution.

**4.6** Any licenses, authorisations, recognitions and legal designations of a (domestic or foreign) FMI necessary for the continued performance of the FMI’s critical functions in resolution, including its recognition for the purposes of the application of relevant settlement finality rules, should not be revoked automatically solely as a result of entry into resolution under either domestic or foreign law and should remain effective to the extent necessary to allow for continuity of the critical functions of the FMI in resolution.

**4.7** The entry into resolution of an FMI should not lead automatically to the restriction, suspension or termination of its participation in, or link with, other FMIs (wherever located) and FMIs should not be prevented (including by law or regulations) from maintaining the participation of, or link with another FMI that is in resolution provided that the FMI in resolution continues to meet its payment and delivery obligations when due and to comply with any other applicable obligations under the rules of the FMI.

***Temporary administration***

**4.8** The resolution authority or an appointed administrator, conservator, receiver or similar official should have the power and the capacity to ensure the continued provision of the critical functions of an FMI in resolution and to fulfil the FMI’s payment and settlement obligations on time, including on the day that the FMI enters into resolution, until the FMI is restored to viability or those functions transferred, replaced by another provider or wound down in an orderly manner.

***Powers to allocate losses and allocate or terminate contracts (KA 3.2 (iii), KA 3.5)***

**4.9** Subject to the relevant safeguards set out in paragraph 4.11 and in KA 5 (as elaborated in paragraph 6.1) resolution authorities should have powers to:

- (i) enforce any existing and outstanding contractual obligations of the FMI’s participants to meet cash calls or make further contributions to a guarantee or default fund, or any other rules and procedures of the FMI for loss allocation (including for the repayment of liquidity providers) where they have not been already applied exhaustively by the FMI prior to the entry of the FMI into resolution;
- (ii) enforce any existing and outstanding obligations of the FMI’s participants pursuant to the rules and procedures of the FMI to accept allocations of the positions of a defaulting participant;
- (iii) write down (fully or partially) equity of the FMI;
- (iv) write down and/or convert to equity (“bail in”) unsecured debt of the FMI in a manner that respects the hierarchy of claims under the applicable insolvency regime;
- (v) reduce the value of any gains payable by the FMI to participants (for example, by variation margin hair-cutting);<sup>20</sup>
- (vi) terminate (“tear up”) or close out contracts.

Termination of some but not all contracts (“partial tear up”) or any reduction in value of gains payable by the FMI to participants should only be performed where consistent with the legal framework and the rules of the FMI drawn up in accordance with the legal framework.

**4.10** Resolution authorities may write down initial margin of direct participants and, where permitted, indirect participants, where the initial margin is not remote from the insolvency of the FMI and where consistent with the legal framework and the rules

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<sup>20</sup> For example, to the extent defaulting participants with ‘out-of-the-money’ positions had been unable to pay variation margin to a CCP, the CCP’s obligations and variation margin payments to all ‘in-the-money’ participants could be haircut pro rata to the size of their variation margin claims.

of the FMI drawn up in accordance with the legal framework.<sup>21</sup>

**4.11** Any power to allocate losses to participants of the FMI by reducing the value of any gains payable to such participants (for example, by variation margin hair-cutting) in accordance with paragraph 4.9 (v) or by writing down initial margin in accordance with paragraph 4.10, should be subject to the following conditions:

- (i) the FMI’s pre-funded resources have been exhausted and other mechanisms under its rules to cover losses and restore viability have either been unsuccessful or have not been implemented (because the resolution authorities determine that their implementation would be likely to compromise financial stability or unlikely to be successful having regard to the circumstances, or for any other reason);
- (ii) the loss allocation respects the rules of the FMI and the hierarchy of claims under the applicable insolvency regime; and
- (iii) the loss allocation applies to collateral and margin only to the extent that such collateral or margin would be used to cover losses other than those related to the obligations of the participant that posted them either under the loss allocation rules of the FMI or if the FMI entered into insolvency.

In a situation where an FMI participant has failed to meet its obligations to the FMI under the rules and procedures of the FMI prior to the FMI’s entry into resolution, these conditions do not preclude the use of the participant’s initial margin to meet those obligations (where consistent with the legal framework and the rules of the FMI).

***Termination (“tear up”) or close out of contracts***

**4.12** When considering whether to terminate the outstanding contracts of a CCP, the resolution authority should take into account, among other things, the impact of that action on:

- (i) the risk management of the CCP’s participants; and
- (ii) financial stability.

***Transfer of critical functions to a solvent third party or bridge institution (KAs 3.2 (vi) and (vii), 3.3 and 3.4)***

**4.13** Resolution authorities should have the power, subject to legal safeguards for counterparties relating, in particular, to netting sets and collateral arrangements, to transfer to a third party purchaser or bridge institution the ownership of an FMI or all

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<sup>21</sup> Initial margin is in principle only available to cover obligations of the participant that posted it. In some jurisdictions, however, where the initial margin is not held in a manner that is remote from the insolvency of the CCP, the initial margin may, in the event of a CCP’s insolvency, be exposed to the claims of creditors other than the participant that posted such initial margin.

or part of an FMI’s critical operations (for example, clearing in one specific product), including all associated rights and obligations and necessary service-level agreements. Any such power should be exercisable notwithstanding any requirements for consent or novation that would otherwise apply.

- 4.14** Where functions of an FMI are transferred to a third party purchaser or bridge institution, the resolution authority should aim to ensure continuity of the FMI’s legal and technical arrangements, such as delivery-versus-payments arrangements, domestic or cross-border links with other FMIs or other critical service providers and relevant contractual arrangements.
- 4.15** Where functions are transferred to a bridge institution, any licenses, authorisations, recognitions and legal designations of the FMI necessary for the continued performance of those functions in resolution, including its recognition for the purposes of the application of relevant settlement finality rules, should be transferred or otherwise applied to the bridge institution (or institutions).
- 4.16** The transfer powers of resolution authorities should enable the authority, in cases where the FMI in resolution holds client assets in a capacity as custodian, to transfer those assets to another institution for custody without affecting the ownership rights or entitlements of the relevant clients to those assets.

***Moratorium (KA 3.2(xi))***

- 4.17** A resolution authority should not impose a moratorium on payments due by the FMI to its participants or to any linked FMI if that moratorium would:
- (i) affect the ordinary flow of payments, settlements and deliveries being processed by the FMI in the course of its core functions; or
  - (ii) otherwise jeopardise or prevent continuity of other critical functions performed by the FMI in resolution or linked FMI.

This should not prevent a resolution authority from imposing a moratorium on payments to general creditors, that is, creditors whose claims on the FMI (a) are not the result of the use of the FMI’s critical functions or (b) do not arise from services necessary for the provision of those functions.

- 4.18** A resolution authority should not be prevented from using any loss allocation powers referred to in paragraph 4.9 or 4.10 in relation to payments, settlements and deliveries subject to a moratorium.



## **5 Set-off, netting, collateralisation, segregation of client assets (KA 4)**

### ***Temporary stay on early termination rights (KA 4)***

- 5.1** Entry into resolution of, or the exercise of any resolution power in relation to, an FMI should not trigger a right to acceleration or early termination by any participant in an FMI or any other counterparty of an FMI. Such rights should remain exercisable where the FMI (or the authority, administrator, receiver or other person exercising control over the FMI in resolution) fails to meet payment or delivery obligations, including collateral transfers, when due in accordance with its rules, but subject to any application of loss allocation to margin or collateral under the rules of the FMI or through the exercise of statutory loss allocation powers.
- 5.2** Where such rights to acceleration or early termination nevertheless arise by reason only of entry into resolution or in connection with the exercise of any resolution powers, the resolution authority should have the power to stay temporarily such rights. When considering whether to impose a temporary stay on the exercise by FMI participants and other relevant counterparties of acceleration or early termination rights triggered by entry into resolution of the FMI, the resolution authority should take into account the impact on the financial markets and on the safe and orderly operations of the FMI and any linked FMI.

## **6 Safeguards (KA 5)**

### ***“No creditor worse off” principle (KA 5.2)***

- 6.1** For the purposes of determining whether a participant is worse off as a result of resolution measures than in liquidation (application of the “no creditor worse off safeguard” set out in KA 5.2), the assessment of the losses that would have been incurred and the recoveries that would have been made by FMI participants if the FMI had been subject to liquidation should assume the full application of the FMI’s rules and procedures for loss allocation.

## **7 Funding of FMI resolution (KA 6)**

- 7.1** Jurisdictions should have in place appropriate arrangements and powers to provide temporary funding to facilitate resolution and to recover any resulting losses to public funds from the FMI, unsecured creditors (including FMI participants) or, if necessary, participants in the financial system more widely (see KA 6.2 and 6.4).
- 7.2** Where jurisdictions provide for the power to place an FMI under temporary public ownership and control in order to ensure continuity of its critical functions, they should make provision to recover any losses to public funds from the FMI, its unsecured creditors (including FMI participants) or, if necessary, participants in the financial system more widely (see KA 6.5).

## **8 Cross-border cooperation (KA 7)**

**8.1** The legal framework should not provide for the automatic revocation of any licenses, authorisations, recognitions and legal designations of an FMI necessary for the continued performance of the FMI’s critical functions in resolution, including its recognition for the purposes of the application of relevant settlement finality rules, or automatically restrict, suspend or terminate its participation in or links with other FMIs, as a result of official intervention or its entry into resolution in another jurisdiction.

## **9 Cooperation, coordination and information sharing (KA 8, 9, 12)**

**9.1** Crisis Management Groups (CMGs) or other arrangements based on the cooperative arrangements maintained under Responsibility E<sup>22</sup> that achieve an equivalent outcome should be maintained for all FMIs that are systemically important in more than one jurisdiction, as determined by the oversight or supervisory authorities and resolution authorities in those jurisdictions.

**9.2** For any such FMI, the CMG (or equivalent arrangement) should include the resolution authorities responsible for the FMI, the authorities that participate in the cooperation arrangements adopted in accordance with Responsibility E and other relevant authorities, of the jurisdictions where the FMI has operations that are material to its resolution.

**9.3** The requirement for institution-specific cross-border cooperation agreements (KA 9) may be met by crisis coordination and communication agreements, protocols or MoUs adopted in accordance with Responsibility E, provided that those arrangements are adapted, amended or supplemented where necessary to support the cooperation, coordination and information sharing needed to carry out the functions relating to recovery and resolution that are specified by the *Key Attributes*. In particular, they should:

- (i) provide for the resolution authority and other authorities that do not participate in the arrangements adopted under Responsibility E (for the purposes of regulation, supervision or oversight of the FMI) to participate in planning, preparing for and carrying out resolution of the FMI;
- (ii) define the roles and responsibilities of the authorities involved in planning, preparing for and carrying out resolution;
- (iii) include arrangements and procedures for sharing information necessary for the purposes of planning, preparing for and carrying out resolution; and

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<sup>22</sup> Responsibility E of the Responsibilities of central banks, market regulators and other relevant authorities for financial market infrastructure, CPSS-IOSCO *Principles for Financial Market Infrastructures*, section 4: <http://www.bis.org/cpmi/publ/d101.htm>

- (iv) include institution-specific details regarding the implementation of the resolution measures set out in the resolution plan for the FMI.

## **10 Resolvability assessments of FMIs (KA 10)**

**10.1** Systemically important FMIs within the scope of this guidance (see Section 2) should be subject to regular resolvability assessments that are conducted in accordance with KA 10 and I-Annex 3.

**10.2** In the case of an FMI that is systemically important in more than one jurisdiction, the resolvability assessment should be carried out by the home resolution authority of the FMI and coordinated within the FMI's CMG or under an equivalent arrangement.

**10.3** When conducting a resolvability assessment of an FMI, authorities should assess the feasibility and credibility of implementing the resolution strategy and operational resolution plan developed for the FMI, by assessing in particular:

- (i) the likely implications for resolution (including the availability of funds to repay liquidity providers) of the implementation of the FMI's recovery plan, including of any rules and procedures for loss allocation or for the allocation of contracts;
- (ii) technical and legal barriers to the transfer of the critical functions of the FMI to another entity, including those arising from the bespoke nature of the risk management and technical processes of individual FMIs;
- (iii) where the resolution plan provides for transfer of the critical FMI functions to another entity or bridge institution, the robustness of any arrangements in place to facilitate the transfer and to maintain continuity, including of the legal and technical arrangements, such as delivery-versus-payments arrangements;
- (iv) the impact of resolution strategies and measures set out in the operational resolution plan on FMI participants and on any linked FMIs, including the ability of participants and those linked FMIs to retain continuous access to the FMI's critical functions during the resolution;
- (v) the ability of the FMI in resolution or of a successor entity or bridge institution to which critical FMI functions have been transferred to maintain access to the services of any linked FMIs and other service providers during the resolution;
- (vi) the rights and obligations of linked FMIs in the event of the failure of one of those FMIs that could affect the conduct of resolution and the ability to maintain enforcement rights over collateral; and
- (vii) any interoperability agreements and cross-margining or loss-sharing arrangements with other FMIs.

**10.4** The oversight, supervisory or resolution authorities for FMIs should have powers to require an FMI, to adopt measures consistent with the legal framework to improve the resolvability of the FMI including, where necessary and appropriate:

- (i) operational, structural or legal changes so that different FMI functions or services (for example, the clearing of different products) can be dealt with separately in resolution;
- (ii) changes to the terms or operation of its links with other FMIs; and
- (iii) changes to delivery, segregation or portability arrangements of participants' positions or related collateral.

Any such requirements should take due account of the likely effects of such changes on the soundness of operations of the FMI, including its risk management, the functioning of markets, the provision of liquidity, and the incentives of direct and indirect participants to use the FMI.

## **11 Recovery and resolution planning for FMIs (KA 11)**

**11.1** FMIs that are systemically important should be subject to a requirement for ongoing recovery and resolution planning.

**11.2** Recovery and resolution plans need to be tailored to the specific risks and systemic implications that a particular type of FMI may be exposed to or create.

### ***Recovery plans***

**11.3** FMI recovery plans should be consistent with the CPSS-IOSCO *Principles for Financial Market Infrastructures* (including Principle 3, key consideration 4) and take into account the guidance in the CPMI-IOSCO report on *Recovery of financial market infrastructures*.<sup>23</sup>

### ***Resolution strategies and plans***

**11.4** Resolution authorities for an FMI should, in cooperation with the FMI's oversight or supervisory authorities (where distinct from the resolution authority), develop resolution strategies and operational plans to facilitate the effective resolution of the FMI in a way that ensures continuity of the critical functions carried out by the FMI.

**11.5** In the case of an FMI that is systemically important in more than one jurisdiction, the resolution strategy and plan should be developed by the home authority of the FMI and coordinated within the FMI's CMG or equivalent arrangements.

**11.6** Resolution plans for FMIs should:

- (i) contemplate scenarios where some or all existing loss allocation arrangements between participants under the FMI rules have been fully or partially put into effect or not implemented;

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<sup>23</sup> See footnote 15.

- (ii) contemplate scenarios where there may be no existing alternative provider to which the critical functions of an FMI can be transferred in the short term;<sup>24</sup>
- (iii) consider and address the potential technical and legal barriers to a transfer of FMI functions;<sup>25</sup>
- (iv) where necessary to ensure continuity of the FMI's legal and technical arrangement and support the transfer of its functions, provide for advance agreement with other FMIs or relevant service providers;
- (v) take into account the legal mechanism by which collateral is provided, including whether collateral is provided as a security interest or pledge or by way of title transfer, the status of that collateral in insolvency (that is, whether it could be considered 'bankruptcy remote'), and the implications of that status for the extent to which losses can be imposed under loss allocation rules of the FMI and the exercise of statutory powers;
- (vi) consider whether assets pledged or available to the FMI would in fact be available for use in resolution or whether such use or the transfer of functions could be hampered or prevented by residual interests of direct and indirect participants in those assets;
- (vii) if resolution measures would split netting sets, consider the impact of that splitting on liquidity and collateral requirements;
- (viii) address how providers of liquidity to the FMI before and during resolution will be repaid;
- (ix) take into account the structure of the FMI, for example, whether it is part of a broader group of FMIs, and the different legal and regulatory regimes under which it operates;
- (x) address any need to maintain links with other FMIs (both domestic or in another jurisdiction) that are necessary for the continuity of critical FMI services in any relevant jurisdiction; and
- (xi) take into account the impact on direct and indirect participants.

**11.7** Resolution plans for FMIs should contain the essential elements set out in I-Annex 4 to the *Key Attributes* and include in addition, as appropriate to the type and specific characteristics of each FMI and its critical functions, the following elements in particular:

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<sup>24</sup> For many FMIs there will, in the short term, be no alternative providers of its critical functions to which operations can be transferred.

<sup>25</sup> Practical challenges (such as IT incompatibility) may make a transfer difficult unless the alternative provider is willing and able to take over the failing FMI's operations in their entirety and run them separately until they can be integrated. Where an alternative provider exists, FMIs and resolution authorities should therefore consider in advance the potential technical and legal barriers to the transfer of activities and seek to address them.

- (i) draft transition agreements that would allow the FMI to continue to provide uninterrupted critical services on behalf of a purchaser or bridge institution using existing staff and infrastructure or, where it is not possible to develop such draft agreements in advance, an issues list and the information necessary to draw up such an agreement at short notice; and
- (ii) key information on the critical operations, IT procedures, creditors and list of key staff and service providers necessary to facilitate the continued operation of critical functions in resolution or the transfer of some or all of the operations to another FMI or bridge institution.

## **12 Access to information and information sharing (KA 12)**

**12.1** In order to facilitate the implementation of resolution measures, FMIs should be required to maintain information systems and controls that can promptly produce and make available, both in normal times and during resolution, relevant data and information needed by the authorities for the purposes of timely resolution planning and resolution, in particular, on the following:

- (i) FMI rules, default fund and other loss allocation arrangements;
- (ii) stakeholders, including the FMI's direct and indirect participants, owners, settlement agents, liquidity providers, linked FMIs, custodians and other service providers;
- (iii) data and information needed for effective and timely risk control during resolution, including gross or net exposures or risk and margin requirements, where appropriate, between the FMI and each participant;
- (iv) the status of obligations of FMI participants (for example, the extent to which FMI participants have fulfilled their obligations to make default fund contributions);
- (v) links and interoperability arrangements with other FMIs, including exposures to and collateral provided to and received from linked FMI;
- (vi) the location of participant collateral, the arrangements under which it is held and any rights of use or rehypothecation that have been exercised in relation to collateral; and
- (vii) netting arrangements, so that authorities can assess the impact of possible transfers of part of the business of an FMI on participants' netting rights).

**12.2** Oversight, supervisory and resolution authorities should take into account the impact of any contractual agreement between an FMI, its direct participants and, where relevant, its indirect participants on the information available on the positions or flows of indirect participants.

## II. Resolution of FMI participants

The Preamble to the *Key Attributes* states that an effective resolution regime should ensure continuity of systemically important financial services and payment, clearing and settlement functions. FMIs play an important role in the resolution of any of their participants and should endeavour to minimise disruption caused by the failure of a participant to any such functions that are provided by the FMI. To resolve a failing firm in a manner that maintains continuity of its critical functions, it is necessary that the firm in resolution (or a successor firm<sup>26</sup>) can continue to rely on services provided by FMIs in which it participates, as long as it promptly performs its margin, collateral or settlement obligations that arise under a financial contract or as a result of its participation in the FMI. It is important that FMIs' rules and procedures adequately address circumstances where FMI participants enter resolution, and that the resolution plans for FMI participants are compatible with the rules and procedures of the FMIs in which they participate.

This guidance sets out certain objectives as regards resolution planning for FMI participants and FMI rules and procedures to ensure consistency with and support for actions by a resolution authority to manage the failure of a participant that could be systemically significant or critical if it fails.

### 1. Rules and procedures governing a participant's default

- 1.1 Jurisdictions should ensure that the participation requirements and rules and procedures of an FMI governing a participant's default (see Principle 13 of CPSS-*IOSCO Principles for Financial Market Infrastructures*) ("FMI rules") are not likely to hamper unnecessarily the orderly resolution of participants in the FMI.
- 1.2 The entry into resolution of an FMI participant or use of a resolution tool should not lead to an automatic termination of its participation in the FMI. Jurisdictions should ensure that laws and regulations applicable to FMIs should not prevent FMIs from maintaining the participation of a firm in resolution provided that the safe and orderly operation of the FMI is not compromised. FMI rules should provide the FMI with sufficient flexibility to cooperate with the resolution authority of the FMI participant in order to prepare for and implement an orderly resolution in a way that does not increase risk to the FMI, its risk management or its safe and orderly operations.
- 1.3 To support the continuity of critical functions of a participant in resolution, FMI rules should:
  - (i) allow for a firm or a successor entity to maintain its participation during a resolution process, subject to adequate safeguards to protect the continued safe and orderly operations of the FMI, including the condition that the firm or successor entity continues to meet payment and delivery obligations when

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<sup>26</sup> This may include a bridge institution or a private sector entity to which to functions of the firm in resolution have been transferred.

due and comply with any other obligations of participants under the rules of the FMI;

- (ii) facilitate, for example, through a fast-track application process, the participation of a third party successor or bridge institution that assumes particular functions or positions of the failing firm, subject to the maintenance of adequate risk control standards; and
- (iii) facilitate, where appropriate, the transfer of positions of the clients of a participant in resolution to other participants in the FMI.

## **2. Resolvability assessments of FMI participants (engagement of resolution authorities with FMIs)**

**2.1** As part of resolution planning and resolvability assessments for firms that are FMI participants, resolution authorities should engage regularly with the FMIs in which those firms are participants in order to have a clear understanding of:

- (i) the implication of the application of resolution tools on the firm's FMI membership (including circumstances where resolution leads to a change of control of the participant);
- (ii) the conditions that the firm needs to meet to maintain its participation in the FMI, such as requirements to contribute to default funds, liquidity commitments, payment and settlement obligations (including collateral and margin);
- (iii) the implication for the risk management of the FMI and for its other participants of continued participation in the FMI of a participant in resolution;
- (iv) the conditions for a bridge entity or another firm to which functions of the firm in resolution would be transferred to participate in the FMI and the time any application process would take;
- (v) the technological changes needed to implement the resolution measures, for example, transfer or integration of IT systems, and the preparations needed to facilitate the rapid execution of such transfer or integration;
- (vi) the operational arrangements necessary to ensure that all of the firm's obligations to the FMI, including margin, collateral and settlement obligations, are met as they fall due, including on the day the firm enters into resolution whether by the firm directly or by the resolution authority on behalf of the firm;
- (vii) the FMI's segregation and portability regime, where relevant and the implications for assets of clients of FMI participants to ensure that those assets are dealt with in a way consistent with domestic laws and regulations;
- (viii) the process for and consequences of termination of membership and its impact



on other participants, any linked FMIs and the operations of the FMI;

- (ix) the FMI's internal governance policies and policies for communication in a crisis;
- (x) the FMI's procedures for evaluating the financial health of its participants;
- (xi) the ability of the FMI to segregate information regarding the outstanding activity at and obligations to the FMI of a single participant and to report it promptly in an organised format to the resolution authority; and
- (xii) the FMI's risk management protocols with respect to a participant that it determines to be in danger of default.

**2.2** FMIs should be required as part of their contingency arrangements to test the effectiveness of their procedures if a major participant were to enter into resolution, including the conditions and requirements for continuing participation or admitting as a new participant in the FMI an entity to which that participants' activities have been transferred.

### **3. Temporary stay on early termination rights of FMIs**

**3.1** If a participant in resolution fails to meet any margin, collateral or settlement obligations to the FMI, the FMI should retain the right to exercise any acceleration or early termination rights that arise as a result of that failure.

**3.2** The power for resolution authorities to impose a temporary stay on the exercise of contractual acceleration or early termination rights should apply to any such rights that are exercisable by an FMI that arise by reason only of the entry into resolution of, or the exercise of resolution powers in relation to, an FMI participant. Any such power should be exercised in relation to an FMI with due regard to the need to ensure that it does not compromise the safe and orderly operations of the FMI.

### **4. Potential impediments to resolvability**

**4.1** Resolution authorities should inform FMIs and the relevant authorities responsible for oversight or supervision of FMIs of any impediments arising from FMI rules and procedures that could affect the effective implementation of a resolution of an FMI participant. The oversight, supervisory and resolution authorities should consider whether rule changes (for example, introduction of carve-outs or exemptions in FMI rules or fast-track application processes) or other actions can be taken to address those reported impediments without compromising the risk management and safe operation of the FMI.

### **5. Provision of information by resolution authorities to FMIs**

**5.1** Resolution authorities should inform FMIs as soon as possible of the resolution of a participant, and if possible in advance of the firm's entry into resolution. Throughout the period that a participant is in resolution, authorities should provide the FMI with

information about the participant or any bridge institution to which its functions have been transferred relevant to the continued participation of that firm or bridge institution in the FMI.