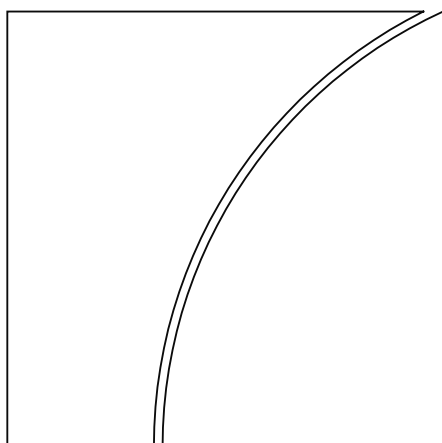


Committee on  
Payments and Market  
Infrastructures

Board of the International  
Organization of Securities  
Commissions



Responsibility E:  
A compilation of  
authorities' experience  
with cooperation

December 2019



BANK FOR INTERNATIONAL SETTLEMENTS



**OICV-IOSCO**

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## Executive summary

Cooperation among authorities is highly valued and has been demonstrated by central banks, market regulators, and other authorities around the world for decades. Whether through informal interactions, formal arrangements, or in standard-setting bodies, authorities cooperate for various reasons, on a variety of topics, and in a range of circumstances. The Committee on Payments and Market Infrastructures (CPMI) and the Board of the International Organization of Securities Commissions (IOSCO) have observed that cooperation among authorities is evolving and that cooperative arrangements for specific financial market infrastructures (FMIs) are growing in number and importance. These developments are due, in part, to the increasing globalisation of financial markets, policy decisions resulting in an increased use of and reliance on FMIs, and the systemic importance of particular FMIs domestically and in multiple jurisdictions. Given these observations and the role of cooperation in the regulation, supervision, and oversight of FMIs, the CPMI and IOSCO developed this report to share lessons learned by authorities.

This report describes ways in which authorities cooperate with each other in a variety of contexts, with particular emphasis on the expectations in Responsibility E of the *Principles for financial market infrastructures* (PFMI). It includes illustrative effective practices which may inform authorities in their development of, and improvements to, cooperative arrangements for all FMI types. The discussion is not intended to impose additional standards beyond those set out in the PFMI or to provide additional guidance beyond that provided in Responsibility E. Instead, the report identifies and elaborates on a range of issues and practices that authorities have experienced and considered when determining whether, and how, to establish and enhance cooperation that suits their needs and fulfils their respective mandates.

This report has benefited from contributions from a range of authorities with responsibilities for regulating, supervising, and overseeing all types of FMI as well as central banks of issue that have an interest in an FMI's payment and settlement arrangements. The examples reflect authorities' actual experience and elaborate on six key topics: the benefits of cooperation; triggers for cooperation; relevant authorities; cooperation regarding a specific FMI; designing cooperative arrangements; and tools for cooperation. The report concludes with a summary of lessons learned, which reflect several themes that emerged from the review of authorities' experience.

# 1. Introduction

## 1.1 Background

In April 2012, the CPMI and IOSCO published the PFMI.<sup>1</sup> The PFMI includes five responsibilities for central banks, market regulators and other relevant authorities for FMIs<sup>2</sup> and provide guidance for consistent and effective regulation, supervision and oversight of FMIs.<sup>3</sup> Responsibilities A through D generally describe the ways in which individual authorities can effectively carry out their respective regulation, supervision and oversight of FMIs. Responsibility E describes how authorities should cooperate with each other, both domestically and internationally, as appropriate, in promoting the safety and efficiency of FMIs. Responsibility E includes key considerations, which further explain the headline standard, and explanatory notes which provide guidance on how the standard can be implemented. Similar to the principles and other responsibilities in the PFMI, Responsibility E does not prescribe the scope, form or intensity of cooperation and the guidance allows for flexibility in how authorities achieve the expected outcomes.<sup>4</sup>

In 2015, the CPMI-IOSCO Implementation Monitoring Standing Group (IMSG) assessed authorities' implementation of the five Responsibilities, across all FMI types as part of the parent committees' broader monitoring programme.<sup>5</sup> For Responsibility E, the IMSG observed that there was considerable variability in implementation measures and, where evidence was available, in outcomes across jurisdictions. This result was due, in part, to (i) the fact that many cooperative arrangements were then new or (ii) varying interpretations of the expectations under Responsibility E.<sup>6</sup> Based on the findings set out in the report, the CPMI-IOSCO Steering Group agreed to conduct further work on Responsibility E and tasked the CPMI-IOSCO Policy Standing Group (PSG) with carrying out such work.

The PSG started with a stocktaking of CPMI and IOSCO members' experience with cooperation. In gathering this information, the PSG sought to understand various aspects of cooperation including the types of arrangement in place; how they are designed; the scope of authorities and FMIs involved; practices used by the authorities in business-as-usual and crisis scenarios; and any limitations or challenges encountered.

The CPMI and IOSCO note that cooperation among authorities is evolving and that FMI-specific arrangements are growing in number and importance. These developments are due, in part, to the increasing globalisation of financial markets, policy decisions resulting in an increased use of and reliance on FMIs, and the systemic importance of particular FMIs domestically and in multiple jurisdictions. Given

<sup>1</sup> The PFMI are available online at [www.bis.org/cpmi/publ/d101a.pdf](http://www.bis.org/cpmi/publ/d101a.pdf) and [www.iosco.org/library/pubdocs/pdf/IOSCOPD377-PFMI.pdf](http://www.iosco.org/library/pubdocs/pdf/IOSCOPD377-PFMI.pdf).

<sup>2</sup> The term "financial market infrastructures" includes systemically important payment systems (PS), central counterparties (CCPs), central securities depositories (CSDs), securities settlement systems (SSS), and trade repositories (TRs). As stated in paragraph 1.8 of the PFMI, "an FMI is defined as a multilateral system among participating institutions, including the operator of the system, used for the purposes of clearing, settling, or recording payments, securities, derivatives, or other financial transactions."

<sup>3</sup> See PFMI paragraph 1.29. Responsibilities A–E are set out in Section 4.0 of the PFMI (pp 126–37).

<sup>4</sup> Irrespective of the forms or purposes of cooperation, cooperation does not in any way detract from the expectations identified in Responsibilities A and B. Furthermore, key consideration 10 of Responsibility E states "Cooperative arrangements between authorities in no way prejudice the statutory or legal or other powers of each participating authority, nor do these arrangements constrain in any way an authority's powers to fulfil its statutory or legislative mandate or its discretion to act in accordance with those powers." See also Responsibility E explanatory note paragraph 4.5.4.

<sup>5</sup> The report *Assessment and review of application of Responsibilities for authorities* (Assessment of Responsibilities) was published in November 2015, and is available online at [www.bis.org/cpmi/publ/d139.pdf](http://www.bis.org/cpmi/publ/d139.pdf) and [www.iosco.org/library/pubdocs/pdf/IOSCOPD514.pdf](http://www.iosco.org/library/pubdocs/pdf/IOSCOPD514.pdf).

<sup>6</sup> See Section 1.2 of the Assessment of Responsibilities. Since the IMSG's assessment, authorities have gained greater experience with cooperation arrangements formed for the purposes of Responsibility E.

these observations and the role of cooperation in the regulation, supervision and oversight of FMIs, the CPMI and IOSCO felt it would be useful to share lessons learned by authorities along several dimensions.

This report is designed to share the lessons learned by a wide range of regulators, supervisors, and overseers of FMIs with cooperation. It describes ways in which authorities cooperate with each other in a variety of contexts, with particular emphasis on the expectations in Responsibility E. It includes illustrative effective practices which may inform authorities in their development of, and improvements to, cooperative arrangements for all FMI types. The report may also be useful to authorities in jurisdictions that are in the process of developing a regulatory framework for FMIs.

The scope of the examples and illustrative effective practices is intentionally broad, to capture the long history, diversity and evolving nature of cooperation among authorities. It includes contributions from a range of authorities with responsibilities for regulating, supervising, and overseeing all types of FMIs as well as central banks of issue that have an interest in an FMI's payment and settlement arrangements. The examples show how authorities have approached cooperation in domestic and cross-border settings, bilateral and multilateral formats, formal and informal settings, routine and ad hoc engagement, and business-as-usual and crisis scenarios. This report also includes examples of cooperation or forms of engagement with other relevant authorities, such as bank supervisors and resolution authorities. The discussion reflects the experience of central banks and market regulators represented on CPMI and IOSCO. The examples are illustrative, not exhaustive.

The discussion is not intended to impose additional standards beyond those set out in the PFMI or to provide additional guidance beyond that which is provided in Responsibility E. Instead, the report identifies and elaborates on a range of issues and practices that authorities have experienced and considered when determining whether, and how, to establish and enhance cooperation that suits their needs and fulfils their respective mandates. It does not prescribe a single approach for cooperation nor does it constrain cooperation among authorities on issues beyond those discussed in this report. This report neither judges nor validates the effectiveness of any particular approach to cooperation described herein.

## 1.2 Cooperation among authorities

The value of cooperation has been recognised and demonstrated by central banks, market regulators and other authorities around the world for decades. Both the CPMI and IOSCO were created, in part, to serve as fora for central banks and market regulators, respectively, to engage and cooperate in the development and promotion of international standards, among other objectives.<sup>7</sup> Both committees individually and jointly have issued reports and adopted standards or principles promoting and facilitating cooperation among authorities. Central banks have a long history of engaging cooperatively in carrying out their oversight responsibilities for PS and settlement systems. Building on the Lamfalussy principles for cooperation published in 1990, the CPMI published the *Core principles for systemically important payment systems* in 2001 followed by its report on *Central bank oversight of payment and settlement systems* in 2005.<sup>8</sup> Similarly, market regulators have developed a number of tools to shape and facilitate cooperation. IOSCO has issued a number of reports on cooperation, including its 2010 *Principles Regarding Cross-Border Supervisory Cooperation*, and in 2017 approved an *Enhanced Multilateral Memorandum of Understanding*

<sup>7</sup> For additional background, see the CPMI Charter and IOSCO fact sheet, [www.bis.org/cpmi/charter.pdf](http://www.bis.org/cpmi/charter.pdf) and [www.iosco.org/about/pdf/IOSCO-Fact-Sheet.pdf](http://www.iosco.org/about/pdf/IOSCO-Fact-Sheet.pdf).

<sup>8</sup> See *Report of the Committee on Interbank Netting Schemes of the Central Banks of the Group of Ten Countries* (referred to as the "Lamfalussy report") (November 1990) available at [www.bis.org/cpmi/publ/d04.pdf](http://www.bis.org/cpmi/publ/d04.pdf); *Core Principles for Systemically Important Payment Systems* (January 2001) available at [www.bis.org/cpmi/publ/d43.pdf](http://www.bis.org/cpmi/publ/d43.pdf); and *Central bank oversight of payment and settlement systems* (May 2005) available at [www.bis.org/cpmi/publ/d68.pdf](http://www.bis.org/cpmi/publ/d68.pdf). The Committee on Payment and Settlement Systems (CPSS) was the predecessor to the CPMI. The CPSS changed its name to the "Committee on Payments and Market Infrastructures" in September 2014; all publications issued prior to that month carry the Committee's former name.

*Concerning Consultation and Cooperation and the Exchange of Information.*<sup>9</sup> In addition, the CPMI and IOSCO have together developed recommendations and standards for cooperation between central banks, market regulators and other relevant authorities in the *Recommendations for securities settlement systems* (2001), the *Recommendations for central counterparties* (2004), and the PFMI including Responsibility E (2012).<sup>10</sup>

The manner in which authorities cooperate with each other can take many different forms and serve multiple purposes. At one end of the spectrum, in its most basic form, authorities often engage informally to facilitate each other's learning unrelated to a particular FMI. Examples include educating colleagues on local developments, explaining how FMIs or legal frameworks operate in a particular jurisdiction, or exchanging views on, for instance, operational questions (e.g., the evolving design of and operating hours for central-bank operated PSs). These types of interactions can be free form, ad hoc, informal, and, ultimately, may broadly inform an authority's internal analysis or other policy deliberations. At the other end of the spectrum, authorities cooperate to fulfil their respective mandates for a particular FMI. Whether bilateral or multilateral, these types of arrangement can involve formal protocols, information-sharing arrangements and expectations for participating authorities. Such arrangements can involve the sharing of supervisory and oversight perspectives, confidential (non-public) firm-specific information, advance notice of changes by the FMI, and assessments against the PFMI and other local requirements.

Cooperation before and during a crisis is one of the most important and effective ways in which authorities can mutually support one another. There are numerous examples where crisis communication protocols have been triggered to facilitate the clear and timely exchange of information. Whether in response to market volatility, monitoring actions during a participant default, or planning before and during natural disasters, pre-arranged logistics and trusted relationships can significantly influence how the public sector can mobilise and respond to a crisis.

Following the 2008 financial crisis, the scope of cooperation has expanded to include authorities beyond those with traditional or legal responsibility for the supervision, regulation, and oversight of FMIs. The public sector is focused on addressing financial stability concerns associated with "too big to fail" or "too interconnected to fail". To do so, authorities with responsibility for FMIs are engaging more often with resolution authorities and supervisors of FMI participants to tackle a range of resolution-related issues. As these relationships evolve, the application of Responsibility E and other relevant guidance will help ensure that cooperation is beneficial to all involved.

### 1.3 Features of and limitations to cooperation

Forming and maintaining strong, trusted relationships between and among the relevant authorities are key means to realise fully the benefits of cooperation and successfully achieving a shared objective. Building trust, domestically and across jurisdictions, however, takes time and commitment. Bilateral and multilateral meetings, routine calls among staff, and joint projects (such as coordinating assessments, developing supervisory stress tests, and analysing FMI data) can all foster greater awareness among the authorities at various organisational levels. Just as trust among authorities helps facilitate the understanding of views in the interpretation and/or implementation of international standards, the process

<sup>9</sup> For additional information, see the IOSCO website: [www.iosco.org/library/pubdocs/pdf/IOSCOPD322.pdf](http://www.iosco.org/library/pubdocs/pdf/IOSCOPD322.pdf) and [www.iosco.org/news/pdf/IOSCONEWS456.pdf](http://www.iosco.org/news/pdf/IOSCONEWS456.pdf).

<sup>10</sup> Recommendation 18 in the CPMI-IOSCO *Recommendations for securities settlement systems* (RSSS) stated that "Securities settlement systems should be subject to transparent and effective regulation and oversight. Central banks and securities regulators should cooperate with each other and with other relevant authorities." The full report is available at [www.bis.org/cpmi/publ/d46.pdf](http://www.bis.org/cpmi/publ/d46.pdf) and [www.iosco.org/library/pubdocs/pdf/IOSCOPD123.pdf](http://www.iosco.org/library/pubdocs/pdf/IOSCOPD123.pdf). The committees' follow-on report on *Recommendations for central counterparties* (RCCP) also spoke to cooperation in recommendation 11 on "Risks in links between CCPs" and recommendation 15 on "Regulation and oversight." See the full report at [www.bis.org/cpmi/publ/d64.pdf](http://www.bis.org/cpmi/publ/d64.pdf) and [www.iosco.org/library/pubdocs/pdf/IOSCOPD176.pdf](http://www.iosco.org/library/pubdocs/pdf/IOSCOPD176.pdf).



of building a reciprocal understanding of views and perspectives can increase trust. Another approach is to clarify roles and establish an ex-ante understanding of how authorities will engage and share information (such as in a memorandum of understanding (MOU)) which, in turn, can foster mutual trust among the parties. An established level of trust among the parties may be especially relevant when responding to, and managing, a crisis event, which typically involves the exchange of confidential, highly-sensitive information. Knowing that counterparts can be relied upon to provide the necessary information and for those receiving the information to treat it appropriately can lead to a more open dialogue and consideration of potential solutions.

Although cooperation brings many benefits to authorities and FMIs alike, there can be limitations to what it can achieve and how it does so. In some jurisdictions, the legal framework prescribes and potentially constrains the way in which authorities can cooperate. In other cases, resource limitations and logistical constraints can influence how cooperation is carried out. For certain global FMIs, cooperative arrangements are quite large and require considerable staff support. As a practical matter, limitations on the availability of funds, human resources with the required technical expertise, internal support functions, and meeting space are obstacles that authorities have had to overcome in order to cooperate effectively.

## 1.4 Organisation of the report

This report is organised under six themes: the benefits of cooperation (Section 2); triggers for cooperation (Section 3); relevant authorities (Section 4); cooperation regarding a specific FMI (Section 5); designing cooperative arrangements (Section 6); and tools for cooperation (Section 7). Each section begins by providing context, including references to relevant key considerations in Responsibility E, followed by a discussion of authorities' experience with cooperation in practice. The report concludes with the lessons learned by authorities with cooperation to date (Section 8).

## 2. Benefits of cooperation

### 2.1 Context

Effective cooperation among authorities can be mutually beneficial in a range of circumstances. Key consideration 1 states, "Relevant authorities should cooperate with each other, both domestically and internationally, to foster efficient and effective communication and consultation in order to support each other in fulfilling their respective mandates with respect to FMIs." Timely access to relevant information and data is fundamental for all relevant authorities to fulfil their respective mandates. Authorities have extensive experience in operationalising information-sharing, including one-off or ad hoc engagements or long-term arrangements following prescribed frequencies along agreed parameters. In fact, some form of information-sharing is a common feature in all types of cooperative arrangement for a specific FMI, whether they are informal or formal, legally required or formed voluntarily, bilateral or multilateral, domestic or cross-border. In order to maximise the value, experience has shown that there must be a willingness and legal and practical ability to share, as well as processes and safeguards to support the sharing. FMIs can also benefit from authorities cooperating with each other. Through information-sharing, authorities can better understand the applicable supervisory, regulatory, and oversight frameworks and identify gaps or inconsistencies. By sharing expectations, including their respective interpretations of their respective requirements, and collectively discussing issues with the FMI, authorities can minimise both the potential duplication of effort and burden on FMIs. Moreover, cooperation can create opportunities for authorities better to align their views, which can benefit FMIs.

This section provides several examples of the circumstances under which authorities, FMIs, and the broader financial system have benefited from cooperation.

## 2.2 Experience

### Shared learning

Authorities support each other in achieving their respective objectives for a variety of reasons. There are many examples of authorities engaging informally for the purpose of advancing their shared learning on topics beyond those related to a specific FMI. For instance, authorities may assist each other to better understand aspects of a jurisdiction's legal framework (eg inquiries regarding the powers and responsibilities of different authorities in a particular jurisdiction); provide technical assistance (eg helping a central bank design its oversight function or launch a real-time gross settlement system (RTGS)); describe types of central bank-operated service available to FMIs (eg explain what settlement services are available to facilitate margin payments by CCPs); exchange views on policy issues under consideration (eg factors influencing RTGS operating hours, ways to improve financial inclusion); discuss industry initiatives (eg digital innovations, industry white papers); and share local developments (eg status of legislation, notice of publications) and foster enhanced understanding of the perspectives and priorities of different types of authority arising from their specific mandates. In addition, authorities may engage formally to achieve an agreed set of objectives. For example, in some jurisdictions, multiple domestic authorities convene to discuss financial stability issues, monitor the macroprudential supervision of large financial institutions including FMIs, facilitate inter-agency coordination, and address developments in the financial sector, such as financial inclusion and financial literacy.

### Policy development

Authorities have long cooperated to develop standards and guidance. In particular, cooperation through the standard-setting bodies brings together authorities with varying sets of responsibilities, diverse sets of experience, and perspectives from both advanced and emerging market economies. Contributions from committee members, authorities responding to consultations, and international financial institutions sharing their unique observations collectively enrich and challenge the analytical process by which international standards are set and implemented. There are multiple examples of cooperation among and between central banks, market regulators, the World Bank and the International Monetary Fund.<sup>11</sup> However, the development of the PFMI was pivotal in advancing the safety and efficiency of FMIs globally by not only setting an agreed set of standards but also including a commitment among authorities to implement the principles.<sup>12</sup> This type of cooperation can have long-term benefits for the broader financial system.

### Coordinated exercises

Market regulators and central banks, among others, have a common interest in the resilience of FMIs, and often undertake coordinated exercises with different objectives. As FMIs are generally highly interconnected (eg common participants and providers), an operational disruption could impact the wider ecosystem. In some cases, authorities have cooperated in market-wide crisis communication exercises, to further enhance crisis management processes, and improve preparedness in cases of operational crises. In the case of CCPs, a default event could impact several CCPs in multiple jurisdictions simultaneously. To better understand these potential impacts, authorities have collaborated to design and execute multi-CCP default simulation exercises. Working together, the authorities are able to better understand CCP default management procedures (including auction processes), identify potential issues, and better inform their conversations with each other as well as with their respective regulated entities.

<sup>11</sup> For examples, see the websites of the CPMI, [www.bis.org/cpmi](http://www.bis.org/cpmi), and IOSCO, [www.iosco.org](http://www.iosco.org).

<sup>12</sup> In addition to the principles and responsibilities, the PFMI includes Annex F, which sets out oversight expectations applicable to critical service providers (CSPs). For instance, SWIFT is a CSP overseen by the National Bank of Belgium, in cooperation with other central banks.

## FMI-specific information

In many cases, authorities cooperate in order to exchange information regarding one or more FMIs.<sup>13</sup> Typically, in a business-as-usual context, authorities may share regulatory, legal and business updates relevant to an FMI; observations learned during ongoing monitoring; supervisory views on an FMI's resilience; assessments against the PFMI and other applicable requirements; details regarding operational incidents and ex post root-cause analyses; advance notice of proposed changes to the FMI's rules, operations, or procedures; and governance or organisational changes.

Although less common, different departments within a single authority may enter into an arrangement to ensure that information is exchanged between them and by what means. For example, in a central bank with oversight and operational responsibilities for its own RTGS system, the oversight department has defined a formal agreement with the operational department to enable the former regular access to certain information. In particular, the two departments entered into an internal MOU. In this case, the operational department provides the oversight department with an agreed set of information at a prescribed frequency and on an ad hoc basis (eg in case of incidents). The information includes participant-level data, settled and unsettled payment data and information on liquidity flows. In another example, different departments of a single authority collaborate on various issues pertaining to FMIs, including the admission of participants to FMIs operated by the authority, approving new licenses and conducting onsite inspections.

## 3. Triggers for cooperation

### 3.1 Context

A range of circumstances and reasons may prompt and encourage cooperation among authorities. Consistent with key consideration 1 of Responsibility E, authorities often cooperate "to foster efficient and effective communication and consultation in order to support each other in fulfilling their respective mandates with respect to FMIs". In some jurisdictions, the legal framework recognises and requires cooperation among authorities as part of the process for regulating, supervising and overseeing FMIs.

In other cases, the development and design of an FMI motivates authorities to engage. Key consideration 2 states, "If an authority has identified an actual or proposed operation of a cross-border or multicurrency FMI in its jurisdiction, the authority should, as soon as it is practicable, inform other relevant authorities that may have an interest in the FMI's observance of the CPMI-IOSCO Principles for financial market infrastructures." This key consideration recognises cooperation can, and should, begin during an FMI's formative stages. It also highlights how one FMI can be relevant to one or more jurisdictions due, for example, to its scope of activities, operating model, settlement procedures, and criticality in the markets it serves. These circumstances tend to trigger voluntary forms of cooperation, which can achieve the same outcomes as arrangements required by law.

This section provides examples of different triggers for cooperation.<sup>14</sup>

<sup>13</sup> This type of cooperation is discussed further in Section 5.

<sup>14</sup> In some cases, multiple authorities within a national border or currency zone can have jurisdiction over an FMI. The discussion in this section applies equally to those cases.

## 3.2 Experience

Authorities are motivated to cooperate for a variety of reasons. In some cases, they cooperate to comply with legal obligations, while in others they engage to address risks to the financial system, shape the design of a proposed FMI, respond to market events, encourage collective action or foster innovation.

### Legislation

In some jurisdictions, authorities are required by law to cooperate with each other.<sup>15</sup> The legal framework may set the parameters of cooperation, including which authorities should be involved and the scope of their respective legal responsibilities and decision-making authority. These arrangements may be wholly domestic (as in the United States for certain financial market utilities designated as systemically important<sup>16</sup>) or cross-border (as in the European Union for CCPs).

Box 1

### Cooperation with respect to CCPs in the European Union

In the European Union, cross-border cooperation between authorities with respect to CCPs established in the Union is based on Regulation 648/2012 (also known as the European Market Infrastructure Regulation (EMIR)),<sup>①</sup> which requires the domestic competent authority designated for the supervision of a CCP under EMIR to establish, manage and chair a *college* including relevant authorities from the European Union.<sup>②</sup> Besides exchanging relevant information on the supervision of the CCP both on an ongoing basis and in emergency situations, the college votes formal opinions on certain authorisation decisions to be adopted by the CCP's competent authority.

① See Article 18 of Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32012R0648>. This box reflects the legal status prior to the amendment of EMIR regarding CCP supervision (so-called EMIR 2.2), which will enter into force at the beginning of January 2020. ② In particular, according to EMIR, the college must include the European Securities and Markets Authority; any other domestic authorities responsible for the supervision of the CCP – where more than one national competent authorities are designated with responsibility for the authorisation and supervision of that CCP; the relevant authorities responsible for (i) the supervision of the clearing members of the CCP (namely, from the three Member States representing the largest contribution to the default fund of the CCP); (ii) the supervision of the trading venues served by the CCP; (iii) the supervision of the CCPs with which interoperable arrangements have been established; and (iv) the supervision of the CSDs to which the CCP is linked; and the central banks responsible for the oversight of the CCP and of those CCPs with which interoperable arrangements have been established; and the central bank of issue of the most relevant Union currencies of the financial instruments cleared by the CCP.

In some jurisdictions, such as Germany, cooperation between domestic authorities reflects the legal mandates of the authorities over a particular FMI. In the case of one arrangement, the central bank and national competent authorities exchange information regarding the planned activities of the FMI (new services or products) and discuss supervisory issues and views. Similar to other authorities' experience, regular and close contact between the authorities is considered constructive and can improve the quality of the supervision of the FMI, especially in risk assessment.

### Addressing risks to the financial system

Market events highlighting risks or other vulnerabilities in the financial system often prompt authorities to pursue collective action. One notable example relates to how cooperation between central banks and bank supervisors was an explicit part of the three-track strategy to reduce foreign exchange settlement risk that was adopted by the governors of the G10 central banks in 1996. The first element of that strategy

<sup>15</sup> For some types of FMI, in certain jurisdictions, informal cooperation during the design phase may be replaced or complemented by legally required arrangements, especially as the FMI evolves.

<sup>16</sup> See Title VIII of the Wall Street Reform and Consumer Protection Act, [www.govinfo.gov/content/pkg/STATUTE-124/pdf/STATUTE-124-Pg1376.pdf](http://www.govinfo.gov/content/pkg/STATUTE-124/pdf/STATUTE-124-Pg1376.pdf).

called for action by individual banks to control their foreign exchange settlement exposures, and the second element called for action by industry groups to provide risk-reducing multicurrency services. To accelerate progress on the first two tracks, the third track called for action by central banks, in cooperation with relevant supervisory authorities, to choose the most effective steps to induce satisfactory action by the private sector. One result of that cooperation was the issuance (first published in 2000 and then updated in 2013) of the supervisory guidance for banks' management of foreign exchange settlement risk, which was developed by a joint working group of the Basel Committee on Banking Supervision and the Committee on Payment and Settlement Systems, which later became the CPMI. The two committees continue to cooperate in monitoring banks' progress in implementing this supervisory guidance.

### New FMIs, services, and products

When an FMI is proposed, or seeks to expand its operations, cooperation among authorities can support their respective mandates and objectives with respect to the FMI. When an FMI seeks to provide a service/product in a new jurisdiction or in a jurisdiction where it already operates, or where a new FMI seeks to provide its services cross-border, its supervisor, regulator or overseer typically informs the relevant authorities of the development. The information exchanged could help the relevant authorities determine the extent to which participation in a cooperative arrangement is necessary. Although the relevant authorities may be limited in what they can share, the outreach and engagement can help ensure that the authorities understand the risks imposed by the new service or product, and then take steps necessary for licensing or registering the FMI, consistent with the legal framework.

Box 2

### Post-crisis formation of CCPs for credit default swaps

One notable example of effective cooperation relates to the formation of a CCP for credit default swaps (CDS), as discussed by authorities and industry participants following the financial crisis in September 2008.<sup>①</sup> At that time, CDS were unregulated in the United States and none of the financial regulatory agencies had statutory responsibilities for the entire market. As events unfolded and proposals were considered, the Board of Governors of the Federal Reserve System, the Commodity Futures Trading Commission, and the Securities and Exchange Commission entered into an MOU to reflect their intent to cooperate, coordinate and share information regarding CDS CCPs.<sup>②</sup> In doing so they recognised "the importance of cooperation and coordination in their respective approval, ongoing supervision, and oversight of CCPs for credit default swaps, and that sharing information concerning such CCPs is important in maintaining effective oversight, fostering stability in the market for credit default swaps and in the financial system as a whole, and promoting compliance with the banking, commodities, and securities laws".<sup>③</sup> In addition, in the absence of an applicable regulatory framework, the authorities looked to the *Recommendations for Central Counterparties* as a common baseline in establishing their supervisory expectations for CDS CCPs.

<sup>①</sup> See [www.newyorkfed.org/newsevents/news/markets/2008/an081010.html](http://www.newyorkfed.org/newsevents/news/markets/2008/an081010.html). <sup>②</sup> See report of the President's Working Group: [www.treasury.gov/press-center/press-releases/Pages/hp1272.aspx](http://www.treasury.gov/press-center/press-releases/Pages/hp1272.aspx). <sup>③</sup> See preamble to MOU: [www.treasury.gov/resource-center/fin-mkts/Documents/finalmou.pdf](http://www.treasury.gov/resource-center/fin-mkts/Documents/finalmou.pdf).

### FMI's design or operating platform

The operational design of one or more FMIs can lead authorities to cooperate. Design features can include one FMI's reliance on another FMI for particular services (such as a CCP using a CSD/SSS to complete securities settlement), links between two FMIs in order to facilitate cross-border activity, or FMI's sharing technological resources. For example, two retail PS operating in two different jurisdictions share and operate using the same technical platform. This design led the relevant central banks to formally develop a cooperative arrangement to share information regarding developments on the platform, monitor operational risk, facilitate crisis management and conduct joint assessments on areas of common interest. In another case, a retail payment system separated its card clearing service into a distinct system serving a single market. Despite this separation, the two systems shared the same technical platform. This

interdependency prompted the relevant central banks to cooperate with each other on a voluntary basis. This highly collaborative relationship has facilitated information-sharing among the central banks, as well as reducing the burden on the operator by meeting jointly, and encouraged consensus among the authorities on decisions and assessments.

### Analysis of systemic importance

An FMI's systemic importance to a particular jurisdiction (including outside of its home jurisdiction) can shape an authority's supervisory, regulatory, or oversight responsibilities and approaches. It can also influence the form and intensity of cooperation among relevant authorities.<sup>17</sup> In order to identify such an FMI, an authority (or group of authorities) typically conducts quantitative and qualitative analyses against a set of factors to determine the system's relevance to its jurisdiction.<sup>18</sup> Examples of data that may be useful in conducting these analyses include, but are not limited to, the extent to which the FMI's participants are located in the authority's jurisdiction, the aggregate volume and value of the transactions that originate in the authority's jurisdiction, the proportion of total volume and value of transactions at the FMI that originate in the authority's jurisdiction, and the extent to which instruments are cleared or settled in the jurisdiction's currency.<sup>19</sup>

Some of the data necessary for an authority's analysis may be confidential or not readily available through public sources. An authority may seek to obtain this information either directly from the FMI or by requesting it from the relevant authority. Where legal restrictions may hinder an FMI's ability to share this information directly, cooperation among the relevant authorities, including any requisite legal documentation, may overcome such hurdles.<sup>20</sup> For example, the existence of an MOU or some other arrangement between two authorities may allow an FMI's home authority to share data with an authority, taking account of the FMI's systemic importance to its jurisdiction.

In some jurisdictions, multiple authorities have different responsibilities over a particular FMI. When the division of labour is not transparent, this can result in delays and, at worst, prevent an authority from gathering the requisite information. The absence of a pre-existing information sharing arrangement (or other type of legal mechanism) has prevented some authorities from sharing non-public information in order to support other authorities in conducting their analysis.

<sup>17</sup> The Financial Stability Board's (FSB's) *Key Attributes for Effective Resolution Regimes for Financial Institutions* (Key Attributes) call for the formation of a crisis management group (CMG) (or equivalent arrangement) for all FMIs that are systemically important in more than one jurisdiction. For additional information, see the Key Attributes and the FMI sector-specific annex (II-Annex I) on the FSB's website, [www.fsb.org/wp-content/uploads/r\\_141015.pdf](http://www.fsb.org/wp-content/uploads/r_141015.pdf).

<sup>18</sup> Paragraph 1.20 of the PFMI states "The presumption is that all CSDs, SSSs, CCPs, and TRs are systemically important, at least in the jurisdiction where they are located, typically because of their critical roles in the markets they serve. ... Conversely, an authority may disclose the criteria used to identify which FMIs are considered as systemically important and may disclose which FMIs it regards as systemically important against these criteria."

<sup>19</sup> Other types of data include links with FMIs located in the authority's jurisdiction; in the case of a CCP, the extent to which the foreign CCP clears instruments that are subject to mandatory clearing obligations in the authority's jurisdiction; in the case of a CSD, proportion of the market value of financial instruments issued by issuers from the authority's jurisdiction and proportion of the market value of financial instruments centrally maintained in securities accounts by a CSD for participants and other holders of securities accounts from the authority's jurisdiction and the extent to which there is no readily available substitute to the FMI; and the degree of interconnectedness between the FMI and the authority's jurisdiction, including the extent to which the FMI's failure could create, or increase, the risk of significant liquidity or credit problems spreading among financial institutions or markets and thereby threaten the stability of the financial system of the authority's jurisdiction.

<sup>20</sup> See Section 7 for a discussion on mechanisms to facilitate information-sharing among authorities, noting, however, that legal restrictions also may hinder the relevant authority's ability to share information.

## 4. Relevant authorities

### 4.1 Context

Several considerations can influence the scope of authorities involved in a particular cooperative arrangement. Relevance is closely linked to the nature and scope of the authority's regulatory, supervisory or oversight responsibilities with respect to the FMI as well as the FMI's systemic importance in an authority's jurisdiction.<sup>21</sup> Responsibility E does provide some guidance to relevant authorities in that they should "explore, and where appropriate, develop cooperative arrangements that take into consideration (a) their statutory responsibilities, (b) the systemic importance of the FMI to their respective jurisdictions, (c) the FMI's comprehensive risk profile (including consideration of risks that may arise from interdependent entities), and (d) the FMI's participants".<sup>22</sup>

Other considerations are linked to the goals of Responsibility E. As reflected in key consideration 1, "Such cooperation needs to be effective in normal circumstances and should be adequately flexible to facilitate effective communication, consultation, or coordination, as appropriate, during periods of market stress, crisis situations, and the potential recovery, wind-down, or resolution of an FMI." Furthermore, as noted in explanatory note 4.5.1, "relevant authorities should also cooperate with resolution authorities and the supervisors of direct participants, as appropriate and necessary, to enable each to fulfil its respective responsibilities." To achieve this outcome, some form of cooperation may be necessary with authorities responsible for the supervision of FMI participants (such as banking supervisors) and resolution authorities.

Under this premise, this section describes how authorities have identified relevant authorities for purposes of cooperative arrangements. It also discusses relationships with banking supervisors and FMI resolution authorities.

### 4.2 Experience

"Relevance" is a multi-dimensional concept. The scope of authorities (types and number) who are "relevant" for the purposes of cooperation is unique to each FMI and influenced by several considerations. Relevance can also be thought of as a spectrum. In some cases, the degree of relevance may be such that formal, routine cooperation would best meet the needs of authorities, while other situations may warrant informal, ad hoc cooperation.

#### Authorities with regulatory, supervisory or oversight responsibilities over FMIs

It is generally understood and recognised in practice that authorities with explicit responsibilities for the regulation, supervision and oversight of an FMI are relevant for the purposes of cooperation. This set of relationships rests at the core of Responsibility E, as well as of the recommendations which predated it.<sup>23</sup> There are numerous examples of arrangements designed to support two or more authorities in their respective supervisory and decision-making activities, among others, regarding a specific FMI. For a multicurrency FMI, the central bank(s) of issue may also be relevant due to, for example, the volume and value of transactions settled in a particular currency or contractual relationships between the central bank and FMI (such as for the provision of accounts and services). Supervisors of an FMI's participants are another category of potentially relevant authorities. For cross-border FMIs, the range of potential

<sup>21</sup> See Responsibility E, explanatory note 4.5.3.

<sup>22</sup> See Responsibility E, explanatory note 4.5.1.

<sup>23</sup> See RISS, [www.iosco.org/library/pubdocs/pdf/IOSCOPD123.pdf](http://www.iosco.org/library/pubdocs/pdf/IOSCOPD123.pdf) and [www.bis.org/cpmi/publ/d46.pdf](http://www.bis.org/cpmi/publ/d46.pdf) and RCCP [www.iosco.org/library/pubdocs/pdf/IOSCOPD176.pdf](http://www.iosco.org/library/pubdocs/pdf/IOSCOPD176.pdf) and [www.bis.org/cpmi/publ/d64.pdf](http://www.bis.org/cpmi/publ/d64.pdf).

authorities to fall within this category could be quite broad, and require further analysis to identify which authorities should be invited to join a cooperative arrangement.<sup>24</sup>

The circumstances surrounding a particular FMI or the market more broadly can also influence which authorities are considered “relevant”. In particular, the types of authority and the number considered “relevant” during normal times might expand during times of market stress. For example, a crisis involving a systemically important global financial institution is inherently complex. This complexity is magnified when the failing institution is affiliated with other legal entities with memberships in FMIs around the world. Unless there is adequate transparency on which particular entity is experiencing financial distress, FMIs and authorities face making decisions on incomplete information. The relevant authorities in an arrangement for an affected FMI may decide to expand their crisis-related communication to include other, now-relevant authorities to exchange information. However, the challenges and inefficiency of crafting any new and necessary information-sharing arrangements during a crisis may make it preferable to set up such arrangements during business-as-usual times, in anticipation of any future crisis. By maintaining flexibility, as appropriate, on “relevance,” authorities can better support each other and take action based on a wider set of information.<sup>25</sup>

Although relevance can vary, some themes have emerged from authorities’ experiences. For PS, central banks are considered “relevant authorities” due to their oversight of private sector and central bank-operated systems or as the central bank of issue for a currency settled by the system. For CSDs and SSS, the authorities typically considered relevant are those with direct responsibilities for the CSD/SSS, supervisors of participants (primarily bank supervisors), central banks of issue, and market regulators. For certain arrangements, the cooperation may be among central banks of issue only, while in others several types of authority may be deemed relevant. In the context of CCPs, especially globally active ones, arrangements include a much higher number of relevant authorities across the different types (direct responsibility for the CCP, central banks of issue, market supervisors and supervisors of participants).

Experience has shown that identifying which authorities are “relevant” has had its challenges. As more FMIs operate cross-border, settle in multiple currencies and serve large portions of a particular market, a larger number and a wider range of authorities have an interest in ensuring that these FMIs operate safely and efficiently. It is not always clear when one authority’s interest is significant enough to warrant cooperation, formal or informal. In certain cases, if the expectation and scope is not prescribed by law or the interested authority has no regulatory, supervisory or oversight relationship with the FMI, then it is possible for these authorities to not be considered relevant for purposes of Responsibility E. This outcome can leave affected authorities with limited or no insight into the FMI whose activities are relevant to their jurisdiction. In such cases, the affected authorities may elect to make policy or other decisions regarding use of the FMI.

### Supervisors of FMI participants

Banks, or their affiliates, are typically eligible to participate in most if not all types of FMI and their supervisors are likely to take a strong interest in how the FMI operates and manages risk. Supervisors of FMI participants may be “relevant” for purposes of cooperation when, for example, the participants represent a significant proportion of total volume and value of transactions cleared, settled or recorded

<sup>24</sup> Such analysis would not preclude authorities from engaging with other supervisors of participants on a bilateral and as-needed basis.

<sup>25</sup> Another example of ad hoc cooperation with other authorities includes those with particular interest in the FMI’s resilience and continued functioning during an operational contingency event. Authorities who supervise trading platforms or exchanges have an interest in understanding how post-trade clearing and settlement systems (CCPs and CSDs/SSS) operate and manage risk, such as how they (i) mitigate and manage operational risk, including cyber risk; (ii) prepare for and employ contingency plans for operational outages; (iii) respond to trading halts; (iv) manage participants in financial difficulty; or (v) test their operational resilience. While these types of authority may not necessarily be involved with the routine cooperative arrangements established for FMIs, there often is a mutual interest in information-sharing, exchanging views, and coordinating with these authorities leading up to and during an actual event.



by the FMI; or they provide critical services to the FMI as a liquidity provider, custodian or settlement agent. The FMI's primary authority may benefit from involving the participants' supervisors in a cooperative arrangement, especially when considering certain risk management controls, default management procedures and recovery tools used by the FMI, and in understanding the risks posed to the FMI by the participants. Not all of the supervisors of an FMI's participants may be considered relevant for purposes of a formal cooperative arrangement (as when the overall benefits of cooperation do not outweigh the costs), but the FMI's primary authority may still engage with them informally on an ad hoc basis.

## Resolution authorities

The scope and frequency of cooperation among relevant authorities for a particular FMI and resolution authorities has been increasing since the 2008 financial crisis. The authority with the legal powers to conduct a resolution of an FMI can vary depending on the jurisdiction. In some cases, one authority may be responsible for the regulation, supervision, oversight and resolution of a particular FMI. As a result, the requisite knowledge and resources may be readily available within the organisation. In other cases, the authority with the legal powers to resolve an FMI may be separate from the FMI's regulator, supervisor or overseer. In these jurisdictions, one common form of cooperation is the supervisory authority assisting the development of the resolution authority's understanding of the organisational, operational and risk management controls and recovery tools available to one or more FMIs. Similarly, the resolution authority may also provide information to the FMI's supervisor to assist in the development of the supervisor's understanding of the resolution authority's approach to resolving the FMI, including, for example, the applicable legal framework for resolution and the resolution plan or strategy for the FMI. This sharing can facilitate learning, foster relationships, and facilitate the development of resolution strategies.

As an FMI's systemic importance expands cross-border, the scope of relevant authorities and expectations for cooperation increase as well. The FSB's Key Attributes call for the formation of a CMG (or equivalent arrangement) 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".<sup>26</sup> The purpose of a CMG is to make both the planning and implementation of the FMI's resolution more effective. When one or more authorities identify an FMI as systemically important for the purposes of resolution, it is often the case that the same FMI has been identified as similarly important for the purposes of the PFMI and cooperation under Responsibility E. In particular, to facilitate a holistic perspective of the risks inherent in FMIs throughout their potential lifecycle (business as usual, crisis management, recovery, resolution), it can be useful to engage authorities involved in resolution planning and resolvability assessments with the ongoing cooperative oversight process, as appropriate.

## 5. Cooperation regarding a specific FMI

### 5.1 Context

Although authorities cooperate on a range of topics and for a variety of purposes, cooperating to promote the safety and efficiency of FMIs is the primary focus of Responsibility E. This has, in practice, resulted in the establishment of cooperative arrangements for specific FMIs. These cooperative arrangements have proved to facilitate effective and efficient sharing of confidential information and supervisory views regarding the FMI, fostered constructive dialogue on the risk management expectations for and controls used by the FMI, enabled authorities to coordinate and contribute to the assessment of the FMI against the PFMI, and served as a ready available communication mechanism during times of crisis, among other

<sup>26</sup> The report on *Key Attributes for Effective Resolution Regimes for Financial Institutions* (Key Attributes) is available at [www.fsb.org/wp-content/uploads/r\\_141015.pdf](http://www.fsb.org/wp-content/uploads/r_141015.pdf), which includes sector-specific guidance incorporated into the Key Attributes in 2014.

benefits. To achieve these outcomes, however, successful arrangements demonstrate flexibility to facilitate effective communication, consultation, or coordination, as appropriate, during normal times as well as during periods of market stress.<sup>27</sup> There is significant value in these arrangements during a crisis event, as evidenced by the experience discussed below.

Responsibility E establishes a broad expectation for cooperation, but also specifies particular instances when relevant authorities should engage. Key consideration 5 states that “At least one authority should ensure that the FMI is periodically assessed against the principles and should, in developing these assessments, consult with other authorities that conduct the supervision or oversight of the FMI and for which the FMI is systemically important.” In addition, consistent with key consideration 7, a core provision in many cooperative arrangements is for relevant authorities to “provide advance notification, where practicable and otherwise as soon as possible thereafter, regarding pending material regulatory changes and adverse events with respect to the FMI that may significantly affect another authority’s regulatory, supervisory, or oversight interests.” Material regulatory changes or proposed changes to the FMI’s rules, procedures, or operations, can affect another authority’s regulatory, supervisory and oversight interest. Advance notification not only helps those authorities fulfil their respective mandates, but also provides views on the changes and planning for potential impacts relevant to the respective jurisdictions.<sup>28</sup> The scope of authorities notified also needs to be considered, especially when the changes or events relate to an FMI’s recovery, wind-down or potential resolution. Circumstances can influence how much notice can be provided practicably. When advance notice is not possible (such as in the case of an emergency rule change by an FMI or temporary exemption from a regulatory requirement), authorities should inform the relevant authorities as soon as possible thereafter.

Key consideration 6 describes another scenario when cooperation for a specific FMI is expected. Central banks of issue may have an interest in an FMI’s payment and settlement arrangements and its related liquidity risk management procedures because of their roles in implementing monetary policy and maintaining financial stability.<sup>29</sup> When the authority (or authorities) with primary responsibility for the FMI assess its payment and settlement arrangements and its related liquidity risk management procedures against the principles, in a currency for which the FMI’s settlements are systemically important, the authority (or authorities) should consider the views of the central banks of issue.<sup>30</sup> Whatever the form of cooperation, consultations among these authorities and central banks of issue help to ensure that there is a common understanding of how the FMI manages its liquidity risk in the relevant currency and what consequences could flow from its risk management practices.

This section elaborates on how authorities cooperate to promote the safety and efficiency of a specific FMI, how they engage in normal circumstances, and ways to communicate effectively and flexibly in crisis scenarios and other market events.

## 5.2 Experience

### Promoting safety and efficiency

Promoting safe and efficient functioning of FMIs is inherent to the mandate of authorities with responsibility for regulating, supervising and overseeing FMIs. Relevant authorities share this objective, including a strong interest in the continuity of an FMI’s critical services provided in their jurisdiction. As reflected in Responsibility E, cooperative arrangements help such authorities achieve their respective goals.

<sup>27</sup> See Responsibility E, key consideration 1.

<sup>28</sup> See generally, Responsibility E, explanatory note 4.5.10.

<sup>29</sup> As a general matter, a central bank of issue is typically interested in understanding how an FMI manages the liquidity risk associated with its currency.

<sup>30</sup> See Responsibility E, key consideration 6.

In practice, through a cooperative arrangement, relevant authorities can promote an FMI's safety and efficiency by sharing substantive information (qualitative and quantitative, public and non-public), exchanging perspectives on risk management controls and views on observance, consulting on views as to supervisory priorities, and discussing interpretations of expectations applicable to the FMI. Effective communication and consultation help the primary authority understand and, as appropriate, incorporate views of relevant authorities in its activities of supervising or overseeing of the FMI, including shaping supervisory messages to the FMI.<sup>31</sup> While respecting their respective legal mandates, and the limits thereto, authorities often share perspectives based on their own experience and discuss details in order to reach a common understanding. In supervisory colleges, for example, the authorities may cooperate in order to converge on a single supervisory view regarding an FMI or provide a common formal opinion on decisions such as the authorisation of proposed products and services. In contrast, in other situations, the supervisory authority may consult with other relevant authorities and consider different opinions before taking final action, but not necessarily reach a single supervisory view.

Assessing an FMI against the principles in the PFMI is another way that relevant authorities can promote safety and efficiency.<sup>32</sup> Approaches to conducting such assessments vary across different cooperative arrangements, domestic and cross-border. In some jurisdictions, the law defines the roles of the central bank, market regulator or other relevant authority (eg reviews are conducted jointly and the mechanics of the assessment process are worked out at a staff level). In other jurisdictions or arrangements, the primary authority conducts the assessment and shares the output with relevant authorities for discussion and to reach consensus, as appropriate for the particular arrangement, regarding the conclusions. There are also examples of the primary authority inviting other relevant authorities to contribute to assessments (including joining onsite examinations), while the primary authority retains responsibility for the final messaging and findings sent to the FMI. Even when a cooperative arrangement is in place, each authority may conduct its own assessment or reach its own conclusion to provide to the FMI's primary authority; these views, however, may, or may not, be taken into account.<sup>33</sup>

In the context of global, cross-border FMIs, relevant authorities (such as supervisors of participants) may be relying considerably on the judgment, information flow and supervisory activities of the authority (or authorities) with responsibility for the supervision or oversight of the FMI. Examples exist where relevant authorities in cooperative arrangements have a means of conveying expectations, expressing concerns and encouraging improvements as to how an FMI is designed or managed.

### Advance notification and mechanisms for consultation

One type of information-sharing relates to advance notification. Authorities participating in cooperative arrangements have developed processes to support advance notification of material changes to an FMI's rules, procedures, or operations, such as by providing notice directly or requiring the FMI to submit notices to the relevant authorities and soliciting views.

In one example related to a particular FMI, such notification has been incorporated voluntarily into the primary authority's supervisory process as follows: a determination that a change is "material" prompts a notification to the authorities participating in the cooperative arrangement. Specifically, the FMI sends a review packet to the members of the arrangement for their review, comment and no objection. Through an iterative process, typically involving one or two drafts, the FMI engages with the members of the arrangement to answer questions, address concerns, and reach a common understanding or, in some

<sup>31</sup> See Section 7 for a discussion of tools authorities have used to facilitate information-sharing.

<sup>32</sup> See Responsibility E, key consideration 5.

<sup>33</sup> Information gathered from such communication and consultation may also assist those authorities who publish their own annual assessments on the FMI (or other similar materials, such as a domestic financial stability report), subject to the relevant confidentiality provisions and protections for non-public information.

cases, a consensus view on the proposal.<sup>34</sup> The primary authority, as the lead of the arrangement, is involved with the entire process and engages with the other authorities as needed. Once all members communicate a no objection, the FMI submits the formal proposal to the primary authority, as required by applicable regulations.

This type of approach can ensure that the relevant authorities receive sufficient notice of a material change and are given ample opportunity to consult with the FMI and the primary authority. Implicit in this approach is a shared understanding among the relevant authorities to cooperate and harmonise the process by which they will consult each other and consider their respective views. A framework such as this can enhance the efficiency of their cooperation. The FMI can benefit by understanding the extent to which relevant authorities support the change, which may lead to fewer issues when it seeks formal approval from the primary authority. The primary authority benefits equally and can make decisions in the light of the views of other relevant authorities. Sequencing the notification process before triggering formal (legally defined) review timeframes provides the relevant authorities with sufficient time to consider the proposal, consult internally and address issues well in advance of the proposal taking effect. When the notification and formal review proceed in parallel, the FMI and primary authority may need to take other steps to provide relevant authorities with sufficient information prior to the formal review process (eg discussions of changes under consideration, in advance of an actual proposal).

### Cooperation with central banks of issue

Central banks often cooperate when one central bank is establishing oversight responsibilities for a new payment, clearing or settlement system in its jurisdiction that will settle payment obligations in another central bank's currency, or when it is enhancing the safety and efficiency of existing systems that involve settlements in a foreign currency. Typically, the host central bank has notified the central bank of issue of the proposed system (or enhancement) and has consulted with the central bank of issue with respect to the system's design, especially regarding the soundness of the settlement and failure-to-settle procedures as they relate to the foreign currency. In some cases, the two central banks have found it beneficial to agree on, or enhance, the foundation for their cooperation (for example by establishing an MOU between the two central banks), to provide clarity around the nature of the engagement and reinforce the commitment to consult.

Central banks with oversight responsibilities have recognised that the central bank of issue is in a unique position to provide the host central bank with insights and perspectives. Those insights have assisted host central banks in assessing the overall soundness of the proposed or existing settlement arrangement. In some cases the assessments resulting from cooperation have led to modifications in the systems' designs that significantly improved their safety and efficiency.

<sup>34</sup> The review phase is not subject to a prescribed time. The length depends on the complexity of the issue and time required to address the authorities' questions. One month is typical.

## Cooperation between the Australian and New Zealand authorities

As a licenced FMI under Australian regulation, ASX Clear (Futures) is subject to supervision by the Reserve Bank of Australia (RBA) and the Australian Securities and Investments Commission. While the relevant New Zealand authorities (the Reserve Bank of New Zealand (RBNZ) and the Financial Markets Authority (FMA)) do not currently have formal supervisory responsibility for ASX Clear (Futures), it is considered to be important to the New Zealand market because it offers NZ dollar-denominated products. Both the RBA and the RBNZ recognise that facilities such as ASX Clear (Futures), which are regulated in one jurisdiction, may offer services in, or be materially important to, the other jurisdiction, even in the absence of formal supervisory responsibilities for relevant entities. Consistent with this view, the two authorities have established an MOU which includes cooperation arrangements relevant to Australian licensed CS facilities' activities in New Zealand dollar-denominated products.<sup>①</sup>

① The MOU is available here: [www.rba.gov.au/payments-and-infrastructure/payments-system-regulation/pdf/memorandum-20140811.pdf](http://www.rba.gov.au/payments-and-infrastructure/payments-system-regulation/pdf/memorandum-20140811.pdf).

## Fostering effective and efficient communications during a crisis

As described in Section 1.3 above, building strong relationships among and between relevant authorities is important to developing trust, which is essential to communicating openly. Based on authorities' experience, routine communication and regular in-person interactions during normal times can foster better communication during a crisis.

Authorities with pre-arranged roles and communication protocols can react and respond effectively, which can be advantageous when the demand for information is high and circumstances are evolving (or deteriorating) quickly. During a crisis event, the scope of information exchanged as well as the authorities considered relevant can expand beyond the parameters established for business-as-usual times.<sup>35</sup> The speed and frequency of information shared may also increase in order for authorities to receive updates in a timely manner and respond appropriately in their respective jurisdictions.

By developing protocols *ex ante*, authorities can be more confident in how and when information will be distributed, prepare to contribute fully to the discussion, and manage expectations internally. Features of such arrangements include (i) a predefined list of primary and secondary contacts for each relevant authority, including title, area of responsibility, contact phone numbers and email addresses; (ii) standing conference bridge capabilities; (iii) updated email distribution lists to notify authorities when crisis communication protocols are activated; (iv) pre-arranged schedule of calls at set times of day (eg 8.00 am, 12.00 pm, 4.00 pm and 8.00 pm of the agreed time zone) or around key processing times for the FMI (eg completion of settlement, completion of margin payments, or following the cut-off time for additional transactions); and (v) annual testing of communication procedures to ensure accuracy of contact information and familiarity among participating authorities. In addition, using an agreed mechanism with a known set of entities can also foster more candid conversations on sensitive topics. This openness in sharing can be critical to how authorities manage the event in their respective jurisdictions. In contrast, an inability or unwillingness to share could have broader, possibly negative, consequences. Inadequate cooperation, especially during times of market stress, can significantly impede the work of relevant authorities.

An ad hoc, temporary arrangement could also be established, as necessary, in order to share non-public information, complement an existing cooperative arrangement, or provide added flexibility to deal

<sup>35</sup> As discussed in Section 4, in some crisis situations, information may need to be exchanged with or shared by authorities who are not a party to an existing relationship. Authorities may determine what, if any, additional legal mechanisms are necessary to support this type of information-sharing.

with the specific scenario. Assuming the necessary details and relationships are in place, this type of arrangement can also be effective in managing a crisis.

Experience has shown that cooperation may need to be elastic, adapting to help authorities fulfil their respective mandates. The scope of authorities relevant in a crisis is likely to expand, especially when the type or magnitude of an event triggers an FMI's recovery plan. Relevant authorities will need to keep the resolution authority informed of events as they unfold. A resolution determination and the actions that immediately follow are time-sensitive. Pre-arranged, well defined, and well understood processes can enhance confidence, reduce uncertainty and support the resolution authority in conducting any necessary analysis and making any decisions on potential intervention measures.<sup>36</sup> Of course, equally important is ongoing cooperation with resolution authorities in order to identify and address any challenges to the effectiveness of resolution actions for FMIs. Responsibility E expects authorities with responsibility for an FMI (ie regulators, supervisors and overseers) to coordinate with resolution authorities in order to enable them to fulfil their respective responsibilities. This could include, for example, the ex ante exchange of information and views on recovery tools and resolution plans for a particular FMI.

For example, the central bank overseers of CLS had put in place a formal crisis communications protocol as part of the cooperative oversight arrangement, and that protocol has proved its worth through multiple market stresses including, most notably, the failures of Bear Stearns and then Lehman Brothers in 2008. The overseeing central banks activated the crisis communications protocol for both Bear Stearns and Lehman, which allowed all of the central banks of issue to monitor each situation as it unfolded, and for every central bank to provide the others with insights on evolving market conditions, concerns and impact in their respective jurisdictions. In the case of Lehman, the cooperating central banks held multiple calls each day throughout the "Lehman weekend" and "Lehman week". Indeed, another relevant authority was invited to provide updates on several of those calls to help put the central bank overseers in the best position possible to understand and to be prepared to respond to market questions, concerns, and developments as they related to CLS and the PS and markets to which it is linked.

## 6. Designing cooperative arrangements

### 6.1 Context

Cooperation may take a variety of forms. As noted in key consideration 3 of Responsibility E, "[t]he form, degree of formalisation and intensity of cooperation should promote the efficiency and effectiveness of the cooperation, and should be appropriate to the nature and scope of each authority's responsibility for the supervision or oversight of the FMI and commensurate with the FMI's systemic importance in the cooperating authorities' various jurisdictions. Cooperative arrangements should be managed to ensure the efficiency and effectiveness of the cooperation with respect to the number of authorities participating in such arrangements." The degree of formalisation of cooperation may vary depending on a number of considerations. In particular, as noted in explanatory note 4.5.1, "relevant authorities should explore, and where appropriate, develop cooperative arrangements that take into consideration (a) their statutory responsibilities, (b) the systemic importance of the FMI to their respective jurisdictions, (c) the FMI's comprehensive risk profile (including consideration of risks that may arise from interdependent entities), and (d) the FMI's participants." Other considerations, such as the legal framework or geographic location, may also influence not only how a cooperative arrangement is designed but also how many of them are formed for a particular FMI.

<sup>36</sup> Communication following entry into resolution would likely be managed by the resolution authority through the CMG. Those details are not discussed in this report.

This section elaborates on the considerations outlined in Responsibility E and offers perspectives on the costs and benefits associated with different types of cooperative arrangement.

## 6.2 Experience

The form, degree of formalisation and intensity of cooperation among authorities will depend on a number of considerations. There may be more than one arrangement among authorities regarding the same FMI or a group of FMIs. As illustrated below, there is no “one size fits all” model.

The statutory mandates of the authorities considered relevant to a particular FMI do influence the design of a cooperative arrangement. As discussed in Section 4, “relevant authorities” can include central banks (as an overseer of the FMI), central banks of issue, market regulators, supervisors of FMI participants and resolution authorities. Each of these authorities has its own mandate and interests in the FMI, which may require different types of information, at different frequencies and in different scenarios. Understanding the nature and scope of these responsibilities can influence the size and number of arrangements necessary as well as the form they should take. This will be particularly important in the context of cooperation and resolution, when the information needed to fulfil the mandates of some relevant authorities may differ from that required by others. Authorities may elect to form one type of cooperative arrangement for a certain purpose (eg a multilateral supervisory college or a set of bilateral supervisory arrangements) and a separate yet similar arrangement (eg a CMG) to reflect the different objectives and memberships that underpin each cooperative arrangement.

Another consideration in designing a cooperative arrangement is the systemic importance of the FMI to the authorities’ respective jurisdictions. As explained in key consideration 3, the form, degree of formalisation and intensity of cooperation should, among other things, “be commensurate with the systemic importance in the cooperating authorities’ various jurisdictions.” In some cases, an FMI’s systemic importance to one or more jurisdictions may be determined through a legal process, such as a formal designation, or through another method of determination. These determinations may or may not be known to the primary authority and the onus is on the relevant authority making the determination to inform the primary authority.<sup>37</sup> Furthermore, a determination of systemic importance may change over time, depending on the nature and scope of the FMI’s activities; therefore, cooperation among authorities may need to do the same.

When an FMI is relevant to multiple authorities, the various authorities could unintentionally establish conflicting expectations for the FMI, absent a mechanism to reduce that risk. In such a scenario, experience has shown that a multilateral arrangement, supported by the appropriate documentation, may be advantageous to both the authorities and the FMI. Such a cooperative arrangement has been established for a systemically important infrastructure supporting settlement services provided by multiple CSDs located in several countries across Europe. In this example, all authorities with responsibilities for those CSDs participate in the arrangement, which is supported by an MOU. The arrangement reflects the respective mandates of the relevant authorities and (i) aims to enhance the effectiveness of the oversight of the infrastructure as well as the oversight/supervision of the FMIs using it; (ii) strives to achieve consistency and to avoid gaps in the application and enforcement of oversight and supervisory requirements; and (iii) serves as a forum for addressing any divergent views. Not only does this model facilitate information-sharing among the authorities, it aims to reduce the potential burden on the operator of the common infrastructure by utilising a lead authority to coordinate all oversight activities and, therefore, eliminating the duplication of tasks.

An FMI’s risk profile is another important consideration when designing a cooperative arrangement. An FMI providing a narrow set of critical services in a single jurisdiction, in a single currency, only to domestic participants will likely have a risk profile different to that of an FMI offering multiple service lines, operating on a cross-border basis, settling in multiple currencies and with links to other

<sup>37</sup> See Section 2 for a discussion regarding information sharing to determine systemic importance.

foreign FMIs. An FMI organised on the former lines could evolve into something more like the latter; in such a case, the cooperative arrangements might need to evolve. For example, mandatory clearing requirements have resulted in an increased number of CCPs that are systemically important in more than one jurisdiction. This expansion has led to the formation of several multilateral cooperative arrangements with participation from authorities around the world.

## Bilateral and multilateral arrangements

Cooperation can occur on a bilateral or multilateral basis. Both forms are effective, used in practice, and usually supported by an MOU or similar instrument, which sets out the purpose for cooperation (eg to share data or information) and the confidentiality provisions necessary to support the exchange of information. With either form, cooperation may enhance effectiveness by reducing the potential for gaps and/or conflicts in the regulation, supervision and oversight that could arise if the authorities did not communicate and consult at all. Furthermore, both types of arrangement can build and enhance trust and strengthen goodwill among the authorities, including during a crisis scenario.

Whether an FMI operates on a domestic or cross-border basis is not a determinative factor in whether authorities should cooperate on a bilateral or multilateral basis. Other considerations, such as the number of relevant authorities, may inform which type of arrangement is optimal. Moreover, as the size of the group expands, it may be harder to reach consensus, as appropriate, across differing groups with differing interests. An authority with multiple bilateral arrangements may find it more practical and useful to form a multilateral arrangement to cover all of the relevant authorities. Alternatively, an authority may find that a bilateral arrangement or arrangements are the most appropriate form for their purposes. Generally speaking, an authority will take into account various costs and benefits when considering which model or models will be most effective and efficient.

## Multilateral arrangements

Multilateral arrangements, by definition, bring together a potentially wide range of authorities to exchange views and perspectives on an FMI. This model can bring certain efficiencies and benefits to all participating authorities and the FMI in a number of ways, including by, but not limited to: (i) sharing information with and receiving information from several authorities in one forum; (ii) hearing perspectives and addressing potential concerns in a group setting, limiting the need for separate bilateral discussions; (iii) developing consensus, as needed, and potentially accelerating decision making; (iv) coordinating supervisory views and avoiding conflicting messaging or expectations for the FMI; (v) minimising the overall burden associated with multiple, duplicative conversations across various time zones by organizing in-person meetings with all relevant authorities and the FMI; and (vi) building the foundation and mechanisms for crisis communication through regular interactions among the group. Multilateral arrangements can be particularly effective in circumstances in which multiple authorities from different jurisdictions need to have a common understanding of the relevant FMI's observance of the PFMI. Similarly, all authorities can benefit from a broader exchange of views and an increased potential for coordination and consistency of decisions.

Group dynamics may present challenges. For example, in some cases, increasing the number of participants may result in an increased potential for differences in priorities among group members based on different legal frameworks, policies, and practices. In other cases, contrasting views may not always be fully reflected in final decisions, even when the arrangement works on a consensus basis.

Supporting any type of arrangement will require resources. In a large, multilateral arrangement, the resources required may expand and other considerations may influence how the arrangement operates. There can be practical challenges to this type of model, such as: (i) number of staff required to distribute agreed information, respond to authorities' inquiries, and ensure that the expectations set forth in any relevant documents are met (such as advance notices and consultations); (ii) logistical considerations such as time zones, meeting space, and costs associated with hosting such meetings; (iii) potential disagreements among authorities that are difficult to resolve in a group setting; and (iv)



complications associated with developing and negotiating the necessary information sharing arrangements with authorities subject to different legal frameworks across multiple jurisdictions. There are examples of multilateral arrangements, ranging in size from 3 to over 20 authorities, where these challenges have been addressed. For instance, some authorities who lead arrangements may assign staff to manage information flow and respond to information needs of authorities in an arrangement; use secure platforms for information sharing, set a commonly agreed start time for calls; limit the number of attendees per participating authority for in-person meetings in order to ensure full representation within any logistical constraints;<sup>38</sup> utilize in-person meetings to better understand all, including divergent, views, or acknowledge objections in documentation, as appropriate; and develop information sharing arrangements in such a manner that ensures each relevant authority has sufficient time to engage their respective legal counsels to review, comment, and substantively contribute to the necessary documentation and to complete necessary internal approvals.

### Bilateral arrangements

Cooperating bilaterally can be efficient and effective. A bilateral arrangement can be tailored specifically to the mandates and interests of the two authorities involved, or be established quickly. A bilateral arrangement may facilitate flexibility and agility in certain circumstances. It may be easier to tailor the scope of cooperation in a bilateral relationship and to focus cooperation on particular issues of interest to the two authorities involved. As they involve fewer parties, these types of arrangements can allow authorities to communicate and exchange information in a nimble fashion. Furthermore, bilateral arrangements may mean reduced complexity in reaching an agreed view among the authorities.

There are many examples of bilateral cooperation between two authorities that are designed to support their respective supervisory responsibilities for a particular FMI. In practice, this type of cooperation has effectively supported concurrent reviews of a CCP's margin model, enabled an authority to rely on a home country regulator's ongoing supervision of an FMI, fostered shared learning and other information flows on a routine basis, and facilitated recognition processes for CCPs seeking to operate outside of their home jurisdiction.

Though these arrangements can be effective, there are trade-offs to cooperating bilaterally, especially when one authority enters multiple bilateral arrangements for a particular FMI. This approach can materially increase burdens on the one authority and the FMI, both of which may need to provide similar information through separate communication channels to several authorities. This approach may be less efficient during a crisis event when there is great value in communicating quickly, efficiently, and consistently with all relevant authorities. This structure also may present challenges in sharing perspectives across all relevant authorities so that each authority's view can be fully informed by those of the others. This, in turn, can present a challenge in reaching common judgement concurrently, which may potentially increase inconsistent views and messaging to the FMI.

### Multiple arrangements

In practice, depending on circumstances, both bilateral and multilateral arrangements may coexist. Participation in a multilateral cooperative arrangement does not preclude the formation of a concurrent multilateral or of bilateral cooperative arrangements among or between relevant authorities. For example, there may be issues of interest to two specific authorities covered by a bilateral arrangement that operates alongside a separate multilateral arrangement.

For certain FMIs, notably CCPs, more than one cooperative arrangement may be in place. This has been observed when a CCP is located in a jurisdiction where cooperation is required by law, and the scope of relevant authorities is broader than what is defined in the applicable legal framework. The primary supervisor, regulator, or overseer may choose to form a separate voluntary arrangement (multilateral or bilateral) to support the ability of other relevant authorities to fulfil their respective mandates. The two

<sup>38</sup> Some authorities have used off-site conference space to accommodate larger groups.

arrangements operate alongside each other and the relevant authorities can meet together as a single group, when appropriate. This not only helps minimize burden on the authorities and the CCP, it also facilitates an exchange of information and views among all relevant authorities. In other examples, authorities have entered into voluntary bilateral arrangements alongside multilateral ones. In one case, two authorities chose to maintain an existing bilateral arrangement formed before legal expectations regarding cooperation went into effect. Experience has shown that separate bilateral arrangements can effectively function alongside multilateral ones.

## 7. Tools for cooperation

### 7.1 Context

Experience has shown that there may be parameters or constraints that influence the scope, design, timeliness and operational aspects of cooperation. In particular, legal requirements, restrictions on information-sharing, technological limitations, and logistical and resource challenges can affect whether and how authorities cooperate. Authorities have used various tools to support cooperation and overcome challenges.

Responsibility E sets expectations for cooperation among authorities while acknowledging the parameters and the non-binding nature of these arrangements. Key consideration 10 states, “Cooperative arrangements between authorities in no way prejudice the statutory or legal or other powers of each participating authority, nor do these arrangements constrain in any way an authority’s powers to fulfil its statutory or legislative mandate or its discretion to act in accordance with those powers.”<sup>39</sup> In some instances, attempts at cooperation have failed to meet the needs of relevant authorities or have otherwise been ineffective.

This section elaborates on the tools authorities have used to facilitate their cooperation.

### 7.2 Experience

#### Legal aspects to be taken into account

The legal framework may affect the authorities’ ability to establish a framework for cooperation or the form that cooperation can take. It may constrain the ability to share relevant information and data (including the granularity of that information), as well as the timing of information exchanges. For example, the legal framework might preclude an authority from sharing information with a foreign authority until that information has been disseminated to domestic entities or approved for release by those entities. Conversely a lack of legal protections can also impose a constraint to cooperation. For example, an authority providing information may be restricted from doing so absent assurances of confidentiality from the receiving authority, and development of a common understanding of “confidentiality” requirements and protections.

In many cases, authorities have sought to address these constraints and fulfil the legal basis for cooperation and exchange of information through MOUs, protocols, or other documentation. Similarly, authorities have utilised a range of ad hoc and informal arrangements, shaped to take relative legal frameworks into consideration. Some jurisdictions have undertaken work to amend legislation in order to

<sup>39</sup> In addition, Responsibility E, key consideration 9 states, “Each authority maintains its discretion to discourage the use of an FMI or the provision of services to such an FMI if, in the authority’s judgement, the FMI is not prudently designed or managed or the principles are not adequately observed.”

support cooperation, particularly in a cross-border context. In some jurisdictions, cooperative arrangements are not legally binding.<sup>40</sup>

It is important that the cooperative arrangements are appropriately tailored to the particular authorities involved and take into account any particular constraints or limitations specific to a particular authority. For example, authorities may be subject to legal requirements with respect to information-sharing, particularly with regard to the onward sharing of information gained through the supervisory process. For such authorities, it would be essential to consider those requirements when developing cooperative arrangements, and such authorities would want to ensure that any arrangements prescribe processes for protecting confidential information and imposing mutually agreeable limits on the onward sharing of information obtained through a cooperative arrangement.

### Legal documentation supporting cooperation

Explanatory note 4.5.4 of Responsibility E references several potential formats for cooperation, including formal arrangements that are organised under MOUs, protocols or other documentation (including, for example, statements of intent or official exchanges of letters), as well as informal arrangements and ad hoc regular communications (which may be implemented through colleges, regulatory networks, oversight committees or ad hoc communication).

Authorities may enter into MOUs, protocols, or other documentation to serve as a formal arrangement governing their cooperation.<sup>41</sup> Regardless of the particular form employed, it is crucial to clearly articulate and make sure all parties involved understand the scope and role of the cooperative arrangement.

The potential advantages of establishing an MOU include the ability to tailor the arrangement very specifically to the authorities involved and to reflect the applicable legal and statutory frameworks of the participating authorities in the MOU itself. This would allow authorities to ensure that an MOU is a feasible solution for them, consistent with their applicable legal and statutory frameworks. An MOU can expressly state that it does not affect the legal, statutory or supervisory framework of any of the parties to the MOU. For example, in some jurisdictions MOUs do not create any legally binding obligations or confer any rights.

MOUs can take a number of forms, including MOUs between or among authorities with respect to (i) a particular FMI; (ii) a broader group of covered entities; or (iii) a more general purpose, such as information-sharing. MOUs can be bilateral or multilateral, among a broader group of authorities with a shared interest. MOUs can be domestic (for example, between an FMI's home supervisory authority and the central bank of the home jurisdiction) or international.

MOUs can reflect particular objectives (as discussed in Section 3), in addition to a general statement of cooperation. These can include consultation on observance of the PFMI by an FMI, whether by periodic assessments or consideration of material changes, or notification of significant developments in a jurisdiction, such as a material event in a jurisdiction that could affect the activities of a particular FMI or in a particular jurisdiction, enforcement or regulatory actions or sanctions related to a particular FMI, any extension of the range of services that an FMI provides, and changes to the relevant requirements to which FMIs are subject by statute, law or regulation.

<sup>40</sup> The applicable legal framework(s) will determine the legal treatment of a cooperative arrangement and any supporting documentation, including whether or not they are legally binding on the participating authorities.

<sup>41</sup> Examples of MOUs include [www.bankofcanada.ca/wp-content/uploads/2014/04/memorandum-understanding-mou.pdf](http://www.bankofcanada.ca/wp-content/uploads/2014/04/memorandum-understanding-mou.pdf), [www.federalreserve.gov/paymentsystems/cls\\_protocol.htm](http://www.federalreserve.gov/paymentsystems/cls_protocol.htm), [www.cftc.gov/idc/groups/public/%40internationalaffairs/documents/file/cftc-rba-asic-clearingmou06051.pdf](http://www.cftc.gov/idc/groups/public/%40internationalaffairs/documents/file/cftc-rba-asic-clearingmou06051.pdf), [www.treasury.gov/resource-center/fin-mkts/Documents/finalmou.pdf](http://www.treasury.gov/resource-center/fin-mkts/Documents/finalmou.pdf), and [www.cftc.gov/International/MemorandaofUnderstanding/index.htm](http://www.cftc.gov/International/MemorandaofUnderstanding/index.htm).

An MOU sets out the undertakings of each authority and can address permissible uses and confidentiality of information shared between authorities. An MOU typically provides that any shared non-public information will be kept confidential and not be disclosed outside the MOU, and addresses whether and, if at all, how a party would furnish any shared information to a third party (eg requiring written notice or consent before sharing, or pursuant to a legally enforceable demand). For example, an MOU can expressly address the onward sharing of information exchanged according to the MOU or the applicability of any particular data privacy, secrecy, confidentiality or blocking statutes to such information.

An MOU could also address other potential uses of shared information, such as in enforcement proceedings or an investigation, in other prudential or supervisory matters, or in the interests of financial stability. Similarly, an MOU could address whether any domestic laws or regulations would prevent the parties to the MOU from providing information or other assistance to each other.

Additionally, an MOU could specify (i) the expected frequency or modes of communication; (ii) the circumstances in which an authority undertakes to notify another authority or authorities; (iii) the content and the form of information-sharing; (iv) procedures for informing other authorities about the relevant oversight/supervisory activities, or involving them; and (v) the general terms for the conduct of on-site examinations.

By addressing such issues in advance of the need to share information and developing a flexible and workable framework for cooperation and information-sharing, the parties to the MOU should be able to follow established procedures when considering requests for information, with the aim of streamlining and expediting the overall process.

## Communication among authorities

Whether the arrangement is bilateral or multilateral, communication is key to achieving effective cooperation. Common approaches include routine in-person meetings (eg annual or biannual), written consultations, scheduled or ad hoc conference calls on specific topics, and other bilateral exchanges of information, as needed (eg responses to market events). As noted above, authorities observe that periodic, pre-scheduled interactions can help build relationships among authorities and allow for a freer exchange of information by providing a regular opportunity for discussion of ongoing developments at the FMI. Managing communication regarding an FMI through a central point of contact can also ease the burden on the FMI while enabling the FMI to understand the issues and concerns of authorities participating in the arrangement.

The frequency with which information is shared may depend on the type of arrangement, needs of the relevant authorities, the purpose of sharing (eg pre-decision notice of changes proposed by an FMI), or nature of the content (eg monthly distributions of data versus annual supervisory assessments). In practice, information may be shared by using a secure email system or saving materials in a central repository. The frequency and level of detail of the information shared can vary across arrangements, and this variation can create challenges in developing a comprehensive view of a particular FMI's activities and impact on one or more jurisdictions.

## 8. Lessons learned

Authorities have identified a number of lessons learned through their experience to date with cooperation. The following non-exhaustive observations, provided for illustration, are not intended to provide guidance to authorities, but may be useful as authorities develop or improve cooperation arrangements, and with regard to specific FMIs.

- Strong, trusted relationships between and among authorities are key to fully realising the benefits of cooperation and successfully achieving a shared objective. An established level of trust among

relevant authorities may be especially relevant when responding to, and managing, a crisis. Authorities often use routine communications and regular in-person interactions to develop these relationships during normal times, which can foster better, open communication during a crisis.

- Exchanging information is a common feature and recognised benefit of cooperation among authorities. The value of cooperation is maximised when there is a willingness as well as legal and practical scope for sharing information, and also when information-sharing is supported by processes and safeguards, as needed. It is essential that cooperative arrangements be appropriately tailored to the particular authorities involved and take into account any particular requirements, constraints or limitations relevant to a particular authority. Authorities often use an MOU, protocol or other type of documentation to help ensure information is exchanged in a manner that is appropriate, to protect confidential information, and to prescribe how information may be used and shared onward, among other details of the particular arrangement.
- Authorities cooperate for many reasons and under various circumstances. Examples include but are not limited to legal mandates or priorities for authorities; market events and other risks emerging in the financial system; the design or operation of new or existing FMIs; and a need to analyse the systemic importance of an FMI to a particular jurisdiction (which in turn, may trigger a certain type of cooperation). Regardless of the trigger, when working together, authorities can mutually support their shared objectives and facilitate their ability to fulfil their respective mandates.
- The scope of authorities considered relevant for purposes of cooperation is unique to each FMI and influenced by several considerations. Authorities take into account the legal mandates of each authority vis-à-vis the FMI, the purpose of the arrangement, and the circumstances necessitating cooperation (business-as-usual and in crisis scenarios). By taking a flexible approach, as appropriate, to determining relevance, authorities can better support one another in a range of circumstances.
- Cooperation regarding a specific FMI can promote the FMI's safety and efficiency. Experience has shown that these objectives can be realised when the arrangement is designed in a way that fosters the sharing of substantive information (qualitative and quantitative); facilitates the exchange of authorities' perspectives on risk management controls and views on observance; enables timely consultation on material changes proposed by the FMI; and supports discussions among authorities regarding interpretations of expectations applicable to the FMI. With appreciation for their respective legal mandates, and limits thereto, authorities both contribute to and benefit from the engagement among authorities in these types of cooperative arrangement.
- There is no one-size-fits-all approach to designing cooperative arrangements. The form, degree of formalisation, and intensity of cooperation often depends on a number of considerations, such as the statutory mandates of the relevant authorities, the FMI's systemic importance to authorities' respective jurisdictions, its risk profile, and the advantages and disadvantages associated with different models. These factors (such as the scope of the FMI's systemic importance) can evolve over time, which may lead authorities to consider whether and how the cooperative arrangement might need to be adapted to reflect changing circumstances.
- Over time, the motivations for, forms of, and tools supporting cooperation among authorities is likely to continue evolving. As a result, the depth and breadth of authorities' experience with cooperation will grow beyond the examples described in this report. Authorities are encouraged to continue to share their experiences with each other and to continue to develop and enhance arrangements that promote the safety and efficiency of FMIs.

## Annex: List of PSG members

### Co-Chairs:

European Central Bank	Daniela Russo
Commodity Futures Trading Commission, US	Robert Wasserman

### Members:

Reserve Bank of Australia	Jon Cheshire
National Bank of Belgium	Steven Van Cauwenberge
Securities and Exchange Commission of Brazil	Sergio Schreiner
Bank of Canada	Peter Youngman
Autorité des marchés financiers, Québec	Anna Tyniec
Ontario Securities Commission	Jalil El Moussadek
Bank of France	Valerie Fasquelle Nicolas Peligry
Autorité des marchés financiers, France	Patrice Aguesse
European Central Bank	Simonetta Rosati
European Commission	Gilles Herve
European Securities and Markets Authority	Giampiero Carlà
Deutsche Bundesbank	Roland Neuschwander
Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	Felicitas Linden
Securities and Futures Commission, Hong Kong SAR	Ryan Ko
Securities and Exchange Board of India	Manoj Kumar
Bank of Italy	Claudio Impenna
Bank of Japan	Norio Hida Megumi Takei
Financial Services Agency, Japan	Kenrin Nishimura Kosaku Taira
National Banking and Securities Commission, Mexico	Luis Leyva
Netherlands Bank	Jeannette Capel
Central Bank of the Russian Federation	Natalya Nikishanina
Monetary Authority of Singapore	Pui Hoon Loh
International Organization of Securities Commissions	Patricia Saenz de Maturana
Finansinspektionen	Jan Axelsson
Committee on Payments and Market Infrastructures	Philippe Troussard
Swiss National Bank	Thomas Nellen
Bank of England	Russell Jackson
Board of Governors of the Federal Reserve System	Jennifer Lucier

Federal Reserve Bank of New York  
Commodity Futures Trading Commission, US  
Securities and Exchange Commission, US  
World Bank Group

Lawrence Sweet  
Kirsten Robbins  
Elizabeth Fitzgerald  
Harish Natarajan