



BANK OF ENGLAND

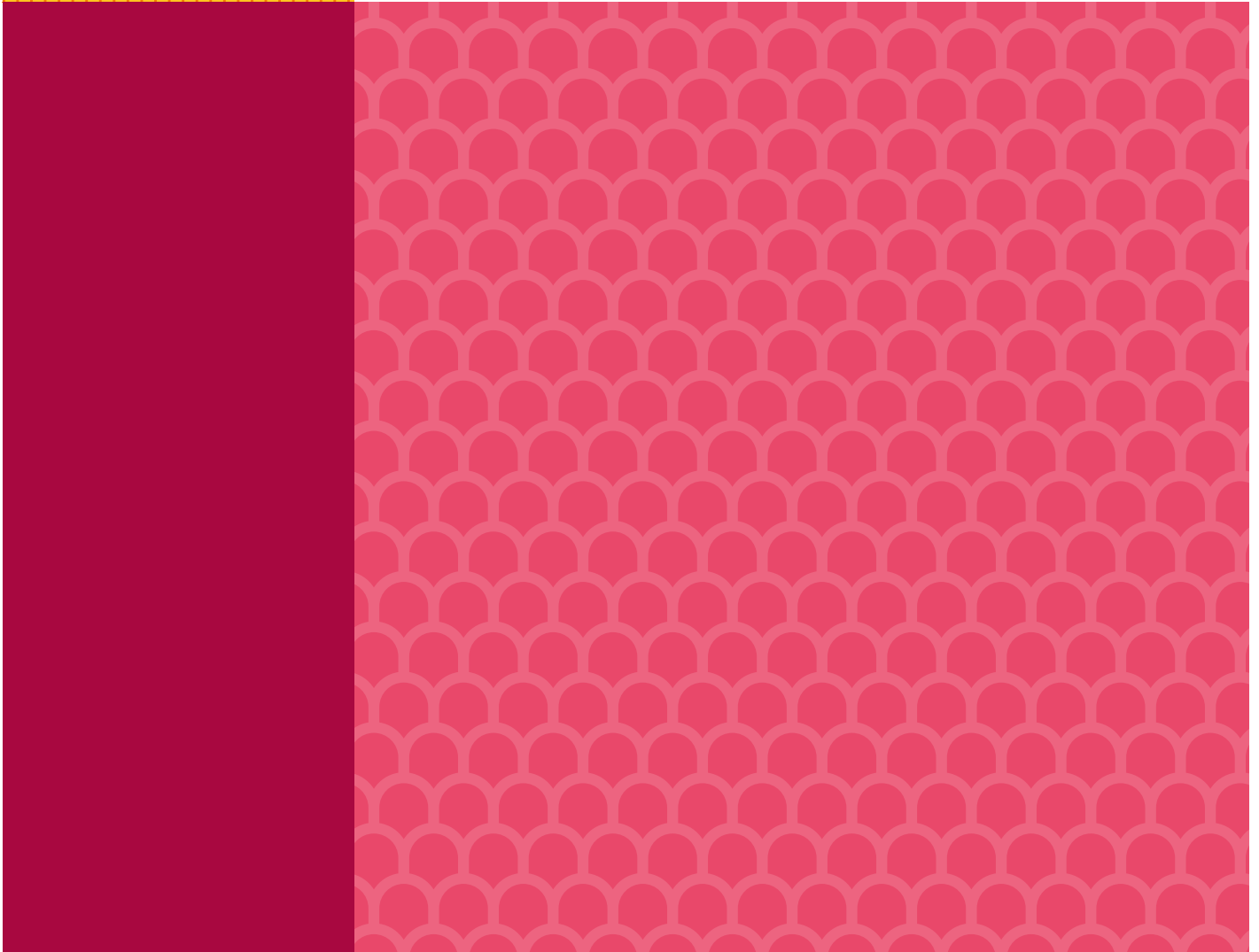
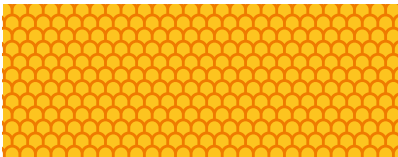
Financial Market  
Infrastructure



Consultation Paper

# Operational Resilience: Central Counterparties

December 2019



Consultation Paper

# Operational Resilience: Central counterparties

December 2019

The Bank of England (the Bank) invites comments on this Consultation Paper. Comments should reach the Bank by Friday 3 April 2020.

Comments may be sent by email to [FMIFeedback@bankofengland.co.uk](mailto:FMIFeedback@bankofengland.co.uk).

Alternatively, please send comments in writing to:

Operational Resilience (CCPs)  
Financial Market Infrastructure Directorate  
Bank of England  
20 Moorgate  
London EC2R 6DA

Information provided in response to this consultation, including personal information may be published or disclosed in accordance with access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA), the Data Protection Act 1998, the Environmental Information Regulations 2004 and the General Data Protection Regulation 2018) or otherwise as required by law or in discharge of our statutory functions.

If you would like the information that you provide to be treated as confidential, please mark this clearly in your response. Under the FOIA, there is a Statutory Code of Practice with which public authorities must comply and which deals, among other things, with obligations of confidence. In view of this, it would be helpful if you could explain why you regard the information you provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give assurance that confidentiality can be maintained in all circumstances.

In the case of electronic responses, general confidentiality disclaimers that often appear at the bottom of emails will be disregarded unless an explicit request for confidentiality is made in the body of the response.

Copies of this consultation paper are available to download from the Bank's website at [www.bankofengland.co.uk](http://www.bankofengland.co.uk).

## Contents

---

<b>1</b>	<b>Overview</b>	<b>1</b>
<hr/>		
	<b>Figure 1: Strategic outcomes and supporting requirements for the Operational Resilience Framework</b>	<b>2</b>
<hr/>		
<b>2</b>	<b>The Bank's proposed expectations regarding a CCP's Operational Resilience Framework</b>	<b>4</b>
<hr/>		
<b>3</b>	<b>Relationship with EMIR and associated technical standards</b>	<b>13</b>
<hr/>		
	<b>Appendix: Draft Supervisory Statement 'Operational Resilience: Central counterparties'</b>	<b>14</b>

## 1 Overview

1.1 This consultation paper (CP) sets out proposals for the Bank of England's (the Bank) expectations for a central counterparty's (CCP's) Operational Resilience Framework and a draft Supervisory Statement (SS) (see appendix) that establishes these expectations. The draft SS sets out what meeting the expectations being consulted on may look like. These expectations are not binding, but they will provide CCPs with information on how the Bank intends to assess the operational resilience of CCPs.

1.2 This consultation is relevant to all current Bank supervised CCPs and CCPs which are planning to apply to the Bank seeking authorisation.

1.3 These expectations have been developed following the publication of Discussion Paper (DP) 1/18 'Building the UK financial sector's operational resilience'.<sup>1</sup> The Bank, Prudential Regulation Authority (PRA) and Financial Conduct Authority (FCA) have developed a joint document which addresses the feedback received to this DP and the outcomes associated with an Operational Resilience Framework. This CP should be read in conjunction with this joint document.

1.4 The policy objective is for CCPs to be operationally resilient to disruption events. The Bank considers disruption to cleared markets to be a financial stability issue, meaning that improving resilience among CCPs would therefore support the Bank's financial stability objective.<sup>2</sup> The Bank therefore considers that improvements in operational resilience should be facilitated by supervisory expectations.

1.5 The Bank considers operational risk to be a risk inherent in doing business. If not managed effectively, it will negatively impact both the financial and the operational activities of a CCP. As a result the Bank expects that CCPs' risk management frameworks should incorporate actions to minimise the likelihood of an operational risk event crystallising; and actions to mitigate and recover from an operational risk event if it crystallises. These risk management frameworks should integrate with the development of appropriate impact tolerances for important business services.

### Responses and next steps

1.6 This consultation closes on Friday 3 April 2020. The Bank invites feedback on the proposals set out in this consultation. Please address any comments or enquires to [FMIFeedback@bankofengland.co.uk](mailto:FMIFeedback@bankofengland.co.uk).

1.7 The proposed implementation date for the proposals is Q4 2021.

### Summary of proposals

1.8 The policy proposals included in this CP are the Bank's proposed supervisory expectations for the operational resilience of CCPs.

1.9 Consistent with the approach set out in the DP 1/18, the proposals aim to ensure that CCPs deliver improvements to their operational resilience in three main areas:

---

<sup>1</sup> July 2018: <https://www.bankofengland.co.uk/prudential-regulation/publication/2018/building-the-uk-financial-sectors-operational-resilience-discussion-paper>.

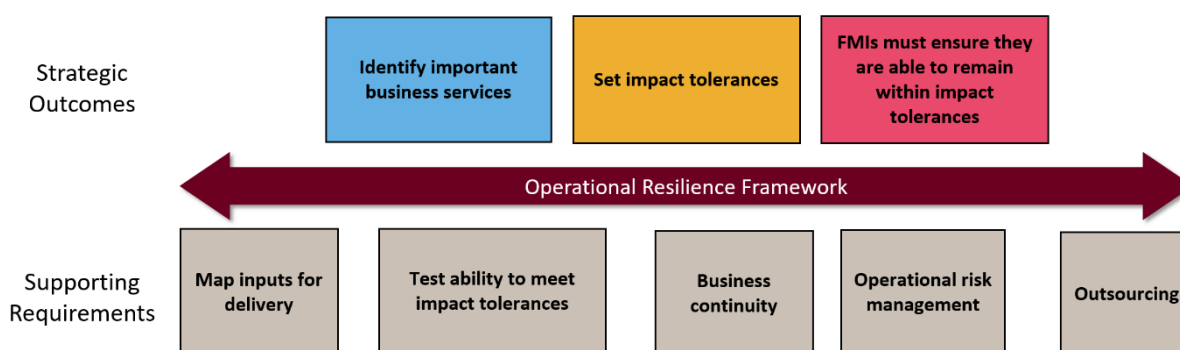
<sup>2</sup> 'Financial stability objective' means the objective set out in section 2A of the Bank of England Act 1998.

- (i) **prioritising the things that matter:** boards and senior management should prioritise those activities that, if disrupted, would pose a risk to the stability of the UK financial system (financial stability). This may mean a shift away from thinking about the resilience of individual systems and resources and a shift towards considering the services that are provided to identifiable participants (identifying important business services);
- (ii) **setting clear standards for operational resilience:** CCPs should articulate specific maximum levels of disruption within which they will be able to resume the delivery of important business services following extreme but plausible disruptions (setting impact tolerances); and
- (iii) **investing to build resilience:** CCPs should have contingency arrangements in place to enable them to resume the delivery of important business services, taking action in advance to ensure that important business services are able to remain within impact tolerances in extreme but plausible scenarios.

The terminology used in this CP and corresponding draft SS is consistent with the terminology used in those draft SSs relating to operational resilience published by the Bank, PRA and FCA. This is to ensure the UK authorities have a consistent supervisory approach to operational resilience across regulated firms.

1.10 Figure 1 below illustrates the key elements in the Bank's proposed approach.

**Figure 1: Strategic outcomes and supporting requirements for the Operational Resilience Framework**



### Structure of the CP

1.11 Chapter 2 consults on the Bank's proposed expectations regarding a CCP's Operational Resilience Framework.

1.12 Chapter 3 sets out the relationship between the Bank's proposed Operational Resilience Framework and the requirements established in 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 (EMIR) and Commission Delegated Regulation (EU) No 153/2013 of 19 December 2012 supplementing Regulation EU No 648/2012 of the European Parliament and of the Council with regard to regulatory technical standards on requirements for central counterparties (RTS 153/2013). For ease of comparison the Bank has included relevant cross-references to EMIR and RTS 153/2013 throughout this CP and the draft SS.

1.13 Appendix 1 is the Draft Supervisory Statement 'Operational Resilience: Central Counterparties'.

## 2 The Bank's proposed expectations regarding a CCP's Operational Resilience Framework

2.1 This chapter sets out the Bank's expectations for CCPs to produce an 'Operational Resilience Framework'. The Bank proposes to align the definition of operational resilience with that published in DP1/18 'Building the UK financial sector's operational resilience'. DP1/18 stated 'Operational resilience is the ability of an FMI and the sector as a whole to prevent, respond to, recover and learn from operational disruptions'.

2.2 The Bank suggests that a CCP should produce an Operational Resilience Framework and associated material. The Bank proposes that this Framework is an approach which will establish how the CCP will meet the operational resilience objectives set out in the draft SS. The Bank suggests that the Framework should ensure that a CCP identifies and targets for investment, where necessary, those aspects of its business most sensitive to an operational disruption. The Bank proposes that the extent of the work required to develop the Operational Resilience Framework should be comprehensive but proportionate to the outcomes expected by the Bank.

2.3 The Bank proposes that a CCP's production of an Operational Resilience Framework is consistent with the requirement in Article 4(1) of RTS 153/2013 for a CCP to have a sound framework for the comprehensive management of all of the material risks to which it is or may be exposed, and establish documented policies procedures and systems to identify, measure, monitor and manage such risks. The Bank further proposes that a CCP's production of an Operational Resilience Framework is consistent with the business continuity policy and disaster recovery plan referred to in Article 34 of EMIR and Article 17(1) of EMIR RTS 153/2013, and not in conflict with those requirements.

2.4 The Bank suggests that the Framework should focus on the CCP's ability to:

- minimise the likelihood of an operational disruption event; and
- mitigate and recover from an operational disruption event.

2.5 The Bank proposes an Operational Resilience Framework should include as a minimum, policies and procedures:

- for the identification of important business services;
- in relation to the approval of impact tolerances for important business services;
- aligned to its broader operational risk framework, for the identification and mapping of people, processes, technology, facilities and information (operational assets) underlying each important business service;
- for identifying risk of disruption to important business services;
- to ensure that important business services, if disrupted, can be recovered within the set impact tolerance; and
- for utilising the results of such testing to make improvements to its procedures and capabilities for minimising the likelihood of, and facilitating recovery from, disruption to important business services.

2.6 The Bank proposes that an Operational Resilience Framework should include communications planning. The Bank suggests that this should take into consideration the potential impact of operational resilience disruption on interdependent FMIs, or the effect of disruption across multiple jurisdictions, markets and products.

2.7 The Bank's proposal that a CCP's Operational Resilience Framework includes communications planning is consistent with the requirement in Article 23(1) of RTS 153/2013 that a CCP shall have a communication plan which documents the way in which communication will take place during a crisis.

*(Article 4(1) of RTS 153/2013)*

*(Article 17(1) of RTS 153/2013)*

*(Article 23(1) of RTS 153/2013)*

### **Identification of important business services and risks to important business services**

2.8 As set out in DP1/18, avoiding disruption to particular systems is a contributing factor to operational resilience, but it is ultimately an important business service that needs to continue to be provided. A focus on important business services will allow appropriate assessment of end-to-end risks to those important business services, thereby increasing operational resilience.

#### **What is a business service?**

2.9 A business service is a service that a CCP provides, delivering a specific outcome or utility to an identifiable participant. A business services approach is an effective way to prioritise improvements to systems and processes. Looking at systems and processes on the basis of the business services they support may bring more transparency to and improve the quality of operational resilience decision making, thereby improving operational resilience.

2.10 The Bank suggests that a CCP should consider the chain of activities which make up the business service, from taking on an obligation, to delivery of the service, and determine which part of the chain is essential to delivery. This would vary by business service. Sometimes the chain will be long, and certain early stages, for example when an obligation is accepted, may not be essential to the final delivery of a service. In other cases, the process of delivering a service may be more integrated and origination may be a key part. The Bank considers that the most essential parts of the service should be operationally resilient, and that firms should accordingly focus their work on the resources necessary to deliver those activities in the chain.

2.11 The Bank would not expect internal services, such as those provided by human resources or payroll teams, to be identified as business services for the purposes of the proposed policy. Failure to deliver internal services would only give rise to concerns from the Bank's perspective when it affected the delivery of outward-facing business services which have direct consequences for financial stability. Internal services, if necessary for the delivery of important business services, should be included in the mapping work a CCP should be performing.

#### **What makes a business service important?**

2.12 The Bank proposes that this identification process should identify specific market or product business services that a CCP provides, but that it should also consider operational activities that



support or comprise elements of market or product business services, which could also be deemed important business services. Such operational activities could include:

- trade acceptance and matching;
- treasury and collateral management;
- margin calculation;
- settlement instructions;
- default management; and
- regulatory driven activity (such as enabling the clearing obligation to be met) or external obligations.

2.13 The Bank proposes that CCPs will be expected to identify important business services by considering a variety of factors. Examples of factors that are relevant to the identification of an important business service might be:

- share of the relevant market;
- the number of members the CCP serves;
- the risk profile of the transactions conducted through the business service;
- the substitutability of the business service; or
- regulatory driven activity (such as enabling the clearing obligation to be met) or external obligations.

2.14 The introduction of the concept of important business services will enable the Bank to prioritise its supervision of CCPs so as to foster financial stability.

2.15 The Bank intends that it will consider that a business service is an important business service if a prolonged disruption of that business service would significantly disrupt the orderly functioning of a market which a CCP serves, thereby impacting financial stability.

2.16 The Bank proposes that this definition of important business services should be broader than the concept of 'critical business functions' established in Article 17(2) of RTS 153/2013. However, the Bank considers it is consistent with the general requirements of Article 26 EMIR and Article 4(2) of RTS 153/2013. This is because important business services is intended to encompass a wider range of activities, which may not all be critical business functions.

2.17 The Bank suggests that a CCP should identify its important business services in order to understand both the implications of disruption of a particular business process to a participant and the interrelationship and interdependency between important business services in the way they support a participant.

2.18 The Bank proposes that a CCP, having identified its important business services, should undertake an assessment of the operational risks that are relevant to these important business services. The Bank suggests that the list of relevant operational risks should be used in the design of

disruption scenarios for the purposes of testing, but should also have wider usage in the CCP for the purposes of managing operational resilience. The Bank proposes that each CCP should use its own risk assessment based upon its own circumstances, markets, products and operational structure to understand which operational risks are relevant, and where operational resilience issues exist.

2.19 The Bank intends to include a non-exhaustive set of examples of the types of risks that the Bank might expect to be considered by a CCP.

*(Article 4(2) EMIR RTS 153/2013)*

*(Article 17(2) of EMIR RTS 153/2013)*

### **Setting the impact tolerance for important business services**

2.20 The Bank intends to define impact tolerance as the maximum tolerable level of disruption for an important business service, whereby further disruption would pose a significant impact to the market the CCP serves. CCPs should consider a range of possible measures by which to judge the appropriate impact tolerance for a given important business service. These factors could include for example: the length of time of an outage, the number of participants impacted, and the volumes of transactions affected.

2.21 Impact tolerances provide a clear standard which the Bank would expect a CCP to remain within, and which boards and senior management could use to drive improvements to their operational resilience.

2.22 The Bank suggests that impact tolerances should be set on the assumption that disruptions will occur. The draft SS sets out some proposed metrics that a CCP could consider when setting a tolerance.

2.23 The Bank proposes that the impact tolerance is complementary to the two hour maximum recovery time for a CCP's critical business functions established in Article 17(6) of RTS 153/2013. This is because the Bank views the definition of important business services as broader than the concept of 'critical business functions'. The Bank suggests that the two-hour maximum recovery time, therefore, only applies to those important business services that are considered to also be 'critical business functions'. This two hour maximum recovery time for a CCP's 'critical business functions' must be met and should be identified and catered for in a CCP's business continuity plan.

2.24 Since the important business services may not necessarily be the same as 'critical business services', the two hour maximum recovery time need not, therefore, apply to all important business services, but only to those that are also considered to be 'critical business functions'.

2.25 In addition, the impact tolerances that the Bank proposes to introduce differ from risk appetites. One key difference is that impact tolerances assume a particular risk has crystallised rather than focusing on the likelihood and impact of operational risks occurring. A CCP that is able to remain within its impact tolerances increases its ability to respond to extreme but plausible disruptions, whereas risk appetites are likely to be exceeded in these disruptions.

2.26 The Bank proposes that a CCP should define an impact tolerance in order to set a measure for each important business service in respect of which procedures can be developed and testing carried out. The Bank suggests that a CCP should ensure that each important business service remains within the impact tolerance which the CCP has set for it. A CCP may be unable to meet the impact tolerance in all circumstances; in this instance the Bank proposes that a CCP should take

steps to return the important business service to within its impact tolerance where there has been a breach of that important business service's impact tolerance.

2.27 The Bank suggests that the expectation that a CCP should set impact tolerances for its important business services is consistent with Article 4(4) of RTS 153/2013, which requires that a CCP's board shall define, determine and document an appropriate level of risk tolerance and risk bearing capacity for the CCP. The Bank's proposed expectations of a CCP's board in relation to the Operational Resilience Framework are set out in paragraphs 2.47-2.53 of this CP.

2.28 The Bank proposes that in setting an impact tolerance for important business services, a CCP should leverage existing risk management frameworks to determine the acceptable level of disruption it is able to tolerate for the relevant important business services. CCPs may already be setting their own risk appetites based on their existing risk management framework.

2.29 The Bank proposes that a CCP should also set out the metrics that it will consider and monitor when setting a tolerance, which may be qualitative or quantitative. The Bank proposes that these metrics need not necessarily be time-based, but could instead be based on financial loss to participants, or counterparties impacted as a result of market disruption. The Bank does not provide any specific metrics for this purpose.

2.30 The Bank suggests that a CCP should take reasonable actions to evidence that it can operate within the impact tolerance for each important business service in the event of disruption to its operations.

*(Article 4(4) of EMIR RTS 153/2013)*

*(Article 17(6) of EMIR RTS 153/2013)*

### **Mapping and identification of dependencies**

2.31 The Bank suggests that a CCP should map dependencies. Mapping of dependencies should entail a CCP identifying and documenting the necessary people, processes, technology, facilities and information required to deliver each of the CCP's important business services. This mapping should facilitate the gathering of evidence to diagnose and remedy vulnerabilities in a CCP's important business services. The Bank considers this a necessary step to ensure a thorough understanding of the ways in which operational disruption could occur.

2.32 For example, a CCP's mapping could highlight vulnerabilities in how important business services are being delivered, such as limited substitutability of resources, single points of failure, and concentration risk. The proposed Operational Resilience Framework would require a CCP to take action to remediate these vulnerabilities so that important business services could be delivered within impact tolerances.

2.33 The Bank proposes that the mapping and identification of dependencies process is consistent with the requirement in Article 18(1) of RTS 153/2013 for a CCP to identify the business functions which are critical to ensure the services of the CCP. However, the Bank proposes that this mapping exercise is broader in scope and application as it encompasses important business services, whose definition is broader than the concept of 'critical business functions' established in Article 17(2) of RTS 153/2013.

2.34 The Bank intends that the mapping of the dependencies within important business services should allow a CCP to comprehensively understand how interconnected or concentrated its

important business services, products, and markets are. The Bank proposes this is necessary in order to design, understand and evaluate the full implications of scenarios (as described in 'Testing, monitoring and reporting' below). This will help the CCP to prioritise its mitigation and recovery actions by identifying specific vulnerabilities.

2.35 The Bank proposes that the mapping of dependencies process should include any outsourced providers, including critical service providers that the CCP considers to be involved in the supply of important business services. CCPs should review the risks to its important business services from other parties as a result of inter-dependencies, and develop appropriate risk management tools.

*(Article 17(2) of EMIR RTS 153/2013)*

*(Article 18(2) of EMIR RTS 153/2013)*

### **Testing, monitoring and reporting**

2.36 The Bank suggests that a CCP should test its important business services against a range of extreme but plausible disruption scenarios to establish whether these important business services can remain within their impact tolerances. The Bank proposes that once a CCP has established what its important business services are, and an impact tolerance for each important business service, the CCP can more precisely define the types of events which will cause disruption to such an important business service and, this will aid the CCP in being prepared for disruption.

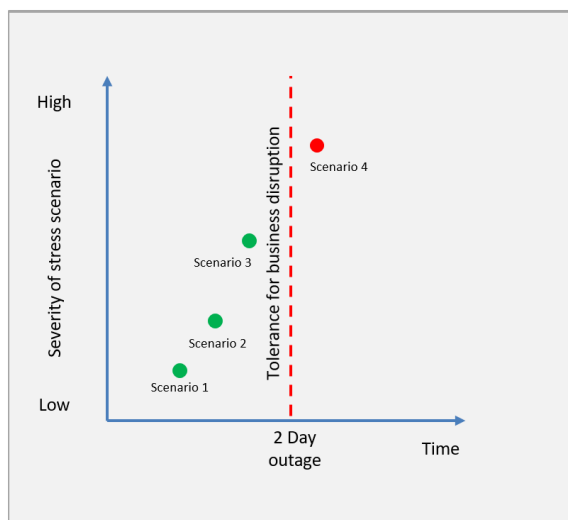
2.37 Paragraph 3.24 in the draft SS sets out the Bank's intention that a CCP should develop a testing plan that details how it would assure itself that it is able to remain within impact tolerances for its important business services. The entire chain of activities that have been identified as the important business service should be considered when developing testing plans.

2.38 The severity of scenarios used by a CCP for testing could be varied by increasing the number or type of resources unavailable for delivering the important business service, or extending the period for which a particular resource is unavailable. The mapping work that a CCP could undertake is likely to be useful in informing it of how its scenarios could be made more difficult.

2.39 A CCP should test a range of scenarios, including those in which they anticipate exceeding their impact tolerance. This is illustrated in figure 2 below. The Bank does not currently propose to set scenarios for a CCP to use when testing their ability to remain within the impact tolerance for their important business services.

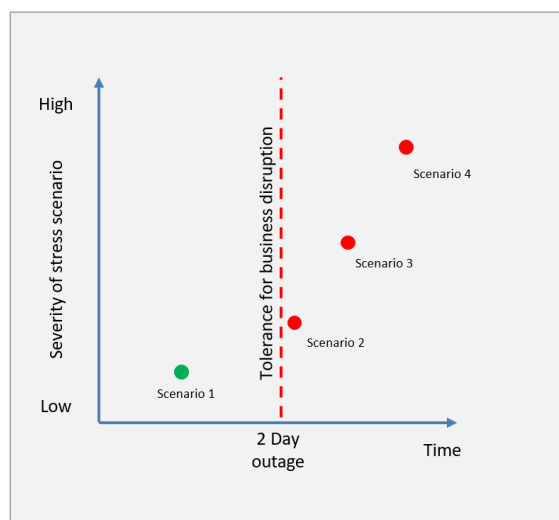
**Figure 2: Some scenarios may see impact tolerances exceeded**

**Case one:** A CCP considers its impact tolerance against extreme but plausible scenarios. Operational resilience is sufficient – it is disproportionate to expect the CCP not to breach its impact tolerance in the extreme scenario of scenario 4.

**Key**

- Scenario recovered within tolerance
- Scenario not recovered within tolerance

**Case two:** A CCP considers its impact tolerance against extreme but plausible scenarios. In this case, operational resilience is not sufficient – the CCP should take steps to improve operational resilience.

**Key**

- Scenario recovered within tolerance
- Scenario not recovered within tolerance

2.40 The Bank proposes that the testing of important business services against disruption scenarios is consistent with the requirement in Article 18 (2) of EMIR RTS 153/2013 for a CCP to use scenario-based risk analysis to identify how various scenarios affect the risks to its critical business functions. However, the Bank proposes that testing is broader in scope and application as it encompasses important business services, whose definition is broader than the concept of 'critical business functions' established in Article 17(2) of RTS 153/2013.

2.41 The Bank suggests that a CCP should:

- (i) conduct scenario analyses of its ability to meet its impact tolerance for each of its important business services in the event of extreme but plausible disruption to its operations;
- (ii) identify an appropriate range of adverse scenarios of varying nature, severity and duration, relevant to its business and risk profile; and
- (iii) consider the risks to delivery of its important business services in those scenarios.

2.42 Where the impact tolerance cannot be met for any important business service, or where there is uncertainty as to whether it can be met, the Bank proposes that a CCP should be able to provide an explanation as to why this has happened and what remedial actions the CCP will undertake to ensure the impact tolerance can be met in future. In such situations, the Bank proposes that the CCP should explain what mitigating actions will be taken to ensure the important business service can be brought within the CCP's impact tolerance, should disruption occur. In addition, the Bank suggests that the relevant important business service should be prioritised when the CCP makes choices about remediation or improvements in its systems, processes and technologies.

2.43 The Bank proposes that in setting an impact tolerance for important business services, CCPs will be expected to incorporate these impact tolerances into the monitoring and reporting

procedures of key qualitative and quantitative measures and processes which support delivery of these services, so as to guide management in taking actions to control risks to a CCP's ability to stay within the defined impact tolerance.

*(Article 17 (2) of EMIR RTS 153/2013)*

*(Article 18 (2) of EMIR RTS 153/2013)*

## **Documentation**

2.44 The Bank suggests that a CCP should make a written record of the assessments made as a result of the Operational Resilience Framework procedures, and to share this with the Bank only if requested to do so.

2.45 The Bank proposes that this requirement for a CCP to maintain documentation relating to its Operational Resilience Framework is consistent with the requirement in Article 4(1) of RTS 153/2013 for a CCP to establish documented policies, procedures and systems that identify, measure and monitor the material risks to be which it may be exposed.

2.46 In particular, the Bank suggests that a CCP should make a written record of the determinations made in respect of:

- the identification of its important business services;
- the setting of its impact tolerances for those important business services;
- the mapping and identification of interdependencies in relation to those important business services; and
- the testing, monitoring and reporting of its important business services' ability to stay within their impact tolerance.

*(Article 4(1) of EMIR RTS 153/2013)*

## **Governance Arrangements**

2.47 The Bank suggests that a credible Operational Resilience Framework will not only take into account testing and improvement of the Framework, but will also be subject to a CCP's governance process.

2.48 The Bank proposes that this expectation for a CCP's Operational Resilience Framework to be subject to a CCP's governance process is consistent with the requirement in Article 4(4) of EMIR RTS 153/2013 for the board of a CCP to assume final responsibility and accountability for managing a CCP's risks.

2.49 The Bank proposes that a CCP's board, directly or through the use of relevant sub-committees, should assure itself that the Operational Resilience Framework is fit for purpose. The Bank intends that a CCP's board should ensure that it regularly reviews and approves the Operational Resilience Framework, at intervals it deems appropriate or following an event where an impact tolerance has been breached.

2.50 The Bank proposes that the body designated with responsibility for risk management by the board of directors should:

- approve the CCP's identified list of important business services;
- approve the CCP's impact tolerances for the important business services;
- be satisfied that the CCP's important business services are mapped effectively;
- review the results of impact tolerance testing; and
- be satisfied that appropriate risk mitigation steps have been undertaken.

2.51 The Bank proposes that a CCP's Operational Resilience Framework should be subject to periodic assessment by the body designated with responsibility for audit by the board of directors, in line with its audit approach but taking into consideration material changes to the Framework.

2.52 The Bank suggests that this internal audit assessment should cover: i) the extent to which the Operational Resilience Framework satisfies the Bank's expectations as laid out in this SS; and ii) the effectiveness of the CCP's operational resilience processes.

2.53 The Bank proposes that this assessment should be reviewed by the CCP's body designated by the board of directors with responsibility for audit.

*(Article 4(4) of EMIR RTS 153/2013)*

### 3 Relationship with EMIR and associated technical standards

3.1 The actions that the Bank proposes CCPs to take are grounded in the requirements established in 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 (EMIR) and Commission Delegated Regulation (EU) No 153/2013 of 19 December 2012 supplementing Regulation EU No 648/2012 of the European Parliament and of the Council with regard to regulatory technical standards on requirements for central counterparties (RTS 153/2013).

3.2 In particular, Article 4 of EMIR RTS 153/2013, which specifies further Article 26 of EMIR, establishes a requirement that a CCP 'shall have a sound framework for the comprehensive management of all material risks to which it is, or may be exposed', and 'shall establish documented policies, procedures and systems that identify, measure, monitor and manage such risks'. This CP is consistent with this requirement. The Bank has developed expectations that a CCP will establish an 'Operational Resilience Framework', as part of which a CCP will identify its important business services, establish an 'impact tolerance' for these services and identify and map their dependencies, and to use scenario testing to establish whether they can stay within their impact tolerances.

3.3 This CP introduces the concept of important business services. This concept is broader than the concept of 'critical business functions' established in Article 17(2) of RTS 153/2013, which specifies further Article 34 of EMIR. In consequence, the expectation for a CCP to set impact tolerances for its important business services is complementary to the requirement in Article 17(6) of RTS 153/2013 for a CCP to achieve a maximum recovery time for its critical functions of not more than two hours. Furthermore, the expectation for a CCP to carry out scenario testing to establish whether its important business services can stay within their impact tolerances is complementary to the requirement in Article 18(2) of RTS 153/2013 for a CCP to identify how various scenarios affect the risks to its critical business functions.

3.4 CCPs must continue to meet the requirements established by EMIR and its associated technical standards. No additional requirements are imposed by this SS beyond those imposed by EMIR and its associated technical standards and the Bank considers all expectations set out in this SS to be consistent with the general requirements of Article 26 of EMIR and Article 4 of EMIR RTS 153/2013, as set out above.

*(Article 17(2) of EMIR RTS 153/2013).*

*(Article 17(6) of EMIR RTS 153/2013).*

*(Article 18(2) of EMIR RTS 153/2013).*



## Appendix: Draft Supervisory Statement ‘Operational Resilience: Central counterparties’

### Contents

---

<b>1</b>	<b>Introduction</b>	<b>1</b>
<b>2</b>	<b>Definitions and Concepts</b>	<b>2</b>
<b>3</b>	<b>The Bank’s expectations regarding a CCP’s Operational Resilience Framework</b>	<b>4</b>

---

## 1 Introduction

1.1 This Supervisory Statement (SS) is relevant to all Bank of England (Bank) supervised central counterparties (CCPs) and any CCPs seeking authorisation by the Bank. It explains the Bank's supervisory approach to operational resilience, which is relevant to many areas of a CCP's operations. The Bank considers disruption to cleared markets to be a financial stability issue, meaning that a lack of resilience amongst CCPs represents a threat to the Bank's financial stability objective.<sup>1</sup> The Bank therefore considers that improvements in operational resilience should be facilitated by supervisory expectations.

1.2 The policy objective of this SS is for CCPs to be resilient to operational disruption events. This SS contains a set of actions the Bank expects CCPs to undertake in order to achieve a level of operational resilience which, in the Bank's view, is sufficient. Taken together, the aim of this framework is to ensure that CCPs' risk management frameworks cover both minimising the likelihood of an operational disruption occurring and mitigating and recovering from an operational disruption once such disruption crystallises.

### Relationship with EMIR and associated technical standards

1.3 The actions that the Bank expects CCPs to take as a result of this SS is grounded in the requirements established in 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 (EMIR) and Commission Delegated Regulation (EU) No 153/2013 of 19 December 2012 supplementing Regulation EU No 648/2012 of the European Parliament and of the Council with regard to regulatory technical standards on requirements for central counterparties (RTS 153/2013).

1.4 In particular, Article 4 of EMIR RTS 153/2013, which specifies further Article 26 of EMIR, establishes a requirement that a CCP 'shall have a sound framework for the comprehensive management of all material risks to which it is or may be exposed', and 'shall establish documented policies, procedures and systems that identify, measure, monitor and manage such risks'. This SS is consistent with this requirement. The Bank has developed expectations that a CCP will establish an 'Operational Resilience Framework', as part of which a CCP will identify its important business services, establish an 'impact tolerance' for these services and identify and map their dependencies, and use scenario testing to establish whether they can stay within their impact tolerances. Definitions for these terms are provided in Chapter 2.

1.5 This SS introduces the concept of important business services. This concept is broader than the concept of 'critical business functions' established in Article 17(2) of RTS 153/2013, which specifies further Article 34 of EMIR. The expectation for a CCP to set impact tolerances for its important business services is complementary to the requirement in Article 17(6) of RTS 153/2013 for a CCP to achieve a maximum recovery time for its critical functions of not more than two hours. Furthermore, the expectation for a CCP to carry out scenario testing to establish whether its important business services can stay within their impact tolerances is complementary to the requirement in Article 18(2) of RTS 153/2013 for a CCP to identify how various scenarios affect the risks to its critical business functions.

---

<sup>1</sup> 'Financial stability objective' means the objective set out in section 2A of the Bank of England Act 1998.

1.6 The Bank will supervise the operational resilience policy in line with its existing supervisory approach for FMIs. The Bank's supervision of FMIs is judgement-based and forward-looking. It is carried out using a supervisory risk assessment framework to identify risks that FMIs may be exposed to and the mitigants that FMIs have in place to guard against those risks.

1.7 CCPs must continue to meet the requirements established by EMIR and its associated technical standards. No additional requirements are imposed by this SS beyond those imposed by EMIR and its associated technical standards and the Bank considers all expectations set out in this SS to be consistent with the general requirements of Article 26 of EMIR and Article 4 of EMIR RTS 153/2013, as set out above.

1.8 Relevant EMIR standards are embedded in the body in the text and following each relevant section.

*(Article 17(2) of EMIR RTS 153/2013)*

*(Article 17(6) of EMIR RTS 153/2013)*

*(Article 18(2) of EMIR RTS 153/2013)*

## Contents

1.9 Chapter 2 establishes the definitions and concepts used in the SS.

1.10 Chapter 3 sets out the Bank's expectations regarding a CCP's Operational Resilience Framework.

## 2 Definitions and Concepts

### Use of terminology

2.1 The terminology used in this SS is consistent with the terminology used in those SSs relating to operational resilience published by the PRA and FCA. This is to ensure the UK authorities have a consistent supervisory approach to operational resilience across regulated firms. However, the relevant articles of EMIR and associated technical standards are referenced throughout.

### Operational Resilience

2.2 Operational resilience is the ability of an FMI and the sector as a whole to prevent, respond to, recover and learn from operational disruptions.

### Important business services

2.3 A business service is a service that a CCP provides, delivering a specific outcome or utility to an identifiable participant. The Bank considers that a business service is an 'important business service' if a prolonged disruption of that business service would significantly disrupt the orderly functioning of a market which a CCP serves, thereby impacting financial stability.

2.4 This definition of important business services is broader than the concept of 'critical business functions' established in Article 17(2) of RTS 153/2013.

2.5 CCPs are expected to identify whether a business service is important by considering a variety of factors. Examples of factors that are relevant to the identification of a business service might be:

- the market share of the CCP;
- the number of members the CCP serves;
- the risk profile of the transactions conducted through the business service;
- the substitutability of the business service; or
- regulatory driven activity (such as enabling the clearing obligation to be met) or external obligations.

2.6 This identification process should identify specific market or product business services that a CCP provides but it should also consider operational activities that support or comprise elements of market or product business services, which could also be deemed important business services. Such operational activities could include:

- trade acceptance and matching;
- treasury and collateral management;
- margin calculation;
- settlement instructions;
- default management; and
- regulatory driven activity (such as enabling the clearing obligation to be met) or external obligations.

*(Article 17 (2) of EMIR RTS 153/2013)*

### **Impact tolerance**

2.7 Impact tolerance is the maximum tolerable level of disruption for an important business service, whereby further disruption would pose a significant impact to the market the CCP serves. CCPs should consider a range of possible measures by which to judge the appropriate impact tolerance for a given important business service. These factors could include for example: the length of time of an outage, the number of participants impacted, and the volumes of transactions affected.

2.8 The Bank views a CCP's impact tolerance for an important business service as complementary to the 2 hour maximum recovery time for a CCP's critical business functions established in Article 17(6) of RTS 153/2013. This 2 hour maximum recovery time for a CCP's critical business functions must be met and should be identified and catered for in a CCP's business continuity plan.

2.9 As noted above, the Bank views the definition of important business services as broader than the concept of 'critical business functions'. The 2 hour maximum recovery time need not, therefore, apply to all important business services, but only to those that are also considered to be 'critical business functions'.

*(Article 17 (6) of EMIR RTS 153/2013)*

### 3 The Bank's expectations regarding a CCP's Operational Resilience Framework

3.1 The Bank expects a CCP to produce an Operational Resilience Framework and associated material. This framework is an approach which will establish how the CCP will meet the operational resilience objectives set out in this SS. The Framework should ensure that a CCP identifies and targets for investment where necessary those aspects of its business most sensitive to an operational disruption. The extent of the work required to develop the Operational Resilience Framework should be comprehensive but proportionate to the outcomes expected by the Bank.

3.2 The Bank views a CCP's production of an Operational Resilience Framework as consistent with the requirement in Article 4(1) of RTS 153/2013 for a CCP to have a sound framework for the comprehensive management of all of the material risks to which it is or may be exposed, and establish policies procedures and systems to identify, measure, monitor and manage such risks. The Bank views the Operational Resilience Framework as consistent with the business continuity policy and disaster recovery plan referred to in Article 34 of EMIR and Article 17(1) of EMIR RTS 153/2013, and not in conflict with those requirements.

3.3 The Framework should focus on a CCP's ability to:

- minimise the likelihood of an operational disruption event; and
- mitigate and recover from an operational disruption event.

3.4 The Bank expects an Operational Resilience Framework to include as a minimum, policies and procedures:

- for the identification of important business services;
- in relation to the approval of impact tolerances for important business services;
- aligned to its broader operational risk framework, for the identification and mapping of people, processes, technology, facilities and information (operational assets) underlying each important business service;
- for identifying risk of disruption to important business services;
- to ensure that important business services, if disrupted can be recovered within the set impact tolerances; and
- for utilising the results of such testing to make improvements to its procedures and capabilities for minimising the likelihood of, and facilitating recovery from, disruption to important business services

3.5 The Bank further expects an Operational Resilience Framework to include communications planning. This should take into consideration the potential impact of operational resilience disruption on interdependent FMIs, or the effect of disruption across multiple jurisdictions, markets and products.

3.6 The Bank views a CCP's communications planning as consistent with the requirement in Article 23(1) of RTS 153/2013 that a CCP shall have a communication plan which documents the way in which communication will take place during a crisis.

*(Article 4(1) of RTS 153/2013)*

*(Article 17(1) of RTS 153/2013)*

*(Article 23(1) of RTS 153/2013)*

### **Identification of important business services and risks to important business services**

3.7 A CCP should consider the chain of activities which make up the business service, from taking on an obligation, to delivery of the service, and determine which part of the chain is essential to delivery.

3.8 The Bank expects a CCP to be capable of identifying important business services in order to understand both the implications of disruption of a particular business process to a participant and the interrelationship and interdependency between important business services in the way they support a participant.

3.9 The Bank expects a CCP, having identified its important business services, to undertake an assessment of the operational risks that are relevant to these important business services. The list of relevant operational risks is expected to be used in the design of disruption scenarios for the purposes of testing, but should also have wider usage in the CCP for the purposes of managing operational resilience. Each CCP is expected to use its own risk assessment based upon its own circumstances, markets, products and operational structure to understand which operational risks are relevant, and where operational resilience issues exist.

3.10 The Bank views the concept of important business services as broader than the concept of 'critical business functions' established in Article 17(2) of RTS 153/2013 but consistent with the general requirements of Article 26 of EMIR and Article 4(2) of RTS 153/2013, which requires a CCP to take an integrated and comprehensive view of all relevant risks.

3.11 However, the Bank views the expectation that a CCP should identify its important business services and the risks to these business services as consistent with Article 4(2) of EMIR RTS 153/2013, which require a CCP to take an integrated and comprehensive view of all relevant risks.

3.12 A non-exhaustive set of examples of the types of risks that the Bank might expect to be considered by a CCP are listed below.

- **Data breach:** participant or other business data compromised, for example through a cyber attack.
- **Internal fraud:** transactions intentionally mis-reported, mismarking of positions.
- **External fraud:** theft/robbery.
- **Employment practices:** compensation and/or benefit failure, termination issues, organised labour activity.
- **Clients, Products & Business practices:** legal breaches, regulatory breaches, breach of privacy, account churning, misuse of confidential information.

- **Damage to physical assets:** natural disaster losses, human losses.
- **Business disruption and system failures:** hardware or software failure, telecommunications or utilities outages.
- **Execution delivery and process management:** miscommunication, model or system mis-operation, delivery failure, collateral management failure.

*(Article 4(2) EMIR RTS 153/2013)*

*(Article 17(2) of EMIR RTS 153/2013)*

### **Setting the impact tolerance for important business services**

3.13 The Bank expects a CCP to define an impact tolerance in order to set a measure for each important business service in respect of which procedures can be developed and testing carried out. The Bank expects a CCP to ensure that each important business service remains within the impact tolerance which the CCP has set for it. A CCP may be unable to meet the impact tolerance in all circumstances, in this instance the Bank expects a CCP to take steps to return the important business service to within its impact tolerance where there has been a breach of that important business service's impact tolerance.

3.14 The Bank considers that an impact tolerance differs from a risk appetite. One key difference is that impact tolerances assume a particular risk has crystallised rather than focusing on the likelihood and impact of operational risks occurring.

3.15 The Bank views the impact tolerance as complementary to the two hour maximum recovery time for a CCP's critical business functions established in Article 17(6) of RTS 153/2013. This is because the Bank views the definition of important business services as broader than the concept of 'critical business functions'. The two hour maximum recovery time, therefore, only applies to those important business services that are considered to also be 'critical business functions'. This two hour maximum recovery time for a CCP's 'critical business functions' must be met and should be identified and catered for in a CCP's business continuity plan.

3.16 The Bank views the expectation that a CCP should set an impact tolerance for its important business services as consistent with Article 4(4) of RTS 153/2013, which requires that a CCP's board shall define, determine and document an appropriate level of risk tolerance and risk bearing capacity for the CCP. The Bank's expectations of a CCP's board are outlined in paragraphs 3.30-3.36.

3.17 The Bank expects that in setting an impact tolerance for important business services, a CCP should leverage existing risk management frameworks to determine the acceptable level of disruption it is able to tolerate for the relevant important business service. A CCP may already be setting their own risk appetites based on their existing risk management framework.

3.18 The CCP should also set out the metrics that it will consider and monitor when setting a tolerance, which may be qualitative or quantitative. These metrics need not necessarily be time-based, but could instead be based on financial loss to participants, or counterparties impacted as a result of market disruption. The Bank does not propose any specific metrics for this purpose.

3.19 The Bank expects a CCP to take reasonable actions to evidence that it can operate within the impact tolerance for each important business service in the event of disruption to its operations.

*(Article 4(4) of EMIR RTS 153/2013)*

*(Article 17(6) of EMIR RTS 153/2013)*

### **Mapping and identification of dependencies**

3.20 The Bank expects a CCP to map dependencies. Mapping of dependencies should entail a CCP identifying and documenting the necessary people, processes, technology, facilities and information required to deliver each of the CCP's important business services. This mapping should facilitate the gathering of evidence to diagnose and remedy vulnerabilities in a CCP's important business services. The Bank considers this a necessary step to ensure a thorough understanding of the ways in which operational disruption could occur.

3.21 The Bank considers that the mapping and identification of dependencies process is consistent with the requirement in Article 18(1) of RTS 153/2013 for a CCP to identify the business functions which are critical to ensure the services of the CCP. However, the Bank expects this mapping exercise to be broader in scope and application as it encompasses important business services, whose definition is broader than the concept of 'critical business functions' established in Article 17(2) of RTS 153/2013, as explained in paragraph 2.4 above.

3.22 Mapping of the dependencies within important business services should allow a CCP to comprehensively understand how interconnected or concentrated its important business services, products, and markets are. This is necessary in order to design, understand and evaluate the full implications of scenarios (as described in 4.15 below). This will help the CCP to prioritise its mitigation and recovery actions by identifying specific vulnerabilities.

3.23 The Bank proposes that the mapping of dependencies process should include any outsourced providers, including critical service providers that the CCP considers to be involved in the supply of important business services. CCPs should review the risks to its important business services from other parties as a result of inter-dependencies, and develop appropriate risk management tools.

*(Article 17(2) of EMIR RTS 153/2013)*

*(Article 18(2) of EMIR RTS 153/2013)*

### **Testing, Monitoring and Reporting**

3.24 The Bank expects that a CCP will test its important business services against a range of extreme but plausible disruption scenarios to establish whether these important business services can remain within impact tolerances. Once a CCP has established what its important business services are, and an impact tolerance for each important business service, the CCP can more precisely define the types of scenarios which will cause disruption to a specific important business service and, therefore, the capacity to recover from the disruption event.

3.25 The Bank considers that the testing of important business services against disruption scenarios is consistent with the requirement in Article 18 (2) of EMIR RTS 153/2013 for a CCP to use scenario-based risk analysis to identify how various scenarios affect the risks to its critical business functions. However, the Bank's expectation of testing is broader in scope and application as it encompasses important business services, whose definition is broader than the concept of 'critical business functions' established in Article 17(2) of RTS 153/2013.

3.26 A CCP should:

- (i) conduct scenario analyses of its ability to meet its impact tolerance for each of its important business services in the event of extreme but plausible disruption to its operations;



(ii) identify an appropriate range of adverse scenarios of varying nature, severity and duration, relevant to its business and risk profile, and

(iii) consider the risks to delivery of its important business services in those scenarios.

3.27 Within any operational risk scenario identified, where the impact tolerance cannot be met for any important business service, or where there is uncertainty as to whether it can be met, the Bank expects a CCP to be able to provide an explanation as to why this has happened and what remedial actions the CCP will undertake to ensure the impact tolerance can be met in future. In such situations, the Bank expects that the CCP should explain how such risks will be managed as part of their risk management framework and what mitigating actions will be taken or how business continuity planning and disaster recovery will be enhanced to ensure the important business service can be brought within the firms impact tolerance should disruption occur. In addition, the Bank expects the relevant important business service to be prioritised when the CCP makes choices about remediation or improvements in its systems, processes and technologies.

3.28 In setting an impact tolerance for important business services, CCPs will be expected to incorporate these impact tolerance into the monitoring and reporting procedures of key qualitative and quantitative measures and processes which support delivery of these services, so as to guide management in taking actions to control risks to a CCP's ability to stay within the defined impact tolerance.

*(Article 17 (2) of EMIR RTS 153/2013)*

*(Article 18 (2) of EMIR RTS 153/2013)*

## **Documentation**

3.29 The Bank expects that a CCP will make a written record of the assessments made as a result of the Operational Resilience Framework procedures and to share this with the Bank only if requested to do so.

3.30 The Bank considers that this requirement for a CCP to maintain documentation relating to its Operational Resilience Framework is consistent with the requirement in Article 4(1) of RTS 153/2013 for a CCP to establish documented policies, procedures and systems that identify, measure and monitor the material risks to be which it may be exposed.

3.31 In particular, the CCP should make a written record of the determinations made in respect of:

- the identification of its important business services;
- the setting of its impact tolerances for those important business services;
- the mapping and identification of interdependencies in relation to those important business services; and
- the testing, monitoring and reporting of its important business services' ability to stay within their impact tolerance

*(Article 4(1) of EMIR RTS 153/2013)*

## Governance Arrangements

3.32 The Bank expects that a credible Operational Resilience Framework will not only take into account testing and improvement of the Framework, but will also be subject to a CCP's governance process.

3.33 The Bank considers that this expectation for a CCP's Operational Resilience Framework to be subject to a CCP's governance process is consistent with the requirement in Article 4(4) of EMIR RTS 153/2013 for the board of a CCP to assume final responsibility and accountability for managing a CCP's risks.

3.34 The Bank expects a CCP's board to assure itself that the Operational Resilience Framework is fit for purpose and to ensure that it regularly reviews and approves the Operational Resilience Framework, at intervals it deems appropriate or following an event where an impact tolerance has been breached.

3.35 The body designated by the board of directors with responsibility for risk management should:

- approve the CCP's identified list of important business services;
- approve the CCP's impact tolerances for the important business services;
- be satisfied that the CCP's important business services are mapped effectively;
- review the results of impact tolerance testing; and
- be satisfied that appropriate risk mitigation steps have been undertaken.

3.36 A CCP's Operational Resilience Framework should be subject to periodic assessment by the body designated with responsibility for audit by the board of directors, in line with its audit approach but taking into consideration material changes to the Framework.

3.37 This internal audit assessment should cover: i) the extent to which the Operational Resilience Framework satisfies the Bank's expectations as laid out in this SS; and ii) the effectiveness of the CCP's operational resilience processes.

3.38 This assessment should be reviewed by the CCP's body designated with responsibility for audit by the board of directors.

*(Article 4(4) of EMIR RTS 153/2013)*