



European Securities and
Markets Authority

Annual peer review of EU CCP supervision

Supervisory activities on CCPs' Default Management Procedures

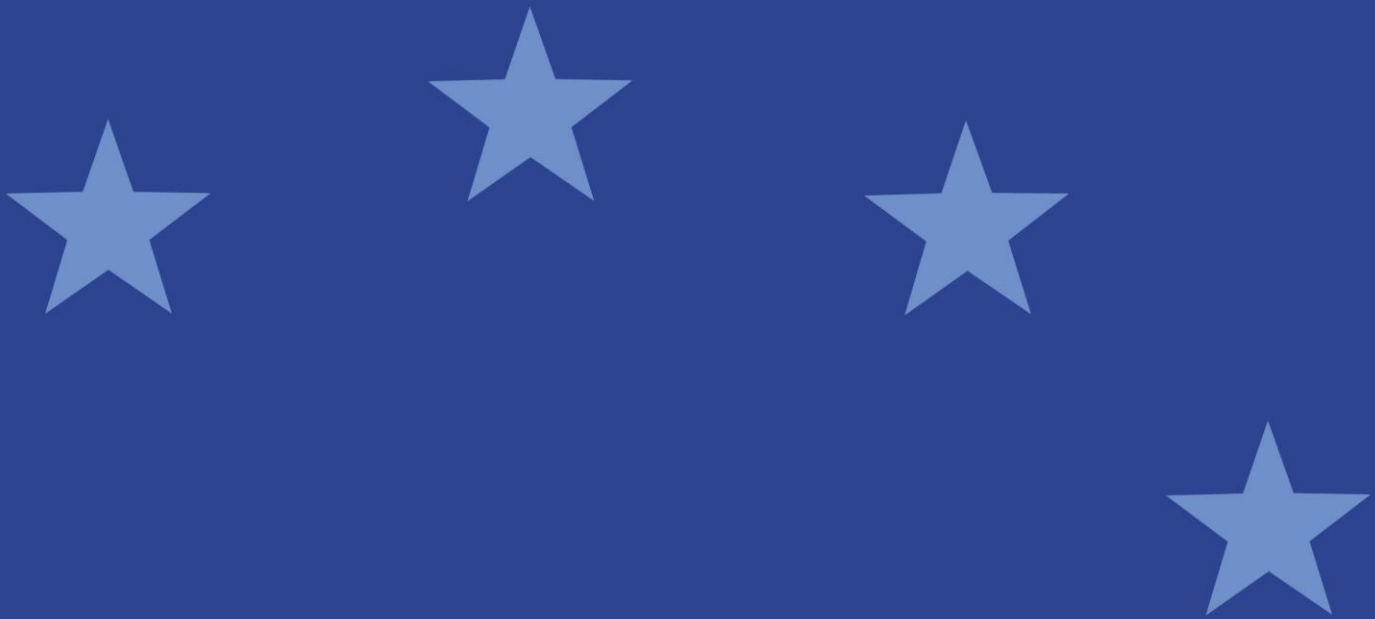


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Acronyms used

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| CCP | Central Counterparty |
| EMIR | Regulation (EU) 648/2012 of the European Parliament and Council on OTC derivatives, central counterparties and trade repositories – also referred to as — EMIR |
| ESMA | The European Securities and Markets Authority |
| NCA | National Competent Authority |
| Q&A | Question and Answer |
| RTS | Regulatory Technical Standards |
| RTS on CCPs | Commission Delegated Regulation (EU) No 153/2013 |
| DMP | Default Management Procedures |

1 Executive Summary

Reasons for publication

The European Securities and Markets Authority (ESMA) is publishing this report pursuant to Article 21 of Regulation (EU) No 648/2012 (EMIR) which provides that in the area of central counterparties (CCP) supervision ESMA shall fulfil a coordination role between competent authorities and across colleges. The objective is to build a common supervisory culture and consistent supervisory practices, ensuring uniform procedures and consistent approaches, to strengthen consistency in supervisory outcomes. For the purposes of such a coordination role, ESMA is required, at least annually, to conduct a peer review analysis of the supervisory activities of all competent authorities in relation to the authorisation and the supervision of central counterparties (CCPs) in accordance with Article 30 of Regulation (EU) No 1095/2010 (ESMA Regulation).

Contents

This peer review assesses the overall functioning of CCP colleges and provides an in-depth analysis of supervisory activities of National Competent Authorities (NCAs) on CCPs with respect to requirements set out in EMIR related to Default Management Procedures (DMP).

This peer review is based on a specific methodology developed for mandatory peer reviews under EMIR. The review was conducted by ESMA staff relying on their experience through participation in CCP colleges and the responses by the NCAs to a predefined questionnaire and, where relevant, tailored follow-up questions. The questionnaire and the findings of the peer review were discussed and agreed among the relevant CCP experts from NCAs within the Post-Trading Standing Committee of ESMA.

Accordingly, this report provides an overview of the approaches followed by NCAs and presents ESMA's assessment of the degree of convergence reached by NCAs. In particular, the report highlights the areas where divergences emerged with respect to the NCAs' supervisory approaches related to reviewing and testing of DMP and to fire drills. Furthermore, it identifies for future discussions, items where supervisory convergence could be further enhanced, and proposes good practices that emerged from the NCAs' responses. Finally, it also identifies a possible case of non-compliance with EMIR for further follow-up.

Next Steps

This report is for information purposes only. ESMA will follow up on the findings listed in this report in order to identify, where relevant, the most appropriate tool to further enhance supervisory convergence with respect to the divergences and items included in this report.

2 Introduction

1. Article 21(6)(a) of Regulation EU No 648/2012 (EMIR) requires ESMA to conduct at least annually a peer review analysis of the supervisory activities of the competent authorities in relation to the authorisation and the supervision of CCPs in accordance with Article 30 of Regulation (EU) No 195/2010 (ESMA Regulation).
2. On 14 December 2016, the ESMA Board of Supervisors approved the methodology for mandatory Peer Reviews in relation to CCPs' authorisation and supervision under EMIR (the methodology)¹, whereby the review is conducted by ESMA staff. Each peer review will assess the overall functioning of CCP colleges and provide an in-depth analysis of a specific topic, to be determined within the scope set by EMIR.
3. In line with the methodology, on 17 May 2017, the Board of Supervisors endorsed the Post Trading Standing Committee (PTSC) proposal for the topic of the 2017 Peer Review to be EMIR requirements on Default Management Procedures (DMP), with a special focus on the testing of the DMPs through simulation exercises (fire drills).
4. In particular, the peer review is aimed at assessing the effectiveness of supervisory practices put in place by competent authorities to assess CCP compliance with the provisions of Article 48 (Default Procedures) of EMIR and related RTS (namely Articles 58 and 59(12) of RTS 153/2013 on requirements for CCPs). The review is also to assess whether competent authorities in doing so are complying with the relevant general principles and criteria agreed at ESMA e.g. via EMIR Q&A, ESMA Guidelines and Recommendations (e.g. the 2014 Guidelines and Recommendation on the CPMI-IOSCO PFMI), or best practices.
5. The Peer Review covers the relevant National Competent Authorities (NCAs) of CCPs authorised under EMIR as at 1 April 2017. On this date, 17 CCPs were authorised under EMIR in the EU. The Peer Review thus covered the NCAs of the 12 Member States where the above mentioned 17 CCPs are established, namely: AT, DE, ES, FR, GR, HU, IT, NL, PL, PT, SE and UK.²
6. The Peer Review considered the NCAs' supervisory activities conducted from September 2015 to March 2017 (the reporting period), with respect to the assessment of a CCP's DMP compliance with the requirements in Article 48 of EMIR and related RTS, in connection to:
 - a) The yearly review (performed during this period) of the CCP compliance with the scope requirements pursuant to Article 21 of EMIR³;

¹ See [ESMA71-1154262120-155](#), as published on ESMA website on 05 January 2017.

² As the authorisation of CMECE was progressively withdrawn between 23 June and 20 July 2017, the UK NCA's answers to the questionnaire with respect to supervisory activities on CMECE's DMP have not been further addressed in this report, as they do not require any follow-up.

³ Pursuant to Article 21 of EMIR, the review shall address the arrangements, strategies, processes and mechanism implemented by the CCPs to comply with EMIR, cover all EMIR requirements, be updated at least on an annual basis and include on-site inspections.

- b) The first Risk Assessment Report performed by an NCA in connection to the initial authorisation of a CCP under Article 14 of EMIR, i.e. in the case that the CCP was authorised during the reporting period;
 - c) The Risk Assessment Report (performed during this period) in connection to an extension of the authorisation under Article 15 of EMIR or the validation of significant changes to risk models and parameters (performed during this period) under Article 49 of EMIR, i.e. where the introduction of new products and services or model changes implied a review of the CCP's DMP.
7. While the overall functioning of CCP colleges has been assessed on the basis of ESMA staff's experience in the participation in CCP colleges, in line with the methodology, the PTSC also developed a self-assessment questionnaire (the questionnaire – see Annex 1). This provided ESMA staff with detailed information on each NCA's supervisory activities, practices and approaches related to the assessment of CCPs' DMP.
 8. The covered NCAs were invited to answer the questionnaire by 31 May 2017. Where a Member State had assigned several NCAs under Article 22 of EMIR, the PTSC member authority from this Member State coordinated with the other respective national authorities with relevant responsibilities for the supervision of the CCPs established in that jurisdiction, so that the contribution of a PTSC member authority could represent the coordinated view of all relevant competent authorities in that Member State. The last NCA's answer was received on 13 July 2017.
 9. Overall NCAs' answers to the questionnaire were quite comprehensive and informative, although for some specific questions the level of detail provided did not always allow a comparative assessment. Following a preliminary review of the answers, on 1 September 2017 ESMA sent to the 11 NCAs some follow-up questions for response within two weeks. 10 NCAs answered within the deadline, while the last NCA's response was received on 27 September 2017.
 10. Although the peer review focused on the competent authorities' supervisory activities related to the competent authorities' assessment of the compliance of their CCPs with EMIR requirements on DMP, ESMA staff also reviewed the respective CCPs' DMP in order to identify where competent authorities have implemented a convergent approach to assessing the compliance of CCPs. Where relevant, ESMA staff took into account the information on the CCPs' DMP that ESMA has received as a member of CCP colleges. This included the initial application for the authorisation under Article 14 of EMIR, subsequent applications for extension of activities under Article 15 of EMIR, subsequent applications for significant changes to risk models and parameters under Article 49 as well as any other relevant information shared within colleges.
 11. The findings of the peer review are presented in this report, which does not intend to provide an exhaustive representation of all responses submitted by the NCAs, but to provide an overview of the approaches followed by the majority of NCAs. The report is intended to highlight any emerging divergences in an effort to identify potential opportunities for further supervisory convergence, best practices and, where

applicable, identify possible cases of non-compliance. Section 3 assesses the overall functioning of CCP colleges. Section 4 presents a general overview of NCAs' supervisory activities conducted in the reporting period with respect to DMP and organisational set-up. Section 5 and Section 6 respectively present the outcome of the peer review of specific supervisory activities, on DMP and on Fire Drills.

3 Overall functioning of CCP colleges

12. During the reporting period, chairing NCAs continued to manage CCP colleges in compliance with EMIR.
13. Beside from the NCAs, ESMA is the only participant represented in all colleges. Although ESMA does not have voting rights, it plays an important role in coordinating the understanding of EMIR and the discussions within the colleges. Due to this central role in the colleges, the views expressed by ESMA have a significant impact on the college members.
14. All colleges held at least one in-person meeting each year, where the NCAs reported the outcome of their supervisory activities and shared their future supervisory work plan. Almost all college meetings included a dedicated session with the participation of the CCP, focusing on ongoing developments, upcoming strategic initiatives and projects, and where relevant selected issues of focus and updates, e.g. CCP's responses to supervisory feedback.
15. ESMA staff noted that discussions at college meetings were more interactive and effective when meeting documents (including the agenda, presentations, risk assessment reports and other background documents) were shared with the college well in advance of the college meeting date. This practice was not always followed, with college material sometimes being distributed shortly before the college meeting date or feedback provided after set deadlines. This problem was amplified by the difference in bank holidays amongst the member states. The lack of background documents makes it even more important to share presentations sufficiently ahead of the meeting.
16. Chairing NCAs generally submitted the outcome of their annual review of the CCP under Article 21 of EMIR in line with the good practice identified in the 2016 peer review⁴. Most commonly, the annual review focused on the changes that occurred during the year or on the topical issues covered under the annual supervisory work plan. Some reviews focused on both changes that occurred during the year and also the topical issues covered under the supervisory work plan. This was achieved by applying a risk-based approach. . Only a few NCAs developed a multi-annual work program to ensure a comprehensive assessment of compliance with all EMIR requirements over the time period.

⁴ See https://www.esma.europa.eu/sites/default/files/library/2016-1683_ccp_peer_review_report.pdf

17. Throughout the reporting period, most chairing NCAs regularly provided the colleges with the qualitative and quantitative information in compliance with the RTS 648/2012 on the functioning of CCP colleges, further complemented by the college written agreement. However, ESMA staff noted a wide range of differences in the format and scope of the information provided. The standardisation of these reports would facilitate more effective monitoring of the information provided, and allow members in multiple colleges to manage and analyse that information more efficiently.
18. The chairing NCAs reviewed the composition of CCP colleges annually and tested the colleges' communication procedures for emergency situations. In particular, they typically performed simple reachability and connectivity tests, but did not yet conduct simulation exercises.
19. Concerning the CCPs' initiatives for new services and activities or changes to risk models and parameters, in the majority of cases the chairing NCAs have applied the framework developed by ESMA for the identification of new services and activities requiring an extension of the authorisation pursuant to Article 15 of EMIR or significant changes for the purpose of Article 49 of EMIR (see ESMA Opinion⁵ published on 15 November 2016). To do this they have informed ex-ante the CCP college and sought the views of college members. However, the college members have rarely challenged a CCPs/NCAs' view that presented an initiative as not material under either Article 15 or 49. Very tight deadlines and the scarcity of information may have contributed to this observation.
20. Where an extension of authorisation for new services and activities or a validation of significant changes was sought, chairing NCAs promptly involved the relevant college and ensured a timely process for the adoption of the related college opinion. In some cases this involved very tight deadlines for the college members to express a view. Given the internal governance approval process for finalising a voting position at each college's member authorities, it is important to i) provide the college with the CCP's material as early as possible, well in advance of any further risk assessment by the competent authorities, and even more importantly well in advance of the forecasted launch date, in order to allow college members to form their independent view on the matter for review; ii) anticipate well in advance the timeline of the college voting procedures for an efficient internal planning.
21. Overall, the level of engagement and challenge by college members has been satisfactory once Article 15 or 49 was triggered, although often some members seem to have relied fully on the review by the chairing NCA and the scrutiny by some other active college members.

⁵ See https://www.esma.europa.eu/sites/default/files/library/2016-1574_-_opinion_on_significant_changes_for_ccps.pdf

22. The colleges also represented useful fora for ESMA and the relevant NCAs to evaluate the CCPs' compliance with ESMA's opinions, guidelines and recommendations related to EMIR (e.g. on cyber security, stress testing, portfolio margining).
23. Outside of those contexts, except in a few cases where a chairing NCA voluntarily involved college members in topical reviews of CCPs' deliverables (e.g. self-assessment against CPMI-IOSCO Principles for Financial Market authorities, recovery plan, liquidity stress test framework, core assurances...), the colleges were mainly used as fora for regular updates and exchange of information. This included information on topics indirectly related to EMIR requirements, including e.g. CCP recovery for which chairing NCAs kindly involved colleges in discussions even though the legal basis for this is still only embodied in draft regulation.
24. Finally, one college experienced the delegation of tasks among college members, whereby the chairing NCA temporarily delegated to ESMA some supervisory tasks related to the assessment of compliance with EMIR prudential requirements. This delegation, based on a service level agreement⁶, was very much appreciated by other college members and was renewed for another year.

4 General Overview of NCAs activities

4.1 NCA's supervisory activities on DMP

25. EMIR requires NCAs to assess and review the compliance of CCPs with the EMIR requirements, including on DMP, under Article 17(4) with respect to authorisations provided under Article 14 or 15, under Article 49 with respect to the validation of significant changes to risk model and parameters, and under Article 21 with respect to regular reviews under on-going supervision, including at least an annual review. The NCAs were asked to provide responses to a number of questions on their supervisory approach and practices with respect to the above supervisory activities, as well as on their organisational set-up.
26. The overview of the responses describing the supervisory practices of different NCAs is provided here separately for each type of activities, while the main findings are summarised in the following section.

⁶ This service level agreement complies both with Article 18(4)(c) of EMIR & Article 6 of Commission Delegated Regulation (EU) No 876/2013, where the respective NCA can delegate some quite technical issues to a member of the College, without changing the allocation of the decision-making power of the NCA. As a result, the responsibility and the authority for supervisory decisions remain with the delegated NCA.

4.1.1 Supervisory activities related to the review of DMP

Annual review under EMIR Article 21

27. Most NCAs reviewed their CCPs' DMP in connection to the annual review under Article 21 EMIR when due within the reporting period. Indeed, ten NCAs reported that they included the review of the DMP in the scope of the annual review conducted in 2015 and/or 2016, and/or 2017.
28. Only two NCAs admitted to not have conducted any comprehensive review of DMP; although, one of them announced that an investigation of its CCP's DMP and fire drills will be carried out in the fall of 2017.
29. Through its participation in CCP colleges, ESMA staff noted though that NCAs had diverse approaches on how to conduct the review of DMP in the context of the annual review under Article 21 of EMIR. Only a very few NCAs systematically review DMP in the context of the annual review. Usually, NCAs included DMP in the scope of an annual review only in the event of material changes or where it was in scope of specific supervisory activities conducted during the year. Consequently, some NCAs do not review the compliance with DMP requirements every year.
30. While NCAs, by applying a risk-based approach, tend to focus their annual review on a selection of more relevant issues, it should be ensured that the entire scope of annual reviews over a reasonable number of years encompasses the assessment of compliance with all EMIR requirements (including DMP requirements).

Risk assessment for the initial authorisation under EMIR Article 14

31. As only one CCP was granted an initial authorisation under EMIR Article 14 during the reporting period ICEU, the respective NCA assessed that CCPs' compliance with the EMIR requirements on DMP in the risk assessment produced for its initial authorisation.

Extension of Authorisation under EMIR Article 15

32. Only two extensions of authorisation were granted under EMIR Article 15 during the reporting period, while two other extensions of authorisation were granted soon after the end of the reporting period, namely:
 - In July 2016, LCH Ltd was authorised to clear exchange-traded interest rate derivatives.
 - In August 2016, KDPW-CCP was authorised to clear additional types of equities, debt instruments and interest rate derivatives.
 - In May 2017, BME Clearing was authorised to clear new products, derivatives related to natural gas.

- In May 2017, the authorisation of LCH SA to clear some additional types of credit derivatives was confirmed through an extension of authorisation.
33. Only two NCAs reported that they assessed the relevant implications on DMP in the context of the risk assessment produced for the extension of authorisation.

Validation of Significant Changes under EMIR Article 49.

34. Only one NCA reported that it validated a significant change to risk models and parameters under Article 49 of EMIR affecting the CCPs' DMP. The NCA reviewed the changes to the DMP in the context of the risk assessment submitted to the college for the approval of that significant change.
35. Another NCA noted that other significant changes validated under Article 49 did not affect the CCP's DMP.

Review of other non-significant changes

36. Finally, six NCAs reported to have reviewed ad hoc other non-significant changes to the DMP, implemented as a follow-up to either experienced defaults or test and simulation results or as an adjustment to other business or environmental changes, as in most cases reported in the context of the annual review under EMIR Article 21.

Supervisory activities related to occurred defaults

37. Four NCAs reported instances where their CCPs declared a default of a clearing member.
38. One instance implied the activation of DMP at three CCPs. In all cases, the relevant NCAs, ESMA and the colleges were promptly informed of the default. No porting of clients' accounts was experienced on this default. The three relevant NCAs received the CCP post-mortem report on the default management; one of them also issued some recommendations to its CCP resulting from its review of the default management report, which were closed in the meantime.
39. Another NCA reported two instances where the CCP considered that the affected clearing members would not be able to meet their future obligation and, therefore, informed the NCA accordingly. In both cases, the NCA issued recommendations to the CCP, some were still open at the time of the answer to the questionnaire.

4.1.2 Supervisory activities related to DMP tests

40. NCAs in only six out of the 12 member states reported some supervisory activities on the review the CCPs' tests of DMPs other than simulation exercises such as fire drills (addressed below). In most cases, the NCA received quarterly/annual reports on the DMP tests submitted by the supervised CCPs. However only two NCAs issued recommendations to CCPs on their DMP tests. In one of those cases all

recommendations were already closed in the meantime, while in the other case the deadline for implementing an outstanding recommendation was June 2017.

41. The other six NCAs did not mention any specific activities on the review of CCP's DMP tests. While in some cases the NCA reported that the CCPs conducted some tests of their DMPs, they did not receive any reports by the CCPs on their tests. One NCA noted that it usually receives reports from the supervised CCPs, even though this is sometimes upon request as opposed to spontaneously. However two NCAs noted that some DMP tests are conducted already as part of simulation exercises, such as fire drills; therefore, these tests were reviewed in conjunction with the review of fire drills, as discussed below.
42. NCAs did not always detail in their answers the date and the nature of the tests performed by the CCPs and how they reviewed them. See section 5.1.5 below for more details on supervisory activities on DMP tests.

4.1.3 Supervisory activities related to fire drills

43. Only one NCA reported not to have undertaken any supervisory activity in relation to the fire drills during the reporting period, because its CCP did not conduct any fire drills.⁷
44. The other NCAs have instead reported some details on the fire drills conducted by their CCPs. It is interesting to note that six CCPs conducted a single fire drill during the reporting period, while the other five CCPs conducted at least two fire drills during the reporting period, with the remaining four CCPs having conducted three or more fire drills. In only three instances were fire drills conducted without the involvement of clearing members, in all other cases CCPs involved their clearing members to some extent in their simulation exercise. Fire drills have normally been conducted by each CCP separately, except in one instance where two CCPs coordinated a cross-CCP simulation exercise. In addition, one group fire drill has been conducted.
45. While all NCAs received a report on the outcome of the fire drills⁸ for their review, two NCAs reported to have participated in the simulation exercises as an observer, while three NCAs had a more proactive role in the fire drill initiation, design and result assessment. For instance, two NCAs noted that when it observed and assessed the fire drills initiated by the supervised CCPs in 2015 and 2016, it documented its own internal assessment and provided feedback on the entire process. Another NCA expressed its intention to be involved in the next simulation exercise.
46. In five instances, three NCAs issued specific recommendations to the supervised CCPs as a result of their review of the fire drill results. In most cases, the implementation of these recommendations was still ongoing at the end of the reporting period. Another

⁷ One NCA mentioned that a CCP had processed a number of actual defaults or near default situations, which serve as a real-life test of the default procedure.

⁸ One NCA mentioned that it received only oral reports during the quarterly meeting with the supervised CCP.

NCA mentioned that although no formal recommendation was issued, specific feedback was provided during regular supervisory meetings with the supervised CCP.

47. See section 6 below for more details on supervisory activities on DMP fire drills.

4.1.4 Other Supervisory Activities: desk-based reviews and on-site inspections

48. Except for the instance reported below, NCAs mentioned no further specific supervisory activities related to the review of DMP, besides those already addressed above and reflected in the annual review under EMIR Article 21.

49. One NCA reported that it had assessed in 2016 the CCP's recovery plan measures and the corresponding changes to the DMP. No pending recommendations were reported from this review.

4.1.5 NCAs' organisational set-up

50. In total, 15 NCAs in 12 EU Members States have a direct supervisory responsibility to assess the EU CCP's compliance with EMIR requirements on DMP (EMIR Article 48 and related RTS):

- In France three NCAs have shared competences on CCPs (ACPR, AMF and BdF), whereby ACPR leads the assessment of compliance with EMIR Article 48 and related RTS and seeks the opinion of the other two authorities on those articles.
- In Italy, two NCAs have shared competences on CCPs (BdI, Consob).
- In the Netherlands, the competences regarding the supervision of CCPs are divided between AFM and DNB, whereby DNB is the sole responsible authority for EMIR Article 48.
- In Germany, BaFin is the sole NCA for the supervision of CCPs. However, due to national legislation (German Banking Act) BaFin works in close cooperation with the Deutsche Bundesbank.
- In Austria, although the FMA is the sole NCA for CCP, the latter has established a close cooperation with the OeNB, whereby on-site inspections are conducted by the OeNB.

51. The number of Full-Time Equivalent (FTE) staff members assigned to the supervision of a CCP (not only to the assessment of compliance with DMP requirements) is quite heterogeneous across NCAs, on average ranging between two and six FTE per NCA. These figures are proportional to the importance and the number of CCPs supervised by the respective NCAs.

52. Eight NCAs have adopted internal procedures, guidelines or other tools to help staff dealing with specific supervisory activities on DMP requirements. The current peer

review did not include a comparative review of the NCAs' internal procedures, guidelines or other tools supporting specific supervisory activities on DMP.

4.2 Main findings

53. While DMP are systematically reviewed in the context of formal authorisation (under Articles 14 and 15) or validation of significant changes (under Article 49), not all NCAs do systematically review their respective CCPs' DMP tests and fire drills.

54. ESMA staff appreciates that NCAs need to prioritise their supervisory activities on the most relevant topics identified, applying a risk-based approach, based on each CCP's risk profile and the corresponding market, business and regulatory developments. NCAs should however ensure that each CCP reviews annually its DMP and conducts regular tests and fire drills, in compliance with EMIR requirements.

55. The following proposal for further supervisory convergence has been identified:

- **Proposal 1.** Even in the absence of changes, NCAs should undertake a regular comprehensive review of the CCPs' DMPs.

56. The following best practice has been identified:

- **Best Practice 1:** NCAs' monitoring activities could include a regular reporting by CCPs on their DMP reviews, tests and fire drills.

57. The following cases of non-compliance have been identified:

- **Possible cases of non-compliance:** In line with the above, the two NCAs that have not yet undertaken a comprehensive review of their CCPs' DMP are invited to do so as soon as possible. Moreover, when CCPs have not yet undertaken any comprehensive fire drills, the respective NCAs are invited to request their supervised CCPs to undertake possible appropriate fire drills as soon as possible and to review their performance in case this has not already been done since the end of the reporting period.

5 Review and testing of DMP

5.1 Overview of NCAs' practices

58. Article 48(1) of EMIR requires CCPs to review their default procedures. The aspects of the default procedure that need to be covered by such a review are detailed in Article 48 of EMIR, Article 58 of the RTS as well as Article 59(12) of the RTS.

59. This section presents current practices on five issues of particular interest. They emerged from the responses to the peer review questionnaire.

Issue 1. Review of DMP

60. Article 58(1) of RTS requires that CCPs shall review their default procedures to ensure their practicability and effectiveness. Article 58(2) of the RTS requires that they should adapt the procedures if a need has been identified.

61. In the validation of the default procedures, all NCAs indicated that they had reviewed the CCPs' documentation in order to check their enforceability and assess the potential legal risk arising from the actions involved in the management of a member's default. In addition, a number of NCAs have indicated that they require legal opinions for additional safety. However, as pointed out by a NCA, it should be acknowledged that the risk of a legal challenge against the CCP cannot be completely excluded.

62. This also applies to the operational risks arising from the implementation of DMP. While the high level of detail of processes in the DMP documentation is used to avoid mistaken interpretation by the CCP's staff, this risk cannot be fully excluded.

63. Concerning the possible impact of a change in the CCP's environment or services on its DMP, most NCAs rely on regular (usually quarterly) reviews of the procedures. One NCA required CCPs to include the change of law as an explicit topic of the CCP's review of the default procedures. Another NCA stated that it had the power to require the CCP to implement changes to its procedures in the event of a change in relevant laws.

64. The adaptation of the DMP by the CCP when it introduces changes or new services is assessed by including the default management aspects in the validation of the change or of the new product. In addition, two NCAs indicated that they can require the CCP to perform a fire drill before the launch of a new product.

65. Article 48(2) of EMIR requires that the non-defaulting members should not be exposed to losses they cannot anticipate. In order to assess that the DMP of the CCPs meet this requirement, all NCAs based themselves on the review of the CCP's documentation, in particular with regard to the waterfall of resources, which is in the CCPs' rules, and therefore is brought to the members' knowledge. In other words, the knowledge of the loss allocation mechanism is taken as a reassurance that members can anticipate their maximum losses.

66. Article 48(3) of EMIR lays out the requirements for the communication of the decision to declare a member in default between the CCP, the NCA, and ESMA. The NCAs keep for this purpose up-to-date contact lists and protocols defined in advance for emergency communication in a so-called pre-default situation.

Issue 2. Porting and liquidation of clients' positions and collateral

67. Articles 48(3) to 48(7) of EMIR lays out the requirements for the CCP to be able to manage both client and house positions and collateral in the event of a default of a clearing member.
68. The effectiveness and more specifically the timeliness of the management of client positions was validated mainly by the review of the outcome of fire drills, and in some cases by reviewing the deadlines laid out in the DMP.
69. The segregation of portfolios and collateral of clients is only validated by NCAs through the review of the CCP's rules and fire drills which can be considered as the bare minimum.
70. As far as the allocation of losses for clients sharing the same omnibus account, none of the CCPs perform a loss allocation calculation, but the common practice is to return any outstanding collateral to the defaulting clearing member's administrator. This is in line with the requirement of Article 48(7) which applies at the account level: there is no requirement to take steps towards the allocation of losses between the clients who share the same omnibus account.

Issue 3. Allocation of the defaulting member's portfolio

71. Article 48(2) of EMIR requires the CCP to take prompt action to contain losses and to ensure that the clearing members are not exposed to losses they cannot anticipate or control. Such losses would potentially arise from the way the CCP allocates the portfolio of the defaulting member.
72. In order to supervise the allocation of the defaulting member's portfolio when it is liquidated, and in order to validate that, in practice, CCPs are acting in accordance with their own rules, NCAs have mainly used the fire drills reports and/or the contractual relationships with market participants which are committed to provide assistance with the liquidation of the portfolio.
73. ESMA staff takes note that none of the responses mentioned a specific inspection of the tools and processes used, such as for example the tools used to determine winning bids where a CCP uses an auction process.
74. In order to validate that the allocation process is robust, fair and transparent, the NCAs mainly based their review on the analysis of the CCPs' documentation. One NCA specifically mentioned that their analysis covered a comparison on the rule-book against the procedures of the CCP. Another NCA mentioned the use of a legal opinion to assess the soundness and enforceability of the procedures.

Issue 4. External traders in the default management group

75. Certain CCPs use external traders seconded by their clearing members to help them with hedging and liquidating the defaulting member's portfolio. The sound functioning of this aspect of the DMP relies on the traders having a clear mandate, a good knowledge and understanding of what is expected from them, including a proper operational expertise.
76. All concerned NCAs rely on the CCP to vet the external traders. One NCA noted that in order to avoid any risk arising from the use of the CCP's IT systems by non-CCP staff, only CCP staff can operate them and provide the reports and information requested by the seconded traders. One NCA indicated that it reviewed the terms of reference of the traders' participation and that it attended the fire drills.
77. NCAs used the CCP's processes and procedures to assess the alignment of the external traders' interests with those of the CCP, including the management of possible conflicts of interest and risk of leakage of confidential information. One NCA mentioned the importance of the timing of the actions linked to the liquidation of the portfolio and in particular the timing of the publication of the contents of the portfolio in reducing the risk of information leakage.
78. With regards to the actual availability of traders, the NCAs verified that the CCP retains sufficient in-house expertise to mitigate the risks from the no-show of a trader. A first cross-CCP fire drill was used to stress further the availability of the seconded traders; and in this respect, one NCA encouraged CCPs to share with one another the lists of seconded traders in order to avoid a situation where the same member would face calls for detachment of staff from all CCPs at the same time.

Issue 5. Testing of the DMP

79. Article 59(12) of the RTS sets out the requirements for the CCP to test and review quarterly its DMP. In most cases, compliance with this requirement is assessed on the basis of test reports. A small number of NCAs have requested the schedule of fire drills and tests from their CCPs in advance.
80. The assessment of the participation of CCP staff in the tests and staff knowledge of the DMP is split among NCAs between identification of the staff in the DMP itself and the review of fire drill reports. However, ESMA staff notes that the responses focus specifically on senior staff as opposed to covering all staff with operational tasks to perform during a default.

5.2 Main findings

81. ESMA has noted that the criteria used by the NCAs to gauge whether the CCPs have ensured the practicability and effectiveness of their DMP vary in their nature, focus (legal, operational etc...) and granularity. However, upon the analysis of the

corresponding NCAs practices and supervisory approach, whatever the underlying rationale for such review, some best practices have emerged.

82. The following best practices have been identified:

- **Best practice 2.** With regard to the review of the DMP, when a CCP introduces a new product or a new activity, NCAs, could at least review any required change to the default procedures before the launch of the new product in addition to a fire drill or shortly after the launch of this new product or new activity.
- **Best practice 3.** Concerning the scope of the reviews of the DMP, NCAs could request CCPs that their own review of DMP includes pre-specified areas of focus including items such as the review of the impact of changes (if any) in applicable law.
- **Best practice 4.** NCAs could verify that the CCP has checked that its operational procedures are consistent with the CCP's rules (or that the CCP's own control framework ensures this is the case), including those related to prudential aspects like the liquidation period calibration, and that there is no risk of contradiction between them. This consistency check would be of particular relevance whenever the procedure is updated (e.g. following the introduction of a new product or a new system).

83. Whilst scrutinising each issue as detailed above, ESMA has identified one significant divergence in the NCAs' supervisory approach. Not all CCPs rely on external trading personnel for their DMP, however, those which do create a potential dependency vis-à-vis these personnel and their knowledge. In this respect, the following divergence has been identified:

- **Main Divergence 1.** Where a CCP uses seconded staff from its clearing members to help manage the defaulter's portfolio. The resilience of the relevant CCP to the dependency on seconded traders is assessed differently across NCAs i.e. either by requiring the CCP to retain in-house knowledge, or by using fire drills to ensure the seconded personnel's actual availability, and skills and their knowledge are fit for the actions they are to undertake, e.g. the CCP are being lent personnel which can demonstrate with front-office skills. ESMA has determined that the two approaches are suitable and thus NCAs can consider them as acceptable.

6 Simulation exercises (Fire drills)

6.1 Overview of NCAs' practices

Issue 1. General aspects of fire drills

84. Article 59(12) of the RTS requires that the CCP performs fire drills annually.

85. All NCAs use the fire drill reports issued by the CCPs to monitor the frequency of the fire drills. In addition, as noted above in 4.1.4, the supervision of the fire drills is done on site by four NCAs, while the other NCAs do not attend the fire drills in person.
86. The review of the fire drill reports by NCAs in some cases resulted in a number of improvements, in relation to the recommendations referred to in paragraph 46 above. In particular, one NCA required the CCP to introduce additional elements in the default scenario, such as multiple defaults and the effects on an interoperability link with another CCP. One NCA uses the review of fire drills to promote best practices by means of a supervisory work program.
87. Regarding the context of the fire drills, no NCAs have indicated that there had been unannounced fire drills. The predictability of fire drills might affect the availability and preparedness of involved staff members (who may otherwise be on vacation). One NCA specifically stated the unpredictability does not seem to be particularly relevant as it considers the fire drill as a learning by doing exercise, while another NCA indicated that the disadvantages of unannounced fire drills would outweigh the advantages, as fire drills are more suited to verifying the organisational preparations of a CCP and its CMs than to simulating the “stressed market conditions” of a real default. Two NCAs indicated they had plans to introduce such unannounced simulation exercises, and another one generally commented that it would work toward increasing the realism of fire drills.

Issue 2. Fire drill scenarios

88. When operating fire drills, CCPs need to run scenarios that cover the various parts of the DMP covered in Article 48 of EMIR. NCAs can assess and validate the complexity and realism of the scenarios either ex-ante while attending the fire drills or ex-post by reviewing the reports.
89. NCAs check that the coverage of the scenarios is appropriate by having a comprehensive view over a number of fire drills. As noted by one NCA, a single fire drill cannot cover all possible cases.
90. In addition, one NCA has a work program spread over four quarterly reviews of the DMP (as opposed to integrating this aspect in fire drills) which cover events such as the use of a liquidity facility or the default of a custodian bank.
91. The inclusion of client accounts in fire drill scenarios was commonly done, with three exceptions, the first two of which have indicated they have plans to have this feature included.
92. The testing of the CCP's capacity to make use of all the financial resources of its waterfall is assessed either by reviewing fire drill reports, or by an on-site review of the tools used to determine the losses. In particular, where a process is performed with desktop tools as opposed to the CCP's system, one NCA has requested an on-site demonstration of the tool.

93. The requirements for the sizing of a CCP's resources are to cover the default of the largest two members. Mirroring this requirement, Article 48(2) of EMIR states that "the CCP shall take prompt action to contain losses and liquidity exposures resulting from the defaults", using the plural for the word "default". Only one NCA reported having supervised such a scenario; another NCA indicated that it requested the addition of multiple defaults in future simulations.
94. The assessment of the combined effect of a business continuity event with a default can be assessed by a fire drill in which the scenario includes such a business continuity event. While a number of respondents indicated that no such test had been performed, one NCA indicated that there were plans to include several such theoretical events, including a cyber-attack. Some other NCAs indicated that the default process was reviewed as part of the business continuity planning (i.e. the CCP includes a review of the capacity to run the DMP in its business continuity test, as opposed to running a full fire drill in a business continuity context). Another NCA analysed several possible cases of stress on the CCP's resources such as senior staff or premises being unavailable. Lastly, another NCA indicated that a simulation of a default while the CCP's offices were unavailable had taken place.

Issue 3. Effectiveness of the default management

95. Article 58(1) of the RTS requires the CCP to ensure the default procedure is both practical and effective. This means that the fire drill must cover operational actions to be performed by the CCP and by the parties involved in the default management.
96. NCAs check the participation and responsiveness of external stakeholders (including seconded traders) either by attending the fire drill in person or by reviewing the fire drill reports. One NCA remarked that the mandate of the supervisor was on the CCP, despite the fact that other market participants have an impact on the management of the default. Another NCA holds meetings with several large clearing members in addition to attending the fire drills. A last NCA reported that while the CCP's rules envisaged using seconded traders, they had never taken part in a fire drill.
97. NCAs validate the capacity of the CCP to continue its business-as-usual activities while managing a default by attending the fire drill and/or by reviewing fire drill reports and specifically the minutes of actions taken and decisions made during the exercise. To further assess their degree of competence, one NCA held interviews with senior staff of the CCPs. However, none of the NCAs reported having checked a full list of staff against their participation to the default management or their training in this respect.
98. This is also the case for the assessment of the tools used in the computations performed as part of the fire drill. One NCA indicated that the CCP had directly provided them with the Excel tools involved in the default management, and several NCAs indicated that they had checked that the calculations had been the subject of a validation or an audit.

Issue 4. Liquidity risk

99. During the management of the default, the CCP needs to access the liquidity resources at its disposition, in line with Articles 41 to 44 of EMIR.
100. The NCAs use fire drills to assess that all liquidity sources are tested, and in addition to this, a number of NCAs have indicated specific liquidity tests, including operational tests of the connection to the liquidity providers, which are performed outside fire drills. In addition, one NCA reviewed the legal contracts between the CCP and liquidity providers to ensure the timeliness and effectiveness of the liquidity provision.
101. Where some participants to the CCP have functions other than clearing member for the CCP, NCAs have assessed that the CCP tests fire drill scenarios do not exclude the exposures of the CCP due to these other functions. For example, one NCA indicated that the default of a clearing member acting also as a correspondent bank had been included in a fire drill and the NCA is checking that the scenarios increase in complexity. Another NCA indicated that the testing of these functions was part of a work program across several fire drills. Another NCA indicated that it requested the CCP to add such elements to its fire drills. A last NCA indicated that the test of the functions of the member as liquidity provider had been performed in isolation and that the simultaneous failure of this entity as a clearing member had not been considered.
102. The assessment of the resilience of the CCP to the failure of a settlement bank and of possible back-up arrangements is not wide spread across NCAs. One NCA indicated it has reviewed back-up arrangements for the technical failure of a settlement bank as part of the supervision of the business continuity plans of the CCP and one NCA indicated this was tested in a different supervisory workstream. Another NCA indicated that it considered the time window allowing to cure a technical default of payment as a mitigant to the impact of a payment issue.

6.2 Main findings

103. Fire drill reports are systematically reviewed after each fire drill when performed and NCAs use them as a tool to supervise the performance of the CCP's fire drills and its compliance with the requirements of Article 48 of EMIR and Article 58 of the RTS.
104. For any given fire drill, the CCP needs to establish a scenario. The scenarios of those fire drills are thus of essence not only for the simulation exercise themselves but also for the consequent supervisory conclusion and work plan of the NCAs which is underlain by the fire drill results. Whilst it is not possible that one given scenario will cover all possible cases, it is however important that the CCP performs fire drills that are sufficiently challenging and comprehensive to demonstrate its capacity to perform its duties in the event of an actual default. ESMA has thus identified the following best practices on different aspects of the fire drill scenarios:

- **Best Practice 5.** NCAs could encourage CCPs with institution-based interdependences to organise simultaneous fire drills in order to stress the availability and responsiveness of these market participants and seconded traders when they are requested at the same time at multiple CCPs.
- **Best Practice 6.** Since one fire drill scenario cannot cover all possible adverse events or conditions that the CCP might face during an actual default, NCAs could establish, or require CCPs to establish, a plan setting out in advance the scenarios to be covered over a number of future fire drills, subject to the flexibility needed as issues identified at one fire drill may impose action points for a subsequent exercise. This would enable the NCA to ensure that the capacity of the CCP to meet its obligations under Article 48 of EMIR stands in all conditions.
- **Best practice 7.** NCAs could request CCPs to perform a fire drill in which two defaults are assumed to occur. In particular, this would enable the NCAs to assess whether CCPs have the operational capacity to hedge and liquidate separately two portfolios without raising concerns on loss allocation and if it has the operational capacity to do so.

105. With regards the execution of the fire drills ESMA has experienced divergence in the supervisory approach and more precisely on the NCAs involvement in the simulation exercise:

- **Main Divergence 2.** There is a split between NCAs whose staff physically attend the fire drill and those who do not. Neither of the two practices contradicts EMIR and they can be considered acceptable even though physical presence allow undoubtedly better understanding and thus analysis than remote monitoring.

106. Finally, ESMA staff appreciate that CCPs are progressively developing their approach towards fire drill exercises leveraging on knowledge and experience gained after each simulation. The following proposal for further supervisory convergence could be considered as possible further improvement of the fire drill assessment:

- **Proposal 2.** NCAs should encourage CCPs to perform fire drills which would be unannounced to most of the CCP's staff, to assess their actual readiness and to identify any impact of time and staffing constraints in a situation where staff has not prepared in advance for the simulation.

7 Conclusion

107. Through the current Peer Review, ESMA only identified one area with possible cases of non-compliance in relation to the NCA's global supervisory activity on DMP. In contradiction to the best practice of others and to Article 21 of EMIR, some NCAs have not reviewed their CCPs' DMP nor confirmed that the latter have undertaken appropriate fire drills so that the NCAs can review the corresponding performance as per their supervisory duties. On this topic, to improve further supervisory convergence

it is suggested that even in the absence of changes, NCAs should undertake regular comprehensive review of the CCPs' DMPs.

108. With regards to reviewing and testing of DMP, ESMA detected one area of divergence with respect to the NCAs' supervisory approach in assessing CCPs' compliance with requirements on DMP, for the resilience of the CCP to the dependency on seconded traders. ESMA has also contemplated three best practices on what NCAs should concentrate on when performing the reviews of DMP.
109. With regards to the fire drills, i.e. simulation exercises, ESMA has found a divergence between NCAs whose staff physically attend the fire drill and those who do not, though in both cases the NCAs reviewed the fire drill reports and has put forward three best practices from NCAs supervisory activity. For better supervisory convergence ESMA has also recommended to incentivise CCPs to perform fire drills unannounced to some of the CCP staff to assess their readiness at all times.
110. Box 1 below summarises the seven best practices from the responses provided by the NCAs, which NCAs are encouraged to consider implementing where appropriate.

Box 1: Best Practices

NCA supervisory activity

- **Best Practice 1:** NCAs' monitoring activities could include a regular reporting by CCPs on their DMP reviews, tests and fire drills.

Review and testing of DMP

- **Best practice 2.** With regard to the review of the DMP, when a CCP introduces a new product or a new activity, NCAs, could at least review any required change to the default procedures before the launch of the new product in addition to a fire drill or shortly after the launch of this new product or new activity
- **Best practice 3.** Concerning the scope of the reviews of the DMP, NCAs could request CCPs that their own review of DMP includes pre-specified areas of focus including items such as the review of the impact of changes (if any) in applicable law.
- **Best practice 4.** NCAs could verify that the CCP has checked that its operational procedures are consistent with the CCP's rules (or that the CCP's own control framework ensures this is the case), including those related to prudential aspects like the liquidation period calibration, and that there is no risk of contradiction between them. This consistency check would be of particular relevance whenever the procedure is updated (e.g. following the introduction of a new product or a new system).

Fire drills

- **Best Practice 5.** NCAs could encourage CCPs with institution-based interdependences to organise simultaneous fire drills in order to stress the availability and responsiveness of these market participants and seconded traders when they are requested at the same time at multiple CCPs.
- **Best Practice 6.** Since one fire drill scenario cannot cover all possible adverse events or conditions that the CCP might face during an actual default, NCAs could establish, or require CCPs to establish, a plan setting out in advance the scenarios to be covered over a number of future fire drills, subject to the flexibility needed as issues identified at one fire drill may impose action points for a subsequent exercise. This would enable the NCA to ensure that the capacity of the CCP to meet its obligations under Article 48 of EMIR stands in all conditions.
- **Best practice 7.** NCAs could request CCPs to perform a fire drill in which two defaults are assumed to occur. In particular, this would enable the NCAs to assess whether CCPs have the operational capacity to hedge and liquidate separately two portfolios without raising concerns on loss allocation and if it has the operational capacity to do so.