

DANMARKS NATIONALBANK

OVERSIGHT POLICY

2019



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Danmarks Nationalbank's policy for oversight of the financial infrastructure in Denmark

It is important to society that payments and securities transactions can be effected in a safe and efficient manner. Like other central banks, Danmarks Nationalbank contributes to this process by overseeing important parts of the financial infrastructure¹. Danmarks Nationalbank oversees the core payment and settlement systems in Denmark and the most important payment instruments. In addition, Danmarks Nationalbank contributes to other central banks' oversight of international systems of relevance in Denmark. Danmarks Nationalbank's policy for oversight is set out in this document.

Purpose and legal basis of Danmarks Nationalbank's oversight

Under section 1 of the Danmarks Nationalbank Act, Danmarks Nationalbank shall "maintain a safe and secure currency system in this country, and facilitate and regulate the traffic in money and the extension of credit".² Against this backdrop, Danmarks Nationalbank oversees that the core payment and settlement systems in Denmark and the most important payment instruments are safe and efficient.

Danmarks Nationalbank's oversight powers are also stated in the Danish Capital Markets Act, cf. Box 1.

Oversight is based on international standards for safety and efficiency, including that operational reliability must be high and risks limited, and that systems and instruments must be up-to-date and cost-effective. Danmarks Nationalbank assesses whether the structures and functionalities of the systems and instruments subject to oversight comply with the international standards. In case of non-compliance, Danmarks Nationalbank instigates changes to systems and instruments as required. Danmarks Nationalbank does not supervise the individual firms within the infrastructure.

There may be situations where socio-economic considerations prompt Danmarks Nationalbank to impose higher requirements for safety and efficiency than the owners of a system or instrument find optimum from a business perspective. Danmarks Nationalbank's task is to lay down requirements that take the interests of society into account. Requirements may change over time due to e.g. technological advances, new needs or a changed threat landscape. Especially the threat of cyberattacks is dynamic in nature.

1 The Danish financial infrastructure is the network of systems that makes it possible for consumers and firms, including banks and other financial market participants, to exchange payments and securities. Danmarks Nationalbank's system, Kronos2, is at the hub of the financial infrastructure.

2 The Danmarks Nationalbank Act ([link](#)).

The extent of oversight

Danmarks Nationalbank oversees the systemically important parts of the financial infrastructure, i.e. the parts where errors and system failures are assessed to constitute a potential threat to financial stability or to have the ability to weaken confidence in the financial system in Denmark in a worst case scenario. Payment and settlement systems could, for instance, threaten financial stability if problems in one financial institution spread to other institutions or the financial system in general. It is very unlikely that this will happen, but the consequences to society could be severe. Confidence in the financial system

could be threatened if, for example, an important payment instrument cannot be used for an extended period of time due to operational disruptions, or in the event of large-scale fraudulent use of a payment instrument.

Danmarks Nationalbank has established criteria for assessing the systemic importance of payment and settlement systems and payment instruments. These criteria are applied in the selection of the systems/instruments to be overseen and in the prioritisation of oversight activities. The criteria are:

Legal basis for Danmarks Nationalbank's oversight

Box 1

Oversight of the financial infrastructure is traditionally a central bank responsibility, the primary objective of which is to ensure the efficiency and stability of the financial infrastructure. The legal basis for Danmarks Nationalbank's oversight is section 1 of the Danmarks Nationalbank Act, stating that Danmarks Nationalbank shall "maintain a safe and secure currency system in this country, and facilitate and regulate the traffic in money and the extension of credit".¹ The Act does not include the term 'oversight', but oversight is considered to be a natural responsibility if Danmarks Nationalbank is to meet its statutory objective of ensuring safe and efficient payments.

When the Danmarks Nationalbank Act was introduced in 1936, the then Minister of Trade, Industry and Shipping stated that the objects specification in section 1 aimed to provide "general guidelines for the responsible management of the bank (...) The way in which and the means by which the bank will best be able to ensure the currency system and facilitate the circulation of money and the extension of credit will depend on the circumstances at various times. At this point, it would neither be possible nor appropriate to determine and lay down this in the Act."

Danmarks Nationalbank's oversight powers are also stated in the Danish Capital Markets Act². Section 212(3) states that Danmarks Nationalbank shall oversee registered payment systems that are, in the opinion of Danmarks Nationalbank, of major significance to payment settlement with a view to promoting the smooth functioning of the systems

by contributing to their efficiency and stability. Danmarks Nationalbank notifies the Danish Financial Supervisory Authority which systems are subject to oversight, and, in accordance with the explanatory notes to the draft Capital Markets Act, the Financial Supervisory Authority publishes a list of the registered systems subject to oversight. Danmarks Nationalbank has a number of regulatory tasks in relation to the payment systems that are subject to oversight (section 180), and Danmarks Nationalbank is empowered to obtain information about the payment systems (section 217, cf. section 216). In addition, Danmarks Nationalbank is empowered to impose default fines on the persons responsible in the event that an order issued in connection with oversight is not observed (section 256).

The powers of the Capital Markets Act relate to payment systems only. Danmarks Nationalbank's oversight of VP settlement is not regulated by the Capital Markets Act. Danmarks Nationalbank's oversight of systems other than payment systems, including securities settlement systems such as VP settlement, takes place on the basis of the Danmarks Nationalbank Act and international standards. Under the regulation on improving securities settlement in the European Union and on central securities depositories, CSDR³, Danmarks Nationalbank is involved, cf. article 12 on relevant authorities, in the authorisation and supervision of central securities depositories where their settlement in Danish kroner warrants this. That is the case in connection with the Danish Financial Supervisory Authority's authorisation and current supervision of VP.

¹ The Danmarks Nationalbank Act ([link](#)).

² Consolidated Act no. 12 of 8 January 2018 (only in Danish) ([link](#)).

³ Regulation (EU) No 909/2014 of the European Parliament and of the Council of 23 July 2014 ([link](#)).

- How large the transaction volume is in terms of the number and value of transactions
- Whether there are few or no substitution options
- What the application of the system/instrument is
- Whether errors and system failures affect the general public
- Whether errors and system failures may affect other systems or instruments.

The following systems and instruments are currently subject to oversight by Danmarks Nationalbank:

- the Kronos2 interbank payment system
- the Sumclearing, Intradagclearing and Straksclearing retail payment systems
- the VP securities settlement system
- the payment instruments Dankort, credit transfers and Betalingservice.

A system or instrument consists of a technical infrastructure, the organisation of this infrastructure and a common set of rules and procedures, including the legal obligations of the parties involved. Danmarks Nationalbank's oversight focuses on aspects where errors, system failures and inadequacies may affect the general operation and use of the system/instrument, i.e. key functions, security features and IT systems as well as overall rules and conditions.

Danmarks Nationalbank's oversight is aimed at those responsible for the systems and instruments, who have ultimate responsibility for ensuring that the systems and instruments are safe and efficient. This also applies in cases where operations or parts of operations are outsourced to a third party.

Planning of oversight activities

Danmarks Nationalbank's oversight is planned in accordance with international guidelines for the

Responsibility of oversight authorities

Box 2

CPMI-IOSCO has identified five key responsibilities for authorities responsible for regulation, supervision and oversight of the systemically important parts of the financial infrastructure. For the oversight authorities these five responsibilities entail that:

- Oversight authorities should define and disclose the criteria used to identify FMIs that should be subject to oversight.
- Oversight authorities should have the powers and resources to carry out effectively their responsibilities in overseeing FMIs.
- The roles and responsibilities of the oversight authorities should be transparent, and the oversight policies should be disclosed.
- Oversight authorities should use internationally accepted standards, and there should be consistency in oversight, for instance systems operated by central banks and other systems should be treated equally.
- Relevant authorities should cooperate on oversight, supervision, etc. – both domestically and internationally.

Danmarks Nationalbank's oversight is based on these areas of responsibility of oversight authorities.

Source: CPMI-IOSCO, Principles for financial market infrastructures, 2012 ([link](#)).

responsibilities of oversight authorities, cf. Box 2. As part of its oversight, Danmarks Nationalbank assesses whether systems and instruments comply with relevant international standards, and developments in systems/instruments is monitored on an ongoing basis by collecting information and through dialogue with those responsible. Danmarks Nationalbank instigates changes to the systems/instruments as required.

Danmarks Nationalbank's oversight of payment and settlement systems is based on the CPMI-IOSCO³

³ The Committee on Payment and Market Infrastructures, CPMI, is based at the Bank for International Settlements, BIS. The International Organization of Securities Commissions, IOSCO, is an international forum of cooperation between supervisors of securities markets.

principles for financial market infrastructures, FMIs, while oversight of payment instruments takes place in accordance with the European Central Bank's, ECB's, standards for payment instruments, cf. Box 3.

Danmarks Nationalbank owns the Kronos2 interbank payment system. To ensure consistency and equality in the oversight of Kronos2 and the other Danish systems, Danmarks Nationalbank's oversight function has been segregated from the development and operation of Kronos2.

Assessment according to international standards

Danmarks Nationalbank regularly assesses whether systems or instruments comply with international standards. Assessments are performed when a system or instrument becomes subject to oversight, or if a previous assessment is no longer adequate. A new assessment may also be required in the event of significant developments in IT, technology, security standards or the threat landscape, e.g. on account of new types of cyberattack.

International standards applied in Danmarks Nationalbank's oversight

Box 3

Danmarks Nationalbank's oversight is based on international standards. Danmarks Nationalbank oversees core payment and settlement systems in Denmark on the basis of the CPMI-IOSCO principles for financial market infrastructures. Oversight of the most important payment instruments in Denmark takes place in accordance with the ECB's standards for payment instruments. The international standards stipulate safety and efficiency requirements.

The CPMI-IOSCO principles

Oversight of Danish payment and settlement systems is based on the CPMI-IOSCO principles for financial market infrastructures, FMIs, i.e. principles for payment systems, securities settlement systems, central securities depositories, CSDs, central counterparties, CCPs, and trade repositories.¹ There are 24 principles in total, some of which are relevant only to certain types of FMIs. The principles impose requirements in terms of the general organisation of FMIs, including a well-founded legal basis, clear and transparent organisation and governance arrangements and a sound risk-management framework. The principles also impose requirements in terms of the management of all types of risk arising from the clearing and settlement of financial transactions. Finally, a number of requirements address efficiency aspects, including requirements in terms of fair and open access, practicality and cost-effectiveness for all relevant parties and requirements in relation to transparency. For instance, requirements in terms of disclosure of rules, procedures and quantitative data on use and operations.

CPMI-IOSCO has issued an assessment methodology and specific requirements for the disclosure of data from the FMIs subject to oversight to market participants, authorities

and the public in general. Under the principles, those responsible for payment and settlement systems are obliged to disclose a detailed description of the system's observance of the principles, referred to as the disclosure. This description should be reviewed at least every two years and after important system changes or other material changes.

In April 2013, Danmarks Nationalbank published a description of the principles and their background.²

The CPMI-IOSCO principles for financial market infrastructures are supplemented by various more detailed guidelines in specific areas, which are also taken into account in Danmarks Nationalbank's oversight. For example, the CPMI-IOSCO cyber guidelines³ and the CPMI strategy for endpoint security⁴ are included in the oversight of operational risk.

The ECB's standards for payment instruments

Danmarks Nationalbank's oversight of the most important Danish payment instruments takes place in accordance with the ECB's harmonised oversight standards for payment instruments.⁵ ECB has published assessment guides for credit transfers, direct debit and card payment schemes that support a comprehensive and efficient assessment against these standards. There are five overall standards, setting out requirements for: 1) a sound legal basis under all relevant jurisdictions; 2) access to comprehensive information for all actors, including information on financial risks; 3) an adequate degree of security, operational reliability and business continuity; 4) effective and accountable governance arrangements with a clear allocation of roles and responsibilities; and 5) risks in relation to the clearing and settlement process should be managed and contained.

1. CPMI-IOSCO, *Principles for financial market infrastructures*, 2012 ([link](#)).

2. Katrine Skjærbæk Rasmussen and Tina Skotte Sørensen, *New principles for financial market infrastructures*, *Danmarks Nationalbank, Monetary Review*, 1st Quarter 2013, Part 1 ([link](#)).

3. CPMI-IOSCO, *Guidance on cyber resilience for financial market infrastructures*, 2016 ([link](#)).

4. CPMI, *Reducing the risk of wholesale payments fraud related to endpoint security*, 2018 ([link](#)).

5. ECB, *Harmonised oversight approach and oversight standards for payment instruments*, 2009 ([link](#)).

Danmarks Nationalbank initiates an assessment by requesting those responsible for the system/instrument to respond to a number of questions in relation to the standards. Based on the responses and related documentation, Danmarks Nationalbank assesses compliance with the standards. This may result in recommendations to address shortcomings and drawbacks. Danmarks Nationalbank publishes a report of conclusions and recommendations. Follow-up on the recommendations is undertaken as part of the ongoing oversight activities, cf. below.

Ongoing oversight

Ongoing oversight of systems/instruments is based on formalised collection of information and regular meetings with those responsible. The purpose of ongoing oversight is to assess the continued compliance with international standards.

Danmarks Nationalbank receives fixed quarterly reporting from the systems/instruments on the legal basis, organisation and strategy, risk management and contingency procedures, use and operation, as well as results of internal and external audits. Danmarks Nationalbank annually receives the systems'/instruments' updated frameworks for risk management, risk assessment, contingency procedures and, for the systems, also stress testing plans. In the event of errors and system failures, Danmarks Nationalbank must be informed as quickly as possible and no later than by the close of the business day. Subsequently, Danmarks Nationalbank will receive a detailed report on the incident. This report must include causes, implications and possible initiatives to prevent a recurrence of the incident.

Generally, quarterly meetings are held between Danmarks Nationalbank and those responsible for a system/instrument. At these meetings, the quarterly reporting is reviewed, and follow-up on major errors and system failures is discussed. Moreover, the results of Danmarks Nationalbank's annual review of risk assessments, contingency procedures, etc. are

discussed and follow-up action is taken on any open recommendations.

Danmarks Nationalbank reports annually on its oversight activities in the publication *Oversight of the Financial Infrastructure*.

Oversight tools

Danmarks Nationalbank instigates changes in the system/instruments subject to oversight as required. Desired adjustments are promoted through an ongoing dialogue with those responsible for the systems and instruments subject to oversight. Danmarks Nationalbank's assessments and recommendations are published, and its position is indicated in articles and publications, including the annual oversight publication. In addition, Danmarks Nationalbank may inform the Danish Payments Council⁴ of any identified weaknesses in the retail payments infrastructure and have the Payments Council discuss and possibly adopt initiatives to promote the efficiency and safety of retail payments in Denmark. Issues regarding operational risk and cyber security can be discussed in the Financial Sector forum for Operational Resilience, FSOR⁵, which may decide to proceed with measures to reduce relevant risks.

Cooperation with other authorities

Danmarks Nationalbank's oversight takes place in cooperation with other national and international authorities. The purpose is to avoid double regulatory control, to utilise the competencies of the respective authorities and to ensure that relevant information is shared. Formal cooperation has been established with the Danish Financial Supervisory Authority, supervising key actors in the financial infrastructure. In addition, Danmarks Nationalbank contributes to other central banks' oversight of international systems of relevance in Denmark.

4 The terms of reference, composition and publications of the Danish Payments Council can be found at Danmarks Nationalbank's website ([link](#)).

5 The terms of reference, composition and publications of the FSOR can be found at Danmarks Nationalbank's website ([link](#)).

Cooperation with the Danish Financial Supervisory Authority

Danmarks Nationalbank cooperates with the Danish Financial Supervisory Authority regarding areas where their powers overlap. The overall framework for this cooperation is laid down in a Memorandum of Understanding (MoU).⁶ The MoU states the legal basis for Danmarks Nationalbank's oversight and the Danish Financial Supervisory Authority's supervision, the structure of the cooperation and the parts of the financial infrastructure to be covered in the MoU.

Oversight of operational risk, including cyber risk

Danmarks Nationalbank's cooperation with the Danish Financial Supervisory Authority relates mainly to oversight of operational risk in the financial infrastructure, including cyber risk. The Danish Financial Supervisory Authority supervises the data centres operating the systems and instruments overseen by Danmarks Nationalbank. The Danish Financial Supervisory Authority supervises that relevant statutory requirements are met, for instance in relation to IT security management, outsourcing and auditing.⁷

Danmarks Nationalbank's assessment of a system's or payment instrument's compliance with the requirements of international standards for IT security and operational risk management is based, as far as possible, on the Danish Financial Supervisory Authority's observations and conclusions. Danmarks Nationalbank participates as an observer in the Danish Financial Supervisory Authority's IT inspections of relevant data centres. That way, Danmarks Nationalbank collects information on compliance with those aspects of the standards that are covered by the Danish Financial Supervisory Authority. In addition, Danmarks Nationalbank and the Danish Financial Supervisory Authority regularly exchange information, and follow-up on errors and system failures in the financial infrastructure is coordinated as required.

Cooperation on oversight/supervision of VP

Oversight of VP is performed in cooperation with the Danish Financial Supervisory Authority. The Danish Financial Supervisory Authority supervises VP, including that VP's regulations, organisation plans, procedures as well as control and security measures are adequate and in accordance with the Danish Capital Markets Act. Danmarks Nationalbank participates as an observer in the Danish Financial Supervisory Authority's IT inspections of VP, information is regularly exchanged and any follow-up action towards VP is coordinated as required. Moreover, Danmarks Nationalbank and the Danish Financial Supervisory Authority cooperate on assessments of VP's compliance with the CPMI-IOSCO principles and release a joint report of conclusions and recommendations.

VP must have a licence issued under the European regulation on central securities depositories, CSDR, in order to be able to operate as a central securities depository in the EU. The Danish Financial Supervisory Authority is the competent authority for VP in relation to issuing the licence and supervising that VP complies with the CSDR. Danmarks Nationalbank and the ECB are relevant authorities, i.e. authorities with a right of consultation. The provisions of the CSDR have been aligned with the CPMI-IOSCO principles.

International oversight activities

Danmarks Nationalbank participates in the oversight of TARGET2 and T2S, the ECB's systems for inter-bank payments in euro and securities settlement, respectively. Oversight of these systems is undertaken by the central banks that are connected to the systems, headed by the ECB. Danmarks Nationalbank is responsible for oversight of the Danish local components of TARGET2.

Danmarks Nationalbank also participates in the oversight of CLS, the international system for settlement

6 The Sub-Memorandum of Understanding is included as Annex 3 in the Memorandum of Understanding between Danmarks Nationalbank and the Danish Financial Supervisory Authority. It is available at Danmarks Nationalbank's website ([link](#)).

7 Data centres must comply with requirements specified e.g. in the Executive Order on governance (ledelsesbekendtgørelsen – only in Danish) ([link](#)), the Executive Order on outsourcing (outsourcingbekendtgørelsen – only in Danish) ([link](#)) and the Executive Order on system audit (systemrevisionsbekendtgørelsen – only in Danish) ([link](#)).

of foreign-exchange transactions. The Federal Reserve System (Fed) is the primary oversight authority of CLS, and the central banks of the currencies connected to CLS, including Danmarks Nationalbank, have joint oversight powers over CLS.

EuroCCP⁸ is a central counterparty for equity transactions concluded at Nasdaq OMX in Copenhagen. The oversight of EuroCCP is headed by the Dutch central bank and the Netherlands Authority for the Financial Markets. Danmarks Nationalbank participates as an observer.

Furthermore, Danmarks Nationalbank is a relevant authority in relation to Euroclear Bank in Brussels under the CSDR due to the volume of settlement of Danish bonds via Euroclear Bank. The National Bank of Belgium is the competent authority.

⁸ A central counterparty, CCP, is characterised by entering into transactions between the buyer and seller, thereby becoming a counterparty to the transactions. The CCP ensures that the transactions are executed as long as the CCP is able to meet its obligations.