

Norges Bank's settlement system (NBO)

# Disclosure Report 2026

CPMI-IOSCO Principles for Financial Market  
Infrastructures (PFMI)

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Responding FMI:	Norges Bank's Settlement System (NBO)
Date of this disclosure:	4 June 2026
Jurisdiction in which the FMI operates:	Norway
Regulating, supervising, or overseeing authority:	Norges Bank The Supervisory Council, appointed by the Storting (the Norwegian Parliament)

This disclosure can also be found at [www.norges-bank.no](http://www.norges-bank.no)

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## Executive summary

Pursuant to the Central Bank Act, Norges Bank shall facilitate a stable and efficient system for payment, clearing, and settlement between institutions that hold accounts with the Bank. Norges Bank's settlement system (NBO) provides secure and efficient settlement of payments between banks and other financial sector institutions with accounts at Norges Bank. NBO is a real-time gross settlement (RTGS) system that supports both real-time and net settlement processes to promote stability and reduce risk in the Norwegian financial system.

The Principles for Financial Market Infrastructures (PFMI), developed by CPMI-IOSCO, provide international standards for systematically important financial market infrastructures (FMI). While central bank-operated settlement systems differ from private financial market infrastructures in several ways, Norges Bank applies the PFMI framework to NBO in line with CPMI-IOSCO's guidance on central bank FMIs, as set out in the publication *Application of the Principles for Financial Market Infrastructures to Central Bank FMIs* (August 2015).

This disclosure outlines how NBO aligns with the PFMI principles, with a focus on risk management, operational stability, and transparency to ensure efficient and secure settlement of payments. Norges Bank continuously monitors NBO's performance and works closely with stakeholders to maintain the system's resilience and adapt to regulatory and technological developments.

## Summary of major changes in the past three years

Norges Bank continues to develop robust and secure settlement processes in NBO. In Norges Bank's strategy for the period 2023-2025, particular emphasis was placed on the research and design of the future payment system infrastructure. This includes determining the design of the next-generation NOK settlement system to meet evolving market needs and regulatory requirements.

The last disclosure report was published in April 2025. Notable changes in the past three years include:

### **Risk Management Framework**

In 2023, Norges Bank completed a review of the risk management framework. The review aimed to ensure continued alignment with recognized best practices and standards for risk management, both internationally and nationally. The subsequent updates were mainly focused on improving the methodology for assessing and reporting risk and incidents.

### **ISO 20022 Migration**

Since 2020, Norges Bank has collaborated with participants in NBO to prepare for the migration to ISO 20022, as well as with the central banks of Sweden and Iceland to harmonise the ISO 20022 payment messaging standard across the Nordic region. The specifications for the new messages (NBO Guidelines), the migration strategy, and the overall transition schedule for ISO 20022 in NBO have been published in Swift MyStandards.

Norges Bank planned to complete the migration by November 2025. The new format was first used for gross payments in March 2025, then in securities settlement and for net payments in November 2025. Bits decided not to migrate NICS Swift Gross payments to the ISO 20022 format, which resulted in new payment flows to NBO. NBO's operating schedule was updated to accommodate these new payment flows, with the changes entering into force on 31 August 2025.

### **Amendments stemming from a shorter securities settlement cycle (T+1)**

The EU has adopted amendments to the Central Securities Depositories Regulation (CSDR) which entails shortening the settlement cycle for securities transactions to one day (T+1). The amendments are scheduled to come into force on 11 October 2027.

In 2025, Norges Bank assessed which adjustments to the NBO operating schedule could become necessary as a result of the transition to T+1. A public consultation was also conducted regarding adjustments to the NBO operating schedule in connection with the transition to T+1.

### **New service for real-time payments – NBO INST**

Norges Bank has decided to establish a new service for real-time payments in Norwegian kroner (NBO INST). To this end, on 28 November 2024, Norges Bank signed an agreement with the European Central Bank (ECB) to participate in TARGET Instant Payment Settlement (TIPS). Experiences from 2025 show that participation in TIPS will require more comprehensive adaptations than previously assumed. This will be addressed in close collaboration with the ECB and the Norwegian banking sector. In cooperation with the banking sector, Norges Bank will plan the transition at the lowest possible risk for all parties involved. Norges Bank's Settlement System

### **General description**

Norges Bank acts as the ultimate settlement bank in the Norwegian payment system. All NOK electronic payments are ultimately settled between banks in NBO. This includes payments by households and firms, large payments in the financial and foreign exchange markets, and payments involving the public sector. The banks' accounts with central bank money in NBO, along with the associated interest on deposits and loans, are key tools for Norges Bank in both monetary policy and liquidity management.

### **General organization**

NBO is owned and operated by Norges Bank, which is responsible for ensuring the system's stability and efficiency. Banks can participate in NBO either directly or indirectly. Indirect participation means that a bank (indirect participant) relies on another bank (direct participant) for settlement in NBO. While most Norwegian banks participate indirectly, the largest Norwegian banks and the Norwegian branches of Nordic banking groups participate directly. As of the end of 2025, 19 banks participated directly in NBO.

### **Legal and regulatory framework**

Norges Bank is subject to Norwegian law, including EEA-relevant EU legislation transposed into

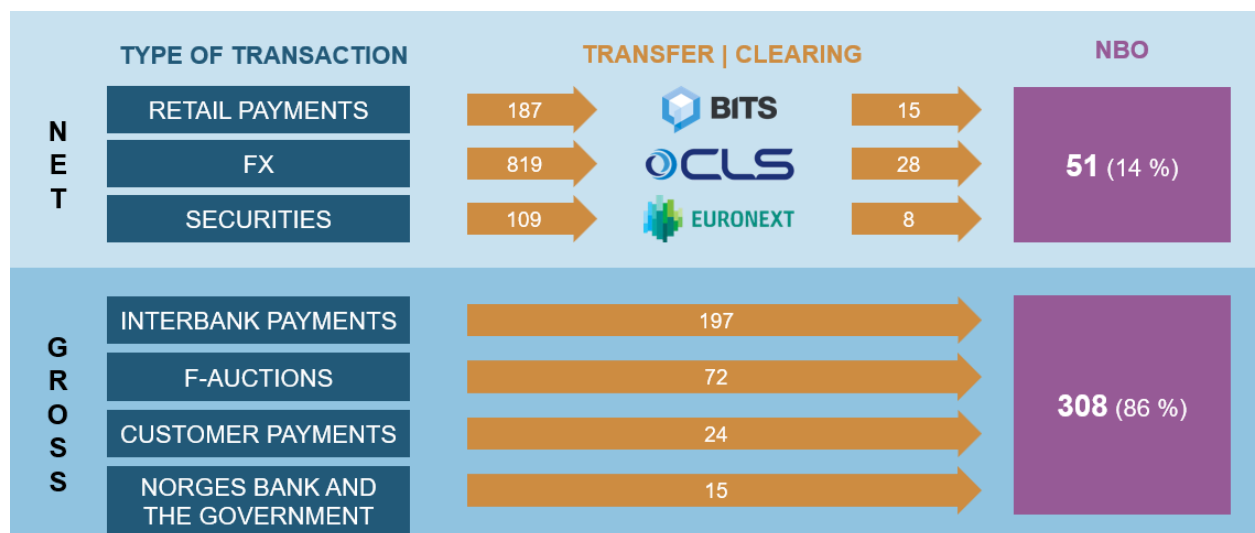
Norwegian law. Key acts are the Central Bank Act and the Payment Systems Act. Norges Bank complies with these laws and regulations to promote financial stability and safeguard the integrity of the payment system.

### System design and operations

NBO comprises a Real Time Gross Settlement (RTGS) system for payment settlement and a subsystem for managing pledged collateral for loans. The global Swift network serves as the primary channel for payment orders and financial messaging. Additionally, account holders have access to NBO through NBO Online, a secure, web-based banking application. Each account holder typically has a main account, a loan account and one or more sub-accounts.

### Data and performance statistics

In 2025, an average of 13 577 payment orders were settled daily, with an average daily settlement value of NOK 359 billion. At the end of 2025, banks held current account and reserve deposits totalling NOK 37 billion. Gross settlement, which involves the real-time settlement of individual payments, accounted for 86% of the turnover in NBO.



Sources: Bits AS, Euronext Securities Oslo, CLS Bank and Norges Bank

Chart 1: Turnover in NBO. In billions of NOK. Daily average. 2025

### Additional information

More details about NBO's functions, governance, and performance can be found on Norges Bank's website and in the NBO Annual Report 2025.

## Disclosure for applicable principles

The PFMI set international standards for the safety and efficiency of systemically important payment systems, central securities depositories, securities settlement systems, central counterparties and trade repositories. Norges Bank applies the PFMI framework to NBO in line with the guidance on systemically important payment systems (PS) and guidance for central bank FMIs.

## **Principle 1: Legal basis**

*A PS should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.*

Norges Bank ensures legal certainty across its FMI activities, including settlement finality, netting, collateral, and insolvency procedures. The NBO Terms and Conditions, in line with the Payment Systems Act, specify that payment orders are final once credited or debited. This applies to both gross and net settlement, with separate accounts to manage settlement risk. Agreements with clearing institutions like Bits AS further support netting and include contingency protocols, ensuring consistency.

Collateral arrangements are governed by the Central Bank Act and the Norwegian Financial Collateral Act. Additionally, the Regulation on Access to Lending and Deposit Facilities at Norges Bank and the Terms and Conditions for account management at Norges Bank provide further guidelines. Securities pledged as collateral are registered in Euronext Securities Oslo (Norwegian Central Securities Depository) or a foreign depository as set out in the guidelines for pledging collateral for loans from Norges Bank. Rules on legal protection and the right to realise collateral depend on the laws of the country in which the securities are registered and the securities account is held. For securities held in another country, Norges Bank obtains legal opinions confirming enforceability. In insolvency cases, additional Ministry of Finance regulations ensure settlement even if a participant becomes insolvent.

Norges Bank aims to ensure that NBO's rules, procedures, and contracts are clear, understandable and consistent with legal standards. Procedures are publicly detailed on the website, and agreements outline responsibilities, including in contingency scenarios. The banking industry sets system rules and guidelines via Finance Norway and Bits AS, aiming for transparent consultation on changes. Legal consistency is verified by internal and external legal experts and updates are aligned with regulatory changes.

Norges Bank communicates the legal basis for NBO through dedicated webpages in order for participants and other stakeholders to understand the formal framework. The website gives an overview of information such as agreements, rules, and procedures related to collateral and settlement, and provides links to relevant legislation.

There is no record of NBO rules being deemed unenforceable in any jurisdiction.

## **Principle 2: Governance**

*A PS should have governance arrangements that are clear and transparent, promote the safety and efficiency of the PS, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.*

The governance arrangements that apply to NBO are the same that apply to Norges Bank. Norges Bank's activities are regulated by the Central Bank Act. The Central Bank Act regulates the relationship between Norges Bank and the government, and the Act contains provisions relating to the Bank's organisation and tasks. The act specifically gives Norges Bank the responsibility to "(...) promote the stability of the financial system and an efficient and secure payment system". Norges Bank's highest

decision-making bodies are the Executive Board, the Monetary Policy and Financial Stability Committee and the Supervisory Council.

Norges Bank's governance model is based on the different roles of the Storting (Norwegian parliament), the Ministry of Finance, Norges Bank's Executive Board and the Governor. The model can be illustrated as follows:

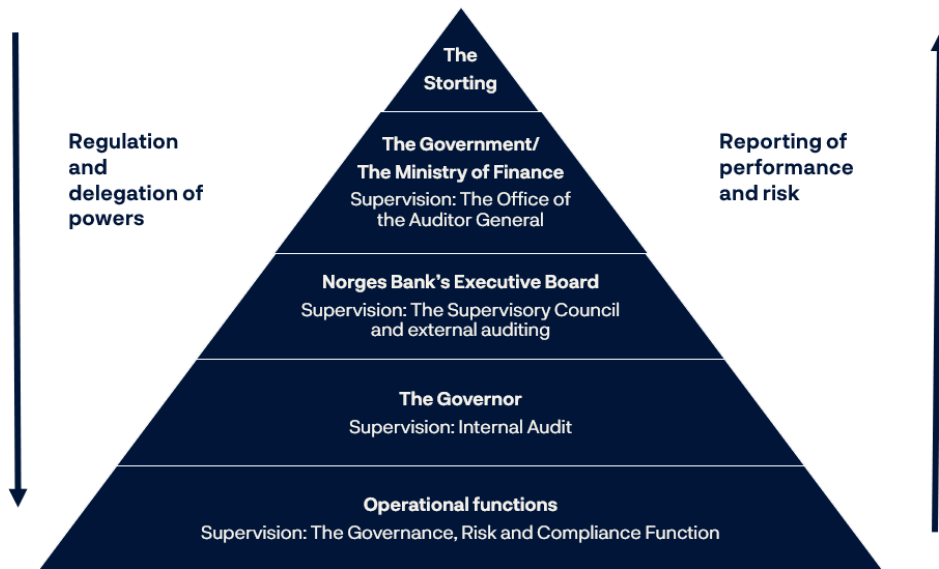


Chart 2: Illustration of Norges Bank's governance model

The Executive Board consists of the Governor, the two Deputy Governors and six external (independent) board members (section 2-3 of the Central Bank Act). In addition, two board members are appointed by and from the employees to participate in the deliberation of administrative matters. The Governor is the chair of the Executive Board. The executive board shall ensure sound, effective and efficient organisation of the Bank.

The Governor's decision-making authority is determined based on the Central Bank Act (section 2-11) and the Executive Board's instructions for the position of Governor. The Governor is responsible for the day-to-day management of Norges Bank's activities and shall adhere to guidelines and instructions from the Executive Board.

### Principle 3: Framework for the comprehensive management of risks

*A PS should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.*

Norges Bank has a comprehensive risk management framework for NBO based on the Central Bank Act and the Internal Control Regulation. The framework draws upon international standards such as the PFMI, ISO 31000 and the COSO framework. The risk management framework covers legal, credit,

liquidity, operational, systemic, reputational and cyber risk and is designed to ensure continuous oversight and effective risk mitigation.

Norges Bank follows a three-lines-of-defense model for risk management and internal control, in line with recognised standards and best practices:

- **The first line functions** are responsible for identifying and managing risks and for compliance with internal and external requirements within their respective areas.
- **The second line functions** have an advisory and monitoring role, developing and maintaining the risk management framework and verifying controls. The Chief Compliance Officer has the right and duty wherever it is deemed necessary to independently report material risks to the Executive Board.
- **The third line function** is the internal audit function, which independently assesses risk management and internal controls and reports directly to the Executive Board.

The Supervisory Council, appointed by the Storting (the Norwegian Parliament), oversees the Executive Board's management of the Bank's activities, including risk management, to ensure compliance with legislation, agreements, decisions and other regulatory frameworks.

Risk assessments are conducted regularly, covering a broad range of risks. Norges Bank's ongoing risk monitoring is organised through Norges Bank's Risk Forum for NBO. The Risk Forum, led by the Director of Financial Stability, includes participants from units within interbank settlement, compliance, security and IT. Mitigating measures are implemented depending on the assessment and nature of the risk and are categorized as, reduction, transfer, acceptance or avoidance. The risk management framework is reviewed annually and updated as and when required to align with internal needs, external requirements and international best practices.

#### **Principle 4: Credit risk**

*A PS should effectively measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes. A PS should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence.*

Norges Bank incurs credit exposure to participants in NBO that are offered credit against collateral. Credit risk is mitigated by providing credit to supervised institutions against collateral in the form of high-quality assets and by using appropriate haircuts to calculate the collateral value of the assets.

Norges Bank has established a framework to manage its credit exposures to participants and mitigate credit risks arising from its payment, clearing and settlement processes. The framework for managing credit exposure is assessed regularly. Norges Bank continuously monitors developments in financial markets and updates its framework to reflect changes in the environment, market practices and risk management requirements.

Borrowing from Norges Bank requires compliance with the NBO Terms and Conditions and the pledging of approved collateral. In the event of participant default, Norges Bank has the right to liquidate pledged collateral to recover loans.

## **Principle 5: Collateral**

*A PS that requires collateral to manage its or its participants' credit exposure should accept collateral with low credit, liquidity and market risks. A PS should also set and enforce appropriately conservative haircuts and concentration limits.*

Norges Bank's collateral management system aims to minimise credit risk while ensuring that participants can borrow sufficient funds to support monetary policy and payment settlement. The collateral management system is automated, providing real-time updates.

The guidelines for pledging collateral for loans from Norges Bank govern which assets may be accepted as collateral and regulate the requirements for assets pledged as collateral for loans from Norges Bank. The guidelines include requirements for the type of asset, issuer, currency and credit rating as well as haircuts and concentration limits for the different asset classes.

Norges Bank, Danmarks Nationalbank or Sveriges Riksbank may extend intra-day loans to a participant against collateral in the form of the participant's deposits in a collateral account at one of the other two central banks through the arrangement Scandinavian Cash Pool (SCP)

The guidelines for pledging collateral for loans from Norges Bank and an overview of securities approved as collateral for banks' loans in Norges Bank, are available on Norges Bank's website.

## **Principle 6: Margin**

The principle is not applicable for PS.

## **Principle 7: Liquidity risk**

*A PS should effectively measure, monitor, and manage its liquidity risk. A PS should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the PS in extreme but plausible market conditions.*

Norges Bank has, as the central bank, the exclusive right to issue NOK and can ensure an unlimited supply of liquidity for NBO. Norges Bank therefore does not have any liquidity risk vis-à-vis participants in NBO. Participants in NBO do not face liquidity risk with respect to Norges Bank itself. However, they may encounter liquidity risk from other participants or due to operational disruptions. The significant collateral pledged by banks for loans ensures that liquidity risk remains minimal, maintaining a stable and secure system.

## **Principle 8: Settlement finality**

*A PS should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, a PS should provide final settlement intraday or in real time.*

The settlement finality is regulated by the Payment Systems Act, which implements the EU's Settlement Finality Directive in Norwegian law.

According to the Act, agreements on clearing and settlement may be enforced according to their terms even if insolvency proceedings are initiated against a participant in the relevant system, a participant in an interoperable system, or a system operator of an interoperable system that is not itself a participant, provided that the payment order has been entered into the system before the insolvency proceedings were initiated. The point in time at which an instruction is deemed entered into the system shall be agreed upon by the participants in the system.

The NBO Terms and Conditions specify that a payment order is deemed as entered into NBO and settled with finality when it has been debited from and credited to one of the participant's accounts in Norges Bank. Norges Bank, the account holder, or a third party may not cancel, reverse or in any sense annul the payment after it is settled.

Instant payments ensure that funds are received directly into the payee's account, usually within seconds, and the funds are available for use 24 hours a day, seven days a week. Between banks, instant payments are not considered to be settled with finality until the banks' net positions are settled in central bank money ie when their accounts at Norges Bank are debited and credited. Net settlement in central bank money occurs five times a day on bank days.

The rules regarding settlement, queuing due to insufficient funds and the handling of unsettled payment orders are clearly outlined in the NBO Terms and Conditions.

### **Principle 9: Money settlements**

*A PS should conduct its money settlements in central bank money where practical and available. If central bank money is not used, a PS should minimise and strictly control the credit and liquidity risk arising from the use of commercial bank money.*

Settlement in NBO is conducted in central bank money by debiting and crediting the accounts of banks and other participants at Norges Bank. Only settlement in NOK takes place in NBO.

### **Principle 10: Physical deliveries**

The principle is not applicable for PS.

### **Principle 11: Central securities depositories**

The principle is not applicable for PS.

### **Principle 12: Exchange-of-value settlement systems**

The principle is not applicable for central bank operated payment systems.

### **Principle 13: Participant-default rules and procedures**

*A PS should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the PS can take timely action to contain losses and liquidity pressures and continue to meet its obligations.*

The legal framework for handling financial institutions that are failing or likely to fail is established in Norwegian legislation in the Financial Institutions Act (FIA).

When Finanstilsynet (the Norwegian Financial Supervisory Authority) considers that a financial institution is failing or is likely to fail, it shall notify the Ministry of Finance (FIA Section 20-13). This notification shall contain an assessment of whether the institution shall be wound up under public administration according to Section 20-29 in the FIA, or if the institution shall be placed under resolution in line with Sections 20-15 to 20-28 in the FIA. Norges Bank will receive a copy of this notification.

The Ministry of Finance decides whether the financial institution will be wound up under public administration or placed under resolution. In case of resolution, the purpose is to continue the critical activities, like payment transactions, of the institution.

However, if the institution is wound up under public administration, legislation, rules and procedures of Norges Bank and for the banking sector's shared systems ensure that NBO can continue to operate. If it is decided that a participant in NBO is to be wound up under public administration, its account is blocked for regular payments.

To reiterate, a resolution decision pursuant to Section 20-15 of the FIA, or corresponding rules in the participant's home state, is not deemed to be a breach of the NBO terms and conditions.

Procedures are outlined in the NBO Terms and Conditions.

#### **Principle 14: Segregation and portability**

The principle is not applicable for PS.

#### **Principle 15: General business risk**

*A PS should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialize. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.*

Norges Bank's general business risk from its settlement operations in NBO is integrated into the Bank's broader risk management framework. This includes financial risk from implementing new systems and operational solutions, potential liabilities if errors cause losses for participants and the risk of increased costs if external suppliers cease to provide services to the Bank.

According to CPMI-IOSCO's guidance on the application of the principles for financial market infrastructures (PFMI) to FMIs owned and operated by central banks, the requirement to hold ring-fenced liquid net assets funded by equity to cover business risk and support a recovery or wind-down plan (Principle 15, Key Considerations 2 to 4) does not apply to central bank FMIs, given the inherent financial soundness of central banks.

#### **Principle 16: Custody and investment risks**

*A PS should safeguard its own and its participants' assets and minimise the risk of loss on and delay in access to these assets. A PS's investments should be in instruments with minimal credit, market, and liquidity risks.*

According to the NBO Terms and Conditions, participants must pledge assets, primarily securities, as collateral for loans from Norges Bank. Norges Bank accepts securities registered in Euronext Securities Oslo (Norwegian central securities depository) in Norway, Euroclear Bank in Belgium, and Clearstream Banking in Luxembourg as collateral for loans. The collateral must be available to Norges Bank at all times under the agreements with each central securities depository and each participant as pledger. The pledged securities are registered in separate collateral accounts and may not be withdrawn etc without Norges Bank's consent. Norges Bank manages the collateral accounts, but the participant remains the owner of the pledged securities. Norges Bank does not reinvest assets pledged as collateral for loans.

### **Principle 17: Operational risk**

*A PS should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the FMI's obligations, including in the event of a wide-scale or major disruption*

Norges Bank's operational risk management framework for NBO ensures continuous assessment and mitigation of risks, aligning with national and international standards, including the PFMI. Key features include robust cyber risk management, supported by a CSOC, and a comprehensive risk database updated through audits, incidents, and exercises. Monitoring involves real-time surveillance and incident management, with stringent oversight of suppliers. Stability is reinforced by a three-line-defense model and adherence to governance standards, ensuring effective control and accountability.

Comprehensive physical and information security measures, based on international guidelines and national standards, address vulnerabilities across IT systems, suppliers, and infrastructure. These policies are supported by regular security assessments and reviews of suppliers and systems. The appropriate security controls to mitigate identified risks are selected based on the nature, feasibility, and cost-effectiveness of the controls. For example, Norges Bank has incorporated elements from various security control frameworks, such as ISO 27002, ITIL, ISF Standard of Good Practice, SWIFT Customer Security Program (CSP), CIS Critical Security Controls, and NIST SP 800-53, into its Information Security Risk Management Framework.

Operational reliability is a core objective. Contracts with suppliers mandates high service availability and performance standards. Incidents are promptly addressed, and procedures are updated based on lessons learned. Scalability and capacity testing confirm readiness for increased volumes during stress scenarios.

Norges Bank's business continuity plan ensures timely recovery from disruptions through the implementation of redundancy, geographic separation of systems, and frequent testing with stakeholders. NBO has established a contingency solution for its core system, which can be activated in cases where the regular operational solutions are unavailable. Additionally, there are contingency

and continuity solutions for scenarios where various parts of the network communication are unavailable. Coordination with FMI and other key stakeholders is facilitated through the NBO Continuity Forum (NBOK) and the Financial Infrastructure Crisis Preparedness Committee (BFI), ensuring effective collaboration and preparedness. Discussions regarding potential improvements to the payment system between key stakeholders are facilitated by the Payment Forum. It serves as a supplement to existing venues and typically meets twice per year. The forum is led by the Executive Director of Financial Stability. A subgroup of the Payment Forum, NBO Subgroup, led by the Director of the Interbank unit, functions as a collaborative forum for NBO participants to present project work, NBO status and dialogue from external fora/the banking industry. Risk posed by or to participants and interconnected FMIs are managed through agreements, contingency plans and collaborative exercises, ensuring the resilience of NBO and the broader financial ecosystem.

The Market Infrastructure Resiliency Service (MIRS), operated by Swift, is an enhanced contingency solution for NBO that ensures critical settlement operations can continue in the event of a failure at both the primary and secondary operating sites. MIRS operates independently from NBO's main infrastructure, using separate software and Swift's global platform, thereby strengthening NBO's operational resilience in line with international standards.

## **Principle 18: Access and participation requirements**

*A PS should have objective, risk-based and publicly disclosed criteria for participation that permit fair and open access.*

The Settlement Finality Directive (article 2) lays down requirements regarding who may be a participant in payment systems that are protected under settlement finality rules. Norges Bank provides access to supervised credit institutions and other entities which, within the framework of the Settlement Finality Directive, are deemed to promote the stability of the financial system and an efficient payment system in Norway.

The new Central Bank Act and Lending regulation from 2019 entailed changes in the criteria for which institutions may open an account with Norges Bank and the terms and conditions that apply to account management. A key requirement is that account management must promote the purpose of the central bank, which is to maintain monetary stability, promote the stability of the financial system and ensure an efficient and secure payment system. The Lending Regulation distinguishes between monetary policy counterparties (typically banks), which have access to all of Norges Bank's lending and deposit facilities, and other counterparties, which may have access to Norges Bank's standing lending and deposit facilities or parts thereof. In assessing such cases, particular emphasis is placed on the extent to which the counterparty actively participates in the payment system or whether the counterparty's account holding will contribute to financial stability or further the purpose of central banking activities.

Norges Bank regularly reviews the access and participation requirements, adjusting them to address financial stability risks and adapt to regulatory changes. Norges Bank monitors participants' compliance with the NBO Terms and conditions, manages potential liquidity issues and enforces

suspension procedures for participants in default. Relevant legislation and detailed terms for participation, including rules for termination, are publicly available on Norges Bank's website.

### **Principle 19: Tiered participation arrangements**

*A PS should identify, monitor and manage the material risks to the PS arising from tiered participation arrangements.*

Norges Bank allows tiered settlement participation for the settlement of payments in NBO. Tiered (or indirect) settlement means that a bank relies on another bank (a private settlement bank) to perform settlement in NBO on its behalf. The agreement is entered into between banks, while the clearing institution facilitates settlement on a technical level.

Although most Norwegian banks have an account with NBO, few banks settle their transactions directly in NBO. These are primarily the largest Norwegian banks and the Norwegian branches of Scandinavian banking groups.

Tiered settlement generally poses limited risk to NBO, as transaction volumes, and exposure are limited to net positions. However, disruptions at a private settlement bank could impact NBO. A contingency solution has been established to allow tiered participants to quickly settle net positions (post clearing) on their own behalf should the private settlement bank be unable to continue operations. Positions settled by private settlement banks on behalf of tiered participants are net positions (post clearing), meaning that each tiered participant would only introduce one settlement position to NBO in the event of a disruption, thereby reducing the potential impact on the settlement system.

An agreement between Norges Bank and Bits AS regulates the operational framework for tiered participation, including procedures for changing settlement banks. Regular reviews and contingency exercises are conducted to facilitate seamless transitions between participation types. Collaboration through the NBO Continuity Forum facilitates coordination to strengthen the system's resilience.

### **Principle 20: FMI links**

The principle is not applicable for PS.

### **Principle 21: Efficiency and effectiveness**

*A PS should be efficient and effective in meeting the requirements of its participants and the market it serves.*

Norges Bank facilitates the efficient and secure settlement of payments through a real-time settlement system that adheres to international standards. The settlement system, supported by Swift and NBO Online, combines real-time gross settlement (RTGS) and net settlement to balance security, risk reduction and liquidity efficiency. Collaboration with stakeholders, including the banking sector and clearing institutions, supports ongoing improvements to ensure that NBO meets the evolving needs of its participants and the Norwegian financial market.

Operational stability is monitored continuously, and incidents are addressed promptly. Efficiency and effectiveness are reviewed regularly through operational reports, data analysis and benchmarking against other central banks. The NBO Continuity Forum facilitates communication, contingency planning and coordination among key stakeholders. Regular upgrades and evaluations are conducted to maintain and improve the system's stability, security and performance.

In 2025, NBO's operating schedule was updated to accommodate new payment flows stemming from the migration to ISO 20022. Norges Bank also assessed which adjustments to the NBO operating schedule could become necessary as a result of the transition to a shorter securities settlement cycle.

## **Principle 22: Communication procedures and standards**

*A PS should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.*

Norges Bank adheres to internationally accepted communication procedures and standards, primarily using the Swift infrastructure as the central communication platform for NBO operations. Payment orders are processed using Swift message formats, with larger banks and other FMIs communicating directly via the Swift network, while smaller banks use NBO Online, which converts their orders into Swift format. The Swift network also facilitates communication with international participants and Scandinavian central banks, particularly through the Scandinavian Cash Pool.

In 2020, Norges Bank initiated a collaboration with the banking industry to transition to ISO 20022 messaging in NBO and other key parts of the payment infrastructure. ISO 20022 is a globally accepted standard that improves interoperability and data richness in financial messaging. The specifications for the new ISO 20022 messages are published in Swift MyStandards, and Norges Bank planned to complete the migration from the current Swift Fin format by November 2025. The new format was first used for gross payments in March 2025, then in the securities settlement and for net payments in November 2025. The migration aligns NBO with international standards and facilitates efficient, secure and reliable communication between participants. Some Swift Fin messages are still used for eg confirmation of the opening and closing of NBO, VPO LOM lock/unlock and for instant payments (to check available credit limits in NICS Real).

## **Principle 23: Disclosure of rules, key procedures and market data**

*A PS should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.*

The rules and procedures for NBO, including contingency procedures, are set out in the NBO Terms and Conditions, which are available in both Norwegian and English on Norges Bank's website. The NBO Terms and Conditions are supplemented by additional publicly available documentation, including information on the pricing model, fees, eligible collateral and system descriptions. Norges Bank ensures that participants have a comprehensive understanding of NBO's operations through regular

training and the provision of training material. Participants can also contact Norges Bank's help desk during NBO's opening hours for further guidance.

This report constitutes the latest disclosure under CPMI-IOSCO's framework for NBO. In addition, NBO's annual reports, Norway's Financial System reports and daily statistics on the use of NBO are publicly available on Norges Bank's website to provide participants and the public with relevant information about NBO's rules, procedures and operations.

## Appendix 1: Acronyms

<b>Bits AS</b>	The financial infrastructure company of the financial industry in Norway
<b>CCP</b>	Central Counterparty
<b>CPMI</b>	Committee on Payments and Market Infrastructures
<b>CSOC</b>	Cyber Security Operations Centre
<b>ECB</b>	European Central Bank
<b>EEA</b>	European Economic Area
<b>FMI</b>	Financial Market Infrastructure(s)
<b>ICT</b>	Information and communication technology
<b>IOSCO</b>	International Organization of Securities Commissions
<b>ISO</b>	International Organization for Standardization
<b>MIRS</b>	Market Infrastructure Resiliency Service
<b>NBO</b>	Norges Bank's Settlement System
<b>NBO INST</b>	NBO Instant Payment System
<b>NICS</b>	Norwegian Interbank Clearing System
<b>NOK</b>	Norwegian kroner
<b>PFMI</b>	Principles for Financial Market Infrastructures
<b>PS</b>	Payment System(s)
<b>RTGS</b>	Real Time Gross Settlement
<b>SCP</b>	Scandinavian Cash Pool
<b>Swift</b>	Society for Worldwide Interbank Financial Telecommunications
<b>TIPS</b>	TARGET Instant Payment Settlement

## Appendix 2: List of publicly available resources

A list of publicly available resources (including those referred to in the disclosure)

### Norges Bank's Interbank Settlement System Information

Annual Reports – Norges Bank's settlement system	<a href="#">Annual Reports - Norges Bank's settlement system</a>
Bits AS	<a href="#">Infrastructure - Bits AS</a>
Collateral for loans from Norges Bank - Practical information and procedures	<a href="#">Practical information and procedures</a>
Financial Infrastructure Crisis Preparedness Committee (BFI)	<a href="#">Financial Infrastructure Crisis Preparedness Committee (BFI) - Finanstilsynet.no</a>
Financial infrastructure 2025	<a href="#">Financial infrastructure 2025</a>
Guidelines for pledging collateral for loans from Norges Bank	<a href="#">Guidelines for pledging securities and fund units as collateral for loans from Norges Bank</a>
NBO INST	<a href="#">Norges Bank signs instant payment settlement agreement with the ECB</a>
Norges Bank's Settlement System – Main Functions	<a href="#">Norges Bank's settlement system – main functions</a>
Norges Bank strategy 2023-2025	<a href="#">Norges Bank's Strategy 2023–2025</a>
Norges Bank Strategy 2026-2028	<a href="#">Norges Bank's Strategy 2026-2028</a>
Norway's financial system 2025	<a href="#">Norway's financial system 2025</a>
Operating schedule for Norges Bank's settlement system	<a href="#">Operating schedule for Norges Bank's settlement system (NBO)</a>
Overview of securities approved as collateral for banks' loans in Norges Bank	<a href="#">Securities approved as collateral for banks' loans</a>
Prices and fees for Norges Bank's settlement system for 2026	<a href="#">Prices and fees – Norges Bank's settlement system for 2026</a>
Scandinavian Cash Pool	<a href="#">4-kvartal-2003-UK.pmd</a>

CLS	<a href="#">Penger og Kreditt 1/2004. Continuous Linked Settlement – valuta for pengene. Ingrid Andresen and Bjørn Bakke</a> (in Norwegian only)
Terms and conditions for account management at Norges Bank	<a href="#">Terms and conditions for account management at Norges Bank from 15 April 2024</a>
TIPS (TARGET Instant Payment Settlement)	<a href="#">Norges Bank signs instant payment settlement agreement with the ECB</a>
<b>Statistics</b>	
Norges Bank's settlement system – daily key figures	<a href="#">Norges Bank's settlement system - daily key figures</a>
<b>Legislation, regulations etc.</b>	
Application of the Principles for financial market infrastructures to central bank FMIs	<a href="#">Application of the Principles for financial market infrastructures to central bank FMIs</a>
Central Bank Act (Act relating to Norges Bank and the Monetary System etc.)	<a href="#">Act relating to Norges Bank and the Monetary System, etc. (Central Bank Act)</a>
Bankruptcy Act (Act on Debt Settlement Proceedings and Bankruptcy)	<a href="#">Lov om gjeldsforhandling og konkurs (konkursloven) - Lovdata</a> (in Norwegian only) <a href="#">lov-19840608-058-eng.pdf</a> (Extract in English Section 85-131)
Financial Collateral Act (Lov om finansiell sikkerhetsstillelse)	<a href="#">Lov om finansiell sikkerhetsstillelse - Lovdata</a> (in Norwegian only)
Financial Institutions Act (Act on financial Institutions and Financial Groups)	<a href="#">Act on financial institutions and financial groups (Financial Institutions Act) - Lovdata</a>
Lovdata (provides access to a collection of online legal resources)	<a href="#">Information about Lovdata in English - Lovdata</a>
Payment Systems Act	<a href="#">Act relating to Payment Systems, etc.</a>
Public Administration Act (Act relating to procedure in cases concerning the public administration)	<a href="#">Act relating to procedure in cases concerning the public administration (Public Administration Act) - Lovdata</a>

Regulation on Access to Lending and Deposit Facilities at Norges Bank	<a href="#"><u>Regulation on Access to Lending and Deposit Facilities at Norges Bank</u></a>
Settlement Finality Directive	<a href="#"><u>Directive - 98/26 - EN - EUR-Lex</u></a>
T+1 settlement	<a href="#"><u>T+1 settlement - European Commission</u></a>