

Norges Bank's settlement system (NBO)

Disclosure Report 2025

CPMI-IOSCO Principles for Financial Market
Infrastructures (PFMI)

Innhold

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Responding FMI:	Norges Bank's Settlement System (NBO)
Date of this disclosure:	April 9, 2025
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

For further information, please email: post@norges-bank.no

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 since last disclosure update (2020)

Norges Bank continues to develop robust and secure settlement processes in NBO. In Norges Bank's strategy for the period 2023-2025, particular emphasis is 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.

Notable changes since the last disclosure 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 harmonize 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. The transition is planned to be completed by November 2025.

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). The new instant payment settlement service is expected to be available in the first half of 2028.

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 2024, 20 banks participated directly in NBO.

Legal and regulatory framework

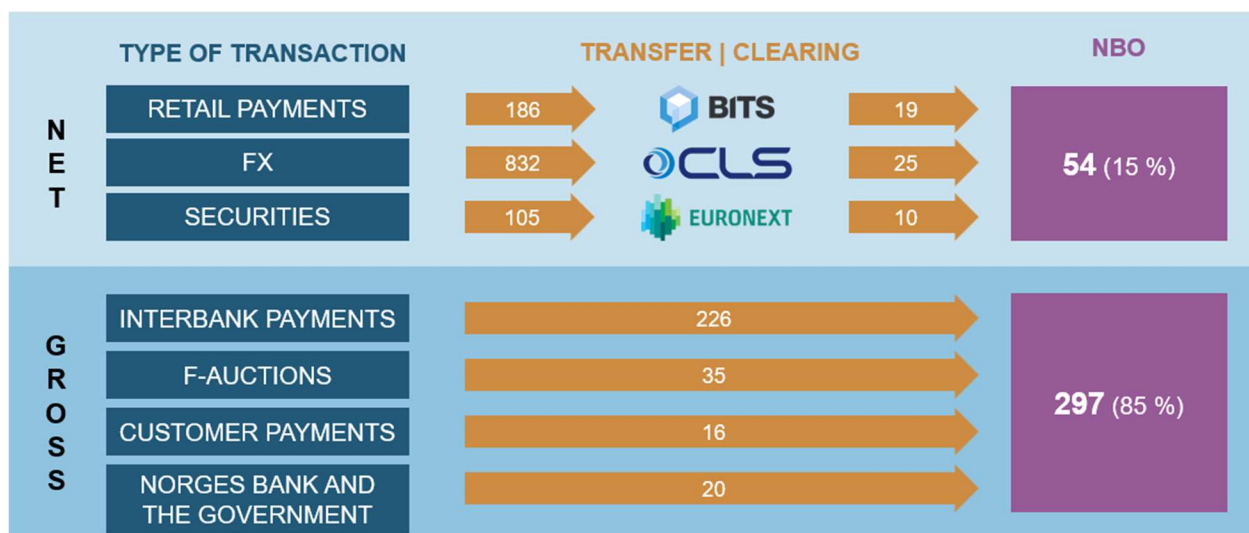
Norges Bank is subject to Norwegian law, including EEA-relevant EU legislation transposed into Norwegian law. Particularly significant are the Central Bank Act and the Payment Systems Act. Norges Bank complies with these laws and regulations to promote financial stability and safeguard the integrity 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 2024, an average of 4 595 payment orders were settled daily, with an average daily settlement value of NOK 350 billion. At the end of 2024, banks held current account and reserve deposits totaling NOK 38 billion. Gross settlement, which involves the real-time settlement of individual payments, accounted for 85 percent 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. 2024

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 2024.

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, aligned with the Payment Systems Act, establish that payment orders are final once credited or debited. This applies to both gross and net settlements, with separate accounts to manage settlement risks. Agreements with settlement clearing entities 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 VPS (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 settlements proceed 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 pages on its website in order for participants and other stakeholders to understand the formal framework. The website refers to, inter alia, 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:

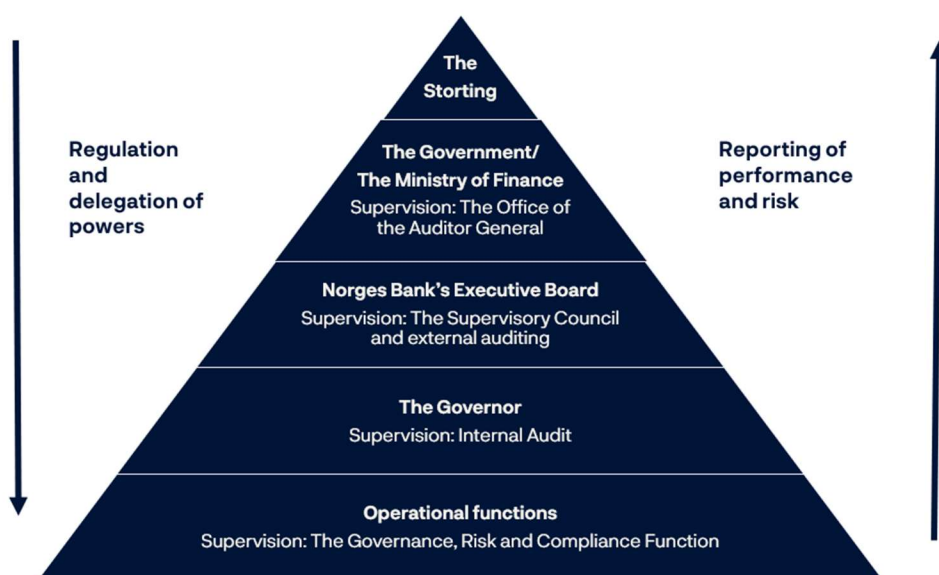


Chart 2: Illustration of Norges Bank's governance model

The Executive Board consists of the Governor, the two Deputy Governors and six external (independent) board members (section 2-3 in 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 CPMI-IOSCO PFMLs, ISO 31000 and the COSO framework. The risk management framework covers legal, credit, liquidity, operational, systemic, reputational, and cyber risks, 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 recognized 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 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 organized 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 a credit exposure on the participants in NBO, who 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 minimize credit risks while ensuring that the participants can borrow enough 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 does therefore not have any liquidity risk vis-à-vis the 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 or credited to one of the participant's accounts in Norges Bank. Norges Bank, the account holder or a third party may not recall the payment order after this time.

A payment order originating from NICS Real is deemed entered into NBO when NICS Real debits the payer's bank and credits the payee's bank in NICS Real (settlement in private money). These payments are settled between banks in central bank money when the banks' accounts at Norges Bank are debited and credited. Settlement in central bank money occurs five times a day at 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.

All settlements in NBO are conducted in central bank money by debiting and crediting the accounts of banks and other participants at Norges Bank. Only settlements in NOK take 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 The Financial Supervisory Authority (Finanstilsynet) 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. Hence, NBO's operations vis a vis the bank will continue, potentially after a brief pause, cf. FIA Section 20-18.

However, if the institution is wound up under public administration, legislation, rules and procedures of Norges Bank and for the bank 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 risks from implementing new systems and operational solutions, potential liabilities if errors cause losses for participants, and the risk of increased costs if external suppliers stop providing 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 risks 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

Verdipapirsentralen (VPS) 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 tasks

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 FMIs and other key stakeholders is facilitated through the NBO Continuity Forum and the Financial Infrastructure Crisis Preparedness Committee (BFI), ensuring

effective collaboration and preparedness. Risks 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.

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 has tiered participation arrangements for the settlement of payments in NBO. Tiered (or indirect) participation means that a bank relies on another bank (a private settlement bank) to perform settlement in NBO on its behalf. 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. The majority of Norwegian banks have only a few gross transactions and participate in net settlements through one of the big banks.

Tiered participation generally poses limited risk to NBO, as the majority of indirect participants have low transaction volumes, and their exposures are limited to net positions. However, disruptions at a

private settlement bank could impact the system. A contingency solution has been established to allow indirect participants to quickly become direct participants in NBO settlement should their private settlement bank be unable to continue operations. Positions settled by private settlement banks on behalf of indirect participants are net positions (having been cleared), meaning that each indirect participant would only bring one position to NBO in the event of a disruption, thereby reducing the potential impact on the system.

Norges Bank's agreements outline the responsibilities of both direct and indirect participants to support effective risk management. In addition, a separate agreement between Norges Bank and Bits AS regulates the operational framework for indirect 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 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 industry and clearinghouses, supports ongoing improvements to ensure that the system 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.

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 plans to complete the migration from the current Swift FIN format to the ISO 20022 format by November 2025. The migration is intended to align NBO with international standards and to facilitate efficient, secure, and reliable communication between participants.

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 emergency 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 the system's rules, procedures, and operations.

Appendix 1: Acronyms

BITS AS	The financial infrastructure company of the financial industry in Norway
CCP	Central Counterparty
CPMI	Committee on Payments and Market Infrastructures
CSOC	Cyber Security Operations Centre
ECB	European Central Bank
EEA	European Economic Area
FMI	Financial Market Infrastructure(s)
ICT	Information and communication technology
IOSCO	International Organization of Securities Commissions
ISO	International Organization for Standardization
NBO	Norges Bank's Settlement System
NBO INST	NBO Instant Payment System
NICS	Norwegian Interbank Clearing System
NOK	Norwegian kroner
PFMI	Principles for Financial Market Infrastructures
PS	Payment System(s)
RTGS	Real Time Gross Settlement
SCP	Scandinavian Cash Pool
SWIFT	Society for Worldwide Interbank Financial Telecommunications
TIPS	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 Report NBO 2024	Annual Reports - Norges Bank's settlement system
Bits AS	Infrastructure - Bits AS
Collateral for loans from Norges Bank - Practical information and procedures	Practical information and procedures
Financial Infrastructure Crisis Preparedness Committee (BFI)	Financial Infrastructure Crisis Preparedness Committee (BFI) - Finanstilsynet.no
Financial Infrastructure 2024	Web report Financial infrastructure 2024
Guidelines for pledging collateral for loans from Norges Bank	Guidelines for pledging securities and fund units as collateral for loans from Norges Bank
NBO INST	Norges Bank signs instant payment settlement agreement with the ECB
Norges Bank's Settlement System – Main Functions	Norges Bank's settlement system – main functions
Norges Bank strategy 2023-2025	Norges Bank's strategy 2023–2025
Norway's financial system 2024	Norway's financial system 2024
Operating schedule for Norges Bank's settlement system	Operating schedule for Norges Bank's settlement system (NBO)
Overview of securities approved as collateral for banks' loans in Norges Bank	Securities approved as collateral for banks' loans
Prices and fees for Norges Bank's settlement system for 2025	Prices and fees for Norges Bank's settlement system for 2025
Scandinavian Cash Pool	4-kvartal-2003-UK.pmd (English) Penger og Kreditt 1/2004. Continuous Linked Settlement – valuta for pengene. Ingrid Andresen og Bjørn Bakke (page 6/42)

Terms and conditions for account management at Norges Bank	Terms and conditions for account management at Norges Bank from 15 April 2024
TIPS (TARGET Instant Payment Settlement)	Norges Bank signs instant payment settlement agreement with the ECB
Statistics	
Norges Bank's settlement system – daily key figures	Norges Bank's settlement system - daily key figures
Legislation, regulations etc.	
Application of the Principles for financial market infrastructures to central bank FMIs	Application of the Principles for financial market infrastructures to central bank FMIs
Central Bank Act (Act relating to Norges Bank and the Monetary System etc.)	Act relating to Norges Bank and the Monetary System, etc. (Central Bank Act)
Bankruptcy Act (Act on Debt Settlement Proceedings and Bankruptcy)	Lov om gjeldsforhandling og konkurs (konkursloven) - Lovdata
Financial Collateral Act (Lov om finansiell sikkerhetsstillelse)	Lov om finansiell sikkerhetsstillelse - Lovdata
Financial Institutions Act (Act on financial Institutions and Financial Groups)	Act on financial institutions and financial groups (Financial Institutions Act) - Lovdata
Lovdata (provides access to a collection of online legal resources)	Information about Lovdata in English - Lovdata
Payment Systems Act	Act relating to Payment Systems, etc.
Public Administration Act (Act relating to procedure in cases concerning the public administration)	Act relating to procedure in cases concerning the public administration (Public Administration Act) - Lovdata
Regulation on Access to Lending and Deposit Facilities at Norges Bank	Regulation on Access to Lending and Deposit Facilities at Norges Bank
Settlement Finality Directive	Directive - 98/26 - EN - EUR-Lex