Nibor Transparency Statement

No 19 – 1 October 2025

The information in this statement is unaudited and provided for illustration purposes only. The information may not be regarded as part of the provisioning of the interest rate benchmark Nibor, and the information cannot for any purposes be used as a benchmark.

Nibor Transparency Statement

Published 01.10.2025.

The Nibor Transparency Statement has been introduced with the purpose to provide users of Nibor with information about the data which the fixings of Nibor have been based on. The statement presents some key figures underlying the Nibor fixings, including the Nibor Transparency Model for the Nibor three months tenor. The three months tenor is most widely used as interest rate reference in Norwegian kroner. The model illustrates how various individual factors have contributed to the observed development in Nibor.

The Statement is updated four times a year. This Statement includes data up to ***22 August 2025.***

Nibor – In short

Nibor shall reflect the interest rate level a bank requires for unsecured money market lending in Norwegian kroner to another bank. Nibor is calculated and published for the maturities of one week and one, two, three and six months.

The calculation of Nibor is based on contributions of data from a panel of six banks. When determining their contributions, the banks shall follow the "waterfall methodology" specified in the Nibor Panel Bank Code of Conduct.

Nibor

Nibor is derived from "Norwegian Interbank Offered Rate" and is the collective term for the set of Norwegian kroner money market interest rates administered by Norske Finansielle Referanser AS (NoRe).

Nibor is calculated and distributed by Global Rate Set Systems (GRSS). GRSS also acts as licensing agent for Nibor.

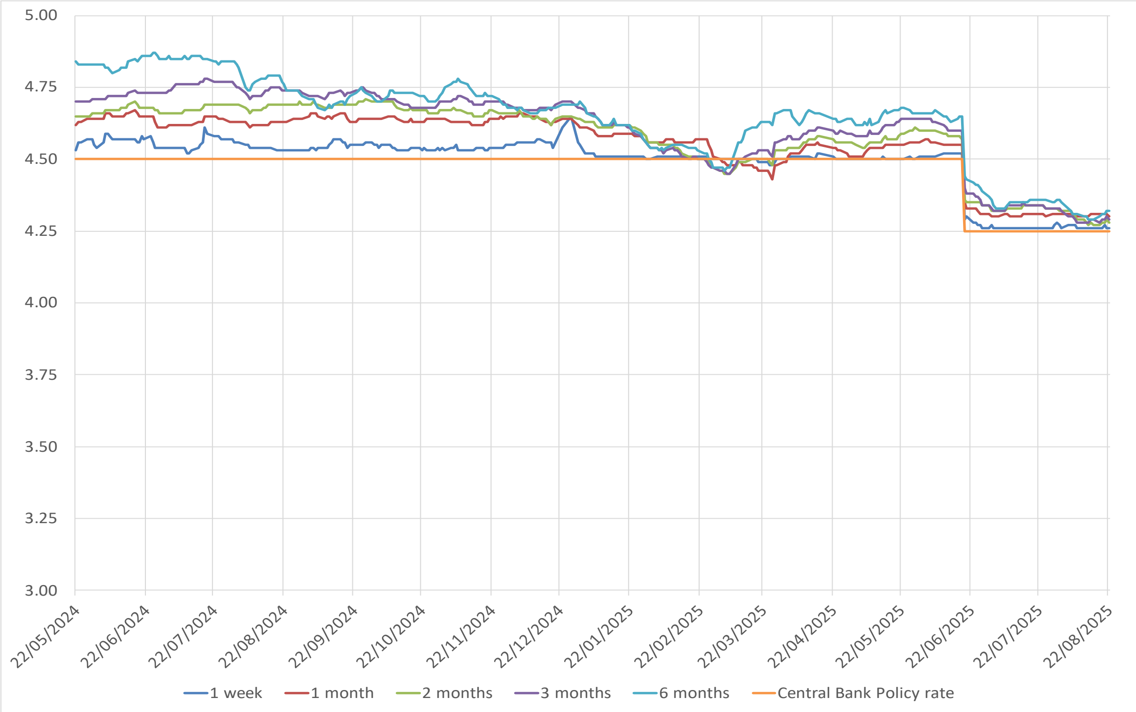
The underlying market

The Norwegian money market is characterised by liquidity being redistributed between the major market participants by using the currency swap market. This has been the situation all the time since the liberalisation of the credit markets in the 1980s. The use of currency swaps reflects the characteristics of the small, open Norwegian economy, with relatively large international engagements connected to trade in raw materials and shipping. In the aftermath of the financial crisis of 2007-08, the use of unsecured interbank market lending in Norwegian kroner contracted from an already low level, in line with the developments observed internationally.

Market developments since the previous statement

The Norwegian Central Bank's policy rate was lowered from 4.50 to 4.25 percent on 19 June 2025. This cut was not expected in the market, and thus not reflected in the expectations embedded in the various Nibor maturities. As a consequence, all Nibor tenors fell significantly on this day. Else, the developments throughout the period have been characterized by stable rates, reflecting a situation with affluent money market liquidity, expectations about this being the situation also going forward and to some extent expectations about another cut in the policy rate in September. Chart 1 illustrates the policy rate and Nibor until 22 August 2025.

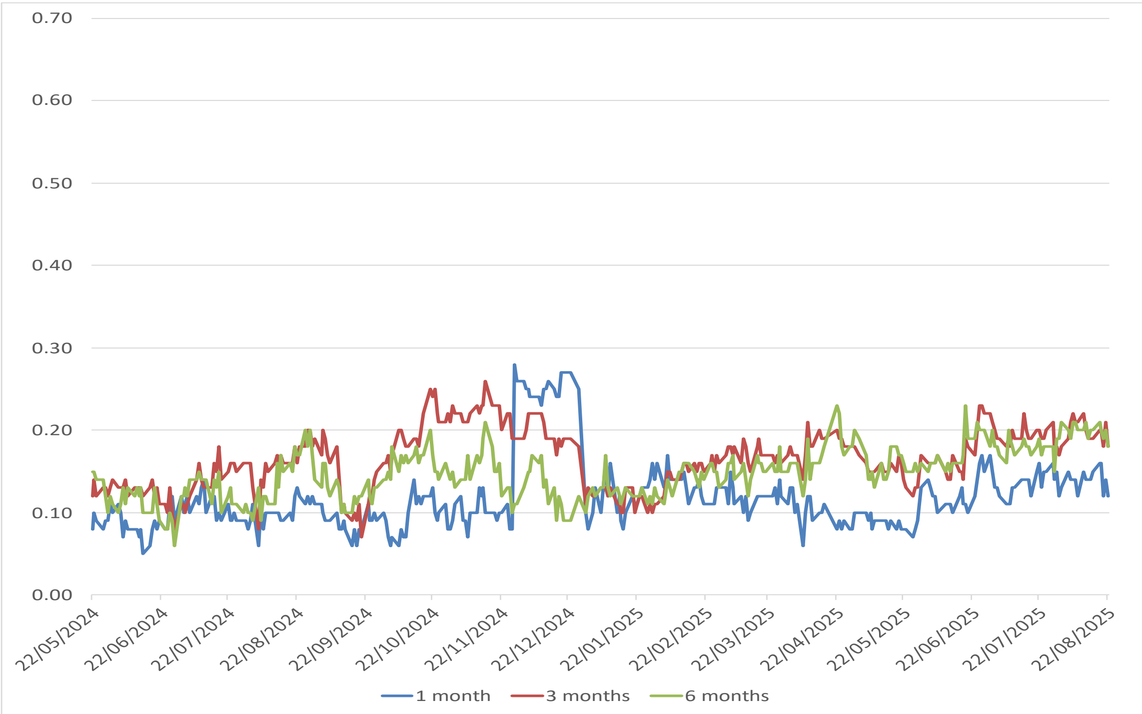
Chart 1. *Nibor fixings and Central Bank policy rate. Percent. 22.05.2024-22.08.2025*



Source: Norges Bank and NoRe

Chart 2 illustrates the spread between the highest and lowest contribution to Nibor for the one-, three- and six-months tenors. Since the last transparency statement, the spread has widened somewhat for all tenors However, all remains within what is considered normal levels.

Chart 2. *Differences in Nibor contributions. Percentage points. 22.05.2024-22.08.2025*



Source: NoRe

Nibor input data

The lack of unsecured NOK-denominated interbank market transactions implies that the contributions to Nibor, with few exemptions, are based on assessments of funding costs and bid/offer-spreads (type c contribution). Statistics on the type of contributions received is presented in Table 1. The table comprises reporting of background data since it was introduced in April 2020.

Table 1. *Contribution type*

Period	Number of business days	Number of fixings	Number of contributions			
			Total	Level a	Level b	Level c
01.04.-31.12.20	189	945	5670	0	1	5669
2021	253	1265	7590	0	1	7589
2022	253	1265	7590	3	0	7587
2023	251	1255	7530	0	0	7530
2024	251	1255	7530	0	0	7530
01.01.- 31.03.25	63	315	1890	0	0	1890
01.04.- 30.06.25	59	295	1770	0	0	1770
01.07.- 22.08.25	39	195	1170	0	0	1170

Brief introduction to the Nibor calculation methodology

The Nibor Panel Banks must be active in the market in which the redistribution of NOK liquidity takes place – in the relevant maturities and throughout the market's trading hours – and have been active for a period of at least three months. The panel banks are also required to quote committing sales prices on Certificates of Deposits (CDs) or Commercial Papers (CPs) denominated in NOK, for the maturities 1, 2, 3 and 6 months. Minimum sales commitment is NOK 100 million for all maturities.

When determining its contributions, the individual bank shall follow the Nibor "waterfall methodology" priority of use of input data, summarized as follows:

a. The bank's own interbank lending transactions concluded with leading banks in the Norwegian Money Market with a minimum value of NOK 100 million at the same day as the Fixing. If none;
b. the bank's own borrowing transactions concluded from sales of CDs or CPs denominated in NOK with a minimum value of NOK 100 million at the same day as the fixing. If none;
c. the bank's committed price quotes on CDs or CPs denominated in NOK and expert judgements based on the bank's weighted funding costs in USD and EUR, preferable prices from actual transactions. With exception for the one-week tenor, committed price quotes on CDs and CPs shall be given at least 50 percent weight in the calculations.

A spread shall be added to calculated borrowing rates, so that the contributions reflect the interest rates that the bank would charge for unsecured lending.

Nibor is fixed/calculated as trimmed averages of the interest rates contributed by the panel banks, where the lowest and the highest rates contributed are omitted. For more information about Nibor please refer to the Nibor Benchmark Statement and the Nibor Framework published on NoRe's website.

The Nibor Transparency model

Nibor is primarily based on level c contributions. The panel banks' underlying input to level c contributions may be used to illustrate how each separate factor has contributed to the calculation of Nibor; The "Nibor Transparency Model" calculates an alternative Norwegian Krone Offered Rate by applying the same methodology as the one which Nibor Panel Banks use to calculate their contributions of level c. However, the Nibor Transparency Model uses *the average* of each underlying data component reported by the banks. The derived rate based on averages is called "D-NOR". For more information about the Nibor Transparency Model see explanation in box on the last page.

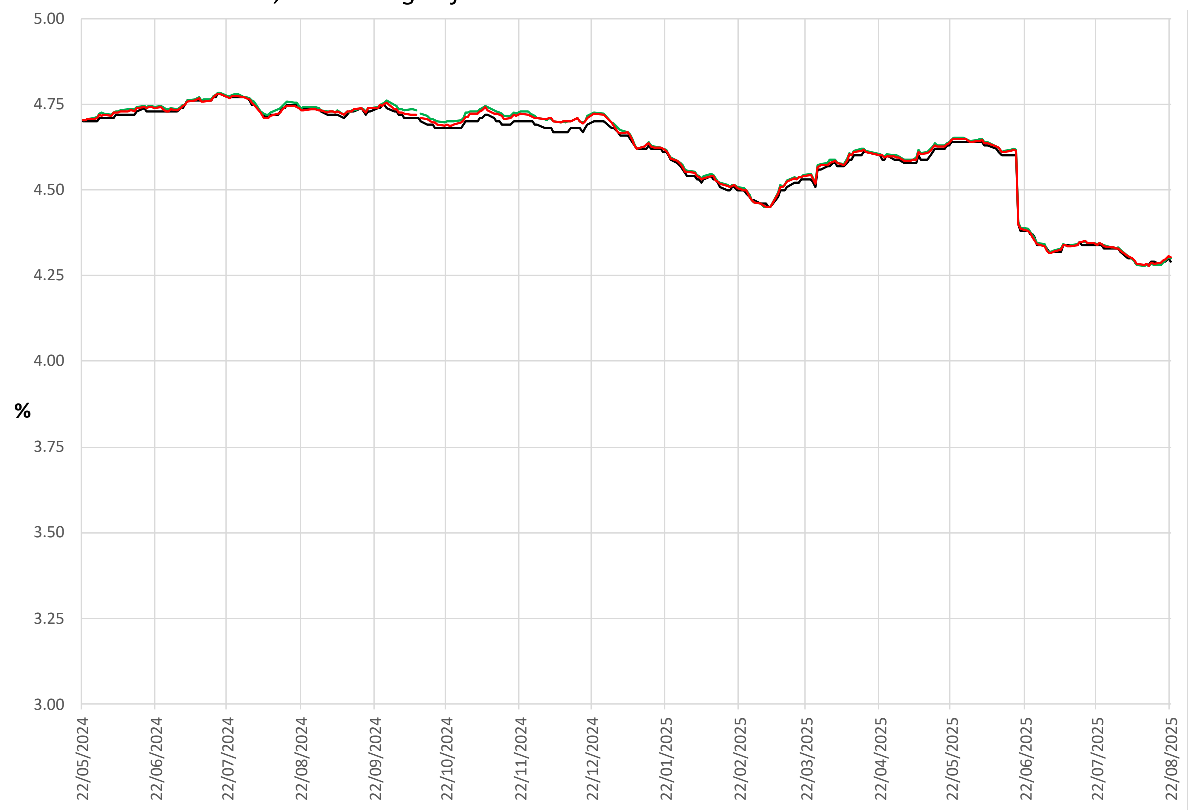
Nibor is calculated as a mean of Nibor contributions, omitting the lowest and the highest contributions. This trimmed mean is normally not very different from a simple average of all contributions.

Underlying data for Nibor contributions

The Nibor Panel banks provide NoRe with background information on their contributions. This information is used as support for NoRe's control activity. The information to be provided depends on which level in the waterfall methodology the contributions have been based on. For transaction-based contributions (level a and b) information is to include whether or not interpolation or transactions with deviating maturity have been used. For non-transaction-based contributions (level c) the banks shall provide information about the underlying elements in their calculations (CD/CP quotes, foreign funding interest rates, foreign exchange spot and term rates) and the weights applied for each individual component. For level b and c contributions the banks also provide information on the spreads used for transforming borrowing rates into offered/lending rates.

The Nibor fixings, the averages of all contributions, and the D-NOR for the 3-month tenor is illustrated in Chart 3. The D-NOR and the average of all contributions have since the last Transparency Statement remained close to the Nibor fixings.

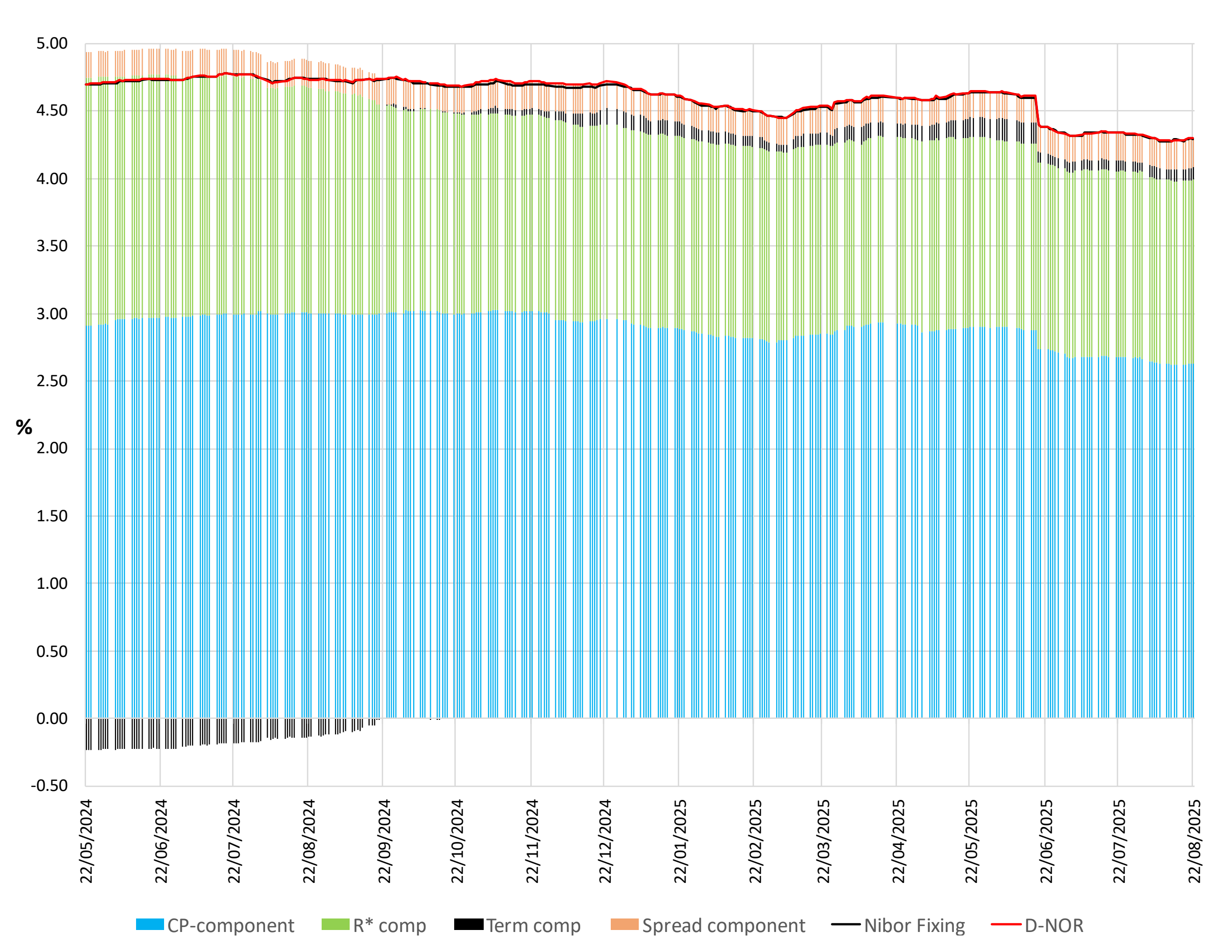
Chart 3. *3-month Nibor, the average of contributions and the D-NOR. Percent. 22.05.2024-22.08.2025*



Source: NoRe

The Nibor Transparency Model calculations are presented in Chart 4. D-NOR and the corresponding Nibor fixing values are shown as lines. The underlying components are shown as stacked columns.

Chart 4. *3-month D-NOR and underlying components. Percent. 22.05.2024-22.08.2025*



R*: Foreign lending costs, Term: Term premium from the foreign exchange market
Source: NoRe

The funding costs in NOK (blue area) has fallen since May, reflecting the cut in the Central Bank's policy rate in June. Both the weighted foreign funding costs in EUR and USD (green area) and the "Term Component" (black area) have fallen somewhat, where the movement in the latter reflects a narrowing differences between NOK and foreign funding cost levels. The average bid/offer spread (orange area) has widened somewhat, to around 22 basis point.

The Nibor Transparency Model explained

The Nibor Transparency model calculates a Norwegian Krone Offered Rate based on background input data from the Nibor Panel Banks and the formula the banks use to determine their Nibor contributions of type c. This illustrative derived rate is called "D-NOR".

The Nibor contributions of type c is the result of calculations using the following formula:

$$\mathbf{R_{PB} = r_{PBcp} * w_{PBcp} + (r_{PBeur} + t_{PBeur}) * w_{PBeur} + (r_{PBusd} + t_{PBusd}) w_{PBusd} + margin_{PB}}$$

where

"$\mathbf{R_{PB}}$" is the Nibor contribution of type c from the panel bank (**"PB"**),
"**w**" is the weight used on each component, in sum equal to 1,
"**r**" is interest rates from different markets,
"**t**" is the term premia from the foreign exchange marked expressed as an interest rate
"margin" is the lending-borrowing margin
"**cp**", "**eur**" and "**usd**" is short for CP/CD, euro and US dollars respectively.

The transparency model isolates the individual components into sub-contributions representing the mean of received data for each individual factor.

- CP/CD-prices (expressed as interest rates): $\mathbf{r_{cp}}$
- Foreign funding costs: $\mathbf{r_{eur}}$ and $\mathbf{r_{usd}}$
- Foreign Exchange Term premia (expressed as interest rates): $\mathbf{t_{eur}}$ and $\mathbf{t_{usd}}$
- Lending-borrowing margin/Spread: **margin**

Thereafter the offered rate (D-NOR) is calculated as a weighted average of these mean-sub-contributions using the averages of the banks' calculation weights for each factor and the following formula:

$$\mathbf{D\text{-}NOR = r_{cp} * w_{cp} + (r_{eur} * w_{eur} + r_{usd} * w_{usd}) + (t_{eur} * w_{eur} + t_{usd} * w_{usd}) + margin}$$

The results of the calculations are presented graphically, where

CP component = $\mathbf{r_{cp} * w_{cp}}$
R* comp = $\mathbf{r_{eur} * w_{eur} + r_{usd} * w_{usd}}$
Term comp = $\mathbf{t_{eur} * w_{eur} + t_{usd} * w_{usd}}$
Bid/ask spread component = **margin**

The explanatory power of the model is somewhat limited when it comes to the part of Nibor movements being explained by changes in CD quotes. CD quotes are required to be given at least 50 percent weight in the Nibor contributions. However, the data indicates a clear historical correlation between the prices on CDs and NOK borrowing costs calculated from foreign funding costs and foreign exchange term premia (the sum of the Term and R* components), which reflects that both data sources indicate similar NOK funding cost developments.

The model uses information connected to level c-contributions only. As long as the majority of contributions continues to be based on level c, the model will illustrate the factors behind the movements in Nibor. However, if contributions of type a and b become frequent, the model's explanatory power will be reduced.