



Dutch State Treasury Agency
Ministry of Finance

Outlook 2024





Contents

Preface and photo theme	3
1. Economic and budgetary outlook	6
1.1 Economic outlook	7
Political developments in the Netherlands	10
1.2 Budgetary outlook	12
Pension reforms	15
2. Climate outlook	16
Green Bond retrospective	19
3. Funding and issuance	20
3.1 Looking back on funding in 2023	21
3.1.1 <i>Capital market</i>	22
3.1.2 <i>Money market</i>	24
3.2 Policy framework debt management 2020-2025	26
Bi-annual review policy framework	27
3.3 Funding plan 2024	28
Retail bonds	32
4. Primary dealers and secondary markets	34
4.1 Primary dealers and commercial paper dealers in 2023 and 2024	35
4.2 Liquidity and secondary markets	37
Statistical appendix	41
Photo captions	47

Preface and photo theme

“New Horizons” is the photo theme for the Outlook 2024, chosen by my colleagues at the Dutch State Treasury Agency (DSTA). Despite consisting of just two words, the phrase evokes many more and brings with it a variety of associations, appealing to a diverse group of people.

This fall, I visited the museum exhibition “Five Generations of Brueghel” and admired the beautiful painting “Landscape with Windmills” by Jan Brueghel the Elder, painted in the 17th century.

The rolling horizon and diminishing size of windmills, farmers, and carts in the distance, in a typical Dutch landscape inspired by the province of North Brabant, creates a sense of boundless space. As we move forward into the future, the impact of artificial intelligence has begun to emerge in many fields, including art. In the Outlook 2024, alongside traditional photographs, you will also discover works created by generative AI, reflecting this evolving landscape.

Beyond inspiring beautiful art, “New Horizons” is a boundless theme that looks forward to new possibilities, new opportunities, and new vistas. It conveys hope, expectations, and ambition. A steady eye on the horizon implies thinking beyond limits and constraints and embracing opportunities and possibilities, even if this sometimes means going against the current and challenging the status quo. After a year marked by major crises such as war and natural disasters, we continue to long for a better world with positive steps forward on the road to prosperity in the Netherlands, Europe and the world.





I am very curious about what the cabinet formation in the Netherlands will bring us in this respect, and which new winds will blow in from The Hague. What kind of new horizon will we be travelling to? In any case, this year's Outlook offers the necessary (visual) inspiration to ponder the answer to that question.

Meanwhile, the work at the DSTA will continue steadily into 2024, as it did in 2023. Though there are always challenges to encounter, there are just as many opportunities to capitalise on to execute our mandate with excellence every day. With the counsel and commitment of our Primary Dealers, we have succeeded in again meeting the funding need of the Dutch State in 2023 in an effective and efficient manner. In October, we issued our second green bond with a particular focus on 'blue' expenditures. Our investors displayed great eagerness to invest in this bond, which for the first time contained specifically mapped eligible expenditures for the Netherlands in areas such as sustainable water management and climate change resilience.

The DSTA has now accumulated considerable knowledge and expertise to continue the successful issuance of bonds adhering to the EU Taxonomy. Working together with our colleagues, for example from the Financial Markets Directorate in the General Treasury and the Ministry of Infrastructure and Water Management, our shared expertise means we play a leading role in Europe. It gives us a sense of pride to be able to contribute to the development of robust green capital markets. We thank our primary dealers, advisors and investors who have made this possible.

The DSTA is ready to keep the Treasury properly filled in 2024, as we take significant steps in our IT systems to drive excellent analyses of data. Making the right choices based on data means we can execute our mandate with precise decision-making. The DSTA is further expanding its decision-making scope and transparency through the establishment of the Advisory Board, a

body composed of a varied group of external professionals who were officially introduced on 1 December. The role of this Advisory Board is to offer independent and strategic advice covering all aspects of the DSTA, including fixed income markets, risk management as well as organisational matters.

In the coming year, the financial world is changing rapidly, interest rate developments are uncertain, and with all the benefits that ever-more important IT systems bring, the complexity and risks also increase; all reasons to continue to broaden our horizon. The 70+ colleagues of the DSTA will rise to the challenge next year with great pleasure and dedication, in close collaboration with our Primary Dealers, investors and advisors. Together, we broaden and renew our horizons!



A high-speed train is shown on tracks, moving away from the viewer. The scene is set at sunset, with a warm, golden light illuminating the sky and the train. In the background, a city skyline with several tall buildings is visible. The train is white with a blue stripe. The tracks are made of steel rails on gravel. There are overhead power lines and poles along the tracks. The overall atmosphere is serene and modern.

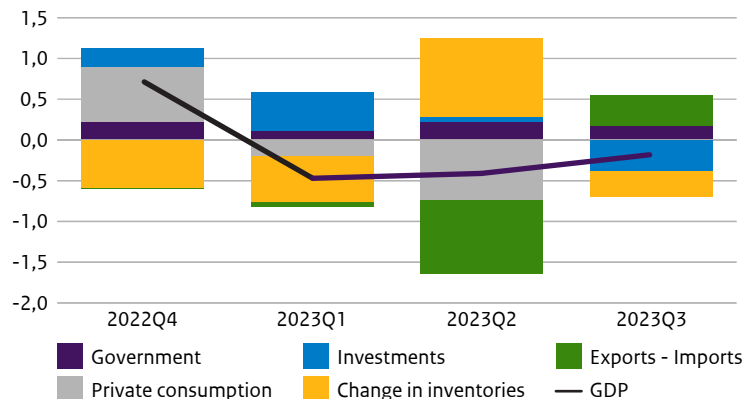
1. Economic and budgetary outlook

1.1 Economic outlook

Modest economic growth expected in 2024 despite economic and geo-political challenges

In the first three quarters of 2023 the Dutch economy showed negative quarter-on-quarter GDP-growth of -0.5%, -0.4% en -0.2% respectively. After the better-than-expected economic recovery of 2021-2023, the Dutch economy had to adapt to new economic conditions. Subsequently the pivot back to economic growth is taking longer than expected. In these first three quarters of 2023, increased government expenditures could not off-set declining exports and investments. The withdrawal from inventories also contributed to the economic decline. Consumer spending decreased as well in the first half of 2023 and remained stable in the third quarter. Figure 1 shows a breakdown of factors influencing Dutch GDP on a quarter-on-quarter basis.

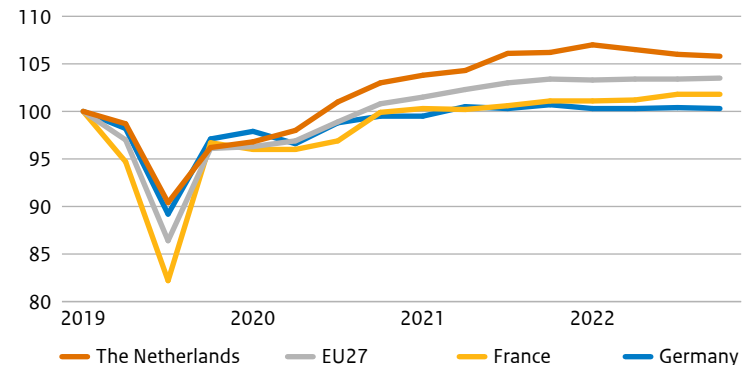
Figure 1 – Decomposition of quarterly GDP growth in the Netherlands



Source: Eurostat, 2023

Across neighbouring countries there are small differences in growth of the economy. Overall, the economy in the European Union grew by 0.1% in the third quarter of 2023 compared to the previous quarter. Figure 2 shows that since the last quarter of 2019, the recovery of the Dutch economy has been stronger than in surrounding countries (Statistics Netherlands, *Centraal Bureau voor Statistiek*, CBS). However, the difference in economic performance between the various countries is now decreasing.

Figure 2 – GDP volume developments based on seasonally adjusted data



Source: Statistics Netherlands, 2023

In 2024 the Dutch GDP is expected to grow by 1.5% according to the Netherlands Bureau for Economic Policy Analysis (*Centraal Planbureau*, CPB). The European Commission also expects a mild recovery in domestic demand going forward, led by the decreasing inflation rates, the strong labour market and increased wage growth. Growth is expected to benefit from increased public consumption and investment. However, business investment is projected to remain weak because of the tighter financial conditions laid out by the ECB.

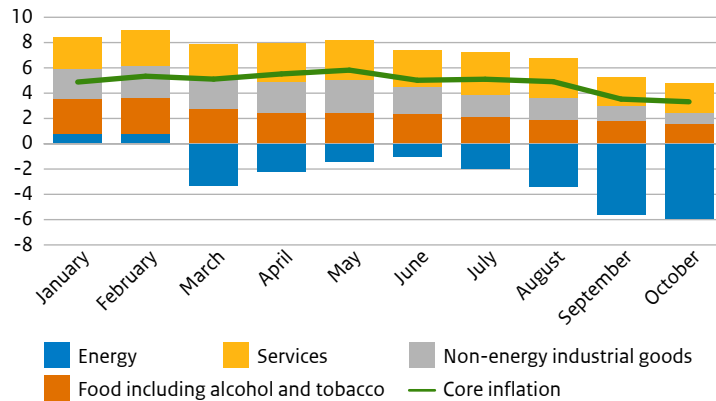


The economic outlook for 2024 obviously comes with a number of uncertain factors. For example, it is still uncertain what kind of budgetary and economic policy a new coalition will carry out. Moreover, geo-political developments can potentially pose serious challenges.

Inflation rapidly decreasing and real wages increasing

In the first half of 2023 inflation levels in the Netherlands were still historically high. Figure 3 depicts year-on-year mutations of HICP-levels. In September and October however, year-on-year inflation figures changed to slight negative numbers. Rapidly falling energy prices explain this decline, as core inflation without energy prices remained at 5.1%. Inflation in November still points towards relatively moderate inflation, with energy prices playing an important role. The estimate of the inflation (HICP) was 1.4% for November. Overall CPI inflation was 1.6% and 4.2% excluding energy.

Figure 3 – Core inflation (in %) and the contribution of components to total inflation (in percentage points)



Source: Statistics Netherlands, 2023

Inflation in the Netherlands is expected to remain at elevated levels in 2024 at 3.9%. The lagging impact of high energy prices on other goods and services is expected to last. Despite these elevated price levels, the CPB expects the purchasing power of the median household to increase by 1.8% in 2024, up from a 1.1% decrease in purchasing power in 2023.

The Dutch labour market continues to be tight. Unemployment is at a relatively stable level. Statistics Netherlands reported an unemployment rate of 3.6% in October, which matches the unemployment rate of one year ago. For 2024 an overall increase in the unemployment rate to 4.0% is expected by CPB. Another indicator is the number of (seasonally adjusted) job openings that is slowly decreasing over the past three quarters; particularly in the commercial services, restaurants and industry sectors.

Partly as a result of the tight labour market, wage increases have accelerated over 2023. Whereas in 2022 nominal wages increased to a lesser extent than

prices and hence real wages declined, real wages have started to increase over the third quarter of 2023. In the third quarter of 2023 the largest increase in 40 years was realised in average collectively bargained wages compared to one year earlier (6.1%). In 2024 the collectively bargained wage growth is expected to be 5.6%. Additionally, the number of bankruptcies have gone up in 2022 and 2023 compared to the exceptionally low levels during and after Covid. This means regular business dynamics returned after a period in which government subsidies kept relatively many businesses afloat.

Housing market picking up after a year of decreasing prices

As a consequence of the increasing interest rate levels of 2023, the Dutch housing prices decreased year-on-year. Despite this decrease on a year-on-year basis, housing prices are picking up on a month-on-month basis with a 0.7% increase in October compared to September. A similar trend is visible in the number of transactions: while the number of transactions in the first 10 months of 2023 was 6% lower than the same period in 2022, the number of transactions in October of this year was 5.7% higher than in September of this year.

Table 1 – Key economic indicators for the Netherlands (short-term, base-scenario).

year-on-year % change, unless otherwise specified	2022	2023*	2024*
GDP	4.3	0.7	1.5
Household consumption	6.6	0.6	2.4
Government consumption	1.6	2.4	3.1
Investment (including inventories)	1.0	2.8	0.3
Imports	3.8	1.9	2.1
Exports	4.5	0.8	1.5
Inflation (HICP)	11.6	4.1	3.9
Unemployment (% of working population)	3.5	3.6	4.0

* Estimated

Source: CPB, Macro Economic Outlook 2024, 2023



Political developments in the Netherlands

On Wednesday 22 November, parliamentary elections were held in the Netherlands for the House of Representatives (*Tweede Kamer*). 15 Parties have entered the new parliament, which was installed on 6 December. The far right PVV (*Partij voor de Vrijheid*) of Geert Wilders came out as the largest party with 23.6% of the votes, representing 37 out of 150 seats in the House of Representatives. The newcomer NSC (*Nieuw Sociaal Contract*) won 12.9% of the votes (20 seats). The new combination of the green party and the social democrats (*GroenLinks – PvdA*) won 15.7% of the votes (25 seats). Parties which formed the previous governing coalition all lost seats. The elections were organised after the Dutch government resigned on 7 July 2023. Following the resignation, a number of the longstanding politicians including prime minister Mark Rutte announced that they would not be available for re-election.

Process following elections

Currently, political parties are in exploratory talks to form a new government with a new coalition of parties. Usually, the aim is to represent a majority in the House of Representatives. After a coalition of parties has adopted a coalition agreement, the political parties will start forming a cabinet. While parties intend to form a coalition without delay, it is not uncommon for these talks to last for multiple months. The previous government was formed after a period of 299 days, resulting in the longest formation period in Dutch history. During the formation of the new government, the current caretaker government remains in position. This caretaker government is limited in its decision-making for certain policy issues which the House of Representatives and Senate have declared controversial. However, for multiple important issues, the current caretaker government has been mandated to continue making decisions. These issues include climate policy and migration.

Budgetary impact

The actual budgetary impact of the plans of the new government can only be thoroughly analysed once the government is formed. The CPB will assess the budgetary impact of a new coalition program using the macroeconomic indicators applicable at the time.



1.2 Budgetary outlook

A stable and robust outlook for 2024 and years thereafter

On 24 November, the government published an update of the budget memorandum for the 2023 budget. In comparison to the 2024 Budget Memorandum which was published on 19 September 2023, the budget deficit for 2023 is expected to deteriorate by 0.2% to -1.8% of GDP. Reasons for the higher budget deficit over 2023 are decreases in tax and premium revenues of 0.4% in comparison to the Budget Memorandum expectations. The effect is alleviated by lower spending on Covid-19 measures and by postponing certain expenses related to the support for Ukraine to 2024. Still, the current expected total revenues over 2023 of EUR 382.3 billion exceeds the expectations in the initial 2023 Budget Memorandum by EUR 15.8 billion.

The expected budget deficit for 2024 is 2.9% and this is expected to remain the same for 2025. In the Budget Memorandum, specific targeted measures are included to improve purchasing power of the lower- and middle-income households, such as an increase of the rental subsidies and an increase of social benefits at the same pace as the minimum wage. In addition, expenditures are expected to increase due to the inflationary impact on wages and prices as well as higher interest expenditures and decreasing revenue from natural gas sales. At the same time, the tax revenues are expected to increase due to 'endogenous growth' of tax and premium revenues, as a result of general economic conditions. One reason for this endogenous growth is the increase of nominal consumption due to inflation and the subsequent increase in VAT revenues.

Since the publication of the 2024 budget in September 2023, a number of amendments have been discussed in parliament. These amendments will be adopted through voting by departmental budget. Most of these departmental budgets have already been approved to date, where others will be discussed in January. If all the amendments are to be adopted by parliament, the budget deficit for 2024 may rise by 0.2% to 3.1%, whereas the EMU-balance for 2025 increases by 0.1% and the balance for 2026 remains unchanged. An official update of the 2024 EMU-balance, based on the latest macro-economic parameters, will be published with the spring budget.

Despite the increasing deficit, the EMU debt-level remains well below the European Union-agreed threshold of 60% of GDP. The figures presented in the 2024 Budget Memorandum are in line with previous years as the EMU-debt level for 2023 is expected to reach a level of 47.3% of GDP for 2024 and of 48.8% for 2025 if the amendments are adopted and implemented. The diverging patterns between the EMU debt and EMU balance can be attributed to higher inflation which leads to a higher nominal GDP, thereby outpacing the growth of the deficit (the denominator effect).

In the longer term, the budget deficit is expected to be around 3.0% in the coming years with a larger deficit in 2026 (3.6%) due to a one-off conversion related to military pensions. The deficit is expected to quickly come back to 2.6% of GDP in the following year. The EMU debt in the period up to 2028 increases from 47.6% to approximately 53% of GDP.

Table 2 – Key budgetary figures for the Netherlands (% GDP)

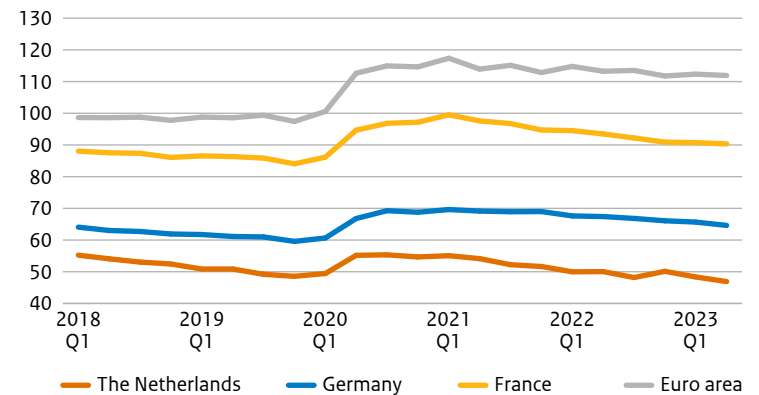
	2022	2023	2024	2025	2026	2027	2028
EMU balance Budget Memorandum 2024	-0.1	-1.6	-2.9	-2.9	-3.6	-2.6	-3.2
Impact of proposed amendments	n/a	-0.2*	-0.2	0.0	0.0	0.0	0.1
EMU balance following proposed amendments	n/a	-1.8*	-3.1	-3.0	-3.6	-2.6	-3.1
EMU debt Budget Memorandum 2024	50.1	47.6	47.3	48.6	50.4	51.3	52.9
Impact proposed amendments	n/a	-0.1	0.1	0.1	0.2	0.2	0.1
EMU debt following proposed amendments	n/a	47.6	47.3	48.8	50.6	51.4	53.0

Sources: 2022 numbers: Statistics Netherlands; quarterly report on state budget, 22 September 2023; 2023 numbers: Ministry of Finance, letter to Parliament on 24 November 2023; 2024-2028 numbers: Ministry of Finance, Budget Memorandum 2024 and Ministry of Finance, letter to Parliament on 31 October 2023.

* These data points include the impact of the November update of the Budget Memorandum.

The budget shows stability in an international comparison

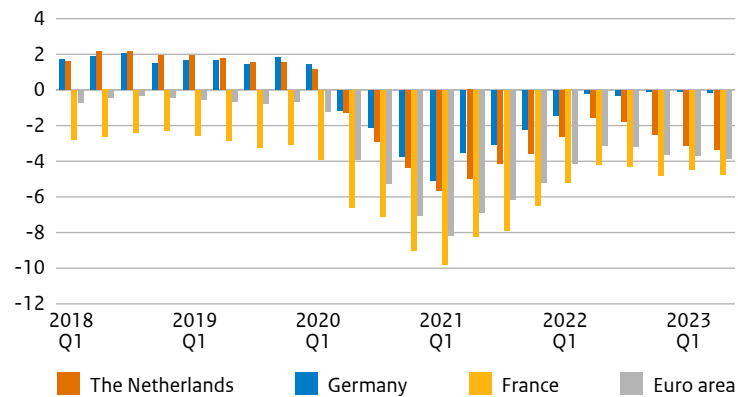
Figures 4 and 5 below shows a comparison of the EMU-balance and debt for the years 2018-2023 for the Netherlands, Germany, France and the entire Euro Area average. The Dutch level of government debt (% of GDP) remains below the Euro area average, below the debt levels (% of GDP) of France and Germany and below the Euro area-norm of 60% of GDP. This has been the case in the last five years, as is shown in figure 4 and figure 5.

Figure 4 – EMU debt (% of GDP)

Source: European Central Bank, 2023



Figure 5 – Government balance (% of GDP)



Source: European Central Bank, 2023



Pension reforms

New Dutch pension system ratified in 2023, transition takes until 2027

In 2023, the Dutch House of Representatives and the Senate approved the 'Wet toekomst pensioenen' (or WTP) which effects the 2019 Pension Agreement. The new law has three primary goals: a supplementary pension that reflects markets better and can increase pensions faster in case of positive developments, a clearer pension accrual, and a pension system that better reflects the modern dynamism in the Dutch job market.

The WTP is based on the defined contribution system (DC), rather than the historically more usual defined benefit (DB) system. In the DC system, pension funds can increase pension benefits faster if returns on investments are high, or instead lower them faster if returns are lower. Henceforth, pension contributions are now calculated as all invested contributions including the return on these funds. Finally, the difference in pension build-up between young and old contributors has been removed from the system.

Pension programs will still be managed on a collective basis, with pension providers adhering to a shared investment policy to keep costs down for their participants. Furthermore, the Dutch government and social partners have reached a consensus on the official retirement age, provisions for early retirement, choices for pension plans, and benefits for survivors' pensions.

The law formally took effect on 1 July 2023, although there is a transition period during which arrangements should be made between pensioners and pension institutions. These arrangements include the new contracts and – most importantly – the method of dividing the accumulated pension capital from the DB system to individual participants in the DC system. The end of the transition period is 1 January 2028. The DSTA is closely monitoring these developments in order to assess the impact of the new pension law on the market for the DSL's and DTC's.



2. Climate outlook

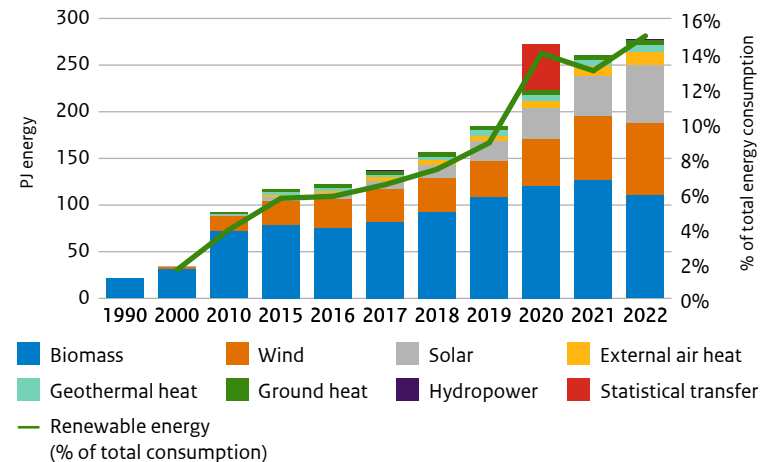
Climate mitigation: Emission reductions for 2030 within reach, other targets are well underway but require acceleration

The commitment to reduce Dutch emission of Greenhouse Gas (GHG) by 55% in 2030 (compared to 1990 levels) has been put into law with the revision of the Climate Act in July 2023. To compensate for any potential future setbacks, the government has introduced policy measures aiming at a 60% GHG reduction. Recently, the Netherlands Environmental Assessment Agency (*Planbureau voor de Leefomgeving*, PBL) reported that the commitment for reducing GHG by 55% in 2030 has come within reach for the first time since the publishing of an annual report, which started in 2019.¹ Currently however, reaching the committed goals still partially depends on factors outside of government control, e.g. the weather and imports of electricity. Other climate related targets, such as for energy consumption, are not within reach yet and require additional efforts according to an additional publication by PBL.² Under the renewed Energy Efficiency Directive (EED) and the Renewable Energy Directive (RED III), targets for energy consumption and the share of renewable energy in the mix have recently been sharpened. Additional measures are required to reach these new targets.

Energy from wind and solar sources has increased significantly in 2022.³ At the end of 2022, the total amount of installed capacity for solar electricity was 19 143 MW, an increase of 4 232 MW since the end of 2021. Installed capacity for energy from wind increased from 7 769 MW at the end of 2021

to 8 831 MW at the end of 2022. The share of renewable energy in total energy consumption is estimated at 15% in 2022. Figure 6 shows the development of renewable energy in the Netherlands over time.

Figure 6 – Development of renewable energy



Source: Statistics Netherlands, 2023

A recent study by Statistics Netherlands shows that Dutch people are generally worried about climate change and that these views are stable over time.⁴ 93% of Dutch people think the climate is changing and 60% of people believe this is completely or partially the result of human behaviour. Notable differences between views of the last study in 2020 and the most

¹ PBL, 26 October 2023. Climate and Energy Outlook 2023 (*Klimaat- en Energieverkenning 2023*). [Link](#).

² PBL, 26 October 2023. Energy saving requires extra efforts; share of renewable energy substantially increases (*Energiebesparing vraagt extra inzet; aandeel hernieuwbare energie stijgt flink*). [Link](#).

³ CBS, 12 October 2023. Renewable Energy in the Netherlands 2022 (*Hernieuwbare energie in Nederland 2022*). [Link](#).

⁴ Statistics Netherlands, 28 November 2023. Climate change and the energy transition: views and behaviour of Dutch people in 2023 (*Klimaatverandering en energietransitie: opvattingen en gedrag van Nederlanders in 2023*). [Link](#).

recent study are an increase in people who are very worried about future generations (from 31% to 34%) and a decrease of the share of people who think the government should have a climate policy (from 85% to 82%).

Climate adaptation: An intensified implementation program in light of new scenarios

The goal of climate adaptation is to prepare and adapt the Netherlands to risks which arise from a changing climate. Adaptation includes strengthening dikes, broadening rivers and making cities and villages greener.

Two recent publications have stressed the importance for climate adaptation in the future as Dutch weather and the Dutch climate are expected to worsen. In October, the Royal Netherlands Meteorological Institute (*Koninklijk Nederlands Meteorologisch Instituut*, KNMI) published its periodical update of climate scenarios.⁵ The KNMI concludes that the Dutch temperature is already 2.3% higher than over the 1850-1900 period. In all scenarios, the KNMI expects the effects of climate change to worsen. Early warning systems for weather extremes will become more important. Both in scenarios with high and low GHG emissions reductions, sea levels will rise significantly or even severely.

The second publication, an interim report by the research program on rising sea levels (*Kennisprogramma Zeespiegelstijging*) confirms the KNMI scenarios on higher sea levels.⁶ This publication also projects that the Netherlands must accept the salinization of existing sources of fresh water. It also points

towards the necessity to keep plenty of North Sea sand available for future coastal defence, to prepare for the reinforcement of dikes and to scale up other approaches aimed at flood prevention.

In November 2023, the government updated its Strategy for climate adaptation (*Nationale Adaptatiestrategie*, NAS).⁷ Highlighting the importance of the KNMI scenarios, this strategy shows which measures are being put into place in the upcoming years and which extra measures will be required. Among others, measures are aimed at achieving future proof fresh water supplies, climate robust agriculture, heat resilient cities and strong and resilient infrastructure. The Dutch government has decided on a new and intensified implementation program to reach the objectives of the NAS.

⁵ KNMI, 9 October 2023. Climate Scenarios 2023 (KNMI'23-klimaatscenario's). [Link](#).

⁶ Research programme on rising sea levels, 9 November 2023. Intermediate findings of the research programme on rising sea levels (*Tussenbalans van het Kennisprogramma Zeespiegelstijging*). [Link](#).

⁷ Ministry of Infrastructure and Water, 17 November 2023. National programme for implementation of climate adaptation (*Nationaal Uitvoeringsprogramma Klimaatadaptatie*). [Link](#).



Green Bond retrospective

In 2023, the DSTA issued a new 20-years Green DSL 3.25% January 2044 through a Dutch Direct Auction (DDA). This auction followed on a revision of the DSTA Green Bond Framework, now incorporating the proposed EU Taxonomy which was adopted in June 2023. This new Green Bond Framework particularly focuses on water investments which, among other objectives, aim to make the Netherlands more resilient to flood risks. These are so-called ‘blue expenditures’.

The expenditures for each investment have been mapped against the revised EU Taxonomy of June 2023. Eleven out of twelve eligible economic activities in the Framework meet the required screening criteria. Moreover, all twelve eligible activities meet the substantial contribution criteria. The Green DSL 2044 is the first of its kind: a triple-A sovereign issuance that has ‘blue’ activities which are mapped to the EU taxonomy.

Issuance of the Green DSL 2044 took place on 17 October with substantial interest.⁸ Five minutes after the order book was opened, the book exceeded € 10 billion. Eventually, the order book was more than 3.5 times oversubscribed. The DSTA issued the Green DSL 3.25% 15 January 2044 for an amount of € 4.98 billion. Of this amount, 76% was allocated to ‘real money’ accounts and 24% was allocated to ‘other’ accounts. Through this issuance, the DSTA remains committed to supporting and developing a robust domestic and international green capital market. In 2024, the DSTA will reopen the Green DSL 2044.

⁸ The DSTA has published a one-pager on the recent 20-year green DDA at <https://english.dsta.nl/>.

3. Funding and issuance



3.1 Looking back on funding in 2023

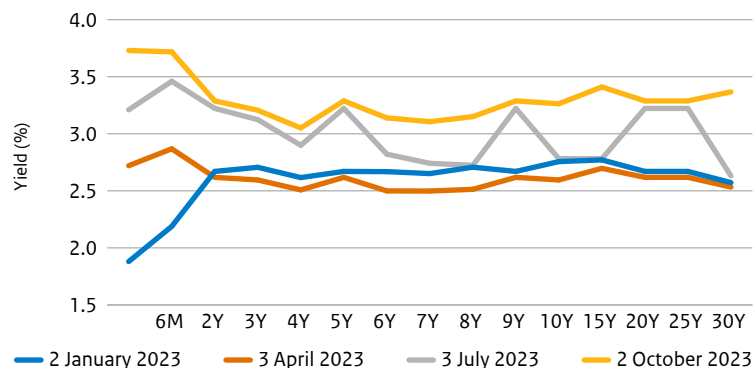
In December 2022, the DSTA estimated its preliminary funding need for 2023 to amount to approximately € 100 billion. This estimate was surrounded by a high degree of uncertainty due to several factors that impact government finances, such as the cap on energy prices, projected inflation, and a slowdown in economic growth. The DSTA announced that the capital market issuance would be approximately € 50 billion (nominal amount). Due to variations in tax income and social security contributions, lower than expected spending on the energy price cap and underspending (i.e. the government being unable to carry out all planned expenditures), the estimate of the funding need for the Dutch State decreased during the year to an amount of € 74.9 billion. Consequently, the call on the capital markets was revised slightly downwards to at least € 46 billion.

Despite the uncertainties about the funding need, the DSTA continued to ensure liquidity across the curve by creating a balance between the call on the capital markets and the money markets in 2023. Issuances in 2023 have contributed to lengthen the average maturity of the debt, swap and cash portfolio towards levels well above the targeted minimum of 7.9 years at the end of the calendar year and a minimum of eight years in 2025.

The interest rate environment for Dutch debt on both the capital and the money markets continued to change drastically over the course of 2023. Figure 7 shows the yield curve of Dutch State securities in 2023, which is a graphical representation of the relationship between the interest rate and the maturity of debt securities issued by the Dutch State in 2023.

The yield curve provides information about the expectations of future inflation, economic growth, and monetary policy. The yield curve of Dutch State securities has increased overall and became inverted in long-term versus short-term maturities, as from the second quarter. This means that investors expect lower interest rates and lower inflation in the future, which may indicate a slowdown in economic growth or a recession. While interest rates moved significantly during the year, the DSTA was able to obtain fair prices during its auctions. The DSTA remained committed to its core values: transparency, consistency and liquidity in executing its funding plan while being flexible when needed.

Figure 7 - Dutch curve at the start of every quarter in 2023 (yield in %)



Source: Bloomberg

3.1.1 Capital market

First quarter

The DSTA started off the year in January with the reopening of the DSL 0.00% 15 January 2026. Including the non-comp option that was exercised in its entirety, an amount of € 4.01 billion was raised at an average yield of 2.58%. Also, in January the DSL 2.00% 15 January 2054 was reopened which raised € 1.99 billion. On 7 February the new 10-year benchmark bond, the DSL 2.50% 15 July 2033, was launched by way of a Dutch Direct Auction (DDA). In this DDA an amount of € 5.99 billion was issued at a yield of 2.66%. At closing of the DDA, the bids in the book had reached € 20.6 billion, resulting in a bid-to-cover ratio of 3.44. Of the total amount allocated 70% went to real money accounts and 30% went to 'other' or so-called fast money accounts (e.g. hedge funds). After consultation with its Primary Dealers, the DSTA reopened in February the DSL 0.00% 15 January 2038 which raised € 2.48 billion. In March the DSTA reopened the DSL 0.75% 15 July 2027 and the DSL 0.00% 15 January 2052 which raised a total amount of € 4.31 billion.

Second quarter

The DSTA announced in its Q2 Quarterly Outlook that it expected a similar cash deficit for 2023, leaving the borrowing requirement unchanged. On 4 April the DSTA launched the DSL 2.50% 15 January 2030 through an MTS-auction. Including the non-comp option that was exercised in its entirety, an amount of € 5.21 billion was raised at an average yield of 2.56%. Also, in April the DSTA reopened the DSL 0.00% 15 January 2052. Although the non-comp option was not exercised in its entirety, an amount of € 2.19 billion was raised at an average yield of 2.68%. In May the DSTA reopened the DSL 0.75% 15 July 2028 which raised € 2.20 billion, and in June - after the initial issuance earlier in the year - the DSL 2.50% 15 July

2033 which raised € 2.0 billion bringing the total outstanding amount of this DSL to € 8.02 billion. Furthermore, the DSTA reopened in June the DSL 2.00% 15 January 2054 which raised another € 1.68 billion.

Third quarter

In the Q3 Quarterly Outlook the DSTA announced that the estimated funding need for 2023 was revised downwards to € 86.4 billion due to a lower expected cash deficit. This was due to lower energy prices as well as higher tax revenues, among other things. The expected issuance on the capital market was maintained for a total amount of around € 50 billion. In the third quarter, the DSTA reopened for the second time the DSL 2.50% 15 July 2030. Including the non-comp option that was exercised in its entirety, an amount of € 2.58 billion was raised at an average yield of 2.95%. After consultation with its Primary Dealers, the DSTA reopened in September, for the second time in the year, the DSL 0.00% 15 January 2026 which raised € 2.49 billion. Also, the DSTA reopened for the second time the DSL 2.50% 15 July 2033 which raised € 2.14 billion bringing the total outstanding amount of this DSL to € 10.16 billion.

Fourth quarter

The DSTA announced in its Q4 Quarterly Outlook that the expected funding need for 2023 was further decreased to € 74.9 billion. The main reasons for the lower funding need were variations in tax income and social security contributions, lower than expected spending on the energy price cap and underspending (i.e. the government being unable to carry out all planned expenditures). Given the updated estimated borrowing requirement, the DSTA lowered its expected call on the capital market in 2023 to at least € 46 billion. On 17 October the DSTA launched its new 20-year green bond DSL 3.25% 15 January 2044 via a DDA. In this DDA an amount of € 4.98 billion was issued at a yield of 3.35%. At closing of the DDA, the bids in the book had reached € 18.2 billion, resulting in a bid-to-cover ratio of 3.67. Of the

total amount allocated 76% went to real money accounts and 24% went to 'other' or so-called fast money accounts. Furthermore, the DSTA reopened in October for the third time the DSL 2.50% 15 July 2033 bringing the total outstanding amount of this DSL to € 12.16 billion. In the Quarterly Outlook the DSTA announced it would be designating one remaining auction moment in November as optional. However, the DSTA decided not to exercise this option. In the end, the total capital market issuance in nominal terms in 2023 (up to and including November) was € 46.31 billion. The actual cash inflow from these issuances was around € 5 billion lower than the nominal amount, due to below par issuances. The weighted average yield of the issuances in 2023 was 2.79% which is a significant increase in comparison with recent years, as can be seen in figure 9.

Figure 8 – Cumulative capital market issuance in 2023 (€ billion)

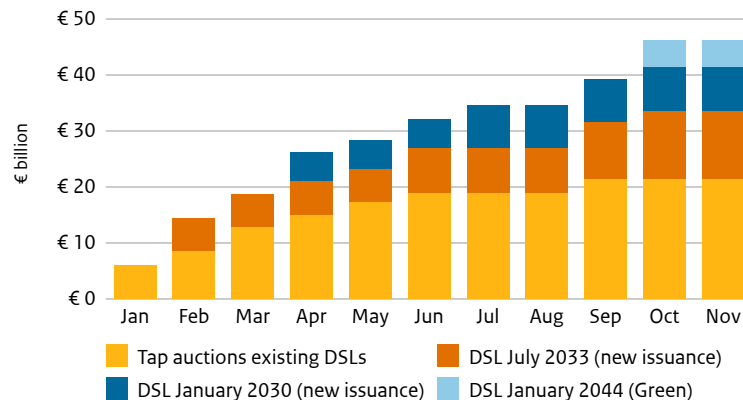
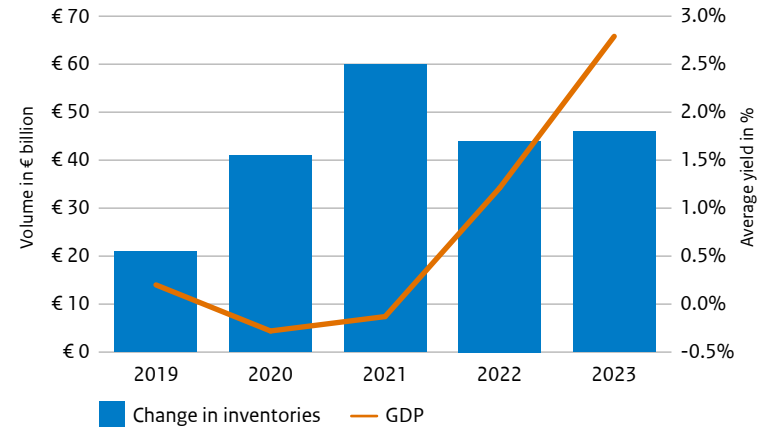


Figure 9 – Yearly average yield of capital market issuances 2019 – 2023 (€ billion)



3.1.2 Money market

The DSTA uses various funding instruments in the money market. Cornerstone of these instruments are the Dutch Treasury Certificates (DTCs). The money market historically serves as a buffer when it comes to accommodating changes in the funding need throughout the year. In 2023, the cash position saw large improvements in the course of the year due to higher tax revenue among other things. Consequently, the DSTA reduced its call on the money market. The end-of-year money market volume is now expected to end up at € 24.4 billion at the end of 2023 which is lower than the estimate that was indicated in the funding plan for 2023. At the same time, the indicated money market volume had initially been set at a relatively high level to accommodate possible improvements in the cash balance. This choice reflects the buffer function of the money market.

The DSTA had regular money market issuances through its DTC programs where auction dates typically contained both a shorter-dated program and a longer-dated program. Figure 10 shows a slight decrease of the outstanding amount of DTCs over the course of 2023. Until 6 December 2023 the weighed average yield in auctions was 3.24%, which is a significant increase compared with previous years, as can be seen in figure 11.

Figure 10 - Amounts outstanding in Dutch Treasury Certificates in 2023 (€ billion)

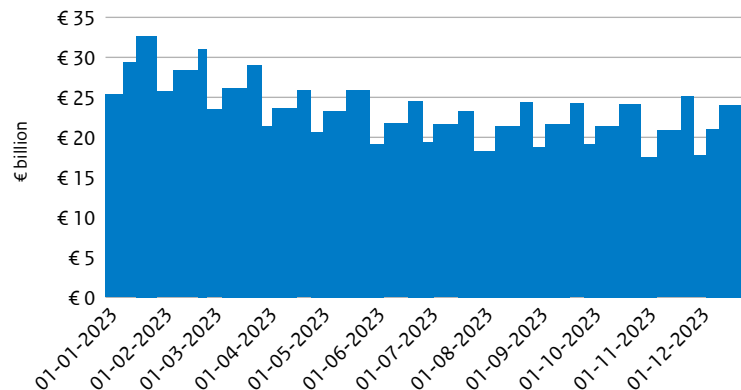
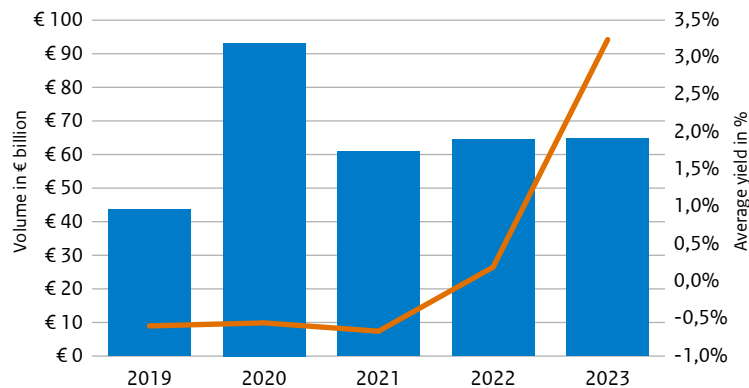


Figure 11 – Yearly average yield of DTC issuances 2019 – 2023 (€ billion)



In addition to DTCs, the Global Commercial Paper program continues to be an important instrument for the DSTA. The program adds flexibility since maturity, currency of denomination and timing of the issuance can be tailored to specifically suit both the investors and the DSTA. Global Commercial Paper is issued as:

- Euro Commercial Paper (ECP), available for non-US investors and issued in euros, US dollars, British pounds, Swiss francs and Norwegian kroner.
- US Commercial Paper (USCP), available for US investors and issued in US dollars.

Until 8 December the DSTA issued cumulatively € 102 billion in ECP and USCP, compared to € 41 billion in 2022, € 39 billion in 2021, € 63 billion in 2020 and € 108 billion in 2019. The majority of this year's issuance was in euros (67% of the total amount). Foreign currencies are hedged against the euro to eliminate foreign exchange risk. The Global Commercial Paper program, with various types of investors with appetites for different maturities, has proven to be of value to the DSTA and its investors.



3.2 Policy framework debt management 2020-2025

The purpose of the DSTA's policy framework on debt management is to finance debt at the lowest possible cost at an acceptable risk to the budget. With the 2020-2025 framework, the DSTA has flexibility in order to respond to changing circumstances, whilst adhering to its core principles of consistency, transparency and liquidity. In 2023 the DSTA conducted its planned bi-annual internal review of the policy framework (see box).

Interest rate risk indicators

The policy framework contains two interest rate risk indicators:

- The average maturity of the debt portfolio, which is defined as the average time to refixing interest rates of debt, swaps and cash. This policy framework states that the average maturity should reach a minimum of 8 years at the end of 2025. Each year the DSTA also defines a yearly target for the average maturity.
- The 12-month refixing amount, which is defined as the nominal amount of debt, swaps and cash on which interest rates need to be refixed within the next twelve months. The annual average of this amount should not exceed 25% of the State debt.

The average maturity of the debt portfolio limits the cumulative interest rate risk over all future years, contributing to multi-annual stability of interest rate costs. Additionally, the cap on the 12-month refixing amount prevents too much concentration of interest rate risk in a single year.

Developments in 2023 and targets for 2024

During 2023 it became clear that the funding need was lower than anticipated at the start of the year. Part of the initial decrease in the funding need was absorbed by the money market which serves as a buffer. With these adjustments the average maturity and 12-month refixing amount still fell comfortably within the targets set for 2023, being a minimum average maturity of 7.9 years and an amount of no more than 25% of the State debt subject to 12-month refixing. Overall a further lengthening of the average maturity of the portfolio was effected by 0.4 years over 2023.

The DSTA annually defines its yearly maturity target based on market circumstances, the development of the funding need and the debt composition. For 2024 the DSTA aims to reach a minimum average maturity of 8.0 years by the end of the year.

Table 3 - Targets and realisations of the DSTA's risk indicators in the 2020-2025 framework

	Realisation 2023 (forecast)	Target 2024
Average maturity (end of year)	8.5 years	A minimum of 8.0 years
12-month refixing amount (% of state debt)	15%	At most 25%



Bi-annual review policy framework

The DSTA carried out its second bi-annual internal review of the policy framework in 2023 as part of the regular review cycle. In 2025 the DSTA will conduct an external review of the policy framework.

Based on the outcomes of the 2023 review the DSTA has decided to keep the goals for the interest rate risk indicators unchanged:

- the **average maturity** target of a minimum of 8 years in 2025. Following the previous external framework review in 2019, the DSTA raised the target for the average maturity. This extension of the maturity mitigates the costs of rising interest rates. Since 2021 interest rates have risen significantly. At the same time, the difference between short and long term interest rates (i.e. the term premium) has remained at low levels. Under these conditions the DSTA has decided to maintain the current target.

- the **12-month refixing amount** remains at a maximum of 25%. The current target provides a balanced trade-off between risk and flexibility and the target is in line with other euro area member states.

3.3 Funding plan 2024

Funding need

The funding need for the DSTA in 2024 is currently estimated to amount to approximately € 76 billion. However, this estimate is surrounded by a high degree of uncertainty due to several factors in the government finances. The elections of November 2023 and the subsequent formation of a new government may have an impact on the actual funding need.

The borrowing requirement for the DSTA consists of three main components. Firstly, it is determined by the redemptions of long-term debt instruments. In 2024, there are two maturing DSLs which need to be refinanced for a total amount of € 32.75 billion. Secondly, short-term debt instruments outstanding at the end of 2023 will roll over to 2024 and thus need to be refinanced. The net money market ultimo 2023 (being the outstanding short-term debt instruments minus cash deposits held at the central bank and in the market) is estimated to amount to approximately € 24.4 billion. The expected cash deficit for 2024 being an amount of € 18.5 billion makes up the third main component of the borrowing requirement. Combined, these amounts result in a preliminary borrowing requirement for 2024 of approximately € 76 billion, as illustrated in Table 4.

Table 4 - Estimated borrowing requirement for 2024

Estimated borrowing requirement	Amount (€ billion)
Capital market redemptions 2024	32.8
Net money market ultimo 2023 (excluding cash collateral)	24.4
Cash deficit 2024*	18.5
Total borrowing requirement 2024	75.7

* A cash deficit is shown as a positive number as it increases the total borrowing requirement

At the beginning of January 2024, we will communicate a first update of the borrowing requirement to reflect the net money market ultimo 2023.

Distribution between capital and money market issuances

The DSTA continues to ensure liquidity across the curve by creating a balance between the call on the capital and the money markets in 2024. Issuances in 2024 will continue to contribute to the DSTA's goal to maintain the average maturity of the debt, swap and cash portfolio at a minimum of eight years until 2025. The DSTA intends to have the average maturity of the portfolio at the end of 2024 at a minimum level of 8.0 years. Given the estimated borrowing requirement of approximately € 76 billion, the DSTA foresees issuances of DSLs on the capital market for an approximate (nominal) amount of around € 40 billion. Fluctuations in the funding need will primarily be absorbed by the call on the money market. However, the DSTA also commits to maintain liquidity in the money market. Therefore, in case of a significantly lower funding need, the call on the capital market could also be reduced.

Capital market issuance in 2024

The aforementioned call on the capital market of around € 40 billion (in nominal amount) will consist of the following issuances (Table 5):

Table 5 – DSL issuance in 2024

DSL issuance	Indicative amounts (€ billion)
New 10-year DSL 2034	12
DSL Jan 2054 (via DDA)	5
Reopening Green DSL 2044	4
Reopening DSL Jan 2030	4
DSL - To be determined	15
Total DSL funding	40

1. A new 10-year benchmark bond, the DSL 15 July 2034, will be launched by means of a DDA in February or March 2024. The DSTA is committed to bring the outstanding volume of this bond to a minimum of around € 12 billion by the end of the year. The exact timing of the launch will be decided upon in consultation with the DDA-advisors appointed for this DSL and the Primary Dealers.
2. The DSTA will reopen the 30-year benchmark bond, DSL 15 January 2054 by means of a DDA. The exact timing and size will be decided at a later stage in consultation with the DDA-advisors appointed for this DSL and the Primary Dealers.
3. The DSTA will reopen the 7-years benchmark bond DSL 15 January 2030 on the first auction slot of the year, 9 January 2024. The outstanding amount in this bond currently stands at € 7.8 billion. The DSTA is committed to increase the outstanding volume of this bond to a size of around € 12 billion within 12 months after the initial issuance. This bond will thus be reopened once more in the first quarter of the year.
4. The Green DSL 15 January 2044 will be re-opened for an amount of approximately € 4 billion in 2024.
5. In order to be able to accommodate market demand and in line with the DSTA's goal to ensure and promote liquidity across the curve, the DSTA opts to leave an amount of € 15 billion of the call on the capital market undetermined for now. The DSTA has the option to reopen DSLs in all maturity buckets, irrespective of the already existing outstanding volumes. Moreover, the DSTA could also decide to issue more than the indicated volumes in the benchmark DSLs that are to be launched in 2024. The DSTA will consult the Primary Dealers on the choices regarding these issuances.

Traditionally, DSL auctions are scheduled on the second and fourth Tuesday of the month. In the first quarter of 2024 all six auction dates will be used. As mentioned, the DSTA will start the year with a tap auction of the DSL 15 January 2030 on 9 January 2024 with a targeted volume of € 2 to € 2.5 billion. Moreover, the DSTA will launch the new 10-year DSL (the DSL 15 July 2034) by means of a DDA in the first quarter. The exact date of the auction will be announced at a later stage.

All other possible issuance dates in this period will be used to reopen existing DSLs. Issuance calendars for the remainder of the year will be published shortly before the start of a new quarter.

Collective action clauses

Due to the possible introduction of new so-called collective action clauses (CACs), the DSTA may update the terms for DSLs which are newly issued in 2024. The exact introduction date of the new CACs is currently not clear as it depends on the full ratification of the European Stability Mechanism Treaty Amendments in all Eurozone Member States. As and when a new DSL is launched to which the new clauses apply, the DSTA will indicate in the accompanying conditions which CACs apply to that DSL. See our website [English.dsta.nl/subject/cacs](https://www.english.dsta.nl/subject/cacs) for further information on the clauses.



Table 6 – DSL calendar for the first quarter of 2024

Auction date	Details	Target volume (€ billion)
9 January	Reopening DSL 15 January 2030	2-2.5
23 January	Tap of an existing DSL	To be announced*
<i>The following bonds are scheduled to be auctioned in February and March of 2024</i>		
	New 10-year bond: DSL 15 July 2034	4-6
	Reopening Green DSL 15 January 2044	To be announced*
	Tap of an existing DSL	To be announced*
	Tap of an existing DSL	To be announced*

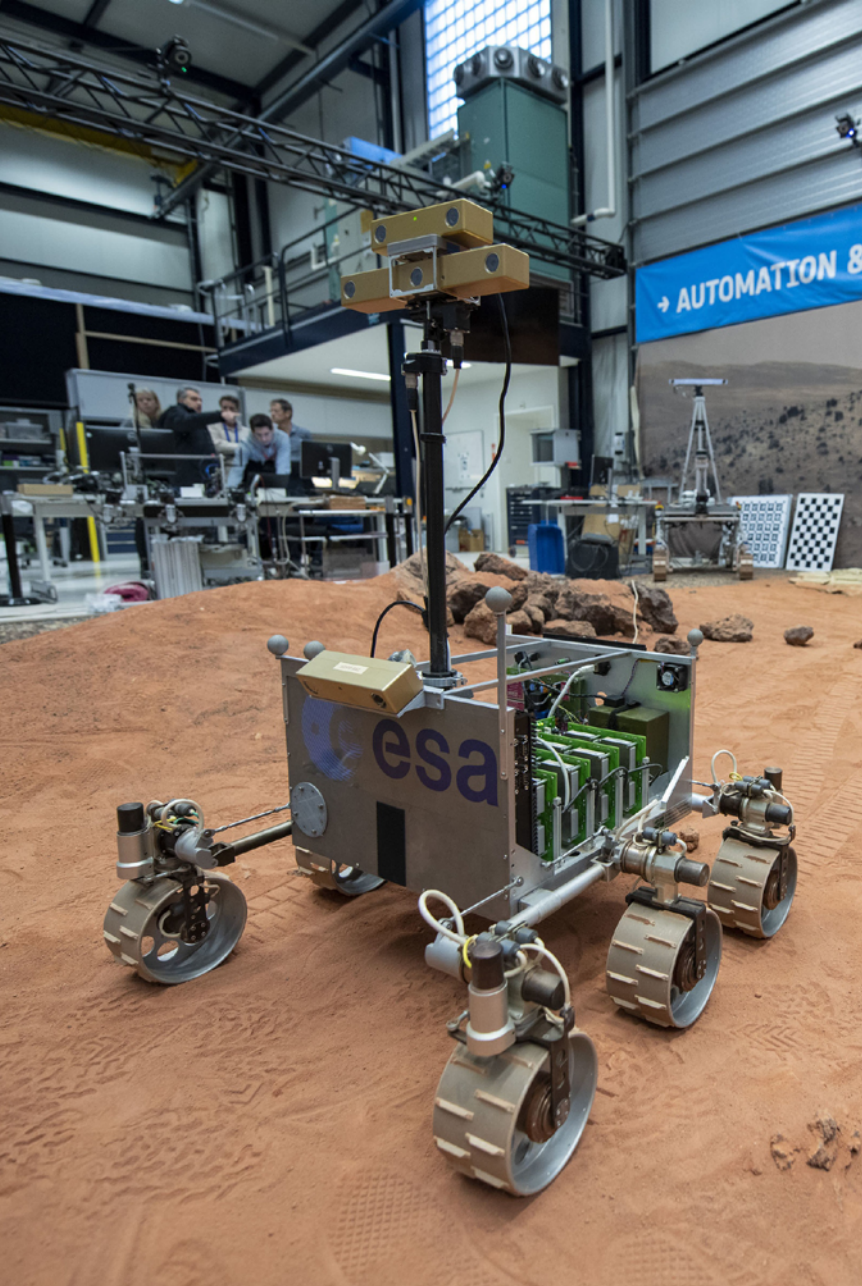
* Target volume and other details will be announced at a later stage, but no later than the Wednesday prior to the auction (t-6).

Money market issuance in 2024

The DSTA will regularly issue DTCs on the money market. The schedule for 2024 follows a similar pattern as in previous years, where auction dates typically contain both a shorter-dated program and a longer-dated program. The DSTA holds the right to make any adjustments to the calendar warranted by market developments. These will be announced in a timely manner by the DSTA.

Auctions are held on the first and third Monday of the month. The only exception is the first auction in January, which has been postponed by one week due to New Year's Day on Monday.

Similar to previous years, there will be no DTC-program maturing in December 2024 as this appears to be a less attractive program for many market participants. Moreover, to better meet investor demand at month



end, DTC programs do not mature on the last business day of the month, but the second-to-last business day. This means for example that the June 2024 DTC program will mature on Thursday 27 instead of Friday 28 June.

Table 7 – DTC calendar for the first quarter of 2024

Auction date	Settlement date	Shorter-dated program	Longer-dated program
08 January 2024	10 January 2024	27 March 2024	27 June 2024
15 January 2024	17 January 2024	29 April 2024	27 June 2024
05 February 2024	07 February 2024	30 May 2024	30 July 2024
19 February 2024	21 February 2024	29 April 2024	30 July 2024
04 March 2024	06 March 2024	27 June 2024	29 August 2024
18 March 2024	20 March 2024	30 May 2024	29 August 2024

Note: announcement of all auction details is on the Wednesday prior to the auction date (t-5).



Retail bonds

Since the second half of 2022 the issuance of retail bonds has grown in the euro area. Recent examples include issuances by the Belgian and Italian government. Retail government bonds are aimed at individual investors rather than institutional investors.

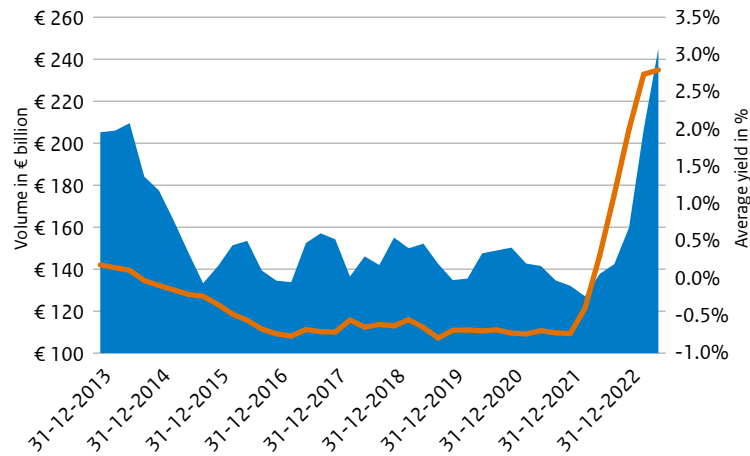
In September 2023 the Belgian government opened a one-year retail bond (*Staatsbon*) and raised € 21.9 billion. The size of the interest by investors was a surprise to most in the financial markets. The partial tax exemption that was introduced for this bond may have added to the increased attention. For the recent issuance of a 5-year retail bond and an 8-year retail bond on 11 December 2023 interest was substantially lower as an amount of € 41.9 million was raised. The Italian government has raised a total of € 18.2 billion in retail bonds (*BTP Valore*) in June 2023. Albeit recent increased attention,

Belgium and Italy have a longer standing tradition of issuing retail bonds. As of the end of October 2023, bonds targeted exclusively at retail investors make up around 2-5% of the total debt outstanding in these countries.

The popularity of government bonds amongst retail investors is also reflected in the holdings of households. The amount of government debt held by households in the euro area grew by 79% between June 2022 and June 2023. Holdings increased from € 138 billion to € 245 billion during this period. This increase coincided with the rise of interest rates (see figure 12). On average, the yield on 2-year euro area government bonds increased from 0.45% around June 2022 to 2.79% a year later. Within the European Union retail ownership of government debt varies. After the third quarter of 2023 Portugal's debt management office reports citizens own around 16% of government debt, while this figure is nearly 2% in neighbouring Spain, based on data reported by the Spanish Debt Management Office (up to August 2023).

Retail bonds can add to the diversification of the investor base for issuers of government debt but can also have implications for the liquidity of traditional bonds and interest rate risk. As with any other financial instrument, investing in a retail bond carries a risk which may or may not be suitable for an investor. The DSTA currently has no plans to issue a retail bond.

Figure 12. Household holdings of government issued debt in the eurozone area (in EUR billions) and the 2-year spot rate for euro area government bonds (in %)



Source: ECB



An aerial photograph of a tropical coastline. The top left shows clear turquoise water meeting a white sandy beach. The middle section is a lush green forested area. The bottom right shows a dark grey rocky coastline with turquoise water. The text '4. Primary dealers and secondary markets' is overlaid in white on the green forest area.

4. Primary dealers and secondary markets

4.1 Primary dealers and commercial paper dealers in 2023 and 2024

Primary dealers and commercial paper dealers in 2023 and 2024

Since 1999, the DSTA uses Primary Dealers (PDs) for the promotion and distribution of DSLs and DTCs in both the primary and secondary market of Dutch government debt. PDs are selected for a period of one year and are bound by the PD conditions. First and foremost, PDs have the exclusive right to participate in all auctions of the DSTA, including DDAs, tap auctions and DTC tenders. In addition, access to the DSTA's repo facility for DSLs and DTCs is reserved to PDs. At the same time, PDs are obliged to provide continuous bid and offer prices for Dutch government securities and must report periodically on their secondary market activities. In case of severe misconduct by a PD, the DSTA is entitled to suspend the rights of this PD. Residual short-term funding needs of the Dutch State are met through the issuance of Commercial Paper (CP). For these issuances, the DSTA uses Commercial Paper Dealers (CPDs). CPDs are divided into Euro Commercial Paper Dealer and US Commercial Paper Dealers.

Developments and ranking in 2023

PDs and CPDs are selected based on their performance in the relevant markets for Dutch State securities in previous years. In addition, the DSTA analyses the business plans and ambitions submitted by the (prospective) dealers. The DSTA ranks its PDs based on a duration weighted system for primary issuance. Weighting factors are assigned in relation to the DSL maturities. The DSTA believes that a weighted issuance ranking provides the right incentives for PDs to achieve a balanced demand for DSLs across different maturities. Furthermore, the weighted issuance method optimally reflects the performance and commitment of a PD vis-à-vis the DSTA, given

that bonds with a higher duration entail more risk for a financial institution and face more challenging market circumstances than shorter-dated bonds. In contrast, DTC rankings are based on unweighted primary market volumes in euro equivalents. Table 8 shows this year's top performers in DSLs and DTCs.

Table 8 - Dealer rankings 2023

Top 5 PDs for DSLs in 2023	
1	ABN AMRO Bank
2	Barclays
3	Citigroup
4	Jefferies
5	Goldman Sachs

Top 5 PDs for DTCs in 2023	
1	ABN AMRO Bank
2	Rabobank
3	HSBC
4	Bank of America
5	Barclays

Dealer selection and ranking 2024

In 2024 the composition of our counterparties will remain largely consistent with previous years. The only change is that Bank of America will join the DSTA's network of Commercial Paper Dealers in 2024. As a result, the DSTA presents the following financial institutions as Primary Dealer and Commercial Paper Dealer for 2024.

Table 9 - Dealers DSTA 2024

Bank	PD	ECP	USCP
ABN AMRO Bank	X	X	
Bank of America	X	X	
Barclays	X	X	X
Bred Banque		X	
Citigroup	X	X	X
Goldman Sachs	X		
HSBC Continental Europe	X		
ING Bank		X	
Jefferies	X		
JP Morgan	X	X	X
NATIXIS	X		
NatWest Markets	X	X	
Nomura	X		
Nordea	X		
Rabobank	X	X	X

The DSTA will continue to use a duration weighted system for primary issuance to rank its PDs in 2024. Next year's weighting factors for the different maturity buckets are shown in Table 10.

Table 10 - Duration weighted DSL

DSL maturing in...	Weighting factor
2024 - 2026	2
2027-2028	3
2029-2030	6
2031-2033	8
2034-2037	10
2038-2047	14
2048 - 2054	20

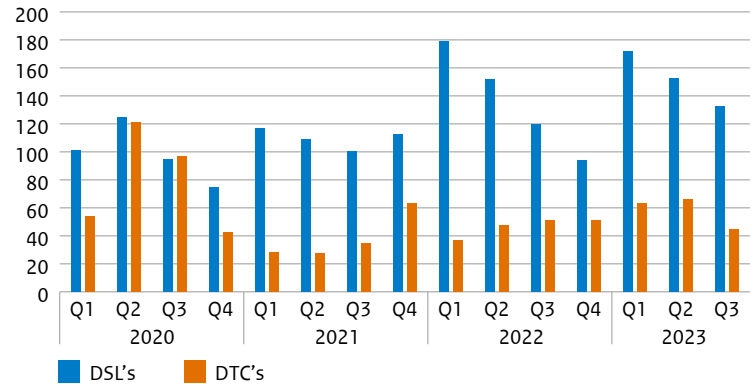
4.2 Liquidity and secondary markets

Secondary market transactions

The DSTA requires Primary Dealers to provide monthly data on their secondary market activity in Dutch State securities (DTC and DSL). These transaction data contain information on turnover, maturity, type of counterparty, region and trading platform. Although the data only covers trades by the DSTA's Primary Dealers, the acquired data presents a general overview of trends in the secondary market. Secondary market trade data is also made available on the [DSTA's website](#).

Figure 13 shows that turnover volumes in the secondary market in 2023 have been € 456.9 billion on an aggregate level for DSLs and € 174 billion for DTCs in the first three quarters of the year. Compared to the same period last year, with DSL volumes at € 449.8 billion and DTC volumes at € 136 billion, there has been an increase in DSL and DTC turnover volume of 1.6% and 27.9% respectively. Moreover, primary issuance volume increased by 6% to € 39.3 billion in 2023 compared to 2022.

Figure 13 – Turnover volumes of DSL and DTC



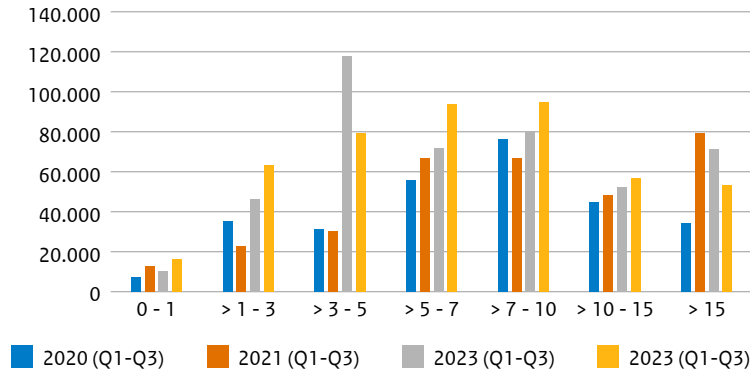
Source: DSTA Secondary Market Trade Reports

Figure 14 shows data on DSL turnover in the secondary market by residual maturity. To be able to compare the activity in consecutive years, the turnover total for each year is based on the first three quarters of the year.

In 2023 the DSL issuance volume of bonds that fall into the >3-5-year maturity bucket was slightly higher compared to 2022. However, after the steep increase in DSL turnover in 2022 in the >3-5-year maturity bucket, compared to 2021, which was partially caused by the large issuance of the DSL January 2026, turnover in this bucket dropped by 33% in 2023. The data indicates that the liquidity in this bucket is still high in 2023 when taking into account the issuance volume. Furthermore, all buckets, except the >3-5

and >15-year maturity buckets, have seen an increase in turnover in 2023 compared to 2022. With an 88% share, “Inter Dealer Broker” is the most dominant investor type in this category.⁹

Figure 14 - Secondary market DSL turnover by residual maturity (€ billion)

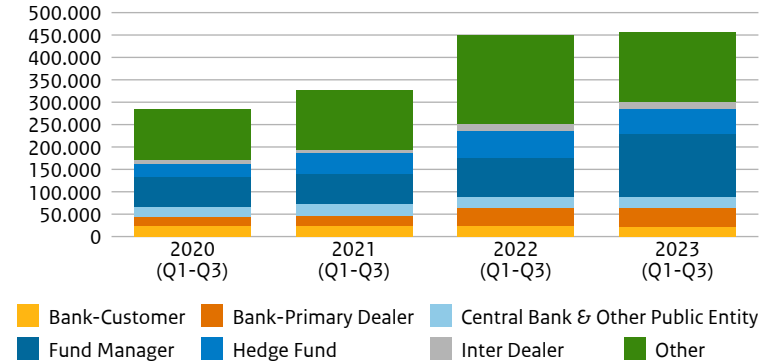


Source: DSTA Secondary Market Trade Reports

Figure 15 presents the reported DSL turnover by investor type. Where there are no notable differences in the turnover distribution among the investor categories between 2021 and 2022, there are significant differences in two categories in 2023.

The most apparent difference is found in investor type “Fund Manager”, as 30% of all turnover is represented by this category in 2023, whereas in 2022 this was 19%.¹⁰ Moreover, in 2023, category “Other” makes up 34% of the total turnover, which is a decrease of 10 percentage point compared to 2022.¹¹ Although the turnover distribution within category “Other” in 2023 is similar to 2022, the total turnover size of this category dropped by 21 percentage point to € 156.8 billion. This was caused by a significantly lower turnover for investor type “Inter Dealer Broker”, which dropped from € 177.1 billion in to € 138.3 billion. With an 88% share, “Inter Dealer Broker” is the most dominant investor type in this category.¹²

Figure 15 - Data on DSL turnover by investor type (€ billion)



Source: DSTA Secondary Market Trade Reports

⁹ The category “Inter Dealer Broker” is a financial intermediary, including central counterpart, electronic and voice brokerage, on a non-name give up basis.

¹⁰ The category “Fund manager” includes asset management companies, mutual funds, real estate investment companies and foundations.

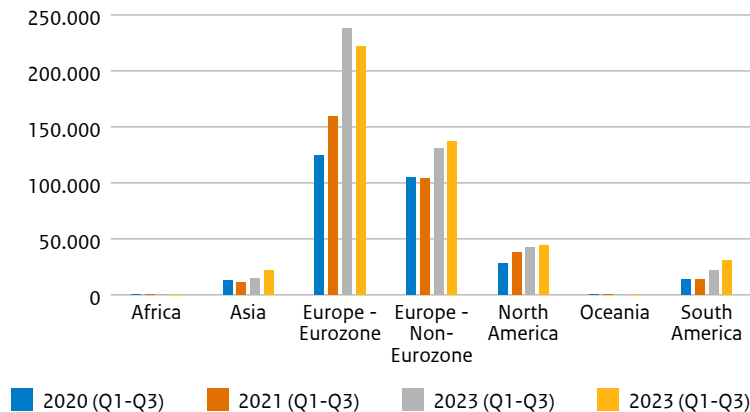
¹¹ The category “Other” contains the following investor types: Corporate, Debt Management Office, Insurance Company, Inter Dealer Broker, Pension Fund, Retail and Bank Connected Entity.

¹² The category “Inter Dealer Broker” is a financial intermediary, including central counterpart, electronic and voice brokerage, on a non-name give up basis.

A geographical breakdown of secondary market turnover volumes, including inter-dealer transactions, is shown below in figure 16.

As in previous years, the Eurozone made up most of the activity in the secondary market (49%), followed by the non-Eurozone European countries (30%). The latter category mainly consists of activities by Primary Dealers with counterparties that are based in the United Kingdom (89%). There is a slight decrease in secondary market turnover activity in the Eurozone. However, the geographical distribution in 2023 is similar to 2022. In absolute terms, turnover volumes of Asia and South America are relatively modest. However, we see a steady and notable increase in these turnover volumes from these regions over the last three years.

Figure 16 - Geographical breakdown of secondary market turnover (€ billion)



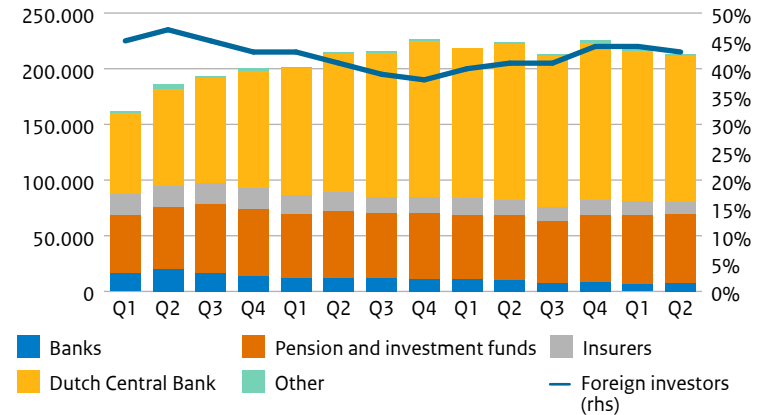
Source: DSTA Secondary Market Trade Reports

Holdings of Dutch government securities by investor type

The Dutch Central Bank (DNB) publishes quarterly data on Dutch government securities holdings. The data contains information on total investor holdings and holdings per residual maturity.

Figure 17 shows holdings of Dutch government securities split between domestic investors (stacked bars) and foreign investors (dark blue line). Domestic investors are further divided into various categories. Eligible securities include DSLs, DTCs and ECP issued by the Dutch State.

Figure 17 - Holdings by domestic (lhs, € billion) and foreign investors (rhs) of Dutch government securities



Source: DNB, Dutch government securities holdings data, November 2023

The total notional of tradeable securities at the end of the second quarter of 2023 amounted to € 373 billion. When compared to the same period of the previous year, this is only a very slight decrease of € 2 billion. In the distribution between domestic and foreign holdings, there is an increase in foreign holdings, which over that period increased from 41% to 43%. As a result, 57% of Dutch state debt is still owned by domestic investors.

In relation to these domestic investors, there is a trend observable of decreased holdings by DNB. DNB holdings steadily increased over the year 2021, to peak at 37.47% of the total outstanding debt (€ 375.54 billion) in the second quarter of 2022. This was to a large extent the consequence of the establishment of the public sector purchase program (PSPP) and Pandemic emergency purchase program (PEPP) buying program of the ECB.

Due to a normalisation of monetary policy, with regard to PSPP and PEPP, DNB holdings are steadily dropping to 35.12% at the end of the second quarter in 2023. This corresponds to a decrease in holdings from € 140.7 billion to € 131.0 billion. Pension funds, fund investors and foreign investors have slightly increased their holdings from 2022 levels.

Market liquidity remains an important topic and therefore DSTA continues to stay in close contact with Primary Dealers to monitor if there are factors influencing the liquidity of both Dutch government bonds and bills in the market.



Statistical appendix



The information presented below reflects the situation at 30 November 2023, unless otherwise indicated. Please see our website for the latest [statistics](#).

1 Changes in long-term debt in 2023

In thousands of euros

Position as at 31 December 2022		355.674.805
New issues in 2023		
Public bonds	46.317.946	
Private placements	0	
Redemptions in 2023		
Regular redemptions		
Public bonds	31.491.090	
Private placements	32.061	
Early redemptions		
Public bonds	185.045	
Private placements	0	
Position as at 30 November 2023		370.284.555

2 Interest rate swaps

Position as at 30 November 2023, in millions of euros

Bucket	Net nominal	Pay or receive
(year of maturity)	amount	(net)
2023	140	Receive
2024	4.072	Receive
2026	3	Receive
2027	750	Receive
2028	680	Receive
2033	500	Receive
2035	1.000	Receive
2036	75	Receive
2037	510	Receive
Net total	7.730	Receive

3 Key figures on individual bonds in 2023

In thousands of euros

	Total	Issues	Redemptions	Total	Isin code
	31 December 2023			30 November 2023	
3,75 pct DSL 2006 due 15 January 2023	4.263.000		4.263.000		NL0000102275
7,50 pct DSL 1993 due 15 January 2023	8.240.127		8.240.127		NL0000102077
Principal 15 January 2023	1.565.000		1.565.000		NL0000103000
1,75 pct DSL 2013 due 15 July 2023	17.507.963		17.507.963		NL0010418810
0,00 pct DSL 2017 due 15 January 2024	15.378.277		50.000	15.328.277	NL0012650469
2,00 pct DSL 2014 due 15 July 2024	17.415.132		50.000	17.365.132	NL0010733424
0,25 pct DSL 2015 due 15 July 2025	19.925.159			19.925.159	NL0011220108
0,00 pct DSL 2022 due 15 January 2026	8.303.000	6.505.000		14.808.000	NL0015000QL2
0,50 pct DSL 2016 due 15 July 2026	18.964.051			18.964.051	NL0011819040
0,00 pct DSL 2020 due 15 January 2027	15.762.000			15.762.000	NL0015031501
0,75 pct DSL 2017 due 15 July 2027	15.380.926	2.325.000		17.705.926	NL0012171458
5,50 pct DSL 1998 due 15 January 2028	13.028.413		45	13.028.368	NL0000102317
0,75 pct DSL 2018 due 15 July 2028	17.126.941	2.205.000		19.331.941	NL0012818504
0,00 pct DSL 2021 due 15 January 2029	12.582.000			12.582.000	NL0015000LS8
0,25 pct DSL 2019 due 15 July 2029	12.215.587			12.215.587	NL0013332430
2,50 pct DSL 2023 due 15 January 2030		7.800.000		7.800.000	NL0015001DQ7
0,00 pct DSL 2020 due 15 July 2030	14.038.462			14.038.462	NL0014555419
0,00 pct DSL 2021 due 15 July 2031	15.064.805			15.064.805	NL00150006U0
0,50 pct DSL 2022 due 15 July 2032	13.615.815			13.615.815	NL0015000RP1
2,50 pct DSL 2012 due 15 January 2033	15.507.900			15.507.900	NL0010071189

	Total	Issues	Redemptions	Total	Isin code
	31 December 2023			30 November 2023	
2,50 pct DSL 2023 due 15 July 2033		12.159.993		12.159.993	NL0015001AM2
4,00 pct DSL 2005 due 15 January 2037	17.977.427			17.977.427	NL0000102234
0,00 pct DSL 2021 due 15 January 2038	7.992.052	2.485.000		10.477.052	NL0015000B11
0,50 pct DSL 2019 due 15 January 2040	15.690.370			15.690.370	NL0013552060
3,75 pct DSL 2010 due 15 January 2042	18.839.910			18.839.910	NL0009446418
3,25 pct DSL 2023 due 15 January 2044		4.981.953		4.981.953	NL0015001RG8
2,75 pct DSL 2014 due 15 January 2047	20.510.187			20.510.187	NL0010721999
0,00 pct DSL 2020 due 15 January 2052	13.623.724	4.176.000		17.799.724	NL0015614579
2,00 pct DSL 2022 due 15 January 2054	4.953.754	3.680.000		8.633.754	NL00150012X2
	355.471.983	46.317.946	31.676.135	370.113.793	

4 Short-term debt and € STR swaps in 2023

In millions of euros

Key figures of T-bills	Total	Issues	Expirations	Total	Isin code
	31 December 2023			30 November 2023	
DTC 2023-01-30	6.890		6.890		NL0015000YB7
DTC 2023-02-27	7.590		7.590		NL00150010N7
DTC 2023-03-30	5.640	2.000	7.640		NL00150012C6
DTC 2023-04-27	1.830	3.340	5.170		NL00150015I6
DTC 2023-05-30	1.820	4.950	6.770		NL00150017E1
DTC 2023-06-29	1.580	3.570	5.150		NL00150018K6
DTC 2023-07-28		5.060	5.060		NL0015001AL4
DTC 2023-08-30		5.650	5.650		NL0015001C92
DTC 2023-09-28		5.060	5.060		NL0015001DN4
DTC 2023-10-30		6.630	6.630		NL0015001F08
DTC 2023-11-29		7.360	7.360		NL0015001GL1
DTC 2024-01-30		7.530		7.530	NL0015001L75
DTC 2024-02-28		4.000		4.000	NL0015001MS4
DTC 2024-03-27		2.450		2.450	NL0015001OM3
DTC 2024-04-29		3.770		3.770	NL00015001S60
	25.350	61.370	68.970	17.750	

Commercial Paper	Total	Issues	Expirations	Total
	31 December 2023			30 November 2023
CP EUR	1.733	66.037	67.770	0
CP USD	15.894	32.662	45.949	2.607
CP GBP	5.281	942	6.224	0
CP CHF	0	0	0	0
CP NOK	0	0	0	0
	22.908	99.641	119.942	2.607

Other short-term debt	Total	Issues	Expirations	Total
	31 December 2023			30 November 2023
Deposit borrow	250	89.505	89.426	329
Deposit lend	-100	-116.700	-116.800	0
Deposit borrow USD	243	0	243	0
Eurex repo	0	-283.638	-278.858	-4.780
Buy Sell Back	0	-94	-94	0
Sell Buy Back	213	57.144	56.819	538

€ STR swaps position as of 30 November 2023

Bucket (year of maturity)	Net nominal amount	Pay or receive (net)
2023	0	
2024	0	

Photo captions



1 Sunrise at a standstill: As the horizon awakens, the windmills pause.



2 The Bakkeveen dunes bloom in the face of the sunrise.



3 Misty fields merge with the July horizon, brightened by the early morning light.



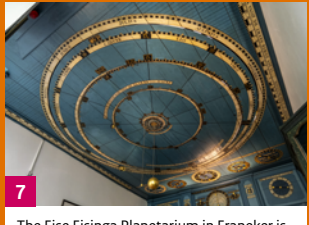
4 DALL-E 3 captures a serene Dutch landscape featuring a colourful sunset.



5 At Voorburg station, a train from The Hague emerges along the track. Among the eligible expenditures of 2023's new Green Bond is € 4,710 million allocated to clean transportation, such as electrified railway infrastructure.



6 Many bridges adorn the river Maas, connecting the two sides of the centuries old city Maastricht.



7 The Eise Eisinga Planetarium in Franeker is the oldest still operating planetarium in the world and has shown visitors a glimpse beyond the horizon for hundreds of years.



8 The Ermelosche heath is in bloom as two tracks lead to the horizon.



9 Only the electricity masts peer out above the clouds in the Zeeland village of Krabbendijke.



10 The South of the Netherlands was treated to a spectacular horizon this November, as a rare Aurora Borealis appeared over the town of Mierlo.



11 Rotterdam's skyline pierces the horizon in the winter.



12 Warm light overtakes the Marker Wadden in the early afternoon, providing an uninterrupted horizon. This artificial archipelago acts as a nature reserve in the IJsselmeer. The work on this archipelago started in 2016.



13 The European cycling championships took place in Emmen in September of 2023. A cyclist braves the headwinds as they race towards the finish on the horizon.



14 This artwork, depicting a classic Dutch polder, was created by DALL-E 3. In 2024, Generative AI will continue to broaden the horizon of art.

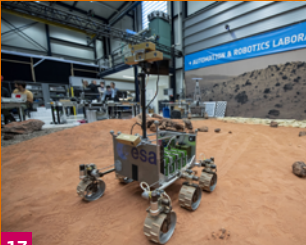
Photo captions



15 The dealing room of the Dutch State Treasury during the auction of the new Green DSL 2044 on 17 October 2023.



16 In the first quarter of the 17th century, Jan Brueghel the Elder emerged as a key Flemish painter, introducing novel styles like flower garland paintings, utopian landscapes, and gallery-themed art pieces. Pictured is his work "Landscape with Windmills".



17 The European Space Agency's ExoTeR rover, tested at ESTEC in Noordwijk, paves the way for the next era of Mars exploration, embodying the Netherlands' contribution to the quest for new horizons.



18 Johannes Vermeer's painting "Zicht op Delft" presents the viewer with a complex horizon of water, city and cloudy sky.



19 anorama Mesdag is an innovative panorama created by Hendrik Willem Mesdag in 1891 and shows visitors an uninterrupted panoramic horizon of Scheveningen Beach.



20 Bonaire, a special municipality of the Netherlands in the Caribbean, faces a changing horizon as climate change endangers the Saliñas, or salt flats, with drought.



21 The Dutch artist Mondriaan's Obelisk symbolises his crossing from early figurative painting into his trademark abstract art. Moving this horizon forward makes Mondriaan one of the most well-known artists of the 20th century.



22 Far from being a uniform landscape, the Dutch horizon in the south is marked by undulating hills, like this sunrise in Zuid-Limburg.

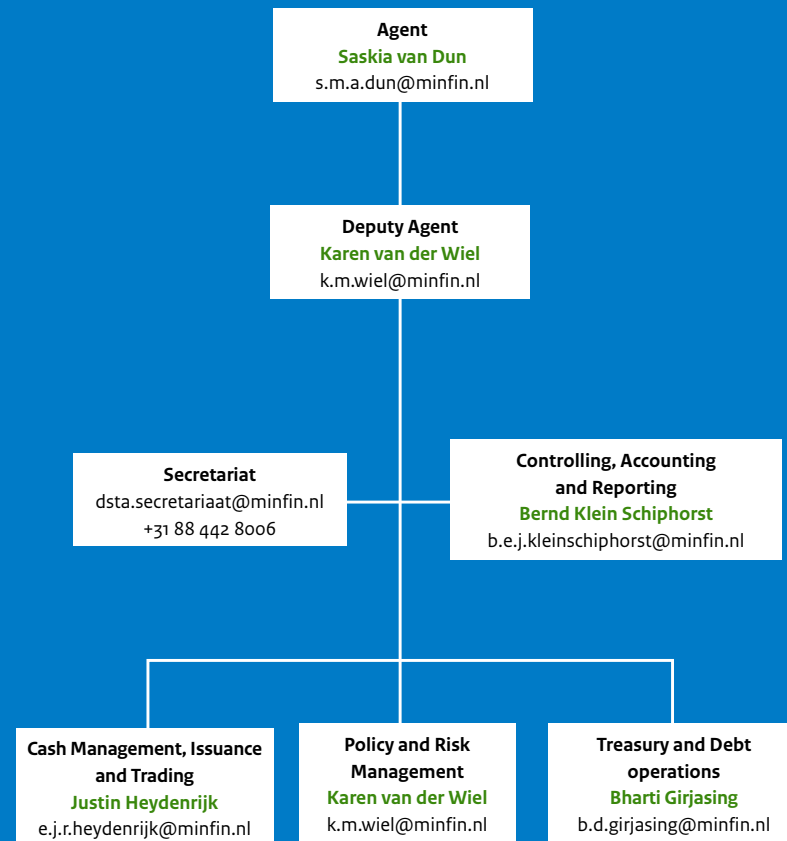


23 Far from being a uniform landscape, the Dutch horizon in the south is marked by undulating hills, like this sunrise in Zuid-Limburg.

Highlights of the DSTA Outlook 2024

- Estimated funding need of approximately € 75.7 billion in 2024.
- Estimated capital funding in 2024: € 40 billion (in nominal terms).
 - Launch of a new 10-year benchmark bond, the DSL 15 July 2034. Minimum issuance volume of approximately € 12 billion in 2024;
 - Reopening of the 30-year benchmark bond, DSL 15 January 2054, through a DDA for an amount of approximately € 5 billion in 2024;
 - Reopening of the Green DSL 15 January 2044 for an amount of approximately € 4 billion in 2024;
 - Reopening of the 7-year benchmark bond, DSL 15 January 2030 on 9 January 2024;
 - DSL issuances of € 15 billion ‘to be determined’ in order to respond to market demand and promote liquidity across the curve.
- If the funding need turns out to be higher or lower than currently estimated, the DSTA could increase or reduce the call on both the money and capital markets.
- Regular updates on borrowing requirements, funding plan and developments in the Dutch economy and budget through Quarterly Outlooks and press releases.

Contacts



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The cut-off date for data in the Outlook 2024 is 11 December 2023, unless otherwise specified.

Colophon

Design Xerox | OSAGE

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Artwork Photo 16: Het Noordbrabants Museum, 's-Hertogenbosch, on loan from the Cultural Heritage Agency of the Netherlands. Photo: Peter Cox; Photo 18:

Mauritshuis, The Hague; Photo 21: Kunstmuseum, Den Haag;

15 December 2023

