

Dutch State Treasury Agency Ministry of Finance

Outlook 2016



The Netherlands has a proportionally long coastline when compared to the rest of mainland Europe: the Netherlands ranks seventh¹ after Norway, Denmark, Greece, Finland, Croatia and Sweden. The tallest buildings in the country are situated in Rotterdam with the Maastoren (165 meter), New Orleans (158 meter) and Delftse Poort (151 meter) forming the country's top 3. The river Meuse (or Maas in Dutch), originates in France and runs through Belgium and the Netherlands. Of its total lenght of 925 km approximately 238 km run though the Netherlands, making it the longest river in the country.

One of the main goals of the new interest rate risk framework for the period 2016-2019 will be to lengthen the average maturity of the Dutch debt portfolio from 4.5 years at the end of 2014, to around 6.4 years in 2019. With the current historically low interest rate environment, especially for (Dutch) Government bonds, it makes sense to extend the average maturity and thereby lower the interest risks with almost negligible costs. Extending, lengthening and elongating are therefore the main themes of the photo theme of this Outlook.



As expressed in its coast/area ratio reported in 'Coastal and Marine Ecosystems – Marine Jurisdictions Coastline length' by the World Resources Institute.

Preface

In this annual Outlook, we inform you of the major themes in our debt management and funding plan for the coming year. A major theme is the intention to increase the average maturity of the debt portfolio over the next four years. This theme is reflected in the photos in this Outlook: never ending rows of colorful tulips, windmills and trees, the 32 km Afsluitdijk and the endless coastline running the whole length of the country.

The switch to a new framework will bring us some challenges. For managing interest rate risk, the redemption profile of the debt portfolio becomes more relevant instead of simply relying on derivates to reach the desired risk profile.

New for the DSTA since the start of the crisis is the fact that we have to cope with a smaller funding need, which might seem like some sort of a luxury problem. In addition, for 2016 we are facing more than normal uncertainties. This year, additional cash inflows resulted in a lower than projected cash balance, which resulted in a lower outstanding amount of T-bills. It also enabled the Dutch State to buy back nearly € 10 billion of DSLS. The improved cash position is partly the result of the solid growth of the Dutch economy, but the cash deficit declined even more than the EMU-balance, due to the IPO of ABN Amro Bank and other one-off cash receipts.

In 2016, the DSTA faces lower redemptions combined with a relative low rollover of money market funding. Currently, the projected funding need for 2016 is \notin 78.8 bn, compared to \notin 92.1 bn in 2015. The funding need for

2016 can decrease even further if the economy beats our expectations or due to possible proceeds from the privatisations which are excluded in the official Ministry of Finance projections. To cope with this increased uncertainty, the DSTA has adopted a small policy change. The money market remains the primary buffer for coping with changing funding needs during the year. However, to ensure sufficient liquidity in the money market, we have introduced limited flexibility on the capital market by announcing a range for issuance on the capital market of between ≤ 25 bn and ≤ 30 bn. What has not changed are our core principles of consistency, transparency and liquidity. Those remain unaltered.

Niek Nahuis Agent of the DSTA





Contents

Prefa	ice in the second s	3
1	The economy, the budget and financial markets	5
1.1	Economic outlook	6
1.2	Budgetary outlook	9
2	Funding and issuance	11
2.1	Looking back on funding in 2015	12
2.2	Funding plan 2016	18
		10
3	Primary and secondary markets	22
3.1	Primary Dealers, Single Market Specialists and Commercial	
	Paper Dealers in 2015 and 2016	23
3.2	Liquidity, QE and secondary markets	25
4	Interest rate risk framework	31
4.1	Evaluation interest rate risk framework 2012-2015	32
4.2	Interest rate risk framework 2016-2019	35
Statis	stical appendix	37
1	Changes in long-term debt in 2015	38
2	Interest rate swaps	38
3	Key figures of individual bonds in 2015	39
4	Short-term debt and eonia swaps in 2015	41
Photo		43
Highl	ights of the DSTA Outlook 2016	40 11
Conta	arts	44
Conte		44

The economy, the budget and financial markets | Outlook 2016 | 5

1 The economy, the budget and financial markets

1.1 Economic outlook

The latest economic forecasts continue to show robust growth for the Dutch economy into 2016. GDP growth will be 2.0% in 2015, and 2.1% in 2016, according to projections by the Netherlands Bureau for Economic Policy Analysis (CPB), which is the official and independent forecaster in the Netherlands. In the third quarter of 2015, growth equaled 1.9% year-on-year, 0.3%-points above the euro area average. The economy has now been growing for six consecutive quarters.

An important feature of the current economic recovery has been the balanced contribution of both the internal and external sectors. Net export growth remained positive throughout the crisis and will also contribute to growth this year and next. In 2015 domestic demand has become the strongest driver of Dutch economic performance and this development is set to continue in 2016. As a result of the continued economic upswing, unemployment will continue its downward trend, falling from a post-crisis high of 7.4% of the labour force in 2014 to 6.7% in 2016.

Table 1.1 – Key economic figures for the Netherlands (% change y-o-y)

	2015	2016
GDP	2.0	2.1
Household consumption	1.7	2.2
Government consumption	-0.2	1.4
Investment (including inventories)	7.1	6.8
Exports	4.7	4.4
Imports	5.4	5.9
Employment (labour years)	1.2	1.3
Unemployment (% labour force)	6.9	6.7
Inflation (HICP)	0.3	0.9

Source: CPB, 11 December 2015

Export performance remains strong

The Dutch export sector continues to be highly competitive. Long-term growth is supported by its diversified composition and geographical destination. In the short term, important drivers are the strong economy in the United States and the United Kingdom and continued economic improvement in the euro area, coupled with a weaker euro. The marked slowdown in world trade, concentrated in Asia and Latin America, has not had a noticeable effect on Dutch export performance. Relevant world trade is expected to accelerate to 5.4% in 2016, a significant increase from the projected 2.8% for 2015. Uncertainty about the development of world trade, particularly due to the economic situation in China, is larger than usual and represents a downside risk to the forecast, according to the CPB.

Household consumption continues upward trend

After a few years of negative growth, 2014 saw a turnaround in household spending on the back of an improvement in real disposable income and a recovery in the housing market. Both factors continue to have a positive impact into 2016. The increase in real disposable income growth in 2016 is mainly supported by moderate wage increases in combination with low inflation and is underpinned by a \leq 5 billion (0.8% of GDP) tax relief package the government presented in its budget for 2016. Consumption is expected to grow by 2.2%.

Investment buoyant

As with consumption, the positive trend in investment that emerged in 2014 is expected to persist in 2016. Business investments (excluding housing), which make up the majority of total investments, are projected to increase by around 7% in 2015 and 2016. Underlying this pickup in investment is a healthy growth in industrial production. As a result, producer confidence has risen steadily and has been above its long-term average since early 2014. Importantly, capacity utilisation has risen sharply as well, to the highest level since the start of the financial crisis in 2008. Improved margins are a further sign of improved economic prospects. Due to considerable slack in the labour market, firms have faced moderate wage increases and were able to significantly lower unit labour costs. The resulting lower prices were only partly passed on to end-buyers, improving business profitability.

Strong recovery housing market

As mentioned above, the housing market is in recovery. Annual growth of house prices remains modest, but prices have risen continuously for the last year and a half. For the first time since the beginning of the crisis, house price increases will outpace inflation. More spectacular has been the improvement in the number of transactions. These have increased by 39% in 2014 and by a further 23% (y-o-y) in the first three quarters of 2015. Whereas prices are still significantly below these levels, the number of transactions is expected to return to this level in the course of 2016. The improved market is reflected in higher investment in new housing. In addition, consumption is pushed up through the wealth effect of higher prices. The CPB considers stronger than projected improvements in the number of transactions and prices as the most important upward risk to the forecast.



Figure 1.1 – Strong recovery housing market

Gradual improvement labour market

As is common in an economic upswing, the labour market is lagging behind somewhat. This is partly explained by the behaviour of firms, where hiring typically will only pick up once internal slack has been used up completely. In the Dutch case, this has been exacerbated by a declining labour demand in the government and health care sectors. Moreover, labour supply is expected to increase both in 2015 and 2016. In the long term this will contribute positively to employment and growth, but it will negatively affect the unemployment rate in the short term. Notwithstanding these mitigating factors, unemployment is expected to fall by 0.5%-points this year, to 6.9%, and further to 6.7% in 2016. These figures are well below the euro area average.



1.2 Budgetary outlook

Budget deficit improving

After the deficit peaked at 5.4% of GDP in 2009, the budget balance has improved consistently. On 27 November 2015, the Ministry of Finance published its latest update of the budget for 2015. The EMU-deficit is expected to come out at 2.3% of GDP in 2015. The \leq 3.8 bn receipt following the IPO of ABN Amro Bank in November 2015 is recorded as a financial transaction. It does not affect the EMU-balance as proceeds from financial transactions are credited directly to the EMU-debt, thereby lowering the funding need of the DSTA.

For 2016, the CPB sees an improvement of the EMU-balance to -1.8% of GDP. As government expenditure growth is limited next year, this improvement will be largely driven by strong economic growth and the resulting higher tax revenues. Current projections take into account a tax relief package of € 5 bn (0.8%-points of GDP). At the cut-off date of this Outlook, the details of any tax relief package were still under discussion in the Senate; a final vote is due before the end of the year.

Debt ratio on a downward path

Current projections show that the post-crisis debt ratio peaked at 68.2% of GDP in 2014. The projected decline to 66.8% in 2015 includes the receipts of the ABN Amro Bank IPO (0.6%-points). As a result of robust economic growth and a declining deficit, EMU-debt to GDP is expected to fall further to 65.4% in 2016. For the estimated debt figures, the CPB has made the technical assumption that in 2016 20% of shares in ABN Amro Bank will be sold.

After the IPO of ABN Amro on 20 November 2015, there is a lock-up period of 180 days, in which the State will not sell any shares. The remaining shares (67%) will be sold over a period of several years. In addition to the IPO of ABN Amro, the government announced the intention to sell ASR, the last fully state-owned financial institution. The insurance company was acquired in 2008, as part of the transaction in which the Dutch government bought Fortis/ABN Amro. The most likely sales method is an IPO; this could happen as soon as the first half of 2016.

Table 1.2 – Key budgetary figures for the Netherlands (% GDP)

	2009	2010	2011	2012	2013	2014	2015	2016
еми-balance	-5.4	-5.0	-4.3	-3.9	-2.4	-2.4	-2.3	-1.8
емu-debt	56.5	59.0	61.7	66.4	67.9	68.2	66.8	65.4

Sources: Ministry of Finance (up to 2015) and CPB (2016)

The economy, the budget and financial markets | Outlook 2016 | 10

Budgetary developments in a European perspective

Budgetary developments in the euro area have improved considerably over recent years. The vast majority of countries has a deficit below 3%, as decreed by the Stability and Growth Pact. For 2016, the EMU-deficit for the Netherlands is lower than the euro area average and even lower than most of its peers. In terms of debt levels, the euro area average is still far removed from the stated goal of 60% of GDP. Dutch debt levels have peaked far below the euro area average and are projected to improve even more quickly.

Figure 1.2 – Dutch budgetary position in 2016 significantly better than euro area average (% GDP)



Source: European Commission Autumn forecast, November 2015



Funding and issuance | Outlook 2016 | 11

2 Funding and issuance



2.1 Looking back on funding in 2015

This paragraph reflects on the execution of the funding plan for 2015 as presented in last year's Outlook. Overall, it can be concluded that the execution of the funding plan has been in line with the DSTA's commitment. Like many other DMOS the DSTA was able to issue at record low yields across all maturities.

Market developments and Dutch yields

The year 2015 will be remembered as the year in which the ECB conducted its first Quantitative Easing or Public Sector Purchase Programme (PSPP) due to low and declining inflation expectations in the euro area. The initial announcement of PSPP resulted for the Netherlands in a strongly declining interest rate environment leading to historical low yields. For example, the 10-year yield reached a low of 0.22% on 20 April. However, less than 2 months later on 10 June, a peak of 1.18% was reached. This is illustrative for the volatility in 2015. The same goes for the 30-year yield, with a low of 0.57% mid April and a high of 1.86% at the end of June.

Besides higher volatility, the Dutch yield curve has shown a relatively sharp steepening as well. End November, yields at the very long end of the curve were above the levels at the beginning of the year, while at the shortest part of the curve yields were at all-time-lows. The Dutch yield curve is in negative territory for maturities up to 5 years.



Figure 2.1 – Steepening of the Dutch yield curve

Source: Bloomberg

Capital market issuances

The capital market issuance for 2015 was targeted at approximately € 48 bn. All capital market auctions for 2015 have now been completed. The DSTA chose to issue € 47.4 bn, which was close to, but a bit below the targeted amount.

In 2015, a few changes were made to the issuance calendar, all triggered by a continuously improving cash position during the year. Especially in the first quarter of 2015 the cash position of the DSTA improved substantially (by roughly € 10 bn), mainly as a consequence of the declining interest rate environment resulting in an increase of the cash collateral from the DSTA's derivative portfolio. Therefore, the DSTA announced in March to cancel a DTC programme and to have only one occasion for the reopening of off-the-run bonds instead of two, as was announced in the Outlook 2015. At the end of year the cash position of the DSTA improved even further due to the IPO of ABN Amro Bank. In response to that, the DSTA decided to cancel the last DTC auction of 2015 (which was planned for 14 December).

Figure 2.2 depicts the issuance on the capital market in the different maturity buckets.



Figure 2.2 – DSL issuance in 2015 by maturity in € bn

The DSTA kicked-off 2015 with the issuance of a new 3-year benchmark bond in January, the DSL 0% 15 April 2018. This DSL was auctioned against a yield of -0.034% for an amount of \leq 3.3 bn. Through four reopenings during the year the amount was raised to a volume of \leq 15.3 bn. The last reopening of the DSL 2018 was issued at -0.271%, which is the lowest issuance yield ever for a DSL.

Through a Dutch Direct Auction (DDA) the DSTA launched a new 10-year benchmark bond, the DSL 0.5% 15 July 2025, in March. Given the high amounts of bids, the DSTA was able to sell \in 6.7 bn against a yield of 0.387%. Through four tap auctions during the year the total amount outstanding was increased to \in 15.2 bn.

The DSTA also executed several tap auctions to increase the amounts outstanding of the on-the-run DSL 0.25% 15 January 2020 and DSL 2.75% 15 January 2047 to their respective benchmark volumes. The outstanding volume of the 5-year DSL was raised by over \leq 10 bn to \leq 15.3 bn, and the 30-year DSL was raised by almost \leq 5 bn to \leq 10.2 bn. By using the off-the-run facility on 22 October, DSLs maturing in 2019 and 2033 were reopened for a total amount of nearly \leq 1.7 bn.

Money market issuances

Traditionally, changes in the borrowing requirement are primarily absorbed by the money market which serves as a buffer. In 2015, the DSTA'S gross money market issuance – consisting of Dutch Treasury Certificates (DTCS), Commercial Paper (CP) and deposits – was lower compared to 2014. The reason for this decrease in money market issuance was the improved cash position due to a significant increase in the cash collateral and to the IPO of ABN Amro. By means of buy backs of shorter dated DSLS (see below), the DSTA was able to uphold money market funding by some degree. Compared to the capital market, money market rates proved less volatile in 2015 due to the significant amount of additional liquidity provided by the ECB in the euro area, like TLTROS. As a consequence, the DSTA short-term yield declined steadily and even declined below the ECB deposit rate.



Figure 2.3 – 6 month DTC yield declined below the ECB-deposit rate

Between January and November 2015 a gross amount of \leq 48 bn DTCs was issued. For the first time in history all DTCs issued in a year were auctioned at negative yields. Despite the negative yields the demand for DTCs by investors remained strong. Although the average bid-to-cover of DTCauctions slightly decreased from 3.0 in 2014 to 2.6 in 2015, the average yield spread of DTCs versus eonia increased from -4.5 basis points in 2014 to -10.5 basis points in 2015.

The amount of Commercial Paper the DSTA issued in 2015 was 38% lower than in 2014 (from 91.4 bn to 56.5 bn, calculated in euros). Almost all CP issued in 2015 was in US dollars due to a favourable USD/EUR FX-SWAP. Because of a strong market appetite the DSTA was able to swap all foreign currency CP issuances back to negative levels in euro. The average CP spread versus eonia more than doubled, from -9.6 basis points in 2014 to -20.1 basis points in 2015.

Buybacks of DSLS with a short remaining maturity

The aim of the buyback programme of DSLS is to improve the DSTA's cash management. In April the DSTA decided to extend the mandate of the buyback programme: besides buying back DSLS that mature in the current or next year (year T or T+1), the facility was, at least until the end of 2015, made available for DSLS that mature within a period of up to T+24 months (at which point the DSLS fall within the PSPP programme of the ECB). The DSTA has decided to continue this new policy into 2016.

The change in policy has enabled the DSTA to manage its cash position more effectively, and to adjust its redemption profile for the current and next two years. In 2015, the DSTA bought back € 9.8 bn of DSLS.

Table 2.1 provides an overview. Buyback operations always take place via a Primary Dealer (PD) and the amount to buy back is determined on a day-by-day basis and primarily driven by cash management considerations and market conditions. To ensure the liquidity of the eligible bonds, the DSTA commits itself to a minimum outstanding volume of every DSL of at least € 10 bn. All DSLS will continue to be available to PDS in the repo facility.

Table 2.1 – Overview of DSLS bought back up to 30 November 2015

Instrument	Amount (€ mn)
dsl 0.75% 15 April 2015	335
DSL 3.25% 15 July 2015	1,395
DSL 0.0% 15 April 2016	1,561
DSL 4.0% 15 July 2016	378
DSL 2.5% 15 January 2017	3,097
Ds∟ 0.5% 15 April 2017	1,910
DSL 4.5% 15 July 2017	1,097
Total	9,773





Box 2.1 - Update on buyback of registered perpetual debt

In the 19th century the Dutch government issued three perpetual loans with coupons of 2.5%, 3% and 3.5% annual interest. Currently three forms of perpetual loans remain: loans in paper form, registered loans and dematerialized loans. Only the registered loans are administrated by the DSTA and the coupons on these loans are paid directly to the owners via bank transfers.

As described in the Outlook 2015, the DSTA started pilots for the buy back of the registered part of the perpetual loans in the second half of 2014. At the start of the first pilot over 800 holders held one or more loans varying in size from fifty to several thousands of euros. Due to the labour intensiveness of registering and paying out the interest cash flows on these loans, the DSTA decided to aim for a decrease of the volume of the outstanding loans. At the end of 2014 over 250 loans with a total nominal amount of nearly \leq 3 million had been bought back.

For 2015, after reviewing the success of the buyback programme, the DSTA decided to extend the programme until further notice and to publish weekly buyback prices on its website www.dsta.nl. Now, at the end of 2015,

an additional 211 loans with a nominal value of \leq 4.7 million have been bought back. This means that in total over 460 loans worth over \leq 7.7 million have been bought back so far.

Besides the buy back programme for the registered part of the perpetual debt, it has always been possible for holders of dematerialized debt to sell securities back to the DSTA. In 2014 and 2015 more than \notin 750.000 and \notin 400.000 respectively was sold back to the DSTA, decreasing the outstanding volume of perpetual debt by a further \notin 1.15 million, to \notin 13.6 million at the end of November 2015.

Table 2.2 – Buy backs of perpetual loans (in millions of euros)

Instrument	Buy backs 2014	Buy backs 2015	Total outstanding 30 November 2015
Perpetual loan 2½ рст	2.34	3.43	10.34
Perpetual loan 3 рст	1.28	1.72	3.06
Perpetual loan 3½ рст	0.06	0.01	0.18
Total	3.68	5.15	13.58

Kenen Kopy

Hy Wellin II, by de gratie Gotes, honing der Socialander Being von Change Narfan, Ger Marten zum Swarnberg, beg beg tag.

Up de son dange som ogen illusister som Genemann som den 20 illeset 199 of 1997er der her som an som de som de lannunger ber her type der arblindung som de lannunger berge den type der arblindung som de lannunger berge illennung der Schnid och her sommalig elseredende Genderast, begreuch och her som andig derenden to be och Besteliet som den 29 diesemben 190 of 10.

Pollander dem generation begin som 2000 son det teketop, som langer som der ander konstrument und angered som der anterstalland konstrument tor generation dem 121 Derember Alter der Ster som dem 21 Derember Met Staderblach Dertif Methen besterten en belanderen, Stette State 1

Alt der Versten eller dyrs jaar, rann de sonorsamheten der Gennerfen tet afdansing der Saterie versten der Gennerfen inter alter deres staten versten der Aller alt de raden an der natelling ter behandeling opgedangen gene bergand op het Departement son Genanden en op dat son Genannlandelin Genenden is solon an der bei Gegentement om Genanden der aber genen Tarm son het Americahe Gigdanat

gene subgern die, alemen het Areton der Or genen her de geldeliger odministratier, die bei dele tanne des sekoningens innender sich b werten.

an her blegentenner var Bannelanderten Sanne her anderen betreid son de grade sogen Sanse, Sandere Magdang, staanstaat, andere

Ung ellemente son Generation of son Connationsisted constraints and son constant to an one on the spinon approximation of the history of the constant of the spinon son the termination of the constant of getering the termination of the spinol of the termination of the subscript that the smaller

and a Anti 2

Co. 201 & Santa Constanting Santa - guildige of Another Santa - Santa - Santa - Santa san Anota dan saya Anuala san san san Capaci Anota dal san saya Anuala da Santa - Santa Anota - Santa - Santa Anat - Santa - Santa - Santa Santa - Santa - Santa Anat - Santa - Santa - Santa Santa - Santa - Santa - Santa - Santa - Santa - Santa Santa - Santa - Santa - Santa - Santa - Santa - Santa Santa - Sant

Secondary constants to construct the Almarkan car Ingenerate a particular lands to deven fileners a particular file construction of the second second status between lands and second second data to be have nonable to second second data second to second to the particularity of More and to be second second second second an observation de ante la constante de la cons

planeten sonten Den ben tenten Sugartin styn just dah voge Slansted von Summernet om tent sontenge dand bet der versammetagde sons, dang som het Soparkatege som det Depart Sumet de Stantwerten.

Alle size Con Marine son Connersion in Constant on Antonio and the connersion Control connersed and the Connersion and Control connersed and and the Connersion of Constant in Connersion and and all day controls and constantiated to some and all day controls and the Constantiation All and a second and the Constantiation of the source Status.

George to & George and 22 Ment

(1991) Dilling (1991) Contras on Sommer (1992) Contras on Some Contrasting of Some Some Some Contrasting of Some Some Some Contrasting Contrast Some Contrasting Contrast (1992) Contrasting (1992) Co

Box 2.2 - A short history of the DSTA: 175 years of debt management

After the Napoleonic era, William I was appointed the first King of the Netherlands in 1815. The Netherlands inherited a substantial amount of debt from the previous period. A so called Amortization Syndicate, which can be considered a predecessor of the DSTA, was made responsible for the redemption of approximately 1.2 billion Dutch guilders (€ 550 million).

William I considered the State's finances his sole domain and under his command, infrastructure was built, industry was developed and the merchant navy was expanded. This required substantial sums of money. Together with war expenditures, the debt level increased to roughly 275% of GDP at the end of the 1830's. When William I abdicated in 1840 in favour of his son, king William II, the Minister of Finance became responsible for public finances and the management of the State debt. At the same time it became apparent that the Amortization Syndicate had neglected its task of redeeming the national debt. The organisation was dismantled and to assist the Minister of Finance with his new responsibilities, the Dutch State Treasury Agency was established in Amsterdam on 22 March 1841. Its memorandum of Association (see the pictures on the left) stated that the Agency would be responsible for the *management* of *business to serve national interests*. Over the years, this rather vague objective was gradually narrowed to result in today's main objectives.

In 1841 the interest costs on the State debt were over 60% of the total income of the State of the Netherlands and had to be forced down. Austerity measures would not have the desired effect as the expenditures of the State were already minimal and raising taxes was politically impossible. Eventually, holders of the Dutch debt were forced to exchange their high yield bonds for a new, lower coupon bond under threat of introducing a new wealth tax. This bold endeavor increased confidence among the public in the Dutch government and was the starting point of lowering the Dutch national debt.

Historically, most DMOS are located in their respective national financial centers, and as such the DSTA resided in Amsterdam for 167 years. Globalisation of financial markets and dematerialisation of securities opened up the possibility to relocate the DSTA to The Hague, in 2009. A merger with the Cash Management Division of the Ministry of Finance resulted in the DSTA as we currently know it: the organisation responsible for all internal and external treasury functions of the Dutch central government.

2.2 Funding plan 2016

This paragraph describes the estimated funding need of the DSTA for 2016 and presents the 2016 funding plan.

Borrowing requirement

The funding need of the DSTA in any year is the sum of the capital market redemptions, the outstanding volume of money market instruments at the close of the preceding year and the expected budget deficit in cash terms. Based on this, the projected borrowing requirement for 2016 equals € 78.8 bn. and is summarised in table 2.3.

Table 2.3 – Estimated funding need 2016 (€ bn)

Capital market redemptions 2016	28.2
Money market ultimo 2015 (excluding cash collateral)	22.4
Cash collateral ultimo 2015	20.6
Cash deficit 2016	7.6
Total borrowing requirement 2016	78.8

The expected funding need for 2016 is lower in comparison with previous years. This is mainly the result of lower capital market redemptions. In 2016 only a 3- and a 10-year DSL will mature, whereas in 2015 also a 5-year DSL had to be redeemed (as will be the case in 2017 and 2018). However, capital market redemptions in 2016 can increase during the year whenever buybacks of DSLS maturing in 2017 and 2018 take place (early redemptions). When buybacks take place, table 2.1 will be updated in the Quarterly outlooks during the year.

Based on the latest projections for the cash balance in 2015, the outstanding volume of the money market (excluding cash collateral) at the end of the year is estimated at approximately \leq 22.4 bn. The money market volume at the end of 2015 is lower than previously estimated. Taking into account the improving economic conditions, it may be possible that the money market will come out even lower. The cash collateral from the DSTA'S derivative portfolio will be approximately \leq 20.6 bn at the end of the year. The exact size of the money market and the cash collateral can only be determined at the end of 2015.

The current estimate of the cash deficit for 2016 is based on the latest budgetary projections of the Ministry of Finance, dated 30 November. This is the most recent budgetary projection available. An update of the budget will be given at the end of May 2016.

For 2016 uncertainties regarding the borrowing requirement are relatively prominent. Not only is the size of the money market ultimo 2015 still undetermined, the uncertainties with respect to the cash deficit and the amount of cash collateral in 2016 are considerable as well.

First, the government has started the process to privatise ABN Amro Bank. The IPO of ABN Amro in November resulted in a cash inflow of \leq 3.8 bn. The government has the intention to privatise ABN Amro in full in the coming years. The current official estimate for the cash deficit in 2016 does not take into account further inflows following possible additional sales of ABN Amro. Together with the earlier announced privatisation of ASR (the insurance company that was nationalised in 2008) the cash deficit in 2016 may come out at a lower level than the official \leq 7.6 bn reported in table 2.3.



Second, the pool of cash collateral remains a source of uncertainty. Changes in cash collateral do not affect the total borrowing requirement as presented in table 2.3. However, they do have an impact on the total call by the DSTA on the market. Cash collateral has become an important source of short term funding for the DSTA. Driven by volatile interest rates and a relatively high interest rate sensitivity of the collateral position, changes in the amount of cash collateral were rather pronounced in 2015, as explained in paragraph 2.1. This had an impact on the use of regular money market instruments, as an increased (decreased) collateral position reduces (increases) the need for regular funding instruments. Therefore, taking into account uncertain interest rate developments in 2016, cash collateral remains an important factor of uncertainty for the funding plan. Unwinds of longer-dated receiver swaps, which might take place in the context of interest risk management purposes, will help to reduce cash collateral but will at the same time reduce the cash deficit ¹. On balance, unwinds therefore have no effect on the funding need.

The borrowing requirement will be updated in January when the money market volume ultimate 2015 will be known.

1 Because of the positive market value of the swaps being unwound.

Funding plan 2016: a delicate balance

As always, the necessary funding for a given year is split between the call on the capital market and the call on the money market. However, given the lower funding need in 2016 and the uncertainty described above, the funding plan for 2016 is more than ever a balancing act between different objectives.

Capital market issuance is the cornerstone of funding by the DSTA. At the same time, traditionally the money market acts as a buffer, for instance to absorb budgetary windfalls and should therefore be sizeable enough. At the same time, the money market also acts as a buffer for budgetary setbacks.

Consequently, a balance has to be struck between these two considerations. Given the circumstances, a bit more flexibility in the split between the call on the capital market and the money market is deemed desirable. Consequently, the DSTA decided to set a target range for the call on the capital market in 2016. The target range for capital market funding via DSLS will be ≤ 25 to ≤ 30 bn.

Based on the current estimate of the funding need, DSL issuance of \notin 25 to \notin 30 bn and with a current level of cash collateral of approximately \notin 20.6 bn, the call on the money market in 2016 will average between

€ 28.2 bn and € 33.2 bn. At first sight, this targeted money market volume seems quite substantial. However, given the possibility of sizeable cash inflows related to sales of ABN Amro Bank and ASR, the actual call on the money market could be significantly lower.

In line with previous years, the money market will continue to act as the primary buffer for accommodating changes in the funding need during the year. The flexibility on the capital market, although relatively limited, is expected to provide an extra cushion for dealing with large changes in the funding need.

Table 2.4 – Balance between the call on the money market and the capital market in 2016 (\in bn)

Funding 2016	
Capital market issuance (DSLS)	25 - 30
Money market ultimo 2016	48.8 - 53.8
o/w regular money market instruments	28.2 - 33.2
o/w cash collateral*	20.6

Total funding 2016

* Assuming cash collateral to remain constant.

As usual, updates of the funding need and funding plan will be presented during the year in the Quarterly outlooks.

Capital market issuance in 2016

The DSTA is planning to fulfil the call on the capital market by issuing two new benchmark DSLS and by reopening one or more longer dated off-the run bonds. More specifically:

- A new 10-year benchmark bond will be issued. The launch will be by means of a Dutch Direct Auction (DDA) in the first quarter. By the end of 2016 a minimum outstanding volume of € 15 bn will be reached by reopening the DSL three or four times. The coupon date will be 15 July.
- A new 5-year benchmark bond will be issued by DDA as well. This DDA is expected before the summer. This new 5-year DSL will be tapped subsequently to an amount of between € 7.5 bn and € 10 bn in 2016, and will be increased towards at least € 15 bn in 2017. The DSTA decided to issue a new 5-year DSL instead of 3-year DSL, because of the current market environment and the aim to lengthen the maturity of the debt portfolio; see for more information on this latter aspect paragraph 4.2.
- One or more longer dated off-the-run bonds will be reopened for a total amount of between € 2.5 bn and € 5 bn. The specific bond(s) to be reopened will be announced in the quarterly issuance calendars.

With regard to the issuance of US dollar bonds, the DSTA's policy is unchanged. Besides the precondition that a funding advantage should be realised vis-à-vis a comparable bond in euros, the issuance of a USD DSL will only be feasible if such an issuance can be accommodated in the funding plan. Tabel 2.5 summarises the DSL issuance in 2016.

Table 2.5 – DSL issuance in 2016

78.8

DSL	Indicative amounts (€ bn)
New 5-year DsL*	7.5 - 10
New 10-year DSL	15
Reopening of longer dated off-the-run DSLS	2.5 - 5
Total psi funding	25 - 30

* The new 5-year DSL to be launched in 2016 will be reopened in 2017 in order to increase the outstanding volume to at least € 15 bn within one year of its initial launch. The DSL issuance calendar for the first quarter is shown in table 2.6. In the first quarter, there will be two auctions: the reopening of the 2.5% DSL 15 January 2033 (on the second Tuesday of January) and the DDA of the new 10-year DSL in March. Quarterly calendars will be published in the Quarterly outlooks during the year. There will be fewer auctions in the first quarter compared to previous years, due to the lower call on the capital market and because of cash management considerations. For the whole year it is expected that auctions will be held primarily on the second Tuesday of every month (excluding August and December), with the fourth Tuesday as reserve date.

Money market issuance

The DTC calendar follows the usual pattern with auctions held on the first and third Monday of every month. Just as last year, all new issuances will be launched as 6-months programmes, to be re-issued several times after that. At every auction a 3-months programme will be tendered, in combination with a 6-months programme.

The DTC calendar for the first quarter of 2016 is depicted in table 2.7. The details of the DTC-programmes to be auctioned (such as the target amounts) will be announced on the Wednesday prior to the auction (T-5). The indicative DTC issuance calendar for the following quarter will be announced in the respective Quarterly outlook.

In addition to DTCS, the DSTA remains committed to the market for CP. However, taking into account present projections for the cash position in the first 4 to 5 months in 2016, it is expected that the supply of CP will be relatively limited in the first part of 2016 and that the DSTA will be more active in the market for CP in the second half of the year.

Table 2.6 – Indicative DSL calendar, Q1 2016

Month of issuance	Auction date	Auction details
January	12	Reopening of the 2.5% DSL 15 January 2033
February	9	No Тар
March	The date for the DDA will be announced in due time	New 10-year DSL: 15 July 2026

Table 2.7 – Indicative DTC calendar, Q1 2016

Auction date	3-months programme	6-months programme
04-01-2016	31-03-2016	30-06-2016
18-01-2016	31-03-2016	30-06-2016
01-02-2016	29-04-2016	29-07-2016
15-02-2016	29-04-2016	29-07-2016
07-03-2016	31-05-2016	31-08-2016
21-03-2016	31-05-2016	31-08-2016

Note: shaded fields indicate new programmes. The DSTA reserves the right to cancel DTC auctions if deemed necessary.

Primary and secondary markets | Outlook 2016 | 22

3 Primary and secondary markets

3.1 Primary Dealers, Single Market Specialists and Commercial Paper Dealers in 2015 and 2016

Every year since 1999, Primary Dealers (PDS) are selected by the DSTA to promote and distribute Dutch State Loans (DSLS) and Dutch Treasury Certificates (DTCS), and to contribute to the secondary market liquidity of Dutch sovereign securities. Since 2001 Single Market Specialists (SMSS) fulfil a similar task exclusively for DTCS. DSLS are sold to the PDS through tap auctions organised by the DSTA. New benchmark issuances with a maturity of five years or more are sold directly to end investors by means of a Dutch Direct Auction (DDA), with the PDS acting as intermediaries. DTCS are distributed to both PDS and SMSS through regular single-price (Dutch) auctions. Additionally, since 2007 dealers for Commercial Paper (CP-dealers) support the DSTA in accommodating its short-term funding needs.

Being a PD entails both rights and obligations. PDS have the exclusive right to buy DSLS from the DSTA in tap auctions. Furthermore, they are entitled to use the DSTA's repo facility, which is available for both DSLS and DTCS. PDS may also strip and reconstitute DSLS with the DSTA if they wish to do so. An overview of the amount of every DSL that has been stripped is available in the monthly report on the DSTA's website.

Ranking 2015

PDS and SMSS are evaluated periodically with respect to their primary market performance. The performance ranking is based on duration-weighted issuance. The weighting factors and corresponding maturities, which were first applied in 2012, will continue to apply in 2016 (see table 3.1).

Table 3.1 – Weighting factors DSLS in 2016

DSL maturity year	Weighting factor
Before 2018	1
In 2018-2019	2.5
In 2020-2022	5
In 2023-2028	8.5
In 2029-2037	13
In 2038-2047	18

The top five performers in the DSL and DTC primary market in 2015 are:

Top 5 PDs for DSLS in 2015		Тор	5 PDS and SMSS for DTCS in 2015
1	ави Amro Bank	1	Commerzbank
2	Royal Bank of Scotland	2	ING Bank
3	ING Bank	3	нѕвс France
4	Rabobank	4	авм Amro Bank
5	нѕвс France	5	Nomura

The performance ranking of CP-dealers is based on the euro equivalent of the issuance amounts. The top three performers in Commercial Paper in 2015 are:

Top 3 CP-dealers in 2015

- I Rabobank
- 2 ING Bank
- 3 Citigroup

Primary Dealers for 2016

PDS are selected annually for the upcoming calendar year based on a business plan they submit to the DSTA and their performance in the previous year(s). The appointment of a PD or SMS is effective for one year, starting on 1 January.

The DSTA is proud to present its selection of 15 PDs for 2016:

List of Primary Dealers for 2016 in alphabetical order			
ави Amro Bank	Jefferies		
Barclays Capital	NATIXIS		
Citigroup	Nomura		
Commerzbank	Rabobank		
Deutsche Bank	Royal Bank of Scotland		
Goldman Sachs	Santander GB&M		
нѕвс France	Société Générale		
ING Bank			
Citigroup Commerzbank Deutsche Bank Goldman Sachs HSBC France ING Bank	Nomura Rabobank Royal Bank of Scotland Santander குதன Société Générale		

Single Market Specialists for 2016

In addition to the PDS, the DSTA appoints a number of SMSS. SMSS have the right to participate in DTCS auctions together with PDS. Both PDS and SMSS have market-making obligations in the secondary DTC market. Including the 15 PDS, the promotion and distribution of DTCS will be safeguarded by 20 banks, including these SMSS:

List of Single Market Specialists for 2016 in alphabetical order				
BBVA Nordea				
Crédit Agricole	UBS			
DZ Bank				

Commercial Paper-dealers for 2016

The DSTA'S Commercial Paper (CP) programme allows the DSTA to issue shorter debt to satisfy its short term funding need in a flexible and cost efficient manner, without interfering with its DTC programme. Next to issuance in euros, CP is issued in US dollars, British pounds, Swiss francs, and Norwegian kroner, with the majority issued in US dollars.

CP issuance is enabled by a panel of designated dealers, which is responsible for the distribution to end investors. CP-dealers are selected annually for the upcoming year and have to be either a PD or SMS. CP-dealers submit a business plan to the DSTA. Based on this business plan, combined with the performance in the current year, the DSTA decides on the group of CP-dealers for the upcoming year. The top 5 CP-dealers are automatically selected for the next year. CP is not issued through auctions at predetermined dates, but rather on an 'if needed' basis, depending on the short-term cash position. This means that it is not always possible for the DSTA to be present and active in the CP market. Since issuance in broken dates is possible, CP has proven successful in attracting new investors with (temporary) excess liquidity. Indicative prices and maturities can be found on the page of the DSTA on Bloomberg (DSTAO6).

The CP-dealers for 2016 are:

List of Commercial Paper dealers for 2016 in alphabetical order					
k					
nk of Scotland					
ING Bank					

3.2 Liquidity, QE and secondary markets

Ensuring liquidity of Dutch Bonds

The DSTA has several liquidity enhancing strategies to ensure the liquidity of its bonds. Liquidity is one of the key goals of the DSTA, to ensure that DSLS are and remain an attractive investment for both buy-and-hold and trading investors. The DSTA employs several instruments to ensure liquidity of its DSLS and DTCS.

First of all, the DSTA raises the outstanding amount of new bonds with a maturity of 3, 5 and 10 year to a minimum of € 15 billion within one year of first issuance. The DSTA may also reopen off-the-run bonds that have already reached their benchmark sizes and offers a repo facility to Primary Dealers (PDS) to ensure the liquidity of its DSLS and DTCS. Because of the availability of this repo facility, PDS know that there is always a lender of last resort available. The DSTA applies a penalty rate to make sure that PDS do their utmost to find and cover their short positions in the market. The fact that PDS can still take short positions, enhances liquidity in the market. Furthermore, PDS may also strip or reconstitute DSLS with the DSTA. For 2016 the DSTA is planning to outsource its strip functionality to Euroclear Netherlands (more information in box 3.1).

DSLS with a maturity of five years or more are launched via Dutch Direct Auctions (DDAS) to issue new bonds in a sufficient size so as to contribute to liquidity immediately after the first issuance. Another liquidity improving feature is the obligation of the PDS of the Dutch State to quote bonds and bills within a specified bid-ask spread for at least 6 hours a day. They are required to quote against the standard bid-offer spread or within one standard deviation of the average spread quoted by all PDS. This quotation obligations assures that tradable prices are readily available. The quotation obligations for 2016 have not changed compared to 2015 and are shown in Table 3.2 below.

Table 3.2 – Quotation obligations (for minimum volume of € 10 mln)

Instrument and remaining maturity	Standard b/a spread	Maximum b/a spread*
DTCS	4 basis points	4 basis points or average b/a + 1 sd
DSLS up to 3½ years	4 cents	4 cents or average b/a + 1 sd
DSLS $3\frac{1}{2}$ to $6\frac{1}{2}$ years	5 cents	5 cents or average b/a + 1 sd
DSLS $6\frac{1}{2}$ to $13\frac{1}{2}$ years	7 cents	7 cents or average b/a + 1 sd
DSLS $13\frac{1}{2}$ to $17\frac{1}{2}$ years	12 cents	12 cents or average b/a + 1 sd
DSLS over $17\frac{1}{2}$ years	20 cents	20 cents or average b/a + 1 sd

* If the average of the PDS quotes is wider than the standard b/a spread, the maximum b/a spread will be one standard deviation (sd) of the average spread of the 6 best hours quotation of all PDS that have quoted that DSL.



Quotation in practice

The following figures show the average spreads for respectively the DSL 15 April 2018, the DSL 15 July 2025 and the DSL 15 January 2047, as quoted by the 15 PDS of the DSTA during the best 6 hours of each business day. For the DSL 15 April 2018 PDS quoted quite easily below the standard spread, which is 4 cents, except for 5 times during the year. This shows that in general it was possible to quote below or equal to the standard b/a spread on the DSL 15 April 2018.





Source: DSTA Quotation reports

Figure 3.2 shows that during the first half of the year it was harder for PDS to quote within the standard spread of 7 cents for the new 10-year DSL. When this happens, the maximum bid-ask spread is replaced by one standard deviation of the average spread of the 6 best hours quotation of PDS that quoted that DSL. As the outstanding amount of the bond increased during the year, liquidity increased and thereby facilitated quoting. Moreover, in the second half of the year there was less uncertainty and less spikes.





Figure 3.3 – Average 6 hour spread in 2015 for the DSL 15 January 2047 (in cents per \in 100)



Source: DSTA Quotation reports

Figure 3.3 shows that during the whole of 2015 the average of the PDS quotes was wider than the standard maximum bid offer spread of 20 cents for the DSL 2047. PDS are allowed to find the right spread by themselves in a peer-based system. Apparently the market is not back to the normal circumstances of before the financial crisis. These three graphs show that the longer the maturity, the harder it is for PDS to quote under the standard maximum bid-ask spread, even though the allowed maximum b/a spread is wider for longer maturities. Volatility has increased on the long end, and available balance sheet has decreased because of regulation and capital ratios.

Source: DSTA Quotation reports

Quantitative Easing

Since the start of the ECB's Quantitative Easing (QE) program, the DSTA has not yet noticed a significant change in the liquidity of its DSLS. During the first 3 quarters of 2015, the DSTA received 28 repo requests for DSLS as compared to 87 in 2014, which means that the number of repo requests dropped significantly. The Dutch repo market remains sufficiently liquid and functions properly according to the DSTA'S PDS. The only exceptions are a few long-end DSLS that are trading special on an occasional basis, such as for instance the DSL 15 January 2042. This could indicate that up to now the buying of the ECB has been accompanied by the selling of bonds that were in buy-and hold portfolio's. It could also indicate that the benchmark size of € 15 billion involves extreme liquidity, whereas € 10 billion of outstanding bonds still involves a sufficiently liquid bond. If the ECB continues the buying of DSLS and surpasses certain thresholds, it is possible that the demand for repo transactions increases. The ECB is allowed to buy DSLS which have a yield higher or equal to the deposit rate, which stood at -0.20% at the end of November. Since mid October, more than one third of all DSLS have been trading at a yield below this deposit rate, and can therefore not be bought by the ECB. Based on yields in late November, the DSL 15 July 2021 is the first DSL with a positive yield. The DSL 15 January 2047 could not be bought in 2015 in the context of QE, because its maturity exceeded the 30 year + 364 days limit set by the central bank. Up to October, the ECB has bought € 20 billion of Dutch bonds under the PSPP-programme, with a weighted average maturity of 6.56 years.

Secondary market transactions

PDS and Single Market Specialists (SMSS) are required to provide the DSTA with monthly information about their trades in Dutch securities in the secondary market. This information is submitted according to the harmonised EU reporting format, which allows banks to report to debt managers in the euro area countries in a uniform manner. The data reported by PDS does not capture all secondary market transactions in DSLS or DTCS, but only the transactions in which a PD operated on one side of the transaction. The data thus does not provide a complete picture of the trade in Dutch securities, but it nevertheless gives a general view on trends in the secondary market.



Figure 3.4 – PD reported DSL turnover, 2012-2015 (Q1-Q3), by remaining maturity (in \in bn)

Source: DSTA SMTR

Figure 3.4 shows the turnover of DSLS in the secondary market by OUT PDS, split into remaining maturity categories. The turnover is the total of the first three quarters of the year. As is shown, the turnover is the highest for DSLS with a remaining maturity of 1 to 5 years and 7 to 10 years and the lowest for bonds that will expire within 12 months or after more than 10 years. The average daily turnover (double counting) equals approx. € 2 bn per trading day. The volume per trading day has slightly decreased in 2015 as compared to 2014.

Figure 3.5 – Reported DSL turnover, 2014 and 2015 (Q1-Q3), by country (in % of total)



Source: DSTA SMTR

Figure 3.5 shows the total turnover for the first three quarters of the years 2014 and 2015. The highest turnover of DSLS was in the United Kingdom.

As can be seen in the table below, the total trading volume is split between interdealer and customer almost 50-50%. Fund managers are the biggest customer category. Central banks and banks also buy DSLS in the secondary market, to cover regulatory requirements and for reserve investment purposes in a safe and liquid asset.

Table 3.3 – PD reported DSL turnover 2015 Q1-Q3

Client type	Volume (€ mn)	% all
Central Bank, Public Entities	57.433	9%
Funds	155.887	27%
Banks	44.953	8%
Rest	17.139	3%
Business to Customer total	275.412	47%
Other PDS	95.358	16%
Inter Dealer Broker	211.848	36%
Business to Business total	307.206	53%
Total	582.618	100%

Source: DSTA SMTR



Box 3.1 – Outsourcing and transfer of stripping activities

The DSTA plans to outsource its strip facility to Euroclear Netherlands (hereafter: Euroclear). At this moment, the DSTA and Euroclear are working on the precise modalities of the new strip functionality. After the outsourcing, stripping DSLS will generate only fungible strips instead of the current separate interest and principal strips. From then on, all stripping and reconstitution activities will be done via Euroclear, regardless of the moment of issuance of the underlying DSL. The DSTA will terminate its own stripping facility. The new stripping method will be comparable to the one in place in the French market.

Holders of current strips will be able to keep their current strips if they do not wish to convert them into new strips. There will be no obligation to convert them. New strips that result from a conversion can then be used in reconstitution operations.

The actual transfer of activities from the DSTA to Euroclear is planned for 2016. The new system still has to be tested. Once the DSTA and Euroclear know when the outsourcing will take place, all market participants will be informed accordingly through a press release.

4 Interest rate risk framework

4.1 Evaluation interest rate risk framework 2012-2015

In June 2015 the policy review of the interest rate risk framework that guided the DSTA for the last four years, was completed. The risk framework, which was developed in 2007, is based on replicating a 7-year centralised benchmark portfolio. A benchmark is an objective standard against which the performance of a debt manager can be measured. A centralised portfolio is one in which a bond with the same maturity and of the same size is continuously issued. In this benchmark portfolio the national debt is financed by daily issuances of a 7-year loan. The 7-year maturity is based on an assessment of costs and risks . The 2008-2012 risk framework was modified after its review in 2011 to allow for deviations from the benchmark, albeit within a predefined set of conditions. This essentially entailed that it was no longer necessary to swap each long-term loan back to the 7-year interest rate. Rising national debt levels and persistent low interest rates prompted the DSTA to extend the average maturity of its debt after the 2011 evaluation concluded that the interest rate risk framework would offer only limited protection against shocks in the budgetary balance and external, structural interest rate shocks. The extension of the average maturity of the debt has lead to more budgetary certainty at an acceptable total cost. The deviations increased the average debt maturity to 4.5 years at the end of 2014. Early 2012 the average debt maturity was 3.5 years.



The main conclusion of this year's policy review is that the risk framework 2012-2015 achieved its central objective: funding the national debt against the lowest possible costs under an acceptable budgetary risk. The framework is in line with the current international guidelines for national debt management as formulated by the IMF and the World Bank. These guidelines include aspects such as risk reduction, transparency and accountability.

The cost efficiency of the policy is demonstrated by the fact that in the period from 2012 to 2014 the combination of DSL issuance and interest rate swaps approximated the calculated interest costs in the fictional benchmark portfolio, excluding deviations. Deviations have led to additional interest costs amounting to \leq 425 mn in the period 2012-2014. The costs of these deviations are deemed acceptable since they mitigate interest rate risks and thus improve budgetary certainty as the interest rate is fixed for 20 or 30 years. Depending on future interest rates, the deviations may not only lead to lower annual risks, but also to lower budgetary costs.

The review states that the framework has largely been effective, but that a few adverse side-effects have occurred in recent years as a result of replicating the benchmark by using interest rate swaps. These side effects proved manageable in the years 2012-2014, but are too substantial to be ignored.

The first side effect is the existence of indirect credit risk. The DSTA receives collateral to cover the credit risk in relation to parties with whom it concludes interest rate swaps. These interest rate swaps are terminated if a party is unable to meet its obligations. The key principle is that these interest rate swaps must be entered into again as soon as possible with another party. In practice, this will take time. During that time interest rates

will fluctuate and the DSTA will be exposed to interest rate risk. This risk has increased in recent years as a result of the increase in the size of the swap portfolio, the lower credit rating of counterparties, a decrease in the number of creditworthy counterparties and the reduced liquidity in the swap market.

The second side effect is that the swap portfolio interferes with the funding policy, which is at odds with the presumption that the interest rate swaps make it possible to separate the interest rate risk policy from the funding policy. Interest rates have fallen sharply, thus giving the swap portfolio a positive value. Counterparties are obliged to put up collateral. Counterparties usually provide this collateral in cash, which reduces the DSTA's remaining funding requirement. Since this collateral has increased sharply since 2011 to over € 20 billion at the end of 2014, the total money market funding, which includes this collateral, has increased. As a result there are fewer options for issuing debt in regular money market instruments, which has an adverse effect on the liquidity of those instruments. The considerable variability of the size of the cash collateral also hampers daily cash management.

The third significant side effect is caused by the fact that the benchmark is based on the sovereign yield curve and the replication of the benchmark is largely based on the swap yield curve. The swap curve fluctuates more compared to the sovereign curve for DSLS, in the order of magnitude of tenths of a percentage point. This pollutes the measured results vis-a-vis the benchmark and complicates comparisons between the benchmark and the actual portfolio. The rising debt and the introduction of the benchmark in 2008 have caused a sharp rise in the DSTA'S number of transactions with financial market parties. Some of these transactions take the form of interest rate swaps and the exchange of collateral. This generally increases operational risks and thus places higher demands on the organisation.

These adverse side effects brought forth the following recommendations to further enhance the efficiency and effectiveness of the new framework:

- Define clear risk and cost measures against which the total debt portfolio, i.e. including maturity extensions, can be assessed, on which can be clearly reported and that can be used as a basis for guiding the actions of the DSTA.
- Reduce the scale at which interest rate swaps are used in view of the adverse side effects. Other than that, the effective smoothing of the interest risk profile will remain desirable in a new framework.
- Analyse the extent to which further extending the maturity of the portfolio is desirable in view of the historically low interest rates.
- Investigate whether, and if so, to what extent more flexibility on the capital market is possible without adversely affecting the predictability of issuance.
- Carry out an interim evaluation of the new policy framework, with special reference to the ability to respond to changing conditions.



4.2 Interest rate risk framework 2016-2019

The results of the policy evaluation have led to a number of changes for the period 2016-2019. The most prominent ones are a lengthening of the maturity of the debt portfolio, the introduction of a new indicator for managing short term interest rate risks and a reduced dependency on interest rate swaps. The new framework will no longer be anchored by the benchmark that the DSTA has employed for the last 8 years. This reflects a significant change in the way interest rate risks will be managed going forward. Irrespective of the new risk framework, the DSTA's funding strategy will remain largely unchanged. Consistency, transparency and liquidity will remain the three key funding principles in the period 2016-2019.

Central to the new risk framework is a multi-annual target for the average maturity of the DSTA'S portfolio (debt plus derivates). In the years 2012-2015 the average maturity already increased from 3.5 years early 2012 to approximately 5 years at the end of 2015. The Minister of Finance has announced that he intends to further increase the maturity in the period up to the end of 2019. This should result in an average maturity of around 6.4 years in 2019. Given the uncertainties related to budgetary developments and market conditions, a range of plus and minus 0.25 years is applied around the maturity target in 2019, as illustrated in figure 4.1.



Figure 4.1 - Path for the average maturity towards the end of 2019

The decision to further lengthen the maturity is driven by the evolving cost-risk trade-off in recent years. While government debt has continued to increase, interest rates have fallen to historically low levels. As a result of the current low costs it is now attractive to fix these low interest rates for a longer period of time. If the situation on the financial markets changes significantly and interest rates rise sharply, the risk framework– in particular the lengthening of the maturity – will be reconsidered on an interim basis.

The extension of the average maturity leads first and foremost to a reduction in long term interest rate risks. However, the composition of the existing debt and swap portfolio can still create undesirable short term interest rate risks. To manage these potential risks, the new framework introduces a new indicator: the 12-month forward looking refixing amount. The refixing amount reflects the nominal amount of debt and swaps for which interest rates have to be refixed within the next twelve months. For the next four years the refixing amount will be maximised at 18% of total State debt.

Since 2008, the interest rate risk framework has been largely dependent on interest rate swaps to replicate the risk profile of the 7-year constant maturity benchmark. In practice, a combination of receiver and payer swaps was used to transform the risk profile of individual debt securities to that of the benchmark. A change in this policy since 2012 has allowed for the possibility to deviate from the benchmark. The attached conditions meant that deviations could only take place if they resulted in an increase of portfolio maturity. As a result, for the majority of long issuances (88% of the total, based on nominal amounts) no swaps were entered into. Up until the end of 2014, the deviations only applied to issuances with a maturity of more than 10 years. As of 2015, it has also been possible to deviate from the benchmark for 10-year bonds. As a result, the DSTA entered into fewer new swap contracts compared to previous years. In addition, since the beginning of 2015, the DSTA has started to unwind long-term interest rate swaps (receivers) with a positive market value. The combined effect of these policy changes has contributed to the increase of the average maturity of the DSTA's portfolio to approximately 5 years at the end of 2015.

Building on the policy changes made in recent years, new DSL issuance will no longer automatically be accompanied by new swap contracts in the framework for 2016-2019. This new policy applies not only to maturities of 10 years or more, but also for shorter maturities. This does not alter the fact that swaps will remain a regular policy instrument for managing interest rate risk in the new policy framework. Swaps will be used if needed to reach the goals for the average maturity and managing short term interest rate risks.

Although the new risk framework does not imply a substantial change in the funding strategy of the DSTA, issuance policy is evolving in response to the recommendations of the evaluation performed in 2015. In particular, the annual issuance plan for 2016 allows for (limited) flexibility in capital market issuance. A point estimate has been replaced by a range in order to allow for an appropriate response to possible changes in the funding need or market conditions.

Statistical appendix | Outlook 2016 | 37

Statistical appendix



1 Changes in long-term debt in 2015

In thousands of euros

Position as at 31 December 2014		335,109,769
New issues in 2015		
Public bonds	47.407.159	
Private placements	269	
	add	47.407.428
Redemptions in 2015		
Regular redemptions		
Public bonds	37,559,327	
Private placements	37,467	
Early redemptions		
Public bonds	9,778,151	
Private placements	-	
	less	47,374,946
	less	41,514,940

Position as at 30 November 2015

335,142,251

2 Interest rate swaps

Position as at 30 November 2015, in millions of euros

Bucket	Net nominal	Pay or receive*
(year of maturity)	amount	(net)
2015	1.359	Pay
2016	25.116	Pay
2017	14.562	Pay
2018	7.684	Pay
2019	14.232	Pay
2020	17.825	Pay
2021	27.834	Pay
2022	3.382	Pay
2023	18.166	Receive
2024	15.315	Receive
2026	1.610	Receive
2027	8.350	Receive
2028	3.707	Receive
2032	16	Receive
2033	2.208	Receive
2035	5.385	Receive
2036	1.388	Receive
2037	3.057	Receive
2042	6.979	Receive
2055	33	Receive
Net total	45,780	Pay

* Receiver swaps are swap contracts in which the Dutch State receives a long-term fixed interest rate and pays a short-term floating interest rate. Payer swaps are swap contracts in which the Dutch State pays a long-term fixed interest rate and receives a short-term floating interest rate.

3 Key figures of individual bonds in 2015 In thousands of euros

	Total	Issues	Redemptions	Total	lsin code
	31-12-14			30-11-15	
2.75 pct DSL 2009 due 15 January 2015	10,273,440		10,273,440		NL0009213651
0.75 pct DsL 2012 due 15 April 2015	12,888,400		12,888,400		NL0010055703
3.25 pct DSL 2005 due 15 July 2015	13,334,765		13,334,765		NL0000102242
0.25 pct DSL USD 2012 due 12 September 2015	2,792,722		2,792,722		XS0827695361
0.00 pct DsL 2013 due 15 April 2016	15,238,000		1,561,000	13,677,000	NL0010364139
4.00 pct DSL 2006 due 15 July 2016	14,728,467		378,000	14,350,467	NL0000102283
2.50 pct DSL 2011 due 15 January 2017	15,638,920		3,097,000	12,541,920	NL0009819671
1.00 pct DSL USD 2012 due 24 February 2017	2,511,619			2,511,619	XS0749484217
0.50 pct DSL 2014 due 15 April 2017	15,036,000		1,910,000	13,126,000	NL0010661930
4.50 pct DSL 2007 due 15 July 2017	14,654,990		1,097,000	13,557,990	NL0006007239
1.25 pct DSL 2012 due 15 January 2018	15,472,425			15,472,425	NL0010200606
0.00 pct DsL 2015 due 15 April 2018		15,338,000		15,338,000	NL0011005137
4.00 pct DSL 2008 due 15 July 2018	15,081,020			15,081,020	NL0006227316
1.25 pct DSL 2013 due 15 January 2019	15,321,224			15,321,224	NL0010514246
4.00 pct DSL 2009 due 15 July 2019	14,056,398	615,000		14,671,398	NL0009086115
0.25 pct DSL 2014 due 15 January 2020	5,089,184	10,229,000		15,318,184	NL0010881827
3.50 pct DSL 2010 due 15 July 2020	15,069,615			15,069,615	NL0009348242
3.25 pct DSL 2011 due 15 July 2021	16,493,985			16,493,985	NL0009712470
2.25 pct DSL 2012 due 15 July 2022	15,252,147			15,252,147	NL0010060257
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	8,241,489			8,241,489	NL0000102077
Principal 15 January 2023	1,565,000			1,565,000	NL0000103000
1.75 pct DSL 2013 due 15 July 2023	15,825,963			15,825,963	NL0010418810

	Total	lssues	Redemptions	Total	Isin code
	31-12-14			30-11-15	
2.00 pct DSL 2014 due 15 July 2024	15,315,132			15,315,132	NL0010733424
0.25 pct DSL 2015 due 15 July 2025		15,220,159		15,220,159	NL0011220108
5.50 pct DSL 1998 due 15 January 2028	13,028,814			13,028,814	NL0000102317
2.50 pct DSL 2012 due 15 January 2033	10,048,900	1,055,000		11,103,900	NL0010071189
4.00 pct DSL 2005 due 15 January 2037	13,697,427			13,697,427	NL0000102234
3.75 pct DSL 2010 due 15 January 2042	15,331,910			15,331,910	NL0009446418
2.75 pct DSL 2014 due 15 January 2047	5,206,187	4,950,000		10,156,187	NL0010721999
2½ pct Grootboek	13,768		3,428	10,340	NL000006286
3 pct Grootboek	4,773		1,716	3,057	NL000004802
3½ pct Grootboek	186		7	179	NL000002707

Total	331,475,869	47,407,159	47,337,479	331,545,551	

4 Short-term debt and eonia swaps in 2015

In millions of euros

Key figures of T-bills	Total	lssues	Expirations	Total	ısın-code
	31-12-14			30-11-15	
отс 2015-01-06	6,090	-	6,090	-	NL0010661880
ртс 2015-01-30	4,390	-	4,390	-	NL0010800991
отс 2015-02-27	3,520	-	3,520	-	NL0010858445
отс 2015-03-31	2,490	2,160	4,650	-	NL0010872487
ртс 2015-04-30	2,350	2,110	4,460	-	NL0010937090
отс 2015-05-29	1,210	3,510	4,720	-	NL0010948287
ртс 2015-06-30	2,150	4,460	6,610	-	NL0010832267
отс 2015-07-31	-	4,350	4,350	-	NL0011131552
отс 2015-08-31	-	4,870	4,870	-	NL0011214036
отс 2015-10-30	-	5,580	5,580	-	NL0011278460
ртс 2015-11-30	-	5,130	5,130	-	NL0011323415
ртс 2015-12-30	-	4,830	-	4,830	NL0011333786
ртс 2016-01-29	-	4,670	-	4,670	NL0011376223
ртс 2016-02-29	-	2,690	-	2,690	NL0011376280
ртс 2016-03-31	-	2,430	-	2,430	NL0011509286
ртс 2016-04-29	-	1,250	-	1,250	NL0011543665
	22,200	48,040	54,370	15,870	

Commercial Paper	Total	Issues	Expirations	Total
	31-12-14			30-11-15
ECP EUR	-	31	31	-
ECP USD	-	55,708	55,708	-
ECP GBP	-	-	-	-
ECP CHF	-	154	154	-
ECP NOK	-	602	602	-
		56,494	56,494	-

Other short-term debt	Total	lssues	Expirations	Total
	31-12-14			30-11-15
Deposit borrow	-	358,054	358,054	
Deposit lend	-	-70,478	-68,978	-1,500
Deposit borrow usp	-	2,861	2,861	-
Eurex repo	-1,000	-119,055	-116,455	-3,600
Sell Buy Back	-	-5,367	-5,367	-

Eonia swaps (position as of 30 November 2015)		
Bucket (year of maturity)	Net nominal amount	Pay or receive (net)
2015	4,830	Receive
2016	11,040	Receive
	15.870	Receive

Photos







Bridge over the river forelands of the Rhine (p. 8)



Long rows of windmills along the IJsselmeer (p. 15)



The endlessly long Dutch coastline (p. 19)



Long row of trees in a flat polder landscape (p.29)



A row of mills in winter (p. 31)

Euromast in Rotterdam (p. 34)



Lighthouse on the island Ameland (p. 4)



Eastern Scheldt storm surge barrier (p. 5)



Watch-tower De Kaap near Doorn (p. 10)



The tallest buildings in the country in Rotterdam (p. 11)



Pier of Scheveningen (p. 16)

Longneck in the Efteling

(p. 26)



The 32 km long Afsluitdijk enclosing the IJsselmeer (p. 22)

Very tall trees (p. 30)



Extremely long freight train on the Betuweroute (p. 32)



A traditional midwinter horn blower in Twente (p. 37)





Potato planting fields (back)

Highlights of the DSTA Outlook 2016

- Capital market funding in 2016: target range between € 25 - 30 bn
- DSL auction dates on the second Tuesday of the month with reserve dates on the fourth Tuesday of the month
- Two new DSLS in 2016: a 5-year and a 10-year
- DDA window for the new 10-year DSL: March 2016. This bond will reach its benchmark volume of € 15 bn in 2016
- DDA window for the new 5-year DSL: before the summer. This bond will reach € 7.5 to € 10 bn in 2016 and € 15 bn within one year of its launch
- A minimum of two reopenings of longer dated off-the-run bonds in 2016
- Borrowing requirement and funding plan updated on a regular basis during the year in the Quarterly outlooks



Dutch State Treasury Agency Ministry of Finance PO BOX 20201 2500 EE The Hague Netherlands www.dsta.nl

The cut-off date for data in the Outlook 2016 is 30 November 2015, unless otherwise specified

Colophon Design Studio Tint, The Hague Photography Nationale Beeldbank

11 December 2015

