



1.	The	National	Bank
	as a	compan	y *

1.1	the Bank's Strategy 2025			
	1.1.1	Russia's war in Ukraine left the Bank without respite	1.	
	1.1.2	Strategy 2025: the Bank prepares for the future	20	
1.2	News	from the Bank's various departments	2!	
	1.2.1	Research, more essential than ever in uncertain times	2!	
	1.2.2	Under IMF scrutiny	28	
	1.2.3	Modernisation of the supervision of banks and stockbroking firms	30	
	1.2.4	Strategic reflection on organisation of the prudential policy and inspection of insurance companies	37	
	1.2.5	Contributing to a digital euro and ensuring secure payment systems	3	
	1.2.6	Protecting the interests of policyholders and ensuring the continuity of insurance companies	42	
	1.2.7	Assisting struggling financial institutions without overburdening public finances	4	
	1.2.8	The National Bank is collecting more and more data and improving its statistical processes	40	
	1.2.9	Microdata management: quality is the objective	5	
	1.2.10	High-quality banknotes, accessible to and accepted by all	59	
	1.2.11	A central bank at the service of society	6	
1.3	Innovation is in the DNA of support functions as well			
	1.3.1	A modern and secure digital environment	6.	
	1.3.2	Modernising communication and improving coordination	7.	
	1.3.3	Under the banner of change	79	
	1.3.4	The Bank and the wellbeing of its employees	8	
	1.3.5	A solid risk management framework	89	
	1.3.6	Significant progress in various real estate projects	9	

Photo: Ukrainian refugees were able to exchange hryvnia at the National Bank between June and December 2022.

^{*} This chapter of the Corporate Report should be read in light of the developments and trends described in our Report on economic and financial developments and prudential regulation and supervision 2022. It may be useful to refer to the list of abbreviations in that report when reading this chapter.

The National Bank of Belgium at the service of society

The functions exercised by the National Bank of Belgium are *par excellence* tasks in the general interest, at both the Belgian and European levels and even worldwide. Some of these fall under the classic mandate of a central bank, such as:

- Placing into circulation and withdrawing banknotes (on behalf of the Eurosystem) and coins (on behalf of the Belgian Treasury).
- Participating in defining the Eurosystem's monetary policy and the implementation of its decisions.
- Conducting research in the fields of economics and finance in Belgium, the euro area and the world. These studies underpin both the Bank's own decision-making and the policies of the federal government and other levels of government in Belgium.
- Compiling the Belgian balance of payments, financial accounts and statistics on financial markets and institutions.
- Maintaining financial stability.
- Supervising, within a European framework, financial infrastructures established in Belgium.
- Managing, within a European framework, central bank settlement systems, large-value interbank transfers in euro and other credit transfers in euro.
- Providing advice to public authorities, both generally and on an ad hoc basis.



In carrying out the above activities, many of the Bank's representatives sit on international bodies such as the IMF, the Bank for International Settlements, the OECD, the ECB, the Single Supervisory Mechanism, the three European supervisory authorities (the European Banking Authority, the European Securities and Markets Authority, and the European Insurance and Occupational Pensions Authority), etc. The Bank also provides assistance to the elgian public authorities, in particular in the framework of the Council the European Union and the Belgian Permanent Representation to

Printing banknotes was a core activity of the Bank for a long time, but as the purchase of banknotes proved to be more efficient, the Bank closed its printworks in 2019. Since then, the Bank has been working with the Portuguese and Austrian central banks on the



Over time, the public authorities have conferred other duties on the National Bank, so that it now fulfils a unique role compared to other banks in the Eurosystem.

- Serving, since its creation in 1850, as the State's cashier.
- Conducting with or without the cooperation of the responsible European bodies – prudential supervision of credit institutions, stockbroking firms, clearing houses, electronic money institutions and insurance companies.
- Performing the tasks of the national resolution authority within the single resolution mechanism of the banking union.
- Ensuring continuity of the financial sector in the country and crisis management.
- Compiling national and regional accounts.

- Compiling public finance statistics.
- Managing a system to collect and publish the annual accounts of almost all legal entities in Belgium.
- Operating the Individual Credit Register, the Corporate Credit Register and the Central Point of Contact (CPC).
- Analysing microeconomic data on firms, industries and economic operators in general.
- Operating a securities settlement system for fixedincome financial assets.

Maintaining economic relations with the country's main socio-economic agents (employers, employee representative bodies, chambers of commerce, trade organisations, academia, local authorities, etc.) is and remains one of the Bank's main functions. In this capacity, it provides the secretariat of the Belgian Financial Forum, which organises conferences, debates and inposia in Brussels and through its 15 regional committees. The aim of brum is to stimulate economic and financial reflection, to provide

a meeting place for professionals, public authorities, academics and business leaders, and to serve as a channel for the dissemination of knowledge and information in the fields of economics and finance.

The Bank also aims to make an active contribution to financial education in Belgium. For this reason, it runs a museum which is accessible to the general public.

The National Bank of Belgium in 2022 in a few figures



161 349 519

new **banknotes** issued by the Bank

19 articles published on the blog

since its creation





position of the Bank in the ranking of most attractive employers 25354 visitors to the Museum





10th anniversary of the integration of prudential supervision 12 strategic worksites





3 193 112

users of **nbb.be**



101
permanent hires

303 575
value of hryvnias exchanged





116
press releases



1638

full-time equivalents



of new hires were **women**



Russia's war in Ukraine left the Bank without respite

In the first half of the year, the after-effects of the coronavirus pandemic were still being felt. As a result, the Bank was unable to organise in-person events in the first quarter, and teleworking remained recommended for most staff members until the spring. In 2022, Russia's war in Ukraine was at the heart of the Bank's research and analyses. This issue is covered in more detail later in this report, in the overview of the activities of the various departments and services. This introduction merely sketches the outlines.

As soon as Russia invaded Ukraine in February, questions arose as to the impact of the war on the Belgian economy. How important was the country's trade with Russia, Belarus and Ukraine? Were Belgian banks and insurance companies active in these countries? Were they exposed to financial risks? What would be the consequences, if any, of the boycott? How would energy prices evolve and would this affect the level of inflation in the country and in the euro area? Could the war lead to a recession?

These were some of the questions answered by public authorities and the media after consulting the Bank. The Bank immediately set up a Ukraine task force to collect and analyse all available data. During the coronavirus crisis, the Bank had developed a similar overview of the impact of the pandemic on the economy. This experience proved useful, although it should be noted that it is extremely difficult to assess or predict the impact of a constantly evolving situation.

A comprehensive dashboard mapping the consequences as accurately as possible was developed and published on the Bank's website. The Ukraine Dashboard is updated regularly and has become a valuable source of information for governments and policymakers, as well as for academics and journalists.

As evidenced by the dashboard, the Bank has once again proven that it can produce socially relevant studies, reliable data and accurate analyses within tight deadlines. In doing so, it has also demonstrated that it can act quickly when the circumstances so require.

The war was a recurring theme in the activities of many of the Bank's departments and services. The Economics and Research Department, the General Statistics Department, the Financial Markets Department and the International Coordination and Eurosystem Department were particularly involved in the dashboard. Each of these departments, within their respective areas of expertise, conducted research and regularly updated data and information. The energy crisis and the supply problems caused by the war were also closely monitored by the Economics and Research Department, as these had a direct impact on the prices of many goods and therefore inflation. These information flows were supplemented by results from the Bank's surveys and some new business surveys. All of this work proved useful in preparing the spring projections, which are traditionally issued in June, and the autumn projections, which are released in December. The Communication Department fielded a large number of guestions from the media, and our experts were regularly quoted in the press.

Prudential supervision

On the one hand, our prudential supervision services had to pay close attention to the exposure of Belgian insurance companies, banks and financial services providers. Even though it quickly became apparent that the risks to the Belgian financial sector were relatively low, constant consultation with the institutions subject to prudential supervision took place in order to ensure optimal monitoring. Furthermore, in its capacity as coordinating supervisor, the Bank had to examine the role of SWIFT in the implementation of the banking sanctions imposed by Europe on Russia.

Cybersecurity

In 2022, wars were no longer fought solely on the battlefield but also in the digital arena. Cyber risks increased after Russia's invasion of Ukraine. The Bank's



IT Department took numerous initiatives to secure the Bank's many applications. The Bank's internal security services were also actively involved in these efforts.

National Bank of Ukraine

Ukraine is no stranger to the National Bank. The National Bank has maintained very good relations with the National Bank of Ukraine for quite some time. In addition, Ukraine has been a member of the same IMF constituency as Belgium for several years now. During the first months of the war, the National Bank of Ukraine and the National Bank of Belgium held frequent bilateral talks concerning the possibilities for support and cyber threats. The Bank is also actively involved in a project between the Polish central bank and the National Bank of Ukraine with a view to the possible accession of the National Bank of Ukraine to SEPA (Single Euro Payments Area).

Thanks to these good contacts, the Bank was one of the first European central banks to conclude an agreement with Ukraine on the exchange of hryvnia coins and banknotes. This agreement was reached after intensive negotiations between the National Bank of Ukraine and the Belgian federal authorities. Thus, from June to December 2022, Ukrainian refugees were able to exchange hryvnias for euros at the National Bank.

To show solidarity with the Ukrainian people and as a symbolic gesture, the yellow and blue Ukrainian flag was hoisted on the roof of the Bank's main building. For more information on other solidarity initiatives, please refer to the chapter on corporate social responsibility.



Strategy 2025:

the Bank prepares for the future

Strategic actions and follow-up

In 2020, a strategic plan was launched to enable the Bank to adapt to the rapidly changing environment in which it operates. This plan was entitled "Strategy 2025" because the development and implementation of its various points for action are spread over a period of five years.

The Bank's strategy for 2025 is illustrated by the temple shown below which sets out the Bank's missions, its strategic objectives, the twelve cross-cutting themes included in the strategy and the new values to which it aspires as an organisation.

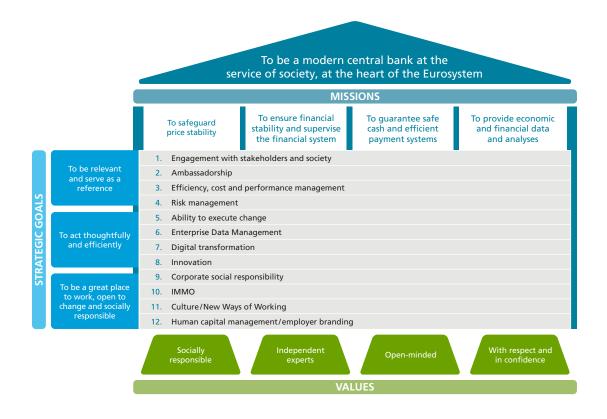
To ensure effective implementation of the strategy as a whole, the Strategy Team organises a

"strategic review" session twice a year for the Board of Directors, the persons responsible for the various themes (12 cross-cutting themes + missions), the heads of departments and stand-alone services, etc.

The aim of these sessions is twofold:

- to assess the progress made in the various initiatives supporting the strategy;
- to enable the Board of Directors to review priorities and provide new guidelines or incentives where necessary.

These strategic reviews started in 2022. The first session was held in the spring, and the second took place in early autumn.



The four major challenges facing the Bank

- 1. The retirement of more than 25% of the Bank's staff by 2025 is a first challenge: in addition to the need to recruit suitable new talent, it is necessary to ensure the transfer of knowledge from outgoing to incoming people.
- 2. The standardisation of internal processes is essential to guaranteeing business continuity in an environment where, due to the inverted age pyramid, staff turnover is relatively high.
- 3. The Bank must be able to provide information and recommendations supporting the government's policy decisions in a constantly evolving external environment (COVID-19, floods, the war in Ukraine, high inflation, etc.).
- 4. The Bank's recommendations and expertise attract considerable attention and the number of invitations to participate in the public debate on various subjects, sometimes far removed from its core tasks (Economic Risk Management Group, COVID-19, climate change, etc.), is growing.

More than ever, a great deal of flexibility and agility is expected of our institution.

State of play

In view of the large number of strategic actions (268 actions under 12 cross-cutting themes and two

strategic missions), the Strategy Team decided to use a tool to visualise the implementation progress. This tool is called PBI, which stands for Power-Bi.

A quick look at the tool shows that one year after being launched, more than 80% of these 268 actions are in progress and considered to be "on time", "on budget" and "on scope". Information on the completion status of actions, potential causes of delays and follow-up indicators will soon be added to the tool.

Some themes required more specific attention. This was the case for – amongst others – real estate. Indeed, post-COVID-19 measures and rising prices had a significant impact on the Bank's real estate programme.

Two new projects were added to the list:

- Business Architecture, Risk & Digital Scan: this joint project between various departments (General Secretariat, Finance and Strategy, and Second Line of Defence) will be launched in the fourth quarters of 2022 and 2023. Based on an analysis of the Bank's processes, the main activities will be mapped in order to assess digitalisation needs (workflow and case management) as well as the main risks.
- Cloud for Business: this new project aims to assess the impact of the migration to the cloud of the IT applications used within various entities.



Strategic actions and follow-up by theme

Innovation – Achievements in 2022

A detailed action plan was drawn up and validated by the Board of Directors. This action plan is based on the four pillars of the Innovation Board's mandate. The objective of the Innovation Board is to support the Strategy 2025 and help the Bank become more relevant, more efficient and more socially responsible.

Foster Internal Collaboration

The main objective is to increase internal, transversal collaboration in the area of innovation. Given the heterogeneous nature of the Bank's activities, a governance structure covering the main actors was set up in the form of an Innovation Board. This board, supported by a dedicated central team, brings together the key players involved in innovation, representing the Bank's main departments. With meetings organised throughout the year, the Innovation Board is supported by a Steering Committee, composed of the heads of innovation, IT and data (CDO) as well as the project portfolio manager.

Test Innovation

A cornerstone of innovation is the development and execution of innovative use cases to test new technologies, new ways of working or solutions not yet adopted by the Bank. This allows the Innovation Board to broaden its spectrum of possibilities.

To this end, an Innovation Intake Funnel was set up to formalise the process of identifying, evaluating, launching and documenting innovative use cases.

Several cases were tested and developed, often successfully, using methods to assess project feasibility (proof of concept), such as

- A legal monitoring solution supported by web scraping technology.
- A virtual agent that automatically answers questions related to use of the Bank's tools.
- The development of a graph-oriented database solution using information available within the Bank to model and analyse interrelationships (in collaboration with the University of Antwerp).
- A solution intended to support the Bank's supervisory mission through automation and increased efficiency by means of advanced checks of the quality of data from supervised institutions. The tool will allow automatic detection of outliers through target data consolidation and the use of differentiation criteria.

- A solution for the in-depth analysis of the skills of the Bank's employees compared to future needs (in collaboration with a subtech player in the Belgian innovation ecosystem).
- A solution to provide more relevant statistical estimates using innovative regression methods (in collaboration with Ghent University).

Communication & Culture of Innovation

Although there is still some way to go, specific efforts were made this year to develop and spread a culture of innovation within the Bank. Design Thinking sessions were organised to refine our vision of innovation and our underlying objectives and actions. An internal exchange and communication platform ("Innovation Forum"), open to all Bank employees, was created and should make it possible to step up the exchange of best practices.

A first major event devoted to innovation was organised within the Bank ("Innovation Day"). Focusing on different themes, the day, intended for our employees, allowed us to inspire, learn and share thanks to the participation of renowned keynote speakers. In total, more than 400 employees took part.

Leveraging External Collaboration

The Bank strengthened external partnerships and established close ties with Belgian and international institutional partners: several Belgian universities, the Virtual Lab of the Eurosystem's Single Supervisory Mechanism (SSM), and the Innovation Forum of the Bank for International Settlements (BIS). On a more *ad hoc* basis, specific collaborative efforts were made with other central banks (De Nederlandsche Bank, Banque de France, European Central Bank).



More than 400 employees took part in Innovation Day.

Ability to effect change

A Project Management Office (PMO) was set up to strengthen project and portfolio management capacity. Another achievement was the development of change management expertise within the Bank through the ADKAR (Awareness – Desire – Knowledge – Ability – Reinforcement) approach. The development of business architecture to serve as a common reference framework for data and IT architecture is underway.



Efficiency, cost and performance management

As part of the continuous improvement of the performance of its missions, the Bank's Finance and Strategy Department has developed a multi-annual budget covering the next five years.

Other actions under the theme of efficiency include the establishment of a Process Management Centre of Excellence (PCE) and the development of process review capabilities. In addition, an expertise centre for process automation via a cloud-based platform will be created.





Research, more essential than ever

in uncertain times

Russia's war in Ukraine and the last spasms of the pandemic had global repercussions, interrupting the post-COVID-19 recovery and fueling stubbornly high inflation. These events led to an unprecedented reversal of monetary policy.

In the absence of a historical benchmark to guide economic policies, the Bank's teams relied on a battery of rigorous and flexible analytical tools derived from many years of research. While these were subject to certain limitations, they facilitated the indispensable diagnostic, forecasting and advisory work expected of economists. These tools essential-

ly consisted of mathematical models that allowed the elaboration of plausible scenarios for the economy as a whole (macroeconomics), short- to medium-term forecasting models, and more refined statistical tools capturing the diversity of sectoral or even individual situations (microeconomics).

Economics & Research Department

The Economics & Research Department consists of various analysis and research groups. Their task is to contribute to the formulation of the Bank's monetary and macroprudential policy positions. They help to achieve policy coherence and to clarify the Eurosystem's and the Bank's actions and positions

by providing highlevel expertise in research and economic analysis.

A credible diagnosis

Thanks to research conducted over many years, Governor Pierre Wunsch was able to rely on a credible diagnosis of the health of the Belgian economy in preparation for his work within the Governing Council of the European Central Bank.

Initially, the Bank's economists had to respond quickly to the governor's and federal authorities' needs for information. Thus, several analytical notes that influenced the public debate were prepared on short notice (notably on the taxation of excess profits, the evolution of corporate profit margins in the context of automatic wage indexation, the inequalities inherent in the resurgence of inflation and the distributional aspects associated with measures introduced to combat the energy crisis).

In the spring, this intensive diagnostic and policy formation work supplied food for thought to the expert group on purchasing power and competitiveness, set up by Prime Minister Alexander De Croo and chaired by Governor Pierre Wunsch. Between April and June 2022, this group, supported by teams from the Economics & Research Department, submitted two reports to the federal government, one dissecting the effects of the energy shock and the second cataloguing possible measures in response to the crisis.

Real-time learning

Once the initial impact of the economic shock caused by the war and the energy crisis had passed, economists continued to draw lessons from it in real time and to update their diagnoses and forecasts. Thus, the NBB's economic models were adapted by introducing new features and considering alternative calibrations reflecting the atypical characteristics of the crisis. This flexibility allowed for a better understanding of the risks surrounding the forecasts.

In addition, detailed follow-up of the evolution of the situation in the form of a dashboard was published for the first time in May on the Bank's website. This document has been updated every three months since September and is the result of close collaboration between the Bank, the Federal Planning Bureau, the FPS Economy and certain private sector actors.



Corporate profit margins in the face of the energy shock and indexation

An example of research directly relevant to the economic policy debate

In addition to regular monitoring of the economic consequences of Russia's war in Ukraine, the Bank conducted, at the request of the government, a study on the impact of rising energy prices and wages on businesses. A first prospective analysis was carried out in April and published in May 2022.

This study assessed the ability of companies to pass cost increases through to their sales prices. First, it identified the most energy- and/or labour-intensive industries. It then estimated the impact of these two shocks on corporate profit margins, finding that most industries entered the current crisis with historically high margins and were therefore able to absorb some of the increase in production costs.

A second study, conducted at the end of 2022, confirmed that, in most sectors, the median firm absorbed a significant share of the shock, with margins settling at a level below that recorded during the COVID-19 crisis or even below pre-COVID-19 levels.

Not to mention long-term projects

The mobilisation of research teams around issues related to the energy crisis did not mean that longer-term projects were frozen. For example, the Bank's biennial research conference in October brought together ten teams of researchers from the Bank, Belgian and foreign universities and other central banks to present the results of two years of intense research on the theme of "household heterogeneity and policy relevance".

The highly differentiated impact of the energy shock on households and productive sectors clearly shows the relevance of the theme of heterogeneity and inequality for the years to come. Equally relevant are research priorities relating to the climate transition and digitalisation, as foreseen by the Strategy 2025.

Finally, the succession of crises highlighted the importance of public action at all levels of government in Belgium and the corresponding need to improve the availability of statistical information about them.

Under IMF scrutiny

In 2023, the IMF will audit the Belgian financial system as part of a five-year assessment. The Bank plays an important coordinating role in this exercise, for which it initiated the preparations in 2022.

In 2023, the International Monetary Fund (IMF) will conduct an assessment of the Belgian financial sector and its supervision. The IMF carries out such an assessment every five years in more than

30 countries with systemically important financial systems. This assessment, for which preparations began in 2022, forms part of the Financial Sector Assessment Program (FSAP). The FSAP focuses on financial stability, concentrating on the financial sector, the regulatory and institutional framework and supervision. It is in addition to annual reviews – so-called Article IV reviews – which focus on economic issues and monetary and fiscal policy.

Prudential supervision and resolution

Financial Stability, AML Supervision and Prudential Bank Policy

This department ensures a wide range of supervisory tasks and duties:

- Identification of risks liable to endanger the stability of the financial sector (financial stability) and the mitigation of these risks through the use of appropriate macroprudential policy tools.
- Preventive supervision of the AML/CFT system.

 Definition and development of international prudential standards for banks and stockbroking firms and their implementation at national level.

A multitude of stakeholders

Issues related to financial stability and financial sector supervision accout for a large share of the FSAP. This explains the extent of the Bank's involvement in this exercise and its coordinating role. The assessment is coordinated by its Financial Stability, AML Supervision and Prudential Banking Policy and International Coordination and Eurosystem Departments. In addition, human and material resources are also mobilised in other entities, such as prudential services, the Legal Department, the Economics & Research Department and the Resolution Unit. A number of Belgian authorities are also involved: the FSMA, the Federal Public Service Finance, the Office of the Minister of Finance and the Guarantee Fund. In addition, European authorities such as the SSM/ECB (Single Supervisory Mechanism/European Central Bank) and the

SRB (Single Resolution Board), as well as Belgian financial institutions and members of the academic community, also play a role.

An assessment in three parts

The FSAP consists of three parts, which together provide a picture of the overall health of a financial system and its resilience to crises.

The first pillar: solvency, debt and liquidity

The health and robustness of the financial system are assessed by means of a systemic risk analysis, based on indicators of the solvency, leverage and liquidity of financial institutions as well as the finances of non-financial agents and households and the state of the financial and real estate markets. Stress tests and scenario analyses are used to measure the effects of external macroeconomic shocks on the solvency and liquidity of the banking, insurance and investment fund sectors. The interdependence between different parts of the financial and economic system is also examined.

The second pillar: international standards and best practices

The second pillar of the FSAP concerns assessment of the financial policy and supervisory framework. It also covers the macroprudential framework.

The approach here is based on a series of questionnaires and interviews to assess whether international standards and best practices are being met in the areas of banking regulation (Basel Committee Core Principles of Effective Banking Supervision), insurance regulation (IAIS Insurance Core Principles) and supervision of financial market infrastructures (CPSS-IOSCO Principles for Financial Market Infrastructures). For this last point, the IMF's analysis will focus on Euroclear and its supervision, as this payment infrastructure is based in Belgium.

The third pillar: safety nets

The third and final pillar of the FSAP focuses on assessing local financial safety nets and the crisis management framework. In this context, the IMF will focus on various factors:

- The relationship between bank home and host countries in terms of resolution.
- Alignment of the deposit insurance system to international standards.
- Early intervention and planning for the recovery and resolution of less significant institutions (LSIs), with the understanding that systemically important credit institutions will be analysed in future similar exercises at the Eurosystem level.

Fieldwork in spring 2023

In December 2022, IMF representatives made a first (virtual) two-week visit to Belgium to launch the project. The objective was to identify the main issues related to the planned assessments. The FSAP itself will take place in March

and June 2023, during two on-site visits.

In 2023, the IMF will carry out an assessment of the Belgian financial sector and its supervision.

A delegation of twelve people will stay in Brussels and Frankfurt

for a fortnight or more. At the end of its stay, the IMF delegation will communicate its preliminary findings to the Belgian and European authorities. The IMF will then prepare a detailed report – the Financial System Stability Assessment (FSSA) – which is expected to be published by the end of 2023.

Modernisation of

the supervision of banks and stockbroking firms

Suptech and European cooperation

The euro area has entrusted banking supervision to the Single Supervisory Mechanism (SSM). The Single Supervisory Mechanism (SSM) is run by the European Central Bank (ECB) in Frankfurt. The National Bank of Belgium (NBB) participates in the banking supervision carried out by the SSM and contributes to the efforts made in the use of innovative technologies in the context of supervision.

In 2020, the ECB defined a five-year action plan – the SSM Digitalisation Blueprint – to address the growing need for innovative supervisory technology (also known as suptech). Based on an approach coordinated between national supervisory authorities, the Blueprint includes specific projects and covers all factors enabling the SSM to achieve its digitalisation objectives.

Prudential supervision and resolution

solvency, liquidity, business models and governance.

Prudential Supervision of Banks and Stockbroking Firms

The Bank's department entrusted with the prudential supervision of banks and stockbroking firms is responsible for the microprudential supervision – off-site, on-site and internal models – of banks in the context of the Single Supervisory Mechanism (SSM) and of stockbroking firms. It focuses on

European cooperation ...

Following the creation of a Suptech Team, two structures were set up by the SSM to foster close cooperation between the ECB and the national competent authorities:

- The Steering Committee Digital Agenda, on which director Tom Dechaene sits, to guide suptech projects;
- The Supervision Innovators Forum, which enables the various SSM supervisors, including those from the National Bank of Belgium, to exchange suptech knowledge.

... with the participation of the Bank

Experts from the Bank's IT and supervision departments have contributed to this exchange of knowledge and to the development of several European tools, including

- Virtual Lab: a platform providing a state-ofthe-art, cloud-based digital infrastructure for remote collaboration between all SSM members.
- Heimdall: a tool for the analysis of fit and proper questionnaires based on natural language processing.
- Medusa: an application used for drafting and checking the consistency of inspection reports on the internal models used by banks.

Sharing of national initiatives

Each year, the Supervision Innovators Conference brings together in Frankfurt innovation actors – from the world of supervision and other fields – to share experiences. After presenting, in January 2022, a tool for the detection of anomalies in banks' prudential reporting, the Bank presented, in September, a tool to challenge internal models for credit risk.

In order to ensure optimal use of these suptech tools within the SSM, the ECB and the national supervisory authorities are also working on the construction of

a common IT environment, an initiative known as Olympus.

Finally, various training initiatives – including a Data Science School – have been launched within the SSM to meet these challenges and promote the use of innovative technologies. In addition to the Bank's own training courses, these initiatives enable employees to be prepared for future developments.



Strategic reflection on organisation of the prudential policy and inspection of insurance companies

Future-proofing prudential supervision

Prudential supervision is a core task of the National Bank of Belgium. The aim is to ensure the soundness and integrity of financial institutions and the stability of the financial system. In doing so, the Bank contributes to the objective of sustainable prosperity in Belgium. This is a highly relevant and significant responsibility, especially in times of social and economic crisis.

Prudential supervision and resolution

Prudential Policy and Insurance Inspection

The Prudential Policy and Insurance Inspection Department monitors compliance with the conditions and rules applicable to the activities of insurance companies in order to ensure protection of the rights of policyholders and third parties involved in the performance of insurance contracts.

Acting efficiently and in a targeted manner, in keeping with the times

To mark the tenth anniversary of the integration of prudential supervision into the Bank, the Board of Directors launched a strategic reflection on this topic, soliciting the views of other prudential authorities well as some thirty CEOs representative of the Belgian financial ecosystem.

Prudential supervision entails, amongst other things, intervening in the event of a breach or risk situation. At the end of this reflection, it was clear to the Bank that supervision must evolve in order to allow supervisors to act in an efficient and targeted manner, in keeping with the times. In other words, it is necessary to develop "future proof" prudential supervision, which will entail organisational, operational and IT changes, innovation and investment. The Bank is ready to undertake these actions, especially given that the digital and economic-financial environments in which financial institutions operate are evolving at such a pace that standing still would be a step backwards.

Innovation, risks & costs

Future-proof prudential supervision must take into account several parameters, such as

Technological innovation

More advanced data use, the implementation of a digital communication platform with the supervised sector, automated end-to-end paperless supervisory processes.



Risk-based monitoring

Strengthening of supervisory capacity where risks are highest. This is not to prevent a failure or breach of the rules – the Bank can give no guarantees on this subject – but to further reduce the likelihood and mitigate the impact of a failure or breach.

To achieve this, the Bank will invest in technological innovation and more extensive use of data, in terms of both volume and quality. As the number of critical files has increased in recent years, the Bank wishes to be even better prepared to deal with crises in the years to come.

At the heart of this "future proof" vision: the interest of the Belgian population

This future-proof vision of prudential supervision forms part of the Bank's multi-year strategic plan. The parameters listed above have been translated into strategic directions to define what the Bank expects from financial institutions and what they can expect from the Bank. Ultimately, future-proof prudential supervision focuses on one thing: making a well-thought-out contribution to protecting the interest of the Belgian population.





"FINDING A NEEDLE IN A HAYSTACK"

PASCAL RINGOOT / FINANCIAL ANALYST

The Bank possesses large amounts of data, some of which contain valuable information. But how can this information be extracted as efficiently as possible, without employees having to sift through every document? Natural language processing (NLP) can help. Pascal Ringoot is an expert in this field.

Pascal: "NLP is the field of artificial intelligence that deals with analysing human language by recognising words or combinations of words, which allows information to be classified. NLP therefore governs translation tools such as Google Translate and DeepL, as well as the virtual assistant Siri and the many corporate chatbots."



Human beings remain in charge

"Let me give you a concrete example: the HelpU AML (anti-money laundering) application used within the supervisory services. We have so much documentation that it's impossible for us to go through it all. But we can't just archive it either, because we could lose valuable information. A few years ago, the prudential supervision services set up a project in which we looked for a system that would extract only relevant information from auditors' reports or inspection reports of insurance companies or banks. A tool that would in short look for a needle in a haystack. In most cases, we know what is in the documents and only want to select those that deviate from the norm. We run the documents through an NLP program that identifies these aspects. It is then up to the analyst to decide what is relevant and what is not. The human being always has the last word, the program is

"In the end, it is the analyst who decides what is relevant and what is not."

only a tool. Machines may one day surpass humans, but for the time being they still lack some crucial tools such as full grammatical analysis of sentences or the accurate identification of pronouns and their antecedents."

NLP at the Bank

"NLP is gradually being rolled out, both inside and outside the Bank. I am following the work of the ECB, EIOPA (the European Insurance and Occupational Pensions Authority) and other central banks. Some projects are already more or less up and running and allow for productive exchanges. But all this is still at a very early stage. For the time being, there is not yet a complete NLP programme, only components."

"The aim is to have an operational tool for the prudential supervision departments by early 2023, which will be grafted onto the AML compliance documents and have the capability to analyse everything that appears in the media. The other departments will follow later, if this could be useful for them. Everyone does things in their own way. It turns out that initiatives are also well underway in other departments, with colleagues from the Data Science Centre, amongst others, working on them. I'm lucky enough to be able to work on these issues almost full-time."

Contributing to a digital euro and ensuring secure payment systems

Towards a digital euro

The Bank continues to prepare for the potential introduction of a digital euro, in collaboration with the European Central Bank. The decision on whether to develop a digital euro will be taken at the end of a two-year research phase, launched in October 2021.

The objective of this phase is to resolve technical issues and to study the implications of a digital currency on payment infrastructures, financial stability and financial inclusion. It is being conducted by various working groups set up by the ECB, such as the High-Level Task Force (HLTF) and the Project Steering Group (PSG), on which the Bank is represented.

The HLTF is responsible for formulating major proposals on the functionality and intrinsic features of the digital euro. The PSG brings together and coordinates the study and research efforts of both the national central banks and the ECB. The joint work of these two committees has led to some progress in the design of a digital euro which draws on a wide range of usage scenarios, including over-the-counter transactions, e-commerce, point-of-sale payments in physical shops and transfers to government.

First decisions

The transfer mechanism

One of the key decisions that has been taken so far relates to the transfer mechanism. It has been decided that the Eurosystem will explore a "third-party validated online solution", similar to transfers carried out through commercial banks, and an "offline peer-to-peer solution" using a smartphone. Online transactions would be settled at the level of the Eurosystem and offline transactions through a local storage device. Transaction management tasks would be carried out by supervised intermediaries (payment service

providers). Unlike the Eurosystem, these intermediaries would be the direct contacts of individuals, merchants and businesses using the digital euro.

Not an investment tool

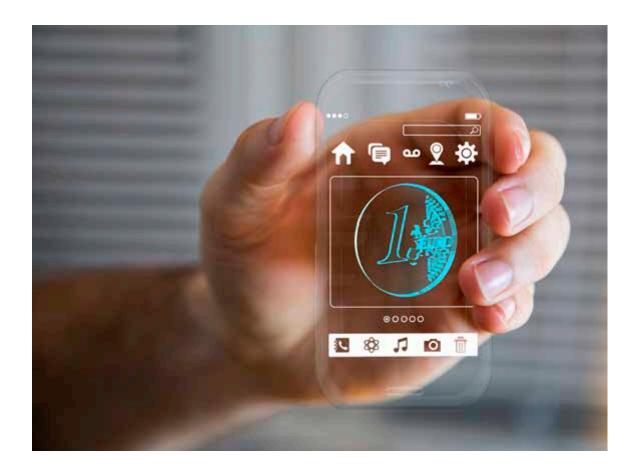
The High-Level Task Force on Central Bank Digital Currency (HLTF – CBDC) has also decided to include in the design of a digital euro tools (such as holding limits) to control the amount of digital euro in circulation. The objective is to prevent its use for investment purposes and at the same time work towards maintaining financial stability.

Prudential supervision and resolution

Market Infrastructures, Payment Services and Cyber Risk Monitoring

This department is responsible for the prudential supervision of payment institutions and market infrastructure operators. It also monitors the systems operated by these infrastructures. It analyses IT risks as part of the overall supervisory review process and works to increase the cyber-awareness and resilience of key financial entities.





A cascade system

The Governing Council further approved the possibility of using a so-called "cascade" functionality, whereby funds in the digital euro portfolio exceeding the holding limit would be automatically transferred to a linked commercial bank account. The reverse functionality (the "reverse cascade") would allow end-users to make a payment even if the amount exceeds their digital euro holdings, by taking additional cash from their linked bank account. Both features, activated at the discretion of the end-user, are intended to ensure a seamless payment experience, thus preventing the holding limit from restricting transactions.

Respect for privacy

With regard to privacy, as explained in the Corporate Report 2021, there has been a move towards stricter data protection rules (such as the General Data Protection Regulation) in the European Union for several years. Two options reflecting these concerns

were therefore favoured by the HLTF – CBDC, namely selective privacy for low-value online payments and full privacy for user balances and transaction data in the context of offline payments.

In addition, various confidentiality-enhancing technologies are being tested in order to make this selective privacy as effective as possible. In any case and as approved by the Governing Council, the Eurosystem is committed to ensuring the highest possible level of confidentiality in the regulatory framework.

A question of transparency

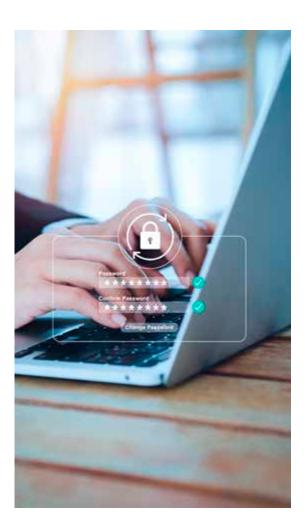
A great deal of attention has been paid to consulting all stakeholders, from citizens to businesses. The public consultations have provided an opportunity to gauge the expectations of euro area citizens.

From time to time, the Bank also organises bilateral meetings with associations concerned by the project, as well as conferences to provide the greatest possible transparency to the public.

The banking and payments sector is also involved through advisory committees at ECB level (Market Advisory Group or MAG). The Bank actively participates in these meetings in order to obtain as much feedback as possible from stakeholders on the progress being made. In addition, the Bank informs the private sector of the progress made through the National Retail Payments Committee (NRPC) and bilateral meetings organised throughout the year with payment institutions, banks and other supervised institutions concerned by the project.

Cybersecurity: the Bank is more vigilant than ever

Shortly after Russia's invasion of Ukraine in February 2022, the Bank made the institutions subject to its supervision aware of the increased cyber threat and encouraged them to take appropriate measures. In addition, institutions which the Bank considers



significant, such as critical infrastructure or essential service providers (for the Belgian financial sector, but also more broadly), were surveyed. This survey assessed their operational readiness and their level of cybersecurity specifically in relation to the crisis and the threat it represents.

The purpose of the survey was to determine whether these "significant institutions" had responded appropriately to the increased threat (or at least to the perception of an increased threat). The responses received were used to identify areas requiring further follow-up and, in the context of the NIS (Network Information Security) Act and Critical Infrastructure Act, to answer questions from the National Crisis Centre or the Federal Cyber Emergency Response Team (the Bank is also the sectoral contact point for these matters).

After a thorough analysis of the responses and, in some cases, the receipt of additional information, it was concluded that, on the whole, the sector had responded adequately. The institutions concerned were found to be well aware of the increased threat and to have clearly stepped up their vigilance. They had intensified monitoring and information sharing and made efforts to prevent cyberattacks and to react appropriately when they occur.

Finally, the Bank further expanded and intensified its national and international partnerships relating to information sharing on cyber threats, allowing it to continuously adapt to ever-changing cyber security developments.

Has Russia's war in Ukraine changed the game?

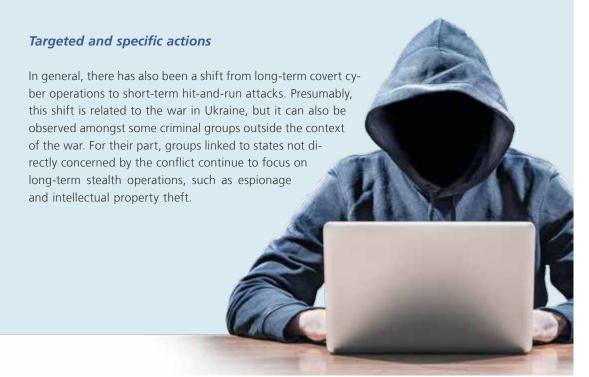
In recent months, there have been explicit and sometimes more subtle signs that the geopolitical fault lines are shifting. Geopolitics is a complex interplay of relationships, taking many forms and active on many fronts, which inevitably affects the cybersecurity threat landscape. Despite the volatility of this landscape, attempts can be made to paint a picture of how it could evolve in the short and long term.

What is a cybersecurity threat?

A cybersecurity threat is characterised by several factors, including the injured parties, the intentions and power of the malicious parties, and the techniques and pretexts used. The tactics are generally similar, such as the exploitation of topical issues and the emotional response of unsuspecting users to them. Topics drawn from current events, mainly Russia's war in Ukraine, the energy crisis and rising inflation, are manipulated in a malicious way to deceive individuals and businesses.

Addressing weaknesses

Cyberattacks exploiting vulnerabilities in widely used but sometimes lesser-known software (such as Log4j, SolarWinds) — either directly or through the supply chain — remain a major concern, regardless of the geopolitical situation. These attack vectors, used in parallel or in combination with phishing and/or ransomware, are still too often exploited by hackers to penetrate corporate networks. It should also be noted that the majority of cyberattacks in Western Europe are driven purely by the prospect of financial gain.



Specific threats related to Russia's war in Ukraine



Ukraine is facing attacks aimed at paralysing communication services and channels. These attacks may be linked to actors directly involved in the conflict or to their allies. The incidents in Ukraine can be considered representative of other incidents, uncontained or not, which could occur closer to home in the future, as was the case in 2017 with the NotPetya malware. However, the likelihood of a global scenario caused by a single piece of malware seems lower now, as more precautions have been taken in response to these attacks. Nevertheless, in recent months there have been signs that critical infrastructure, such as in the energy and telecommunications sectors, is at greater risk of being targeted by cyberattacks.

Hacktivism

Since the outbreak of the war, there has also been increased activity by so-called "hacktivists", who are ideologically driven and active on both sides of the conflict. The main objective of these actors is to disrupt services, either through distributed denial of service (DDoS) attacks or by replacing information on the other side's official websites with propaganda. The impact remains limited in most cases, provided appropriate defences and responses are implemented. In addition, the resilience of hacktivists is generally lower than that of criminal or state-linked groups, and they tend to be less well organised. It is perhaps for these reasons that there has been a noticeable decline in hacktivist activity recently, although some appear to still be active. The degree of Russia's international isolation in the coming years will therefore play an important role in shaping the cybersecurity threat landscape.

Are central banks and other financial institutions more often targeted?

Due to the economic sanctions imposed on Russia, there is a concern that financial institutions, amongst others, could face greater cyber risks than before. In recent months, explicit and targeted threats have indeed been observed, and attacks have taken place against financial sector institutions, mostly with limited or no (operational) impact. Recent developments seem to indicate that there could be a shift towards attacks on national critical infrastructure, in particular in the energy and telecommunications sectors. Collateral damage to the financial sector cannot of course be ruled out in such a scenario.

Protecting the interests of policyholders and ensuring the continuity of insurance companies

Vigilance in the face of cyber risk

The supervision of cyber risk has increased in the insurance and reinsurance sector.

After conducting a cross-sectional analysis of cyber risk – the report on which was provided in 2021 to the insurance and reinsurance companies under its supervision – the Bank organised a workshop on this topic in February 2022, aimed primarily at the sector's IT, information security and risk management managers. The conclusions were made public at two seminars in September 2022.

Prudential supervision and resolution

Prudential Supervision of Insurance and Reinsurance Companies

The department responsible for the prudential supervision of insurance and reinsurance companies supervises Belgian insurance and reinsurance companies with a view to protecting the interests of policyholders and guaranteeing the continuity of insurance companies. It ensures that these companies, whether small niche players or large insurers with an international presence, manage their risks in a sound and prudent manner and comply with all regulatory provisions.

Heightened vigilance and dialogue

Following the invasion of Ukraine, the Bank contacted financial institutions (including insurance companies) to encourage them to be more vigilant and to assess the potential impact of possible cyberattacks. A specific dialogue was established between these companies and the Bank, in addition to regular periodic interaction.

As a general rule, when a major cyber incident is brought to the attention of the Bank, contact is immediately made with the potentially affected insurance or reinsurance companies and subcontractors involved, in order to measure the impact of the attack and the measures taken by the various parties to tighten their IT security.

In 2022, the Bank processed the application for authorisation of a company that will specifically insure this type of risk.



Exchanges with actuarial functions ...

Targeted analyses of technical provisions, both life and non-life, were initiated in 2021 and continued in 2022. The Bank further analysed the documentation and actuarial function's report for companies with unexpected reserve figures. The Bank also organised a workshop for actuarial functions to remind them of the legal requirements and explain its expectations in this area. The Bank then published a communication on the tasks of the actuarial function and the documentation requirements for technical provisions, on 2 November 2022.

... and with accredited auditors

The Bank organised workshops for accredited auditors in 2021 on audit of the valuation of investments and the calculation of capital requirements to cover market risk. The aim of the workshops was twofold: to gain a clearer picture of the audit activities carried out in practice and to improve coordination of the Bank's work with that of auditors. As a follow-up to these workshops, the Bank launched discussions in 2022 with auditors on investments based on a summary table format.

Assisting struggling financial institutions

without overburdening public finances

The work of the National Bank as Belgium's resolution authority is carried out in the framework of the single resolution mechanism, which is the second pillar of the European banking union.

Resolution mechanisms are intended to enable authorities to resolve crises affecting credit institutions without directly burdening public finances and while containing the impact of these disruptions for the system as a whole.

Each year, the Bank draws up an action plan that reflects both its priorities and those established for the European banking union by the Single Resolution Board. The 2022 action plan was broken down into four key areas, deemed crucial to ensuring that, if necessary, the failure of a banking group could be dealt with without impacting the real economy, affecting financial stability and resorting to state aid.

Four priorities

The four focus areas were:

- The preparatory work undertaken with each banking group established in Belgium, as well as with stockbroking firms, in order to strengthen their resolvability. The National Bank, together with the Single Resolution Board, ensures that these institutions and firms are sufficiently prepared to allow the deployment of resolution instruments in the event of failure. This implies, amongst other things, the integration of resolvability considerations into governance.
- The development of a legislative and regulatory framework that is sufficiently robust to permit the rapid handling of failures. This framework should also define preparedness requirements for credit

institutions and stockbroking firms, including requirements relating to the structure of their liabilities. The National Bank, in its capacity as an independent expert, participates in negotiations at European level on these requirements and in their implementation at national level.

The development of crisis management capacity, based on crisis manuals describing the steps to be taken, both legal and operational, to implement various resolution instruments in a Belgian context.

Prudential supervision and resolution

Resolution Unit

The Bank has been designated as the national resolution authority and must therefore – in the framework of the Single Resolution Mechanism – prepare for the failure of credit institutions so that these can take place without jeopardising the stability of the financial system and without the cost falling on taxpayers. The Resolution Unit acts as the secretariat to the Resolution College – the Bank's body responsible for this task – and ensures in particular that each credit

institution has a resolution plan and meets the regulatory requirements for resolution. The establishment of resolution funds prefinanced by the sector. The aim is to ensure that funding is available when resolution tools are needed. This funding, constituted by the sector, mainly takes the form of a European resolution fund. In the course of 2022, the Single Resolution Fund raised contributions amounting to €13.7 billion, bringing its total to €66 billion. Belgian credit institutions contributed €447 million to the fund in 2022, compared to €347 million in 2021. At the confluence of law and finance, the resolution framework is fertile ground for developing the talents of lawyers and financial analysts. It requires analytical and conceptual capabilities, negotiation and diplomatic skills, as well as an ability to develop solutions, to be put to use in a Belgian and European environment, in contact with credit institutions and Belgian and European authorities.

NBB Supervision portal

On 3 October, the Bank launched a new portal, NBB Supervision, for the exchange of information with the financial sector. Via the portal, the Bank now manages the reporting obligations of supervised entities, and financial institutions and their supervisors can consult or download documents.

The portal is based on agile modelling, with new developments gradually being added to the application. In the long term, with a view to simplifying certain administrative procedures, the objective is for NBB Supervision to become a one-stop shop for financial institutions for all services offered by the Bank or requests addressed to it.

The European dimension is an essential aspect of this project, and possible synergies between NBB Supervision and the applications of European authorities are being taken into account.



The National Bank is collecting more and more data and improving its statistical processes

A better understanding of the impact of the energy crisis on the Belgian economy

Survey of households to determine the impact of the energy crisis on their income

Driven by the war in Ukraine, the inflationary pressures that began in the winter of 2021 intensified in the first few months of the year. As the authorities considered the most appropriate support measures, it was essential to measure the impact of the energy crisis on household purchasing power as accurately

as possible. In this context, the Bank adapted its monthly consumer survey, adding questions on the energy bill and household responses to different types of support. Taking into account the socio-demographic characteristics of the households surveyed, the survey differentiated behaviour according to age, income and family situation. Conducted in collaboration with the Economics & Research Department, this initiative resulted in in-depth analyses, which were presented at the Bank's international conference in October 2022.

Redesign and expansion of the business investment survey

The Bank asks business leaders twice a year about their investment plans. At the initiative of the European Commission, this survey was redesigned in 2022 to improve the quality of the data and facilitate use of the results. It was also extended to the business-related services sector, in addition to the manufacturing industry.

Real-time measurement of the impact of the energy crisis on Belgium's trade flows

Foreign trade statistics, which are available on a monthly basis, provide a rapid overview of world trade and Belgium's place in it. Throughout the year, the Bank endeavoured, through its publications, to highlight the impact of the energy crisis, in particular the heavy energy bill, on Belgium's imports and exports.

والواللة

At the same time, it continued its communication efforts regarding the impact of the development and marketing of COVID-19 vaccines and medicines on the Belgian economy.

General Statistics Department

The objective of the General Statistics Department is to produce and make available statistics to a wide range of users – decision-makers and economic policy specialists – both within the Bank (management, the Economics & Research Department, International Coordination and Eurosystem, etc.) and outside it (the European Central Bank, the European Commission and the International Monetary Fund). Our statistics are also made available in the public interest to citizens, civil society organisations, academics and the press, in order to foster public debate on the Belgian economy and society, based on

reliable and high-quality figures.



Contribution to the external trade microdata exchange project

The exchange of microdata on external trade in goods between EU Member States started on 1 March 2022. Initiated by the European Commission and Eurostat, this project entails the development of a common secure infrastructure, by Eurostat and the Member States.

The Bank, which is responsible for compiling Belgium's foreign trade statistics, is contributing to this initiative. Two projects were launched:

- The Micro Data Exchange (MDE) project on intra-EU exports of goods.
- The Customs Data Exchange (CDE) project on trade in goods with non-EU partners.

Both aim to improve the consistency of statistics at European level, while reducing the administrative burden on reporting companies.

Households database

Given the importance of the societal role of households and the impact of economic and monetary policy decisions on them, the Bank closely follows discussions related to household inequality. In this context, it actively participates in initiatives by international institutions (Eurostat, OECD, ECB) to develop new statistics to map inequalities in household income, consumption and wealth.

In this regard, a major step was taken in 2022 with the laying, in collaboration with Statbel, of the cornerstone for a database (*Households Database*) of administrative (demographic and tax) and survey data.

More transparent statistical methodologies

There is an increasing demand for transparency on the part of organisations producing statistics and analysis. In keeping with this trend, the Bank shares the results of its analyses as well as information on the sources and methods used. For example, in early 2022, the Bank published an updated version of its national accounts methodologies. Entitled "GNI Inventory" (Gross National Income), this document describes in an exhaustive manner how the multiple aggregates of the national accounts – in particular GNI – are compiled, which makes it possible to calculate Belgium's contribution to the European Union budget.

Financial statistics: new and green

In the field of financial statistics, 2022 was marked by the progress made in several projects in coordination with the ECB and the European System of Central Banks, in terms of dissemination and procedures as well as the production of new statistics.

Dissemination of statistics

The dissemination of statistical data was enhanced in several areas in 2022, at both national and European levels.



- Over the course of the year, the Bank published two new quarterly press releases on financial activities, relating to:
 - Non-monetary Belgian investment funds
 - International investment position and balance of payments financial account
- In July, the European Central Bank (ECB) published for the first time more granular statistics on securities holdings and issues, accompanied by a methodological manual. The Bank was involved in this project alongside the other national central banks of the European System of Central Banks (ESCB).
- The Bank started to transmit quarterly financial accounts data to the ECB. The non-bank financial institutions sector has been broken down into several headings in order to obtain a better analysis of financial sectors, including non-bank financial intermediation.

New statistics

The mapping of payments, climate indicators, the distribution of household wealth, the isolation of data on entities making little or no contribution to national production, etc. In terms of statistics, many new developments saw the light of day in 2022.

Mapping of payments

On 1 January 2022, a new regulation applicable to credit institutions, payment institutions, e-money issuers and system operators entered into force. It aims to better map payment habits by increasing the volume and frequency of data collection.

The climate dimension

Following the ECB's decision to further integrate the climate dimension into statistics, the Bank participated in the development and production of new sustainable finance indicators. These indicators provide information on the climate risks faced by financial institutions through the corporate securities and loans in their portfolios, as issuers may emit greenhouse gases or be exposed to physical climate risks such as flooding. The indicators also estimate the share

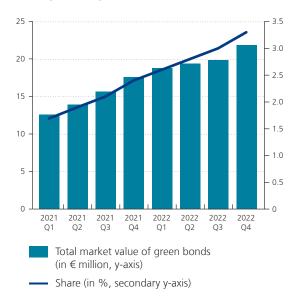
of green bonds. These experimental indicators and their methodological references have been available since January 2023 on the ECB's website.

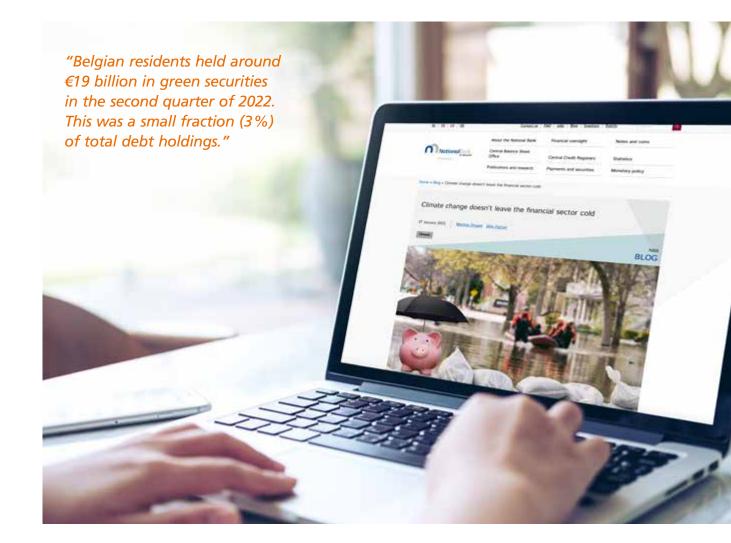
The new climate indicators are discussed in a blog post, "Climate change doesn't leave the financial sector cold", by Martine Druant and Stijn Ferrari, published on the Bank's website on 27 January 2023.

Distribution of household wealth

Due to growing user demand for statistical data, as reflected in the G20 Data Gap Initiative, the Bank participated in an ECB project in 2022 to provide aggregate data on the distribution of financial and non-financial household wealth.

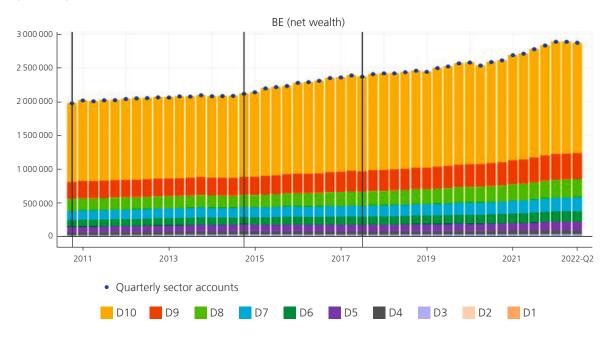
Share of green bonds in total debt instrument holdings of Belgian residents





Net wealth of Belgian households

(in € million)



Still in the experimental phase, these statistics are based on aggregates from the quarterly financial accounts compiled by the Bank, as well as on microdata from the Household Finance and Consumption Survey (HFCS). They allow various household assets to be broken down into deciles or according to demographic variables.

Other indicators are also calculated, such as the Gini coefficient (distribution of a variable within the population), average and median wealth, etc. It will also be possible to carry out a temporal analysis thanks

The Bank is working on a new statistical survey to map the redistributive effects of monetary policy, as from the end of 2023 to figures established on a quarterly basis since 2010.

These statistics will facilitate, amongst other things, a better understanding of the distri-

butional effects of monetary policy and allow the impact of economic shocks on vulnerable households to be estimated. They are expected to be published by the end of 2023.

Special purpose vehicles in the balance of payments

Following international consultation with the ECB and the IMF, the new Balance of Payments Manual (BPM7) has been amended. The amendments include a definition for a new category of company, the special purpose vehicle (SPV).

Established for a specific purpose, these legal entities are controlled from abroad and have little or no employment, production or physical presence. A special category has been created under the balance of payments and international investment position headings to isolate the claims, liabilities and transactions of these vehicles, the reporting of which was made mandatory in 2022 by an amendment to the ECB Balance of Payments Directive.

While there are only about 100 such entities in Belgium, they dominate the balance of payments in countries such as Ireland and Luxembourg, where they make little or no contribution to national output.

The ESCM Integrated Reporting Framework (IReF)



In early July, the Bank hosted a meeting of the European Statistics Committee on the Integrated Reporting Framework (IReF), one of the most important ESCB projects in recent years. The IReF has the twofold aim of reducing the reporting burden on banks and redefining the process of compiling banking statistics so that all national central banks follow the same process.

The IReF will apply throughout the euro area and may be adopted by authorities in other EU countries. The basic requirements are that all bank data be shared between competent authorities and that harmonised reference databases on financial instruments and counterparties be used by all.

A cost-benefit analysis has shown that – despite a large initial investment – the benefits of the IReF include a lighter reporting burden, more efficient processes, better data quality, improved comparability between countries and shorter response times.

A review phase of the programme for the implementation of the IReF in the medium term was initiated in early 2022. The new framework is intended to replace those of the 19 national central banks and to stimulate collaboration between the national central banks and the ECB. The IReF programme includes collaboration with the European Banking Authority (EBA) to eventually integrate prudential and resolution reporting.



"COVID-19 PREPARED ME FOR THE TRANSITION TO RETIREMENT."

RUDI ACX / HEAD OF THE GENERAL STATISTICS DEPARTMENT

until the end of January 2023

Rudi Acx joined the Bank's IT team as a young economist in 1984, but he didn't really feel at home there. After a time, his doctorate opened the door to Statistics. With a few interruptions, he spent the rest of his career in that department, until January 2023.

A fascinating subject

Rudi: "I think it's great to be able to follow the news while working and to produce information for the general public. What's more, I was lucky enough to work with some very good teams. So I knew we were producing the best statistics possible with the data we had."





40 years of social change

"When I started, we were beginning to redesign an ageing money market. My position at Statistics allowed me to contribute directly to this work. I then took part in the strengthening of public credit institutions (such as the CGER and the Crédit Communal) and their integration into the financial system.

After the fall of the Iron Curtain, Europe opened up to the East. The Bank provided a great deal of support to these countries, particularly in terms of training.

In 1995, our department doubled in size in preparation for joining the monetary union. Overnight, we had to provide Europe with macroeconomic statistics which the NSI (now Statbel) did not have the capacity to produce.

The global financial crisis of 2008 led to a further expansion of the Bank's activities, and more detailed data collection was initiated. In 2011, the Bank took over the systemic micro- and macroprudential supervision of banks, in which we were widely involved."

Coronavirus crisis

"Teleworking taught us to work together differently. I found that those who worked from home delivered as good results as those who worked in the office.

"I think it's great to be able to follow the news while working and producing information for the general public."

There were also personal benefits. COVID-19 taught me to be at home again, which helped prepared me for the transition to retirement."

Technological developments

"In the 1980s, data were still collected on paper and by telephone and processed by the Electronic Centre for Bank Reporting. Computers then validated and compiled the data in preparation for the establishment of statistics. I remember the first PCs: IBM computers attached to a wall in a locked room. They were personal computers in name only. But the Bank evolved very quickly and it wasn't long before everyone was working on a PC."

Gender diversity

"I sincerely believe that the Bank's staff should reflect society. We have already come a long way, but there is still a long way to go."

Art lover

"In my office, I am surrounded by magnificent works by Raoul De Keyser, Hans Op de Beeck and Maurice Wyckaert. I think it's wonderful that the Bank not only acquires works of art to enrich its collection and support the cultural sector, but also exhibits them in its buildings and elsewhere."

The final word

"The Bank is very fortunate with its staff. Many of its employees are highly skilled and passionate about their work."

The Large Case Unit

Connecting statistics and multinationals

How can the wealth created by multinationals, which by definition know no borders, be integrated into national accounting? This is the question studied by the Large Case Unit (LCU), created in 2021. Let's take a closer look at a task that requires both statistical expertise and IT and interpersonal skills, with two statisticians, Xavier Deville and Appeleen Casieris

Gross domestic product (GDP) is the total wealth produced in a country over a given year. Its variation from one year to the next indicates economic growth, but globalisation is making it increasingly difficult to calculate.

Xavier Deville: "In recent years, we have found it increasingly difficult to track the activities of companies whose production chains are spread across several countries, as macroeconomic statistics – including GDP – are calculated within national borders. How can we define what

is produced in Belgium and what is produced abroad? To help answer this question, the Bank set up a Large Case Unit – or LCU in the jargon of the trade – in 2021. Other European countries have done likewise."

Anneleen Casieris: "We are finding more and more inconsistencies in the source data of multinationals. These impact macroeconomic statistics and therefore GDP/GNI. This is a very important indicator, especially for the calculation of Member States' contributions to the EU. In this way, it has a direct effect on our wallets, thus giving a social dimension to the work of the LCU."

A context of globalisation

Xavier: "The LCU has developed working methods adapted to the context of globalisation, in order to monitor in greater depth and proactively



certain large multinational groups whose interpretation and recording of figures are complex. In practice, this involves crossing the data collected by the Bank with various sources: foreign trade data (Intrastat and Extrastat), figures from Statbel, VAT returns, etc."

Anneleen: "We have developed a tool to compare the macroeconomic aggregates of multinationals. This gives us a complete picture of the macroeconomic activity of a firm and any inconsistencies that emerge. Our task is to discover what lies behind the data. It's real detective work."

A new dynamic

Xavier: "The work is done in coordination with other European LCUs, with which we share our data. We also correspond with companies which, by the way, are not legally obliged to answer our questions. But as they understand the potential impact of their figures on macroeconomic statistics, this is not usually a problem."

Anneleen: "We try to lighten their administrative burden, but of course we have to wait for the figures. Companies submit their data, we identify inconsistencies and contact them again if adjustments are necessary. The LCU groups together the questions and acts as a buffer between the various entities of the Bank and companies. In practice, each company is assigned an account manager."



Xavier Deville

"Multinationals

understand the

potential impact of their
numbers on statistics."

Anneleen Casieris
"Our job is to find
out what lies behind
the data. It's real
detective work."



Xavier: "This involves good coordination with our colleagues in the Data Collection Unit, who are in front-line contact with companies. There is no question of asking the same question twice! Once the data have been validated, we pass them on to the other entities in our department, including the service responsible for drawing up the national accounts. Our work allows them to refine their statistical series and produce quality aggregates."

A powerful tool

Xavier: "Our data originate from multiple sources, stored in different locations – both inside and outside the Bank – with different applications and means of access. To avoid time-consuming manual data searches and move towards greater uniformity in the processing of figures, we called on the Bank's Data Science Centre (our experts in application development), which helped us develop a centralised data processing tool. This provides us with computing power applicable to tens of thousands of companies. It's a great analysis tool, which forms part of the Bank's EDM (Enterprise Data Management) strategy!"

Anneleen: "In concrete terms, this entails comparing production, intermediate consumption, exports and imports of goods and services, investment, etc. in a table for each multinational. We can then identify the inconsistencies which we try to resolve as best we can."

Microdata management:

quality is the objective

Over the past year, the Microdata Management Department continued to centralise and reorganise the collection and validation of data provided by third parties further to the conduct of the Bank's core tasks (statistics, prudential supervision, research, etc.).

This approach, aligned with the Bank's "Data" strategy, aims to rationalise, standardise and normalise tools and procedures, particularly through increased computerisation.

Tens of thousands of reporting

From 2020, the year of its creation, to 1 January 2023, the Microdata Management Department grew from 0 to 173 staff members. They manage more than 8 000 data collections, sometimes consisting of several different reports from tens of thousands of reporting agents, ranging from private individuals reporting a few items on an ad hoc basis to financial corporations providing huge volumes of data on a daily basis.

These data are used by many of the Bank's departments, the best known of which to the general public are the Individual Credit Register, the Central Balance Sheet Office and the Central Contact Point. The largest volumes are used by the General Statistics and Economics & Research Departments, as well as by the services responsible for prudential supervision.

Many challenges

The direction and framework for these transformations are provided by Enterprise Data Management and the Data Governance Office, set up as part of the Bank's strategic plan.

This project is spread out over several years due to numerous integration challenges, first for staff from different entities who will be called upon to collaborate in a totally new context and then with respect to applications, protocols and other IT technologies.

2022 was marked by constant efforts of teams, in an environment still affected by the COVID-19 crisis, to absorb activity growth while ensuring continuity of service to clients. Major training efforts were undertaken based on individual employee needs.

Microdata Management Department

The Microdata Management Department centralises the collection and validation of all economic and/or financial data by the National Bank of Belgium. In doing so, it facilitates the task of reporting agents by acting as a single interface. It ensures that this activity is carried out in such a way as to minimise costs while guaranteeing the quality of the data in accordance with user needs.

The department also leads the strategic Enterprise Data Management programme, which aims to ensure that the Bank's data are organised and processed in a modern and efficient way in order to maximise qual-

ity and availability.

First successes

A number of projects were completed in 2022.

For the public

- The launch of a user-friendly opinion survey tool based on open-source software.
- The production of a new application to collect company balance sheets.
- A new application to gather business credit data.
- The possibility for individuals to consult their data in the Central Contact Point online.

In the area of data governance

- Data governance continued to be developed within the various departments of the Bank, under the leadership of the Chief Data Officer.
- As part of the Enterprise Data Management programme, a new data and information architecture
 has been established and a number of policies for data quality management have been defined
 and implemented.
- To implement data governance principles, Data Management Boards have been set up for different fields of activity. They report to the Data Governance Council and ensure the consistency of the various data-related initiatives within the Bank.
- For staff, a Data Academy and targeted communication via a Data Forum have been established to improve the Bank's data maturity.

2023 targets

The department aims to further integrate and harmonise the processes for data collection and validation and initiate reflection on the strategies and tools used to validate the data received. The objective is to deliver products of the highest quality, while minimising

the administrative burden for companies.

"We aim to deliver the highest quality products, while minimising the administrative burden on businesses."

The Bank intends to further improve the quality of data on the assessment of economic developments, as

well as on foreign direct investment, by focusing on data from companies and sectors with a significant weight in the national economy. Finally, in the context of data governance, the Data Catalog and Master Data Management projects aim to facilitate internal access to the innumerable datasets available within the Bank.

High-quality banknotes, accessible to and accepted by all

An accessible means of payment

A recent study by the European Central Bank showed that the share of cash transactions in daily payments by consumers remains significant, although it is declining.

While cash transactions accounted for 58 % of payments in Belgium in 2019, this figure fell to 45 % in 2021. In this changing context, the National Bank believes it is important to ensure that cash remains an accessible and accepted means of payment, on equal footing with electronic means of payment. Everyone should be able to use the means of payment of their choice.

However, the declining use of cash in our daily lives is putting pressure on the banking sector to reduce the costs of cash, notably by closing bank branches or reducing the number of cash dispensers. In this context, two projects were launched recently:

- Batopin (Belgian ATM Optimisation Initiative), which aims to set up a network of ATMs shared by the four largest banks in the country.
- Jofico (Joint Financial Company), which brings together bpost and other smaller banks, with the aim of proceeding, jointly and at lower cost, with the acquisition as well as the management and maintenance of the banknote distributors of the institutions concerned.



In order to analyse the accessibility of cash, the National Bank developed a model to assess the extent to which a large portion of the population can access an ATM within a sufficiently close distance. The results were provided to the relevant political bodies, which are expected, if necessary, to put in place the necessary infrastructure to ensure access to cash.

An accepted means of payment

Cash must remain both accessible and accepted. Ensuring that cash is accepted everywhere, as legal tender, is an essential aspect of our payment systems. Consumers should be able to freely choose how to pay, and people who do not have access to electronic means of payment should not be disadvantaged.

In this respect, the Bank has contributed to the work of the European Commission's ELTEG III (Euro Legal Tender Expert Group), which aims to:

- Create a forum for discussion between the Commission, the ECB and the Member States on issues related to the acceptance and availability of euro notes.
- To provide the Commission with factual analyses and legal expertise on the acceptance of euro cash as a means of payment and on the availability of euro notes in the euro area countries.
- To assist the Commission with the assessment of a possible legislative or policy initiative on the legal tender status of euro banknotes and coins.

Streamlining the cash cycle

The Bank strives to streamline the cash cycle. It puts banknotes into circulation through banks and cash-in-transit companies. A large portion of the notes in circulation is recycled directly by private operators in accordance with strict standards set by the European Central Bank and applied by the National Bank. Banknotes that are not recycled return to the Bank and are processed using machines equipped with high-tech detectors, specific to central banks, making them the most efficient and effective ones on the market.

Only good quality notes are put back into circulation. The rest are destroyed and replaced with new bills.

Enlargement of the Cash SSP community

Cash SSP (Cash Single Shared Platform) is a global platform for processing cash transactions, developed and hosted by the Bank and De Nederlandsche Bank.

On 16 May, Lietuvos Bankas became a member of Cash SSP, having implemented all functionalities of this logistics application. Twelve central banks now share the costs of developing and hosting the platform.



A central bank at the service of society

More information on the results of the Bank's financial market activities can be found in chapter 3. Below, a lesser-known activity of the Bank, which was entrusted with a significant new mandate in 2022, is highlighted.

The National Bank of Belgium manages a central securities depository and, through this service, has been supporting the Belgian Debt Agency for more than 30 years with its financing of the country's sovereign debt. It also assists local authorities and private companies that issue securities to meet their financing needs.

NextGenerationEU, a plan to emerge stronger from the pandemic

In the summer of 2022, the European Commission chose the Bank as a partner in its NextGenerationEU plan. The first step is to raise around €800 billion from investors. To do so, the Bank will issue securities on the primary market through primary dealers on behalf of the Commission. The dealers will then distribute the securities to other banks and investors.

The Bank will also support the processing of transactions in these securities on the secondary market

Financial Markets Department

The Financial Markets Department is responsible for the Bank's core operational tasks as a central bank and a member of the Eurosystem. This department thus makes an essential contribution to the Bank's missions of ensuring price stability and guaranteeing efficient payment systems. As an operational banking department, it is not responsible for research or supervision. It is composed of independent, open-minded experts who contribute to the preparation and development of policy at national, Eurosystem and international levels, thanks to their experience in markets, transactions





throughout their term. The European Central Bank will act as payment bank. It will also make the accounts available to the Commission via the Target system. The Commission will then channel these funds to the Member States, which will ultimately invest them in national programmes aimed at boosting the European economy and emerging stronger from the

pandemic, with a focus on climate goals, inclusion and further digitalisation.

At present, the EU Issuance Service is still being developed, but it is expected to be fully operational as from the second half of 2023.

Extended collaboration

The collaboration between the European Commission, the ECB and the Bank on the new Issuance Service started shortly before Russia's invasion of Ukraine. The Commission is now considering extending the Bank's role in NGEU to Macro-Financial Assistance, which could be used to rebuild infrastructure in Ukraine, as well as to RePowerEU, a plan to achieve European independence from Russian fossil fuels.



On 12 July 2022, Pierre Wunsch, Governor of the National Bank, Johannes Hahn, European Commissioner for Budget and Administration, and Fabio Panetta, Member of the ECB Executive Board, signed a letter of intent formalising this cooperation.



A modern and secure digital environment

IT Department

The IT Department provides the Bank's various entities with the resources – hardware, software and services – they need to perform their tasks. It contributes to the research and development of quality tools which enhance efficiency and productivity. It constantly strives to reduce the risks associated with the growing threats of cybercrime and breaches of private or professional data.

The IT Department's achievements form part of the Bank's strategy to introduce new technologies, with a particular focus on the development of IT skills and digital adoption by staff.

One of the priorities of the IT Department is to offer all staff a modern and secure digital working environment. In the past year, this was reflected in investments to facilitate hybrid working at the Bank and other sites (notably the home environment) and the possibility to use biometric identification for logon purposes. These advances improve both ease of use and security.

Working with the European Central Bank

The IT Department is collaborating on various ECB projects, including a preliminary study and a prototype for the development of a digital euro.

Our IT specialists are also working on the development of tools to facilitate joint teamwork, diary management and planning for colleagues working at the ECB.

Some of them actively contributed, as part of a European team, to the development of a virtual laboratory for the Single Supervisory Mechanism (SSM), an initiative that received the "Cloud Innovation Award" from the Central Banking Institute.

In the cloud

With the exception of certain critical applications, the Bank is gradually migrating data to the cloud. This technological solution has many advantages, including:

- The possibility for users from various services to automate certain tasks themselves in the cloud, within a secure architecture and with the approval of the IT Department. Repetitive tasks related to report processing have already been automated, as has the management of the art collection, which has been moved online.
- The NBB cloud also includes an "innovation" space where new concepts can be tested quickly, without compromising the availability of existing applications, as was done with various tests relating to artificial intelligence and machine learning over the past year.
- The data platform in development aims to support the Bank's Enterprise Data Management (EDM) strategy through appropriate IT solutions. A first group of data has already been moved to a highly scalable environment, where new business intelligence and data science tools are also available. This trend will continue in 2023.

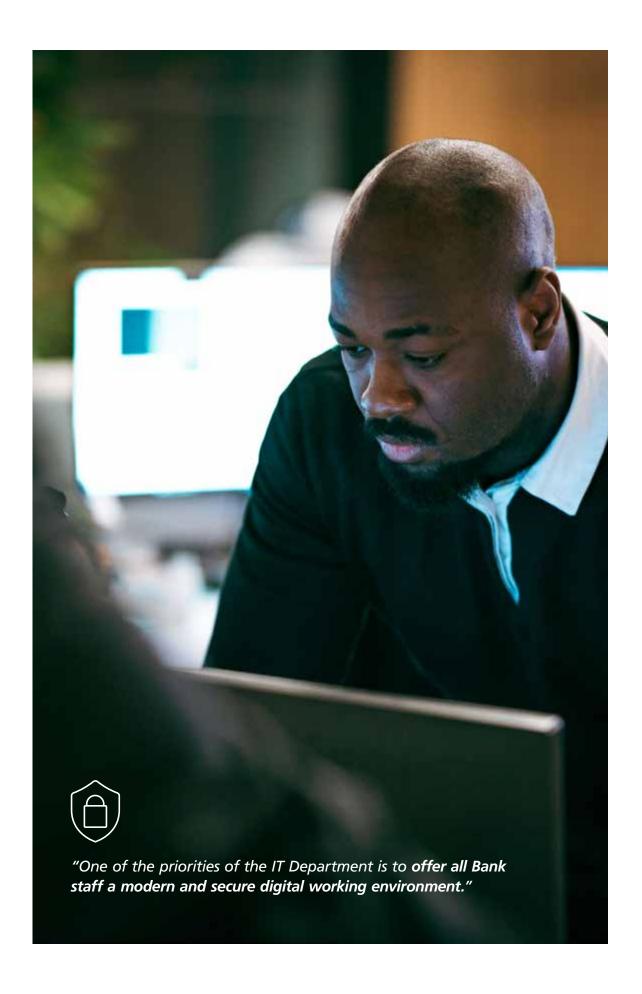
Other achievements in 2022

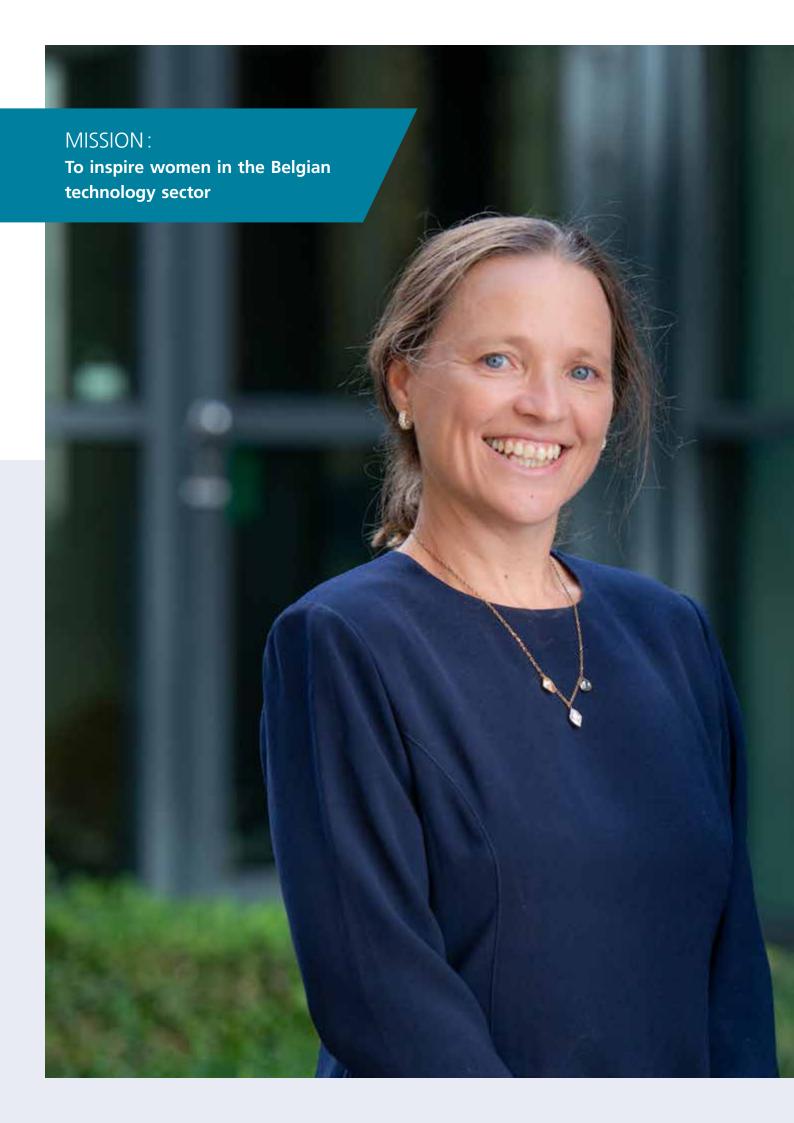
- The migration of a data centre hosting, amongst other things, critical financial market applications – enabled the adoption of new, more energy-efficient technology.
- Revamped in 2022, the Central Balance Sheet Office application now offers more efficient tools to the 500 000 or so companies and NPOs required to file their annual accounts with the Bank, which makes them available to the public. In the new application, the annual accounts filing notice is sent directly to the filer's official inbox, which significantly reduces paper consumption.
- A dedicated supervisory portal, which represents a major step forward for companies subject to prudential supervision, was launched. This tool

 part of a programme to renew supervisory tools – offers simpler, more effective follow-up with the supervisor.

IT risks: a matter for future attention

One of the key tasks of the IT Department is to manage IT risks. In 2022, particular attention was paid to the cyber risks arising from Russia's war in Ukraine, amongst other things. As risks of this type are increasing globally, the issue of IT security will become even more important for the Bank in the coming years.





"WOMEN CAN SHOW THEIR TALENTS MORE!"

AN SWALENS / HEAD OF THE IT DEPARTMENT

The head of our IT Department appears on the new list of the 50 most inspiring women in technology. InspiringFifty is a non-profit organisation which works to increase the presence of women in managerial positions in the technology sector.

An: "I see this award as a recognition. The list is very diverse. For example, at the awards ceremony I bumped into a former classmate. She has followed a completely different path, but in the end, I can see that we are facing the same challenges."

More women in the technology sector

"My passion for IT is what guides me in my work. I think it is essential to contribute to making more room for women in the IT sector. This is a common thread that runs throughout my career, just like the passion with which I set to work every day. My work is very gratifying!"

A passion for IT

"I am a civil electronics engineer by training, but I am not interested in technology as such, rather in the solutions it offers! Technology allows us to do things that are useful to society. Its effects are tangible. At the Bank, these two factors complement each other: we find IT solutions that enable us to continue to help society as a whole, which I think is great!"

More opportunities for women

"During my studies, there were few women in the lecture halls, and this has not really changed over the years. That's a pity, because it all starts there. The IT world is still largely male. Many people associate IT with an isolated nerd behind a big screen, whereas today it's all about seeking solutions with a collaborative and creative mindset."

"Given the importance of technology today, it is obvious that we need to attract more women."

A woman in the IT world

"Of course, it wasn't always easy. When I started out, I had no experience and I was surrounded by experts. But as time passed, I realised I was adding value with my unique perspective. People who are tech-savvy tend to focus on finding an attractive technological solution whereas I would ask myself if users really needed it and what they really wanted."



How can the IT sector attract more women?

"We need to put more emphasis on the positive and wide-ranging effects of technology in our society. The level of language we use to explain the possibilities of IT must also be more accessible to the general public. IT forms an integral part of every function, including at the Bank. Without it, we could no longer work efficiently and innovatively. Do you ever think about this? Given the importance of technology today, it's clear that we need to attract more women."

What advice would you give to women starting out in the IT sector?

"It is important to first discover your talents and then work on developing them. Don't be shy, take initiatives, be open to new experiences and hang in there when things get tough. The good thing about IT is that your efforts lead to tangible results. Take the plunge!"





"Today, IT is all about seeking solutions with a collaborative and creative mindset."





"THEY HAD FAITH IN ME!"

ALEXANDRA SELTEN / IT CLIENT SERVICES

An Eastern European national, Alexandra discovered the Bank through a mentorship programme.

It's not easy to enter the job market when you come from another country and another culture! However, Alexandra had much in her favour: a master's degree in translation and public relations as well as a master's degree in European law from the University of Bordeaux IV (Minsk campus, where she completed coursework in French). She became interested in IT during her studies and contributed to the creation of a start-up, before working for an IT services company. Despite her impressive resume, Alexandra found herself back at square one when she arrived in Belgium in 2019.

DUO for a JOB

"I quickly realised that it would not be easy to break into a job market whose codes I did not know and which, moreover, had been turned upside down by the health crisis. For nine months, I followed training courses: Dutch, Agile fundamental (IT team management), etc. My chance came when I discovered the DUO for a JOB project, in which the Bank participates.

DUO for a JOB is a non-profit organisation that puts young people from immigrant backgrounds into contact with mentors from companies, with the aim of giving them a foothold on the Belgian labour market. In this case, my mentor was the previous head of the Bank's IT Department. His advice demystified the workings of the Belgian labour market for me, in particular within the Bank.

The first thing I learned was how to write a cover letter: in my country, there is no such thing! There, a CV is just a list of diplomas and previous work experience. Likewise, you will never be asked about your personality during a job interview. I wasn't ready for that. So, despite intensive training, I was really nervous on the day of my first interview!"



"My first interview, further to the DUO for a JOB programme, led to a six-month internship in the Bank's IT Department. My mentor put me in touch with the department where I still work today, which had faith in me.

From the moment I arrived, I was very well supported. Even though they had a lot of work to do, my colleagues were always available to explain things to me. I quickly got used to another cultural difference, compared to my country of origin: here, everyone is on a first-name basis. Most people are smiling and friendly. They come up to me spontaneously, as if we had known each other for a long time.

In the end, everything went very well. The proof is that I'm still here [laughs]! At the end of my internship, I was offered a temporary contract, while waiting for the holy grail, a permanent contract, which I received in January 2022, after completing the selection procedure like any other candidate for a job at the National Bank."

In addition, Alexandra, who is Russian speaking, acted as an interpreter when the Bank decided, in the spring of 2022, to accommodate Ukrainian refugees in its guesthouse!



"From the moment I arrived, I was very well supported. Even though they had a lot of work to do, my colleagues always made time to explain things to me."

Modernising **communication** and improving **coordination**

The importance of external relations

In the framework of the Bank's Strategy 2025, the General Secretariat Department manages a number of strategic projects.

For example, it coordinates the Bank's CSR and reporting efforts. In 2022, patronage initiatives were refocused after a thorough review to better match the new vision the Bank wishes to promote. The implementation of this new strategic approach, launched in 2021, continued in 2022. In addition to the definition of CSR priorities, increasing attention is paid to communication in this area. The CSR chapter in this report provides an overview of how our institution fulfils its societal role and addresses issues such as diversity and inclusion.

In addition, the General Secretariat launched a new public affairs strategy in 2022, focusing on the federal parliament (parliamentary hearings and questions) and the various federal public administrations, on the one hand, and the academic world, on the other.

The General Secretariat

The Secretariat supports the functioning of the various management bodies of the Bank, such as the Council of Regency and the Board of Directors. It also organises the Annual General Meeting, which, in 2022, was held in person for the first time since the COVID-19 pandemic.

The department also oversees the Auditorium and the Bank's Museum. In 2022, substantial effort was put into equipping the Auditorium with audio-visual technology for hybrid meetings.

The Museum, which emphasises interaction, welcomed 25 354 visitors in 2022. It organised several thematic events over the course of the year and once again successfully participated in Museum Night Fever.

General Secretariat Department

The **General Secretariat** provides crosscutting support to all the Bank's departments, services and bodies in the areas of management, coordination, international relations, CSR, public affairs, communication and public relations.





Paperless

One of the Secretariat's major projects is the "paperless" programme, which aims to radically reduce the Bank's paper consumption. This requires, on the one hand, encouraging a change in working habits within the Bank and, on the other hand, providing digital solutions in a variety of areas, such as archiving, electronic signatures, etc. The project is spread over several years and entails intensive cross-cutting cooperation with almost all departments and services of the Bank.

Art collection

Finally, the Secretariat also manages the Bank's art collection, which has acquired more than 2000 works since its creation in 1972. In 2022, the Bank once again realised its ambition



of sharing this artistic heritage with the public. After a successful first joint exhibition in 2019, in collaboration with the Bundesbank, the experience was repeated last year, this time with the Banco de España.



The exhibition "(un)common values" presented works from the collections of the Banco de España and the National Bank of Belgium.

Over the summer, 5 662 visitors came through the doors of the Bank's majestic modernist-style central hall to view the works of 43 artists. The exhibition, entitled "(un)common values", explored how art illustrates changes in society, echoes the perceptions of different generations and reflects the kaleidoscopic world we live in. The organisation and promotion of the event were the result of a partnership with the Spanish Embassy in Belgium, the Instituto Cervantes Bruselas and Visit.Brussels.

International Coordination and Eurosystem Service

After a long hiatus due to COVID-19 restrictions, important international meetings were again held face-to-face or in hybrid format in 2022. This allowed the Bank to maintain its formal and informal contacts and grow its network.

In addition to coordination with the ECB, the SSM and other international institutions in which the Bank participates directly or indirectly (IMF, BIS, EC/Permanent Representation of Belgium, etc.), the International Coordination and Eurosystem Service is responsible for bilateral international cooperation.

In 2022, many activities were impacted by Russia's war in Ukraine. More information can be found in the CSR section of this report.

In addition, the International Coordination and Eurosystem Service was closely involved in the European Commission's Western Balkans programme in 2022, which consisted of technical cooperation with the central banks of six candidate countries (Montenegro, Northern Macedonia, Bosnia and Herzegovina, Serbia, Kosovo and Albania). Coordinated by the ICE Service, various departments of the Bank participated in training sessions and seminars organised for representatives from these six banks. This technical cooperation first started in 2019. In 2022, the EC decided to launch a follow-up programme which will run until 2025.

Finally, on behalf of the Bank, the service organised a widely acclaimed online conference for the Belgium-Netherlands IMF constituency on the topic of "The Aftermath of COVID-19 and geopolitical tensions: the new macroeconomic reality".



The headquarters of the European Central Bank in Frankfurt.

The Communication Service

In 2022, the Communication Service continued to pursue its ambition of making the Bank more open and accessible to the media and the general public.

In this context, the Communication Service embarked on a number of projects: the development of the Bank's social media channels, the production of videos, the launch of an accessible and completely redesigned website, improvement of the linguistic accessibility and readability of publications, and the organisation of exciting events to support and publicise the work of the Bank's various departments. Particular attention was paid to the Bank's image and diversity.

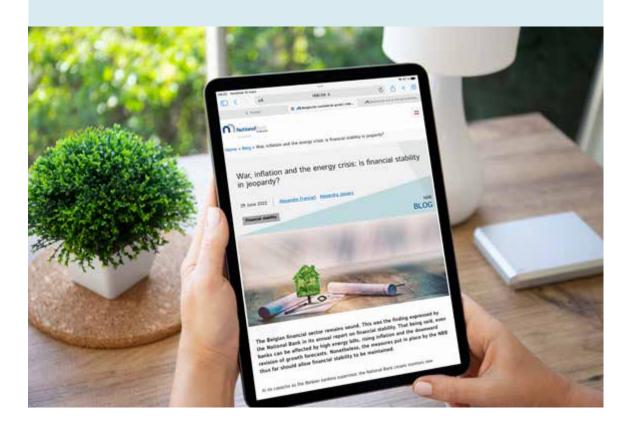
While some projects will take several years to complete (e.g. the new website, which is currently being developed), the results of other initiatives are already visible.

articles published

The Bank's blog

The Bank's new blog reached cruising speed in 2022. The idea is to communicate more fluently and effectively on the Bank's policy areas. A total of 19 articles written in accessible language were published on a variety of subjects: the Bank's blacklist for defaulting creditors, the potential impact of the war in Ukraine on financial stability, energy prices and inflation, the capital injected by Belgian firms into foreign companies,





Social networks and videos

The number of subscribers to the Bank's Twitter and LinkedIn accounts increased each month. As the popularity of audiovisual channels is rapidly growing, the Bank relies on video as well. For this reason, the Communication Service is increasingly producing short videos to accompany published studies, in which experts comment on their work. At the end of 2022, a green screen studio was opened to produce webinars and videos in a more professional environment.



Stakeholder relations

In addition to developing its digital and audiovisual communication, the Bank continues to organise conferences, debates and face-to-face presentations. Over the course of the year, the Economic Relations Division organised around one hundred events under direct management or in support of the Belgian Financial Forum. In the first half of the year, these events were still regularly held online due to the restrictions linked to COVID-19, but they were again held in person or in hybrid form from the spring onwards.

The highlight of the year was undoubtedly the conference organised to mark the 10th anniversary of prudential supervision at the Bank, which attracted a large audience. In addition, face-to-face events at which members of the Board of Directors commented on the Bank's economic projections were held in June throughout the country.



Director Dechaene at an event to mark the 10th anniversary of prudential supervision by the Bank.

Another important event was held in the Eastern Cantons. For one day, the governor met with members of the government and parliamentarians of the German-speaking Community in Eupen. He also met with representatives of the business community, with whom he discussed some of the issues specific to this border region. In Limburg, the governor's speech at the opening of the academic year at the UHasselt attracted much attention. Finally, the Economic Relations Division organised a number of events for university and college students in 2022.

Belgian media

The Bank issued several press releases on its many activities each week. In addition, the Bank organised well-attended press conferences to present its annual report, Financial Stability Report, economic projections and some of its studies. The press event held at the Bank on the occasion of the IMF's visit (officially, the IMF's Article IV consultation) also attracted considerable national media attention.

The Bank's press office dealt with questions from Belgian journalists on a daily basis, including about the repercussions of Russia's invasion of Ukraine, the economic outlook and accelerating inflation. The Bank's experts also exchanged views with the

national press on many other topics, such as developments in the labour and housing markets, the Belgian saving rate, trade, cash payments, developments in statistics, bad payers, financial stability and banking supervision.

The governor gave interviews to all major print media and a number of current affairs magazines and appeared on several Sunday talk shows.

International media

In 2022, the international media continued to take a close interest in the Bank's activities. For example, the Bank received questions about its oversight of SWIFT (Society for Worldwide Interbank Financial Communication) in the wake of Russia's invasion of Ukraine and the related sanctions. The governor spoke to numerous international news channels on the occasion of the IMF Spring Meeting and Annual Meeting and at the ECB Forum in Sintra. Throughout the year, media outlets such as Reuters, Reuters TV, Bloomberg, Bloomberg TV, CNBC, The New York Times, De Volkskrant, Börsen-Zeitung and a host of specialist media regularly sought the governor's views on monetary policy and the economic climate. The interviews he gave were also widely shared on Twitter around the world.

Under the banner of change

Psychological safety, managing hybrid work and implementing change are some of the key focus areas of our **Human Resources** Department, whose efforts were recognised with a leap forward in the Randstad ranking of the most attractive companies.

Psychological safety

Psychological safety means being able to share ideas, ask questions, express doubts and report mistakes without fear of judgment. Research has shown that this dimension is crucial to team performance. When employees feel psychologically safe, their team is better able to find solutions to the complex challenges it faces in a VUCA (volatile, uncertain, complex and ambiguous) world. Its members are more skilled at coping with change, are more creative and more innovation oriented. In addition, psychological safety facilitates a pleasant ambiance at work, which is

essential to the creation of a positive environment in which everyone works together in an atmosphere of respect and trust. It also helps to foster open dialogue which allows new ideas to emerge, enabling the Bank to continue to play a relevant and leading role in society.

Assessing

Thanks to COVID-19, remote working has become more widespread, with the corollary that it is more complicated to know what our co-workers are doing, exchange views and develop a group dynamic.

The psychological safety of a group can be assessed by asking individuals about the extent to which they are convinced that if they were to make a mistake, they would not suffer direct consequences.

Human Resources conducted a survey of all staff to this end, with an anonymous response rate of 54 %. The results ranged from good to very good.

Human Resources Department

The Human Resources department consists of two entities. Payroll and Social Administration is responsible for managing contracts, compensation and benefits, while Human Resources Management is in charge of skills management, recruitment, the integration of new employees and talent development.

Engaging in dialogue

Managers benefited from a webinar, accompanied by a manual, on how to discuss the results of the survey with their teams.

Employees had the opportunity to express their views, formulate proposals and launch initiatives.





Although managers play an important role in creating a psychologically safe environment, this responsibility lies with all team members.

Hybrid working

The last COVID-19 outbreak resulted in the implementation of a hybrid working arrangement, allowing staff to work half-time at the Bank and half-time at home. Teleworking statistics show that most employees took full advantage of this possibility.

The policy was evaluated after six months by means of a survey, followed by focus groups. The evaluation covered topics such as work-life balance, hybrid meetings, inclusion, disconnection, social cohesion, training for new colleagues, etc. The conclusions are expected to be released in early 2023.

Implementing change

Change is the only constant, as the saying goes, and the Bank is experiencing change in many areas (see Strategy 2025). It is no coincidence that "the ability to implement change" is one of its 12 strategic focus areas. In this respect, the Bank aims to achieve four objectives: to better manage resistance to change, to increase the return on investment in people, to improve the chances of success of projects and to foster a culture open to change.

Of course, if people refuse to adapt their ways of working, the chances of successful change are rather slim. Appropriate change management support increases the chances of success by a factor of six! At present, such support is still too often reactive and intuitive. If staff are more involved in the process and it is done more quickly, they will be better prepared and the chances of success will increase.



"When employees feel psychologically safe, their team is better able to find solutions to the complex challenges it faces."



A Change Competence Centre has been set up within the Human Resources Department, in cooperation with the Enterprise Project Management Office (EPMO). The aim is to facilitate the success of projects through the use of a common methodology, uniform procedures and tools, and clear roles and responsibilities for everyone.

In the future, training will also be offered to sponsors, project managers, executives and staff. The expertise and experience of all stakeholders will then be gathered and shared in a "change community".

A survey scheduled for 2023 will provide an overview of the expected capacity for change and the initiatives needed to foster a culture of change.



The sixth most attractive employer

The Bank continued its efforts to promote its attractiveness as an employer over the past year. The number of new hires in a tight labour market and the results of Randstad's Employer Brand survey show that these efforts paid off.

The Randstad survey measures the image of private companies with more than 1 000 employees in Belgium, i.e. 185 companies in 2022. With a sample of over 12 685 respondents, it is representative of the population aged 18 to 65. The aim is to assess whether respondents are familiar with a company and would like to work there. The study also focuses on what makes a company attractive, based on 16 drivers.

The Bank moved into the top three for both work-life balance and job security. In the global ranking, it progressed from 16th place in 2021 to an impressive 6th place in 2022. A result to be proud of!



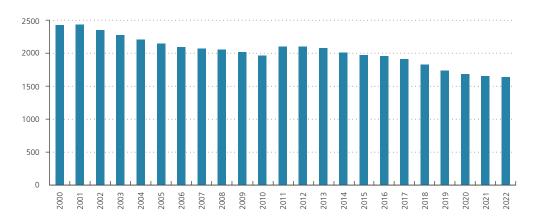


The staff in figures

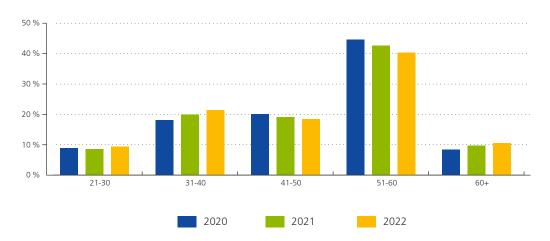
The workforce continued its downward trend. The number of full-time equivalents fell from 1 651 at the end of 2021 to 1 638 at the end of 2022. However, this trend is expected to be less pronounced in the coming years.

Change in the Bank's workforce

(annual number of FTE)



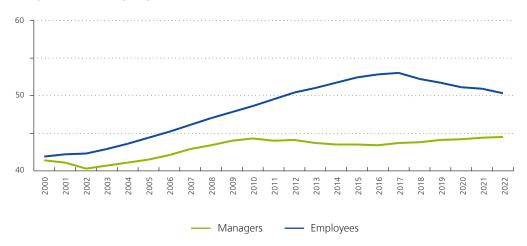
Distribution of staff by age group



Half of the workforce is over 50 years of age. The age pyramid will reflect for a number of years to come the consequences of a long hiring freeze. Recent hires are very gradually correcting this imbalance.

The effects of an employee early retirement plan are still noticeable in the 51-60 age group. Since 2018, the average age of employees has been decreasing due to this plan, the effects of which will be felt until 2023, when the last beneficiaries will leave.

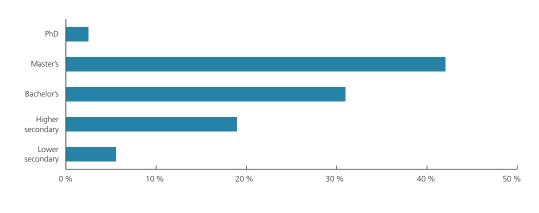
Change in the average age of staff members



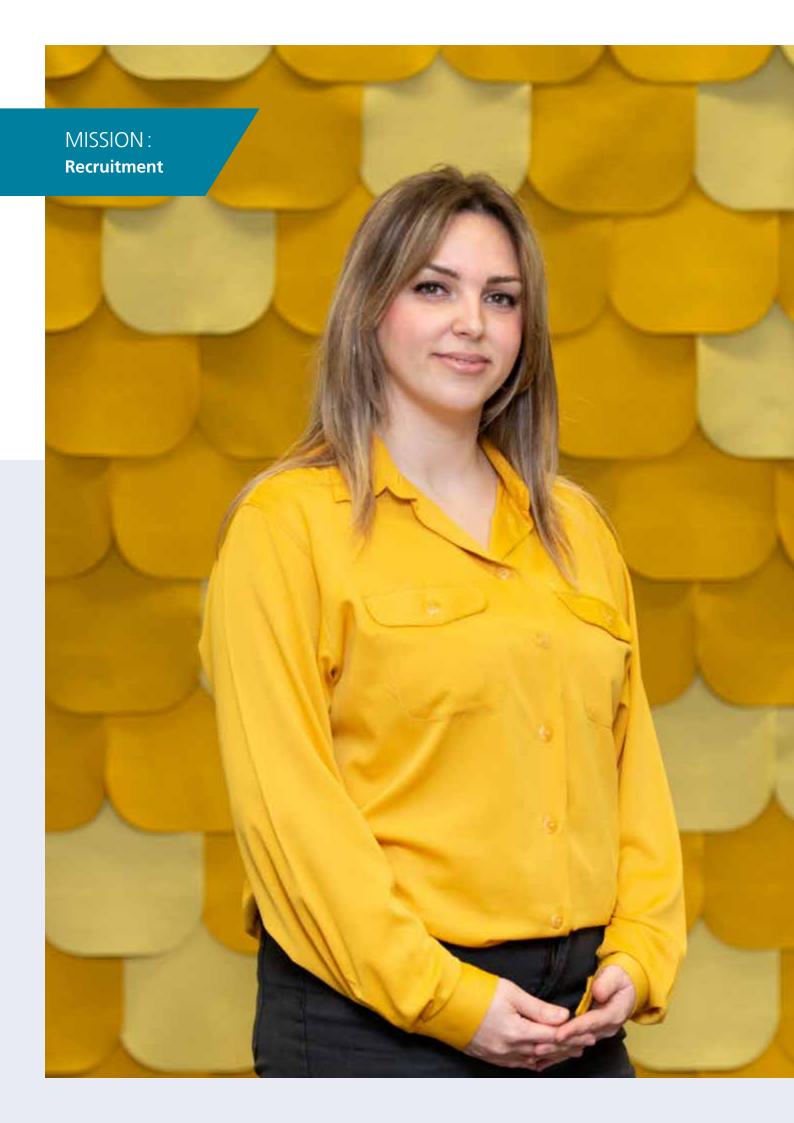
Recruitment

In 2022, 101 permanent hires were made. The Bank targets highly qualified profiles. The vast majority of staff have a higher education degree; 44 % have at least a master's degree.

Level of education of staff in 2022









"EVERYONE STANDS A CHANCE!"

ENI KORÇA / TALENT ACQUISITION

Eni is from Albania and has been working in Human Resources since 2020. For the past three years, she has been putting her talents to use in recruitment, to convince those like her, who do not have a specific background in economics, that this is not a prerequisite for working at the National Bank.

Eni: "Don't think that the National Bank isn't for you! There are many different types of talent here: economists, of course, but not only. The Bank also needs lawyers, IT specialists, graphic designers, statisticians, accountants, administrative staff, communications specialists, human resources experts, technical staff, security guards, etc. The most important thing is to be motivated and willing to learn! I know something about this, because my job is precisely recruitment."



130 recruitments planned for 2023

"In 2022 alone, we welcomed 141 new colleagues, including 101 on a permanent basis. And this will continue in 2023, when we expect to recruit more than 130 newcomers! If you're interested, you can follow our website, jobs.nbb.be. Better still, sign up to receive alerts when a job offer matches your profile. The Bank needs talent and you can be sure that almost everyone stands a chance!

There are nine women on my team. When I arrived, I expected it to be mainly an administrative job. Not at all! We are real recruiters. We manage our files from A to Z, from the publication of vacancy announcements to the intake of new colleagues, including the organisation of selection tests, participation in selection interviews, the drafting of employment contracts, etc. Throughout the procedure, we play an advisory role for the departments and ensure compliance with the legislation, particularly in terms of preventing all forms of discrimination."

An attractive employer!

"In 2022, we moved up 10 places in Randstad's Attractive Employer Ranking to 6th place (out of 84 companies). 45.5% of respondents to the survey said they knew of the Bank and were interested in working here. This is a great source of satisfaction to me and my colleagues. But we don't intend to rest on our laurels. The war for talent is a reality in recruitment circles. This means we must constantly promote the Bank's image and adapt to our target audience. We do so through recruitment fairs, by regularly updating our website, and via social media, which are the best ways of reaching generations Y and Z!"

They thank us

"Of course, in every recruitment campaign there are candidates who are not selected. But that doesn't mean we cut all ties with disappointed applicants. We always provide them with feedback on their performance, so that they can make adjustments when they try again, at the Bank or elsewhere. And that's a gift! We also analyse their profile so that we can point them in the direction of other functions for which we are planning to recruit. And we often meet again. Successful or not, it's not unusual for a candidate and the internal department that is recruiting to thank us. It's always a pleasure to meet afterwards colleagues we've recruited. It gives you the feeling that you're doing useful work. And yes, I am proud to be part of this team!"

"The Bank needs not only economists but also lawyers, IT specialists, graphic designers, statisticians, accountants, administrative staff, communication specialists, human resources experts, technical staff, security guards, etc."

The Bank and the wellbeing of its employees

Composed of health and safety advisors and including an Occupational Medicine Unit, the Internal Service for Prevention and Protection at Work assists the employer, management and employees with the application of the legislation on wellbeing at work and with activities related to health and safety.

According to the definition developed jointly by the International Labour Organization (ILO) and the World Health Organisation (WHO), occupational health has three distinct objectives:

- Maintenance of a high level of employee physical, mental and social wellbeing.
- Prevention of risks to employees in the workplace and thus protection from harm.
- Placement of employees in positions that are suited to their physiological and psychological capacities.

In addition to ensuring protection of the physical health of employees, occupational health also takes into account their mental health and favours a policy of prevention and quality of life at work.

A multidisciplinary approach

In terms of health, the Internal Service for Prevention and Protection at Work (abbreviated SIPP in French) and the Human Resources Department pursue a multidisciplinary approach covering all employees and the organisation as a whole.

This approach takes into account various aspects relating to physical and psychosocial conditions, working conditions and the working environment, the continuance of employment following health problems, etc.

In addition to mandatory legal obligations – such as the organisation of first aid, the prevention of occupational accidents, the monitoring of health, ergonomics, etc. – the Bank offers its employees the possibility of vaccinations (with the exception of COVID-19) and medical check-ups with an external service as well as on-site blood donation.

The Internal Service for Prevention and Protection at Work

Composed of health and safety advisors and including an Occupational Medicine Unit, the Internal Service for Prevention and Protection at Work (SIPP) assists the employer, management and employees with the application of legislation relating to wellbeing at work and with activities related to health and safety.





2022 in figures and actions

Over the past financial year, the Occupational Medicine Unit administered first aid more than 500 times. In terms of prevention, it contributed to more than:

- 1 000 blood samples
- 600 periodic check-ups
- 350 check-ups with an external service provider

SIPP also carries out internal awareness-raising activities in line with national and international campaigns. The themes addressed in 2022 included:

- Dry February
- Working together to create a positive culture of health and safety at work (World Day for Safety and Health at Work)
- Smoking booths on strike, too (World No Tobacco Day)
- Are you comfortable at your desk? (ergonomics)
- World Mental Health Day: Let's face it together!
- I move, you move, we move (ergonomics month)

Current and future challenges

Vigilance in the face of new or emerging epidemics or pandemics

Since March 2022, the Workplace Welfare Code has included an obligation for the employer to take special preventive measures during an epidemic or pandemic.

Teleworking

The definition of a framework which takes into account work-life balance, the right to disconnect, the adaptation of workstations to individual employee needs, and psychosocial risks, such as those resulting from isolation.

Reintegration of employees on disability leave

In October 2022, a number of points relating to reintegration were amended in the Workplace Welfare Code.

Prevention of psychosocial risks

The main risks are burnout and depression.

A solid risk management framework

The Bank's **non-financial risk management** framework is based on three lines of defence:

- The first line of defence consists of the operational and cross-cutting services, which are responsible for identifying, assessing and addressing the risks inherent in their activities. These services carry out risk analyses of their activities to ensure that risks are kept within acceptable limits in order to achieve their objectives.
- On the second line, the Bank has a separate service dedicated to the implementation and supervision of the non-financial risk management framework. The Second Line of Defence oversees the development and updating of the various components of the Bank's risk management framework. It also provides support to the front-line departments with respect to the management of all nonfinancial risks, including:
 - physical security
 - business continuity
 - outsourcing
 - IT security
 - data protection
 - cybersecurity
 - compliance (including with anti-money laundering legislation, the GDPR and the Code of Conduct).

 The third line of defence provides independent and objective assurance on the proper functioning of the internal control environment.

In 2022, the Bank continued to develop and expand the various components of its non-financial risk management framework. For example, it developed a new physical security management policy to provide a framework for the various real estate projects in progress.

As part of the risk universe approved last year, the Bank also adopted several guidelines to classify and report risks and incidents as accurately as possible. Based on the findings of a comprehensive strategic review in 2020, which covered non-financial risk management, the Bank developed and defined a more detailed multi-year plan to strengthen non-financial risk management until 2025.

Second Line of Defence

The Second Line of Defence develops an overall risk management framework for the first line of defence (departments, services and stand-alone units) and conducts risk analyses. It independently supervises the proper functioning and implementation of non-financial risk management and ensures compliance with laws and regulations.

"The Bank continues to develop and expand the various components of its non-financial risk management framework."

Cybersecurity and business continuity

In the areas of cybersecurity and business continuity, the Bank is continuing its efforts to strengthen the robustness and maturity of its framework.

Due to Russia's war in Ukraine, particular attention (especially at the beginning of the year) was paid to the potential direct and indirect impacts of possible cyberattacks on the Bank, its most important service providers and essential public services.

In the autumn, major ransomware attacks against certain government agencies required new cybersecurity and continuity arrangements.

To keep its employees alert to cyber risks (phishing and other techniques), the Bank carries out unannounced campaigns that replicate real threats, such as phishing, under controlled conditions. Recipients who do not respond appropriately, or who are misled, are invited to undergo refresher training and testing.

Redesign of the information security policy

Information security forms the object of a clear division of roles and responsibilities between the first and second lines of defence.

"Particular attention has been paid to the potential impact of possible cyberattacks on the Bank."



In order to ensure that all employees are aware of the rules to be observed when it comes to securing information systems, the Bank thoroughly revised its information security policy. This policy addresses in particular the issue of personal data protection in accordance with the General Data Protection Regulation (GDPR), as well as the handling of sensitive data at workplaces outside the Bank, that is when working from home or remotely, given the increased flexibility in terms of working locations and working time.

Since, aside from clear governance, good user information contributes to better information security, the online awareness programme was extended to all staff, with the follow-up of its modules integrated into the annual objectives for all employees. This programme, the content of which is regularly supplemented, will run for a period of four years. In 2022, the non-financial risk management section of the intranet was fully updated, so that employees can now find all relevant information online (reference framework, guidelines, regulations, etc.).

The Bank also continued to improve its onboarding and training processes for new staff. In particular, it added certain mandatory awareness-raising modules, as well as information on what is expected in terms of non-financial risks.

Frequent checks of banknotes

Second-line monitoring extends to banknotes and takes the form of regular compliance checks by the Cash Service with the aim of detecting and avoiding potential risks. In addition to cash inspections, these checks include the processing of cash discrepancies and possible complaints by financial institutions, the checking of damaged banknotes, the packaging of valuables and their destruction as well as validation tests of sorting machines, supplier checks and activities related to the fight against money laundering and the financing of terrorism (AML/CFT).

Compliance checks, using video footage, have also been put in place to ensure that staff apply internal instructions and procedures correctly.



Ethical rules and data protection

In 2022, pursuant to the the Code of Conduct and the General Data Protection Regulation, Compliance dealt with 33 interpretation questions, one request for the authorisation of a financial transaction and 118 declarations of benefits by staff and management. In addition, there were 30 requests relating to the GDPR.

As required by the GDPR, the impact on data protection of a number of new operations that

could present a high risk to privacy was assessed. To comply with the requirements of the legislation on the processing of personal data, transfers of personal data to external authorities have been formalised by means of a protocol published on the Bank's website.

On 16 December 2022, the ECB updated and published a new code of conduct for its senior officials. Effective 1 January 2023, the code essentially introduces stricter rules and higher standards of conduct for private financial transactions.

Significant progress in various real estate projects

Selection of an engineering design firm for the renovation of the Bank's main building

At the end of 2020, the Bank issued a call for tenders for the selection of a multidisciplinary engineering design firm for the renovation of its main building in Brussels. The Bank was assisted in assessing the bids by an advisory committee composed of internal and external experts. The criteria included the quality of the project and the architectural design,

Facilities Management Department

The Facilities Management Department manages the Bank's infrastructure (buildings and technical installations) and provides general services to all entities. It ensures that the infrastructure is continually adapted to meet changing needs for working space and the specific security requirements of a central bank. Over the next few years, the Bank will carry out a thorough renovation of some of its buildings, with a view to improving sustainability and energy efficiency.

The department is also responsible for catering services, the organisation of cleaning, the management of the flow of goods within the Bank, the mail room and general logistics services. It also plays an important role in the Bank's sustainable entrepreneurship.

the heritage value of the building, wellness and sustainability aspects, and physical and IT security. The proposed action plan, the project management method and the budget note were also examined in detail.

Aside from quality, the bids were assessed based on price. The contract was awarded on 11 October 2022 to the Statuur Consortium, consisting of KAAN Architects and Low Architects.

Real estate strategy

The renovation of the Bank's headquarters forms part of an ambitious real estate strategy, itself included in a set of strategic objectives aimed at cementing the Bank's position as a modern central bank at the service of society. In this context, it was decided to build a new cash centre in Zellik by 2025 and to anchor the Bank's historical presence in the centre of Brussels by renovating the ageing main building by 2030. Both projects aim to improve the Bank's infrastructure by making it more modern and efficient.

The new cash centre will allow further automation of cash processing in a secure manner, in accordance with international recommendations.

The refurbishment of the main building will enable staff and activities to be grouped together in a modern, pleasant and user-friendly building, perfectly adapted to the Bank's needs and allowing for more efficient use of its operational resources.

Cost control and energy performance

Operating costs will be greatly reduced by sale of the building complex on the other side of the Boulevard de Berlaimont. Use of the most modern techniques will also reduce the Bank's ecological footprint. Growing awareness of climate issues and the sharp rise in energy prices in 2022 made it more important than ever to improve the energy performance of the headquarters and reduce the amount of office space used.

The project submitted by the Statuur Consortium aims to make the headquarters a sustainable, scalable, energy-neutral and circular building, maximising

the potential for reuse of existing materials. The idea is to achieve high added value with minimal intervention. The renovation will be complex and the challenges significant. The different parts of the building – some of which have significant heritage value – must be integrated into an efficient whole, with sustainability and energy performance being the key words.

The plans will be finalised in the coming months together with specifications for contractors and sub-contractors. Renovation works are expected to start in 2025, after completion of the new cash centre and the transfer of cash activities to Zellik.



The first stone in a vast real estate project

The laying of the foundation stone for the new cash centre in Zellik-Asse marked the start of a real estate project that also includes the renovation of the Bank's headquarters. The aim is to reduce operating costs and increase the energy efficiency of buildings.

Construction of a new cash centre

On 19 May 2022, Directors Tim Hermans and Vincent Magnée and Vice-Governor Steven Vanackere gave the symbolic green light for the construction of the Bank's new cash centre. The ceremony took place in the presence of members of the Asse-Zellik board and city council, local residents, the local media and representatives of the many partners involved in the project.

875 000 kWh

The Bank is making great efforts to put in place modern, sustainable and environmentally friendly infrastructure. In addition to meeting the latest environmental standards, the new cash centre will have solar panels with a peak capacity of 825 kWp. Their annual

production is estimated at 875 000 kWh (approximately the consumption of 250 families). Of this total, around 575 000 kWh will be for own use and around 300 000 kWh will be fed to the grid. A geothermal plant with a capacity of 240 kW is also planned. This plant will be used for heating in winter and cooling in summer. In addition, a large green buffer zone will be created around the buildings, including a row of trees, local shrubbery and, near the plant, an ecological pond.

On schedule

Despite longer delivery times for building materials, it has so far been possible to keep to the construction schedule. The shell of both the industrial and administrative buildings had been completed by the end of 2022. The interior fittings will follow in 2023, with handover scheduled for spring 2024. The move to the new premises will take several months and will include tests with coins and notes. The counting and sorting machinery will be transferred in stages from mid-2024 onwards, meaning cash processing will take place at both the head office and in Zellik until spring 2025. The commissioning of the cash centre and the dismantling of the Cash Service in Brussels will take place in accordance with a secure schedule, which is currently being prepared.



Directors Vincent Magnée and Tim Hermans and Vice-Governor Steven Vanackere leave their handprints at the official opening of the Zellik construction site on 19 May 2022.

Renovation of NBB2

In 2022, the Bank continued the renovation of NBB2, the complex located opposite its main building on Boulevard de Berlaimont. As the latter will be completely vacated in 2025 for renovation works, some 600 additional workstations need to be created in NBB2 to accommodate the departments currently occupying the main building.

The Bank adapted the renovation plans over the past year, as the increase in teleworking since the pandemic has significantly reduced the need for office space. In order to avoid empty offices and unnecessary operating costs, the Board of Directors decided in mid-2022 to limit the number of physical workplaces to 70% of staff. This will free up enough space in NBB2 to temporarily accommodate almost all staff. NBB3, located on Place Sainte-Gudule, will continue to be rented until the completion of renovation of the main building.

