

# ANNUAL REPORT 2022



Measuring, understanding

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# INSEE AND OFFICIAL STATISTICS

INSEE collects, produces, analyses and disseminates information on the French economy and society to inform public debate and economic decision making.

## The National Institute for Statistics and Economic Studies

**T**he French National Institute for Statistics and Economic Studies (INSEE) was created by the French Finance Law of 27 April 1946 (Articles 32 and 33), taking over the official statistics activity that has been performed without interruption since 1833. Today, INSEE is a Directorate-General of the Ministry of the Economy and Finance committed to achieving a strong and sustainable economy. The Institute has offices across France and its employees are agents of the State. It is subject to public accounting regulations and its funds are part of the general State budget.



### Working with complete professional independence

INSEE operates with complete professional independence. Created by the Law on the Modernisation of the Economy of 4 August 2008, the Official Statistics Authority monitors compliance with the principle of independence in "the design, production and dissemination of official statistics" (Law No. 51-711, Article 1). The National Council for Statistical Information (CNIS) facilitates interactions between the producers and users of official statistics.

### Contributing to European and international statistics

Along with Eurostat, the statistical office of the European Union (EU), and its EU counterparts, INSEE contributes to building the

European statistical system. It also plays a part in the statistical work of international bodies such as the United Nations (UN), the International Monetary Fund (IMF) and the Organisation for Economic Co-operation and Development (OECD).

### Coordinating Public Service Statistics

The Official Statistical System (SPP) is composed of INSEE and the 16 Ministerial Statistical Offices (MSOs), which carry out statistical operations in their field of competence (education, health, justice, etc.). INSEE coordinates the work of the SSP and decides together with the MSOs on the methods, rules and procedures for compiling and publishing statistics.

# EDITORIAL



**JEAN-LUC  
TAVERNIER**  
DIRECTOR-GENERAL  
OF INSEE

*Meeting the challenges of a turbulent environment: read on to discover this INSEE success story*

**I**n 2022, as the health crisis eased, a new geopolitical and economic crisis erupted into our day-to-day lives in the form of the war in Ukraine. Once again, INSEE adapted its economic analysis mechanisms and observation system in order to better track the price transmission of energy and other raw materials to the retail market prices as closely as possible, as well as the downstream impacts of this on household purchasing power.

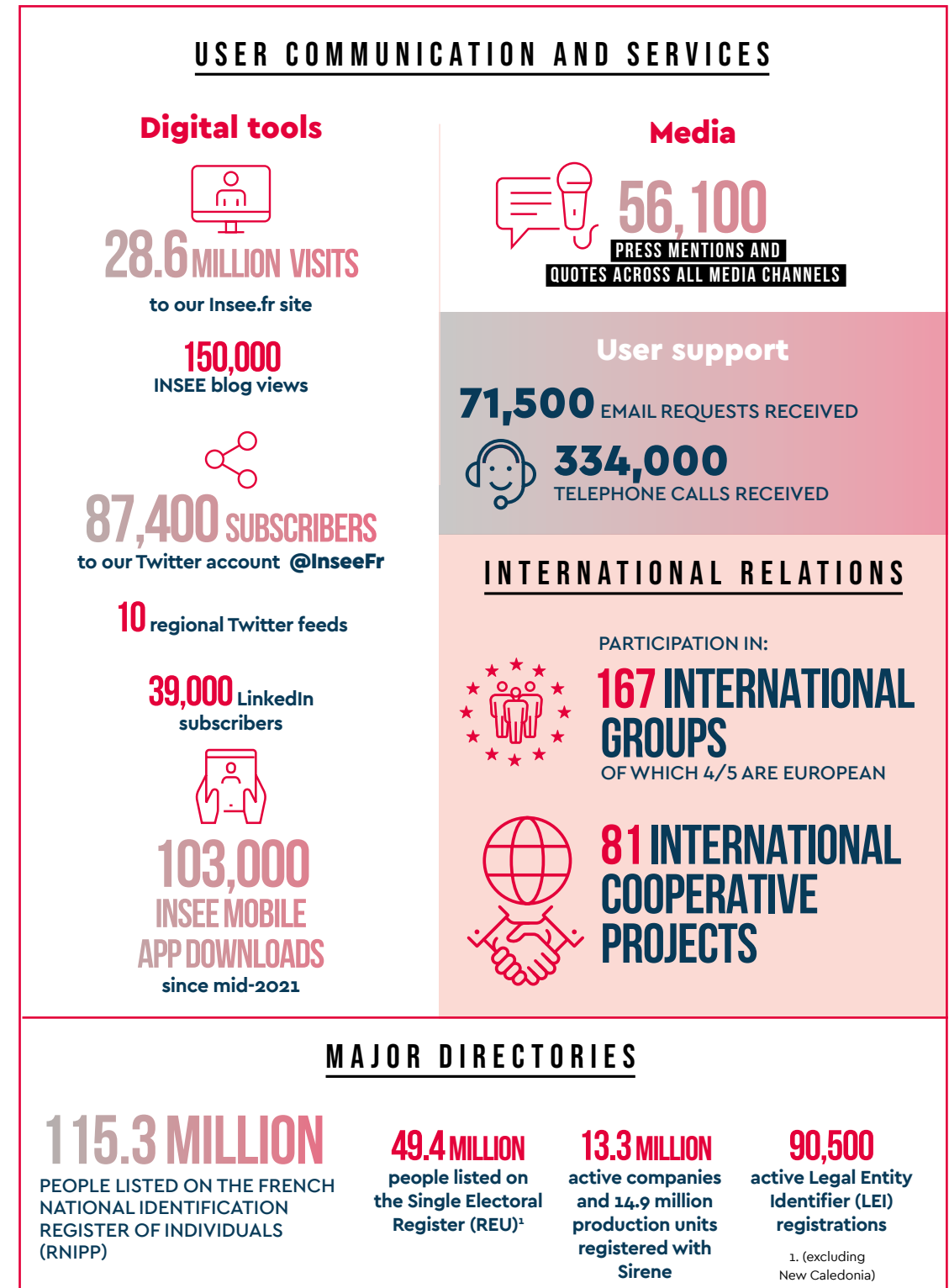
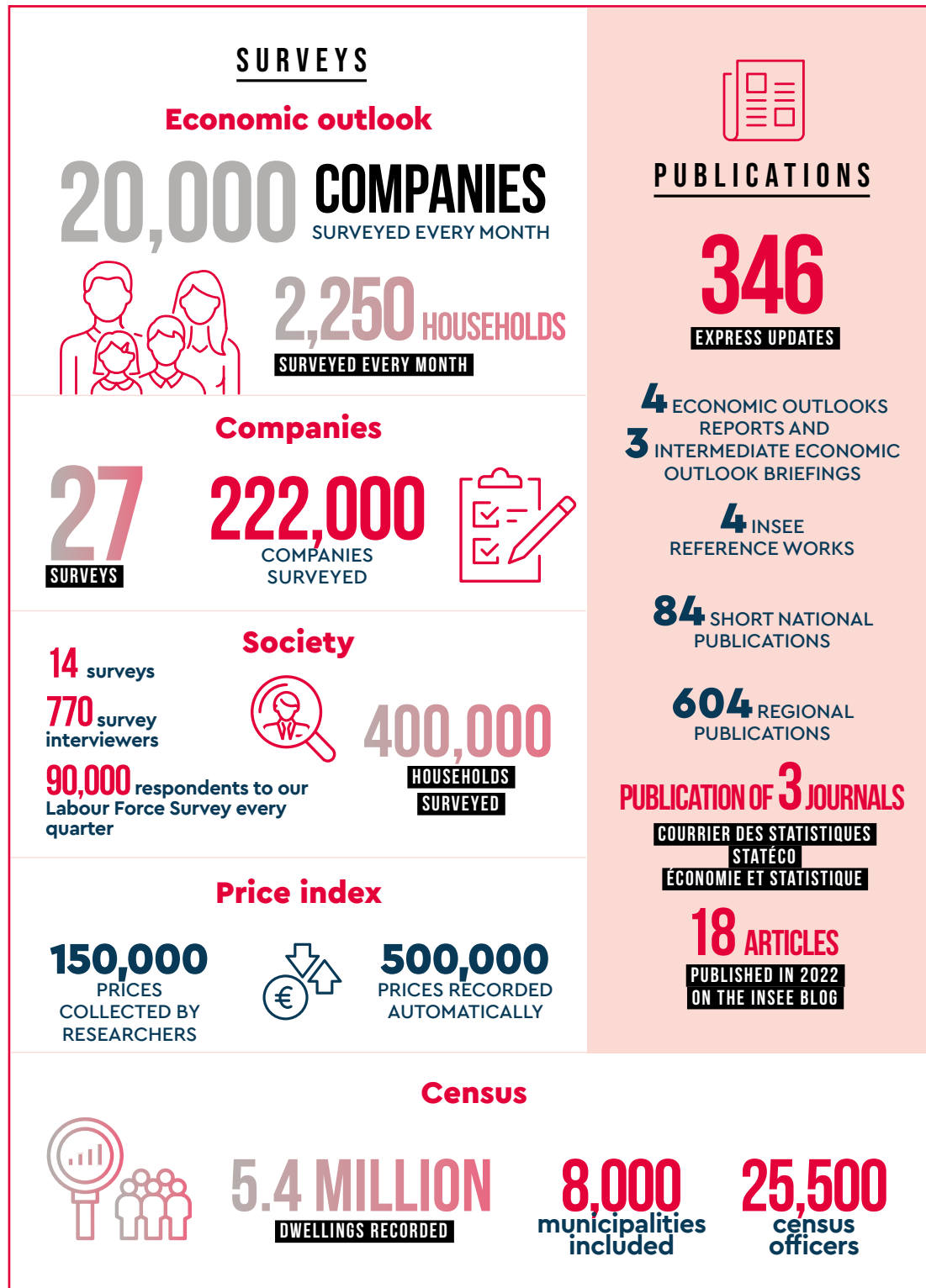
In this unsettled climate, INSEE successfully developed new surveys and analyses within very tight timeframes. However, despite this, there were no delays in the schedule. For example, the year 2022 saw publication of the initial results of the TeO2 survey on immigrants and their descendants, regional population and labour force projections, as well as international carbon footprint comparisons. This last study echoes the key challenges associated with the climate crisis, a subject that INSEE will continue to deal with in depth, as evidenced by our enlarged national accounts project and the roll-out of INSEE's Green Plan for its own activities. INSEE produced and commented on such innovative statistics as the plight of society's most vulnerable members through the results of its survey

on food aid beneficiaries, the proven difficulties in administrative procedures, and even the cash-flow problems facing holders of Banque Postale accounts. Innovation has also meant continuous INSEE investment in data science with new uses for machine-learning methods, the launch of the data scientists network of the Official Statistical Service, as well as the Onyxia platform.

In 2022, INSEE was ready to play its part in the national elections, to ensure a smooth electoral process, including the successful incorporation of proxies into the Single Electoral Register. It also chaired the Council's Working Party on Statistics as part of the French Presidency of the European Union. Thanks to sound preparation and a considerable amount of work over its first six months, the INSEE was able to move forward on its reflections regarding the further development of regulation 223, the European Statistical Law, and managed to broker a compromise with the European Parliament on the very delicate regulation framework regarding agricultural statistics.

It is with a feeling of gratitude for the dedication of our INSEE agents, and of pride in what they have achieved, that I invite you to regard this overview of our work.

# 2022: THE YEAR IN FIGURES





# SURVEYS CONDUCTED IN 2022

## Of households and individuals



### Living conditions

- Monthly survey on the consumer confidence of households (Camme)
- Survey on information and communication technologies (TIC)
- Survey on the autonomy of individuals



### Housing

- Housing survey
- Quarterly rents and charges survey



### Resources

- Statistics on Income and Living Conditions Survey (SRCV)
- Tax and Social Revenues Survey (ERFS)



### Population census



### Employment, qualifications, professional integration and wages

- Labour Force survey
- Labour Force survey – Mayotte
- Entry into adulthood survey (EVA)
- Daily life skills and training survey (FLV)

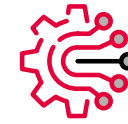
## Other surveys



### Price, purchasing power

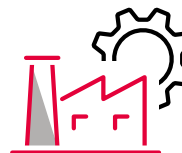
- Consumer Price Index (CPI)
- Spatial price comparison survey, ECSP)
- Purchasing Power Parity (PPA)

## Business surveys



### Productive system

- Annual sectoral survey (ESA)
- Annual production survey (EAP)
- Company structure in Mayotte survey (ESEM)
- Observation of prices in industry and services survey (OPISE)
- European survey on activities of foreign subsidiaries of French groups (OFATS)
- Monthly survey on large food retailer activities (EMAGSA)
- IT system survey on new businesses (SINE and MICRO)



### Companies and market strategies, outlook

- Monthly business outlook survey of the industry sector
- Monthly business outlook survey of the building industry sector
- Monthly business outlook survey of the service sector
- Monthly business outlook survey of the retail trade, and the trade and repair of motor vehicles
- Bi-monthly business outlook survey of the wholesale sector



### Tourism

- Tourist demand survey (SDT)
- Survey on occupancy of collective tourist accommodation



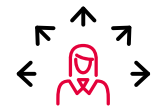
### Financial system and financing the economy

- Annual survey on financial leasing



### Environment and sustainable development

- Annual survey on industrial energy consumption (EACEI)
- Environmental protection studies and investments survey (Antipol)



### Employment, professional integration, wages

- Labour cost and wage structure survey (Ecmoss)



### Industry

- Monthly industry branch survey (EMB)
- Annual survey on the aerospace industry in the greater south-west area of France (FAS-GSO)
- Survey on the sub-contracting industry



### Innovation

- Survey on information and communication technologies in companies (TIC)
- Survey on information and communication technologies in very small businesses (TPE)

# FRENCH PRESIDENCY OF THE E.U. WORKING PARTY ON STATISTICS



**F**or INSEE, the French Presidency of the European Union required the Institute to preside over the E.U. Council Working Party on Statistics. Improving the measurement of pesticide use by European farmers, preparing for the setup of European institution accounts, and giving Official Statistics access to data from private stakeholders as part of the review of the European Statistical Law, were the three main topics on which INSEE focused while ensuring its presidency.

*“As the role of Presidency only comes around once every 14 years, the stakes were high for INSEE and the Official Statistical Service more broadly. It was an opportunity to make headway with ongoing legislative projects while carrying forward a vision for European statistics.”*

**JEAN-LUC TAVERNIER**  
DIRECTOR-GENERAL OF INSEE

## Steering the negotiations for two regulations

### The Framework Regulation on Farm Statistics (SAIO)

**This regulation, in particular, establishes indicators on the use of pesticides by farmers in the European Union.** This subject was actually in the final stages of negotiation, and which consisted in negotiating with the European Parliament on behalf of the Council of the European Union under the aegis of the European Commission (the so-called dialogues). Finding a compromise was not easy for INSEE. The main difficulty was the need to balance the growing demand for statistics that are expected within ever tighter timeframes with the resources that the E.U.'s National Statistical Institutes (NSIs) can employ to address this – all the while limiting the burden on farmers. Nevertheless, an agreement was reached with the Parliament before the end of the French Presidency, which provides for the annual monitoring of pesticide use in agriculture, following a transition period.



This agreement was voted for unanimously by the Member States, and received 555 votes in favour in the Parliament. The regulation was finally adopted in Autumn 2022.

### The mid-term review of the National Accounts regulation

**The European Commission adopted the proposal to review the National Accounts regulation in late 2021.** INSEE was therefore required to lead the initial negotiations, which took place within the Working Party on Statistics. The Commission proposed that the regulation be revised primarily in respect to two areas: reducing the time taken for Member States to transmit data, as well as making the sending of data and metadata obligatory, which had until then been optional. INSEE found a compromise that was agreed on within the Working Party on Statistics. In comparison with the initial proposal, this compromise “gives greater flexibility to the European N.S.I.s,” explains Yaëlle Hauseux, Head of the Concepts, Methods and Assessment of the National Accounts Division, “and allows for exceptions to be granted to countries to give them time to adjust whenever they need it”. In particular, this compromise paves the way for the establishment of European institution accounts to measure the debt created directly at the European level following the health

crisis. On that basis, the Member States unanimously adopted a compromise that made it possible for dialogues to be held during the second half of 2022, under the Czech Presidency, and for the adoption of the revised text in April 2023.

The preparation of a European regulation (the equivalent of our national laws at the European level) proposed by the European Commission is a long process, and the Members of the European Parliament and its 27 E.U. Member States each have a say. Preparing a statistics regulation is no different as it involves numerous stakeholders and a long consultation process. The three main subjects that INSEE had to deal with during its French Presidency were at three different stages in this process which lasts a year and a half, on average.



## Initiating a review of the European Statistical Law

**INSEE played a key role in the discussions prior to the legislative process initiated by Eurostat regarding the revision of the European Statistical Law.** Given that this regulation, which governs the development, production and dissemination of European statistics, spans an extremely wide range of areas, the discussions directly involved the Presidents and Directors-General of the National Statistical Institutes. INSEE therefore invited them to Lyon in April 2022 to discuss the elements to be included in the revised law. Views converged around two main objectives: access to private data for the purposes of statistical production, and the sharing of data between NSIs. The revised regulation should allow European statisticians to more easily access private data sources and thereby explain economic, social and environmental issues more effectively.



## Continuous dissemination of information to the public

**In addition to its work on European regulations, INSEE also made use of the French Presidency of the E.U. to increase public awareness of the European-wide implications of its missions.** Firstly, via the official website of the Presidency (eu2022.insee.fr), which presented the latest developments, legislative progress and practical information throughout the six-month period in order to keep our European colleagues informed. The INSEE website (insee.fr) also provided numerous studies and publications on France's position within the European Union, to which the MSOs made a broad contribution. Two articles were published on the INSEE blog as well, to provide some insight into the challenges of European statistics and the progress it had made by the end of its six-month Presidency.

*“INSEE played a crucial role in presiding over the E.U. Council Working Party on Statistics, and this is reflected in the progress and achievements made with regard to several legislative matters. Beyond this, the Presidency entails a certain influence that can be brought to bear, for example, by more generally animating discussions within the European Statistical System concerning certain current matters of common strategic interest - as it did with the prospective revision of the European Statistics Law.”*

**PIERRE BISCHOFF,**  
ADVISOR TO THE DIRECTOR-GENERAL  
OF EUROSTAT



] Director-General of INSEE, Jean-Luc Tavernier, handing the baton over to his Czech counterpart, Marek Rojíček

## Passing on the responsibility

**A**fter six months of intense work, INSEE handed over the Presidency of the E.U. Council to the Czech Republic. The handover ceremony was an opportunity for INSEE to convey not only its record of success but also some of the difficulties the Working Party on Statistics encountered. It was additionally an occasion to take stock of the next legislative texts to be negotiated. “This was a symbolic moment for explaining what INSEE had built and to capitalise on the knowledge it had acquired. The aim was to ensure a continuity between the Presidencies, by providing advice and good practices,” explains Pierre Bayart, Responsible for International Coordination. The Czech Republic effectively had much to do between 1 July and 31 December 2022: finalising the revision of the National Accounts regulation and initiating new negotiations to review the European regulation on the economic accounts relating to the environment. This Czech Presidency came to an end with its handover to Sweden, which took up the Presidency for the first half of 2023.



# LEADING THE WAY WITH DATA SOURCES

# ADAPTING OUR SURVEY METHODOLOGY

Whether as a reaction to the international context or in response to new needs and uses, INSEE demonstrated its agility and revised some of its surveys in 2022.

## Monitoring the economic outlook

**T**he war in Ukraine, which began in February 2022, led to a surge in energy prices that has had a lasting impact on both households and companies. INSEE measured the scope of the shocks on the price of energy using several of its observation techniques, first among which were the consumer price index for households and the producer price indices for companies. The effects on business, the population and the economy as a whole were then cross-referenced within INSEE's information systems and models, in particular those of National Accounts.

Given the scale of the shocks, INSEE demonstrated its agility in setting up several specific methods for collecting information to shed further light on the situation. This was particularly true in the case of companies, as the range of situations they face is less well documented than that of households. In order to do this, INSEE put into action several new levers, including:

- designing a specific module within the business outlook surveys that related more specifically to the increase in electricity and gas prices and its impact on economic activity;
- adding additional questions to the household outlook survey, which allowed us to explain consumer reactions to the increase in prices, particularly energy prices;
- creating a specific electricity supplier survey in late 2022, which gave us data on the



change in average prices paid by companies to access this energy source in 2021 and 2022, along with an estimate of the change in these prices in 2023;

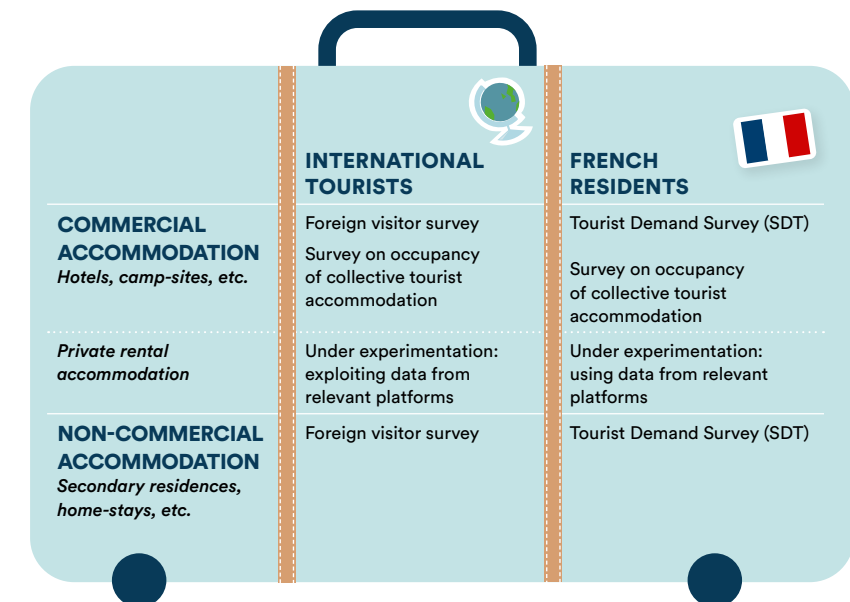
- elaborating supplementary elements to the annual survey on industrial energy consumption at the start of 2023, which pick up on some of the questions already posed in the outlook surveys.

In order to better characterise the exceptional situation in which economic stakeholders find themselves today, INSEE is working in close collaboration with the Service responsible for data and statistical studies (SDES) of the Ministry for Energy.

## Adjusting the production of tourism data

INSEE is now coordinating the production and provision of data across all areas of tourism. In 2022, the production of tourism statistics was in fact adapted to give it a broader coverage. Associated with surveys on collective tourist accommodation occupancy, the Tourist Demand Survey (SDT) allows us to analyse the non-market sector. To complement this occupancy information, INSEE will publish the Tourism Satellite Account, primarily fed with data from the foreign visitor survey and the SDT survey for resident tourists. This account will enable us to have an economic vision of tourism and allow us to compare ourselves with other countries.

A field of study extended to include all tourist occupancy in France



## Surveys shifting to multimode versions

**M**ultimode protocols using multiple data collection methods (in person, by telephone, online, etc.) are not new in Official Statistics surveys. With the rise in digital technology and the growing difficulty of contacting households, the setting up of these protocols has been an important strategic orientation for us since the 2010s. Their development was further accelerated during the specific context of the COVID-19 health crisis.

At INSEE, an increasing number of surveys are being tested for their multimode suitability or are shifting to multimode versions.

This is the case for the national housing survey (ENL), which, since 1955, has been regularly conducted in person. The new edition, which will be rolled out in 2023-2024 will integrate additional internet- and telephone-based methods of collecting data. "In order for us to carry out such a long questionnaire over the internet or by phone," explains Flore Cornuet, statistical project manager within the Housing and Heritage Division, "it has been split into three parts, which participating households are asked to complete separately. This sequential protocol is both innovative and challenging in terms of the data collection organisation."



# MAKING THE MOST OF THE DATA

To make better use of its data, INSEE is re-examining its methods, safeguarding its practices, and investing in research projects.

## Data matching: progress made in 2022

**M**aking progress in data matching is one of the key challenges for Official Statistics: it represents a useful and effective practice for enhancing the analysis of links between different subject areas or monitoring people's trajectories. Transparency in these operations and guaranteeing respect for statistical confidentiality are mandatory conditions for their deployment within a clear legal and ethical framework. In this context, the National Council for Statistical Information (CNIS) organised a meeting on 28 January 2022 on the subject of matching the data of individuals. During this event the 360 attendees were presented with a few of the latest tools as well as some of the challenges that these tools give rise to in matching practices.

Among these challenges is INSEE's project to develop a statistical directory of individuals and housing by 2025 that aims to build a database that is exhaustive in terms of coverage, yet which minimises the number of characteristics and the amount of data relating to individuals

and housing that are based on tax and social administrative data. This directory will serve to support survey sampling, adjustments, measuring the coverage of surveys and administrative data. It will also make it possible to make matching activities secure, reliable and easy to carry out.

Given the exhaustive nature of the directory and the use of several matched sources to create it, INSEE has placed the legal, ethical and consultation challenges it presents at the same level as the technical challenges. Above and beyond a strong legal framework, INSEE also wants to put into place an explicit social mandate upstream of the project. A consultation group comprising representatives of civil society therefore worked from May to September 2022 under the aegis of the CNIS. This innovative approach enabled us to better understand the questions, as well as the fears, that this project might generate. This led to proposals such as pursuing efforts in terms of transparency and consultation, to ensure that the project – whose legitimacy was recognised by the consultation group – is built on trust.

INSEE has created a service to facilitate matching operations for statisticians, known as the non-identifying statistical code. In operation since 2021, this service gives each individual appearing in an administrative or survey file a non-identifying code, obtained by irreversibly encoding their social security number (NIR), the result of which is unique for each individual. The calculation method was expanded in 2022 to include a service enabling the NIR to be found using civil status data for statistical sources that were not able to access this information.

VIEW FROM THE OUTSIDE



**DAVID BOUNIE**  
PROFESSOR OF ECONOMICS AT TÉLÉCOM PARIS, CO-FOUNDER OF THE DIGITAL FINANCE CHAIR

**What are the fields of study and objectives of the Digital Finance Chair set up in 2018?**  
Created along with Cartes Bancaires CB, Banque Postale and the Caisse des dépôts, the aim of this research chair is to study how digital technology

## Making greater use of sources while alleviating the response burden

### A new way to use the Nominative Social Declaration

Since 2013, employers have been submitting such information as the single declaration of social security contributions, monthly declaration of labour force movements, and the annual declaration of social data, as part of the Nominative Social Declaration (DSN). This source of information is used by INSEE in particular to analyse employment and wages. Since the COVID-19 crisis, the data in this DSN had also been used to develop an initial estimate of the production index for construction, before the monthly building industry activity surveys (EMBTB) are available. This index is used for macro-economic analyses and outlook monitoring in this sector. Important work seeking to better understand the sources of differences between the DSN and the EMBTB survey and to appraise the quality of the DSN was conducted in 2022. This work made it possible to validate the qualitative contribution of the DSN thereby allowing the EMBTB survey to be relinquished in early 2023.

### Scanner data to measure large retailer activity

Until 2022, INSEE's use of scanner data was limited to calculating the Consumer Price Index (CPI). Its work on new sources of data means that these can now be used to produce large food retailer activity indices. This progress has led to both an improvement in the quality of the statistics and a reduction in the response burden for companies. Previously, it was the monthly survey on large food retailer activity (Emagsa) that provided the statistical information on the turnover of these companies. Since January 2023, when the Emagsa survey was brought to an end, scanner data have been offering a more granular, almost exhaustive, typology of large food retailer products and are available much more quickly than was the case with the Emagsa data.

is transforming the financial industry. Digital technology is changing the access, verification, storage and processing of financial data. It affects all the services that were traditionally provided by financial intermediaries. It is therefore essential to understand, for example, who the new actors in the market are or how the regulations are changing. One of the distinctive features of the Chair is its use of alternative data, sometimes called high-frequency data, to study economic questions.

The research projects are concerned with innovations in terms of digital payments and their impact on the banking and monetary system, financial inclusion of the people in French territories, as well as statistical learning tools to better combat fraud, money laundering and the financing of terrorism.

**INSEE has been financing the Chair since late 2022. What work is likely to see the light of day thanks to the Institute's participation?**  
INSEE has launched a joint work

programme with Cartes Bancaires CB based on three main initiatives. Firstly, exploring the potential of bankcard payment data combined with the data traditionally employed by INSEE. Secondly, an understanding of e-commerce in France, in particular its effects on a company's internal organisation. Lastly, the bankcard payment pathways which provide entirely new indicators about people moving around the country. INSEE's contribution has also allowed us to finance a doctoral student whose work will specifically focus on these issues.



# INNOVATING AND MOVING FORWARD

Providing information more rapidly, applying innovative methods, modernising the directories it manages in line with the changing needs of society... 2022 once again saw INSEE demonstrate its ability to reinvent its practices.

## Growing use of machine-learning methods

**E**stimating the tax shortfall associated with the non-recovery of VAT is a key challenge. To quantify these losses, INSEE based its 2019 estimates on the recoveries observed during tax audits. However, the companies that are audited are not representative of all companies, and this makes extrapolation difficult. Although still subject to some uncertainties, the estimate that INSEE published in a working document in July 2022 is based on a sounder method. By using tax audit management data, INSEE refined its procedures and the estimates were re-calculated – they are now published with confidence intervals.

Techniques for correcting non-responses based partly on machine-learning methods have been developed. Employed more and more by Official Statistics, these methods use algorithms that are based on training data sets, most often with the aim of classifying structured data, but of text as well (and even images, sound, etc.). In 2022, they were also used to generate the non-identifying statistical code and to implement a new module for codifying the principal activity as part of the overhaul of the Sirene business registration database.

**45** DAYS INSTEAD OF 80  
THIS IS THE NEW TIMEFRAME FOR PUBLISHING THE BUILDING AND PUBLIC WORKS MONTHLY INDEX IN OPERATION SINCE 2022

## What's new in the directories

**T**he National Directory for the Identification of Individuals (RNIPP), which INSEE has maintained since 1946, is continuously updated thanks to the civil status statistical bulletins drawn up by municipalities and sent to the Institute following events such as births, deaths or marriages. In April 2022, INSEE amended these bulletins, which now take into account changes introduced by the 2021 bioethics law giving access to medically-assisted procreation for female couples. Since January 2023, the amended bulletins have also provided more information on deaths, based on lessons learned from the health crisis, and have made it possible to better track divorces. Furthermore, since 1 January 2022, voters have been able to assign a proxy to a citizen registered on the electoral roll from a municipality other than their own. This option was made possible thanks to an adjustment to the Single Electoral Register, which makes it possible to continuously update the electoral rolls and register the proxies in a centralised way.

### A first for the Saint-Martin overseas territory

The spatial price comparison survey carried out by INSEE is used to compare consumer price levels between mainland France and its overseas departments and regions, between the mainland provinces and Corsica, and between these mainland provinces and the urban unit of Paris, by taking into account products that are as similar as possible. In 2022, this survey was conducted between February and April in Saint-Martin for the first time, after it expressed its wish to participate. The previous edition dated back to 2015. All the results will be disseminated in July 2023.



# MAKING SENSE OF THE FIGURES



# FOCUSING ON THE HIGHLIGHTS OF 2022

The subjects analysed in our INSEE studies are chosen in order to best meet the needs of decision-makers and respond to society's preoccupations. Here are some highlights from 2022.

## Attentive to mutations and other phenomena

### • Difficulties involving online administrative procedures

The number of dematerialised administrative procedures on the internet has doubled over the last 10 years. But how many French people refrain from carrying out these procedures online? And who has the greatest difficulty in dealing with them? These were some of the questions answered by the INSEE study published in May 2022.

### • Healthcare workers in the Franco-Vaud-Geneva region

People working healthcare are essential workers, a reality made clear by the COVID-19 pandemic. Measuring and understanding the phenomenon of cross-border working in this sector is a major challenge for the public authorities. This is especially the case for nurses, healthcare assistants and midwives, who provide services that cannot take place remotely. This is why the Franco-Vaud-Geneva Region worked with INSEE Auvergne-Rhône-Alpes and the Canton Statistical Office (OCS-TAT) on a study focusing on the 41,000 healthcare workers residing in the region.

### • The Aerospace sector in France

In 2021, in order to measure the effects of the health crisis, which significantly impacted this sector, the annual survey of the Aerospace and Space sector (FAS), usually carried out across the Grand Sud-Ouest region, was extended to cover the whole country. This survey, carried out by the Occitanie and Nouvelle-Aquitaine Regional Divisions, led to two nation-wide publications in 2022, along with their regional iterations.

## The 2022 election year

INSEE closely accompanied and documented the electoral process, according to this timeline:



## The rise in energy prices and its impacts

In December 2022, INSEE gave its economic outlook the title "**Refroidissement**" ("Cooling down") and announced that annual growth would reach 2.5% in 2022 (after 6.8% in 2021) and would weaken further in 2023. This outlook rounded off a year during which INSEE sought to shed light on the impact of the war in Ukraine and on energy price rises for companies and households, using its indicators and publications. This was the case, for example, with our March Economic Outlook, which described the high level of tension in the supply and the prices of energy and raw materials. Exceptionally, INSEE published the early results of its March 2022 outlook surveys so as to assess the initial impacts of the war on the morale of business leaders. Another example came in December in the form of the publication of an analysis describing the contrasting situations and reactions of companies faced with the rise in energy prices.

INSEE's publications also highlighted the consequences of inflation and the effects of the measures enacted by the French governments to limit these, with the publication of "*La flambée des prix de l'énergie : un effet sur l'inflation réduit de moitié par le 'bouclier tarifaire'*" ("Soaring energy prices: the impact on inflation halved by the 'price shield'") in September, "*Entre janvier 2021 et juin 2022, la hausse des prix de l'énergie a entraîné une perte de pouvoir d'achat, malgré la mise en oeuvre des mesures exceptionnelles*" ("Between January 2021 and June 2022 rising energy prices led to a loss in purchasing power, despite excep-

tional measures") in December. INSEE examined the impact of inflation on households by way of various studies. One of these was based on data from Banque Postale and Crédit Mutuel Alliance Fédérale and was used to analyse in real-time, or near real-time, financial insecurity over the first half of 2022. In Hauts-de-France, which has the highest proportion of low-income households in France, our regional division published a dedicated study in September entitled: "*Vulnérabilité des ménages face à l'inflation dans les Hauts-de-France*" ("Vulnerability of households in the face of inflation in Hauts-de-France").

While INSEE monitored inflation by disseminating its figures and publications throughout the year, it also explained how this is measured via a series of educational videos posted on YouTube and its blog posts.

### Paris and Île-de-France: thermal sieves

Under the Climate and Resilience Law, it will be prohibited to rent out poorly insulated accommodation known as "*passoires thermiques*" (literally: thermal sieves), as of 2025 for G-rated accommodation, 2028 for F-rated accommodation and 2034 for E-rated accommodation. Given the current tensions in the property market in Île-de-France, a better understanding of the dwellings concerned is vital in identifying the priority steps to be undertaken in the massive push for energy-efficient renovations. As Clotilde Sarron, Deputy Head of the Studies and Dissemination Department at the Île-de-France regional division, explains: "we carried out two studies in 2022. One focused on the Parisian housing stock with the association, Atelier parisien d'urbanisme, and the other focused on all housing in the region with the Institut Paris Region. The outcome of these showed that, without energetic renovation, 54% of the housing in Paris and 45% of the housing in Île-de-France could be prohibited for rental."



# SHINING A LIGHT ON SOCIETAL CHALLENGES OVER THE LONGER TERM

In 2022, INSEE continued its work describing French society, and highlighting the range of living conditions and how they are evolving.

## Climate change

**Greenhouse gas emissions generated by human activity are disrupting the climate balance on a global scale.**

They are leading to a rise in temperatures, increasing the frequency of intense climate events (floods, droughts, fires, etc.) and affecting ecosystems. INSEE is providing resources and data to better understand the ecological challenges that lie ahead.

In July 2022, INSEE published a study on the European Union carbon footprint which showed that the EU emits 1.5 times more greenhouse gases per inhabitant than the global average; the US emitting almost three times more. France's energy mix and, by extension, its overall production is less carbon intensive than that of its partners within the EU, in particular Germany.

INSEE also published an original analysis of the regional climate warming disparities using data provided by Météo France. The key messages from this study are that one in seven inhabitants lives in a region that will be exposed to 20 abnormally hot days per summer over the decades to come. It found that Auvergne-Rhône-Alpes, Bourgogne-Franche-Comté and Occitanie are the regions that will be most affected.

To support local environmental policies, INSEE regularly provides its expertise to the Regional Directorates responsible for the Environment, Development and Housing (DREAL). In 2022, INSEE Normandie provided information to enable an assessment of the demographic and economic challenges facing the municipalities and inter-communal bodies affected by the



risk of coastal flooding. The study published in May in partnership with the Prefecture and the DREAL should enable the priorities for action, in terms of protecting or relocating activities and housing, to be identified, as well as the associated land-use and management policy to be defined. A further example was the study on greenhouse gas emissions in the region undertaken by INSEE Paca, in partnership with the DREAL and the Provence-Alpes-Côte d'Azur Region. This study, which benefitted from the expertise of AtmoSud, an accredited association in air-quality monitoring, shows that the Global Warming Potential (GWP) – an indicator that charts the combined effect of all greenhouse gases emitted over a region – is higher in Provence-Alpes-Côte-d'Azur than in mainland France.

## Population projections

**In November 2022, INSEE published a study on life expectancy by generation, which indicates that girls born in 2022 will live, on average, for 93 years and boys for 90 years. This represents, on average, 37 and 42 years longer than the generation born in 1900.** These calculations are based on the central scenario for population projections for the period 2021–2070 published in November 2021, which show that France will have 68.1 million inhabitants in 2070, 700,000 more than in 2021. The regional and departmental population projections for the 2070 horizon published in November 2022 clarify and complement the hypotheses used in the national exercise. This made it possible to apply scenarios more adapted to local considerations to those departments presenting highly specific characteristics.

The projections suggest that the population will age considerably across all regions. These data are key to anticipating local needs by offering healthcare and training, adaptation in terms of housing or public spaces, and mobility policy. At the *Assises de l'autonomie* conference organised in April 2022 by the Eure department, INSEE Normandie was asked to present the living conditions of the senior citizens in the region as well as, more generally, the demographic changes forecast for this population by 2050.

The population projections also enable INSEE to conduct labour force projections every five years. These are essential to anticipate the dynamism of the labour market, the resource needs of the workforce and the potential growth in the medium and long term. They are also used to study the financial equilibrium of the various pension schemes and the design of economic policies.

The new labour force projections show that the active working population will continue to grow, reaching 30.5 million by 2040, but at a more moderate rate than during the two preceding decades. After this date the trend is expected to reverse, with the labour force falling to 29.2 million by 2070.

VIEW FROM THE OUTSIDE



**MARIE-CHARLOTTE DEVAIN**  
DATA PROJECT MANAGER FOR HOUSING-SOCIETY AT THE MOSELLE CITY PLANNING AGENCY (AGURAM)

### What is AGURAM's main mission?

AGURAM is an engineering and research organisation for regional planning and development. Its structure takes the form of an association. It has been supporting the city of Metz and the other Moselle conurbations with their planning and development projects for nearly 50 years, primarily by providing diagnostics and projections on issues of mobility, planning, housing, the economy, environment and health. It also contributes to understanding cross-border challenges, which are a significant issue in our regions.

### How do you make use of the local population projections provided by INSEE?

Across the Eurométropole de Metz region, our work focused primarily on senior citizens and students. The population projections have shown significant increases in those aged 75 and over. While this is not a surprise, we need more accurate, quantified information for the whole region in order to understand the specifics of the phenomenon, and to envisage future solutions. As for the younger population, this is set to stabilise and then fall, which calls into question future student numbers.

Of course, the projections are not everything and tomorrow's senior citizens are not today's. And the same applies in the case of students – we do not yet know the proportion of graduates who will be studying in higher education in 20 years time, or how the provision of education will change, etc. However, anticipating today the profound changes taking place in our demographic structure, along with their very concrete effects on needs in terms of economics, housing, and mobility, is a powerful driver for political decision-making.

## Inequalities and discrimination

### Inequality between women and men

To mark International Women's Day, INSEE published its report **"Women and Men: Equality in Question"**. This publication offered an overview of recent developments in terms of inequality between women and men across various areas of society: education, demographics, health, the labour market, and living conditions. Three analysis reports explored the topics of school careers, working conditions in various trades, and workforce behaviour. In 2022, INSEE Pays de la Loire published the findings of its work on gender equality, conducted in partnership with the region. Two analyses of the March 2020 lockdown were published: one on the more difficult work-life balance for women, and the other on *"Les femmes en première ligne"* ("Women on the front line"). These reports were supplemented by *"Regard sur la parité dans les Pays de la Loire"* ("A look at equality in Pays de la Loire"). INSEE and the Prefecture joined forces to publish *"Les Femmes à Mayotte"* ("Women in Mayotte"), an overview of the economic and social situation of women on the island, comparing it with that of women in mainland France and of men living in Mayotte.

### Immigration and population diversity

The initial results of the second edition of the **"Trajectoires et Origines 2"** (Survey of Trajectories and Origins, TeO2), carried out by INSEE and INED (National Institute for Demographic Studies) offered an entirely new analysis of the diversity of the French population as well as recent data on experiences of discrimination. By exploring the migration history of people and their parents, and describing their trajectories (educational, professional, residential, familial) as well as the passing on of their languages and religion within the family setting, this survey sought to study the extent to which geographic, national, cultural or social origins are likely to influence people's living conditions and their trajectories.



#### Educational inequalities

INSEE Centre-Val-de-Loire dedicated a study, conducted in partnership with the local education authority, to an in-depth analysis of the relationship between poverty and learning difficulties. This study shows that young people in regions affected by poverty are more likely to fall behind at school.



## Insecurity

**T**hanks to its data and its studies, INSEE is able to contribute to the public debate and public policies on important issues such as insecurity. In 2022, it published a study on extreme poverty in the French overseas departments and regions. It showed that poverty is 5 to 15 times more common in these places than in mainland France and is much more severe.

As part of a partnership between INSEE and the Directorate-General for French Overseas Territories (DGOM), the Statistics on Resources and Living Conditions (SRCV) survey was expanded in 2018 to include a larger sample in Guadeloupe, Martinique, French Guiana and Réunion so as to provide meaningful results for each of these departments.

INSEE Normandie collaborated with the Prefecture to develop a regional overview of poverty, which was necessary in order to implement the national poverty prevention strategy. "The usual analysis of poverty, from a monetary perspective," explains Sylvain Comte, Head of the Studies and Consultancy Division for State Services to the Regional Directorate, "is supplemented by typical profiles of households in poverty and an approach

In Réunion, free public transport in *"Cars jaunes"* ("Yellow buses") was first granted to job-seekers. The Region asked INSEE La Réunion to assess the population of poor workers, with a view of estimating its impact on the 2023 budget if they too were to be granted the same entitlement.

The innovative tool used for our survey of persons frequenting food-aid distribution centres carried out in late 2021, led to 4,500 questionnaires being answered in 235 sites across mainland France. These show that, among other things, the health crisis has increased the insecurity of food-aid users, especially students, and that the beneficiaries are most often among the poorest people in situations of income poverty.

that takes other dimensions into account, such as labour market integration, family situations, housing or access to healthcare." Based on data that, for the most part, date back to before the 2020 COVID-19 health crisis, this diagnostic "establishes a 'pre-crisis' benchmark at a fine-scale living area level. Co-developed with the commissioner for the fight against poverty, it constitutes a very helpful decision-making tool for organisations working to combat poverty." This was also the case in Auvergne-Rhône-Alpes where the INSEE regional division published *"Près de 3 millions de personnes ressentent des soucis financiers à l'aube de la crise sanitaire"* ("Almost 3 million people feeling the effects of financial worries due to the health crisis"). At a time when the issue of purchasing power is emerging in the public debate and given the context of returning inflation, this study is particularly illuminating for the Regional Department of Economy, Employment, Labour and Solidarity, with whom the study was conducted. We should note here the use of an original data source: the results of the Epidemiology and Living Conditions (Epicov) survey carried out jointly by INSERM and DREES, with support from Santé publique France and INSEE in the context of the COVID-19 pandemic.



# ZOOMING IN ON THE LOCAL ECONOMY AND URBAN POLICY

The INSEE Regional Divisions carried out studies and evaluations on the major issues facing local economies and urban policy.



## Local economic sectors under the microscope

**I**n French Guiana, in partnership with the French National Centre for Space Studies (CNES), INSEE published the results of its 2019 survey on the impact of space-based activities in 2022. Better understanding the ripple effect that this industry has on the region's economy, its influence on growth, and how it operates today, are just some of the many challenges of interest to public and private stakeholders at the local and national level. In Burgundy, the automobile sector was closely examined by the INSEE regional division in its study *"Une filière automobile déjà en pleine mutation à l'aube de la crise sanitaire"* ("Changes already under way in the automobile sector at the start of the health crisis"). Although established in the region for over a century, this sector has for a number of years been facing not only a combination of difficulties threatening industrial employment but new challenges as well, both in terms of competitiveness and changes associated with social and environmental shifts. In Corsica, two recent studies on sectors facing recruitment problems were published: one relating to home help and the other to hotels, cafes and restaurants. These provided useful findings for our study partner, the Regional Department of Economy, Employment, Labour and Solidarity, in regard to understanding what is holding back recruitment.

## Contributing to assessing contracts made with cities and towns

**2**022 was the review year for the contracts made with cities and towns launched in 2015. These contracts obliges each signatory (the State and its public institutions, local authorities, associations, etc.) to implement coordinated measures to improve the day-to-day lives of the inhabitants of deprived neighbourhoods, in the areas of education, employment, housing, quality of life, crime, access to rights, etc. To facilitate the assessment of these contracts, INSEE publishes yearly online databases that comprise various statistical indicators selected together with the National Agency for Territorial Cohesion (ANCT), primarily in the form of thematic and neighbourhood specific files. In addition, several of INSEE's regional divisions were asked to bring their methodological support and expertise to bear on the data relating to the priority districts under the urban policy and to IRIS (the basic scale for standard sub-municipal data dissemination). This was the case for the regional divisions in Normandy (for the Rouen Normandie Conurbation) and in PACA, which launched a series of four webinars on the subject of useful resources for the observation and assessment of the city contracts with the Centre Cité Ressources.

INSEE Bretagne published a study on the distribution of income across the Rennes greater city area over 10 years. It showed that the population in the Rennes catchment area can be categorised by income based on a concentric structure, and that the proportion of low-income earners increased in the priority districts of the urban policy between 2004 and 2017.



# REACHING OUT TO ALL OUR STAKEHOLDERS



# FOSTERING STATISTICAL LITERACY

In order to provide as many people as possible with statistical reference information and the most suitable means to access it, INSEE is counting on its programmes!

## Via its event programmes

**In order to reach out to its many stakeholders, INSEE participates in trade fairs, conferences and symposia.**

"Our presence may be in the form of a stand at which experts answer questions and offer guidance to visitors," explains Jean-William Angel, Head of the External Communication Division. "Sometimes, within the context of certain events, INSEE animates workshops or participates in conferences. In 2022, for example, we reached out to companies and institutions at the Go Entrepreneurs and the Salon des Maires trade fairs to make them aware of the services we provide. But in 2022, what we especially focused on, were our initiatives aimed at younger students and their teachers." To this end, at the Festival International de Géographie festival in Saint-Dié, the Rendez-vous de l'histoire festival in Blois and the Journées de l'économie event in Lyon, INSEE held various workshops and conferences aimed directly at teachers to encourage them to use its tools in their classrooms. As for the Pays de la Loire and Nouvelle-Aquitaine regional divisions, they designed a digital escape

game aimed to help people discover statistics at the GéoDataDays trade fair.

With a view to enabling greater understanding of socio-economic phenomena through the studies and data that INSEE produces, experts from the Institute participate in and moderate round tables at events for the general public. These occasions are particularly popular among students. "*Quelle stratégie énergétique pour la France?*" ("What energy strategy should France adopt?") and "*Lutter contre la pauvreté au plus près*" ("Tackling poverty at the local level") were two of the eight conferences at which INSEE experts spoke during the Journées de l'économie event in Lyon. At the Printemps de l'économie event, INSEE organised the conference entitled "*Une croissance verte ou un renoncement à la croissance? Perspectives et choix*" ("Green growth or no growth: Prospects and choices"). At the Rendez-vous de l'histoire event in Blois, the Director General, Jean-Luc Tavernier, offered his expertise on the theme of "Measuring Inflation: Challenges and Controversies."



VIEW FROM THE OUTSIDE



**DENIS MARTIN**  
REGIONAL ECONOMIC AND SOCIAL SCIENCE EDUCATIONAL INSPECTOR WITH THE ACADEMIE DE NANTES EDUCATION AUTHORITY

## Via its school programmes

**In order to strengthen the pedagogical nature of its missions, INSEE carries out specific projects for the educational community at both regional and national level.** For example, in 2022, INSEE presented its resources and data to the network of academic digital advocates (IAN), teachers of economic and social sciences and of history-geography who specialise in digital technology.

Working with the Ministry of National Education and Youth (MENJ), INSEE concluded an agreement in 2022 to provide students with the means to better understand the world, to train them to understand statistical data, to understand the mechanisms of the economy, and to develop their critical thinking. Achieving this will involve pedagogical initiatives for the students, such as classroom presentations and lectures, as well as awareness raising and teacher training.

This agreement includes the promotion of INSEE data and tools by teachers, in particular via, firstly, the Eduscol website and, secondly, by the joint production of resources and tools outlining the school programmes to support teachers when using the INSEE data. The National Training Plan seminar, organised by the Ministry of National Education and Youth in September 2022, focused on the topic "Steering educational initiatives within the partnership framework between the Banque de France and INSEE: fostering the integration of teaching current socio-economic and budgetary issues". It was an opportunity to bring together INSEE's regional representatives and their academic interlocutors (over 100) to discuss current and future collaborations and regional iterations of this agreement.

**What are the objectives of the three-year agreement signed in 2022 between the Académie de Nantes and INSEE Pays de la Loire?**

Our partnership aims to foster a robust economic and social culture among our stakeholders in the educational community, so as to enable a better understanding of current economic and social challenges. This involves raising awareness among these various stakeholders of the proper use of statistical information, which assumes a knowledge of its sources and an understanding of both the conditions under which the data is built and their limits. This partnership also works alongside other actors to bring together the educational community and the economic and social world. Even though the partnership is first and foremost targeting students, it also more broadly involves teachers who use INSEE's resources as well as business managers whose expertise necessitates a detailed knowledge of the specific characteristics of their region.

**What initiatives were rolled out during the 2022/2023 academic year?**

Among the key actions put in place, mention could be made of the training given by INSEE agents on the good use of statistical data. Sixty teachers from a range of disciplines (including economic and social sciences, mathematics, business administration, and history-geography) took the course as part of the Academic Training Plan. Teachers and business managers also took part in a two-part presentation session that was offered via webinar and in situ at the INSEE regional division offices, entitled *Les Rendez-vous de L'Insee* and *Portrait socio-économique de la région*. An award ceremony in recognition of the students and their teachers who were actively involved at the regional level in the European Statistics Competition is finally planned for 7 June at INSEE in Nantes, in the presence of its Regional Director together with the director of the regional education authority.

# FACILITATING ACCESS TO DIGITAL CONTENT

INSEE is continuing its efforts to enable the wider public to use its data, tools and studies by strengthening its presence in the field of digital tools.

## Improving service accessibility

In 2022, INSEE continued its work to ensure its website is compliant with accessibility standards by improving accessibility for its graphics enabling its news carousel to pause, improving keyboard navigation, and providing site users with a form to report any accessibility issues experienced. To better guide its users, INSEE incorporated chatbots into two of its online services: the Coltrane company survey platform and the population census site. The mobile version of this census site was actually developed in "responsive design", so that the layout is now able to adapt to the screen format being used (mobile phone, tablet, etc.).

## And always in the media

With over 56,100 articles appearing in the press in 2022, INSEE continues to enjoy a strong presence in the traditional national and local media and maintains a close and healthy relationship with the press. For example, in 2022, the Bourgogne-Franche-Comté regional division provided data for the brief "Le chiffre de jour" daily radio broadcast on France Bleu Belfort-Montbéliard.

## 5 IS THE NUMBER OF REGIONAL DIVISIONS

THAT LAUNCHED A TWITTER FEED IN 2022

Bourgogne-Franche-Comté @InseeBFC  
Ile-de-France @Inseeldf  
Normandie @InseeNormandie  
Nouvelle-Aquitaine @Insee\_NA  
Provence-Alpes-Côte-d'Azur @InseePaca



The French economy dashboard provides a quick and regularly updated overview of the current economic, demographic and social situation in France. Since July 2022, each theme covered by this interactive tool (economy, companies, demographics, etc.) has offered geographical insights in the form of maps and graphs.



# POOLING AND BUILDING SHARED STATISTICS

# OFFICIAL STATISTICS ON THE MOVE

INSEE is developing its activities with a view to fostering a climate of innovation and the sharing of good practices within the Official Statistical Service, which it coordinates.

## Sharing expertise

**M**aintaining an ecosystem that is open to experimentation and innovation involves the organisation of various kinds of expertise-sharing events with the actors and users of public statistics.

### INSEE's Statistical Methodology Days

The 14<sup>th</sup> edition of INSEE's *Journées de méthodologie statistique (JMS)* took place from 29 to 31 March 2022 both in Paris and remotely.

The event was aimed at raising awareness of the innovative work of the Official Statistical Service in the field of statistical methodology, by ensuring its dissemination and encouraging its use. The sessions covered the statistical engineering behind traditional surveys (sampling, non-responses, collecting data), emerging themes (big data, machine learning, artificial intelligence), as well as subjects involving economic or econometric analysis applied to economic issues. During the final session, Emanuele Baldacci (Eurostat) and Sylvie Lagarde (INSEE) delivered a forecasting exercise on the medium-term innovations of European and national statistical systems.

### Training in the use of databases

Throughout the year, INSEE organises seminars together with the Secure Data Access Centre (CASD), the aim of which is to inform an expert audience of its main tools and how to use them effectively. In 2022, a training session on the annual company statistics elaboration tool (Ésane) brought together around 120 researchers and users of these data coming from the Directorate-General for Companies, the Directorate-General for the Treasury, the Banque de France, the OECD and the France Stratégie policy body. INSEE also introduced and trained hundreds of users on the databases for "Tous salariés" ("We're all employees") and the housing and individual demographic files (Fideli).



850 FACE-TO-FACE AND REMOTE PARTICIPANTS

240 AUTHORS

100 COMMUNICATIONS

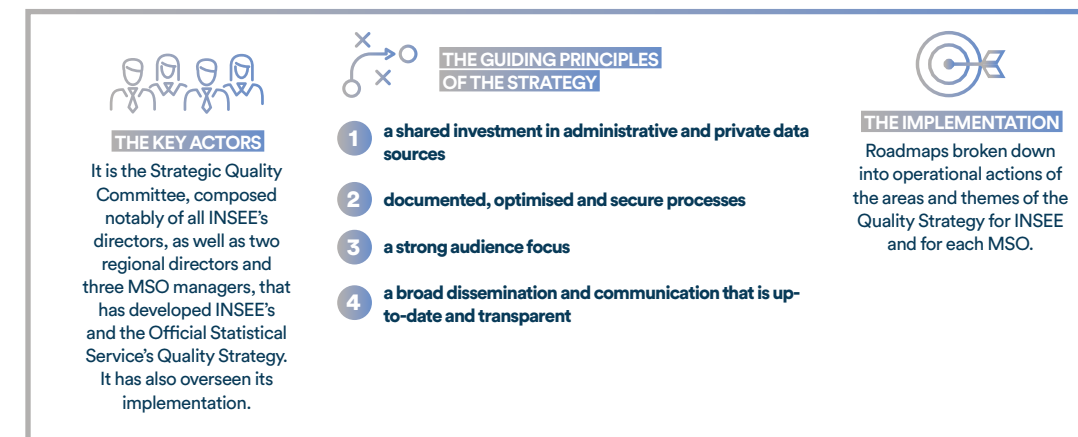
30 SESSIONS

### A circle of economic outlook producers in Corsica

Following the example of other regional divisions such as Île-de-France and Pays de la Loire, the Corse regional division instigated a circle of economic outlook producers in 2022. Each month, INSEE, with the Banque de France regional division and the Regional Directorate for Public Finance, bring together all the data producers working in the service of the State.

## A new Quality Strategy for the Official Statistical Service (SSP)

**F**ollowing the third European peer review in 2021, an action plan involving the Official Statistical Service was finalised in early 2022. To address the peers' recommendations on integrating quality management within the Official Statistical Service, INSEE working in close collaboration with the Ministerial Statistical Offices (SSM) reviewed the Official Statistical Service's Quality Strategy for 2022-2027.



## The SSP Hub: a network of data scientists for Official Statistics

**A**t the crossroads of techniques coming from mathematics, statistics and IT, data science offers promising innovations for statisticians in both the methods used to process traditional sources and those for exploiting new ones. To ensure that skills in this field are developed within the Official Statistical Service and that advances are not simply isolated cases, the Official Statistical Service Lab launched an open community dedicated to data science in February 2022, known as the SPP Hub. This network is intended for SSP agents, for data science experts and beginners – to share their knowledge and help each other out – as well as for the uninitiated who are curious and want to learn more about these new techniques and even get training in them. It provides its members (of which there were over 300 at the end of 2022) with monthly newsletters, offers an instant messaging channel and assembles together training resources, all on a dedicated website: [ssphub.netlify.app](https://ssphub.netlify.app).

Events such as the Open Hour, an informal exchange session focusing on a specific topic, are organised regularly.

In 2022, INSEE's IT System Directorate set up a data science product team responsible for end-to-end management of the services made available to statisticians whose work involves IT programming ("les selfeurs"). One of these services is a new data science platform (<https://datalab.sspcloud.fr/home>) that is built around Onyxia, INSEE's open-source project, accessible via a web app. The platform's catalogue of services has been conceived to help data scientists deal with the essentials, from self-service developing to the production of processes and applications.



# CONTRIBUTING TO EUROPEAN STATISTICS

Beyond its role in the French Presidency of the EU Council (see pages 10 to 12), INSEE's actions at the European level in 2022 involved as much the application of regulations as the sharing of expertise.

## Towards harmonised business statistics

**T**he framework regulation on business statistics, initially named the FRIBS (Framework Regulation Integrating Business Statistics) and then the EBS (European Business Statistics), was adopted by the EU in 2019. This regulation establishes rules governing the development, production and dissemination of European business statistics, as well as those relating to the European framework for statistical business registers. The text creates a common legal framework for business statistics, replacing no fewer than 10 sector-specific regulations or decisions that were previously in force.

INSEE, in collaboration with several MSOs (Agriculture, Foreign trade, Sustainable development, Higher education, Research and innovation) and the Banque de France, is responsible for its implementation, which officially began in 2021. "Rather than having multiple regulations," explains Séverine Arnault, Head of the Annual Business Statistics Elaboration Division (Esane), "the objective here is centralisation, so as to have a more complete, unified and transversal overview of business activities." The EBS is based on methodolo-

gical principles and common quality criteria; it enables a greater flexibility when adapting to economic changes and emerging statistical needs. "By facilitating inter-disciplinary synergies and simplifying the requested data framework," Séverine Arnault continues, "it will help improve comparability at the European level and facilitate the study of certain issues, like questions on globalisation."

In concrete terms, the implementation of the regulation has made it possible to produce and make available new economic outlook indicators for commercial sales volumes and the production in services. In addition, it has enabled work on R&D survey protocols and global production chains, and facilitated exchanges of micro-data between Member States. The production of business demographic indicators that are consistent with the concept of a business enterprise has been in full effect since 2022, and we can now consider that the EBS regulation is fully operational in France. Furthermore, 2022 saw greater cooperation on methodological subjects with other Member States, in particular with Germany, on elements of profiling.

## European statistics in the regions

**W**hat are the uses and needs in terms of European statistics at the regional level? On Europe Day, the 9 May, over 70 people joined a webinar organised by the Nouvelle-Aquitaine regional division to discuss this question. Highlights included talks by representatives of the Euro-region Nouvelle-Aquitaine/Euskadi/Navarra, the Regional Council,

the Regional Prefecture, the IMF and the Atlantic and Pyrenees Urbanism Agency. Discussions first focused on the statistical framework, before moving on to the European data employed in steering public action. The webinar concluded with a presentation of case study examples based on European data, such as the new INSEE study on young people in Europe.

## Discussions on quality in official statistics

**I**n 2022, INSEE once again took part in the European Conference on Quality in Official Statistics (Q2022), organised by Statistics Lithuania and Eurostat in Vilnius, Lithuania. Organised bi-annually, the event aims to bring together statisticians, academics and other stakeholders in order to improve the dissemination of knowledge and the latest research on emerging issues associated with quality in official statistics.

Over 350 people took part in this 2022 edition, which focused on the institutional challenges of quality management and quality assurance in the emerging data ecosystem, the new challenges in establishing and maintaining user confidence, as well as the new opportunities arising from global crises.

Six INSEE experts participated in the sessions and presented, as examples, the contribution of the peer review as a valuable lever for improvement, the interest in metadata from the producer's pers-



pective for mobilising numerous sources of data, as well as INSEE's experience of coding professions and socio-professional categories (PCS) in 2020 using machine-learning methods within the framework of the population census.

VIEW FROM THE OUTSIDE



**EMANUELE BALDACC**  
EUROSTAT  
DIRECTOR OF  
RESOURCES

**You co-chaired the Partnership Group Task Force on Innovation within the European Statistical System (ESS). What were its objectives?**

In 2021, the committee of Directors-Generals of the European National Statistical Institutes (NSIs) felt it was an opportune moment to develop an innovation strategy for the next five years, broken down into annual coordinated programmes. A task force was created, composed of senior managers of several NSIs, whose purpose it was

to identify tools to support innovation, flagship projects, those fields where the innovation stakes are high, as well as transversal investments likely to spark innovation. The task force therefore drew up an innovation agenda, establishing the guiding principles for the development of innovative activities within the annual statistical programme, and for investment in European innovation projects.

**What role did INSEE play in this task force?**

INSEE's role, as with that of all the NSIs, was crucial. Having European NSI representation made it possible to increase transparency as well as responsibility in the process of elaborating the innovation agenda, and ensuring that this agenda takes into account

the diverse perspectives and needs of the various stakeholders. INSEE was particularly active on the subject of quality and the pertinence of official statistics.

**What were the main priorities that the task force identified?**

The high demand for statistics that are more up-to-date and more detailed requires the NSIs to accelerate the integration of innovations into their statistics. This will involve regulatory developments, greater agility in statistical production, training agents in data science (machine learning, for example), a better understanding and acceptance of statistical methods among citizens, and the positioning of NSIs in the emerging data ecosystems. The agenda will contribute to these challenges.

# ACTION AT THE INTERNATIONAL LEVEL

INSEE has continued its international technical support activities and its participation in the most important international cooperative bodies dealing with official statistics.

## Technical support for the Pan-African Statistics Programme



**INSEE is providing its technical expertise to support the implementation of the Pan-African Statistics Programme (PAS2), which commenced in 2022.** This programme, funded by the European Commission, aims to strengthen the statistical systems in Africa. Beginning in February, INSEE participated in the launch phase for the subsidised projects with several objectives in mind: to raise awareness of the programme among the countries of the African Union; to identify the countries that will benefit from the various activities as well as their needs; and finally, to categorise the NSIs according to their capacities and level of development.

The activities officially got started in September, following the fourth coordination meeting for the programme's implementation which brought together Eurostat and the European partner NSIs. By way of example, a training workshop on Eretes (an IT platform designed to assist the production of national accounts) was organised in Abuja, for the benefit of Nigeria, Liberia and Sierra Leone. This training was part of the Ecobusaf programme (Economic and business statistics in Africa) that is coordinated by INSEE.

### The Statéco review at 50

Created by INSEE in 1972, the Statéco methodological journal celebrated its 50th anniversary in 2022! Half a century after its creation, it continues to be an essential and unique forum for knowledge sharing between statisticians working in the field of development. Since 2004, the review has been published in partnership with Afristat, the economic and statistical observatory for Sub-Saharan Africa, and the Institute of Research for Development. The 116th issue, published in May 2022, includes topics such as statistics on governance, peace and security. It contains 11 articles written by 25 researchers, international organisation managers and statisticians from the three continents of Africa, America and Europe.

## INSEE in international forums

### Promoting French expertise in the field of official statistics comes through participating in international forums.

In November 2022, the *Enquête Trajectoires et Origines 2* (Second survey of Trajectories and Origins) was presented at the Statistics Canada International Methodology Symposium dedicated to the theme of "Data Disaggregation: Building a more-representative data portrait of society". INSEE also presented its work at the International Association for Official Statistics conference, organised in collaboration with Statistics Poland, and held in Krakow in April. At this conference, entitled "Worthy Information for Challenging Times", INSEE additionally funded three Ukrainian statisticians to enable them to attend.



# INSEE'S RESOURCES AND ORGANISATION

# INSEE'S MISSIONS

In order to carry out its missions of collecting, producing, analysing and disseminating data on the French economy and society, INSEE relies on an organisational structure and human and material resources spread throughout all of France and its territories.

## Establishing diagnoses of the economic outlook

INSEE regularly produces diagnostic assessments and makes forecasts on France's economic situation. It measures the unemployment rate every quarter, estimates household consumption and gross domestic product, and calculates the consumer price index each month in order to measure inflation.

## Understanding companies

INSEE collects data on the structure (size, sector, etc.) and activity (order books, investment, etc.) of companies. It also conducts a range of thematic surveys on topics such as energy consumption, new technologies, innovation, etc.

## Observing changes in society

INSEE conducts statistical surveys of households and individuals. Regular surveys measure changes in major economic and social conditions (consumer confidence, employment, information technologies, etc.), and structural surveys, carried out every five to ten years, focus on certain behaviours or phenomena (day-to-day life and health, housing, resources and living conditions, etc.). Administrative files are used to obtain data without relying on surveys that are expensive for local authorities to carry out, particularly those data pertaining to employment, salaries and income distribution.

## Carrying out the population census

Each year, INSEE runs the population census survey. This enables us to be aware of demographic shifts in the population, to help assess the resulting needs in terms of infrastructure, and to determine the allocation of government funding to municipalities.

## Describing and analysing regions and territories

Thanks to its regional presence, INSEE is able to gain a detailed knowledge of the French territories. The INSEE regional divisions often produce studies in partnership with local public stakeholders, to whom they also provide advice and expertise when implementing public policies.

## Managing large repositories

INSEE is bound by law to keep three national registers and repositories up to date: the National Directory for the Identification of Individuals (RNIPP), the Single Electoral Register (REU) and the Business register identification system (Sirene). INSEE also contributes to the Legal Entity Identifier (LEI) global register, and issues this identifier for French legal entities.

## Disseminating its statistics and studies

INSEE is not only an institute of statistics; its remit also includes economic and social studies. Subjects of study are selected to best meet the needs of public and private sector decision-makers and respond to the public's preoccupations. An active communication strategy seeks to ensure that its studies are disseminated as widely as possible, notably through the media and via INSEE's digital communication tools. A broad range of freely accessible publications on insee.fr allows the needs of its various users to be met.

## Perfecting its methods and assessing quality

INSEE is constantly seeking to improve its methods; it tests out new data and develops statistical processes to take full advantage of them. It also strives to optimise the data collection protocols for its surveys. These activities are carried out with the Ministerial Statistical Offices as well as in partnership with other organisations.

## Contributing to European and international statistics

INSEE works closely with the European Statistical System, which aims to develop, produce and disseminate statistics that are comparable between the European Union countries. It also contributes to the creation of international statistics by cooperating with international agencies and providing its expertise to National Statistical Institutes.

# THE INSEE BUDGET

INSEE's total budget is

## €435.3 MILLION

according to the *Loi de finances initiale de 2022*



## €368.6 MILLION

STAFF BUDGET



## €43.5 MILLION

OPERATING BUDGET

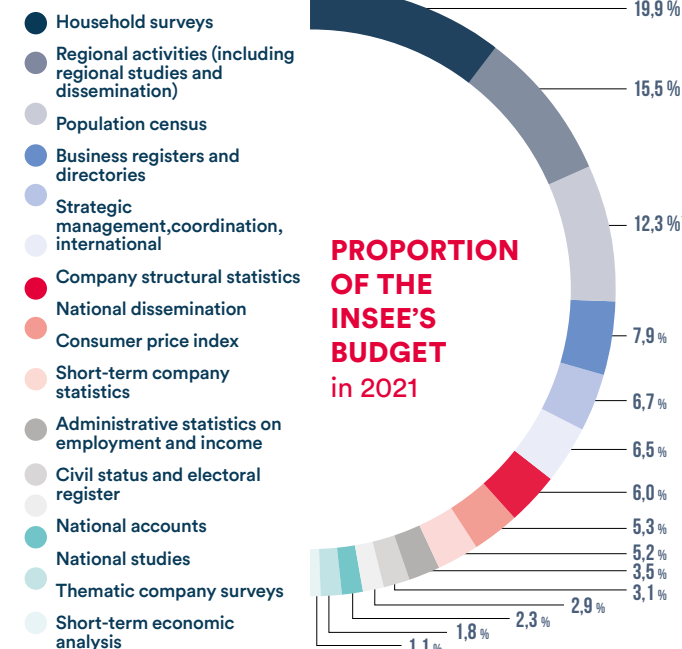


## €23.2 MILLION

INTERVENTION BUDGET

## DISTRIBUTION OF THE BUDGET ACCORDING TO THE FULL COST OF INSEE'S MAJOR OPERATIONS

### OPERATIONS



1. In 2021, the lack of data collection due to the COVID-19 epidemic reduced the costs of the population census. This is generally the activity to which INSEE dedicates the major part of its budget.



# THE WOMEN AND MEN AT INSEE

INSEE's resources are distributed between the head office, located in Montrouge, the regional divisions and the national IT centres and services. In the overseas territories, the regional divisions take the form of inter-regional divisions supported by regional services.

## Staff in figures

# 5,040 OFFICERS

INCLUDING 3,900 THROUGHOUT THE 15 REGIONAL DIVISIONS

# 52.5%

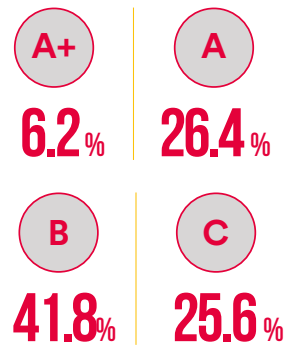
OF STAFF UNDER 50 YEARS OLD

# 56%

OF TOTAL STAFF ARE FEMALE



## DISTRIBUTION OF TOTAL STAFF BY GRADE



# 41.5%

OF EXECUTIVES ARE FEMALE

## Directorate-General organisation chart

(as at 1 April 2023)



**JEAN-LUC TAVERNIER**  
DIRECTOR-GENERAL



**LIONEL JANIN**  
CABINET DIRECTOR



**PASCAL RIVIÈRE**  
HEAD OF THE INTERNAL AUDIT OFFICE

### Secretary General



**KARINE BERGER**  
SECRETARY GENERAL

**ADRIEN FRIEZ**  
Head of the Coordination of Cross-Cutting Initiatives Unit

**PATRICK REDOR**  
Head of the Legal Affairs and Litigation Unit

**NICOLAS VANNIEUWENHUYZE**  
Head of the Financial Affairs Department

**JEAN-CHRISTOPHE FANOUILLET**  
Head of the Living and Working Conditions Department

**TO BE APPROPRIATED**  
Head of the Human Resources Department

### Directions



**JEAN-SEVERIN LAIR**  
DIRECTOR OF THE INFORMATION SYSTEM



**SYLVAIN MOREAU**  
DIRECTOR OF BUSINESS STATISTICS



**CHRISTEL COLIN**  
DIRECTOR OF DEMOGRAPHIC AND SOCIAL STATISTICS



**NICOLAS CARNOT**  
DIRECTOR OF ECONOMIC STUDIES AND REPORTS



**ALAIN BAYET**  
DIRECTOR OF DISSEMINATION AND REGIONAL ACTION



**SYLVIE LAGARDE**  
DIRECTOR OF METHODOLOGY, STATISTICAL COORDINATION AND INTERNATIONAL RELATIONS

**CHANTAL VILLETTE**  
Head of IT Production and Infrastructure

**AXELLE CHAUVET**  
Head of the Information Systems Development Department

**LOÏC MIDY**  
Head of the Innovation and Information System Strategy Unit

**MARIE LECLAIR**  
Head of the Registers, Infrastructure and Structural Statistics Department

**ALAIN JACQUOT**  
Head of the Short-Term Statistics Department

**CHRISTINE CHAMBAZ**  
Head of the Sectoral Economic Outlooks Department

**SYLVIE LE MINEZ**  
Head of the Demographic and Social Studies Unit

**VLADIMIR PASSERON**  
Head of the Employment and Earnings Department

**VALÉRIE ALBOUY**  
Head of the Household Resources and Living Conditions Department

**MURIEL BARLET**  
Head of the Demography Department

**AURÉLIEN DAUBAIRE**  
Head of the Consumer Prices and Household Surveys Department

**JULIEN POUGET**  
Head of the Department of Short-Term Economic Analysis

**PAULINE GIVORD**  
Head of the Economic Studies Department

**GUILAUME HOURIEZ**  
Head of the National Accounts Department

**FRANÇOIS GUILLAUMAT-THILLIET**  
Head of the Secretariat of the National Council for Statistical Information

**HÉLÈNE ERKEL-ROUSSE**  
Head of the Documentary Resources and Archiving Unit

**CHRISTINE LAGARENNE**  
Head of the Editorial Content Department

**MICHEL DUÉE**  
Head of the Regional Action Department

**CÉLINE ROUQUETTE**  
Head of the Public Communication and Services Department

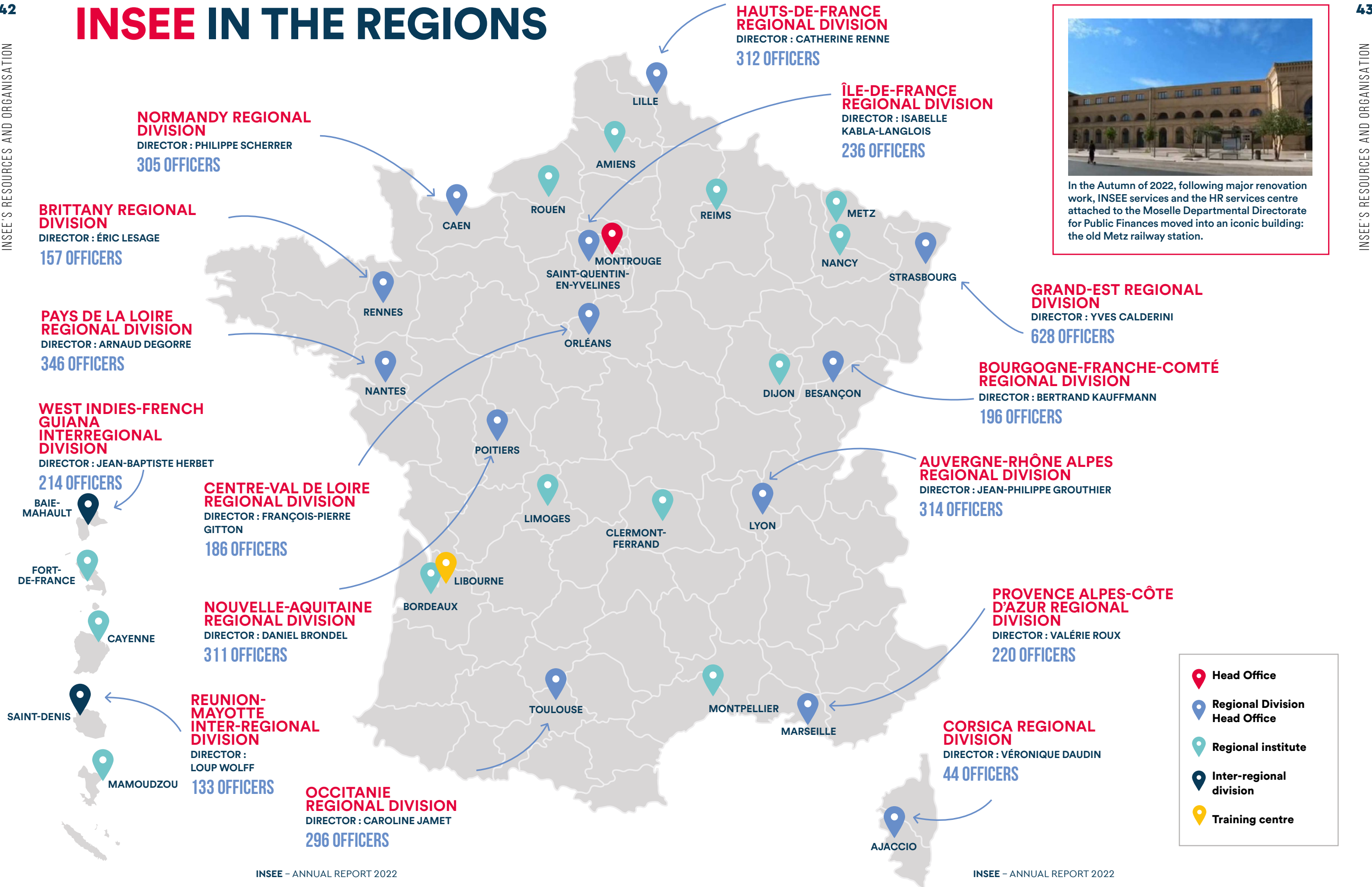
**PATRICK SILLARD**  
Head of the Department of Statistical Methods

**MYLÈNE CHALEIX**  
Head of the Quality Unit

**JEAN-PIERRE CLING**  
Head of the Statistical Coordination and International Relations Department

**ROMAIN LESUR**  
Head of the SSP Lab Unit

# INSEE IN THE REGIONS



# WORKING AT INSEE

## Working towards energy sobriety and effective resource management

### A Green INSEE

In 2020, INSEE began thinking about the best ways to keep in check its environmental impact. In 2022, as part of the government's Eco-responsible public services scheme and the Ministry of Economy's "Bercy Vert" plan, it launched its environmental footprint transformation project: the Green INSEE plan. This plan set out its strategic orientations and encouraged local initiatives.

In concrete terms, at least one spokesperson was appointed within each regional division to promote and coordinate the local INSEE initiatives. This led to the implementation of energy-saving measures for its buildings: a maximum temperature of 19 degrees in winter and the progressive replacement of incandescent light bulbs with LEDs in Hauts-de-France. Work-related travel initiatives were also launched: an experiment involving electric car rental for surveyors, as well as the encouragement of car-sharing and bike use in Occitanie, and the installation of bike-shelters close to the offices in

INSEE produced a greenhouse gas emission report in order to quantify the different sources responsible and to prepare a carbon transition plan. The measures envisaged under this plan should lead to a 17% reduction in greenhouse gas emissions by 2025. Based on estimated current levels of 15,400 tonnes of equivalent CO<sub>2</sub>, this should effectively represent a reduction of 2.9 tonnes per agent.

Bourgogne-Franche-Comté. Initiatives to raise awareness of the ecological impact of digital technology – in particular emails, waste sorting and other everyday gestures – were also set up.

### Operation Edifice

This major project, known internally as Edifice (referring to the transition towards centralised IT infrastructure data centres) is a large-scale operation that was launched in 2019 and completed in late 2022, with the migration of its infrastructure tools. Relocating INSEE's applications stored in Metz to two State-managed data centres required major operations, such as designing a suitable architecture, building the target infrastructure and drawing up the migration plan. This new dual location guarantees a high level of security while ensuring the continuity of INSEE's work.


### Tools that adapt to new ways of working

INSEE is helping its agents adapt to the new ways of working associated with the evolution of society, such as the development of remote working and the digital transformation.

Sharing of good practices, raising manager awareness, training programmes, workshops, and collaborative tools were all made available to INSEE agents in 2022, in collaboration with the Inter-ministerial Directorate for Public Transformation.

## Working at INSEE

INSEE draws on a variety of skills that cover the following statistical fields:

- 
**statistical production:** methodology, design and management of statistical operations.
- 
**statistical analyses and studies:** national statistical studies, economic summaries and short-term economic analyses.
- 
**regional activities, public relations and coordination:** consulting/expertise missions with regional public stakeholders, dissemination of publications and data, responding to users, coordination of official statistics.
- 
**IT:** IT development and production, steering the development of INSEE's IT system and cybersecurity.
- 
**support functions:** documentation and/or archive management; human resources management; financial management; domaine expertise (law, communication, public procurement, prevention); secretariat and management support; and logistical support.
- 
**data collection:** INSEE relies on a network of specialised surveyors for both household and business surveys.



### Implementing a DevOps approach

DevOps stems from a desire for a better collaboration between IT development and IT production so as to break down the "wall of incomprehension" that might separate them. The Information System Directorate, which strives to remain at the cutting edge, has been rolling out this programme since 2022. Its basic principles include a greater reactivity to requests, a reduction in the total IT management workload dedicated to applications, and a refocusing on the notion of "user needs".



## Competitive exams, schools and training centre

### Competitive exams

INSEE primarily recruits its agents through competitive exams. There are 18 internal and external competitive exams covering 5 grades that enable entry into INSEE, whether it be as a surveyor, an administrative assistant, a statistical controller, an attaché statistician or an administrator.

### INSEE's training centre

Founded on 1 February 1996 in Libourne in Gironde, the CEFIL is INSEE's training centre. Its main mission is to design and deliver basic training for administrative assistants, statistical controllers and surveyors arriving at INSEE or being promoted to a new unit. It is also responsible for designing remote training, hosting an integrated preparatory class ("classe prépa Talents") for the external competitive exam for statistical controllers, and for organising and hosting national and international meetings and seminars.

### The Group of National Economics and Statistics Schools (GENES)

**INSEE is responsible for the technical oversight of the GENES, a public higher education and research establishment under the Ministry of the Economy. It comprises four entities:**

- the National School of Statistics and Economic Administration (ENSAE), which trains administrators for the Official Statistical Service as well as statisticians and economists for the private sector;
- the National School for Statistics and Information Analysis (ENSAI), which trains the attachés of the Official Statistical Service and statistical engineering, data processing and general economics managers for the private sector;
- the Centre for Economic Programme Studies (CEPE), which is a professional training centre working for both the public and private sectors;
- the Centre for Research in Economics and Statistics (CREST).

## Ongoing training

In order to promote the creation of diversified and constructive career paths, INSEE human resources offer public officers enhanced training and individual support.

### Key figures 2022

# 83%

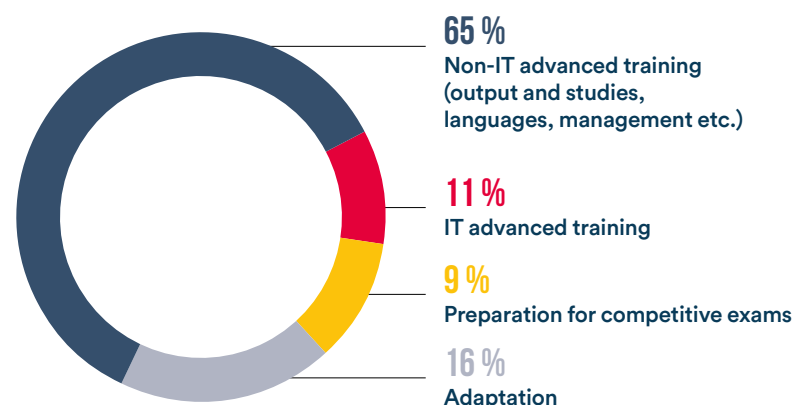
OF OFFICERS ATTENDED AT LEAST ONE TRAINING COURSE

EACH OFFICER RECEIVED

# 6.4

DAYS OF TRAINING ON AVERAGE

### BREAKDOWN OF TRAINING HOURS BY TYPE



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