

ANNUAL REPORT 2019



DESIGNING FUTURE. CONNECTING PEOPLE.



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THE CHAIRWOMA

Dear employees, shareholders and clients.

2019 was a good year for Ineco. The economic figures show that we have increased turnover by more than 11% in comparison with the previous year, over 304 million euros compared to just under 274 million euros in 2018. This positive trend is part of the Atenea Strategic Plan (2019-2022), a roadmap to strengthen our position as a leading transport engineering and consulting company, while at the same time contributing to the development of safe, sustainable and connected mobility that improves the quality of life of millions of people. However, the exceptional circumstances that we are going through as a result of COVID-19, and its impact on the activity of the sector, are influencing and causing variations in our initial estimates for 2020.

At the national level, we continue to collaborate with our shareholders on a wide

range of different projects throughout Spain. Work that demonstrates the enormous technical skills that our more than 3,000 employees contribute to innovative and ground-breaking projects such as BIM-GIS integration into the design of the construction project for the Villamartín de la Abadía-Requejo section of the A-76 motorway. Another important aspect is the participation in phase one of the study on high-speed rail access to the Madrid-Barajas Adolfo Suárez Airport, aimed at strengthening airport nodes for connection between air and land transport. Our capacity to diversify projects and clients is demonstrated by the consolidation of ICT services. This activity becomes more important every year and is deployed in projects such as the modernisation of the Administration of Justice, support for the provision of shared services to different entities of the General State Administration and the development of the Cityneco platform for the

management of smart cities.

In regard **to the international** market, an area, the major involvement of all Ineco's teams area in which Ineco has increased its revenues allowed us to carry out 34 solidarity actions by almost 13% over the previous year, 2019 over the course of 2019, aimed at improving marked a new highly symbolic milestone for the quality of life of more than 200,000 people. the company, which began its activity in a The company also presented an ambitious fifth continent through its participation in the Equality Plan comprising eight lines of action Sydney, Australia rail network modernisation that will enable us to achieve real equality project. In Europe, the company's principal between women and men in a male-dominated market, major ventures include contracts sector like engineering. awarded for the large Rail Báltica project, a high-speed line that will connect Estonia, Finally, I would like to dedicate a few words of Lithuania and Latvia; the design of the new thanks to our clients for the trust that they place terminal at Schiphol Airport; and our leadership in us, which encourages us to continue working in the operation of the User Services Centre and striving to provide the best response to of the European Galileo satellite navigation all of the new technical challenges that we system. Ineco also participated in projects encounter, once again showing our willingness in the Americas and Asia, demonstrating to continue "designing the future, connecting the leading position of Spanish engineering people" together. abroad. These include urban transport works carried out in Mexico - with the expansion of line 12 of the Mexico City metro - and Brasil Carmen Librero Pintado - with the support of the public company EPL in the launch of the National Observatory of Chairwoman Logistics and Transportation; or railway projects such as the modernisation of the Samsun-Kalin line in Turkey and consulting and engineering services for train protection systems on sections of lines in India.

2019 was also an especially successful year with regard to our commitment to innovation. Ineco's ability to provide innovative solutions to challenges with a high degree of technical complexity leads us to add value to our services in a process of ongoing improvement and to develop projects such as the "Methodology for the Integration of the Human Factor in Risk Analysis", recognised by an award from CANSO, the world organisation representing air navigation service providers, and the Ronin innovation project, a road safety management tool, which was one of the three finalists in the 2019 Ponle Freno Awards. Both are the best example of Ineco's main asset: its teams of men and women who transform their talent and creativity into solutions and services for society as a whole.

A commitment in line with our dedication to the Sustainable Development Goals and the 2030 Agenda, and with acceptance, for another year, of the ten principles of the United Nations Global Compact, initiatives that serve as a

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fundamental pillar in our daily activities and that define the company's corporate culture. In this





- N6







*data as of December 2019

WORLDWIDE

Thanks to the first contract awarded in Australia - participation in the modernisation of the Sydney railway network -, Ineco enhances its presence in all five continents in 2019.



Croatia Croati

AMERICA Argentina Argentin



AIRPORTS

URBAN

TRANSPORTATION

((b))

4.0 MOBILITY

ROADS

AIR NAVIGATION PERMANENT OFFICES

h



2019 MILESTONES

january⁰¹

- » First contract in Australia: modernisation of the Sydney commuter rail network with the role of Systems Integrator
- » ERA entrusts Ineco with the preparation of the ERTMS Machinist's Manual
- » ORAT of the new Moynihan railway station in New York

march⁰³

» Ineco is at the forefront of new projects for the deployment of ERTMS in Europe

*may*⁰⁵

- » Refurbishment of NS74 trains in Chile
- » Works for the new Old Oak Common HS2 high-speed station
- » Launching of the Mujeres IN Programme, an internal pioneer initiative aimed at the personal and professional development of high-potential company profiles

february⁰²

- » Ineco enters Rail Baltica, the corridor that will link Northeast Europe, after being awarded two contracts (implementation strategy for the energy system and definition of maintenance facilities)
- » Presentation of the 2030 Agenda Plan by which Ineco commits itself to the new Sustainable Development Goals

04 april

- » Ineco participates in the new Modernisation Strategy of the Ministry of Justice
- » Ronin: finalist at the 11th Ponle Freno Awards

july⁰⁷

- » DOMUS performs the first U space demonstration with drones in Spain
- » Presentation of the company's strategic plan: Atenea Plan
- » New collaboration with Rail Baltica (engineering, design and supervision of one of the eleven sections)

*september*⁰⁹

- » Ineco is in charge of phase 2 of the New Railway Complex at Atocha station
- » Launching of the 5G pilot project in Galicia

november

- » Supervision of the railway line between Montevideo and Paso de los Toros in Uruguay
- » CANSO Award for the "Methodology for the Integration of the Human Factor in Risk Analysis"
- » Ellas Vuelan Alto highlights the work of Carmen Librero for Equality - EVA Award 2019

june⁰⁶

- » Grant Thornton and Ineco lead the
- initiative to standardise the railway BIM » First construction project of roads in BIM
- A-76 motorway (BIM GIS integration)



» The structure of the Gaznata bridge over Burguillo reservoir (N-403, Ávila) is completed

10 october

- » Design of commercial spaces for Vilnius airport
- » Award from the Argentine Road Association for the best urban project to Paseo del Bajo, in which Ineco participates



- » Presentation of the Ineco Equality Plan, inaugurated by the Minister of Transport, Mobility and the Urban Agenda
- » Consulting and technical assistance to update and improve Malta's National Transport Model





ATENEA 2019-2022 STRATEGIC PLAN

In 2019, Ineco's Board of Directors approved the ATENEA 2019-2022 Strategic Plan. A plan that provides the roadmap that will consolidate the company's leadership in the engineering and consulting sector and reinforce its role in the design and development of more efficient, sustainable and safe mobility. The Plan focuses on structure, traceability and participation, supported by the fundamental phases of analysis; diagnosis and reflection; formulation of objectives and definition of strategic lines, plans and programmes.





Its ultimate goal is to allow Ineco to combine the dedication and development of the company's capabilities in terms of national projects, with an increase in knowledge and improvement of its position on the international market. The Plan established the following six strategic goals that will mark the company's path in the short and medium term:



People Keep our professionals and attract new talent.



Efficiency Optimise resource management in order to offer a more efficient service to clients and shareholders



Production Positioning Consolidate our leadership in reference products and services.



Focus on International Trade Selective marketing strategy in line with the MITMA Group's activities.



Quality Ensure the effective quality of our products and services



Sustainable Development Contribute to social improvement and sustainable development.

These goals are fulfilled through **12 strategic lines, 21 action plans and 49 programmes** that provide details of the lines of action to be implemented between 2019 and 2022. The plan also offers **monitoring instruments and mechanisms** to enable continuous evaluation of the level of achievement of the goals, the necessary adjustments to be made and new goals to be defined.

Looking ahead to 2020, Ineco will continue to advance based on the following lines of action: enhance its technical knowledge in current and future reference products and services; continue incorporating procedures and tools to provide continuous efficiency and quality of the services it offers; strengthen its work as an Instrumental Medium of Public Administration; and focus its international presence by maximising collaboration with the MITMA Group. All the above is part of the explicit commitment that Ineco has made to 2030 Agenda.











MISSION

"To provide a quality, experienced and differential engineering and consulting service in mobility and transport that provides added value to our clients and to society as a whole."

VISION

"To be the reference engineering and consulting firm in mobility and transport, recognised for our technical leadership and specific differentiated knowledge."

VALUES

Integrity SustaiNability Experience Confidence RigOur

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A WEARE INECO



CORPORATE GOVERNANCE

Ineco has the necessary governing bodies to ensure that its values and management model reach all areas and disciplines of the company. The governance model is determined by the strategy and current organisation, depending on company needs.

The president of Ineco is the head of the Board of Directors, Steering Committee and Ethics Committee.

GENERAL SHAREHOLDERS' MEETING

The Company's deliberative body is the Shareholders' Meeting. Its agreements, legitimately adopted, are binding upon the Company and all of its shareholders.

BOARD OF DIRECTORS

The Board of Directors is the body in charge of making decisions and agreements on strategic issues, preparing financial statements, approving budgets and other proposals submitted.

The Internal Regulations of the Board of Directors were approved in 2019, with a view to consolidating the Company's legal regime and establishing its organisation and internal regime in greater detail, adapting it to the Company's business needs.

A set of criteria have therefore been established that prioritise the actions of the Board of Directors at all times, including: the protection and promotion of the company's general interests, vocation of service to citizens and commitment to the environment.



COMPOSITION OF THE BOARD

CHAIRWOMAN (DIRECTOR)

Ms. Carmen Librero Pintado President of Ineco

BOARD MEMBERS

Mr. Manuel Martínez Cepeda Treasury and Accounts Manager of Adif

Ms. Belén Bada de Cominges Deputy Director for Legislation of the General Technical Secretariat. MITMA

Mr. Francisco Gijón Romero Deputy Director of Information Technologies and Electronic Administration. Inspectorate General for Public Works. MITMA

Mr. José Luis Rodríguez Castro Systems Director of Enaire

Mr. Miguel Ángel Carrillo Suárez Deputy Director of Services and Works Inspection Inspectorate General for Public Works. MITMA

Mr. Antonio Sánchez Bustamante Deputy Director of Commercial Policy with Ibero-America and North America. Ministry of Economic Affairs and Digital Transformation

Mr. José Salvador Trigueros Rodrigo Director of CEDEX

Mr. José María Santacana Gómez Delegate Auditor of MITMA



Mr. Mariano Gasparet Romero Cabinet advisor. MITMA

Mr. Miguel Ángel Marfull Robledo Executive advisor of the Spanish Cabinet Office

Ms. María Esther Mateo Rodríguez Managing Director of Safety, Corporate Processes and Systems of Adif

Ms. María Magdalena Bodelón Alonso Director of Strategy and Quality of Renfe Operadora

Mr. Santiago Cortés Burns Head of Security, Quality and the Environment of Enaire

Mr. Jesús Antonio Pérez Blanco Deputy Director of Airports and Air Navigation. General Directorate of Civil Aviation. MITMA

BOARD SECRETARY (NON-BOARD MEMBER)

Mr. Carlos Moro Valero Director of Legal & Compliance of Ineco

DISMISSALS AND APPOINTMENTS DURING 2019

Extraordinary General Assembly (19 February 2019):

Dismissal: Mr. Juan Tébar Molinero **Appointment:** Mr. Santiago Cortés Burns

as of December 2019

AUDIT AND CONTROL COMMISSION

The main role of the Audit and Control Commission is to support the Board of Directors in its supervisory tasks.

The Audit and Control Commission shall supervise the economic and financial information of the Company, as well as inform the General Meeting and the Board of Directors about the accounts and the audit.



MANAGEMENT COMMITTEE

The Steering Committee is the highest internal decision body of the company. It meets weekly and it is responsible for the implementation and development of the strategic guidelines approved in the Board of Directors meeting.

As of 31 December 2019:

Carmen Librero

Chairwoman

Casimiro Iglesias

National Business General Directorate

Ignacio Fernández-Cuenca

International Business General Directorate

Ana Rojo

Engineering and Consultancy General Directorate

Eva Pulido

Organisation and Corporate Services General Directorate

Celestino Rodríguez

President's Office Directorate

Daniel Latorre

Strategy and Management Control Directorate

Carlos Moro Director of Legal & Compliance

SHAREHOLDERS





INTEGRITY, TRANSPARENCY AND GOOD PRACTICES

Transparency with all its customers and integrity as an essential principle of action and professional ethics are the two pillars on which Ineco's values are based.

The company has maintained its adherence to the ten principles of the United Nations Global Compact since 2008, based on respect for and promotion of human, labour, environmental and anti-corruption rights. The company's firm commitment with the environment is evident in its corporate culture and implemented in its daily activity.

REGULATORY FRAMEWORK. INTEGRITY STANDARDS

Ineco offers Standards of Integrity, Transparency and Commitment in its quest to ensure its management model based on commitment to sustainability. These are a differential element that directly affects SDG 16 "Peace, Justice and Solid Institutions", which promotes universal access to justice and the construction of responsible and effective institutions at all levels. It is not only a matter of complying with the current laws of each country in which it operates, but also of preventing, promoting, facilitating, correcting and ensuring that Ineco, and all its professionals, act in accordance with the main international standards, corporate values and social demands in force at any given time.

The policies of these Standards that govern the company's ethical behaviour with its stakeholders include:



- Corporate Responsibility Policy
- Code of Conduct
- Zero Tolerance Policy for Corruption
- Information transparency and veracity policy
- Gift Policy

These Standards also include applicable procedures and operating methods to ensure the consistency of Ineco in all its activities and are managed by the Ethics Committee to ensure their fulfilment.

In 2019, the Integrity, Transparency and Commitment Standards were updated and approved by the Management Committee, a campaign that will culminate in 2020 with communication to all Ineco professionals. These standards, which must be complied with by managers and employees, are available on the intranet and are open documents subject to updating to adapt them to new trends and growing legal requirements.

Furthermore, unlike the Standards of Integrity that govern ethical conduct and are managed by the Ethics Committee, the Organisation and Management Model for Crime Prevention that includes all Ineco's procedures is also operational, helps to prevent crimes from occurring and is managed by the Compliance Committee. However, there is a set of texts that are included in both documents due to their nature.

CORPORATE RESPONSIBILITY POLICY

Ineco contributes to the development and improvement of the society in which it operated incorporating social, labour and environmental aspects in its strategy and management to help develop and improve the society in which it operates. Integrity, transparency and commitment are the principles that govern the activity of the company and the key axes on which Ineco's relationship with all its stakeholders are based.

COMMITMENTS

CLIENTS: outstanding service

- / Quality and service excellence
- / Committed to long term success
- / Ongoing dialogue and trust relationship
- / Confidentiality and objectivity
- / Clear bet on innovation

SHAREHOLDERS: sustainable results

- / Creation of sustained and sustainable values
- / Efficient management
- / Profitability and transparency

30

EMPLOYEES: attractive corporate project

- / Increase in welfare and progress
- / Clear bet on innovation, research and dissemination of knowledge
- / Quality employment:
 - Merit and skill
 - Professional development and training
 - Equal opportunities, reconciliation
 - Safe and health in all the positions
 - Team work, communication and participation

SUPPLIERS: trust and transparency

- / Advertising, concurrence, nondiscrimination
- / Confidentiality
- / Mutual benefits and trust
- / Objectivity
- Promotion of Corporate Responsibility principles

SOCIETY:

cultural, social and economic development

- / Inclusion of people with disabilities or handicaps
- / Increase in welfare and progress
- / Cultural, social and economic development
- / Innovation, research and dissemination of knowledge

ENVIRONMENT: preventive approach

- Priority given to environmental aspects upon drafting projects and rendering services
- / Responsible use of resources
- / Adequate management of our waste
- / Demanding practices for our employees and suppliers

CODE OF CONDUCT

Ineco has a set of rules of conduct that define corporate culture that are assumed and implemented to achieve ethical and responsible management in the development of the services and products it offers, and in the relationships it establishes with different interest groups.

PRINCIPLES

LOYALTY TO THE ORGANISATION

- / Reputation and loyalty to the company
- / Respect for confidentiality
- / Efficient and responsible involvement
- / Non-concurrence with other companies
- Appropriate use of the company's resources
- / Compliance with environmental, health and safety measures

RELATIONSHIP OF PROFESSIONALS WITH THE STAKEHOLDERS

- / Relationship with clients: excellence, confidentiality, objectivity and trust
- Relationship with suppliers and partner companies: trust and mutual benefit, transparency and impartiality
- Relationship with the international environment: respect for legislation, culture and customs
- / Strict compliance with legality
- / Transparency and truthfulness of information
- Rejection of gifts, compensation and bribes

RELATIONSHIP BETWEEN PROFESSIONALS

- / Respect for people
- / Non-discrimination
- / Cooperation and collaboration

ADMINISTRATORS AND STRUCTURE STAFF

- / Knowledge and communication: ethical and responsible professional practice
- Respect and promote the fundamental rights of workers
- Professionalism and subordination of own interests to those of the company
- / Veracity, accuracy and honesty in economic/financial management
- Apply principles of merit and ability when contracting
- / Encourage professional training and promotion of staff in an objective manner
- / Facilitate and promote labour integration and reconciliation

ETHICS COMMITTEE

This committee is responsible for supervising compliance with corporate integrity standards and their interpretation, for proposing preventive or corrective actions in relation to their possible non-fulfilment.



TRANSPARENCY PORTAL

Ineco maintains a commitment to citizens and to society as a whole, striving to always provide them with accurate and transparent information.

In compliance with Law 19/2013, of 9 December, on Transparency, Access to Information and Good Governance, Ineco has enabled a Transparency Portal on its corporate website, whose objectives are to host the contents required by the Transparency Law and to open a specific communication channel for inquiries related to information transparency issues.

An internal procedure has also been established to comply with said transparency objectives, differentiating between:

- Active publicity: information that must be published ex officio, whose knowledge is relevant to ensure the transparency of the company's activity, related to the operation and control of public performance.
- Passive advertising or right of access to public information: information that must be provided at the request of a third party.

In order to guarantee transparency in the operation and control of public actions, Ineco keeps the information updated through a monthly review prepared by competent in-house teams. In 2019, the following blocks were established to organise the contents in the active advertising section: institutional, organisational and planning information; information of legal relevance; economic, budget and statistical information; and statistical data.

In relation to the queries that Ineco receives through the Transparency Portal, and to guarantee the right of citizens to receive a response to their requests for information, in time and form, Ineco has developed an internal procedure that culminates in a motivated resolution of the president, which is sent to the requesting citizen. During 2019, all queries received through the Transparency Portal were answered, in accordance with the procedure described, within a period of one month conferred by law.

COMMITMENT TO SUPPLIERS

Aware of the importance of the suppliers in the smooth operation of the company, Ineco seeks to establish good relations with them and guarantees transparency and equality in all its contracting processes. It is about selecting those who not only better meet the needs of the company, but who are also better aligned with the principles and values of the company.

The principles that govern Ineco's internal contracting standards are the following:

• Principle of advertising

The company applies this principle by inserting the General Conditions of Contract on the website; publishing the procurement processes on the State Contracting Platform (www. contrataciondelestado.es), and, as appropriate, also on the Ineco website, without resorting to other additional means of advertising contracts derived from management assignments.

• Principles of competition, equality and non-discrimination

Ineco guarantees free access to contracting by any company, starting with the non-discriminatory description of the subject matter of the contract. It also guarantees equal access for all economic operators in all European Union member states, with the recognition of degrees, certificates and other diplomas from different EU countries. It is also a fundamental company policy to avoid providing information in a discriminatory manner which could give certain bidders an advantage over others.

• Principle of transparency

Ineco meets the requirements of this principle by publishing the Internal Contracting Standards which specify the contracting process used and the award bodies established.

It has also published the General Contracting Terms and Conditions applicable to contracts; and sets objective assessment criteria for each specification, in order to always award the most

economically advantageous proposal, in accordance with those criteria

• Principle of confidentiality

The guarantee of compliance with this principle is embodied in the confidentiality clause included in the General Contracting Conditions, which, in certain processes, are complemented by specific statements.

• Principle of sustainability

On the other hand, Ineco is aware of the most disadvantaged groups and is committed to socially responsible purchases by promoting the inclusion of both social and, as long as they are related to the object of the contract, environmental clauses: emissions, efficient use of water and energy; use of materials, procedures and ecological production methods, waste recycling and management, etc.

Ineco is strongly committed to hiring local suppliers as a strategy to positively influence the economy of the places where it develops its projects. Therefore, in 2019, in the international arena, the volume of subcontracts with local suppliers represented **24.56 %** of the total subcontracts.



SECTORAL COLLABORATION

As a leading global company in the transport engineering and consulting sector, Ineco also promotes cooperation between national engineering companies and is a member of various national and international associations and organisations. The objective is to contribute to enrich and strengthen the synergies between all agents from the sector, as well as to keep up-to-date their technical and management know-how by exchanging state-of-the-art knowledge with other companies and organisations. Therefore, in 2019, Ineco belonged to the following entities:

- / Aenor Climate Change
- / Aenor Smart Cities
- / AGERS
- / Airports Council International (ACI)
- / Association of the Socially Responsible Recruitment Forum (AFCPSR)
- / Association of Mexican Railroads (AMF)
- / Asociación para el Progreso de la Dirección (APD) (Association for the Advancement of Management)
- / Building Smart Spanish
- / Centro PPP for Cities, Specialist Centre on PPP in Smart and Sustainable Cities (IESE)
- Civil Air Navigation Services Organisation (CANSO)
- / Cluster Andalucía Smart Cities
- / European Innovation Partnership (EIP)
- / Eurocae
- / Forética
- / Galileo Services
- / Global Compact
- / IE Benchmarking Club
- / Infra Eco Network Europe (IENE)
- / Innovation and Knowledge Club
- / Latin American Train and Underground

Association (ALAMYS)

- / Loyalty Foundation
- / Madrid Chamber of Commerce
- / Mexican Chamber of Commerce
- / Move2Future
- / National Accreditation Entity (ENAC)
- / National Association of Auscultation and Technical Infrastructure Management Systems (AUSIGETI)
- / National Road Safety Alliance (Mexico)
- / New Economy Forum
- / PRL Innovation
- / Railway Innovation Hub (Malaga)
- / Scientific and Chemical Structural Concrete Association (ACHE)
- / Spanish Association of Railway Services, Equipment and Material Manufacturers and Exporters (MAFEX)
- / Spanish Railways Technological Platform (PTFE)
- / Spanish Technological Road Platform (PTC)
- / Spanish Association for Quality (AEC)
- / Spanish Association for Non-Destructive Tests (AEND)
- / Spanish Association of Tunnels and Works (AETOS)
- / Spanish Association for the Repair, Reinforcement, and Protection of Concrete (ARPHO)
- / Spanish Construction Technology Platform (PTEC)
- / Spanish Expatriate Forum (FEEX)
- / Spanish Group for Green Growth
- / Spanish Association of Risk and Insurance Management (AEGVE)
- / The Railway Industry Association (RIA)
- / They Fly High (EVA)
- / Technical Road Association (ATC)
- / Tecniberia

TEAM

Ineco's core value is its team. More than 3000 employees who endeavour to provide their experience and know-how every day for projects and activities developed by the company inside and outside Spain.

IDENTIFICATION OF TALENT

In 2019, Ineco implemented different initiatives to identify the best professionals in the national and international market and attract them through a value proposition:

- Launch of the Aeronautical Talent Attraction Programme, aimed primarily at European professionals specialising in Aerospace Systems - Aviation Security, Airspace and CNS/ATM Systems - and Airports.
- Specific scholarship and internship programmes in the field of Aeronautical Engineering in the specialties of Air Navigation, Airports, Industrial Engineering and Telecommunications.
- In line with SDG 5 on Gender Equality, an approach to engineering and STEM disciplines was made to institutes with the 4th company programme and the project "Engineering as a future option", including talks to CSE and Baccalaureate students with special focus on the female gender.
- Within the framework of the Ineco Campus, Ineco launched an International Fellows Hiring Plan.

The firm conviction that young people are a key group and the essential basis of our recruitment, training and professional development strategy increased the number of fellows in 2019 to over 120, more than half of whom joined the company. A 50% increase in attendance of national and international forums and events was therefore registered in comparison with 2018. The company has the firm intention of advancing in 2020 with the digitisation of recruiting processes and tools to enhance our effectiveness, offer the best service to our clients and, therefore, add value to the company. It will also address the challenge of creating specific attraction programmes for critical and recurrent vacancies, particularly abroad and reinforce the selection of experts in new technologies.

DEVELOPING TALENT

Aware that talent is the main source of the company's competitive advantage and its differentiating factor abroad, Ineco has comprehensive programmes to enhance both team capabilities and communication, as well as to generate high-performance and committed environments.

Through Management by Objectives (GpO, in Spanish), the achievement of the company's strategic objectives, as well as of each of the positions, is promoted.

The Development Evaluation (EdD) is an annual process oriented towards the effective management of the development of workers and to strengthening communication with those responsible. Its objective is to detect their abilities and capacities, their development potential, as well as their interests, motivations and attitudes. All this allows the detection of training needs, individual development plans, the management of geographic and functional mobility, succession plans, etc. In 2019, it evolved towards the implementation of a 360° Development Evaluation model (EdD 360°), a comprehensive evaluation process that covers the perception of performance by the person in charge, the direct team, colleagues, clients, as well as other stakeholders, such as suppliers and strategic partners.

We continue to promote the activity of the Employees' Club, managing new agreements with centres (educational, health and family support), as well as financial institutions and restaurants near the headquarters, obtaining exclusive discounts for our employees through the Savings Club. Likewise, in the Leisure Club, Sports Club and Solidarity Club, we have increased the number of activity proposals based on the interests of employees, increasing their diversity in the different provinces of Spain and enhancing the range of activities to be carried out.

Looking ahead to 2020, the company will launch the 2020 Climate and Commitment Survey, aimed at defining plans, policies and actions for motivating, retaining and engaging employees.



TRAINING

The main objective of the 2019 Training Plan was to enhance the capacities, knowledge and skills of Ineco professionals, based on the 70/20/10 learning model, where 70% of learning comes from experience and practice at work stations ("learning by doing"), 20% is acquired through informal learning and relationships with other people, and only 10% comes from structured courses and programmes.

With the aim of achieving the company's strategic goals, Ineco's workers become the protagonists of their own professional development, being offered specialised and unlimited training supplements and self-learning possibilities.

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Important data and figures 2019





3.196

Training hours





1.542

Course editions

THE TRAINING PLAN: 5 TRAINING PROGRAMMES:



Work Processes and Models Programme



Language Programme



Certification and Working Methodologies Programme



+ Up Grading Programme

INITIATIVES 2019

• INTERNAL TRAINING SCHOOL: 119 accredited and highly qualified trainers.

• UNIVERSAL TRAINING: 350 courses in different training areas.

• ON BOARD WELCOME PROGRAMME: aimed at all new recruits.

• TRAINING IN PLANNING MANUAL: new planning tool. Planner 3.0

• ENHANCEMENT OF SPECIFIC **TECHNICAL TRAINING:** new cross-cutting training sessions such as Big Data, Machine Learning or Power BI.

 LANGUAGE PROGRAMME: International Certificate Preparation Programme and telephone training, which offers participants full time flexibility 24 hours a day, 7 days a week.

CORPORATE COMPLIANCE PROGRAMME

• TRAINING AVAILABLE IN ALL **PROVINCES:** Barcelona, Seville, León and Valencia.

PROTECTION OF PERSONAL DATA IN THE WORKPLACE

SPECIFIC PREVENTION OF **OCCUPATIONAL RISKS COURSES**





In the field of **Knowledge Management**, 5 Ineco Forums were held in 2019, aimed at sharing knowledge and exchanging experiences with other professionals in the sector:

- Satellite navigation: present and future of transport and mobility.
- The future of drones in infrastructures.
- Safety and Health, new challenges and opportunities.
- Circular Economy, a practical view.

- The future of Drones in infrastructures.
- BIM in the digitisation of airport infrastructures

Among other initiatives that will be launched throughout 2020 is Equality Week, which will feature different activities aimed at highlighting equality in the professional field and incorporating 120 new developments in the Universal Training platform, launching the International Welcome Programme, and the skills itinerary for project managers.

MANAGING COMMITMENT

Ineco has the firm intention of offering its workers an agile, effective work environment that motivates and invites them to take on challenges. One that also enables the reconciliation of personal, work and family life. In this sense, the company has highly valued plans from the entire team, such as the Equality, Concilia or Integra Plans.

In addition, the company offers professionals

COMPOSITION OF STAFF, BREAKDOWN BY SEX AND AGE GROUPS



<30 years: 12.6% 30 a 50 years: 74% >50 years: 13.4%





a social benefits package (Más Programme) depending on their needs, which they can receive by choosing from the following products: food aid, daycare assistance, health insurance or a combination thereof. The company's workers also have life insurance that covers death or permanent disability, as well as a supplement to Social Security benefits in the event of temporary disability.



GLOBAL TALENT

In accordance with the ATENEA Strategic Plan, approved during 2019, Ineco has maintained its firm commitment to attracting and retaining international talent to guarantee added value for its international projects. To do this, we have worked on different programmes and projects, including:

- The design and implementation of a Strategic Talent Recruitment Plan, used to emphasise the mapping, promotion and recruitment of key international talent in critical disciplines.
- The Ineco Campus that the company has promoted throughout 2019 as a strategic tool for attracting an international junior team and thanks to which we have managed to increase by more than 100% the 2018 incorporations, extending to 4 countries its own implementation.
- Commitment to specialised online training, through the Universal Training platform.

 Launch of the Management by Objectives or Performance Evaluation Programmes for the group of professionals hired at international branches and subsidiaries, aimed at recognising and rewarding excellence and value of those profiles with high added value and high potentials, as well as aligning their management with other corporate objectives.

The priority objectives for 2020 include continuing to attract international talent through the Ineco Campus, as well as loyalty from teams outside Spain from the very outset with the implementation of the International Reception Programme.

PEOPLE PER GEOGRAPHIC AREA IN 2019

International Staff 2019	Total
América	79
Oceanía	1
Asia	25
Europa	32



SAFETY, HEALTH AND WELL-BEING

Occupational well-being and the promotion of healthy habits among all workers is a priority at Ineco. We therefore carried out various actions in 2019, including the Annual Visitation Plan aimed at advising on the adoption of good practices in health and safety, and detecting the needs of displaced people in this area. The company has also held the fourth edition of Health Week, aimed at raising the awareness of professionals on healthy habits, stress management, etc.

Also worthy of mention is the transition from the OHSAS 18001 to the ISO 45001 standard, undertaken through the multi-location approach, which has allowed us to obtain certification in international locations where the company has offices.

EFFICIENT MANAGAMENT

The optimization in the management of our resources is a clear objective in our organization, since it allows us to offer a more efficient service to our clients.

In this sense, 2019 has been a year of significant achievements and challenges. As a basis for these measures, our main internal processes, such as strategic, commercial and project management processes, have been reviewed, updated and simplified.

We have adapted and optimised our workspaces with a policy of grouping and reducing costs. Among all the measures implemented, we can highlight a pilot project of "coworking", where the increase of flexible positions allows us to meet specific needs by activity and project. A cost reduction policy that continues to be successful in areas such as electricity consumption, rental fees for vehicles used in our projects or the operating costs of our branches in international countries. Reductions that reach values of around 40%, 30% and 20% respectively.





INNOVATION THAT DISTINGUISHES US

At Ineco, innovation is understood as a key factor for differentiation and a driving force for change. This is why the company continues to focus on this area in order to transform good ideas into new developments that contribute to safer, more sustainable and connected mobility for all.

To this end, we focus on three key lines of action:

- Internal innovation: promoting the development of new ideas and solutions based on the expertise of Ineco's professionals.
- Collaborative innovation: contributing

with our knowledge and experience in initiatives and projects of interest; especially in those corresponding to innovation programmes promoted by national organisations (CDTI) and international organisations (European Commission in the H2020 Programme, etc.).

 Technological vigilance: membership of associations and participation in forums, congresses and other events that allow us to be an active part of the innovative ecosystem, and to maintain permanent knowledge of new trends and developments in the sector in Ineco's business sector.



People involved in innovation projects

Hours dedicated to innnovation projects

NOVADOR Novador

Projects developed

(

Internal projects	16	
Collaborative projects	15	
Total innovation projects during 2019	31	



Premios Innova 2019



2.16 M€ R&D+i effort



3,737 h



People involved in innovation projects

Projects per areas

(developed in 2019)



Ineco is aware of the current high-tech environment characterised by rapid and disruptive changes and has installed a technological vigilance system, which consists of an organised, selective and permanent process of collecting information from abroad and from the organisation itself on innovation and technology in order to organise, analyse, spread and communicate it, turning it into knowledge for making decisions and anticipating changes.

Therefore, in 2019, the company participated in congresses and events such as the Transfer Forum in Malaga, Start-up Olé in Salamanca, South Summit or Innovacarretera in Santiago de Compostela, where an Ineco project pioneer in BIM - GIS integration applied to linear works was presented for the A-76 Ponferrada-Ourense motorway. Throughout the year, we also participated in forums and workshops such as the international conference "Shift2Rail Dialogue on the Future of Rail Research & Innovation - Spanish Event" or a round table on "Experiences of innovation in companies and the Spanish public sector".

Ineco also belongs to various forums and associations that provide us with the opportunity to maintain relationships with other relevant agents in the innovative ecosystem. Among these are the Railway Innovation Hub (RIH), Spanish Railway Technology Platform (PTFE), Construction Technology Platform, Spanish Highway Technology Platform (PTC), Spanish Automotive and Mobility Technology Platform (Move2Future), Innovation and Knowledge Club, European Innovation Partnership - Smart cities and Communities, Reference Centre for ATM Research, Development and Innovation (CRIDA) and High Railway Technology Test Centre (CTF).

On the other hand, we promote and encourage innovation from the company itself. To this end, the company uses the internal and external channels available to it to value the initiatives carried out in the field of innovation. In this sense, we carried out various actions in 2019, the most prominent being:

• Innovation Ineco Programme: programme aimed exclusively at the organisation's millennials, for the development of innovative projects related to optimising



the mobility of company employees in their daily trips from their residence to their workplace.

Innova Awards annual initiative aimed at recognising the company's most outstanding innovative proposals. In 2019, 11 applications were presented, and "Integration of the Human Factor in Risk Analysis (Phase 2)" was the winner.

COLLABORATIVE PROJECTS

Ineco cooperates with other external agents in research and development projects in its commitment to open innovation models. Throughout 2019, it participated in the following programmes for national and international projects:

HORIZON 2030 PROGRAMME

ERSAT GGC (2017-2020)

Project that continues to study the application of satellite positioning technologies to rail transport. In this case, using the Galileo constellation, our work will focus on the characterisation of existing railway lines to assess their suitability for the use of ERTMS virtual beacons.

SESAR 2020 PROGRAMME (2016-2022)

Programme for research into the future of air traffic management (ATM) in Europe, as well as the civil aviation strategy within the framework of the Single European Sky (SES). As affiliate of Enaire, Ineco participated in the final phase of the following eight projects from the first batch of this programme in 2019 (2017-2019):

SESAR 2020 PJ01: Enhanced arrivals and departures

SESAR 2020 PJ02: Enhanced RWY throughout

SESAR 2020 PJ03a:Integrated surface management

SESAR 2020 PJ04: Total airport management

SESAR 2020 PJ06: Trajectory and performance based free routing

SESAR 2020 PJ10: Separation management en-route and TMA

SESAR 2020 PJ14: Communication Navigation Surveillance (CNS)

SESAR 2020 PJ24: Network collaborative management

Ineco also achieved an important position in the SESAR Programme in recent years, especially regarding RPAS (drones). Among these are:

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TERRA (2017-2020)

A project led by Ineco to study the ground infrastructure necessary to be able to control drone traffic at very low flight levels (Very Low Level – VLL).

IMPETUS (2017-2020)

A project that studies the services that must be provided to drones to allow them to plan and execute their missions.

DOMUS (2018-2020)

This project enables Ineco to carry out the most advanced demonstration of U-Space initial services (drone traffic management system) in its first deployment capabilities (service level U1 and U2, with some functions of level U3). Demonstrations took place in Spain during the summer of 2019 and important conclusions were reached regarding the viability of the architecture proposed or different emission types. The different U-Space service providers acted in a federated manner under the coordination of a central administrator, Enaire, which enabled different providers to be present in the same geographical area.

SHIFT2RAIL PROGRAMME

Shift2Rail is the European Commission programme focused on innovation in the rail sector. Ineco participates in it through its Open Calls project awarded along with several consortiums.

VITE Virtualisation of the Testing Environment (2016-2019)

Ineco is leader of this project, which is aimed at transferring to the laboratory (virtualisation) part of the tests performed on the ERTMS system.

GATE4RAIL (2018-2020)

Gate4Rail complements the work done in ERSAT GGC by federating the virtual testing of ERTMS among several laboratories, so that testing times and needs are reduced. The project defines the architecture and the necessary test protocols.

OTHERS

INFRADAPT (2017-2019)

A project belonging to the call Innterconecta of CDTI in which Ineco developed the BIM modelling of various existing infrastructures from mobile mapping data to facilitate their maintenance in operation.



In 2019, Ineco continued to invest in its own projects for the development of high valueadded products and services.

SMART ROUTE

A project that develops a geolocation and positioning system of elements in interiors applied to Industry 4.0.

GAVILAN

A web tool that allows studies to be carried out on the availability of the Galileo signal, Europe's Global Navigation Satellite System (GNSS). Its aim is to obtain geographic information from satellites in a position and at a specified time, according to navigation data, resolving incidences (positioning) based on the real status of the satellite.

BIM Team

Development of an open source web platform that integrates and centralises all the information contained in the .ifc standards (common standard for data exchange), and that is applicable to any stage within the life cycle of BIM projects.

Smart CNS

Tool that integrates maintenance data (faults) of air navigation equipment like radars or sensors. The objective is to use models and algorithms for the exploitation of this data, with Big Data techniques, for the predictive maintenance of these devices. The system incorporates Business Intelligence (BI) for management and presentation of results.

Tunnel Blast Wave

Study of the propagation of the blast wave in the event of an explosion (accidental or intentional) in suburban transport network tunnels and its effect on all infrastructures close to the point of the explosion, in order to minimise the negative effects of the explosion as far as possible.

Methodological Guide for Cybersecurity Annex in signalling projects

Preparation of a Methodological Guide to systematically develop the cyber-security protection design of a new command and control system within the railway environment.

The VR Lighthouse of the BIM Theater

The project has developed a modelled space, where different proofs of concept related to BIM technologies, Virtual Reality, etc. are developed.

ORAT Penn Station

In 2019, a real pilot project was carried out which consisted of applying Ineco's ORAT methodology to the start-up of Penn Station (New York, USA) for its validation. This provides the new railway infrastructure with a tool to ensure that the new railway infrastructure works in accordance with the best practices and standards in the world.

Analysis of alternative ERTMS data applications

Theoretical and functional analysis of ERTMS data, defining cases based on the use of the information obtained with this signalling system.

EOS

A conventional flight procedures design tool attending to the requirements (types, parameters, concepts, descriptions, etc.) of all the processes involved, ensuring the efficient performance of tasks associated with the operations that fall within the scope of the regulations.



Participation in the Transport and Infrastructure Innovation Plan 2018-2020, promoted by the Ministry of Transport, Mobility and Urban Agenda (MITMA)

In this context, Ineco is leading 6 initiatives, which are also included in this section on internal projects.

1. Indoor positioning in transport terminals:

Web platform that will integrate different positioning technologies and their elements so that it can be adaptable and scalable to customer needs.

2. User platform:

The technological platform that will incorporate all the agreed data of interest, collected by the various sources of the MITMA Group about its users.

3. Positioning towards 5G networks:

Exploration and validation of the use of 5G technology through practical pilot projects (connected car for road signs, drones for supervision of railway tracks, virtual blocks in railway safety systems).

4. BIM in linear infrastructures:

The project defines and develops BIM standards in the digitisation of linear infrastructures.

5. Laboratory of unmanned aerial vehicles - UAVs:

Identification of pilot projects for the use of drones with commercial objectives for the companies of the MITMA Group.

6. The bicycle as the axis of urban mobility:

Study on the fare integration of public bicycle services and Renfe Cercanías commuter services.



INNOVATION AWARDS

In 2019, Ineco received from CANSO, a global organisation representing the interests of air navigation service providers (ANSP), the "Global Safety Achievement Award 2019" for its **innovation project "Methodology for the Integration of the Human Factor in the Risk Analysis"**. Developed between 2016 and 2018 by a multidisciplinary team of aviation and ground security, together with external experts from universities, the project was developed by both the air and ground sectors as an essential factor in obtaining a cross-sectional method applicable to any means of transport.

Ineco's "Human Factor" methodology has been presented in various forums in recent years such as the Human Factor Aviation Safety Conference (London, 2018) or the World ATM Congress 2019 (Madrid, 2019).

On the other hand, the **RONIN** innovation project, developed by Ineco, was one of the three finalists at the 2019 Ponle Freno Awards, selected from among 105 proposals submitted under the "Axa road safety innovation and development" category. A section which rewards products, procedures or innovative designs that represent a new scientific/technological development in the improvement of road safety and show a high potential for industrial transfer, enabling them to be promptly put to use for the benefit of road users and society in general.

Ronin is a tool for the comprehensive management of road safety. Through software, it facilitates the making of strategic decisions in the field of infrastructure safety, representing a powerful tool for public authorities and road operators, with a notable impact on users of one of the major means of transport. This project is also part of "SDG 9: Industry, Innovation and Infrastructure", and was the winner of the 1st edition of the go!ODS Awards.



QUALITY

In order to offer its clients its best quality products and services, Ineco has a management system that involves the whole organisation and whose priority is customer satisfaction, focus on processes and continuous improvement.

Teamwork, best work practices and system sustainability are the keys to achieving technical excellence in our work.

CERTIFICATIONS

Ineco offers a **management system certified** by TÜV Rheinland Cert GmbH, in accordance with the latest versions of the ISO 9001:2015 for international **quality standards**, ISO 14001: 2015 for **environmental management** standards and, since June 2019, ISO 45001:2018 for safety and health at work, all of which are the latest versions. Previously, the safety and health certification complied with standard OHSAS 18001:2007.

The scope of these certifications covers all the activities of the organisation, that is:

The certification follows a multi-site scheme that covers various offices in Spain and locations in up to 13 countries.

During the second semester of 2019, we worked on the definition and implementation of an **information security management system (ISMS)** certified in accordance with the international standard ISO/IEC 27001: 2013 and an initial scope that includes the provision of the generation of backup copies and recovery of information managed by Ineco, which ended in early 2020 with the successful completion of the external certification audit.

In the railway area, Ineco is accredited by ENAC (National Accreditation Entity) as an Inspection Entity (Type C) for Railway Rolling Stock and for Safety of Railway **Applications**, in accordance with the criteria set forth in the ISO/IEC 17020:2012 standard. This accreditation qualifies Ineco to perform inspections in the industrial area on the following six subsystems: Infrastructure, Energy, Rolling Stock, Command and signalling control, operation and management of traffic, maintenance and safe integration.

Ineco is also certified by Cyber Essentials-UK, certificate of compliance with the essential cybersecurity requirements scheme in the United Kingdom.

Ineco also has other accreditations and certifications associated with products and services:

• SUPPLIER OF RAILWAY PRODUCTS AND SERVICES

As supplier of railway products/services, Ineco is certified as a supplier in Link-Up, according to the RISQS (Railway Industry Supplier Qualification Scheme) requirements.

• SOFTWARE DEVELOPMENT

CMMI (Capability Maturity Model Integration)-Level 3.

In 2019, the **software development methodology** was accredited in level 3 of the CMMI-DEV v1.3 model for work carried out by the Sub-Directorate of Information Technologies.

Certificate granted by PROQUA (Process Quality Engineering), CMMI Institute Partner.

AIR NAVIGATION SERVICES

Air navigation service provider in accordance with the requirements of Implementation Regulation (EU) No. 1035/2011. Training provider for air traffic controllers, in accordance with the requirements of EU Regulation 2015/340, and once AESA issued the corresponding positive report, the transition process to a new supplier, previously designated by the General Directorate of Civil Aviation to provide said services, was completed in the first half of 2019.

On 24 May 2019, AESA's certificate as an air navigation service provider, as well as an air traffic control training provider, was returned to AESA.

CLIENTS' OPINIONS

In 2019, the new process for evaluating Clients Satisfaction was adopted, based on the international standard methodology NPS (Net Promoter Score), obtaining information from customers throughout the life cycle of projects. A specific survey for each phase of the projects informed Ineco of the recommendations, evaluations and concerns of its clients, with more higher quality information. In addition, seven new assessment concepts are incorporated: agile offers, economic competitiveness in the offer, agile start, solution in cases of rotation, adaptation of the result to expectations, value for money,



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efficient administrative procedures. One more step towards the objective of achieving excellence in the provision of services. In 2019 a **Global NPS index of +51** has been obtained (the NPS is the result of the percentage of Promoter clients minus the percentage of Detractor clients).

The global satisfaction rating stands at **8.5 points out of 10.** It should be noted that the results were obtained from 139% more surveys than in the previous year, (934 surveys sent and 378 responses received in 2019 compared to 227 surveys sent and 158 responses received in 2018), which evidences the clear growing trend of customer satisfaction with work performed by Ineco. 58% of Ineco's clients are promoters (score greater than or equal to 9 out of 10), so they would be expected to actively recommend its services. In addition, 23% of clients include express congratulations in the comment made to the work teams and/or have an overall rating of 10.



Overall rating of 8.5 out of 10

POSITIVE TREND IN CLIENTS' SATISFACTION

378 Survey responses received (compared to 158 received in 2018)

58% Clients are promoters (score greater than or equal to 9 out of 10)

+51Global NPS Index (the NPS is the result of the percentage of Promoter clients minus the percentage of Detractor clients)

23% of clients include express congratulations in the comment made to the work teams and/or have an overall rating of 10





9.2 8.9 Level of communication Treatment received 8.8 8.8 Adequacy of the result to the expectations Adequacy of team work 7.1 Start-up agility 7.4 Economic 8.9 competitiveness Solutions to unforeseen circumstances 8.2 8.7 Value for money Documents submitted

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8.8

Compliance with conditions and technical requirements

8.0

Offer flexibility

8.5

Compliance with deadlines

8.4

Solutions to staff turnover



Efficiency in administrative and financial management

BUSINESS



AVIATION



Steady progress

The economic balance of Ineco's aeronautical activity in 2019 - airports, air navigation and satellite navigation, was, overall, similar to that of recent years, with an annual average income of 51.2 million euros. It maintained its portfolio percentage, in which the increase in income from international activity reached an outstanding 16 million euros, 2.5% more than in 2018.

In the Spanish **airport area**, the company has continued to work for its traditional clients, Enaire, Aena, the General Directorate of Civil Aviation (DGAC), and the Spanish Aviation Safety Agency (AESA), although some work has also been carried out within the airport framework with other clients like Accenture.

More than 600 assessment and study reports on airport conditions in relation to urban planning were completed for the General Directorate of Civil Aviation (DGAC). Support work was also carried out for the coordination Safety Action Plan (PASO) and in the execution and management of aircraft noise and of inspections. The company participated in proposals for new acoustic easements were 46 ground assistance security inspections, reviewed, as well as others related to climate another 80 easements at various airports and change, local and acoustic pollution and in aerodrome verification processes; one of biodiversity, which may serve as basis for a the most important being the Ciudad Real Civil Aviation Sustainability Plan in the coming airport prior to its reopening to traffic in years. The first phase of the Madrid Airport September 2019. Other inspection and control System Strategic Plan also began. At the activities were related to operational safety same time, technical support was provided requirements and the maintenance of remotely for the monitoring of the Airport Regulation piloted aircraft. In addition, activity in the Document 2017-2021 (DORA), (investments, ICT field in user assistance and infrastructure capacity, quality, economic aspects, airport maintenance continued. In 2019, Ineco management and monitoring and coordination began a new activity to support continuous of actions), as well as for the Strategic Plan for airworthiness inspections, which was carried the Development of the Civil Sector of Drones out at the flight safety office at Seville airport. in Spain, 2018-2021.

Ineco has collaborated with the State Aviation Safety Agency AESA since its foundation. In 2019, the company provided major support in the development of regulations, design and implementation of processes, preparation of guide material, monitoring of the Operations



Various airport planning studies were carried out for Aena, including the functional designs of terminals T4 and T4S and associated platforms at the Adolfo Suárez Madrid-Barajas airport, and the design and preliminary studies of the new terminal building that will

replace the current T123, where work was also started on the basic project. The new satellite and associated platforms were also drawn up for the Josep Tarradellas Barcelona-El Prat airport, the functional designs for terminal T1. In addition, capacity studies were carried out for various airports, and technical support was provided for the preparation of annual traffic forecasts. In the environmental field, it is important to mention the development of noise and carbon footprints for various airports, as well as support for the development of a climate change strategy.

Ineco has led the technical direction of more than 100 construction and civil works projects, and many other evaluation reports of airfield pavement (PCI reports, surface regularity, friction and texture, bearing capacity, and operational studies) from most airports in the Aena network.





In the international market, work has continued at European airports on the design of the new Terminal A at Schiphol airport in Amsterdam, Netherlands, through the Spanish-Dutch consortium KLAIR. Work started in 2017 and during 2019 the preliminary design phase was presented and approved and the final design began. Preliminary work began on the design of the new Heraklion airport in Crete, Greece, and ORAT (Operational Readiness and Transition) work was carried out for Swedavia, the air navigation service provider in Sweden, at Gothenburg airport; and a Master Plan for the commercial area of the Vilnius airport in Lithuania was developed.

Work in Colombia is among the most important in South America, where the Master Plan for the Germán Olano airport in Puerto Carreño and the airport planning schemes for the San Bernardo de Mompox and Contador de Pitalito airports were completed. In addition, in 2019 the consulting and design work began for the expansion of the current runway of the Santa Marta airport over the sea. In Peru, assistance continued to be provided in the supervision of improvement and expansion work (runway, control tower and terminal) on the Jorge



Chávez airport in Lima, as well as in the design of the airside rehabilitation projects of Tumbes and Iquitos airports, in the north of the country.

Work continued in the Middle East, which included commissioning and operational transition (ORAT) for the new MTC terminal (Midfield Terminal Complex) of the Abu Dhabi International Airport, in the United Arab Emirates, started in 2014. In Saudi Arabia, an Environmental Sustainability Plan was developed after finalising the Master Plan for Dammam King Fahd International Airport.

Finally, in North America, advisory and supervision work on the ORAT project for the new terminal of Newark (New Jersey) airport in the United States began.

Regarding **air navigation**, Ineco participated in many activities for Enaire at a national level.

In the field of operations management in control, approach and route towers, several studies were carried out to improve capacity at Barcelona El Prat airport; a comparative analysis of different Spanish control towers was carried out and software flow tools

applications were developed, which use tactical data from Eurocontrol for service providers to streamline real-time decisionmaking in air traffic management.

In structuring and organising airspace, Ineco participated in the MIDAS project, in which operations at Malaga airport were restructured, and in the second phase of the BRUT project, in which airport operations were modified from Menorca, Ibiza and Palma de Mallorca.

In 2019, RNP operations of the Jerez, Logroño, Vitoria, Burgos, Pamplona, Girona, Lleida, Reus, and Castellón airports were designed as part of the PBN Implementation Plan.

In terms of security, programmes were developed for 96 air navigation facilities as well as documentation for updating the Specific Protection Plans of Enaire's critical infrastructures. Regarding safety, the company collaborated in the development of an Operational Risk Management System associated with the fatigue and stress of air traffic controllers. It also participated in the Galician Skyway Project, providing technological solutions to contingency situations in the operation of drones; it also worked on a TCAS/RA (Traffic Alert Collision Avoidance System/Resolution Advisory) alarm heat map based on data extracted from Enaire's radars.

In the field of aeronautical communications, we participated in the Integration of voice ground/ground communications for ATC (telephone links between control centres and towers) in the Air Navigation Data Network (REDAN) in the Central-North and South Air Navigation regional departments. It also participated in tests for the integration of VoIP systems in the airports of Palma de Mallorca, Gran Canaria, Lanzarote, La Coruña and Ibiza. In addition, L/A communications



coverage studies were carried out at the airports of Pamplona, Girona, Jerez, San Sebastián, Burgos, Vitoria and Logroño.

During the past year, more than 150 radio simulation studies for Enaire and Aena were also carried out at different airports, and that of the new control centre building (ACC) in Madrid.

In 2019, in navigation and surveillance systems, Ineco provided technical support in the deployments of new radar systems and collaborated in the preparation and drafting of over 15 radar surveillance coverage reports.

In relation to CNS remote monitoring systems, it is worth mentioning the support provided for the implementation of the SCADA Infrastructures system for the supervision of energy, air conditioning and fire systems at various Enaire sites in the Canary Islands, South, East, Balearic Islands and Centre/North, as well as support for the deployment of the company's radio navigation management integration system (SIRA). Likewise, the deployment of advanced management of Thales radio aids in the Central/North Region was completed and progress was made in others in all Enaire's control regions.

Regarding infrastructure verification, Ineco participated in the drafting of the project for a new operational technical building in Torrejón and supported infrastructure standardisation and the replacement of the Malaga I radar tower for the new secondary radar. In addition, it reviewed more than 150 flight reports for ILS, VOR, NDB and DME systems, and prepared 17 studies for the increased frequency of verification flights.

In 2019, in the field of satellite navigation, we collaborated in activities prior to the publication of RNP approaches in Vigo and Lanzarote, and in the elaboration of the Concept of Operations (CONOPS) and/or measurement campaigns for RNP approaches in Barcelona, Pamplona, La Seu D'Urgell, San Sebastián, A Coruña, Burgos, Castellón, Reus, Logroño, Vitoria, Gerona, Jerez and Córdoba. It also monitored the offers for the deployment of the RIMS EGNOS V3



in Spanish territory (La Palma, Canarias, Málaga, Palma de Mallorca and Santiago) and the offer of the MCC EGNOS V3 in Torrejón de Ardoz.

As regards automation of the air traffic control system, Ineco actively participated in several commissioning services: new SACTA eVEREST architecture in the control centres of Madrid and Barcelona, the Department of Clearance (DCL) service in the towers of Barcelona, Malaga and Palma de Mallorca, the new access to ICARO via mobile application and perimeter security teams of the three CPD control centres (Madrid, Barcelona and the Canary Islands).

It also continued to collaborate in the working groups that are defining the iTEC systems both in Flight Plan, control position and new architecture and in the specification of the new tactical trajectories module (Tactical MTCD) for SACTA 4.0 (TTM)

Internationally, Ineco continued to lead the service provided at the European User Services Centre of the Galileo programme (European GNSS Service Center-GSC) located in Torrejón de Ardoz (Madrid). It also continued to provide support to the European Space Agency (ESA) for the development of the European EGNOS satellite navigation system at the Toulouse (France) facilities.



RAILWAYS



Exporting experience

Since it was founded more than 50 years ago and until today, the railway in all its forms conventional, high speed, subways and trams - has been and continues to be the core of Ineco's activity. Mainly in Spain, where it has collaborated from the start in the modernisation and expansion of the railway network, as well as abroad, first in Latin America and now in the five continents, after signing the first contract



in Australia in 2019. In 2019, the railway sector continued to represent the highest volume of the company for yet another year, both in terms of revenue, which experienced a significant increase, with an annual average of 173.9 million euros, compared to 146.9 in the previous year, and in portfolio, with 57.7% of the total.

Railway activity increased at the national level, focused on the shareholder clients Adif, Adif Alta Velocidad and Renfe, and on the Ministry of Transport, Mobility and Urban Agenda (MITMA).

A wide range of activities has been further developed with the infrastructure manager Adif, ranging from planning studies for new axes, preliminary studies and preliminary



projects in all techniques (conceptual design), basic and constructive projects (preliminary and detail design), asset management, technology track and systems, support and technical assistance on site, works related to the operation of corridors, line maintenance, development of information and communication technologies (ICTs), management of the railway system, operational

security (safety), etc.

In 2019, work continued on planning and drafting projects for major urban interventions, with a view to increasing the capacity planned for the forthcoming release of services. Actions were also carried out for various local master plans, and for the implementation of the standard gauge on the lines requiring it. Other important areas of activity included railway safety, and support tasks in terms of risk management and compliance with European interoperability directives.

Among the main works of 2019 in the planning and design phase are the functional studies that were carried out in different axes, such as the Mediterranean Corridor, as well as studies of line capacity, demand and investment planning.

It is worth mentioning the constructive projects, included in different master plans, for the improvement of infrastructure and track, especially in Galicia; and those for adaptation and implementation of the standard gauge in the Mediterranean Corridor, the Orense-Monforte-Lugo section or the Astigarraga-Irún line.

With regard to stations, construction projects began for important passenger stations, such as Irún; along with those of Chamartín, with the remodelling of the tracks and halls and the expansion of Atocha, in Madrid. Other outstanding projects are those of urban integration in Ourense and access routes to Murcia.

In addition, work was carried out on the suppression of telephone blocks, implementation and testing of ERTMS, renewal of telecommunications, such as those on the Madrid-Seville line; civil protection installations in different tunnels of the network, with special mention for those near Madrid; and renovation and improvement of the infrastructure in the conventional gauge network.

Works in the construction phase continued to involve works management, technical assistance and control of works in multiple actions in all techniques, both in the highspeed and conventional network. Among them, the implementation of the standard width in different sections of the Mediterranean Corridor or the improvement of the electrification between Salamanca and Fuentes de Oñoro; duplications and track renovations such as the Sagunto-Teruel section; urban integration, such as technical assistance at the Chamartín station in Madrid, renovation of the Atocha-Recoletos tunnel in Madrid; telecommunications facilities, the Pedralba-Ourense high-speed line or rail access to the new terminal at Barcelona airport, among others. Ineco also provided support for commuter works and continued with tasks for controlling circulation and quality control of railway supplies in various high-speed and conventional works throughout the country.





In relation to maintenance and operation, the company supported Adif in carrying out the analyses and drafting the associated documentation for the commissioning of different lines and sections. Likewise, as it had been doing for years, it continued providing support on the maintenance of the high-speed network, as well as high-performance lines such as Seville-Cádiz; 16 gauge changeovers distributed throughout the network, and direct current traction electrical substations. Other work worth mentioning is the monitoring of the implementation of ASFA equipment in Adif vehicles and supervision of facilities at CRCs on high-speed lines.

For the **Renfe** operator, architectural and civil works were carried out, drafting of projects, management and control of works, etc. In rolling stock, Ineco collaborated throughout the life cycle (supervision of design, manufacturing, testing and commissioning, maintenance, etc.) and related facilities, with technical maintenance audits, factory inspections, asset valuation or assistance in the transformation of trains. Workshop capacity studies were also carried out.

In 2019, work related to the improvement of commuter stations continued to be carried out in all phases: drafting of construction projects, facultative directorates and coordination of safety and health, management and coordination of the project, as well as traveller capacity studies. Especially relevant are the activities in information technology, with computer developments of different applications, online sales and wi-fi services, security, etc.

Informative and functional studies were prepared for the **Ministry of Transport**, for new sections of the network, such as the Burgos-Vitoria, Aguilar de Campoo-Reinosa high-speed line, the Os Peares and Rubián bypasses on the Ourense-Lugo line. Studies of railway accesses were also carried out, (Bilbao and Vitoria, new intermodal station in Gijón); the Astigarraga-Lezo section in the Basque Country, the underpass for the railway in Torrelavega in Cantabria, the future high-speed rail access to the Adolfo Suárez Madrid-Barajas airport or new stops in the Madrid Cercanías commuter network, among others.

Also of interest are other studies on the interoperability of cross-border traffic on the Zaragoza-Canfranc-Pau line or the Barcelona railway network.

Also for the Ministry, Ineco collaborated in the elaboration of the Indicative Strategy for the development, maintenance and renovation of the Spanish railway infrastructure.

It is also important to highlight support in various works in the area of safety and interoperability for the State Railway Safety Agency (AESF); as well as the characterisation and study of railway tunnels of the Railway Network of General Interest.


At an international level, the railway sector represents the bulk of activity abroad and in 2019 it increased by 24.5% compared to the previous year. The year also marked a milestone with the achievement of the first contract in Australia, which means that Ineco is already present in five continents.

In the Middle East, it is worth mentioning that Ineco has continued its work on the high-speed line between Mecca and Medina. Commercial passenger transport services were provided throughout 2019. In terms of commercial operations, Ineco leads the maintenance management, as well as the contractual management towards the client and the financial management of the two subsidiaries, Sociedad Consorcio Español de Alta Velocidad Meca Medina (CEAVMM) and Saudi Spanish Train Project (SSTPC).

Europe registered the highest international railway activity in 2019, where projects were carried out in six different countries, and for various community institutions, such as the European Commission and the European Railway Agency. In the United Kingdom, work continued for another year on the design of a section of the second phase of the British high-speed line, High Speed Two, HS2. Other projects than have continued in progress have

been those related to the development and implementation of the common European rail traffic management system, the ERTMS. On the one hand, it has continued to collaborate with Banedanmark, Denmark's railway infrastructure manager which, in 2023, expects to become the first European country to its whole railway signalling network completely renewed. At the same time, services have continued to be provided to the European Railway Agency (ERA) and the European Commission in supervising the development and implementation of the system in the main European railway corridors.

Among the new contracts are the three signed by Ineco, in consortium with two Spanish engineering companies, for the Rail Baltic project, a modern high-speed rail corridor that will link Estonia, Latvia and Lithuania. The new infrastructure will connect Europe through Poland with a full-length 870 km double-track line (213 km in Estonia, 265 km in Latvia and 392 km in Lithuania).

Two of the contracts, in consortium with Ardanuy, are related to the definition of an energy implementation strategy, on the one hand, and, on the other, of global maintenance facilities along the entire line. The third, the largest volume, in consortium with IDOM, includes the design of the 56-kilometre high-





speed section passing through Riga, which consists of three subsections: Upeslejas-Riga central station, the sub-section between Tonsakalns-Imanta and the section between Riga International Airport and the Misa River.

In South America, supervision of the acquisition The project, awarded in May 2019, has a or remodelling and start-up of rolling stock for duration of 24 months. the Quito (Ecuador), Santiago de Chile (Chile) Another large project started in 2015 and which and Medellín (Colombia) metros, which are equipping or modernising their fleets, as well has been extended until the end of 2020 is as for line 13 of CPTM (Companhia Paulista the modernisation of the line between Samsun and Kalin, in Turkey. Ineco is in charge of the de Trens Metropolitanos) of São Paulo, Brazil. supervision and direction of the works, in Work also continues on the Independent consortium with UBM and Mott-McDonald. Safety Assessment (ISA) of the expansion of the Panama City Metro. Other relevant projects In 2019, Ineco won its first contract in Australia, in the region include the development of the which is contributing to modernise the Sydney new technical regulation for the State Railway commuter rail network, operated by Sydney Company in Chile and advice on the revision Trains. With the role of Systems Integrator, of the drafting of the project for the Paso de Ineco is in charge of supporting the Transport los Toros railway line, in Uruguay, which will for New South Wales (TfNSW) authority in the allow transportation of pulp from the new definition, integration and implementation plant in the centre of the country to the port of of the new railway systems of the network, Montevideo.

as subconsultant of Network Rail Consulting, and together with Acmena and The Go Ahead Group.

On the other side of the world, in North America, the company's subsidiary, InecoMex, continued to work on the management project for the expansion of line 12 of the Mexico City metro. In the United States, the ORAT (Commissioning and Operational Transition) works for the new Moynihan station in New York were completed. It is a historic building

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in the heart of Manhattan, located opposite the current Pennsylvania station, which is being remodelled into a modern underground transfer station.



INTERMODAL AND ROADS



Vital connections

Ineco's activity, both in the national market and abroad, extends to all transport sectors, not only rail and air, but also roads and ports. The connections between the different modes are crucial to ensure the mobility of people and goods, and the economic and environmental efficiency of transport systems depend on them. Hence, the weight of this area in the overall activity of the company has only grown in recent years, to add an annual average of 79.4 million euros in 2019 and almost 42% of the portfolio (including ICT, which is analysed in another section).

In 2019, support continued to be provided to the Ministry of Transport, Mobility and Urban Agenda (MITMA) in the improvement and maintenance of the Spanish road network, while work continued abroad in Mexico, Brazil or Costa Rica, and others were completed, such as the site inspection of the new Paseo del Bajo in Buenos Aires.

Abroad, it is important to mention the continued supervision of the projects and works for more than 150 schools in Colombia, mainly in the regions of Cundinamarca and Antioquia.

In 2019, in the field of **intermodal planning**, Ineco started or continued various works for MITMA, such as the definition of a "Safe, Sustainable and Connected Mobility Strategy", a general framework for the development of mobility policies in Spain; maintenance and improvement of the database of the Observatory of Transport and Logistics in Spain (OTLE) or the construction, calibration and validation of a National Model for Transport of Travellers and Goods.

Ineco also worked with the Directorate General of the Merchant Navy in the control and monitoring of maritime transport rate discounts for large families and residents of the Canary and Balearic Islands and the autonomous cities of Ceuta and Melilla.



Work in progress in Brazil continued in the international market, with the support of the public company EPL in the launch of the National Observatory of Logistics and Transportation.

Ineco's activity in the area of **ports** during 2019 intensified in Spain and, in addition to collaboration to improve land accesses, (both rail and road), new work began for various Port Authorities in the field of consulting, drafting of studies and projects, control and surveillance of works and commissioning and operation.



New project drafting includes the informative study of the northern access to the port of Valencia, which has also been given consultancy support for commercial development, through the assignment for Shipper Promotion.

The adaptation project for 550-metre trains at the Majarabique facilities began for the port of Huelva. In the field of consulting, a strategy analysis related to "rail motorways" was also developed.

In the port of Ceuta, the drafting of the project for the expansion and adaptation of the maritime station began, while in the port of Castellón, work on the New Southern Rail Access project continued and consultancy services were provided to request CEF funds.

Other notable works in 2019 in the port context include specialised technical advice to the Port Authority of Santander in the certification of safety and interoperability of the renewal of its rail access, and the continued analysis of dossiers for the extension of the term of public concessions, for State Ports.

In the section on national **roads**, the company continued to work with the General Directorate of Roads of the Ministry of Transport. Among the works carried out, the drafting of the project for the Villamartín-Requejo section of the A-76 stands out for its innovative nature, where the BIM methodology was integrated with the GIS system on a road infrastructure for the first time in Spain.

Regarding the drafting of projects, in 2019 the expansion of the A-67 between Polanco and Santander, the A-67 and S-10 in the Santander-airport section, the Potes variant and the upgrading of the N-627 in the port of Los Tornos and in the bypass of Lanestosa continued.

In addition, the preliminary projects for the adaptation of six stretches of first generation motorways has continued: the A-1 between Madrid and El Molar, the A-2 between Igualada and Martorell, the A-3 between Madrid and the P.L. of Cuenca, the A-4 in the stretches between Ocaña and Puerto Lápice and between the P.L. of Jaén and the P.L. of Seville, and the A-5 between Madrid and Maqueda.

Other projects already started and still being

developed include the A-68 dual carriageway in the Calahorra-P.L of Navarre, the A-74 dual carriageway in the Foz-Barreiros section, remodelling of the A-55 dual carriageway in the section of Avenida de Madrid in Vigo, improvement of the connection of the N-330 with the N-234 bypass in Teruel, adaptation of accesses and improvement of road safety between Villastar and Teruel and the construction project for the improvement of the connection between the dual carriageways A-2 and B-40 in Abrera (Barcelona).

New projects in 2019 include the drafting of those for the A-11 motorway in the Langa de Duero-Variante section of Aranda de Duero, and the extension of the Baix Llobregat motorway.

In relation to the reversal and salvage of some of the Spanish toll motorways, in 2019 Ineco continued providing support to the General Directorate of Roads with different activities: Works were carried out by concessionaires on the AP-4, between Seville and Cádiz, and on the AP-7, between Alicante and Salou. On the AP-2 motorway, between Alfajarín and Fraga, an evaluation of the state of the infrastructure began, along with the calculation of the Administration's Property Liability for expropriations (RPA) on the salvaged motorways.

Regarding works, control and surveillance services, health and safety coordination and environmental monitoring were provided in more than 30 new construction works and expansion of the State Road Network. Among the most significant completed in 2019 are the construction and commissioning of the new section of the A-23 motorway between Congosto de Isuela and Arguis, in Huesca, and the new Gaznata bridge over the Burguillo reservoir, in Ávila, for which Ineco provided control and surveillance services.

At the same time, work continued on the preparation of 29 tunnel adaptation projects of Spain's Road Network under RD 635/2006 on minimum safety requirements involving intervention in almost 100 tunnels. Within this project, it is worth highlighting the start of technical assistance for the inspection of the adaptation of the Costa del Sol tunnels on the AP-7 motorway, between Malaga and Guadiaro.



In 2019, Ineco also continued to provide technical and legal support services to State Road Districts in the area of expropriation management, conservation, maintenance and operation of roads.

In the **international** environment, in May 2019 one of the largest civil works in Argentina was inaugurated: the Paseo del Bajo, in Buenos Aires, where Ineco was in charge of site inspection. With its commissioning, city traffic is decongested and north-south connectivity is improved, thanks to its 12 new lanes of over six kilometres in length.

On the other hand, the work begun in previous years continued: in Mexico, the company continued to exercise its role as Supervisory Administrator Agent (AAS) of the 148 km Guadalajara-Colima motorway, as it had been doing since 2011. In Costa Rica, Ineco's work as contractor of the Transport Infrastructure Programme (PIT) for the Ministry of Public Works and Transport (MOPT) also continued.



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The PIT is a nationwide plan financed by the Inter-American Development Bank (IDB), which includes seven road improvement and expansion projects and three port projects.

Another international road project that was developed in 2019 - and now close to completion - is the Northern Route of the Ringroad of São Paulo in Brazil. It is the last section that remains to be closed to complete the ring road of one of the largest urban agglomerations in the world. Ineco supports the mixed company DERSA (Desenvolvimento Rodoviário S.A) for the coordination of different contracts (about 50) and participating organisations in this complex work, which began in 2013.

The experience and capabilities accumulated by the company in the transport sector also apply to activities in various fields, such as planning, the environment or **building**, especially in Spain, but also abroad.

Therefore, in 2019, Ineco provided its services to different Ministries with regard to the remodelling and improvement of its buildings and facilities. For abroad, work on the new headquarters of the Plaza Marqués de Salamanca, in Madrid, and other works on the current headquarters of the Plaza de Santa Cruz

continued. Technical advice was also provided in the work on facilities of the Ministry of Health and the National Institute of Statistics (Ministry of Economic Affairs), where repairs on its Paseo de la Castellana building was also supervised. Work already underway also continued, such as the control and surveillance of work on a new meteorological radar in Alto de Gala (Tenerife) for the Spanish Meteorological Agency (AEMET), under the Ministry for Ecological Transition, or the refurbishment of the Cervantina Society headquarters at Calle Atocha, for the Ministry of Transport.

Regarding the works related to the **environment**, it is worth mentioning in 2019 the continued collaboration with the Ministry of Ecological Transition for the drafting of projects and management support for the financing of the adaptation of high voltage power lines to new requirements established; and the beginning of the modernisation of the piezometry network for groundwater control and integration in the hydrological information systems of the public body Organismos de Cuenca.



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TIC



The future is already upon us

ICT (Information and Communication Technologies) activity at Ineco, which covers different areas - digital administration, cybersecurity, smart products and BIM - has experienced exponential growth since 2016. Record income and recruitment figures were reached in 2019. In recent years, the company has gone from developing ad hoc software to support its engineering projects, mainly in the



field of transport, to providing comprehensive solutions in the **digital transformation** and modernisation of the General State Administration (AGE).

Thus, during the last financial year, new steps were taken towards the consolidation of a relatively recent activity, but one that has become strategic for Ineco, in response to the growing demand for digitisation by society and public administrations.

At the same time, due to its status as the AGE's own medium, it acts as a facilitator and promoter of interoperability between different administrations and the use of



common services, providing effective added value, especially in those digital administration services considered critical and of great impact on citizens.

One of the objectives achieved in 2019 was greater diversification of projects and clients in the ICT field in Administration. The most noteworthy cases of this achievement are

the provision of architecture and governance services for corporate computer developments and a centre of competence for local development of the Public State Employment Service (SEPE); the establishment of the planning and technology offices of Computer Management of the General Directorate of Traffic (DGT); or the promotion of content interoperability and support for the mobility of services and applications, cloudification and user experience of the Spanish Broadcasting Corporation (CRTVE).

It is also worth mentioning the support and technical assistance in the administration and



support of databases, collaboration sites, communications and applications of the Ministry of the Presidency, Relations with the Cortes and Democratic Memory; technicalfunctional consulting services, support for the management of ICT projects, creation and maintenance of websites and intranet and setting up of the portal and electronic headquarters of the Ministry of Science, Innovation and Universities; as well as various digitisation, metadata and file processing services of the Directorate General of Registries and Notaries of the Ministry of Justice.

At the same time, throughout 2019, work started previously continued, the most important being the support given to the Ministry of Justice for the implementation of the electronic judicial administration and management of its development centre; in addition to supporting the General Secretariat of Administration - SGAD Digital, of the Ministry of Territorial Policy and Public Administration, in the provision of shared telecommunications services to different entities of the AGE and support in the field of quality and security of common services of the public sector.

Other works that continued in 2019 are the provision of systems and database support services from the Spanish General Directorate for Cadastre, with the specification and development of new computer systems for the management of the Commission for the Tobacco Market, and with the construction of the new application for the management of files of the State Legal Service.

An increasingly relevant field of activity is **cybersecurity.** The company poses as a challenge for 2020 and subsequent years the achievement of a broader range of services to meet the growing demands of the Administration in this field. It is crucial to guarantee confidentiality, integrity and availability, which is why Ineco has established controls and measures in line with national security and interoperability schemes (ENS and ENI), providing services in this area to clients such as the GSA at the European User Services Centre of the Galileo programme.

Ineco began to apply the **BIM** (Building Information Modelling) methodology in its



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projects from 2010 onwards. Among the major works taking place in 2019, it is worth mentioning the preliminary and basic projects for the remodelling of terminals T1, T2 and T3 of the Adolfo Suárez-Madrid Barajas airport, the project of phases 2 and 3 of the reorganisation of Atocha station, the remodelling and expansion of the Chamartín station, the project management of the new headquarters of AESA (Spanish Aviation Safety Agency) and the project of a new office building in the vicinity of the Santander railway station. The development of the design and environmental impact assessment of high speed in the

United Kingdom (HS2) is also one of the most outstanding works in this field.

Support also continued for the Interministerial Commission led by MITMA in monitoring the public tender with BIM requirements and with participation in the steering committee of the European Group EU BIM Task Group. Ineco also led the coordination of the BIM Strategic Line, within the Railway Innovation Hub.

After the progress achieved in 2019, the objective is once again set for 2020 to continue consolidating ICT activity with new jobs in a clearly growing sector.



URBAN AGENDA AND SMART MOBILITY



Connected systems

In terms of mobility and smart cities, Ineco is committed to the Goals of the 2030 Agenda and aligned with the MITMA strategy (Ministry of Transport, Mobility and Urban Agenda), and has defined intermodality and sustainable mobility as one of the axes of its strategic plan. In the coming years, the company wants to maintain its leadership in sustainable mobility in the urban sphere, reinforcing its role of neutral coordination between administrations and stakeholders, and to continue participating in the development of citizen-friendly smart cities.

It is worth mentioning the support given to the Malaga City Council in the call for the National Smart Territories Plan with smart building pilots and the culmination of the Cityneco pilot project for Granada Council, which allowed the implementation of a real time predictive model for the improvement of traffic and mobility of a certain area of the city. The drafting of the Smart Campus Master Plan for the University of Almería was also completed.

Ineco has developed the technology and knowledge necessary for management and batch analysis of data from various sources of information, combining a unique experience in the transport sector with incessant digital transformation. For the last few years, for example, demand studies have incorporated technology for batch processing of geolocated mobile phone data that, in combination with classic data collection methods, allow obtaining mobility patterns and subsequent transport system modelling. These advances have been implemented, for example, in the demand studies for new stations or for the optimisation of corridors in different units of the Adif Spanish railway network.

Likewise, the planning tools and mechanisms for the generation of demand prediction

models play an essential role in offering mobility solutions in the urban or inter-urban sphere, both for operators and managers of infrastructures, as well as local, regional or national administrations. In this area, it is important to mention passenger and freight demand prediction models that are being developed in the MITMA National Transport Model and in the Adif Mediterranean and Atlantic Corridors.

Ineco focuses on intelligent, user-centred mobility, especially in urban areas where new transport alternatives generate a special need for adaptation both to the environment - infrastructure and services - and to regulations and governance models, which is all within the context of transport planning.

Therefore, in 2019 Ineco began to develop for MITMA the "Safe, Sustainable and Connected Mobility Strategy", and continued to coordinate the various public and private initiatives of smart cities, as well as their national and international modelling and dissemination; it provided support for networking in Spanish cities and for the National Smart Territories Plan for the SE for Digital Advancement.



MAIN PROJECTS

MODERNISATION OF SYDNEY'S COMMUTER RAIL NETWORK

The New South Wales Transport Authority has decided to work with Ineco to modernise the railway systems on Sydney's 815 kilometre commuter network. The contract, effective until the end of 2020, marks Ineco's arrival in Australia and extends its presence to all five continents.

With the role of Systems Integrator, Ineco was in charge of supporting the Transport for New South Wales (TfNSW) authority in the definition, integration and implementation of the network's new railway systems, as subconsultant of Network Rail Consulting (NRC), and together with Acmena and The Go-Ahead Group. The ultimate goal is to increase by more than 60% the number of trains that can access the central district of Sydney and increase the capacity of areas such as Western Sydney and South West Sydney by up to 100,000 people per hour. This programme is part of the plan "More trains, more services", launched by TfNSW in June 2018 and which seeks to modernise the Sydney railway network.

The project, to be completed before the end of 2020, is the first Ineco contract in Australia, a country in which major investments are being made in infrastructures. Ineco's extensive experience in the field of ERTMS both in Spain and in Europe where it collaborates with the European Commission in the implementation of this system in the continent's main corridors, was the main point of reference.

Transport for New South Wales, located in south-east Australia, tendered the contract for the development and subsequent implementation of a new digital signalling system based on the European ETCS level 2 standard in 2018, as part of the digitalisation programme of its railway network. This part of the services is known as system integrator. The contract was awarded in late 2018 to the British company NRC together with the Spanish public engineering company Ineco, the Australian engineering company Acmena, and the British

Ineco acts as a systems integrator in the Sydney commuter rail modernisation project, the company's first in Australia, and to which it contributes its extensive experience in ERTMS

operator Go-Ahead.

The programme features three lines of action: the updating of its entire signalling network to ETCS level 2; implementation of the ATO system (Automatic Train Operation) to help the driver and installation of a railway traffic management system (TMS) to improve the efficiency of incidents and the service of the entire network.

Ineco has participated in the project since the first phase, which was developed throughout 2019, in which the system integrator worked on defining the system requirements, both in terms of track and on-board signalling equipment, fixed and mobile communications, and the unified traffic management system (TMS).





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Australia

MANAGEMENT OF SPANISH HIGH-SPEED WORKS

Ineco has been collaborating from the day it opened, 28 years ago, in all phases of development of the Spanish high-speed rail network. One of the many tasks it performs is the construction management for Adif Alta Velocidad. In 2019, 63 construction managers and 12 assistants provided service on different lines in more than 100 works across the country.

During the construction phase, project managers made every effort to ensure the effective development of the works contracts, and their conformity with the construction project, systems and processes of Adif Alta Velocidad and other current regulations. They act as defenders and administrators of the work on behalf of Adif Alta Velocidad.

In 2019, 63 construction managers and 12 assistants from Ineco provided service on more than 100 high-speed works across the country

Through different contracts, the Spanish railway infrastructure administrator, currently Adif Alta Velocidad, has been entrusting Ineco with these tasks. In 2019 it carried out more than 100 works that include both infrastructure and track, overhead contact line, power supply, control/command and signalling control system.

At the end of the year, a total of 63 construction managers and 12 assistants were working across the country on the high-speed lines of Madrid-Galicia, Madrid-Extremadura-Portuguese border, Madrid-Barcelona-French border, León-Asturias, Madrid-Castilla La Mancha-Comunidad Valenciana-Región de Murcia, Vitoria-Bilbao-San Sebastián, Antequera-Granada, Almería-Murcia and Zaragoza-Pamplona.





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CONSULTANCY SERVICES FOR THE RAILWAY BETWEEN MONTEVIDEO AND PASO DE LOS TOROS

The Ministry of Transport and Public Works of Uruguay entrusted Ineco with consultancy contracts in 2019 for the supervision of design drafting and construction management on the Paso de los Toros-Montevideo railway line and access to the port.

The "Central Railway" project promoted by the government of Uruguay is the most important in recent years in the country and consists of the design, construction and maintenance of 273 kilometres of railway between the port of Montevideo and the city of Paso de los Toros, applying the highest European safety

The renovation of the railway line between the city of Paso de los Toros and Montevideo is the most important infrastructure project in recent years in Uruguay

standards.

In 2019 the Ministry of Transport and Public Works entrusted Ineco with consultancy contracts for the supervision of design drafting and construction management on the Paso de los Toros-Montevideo railway line and access to the port. The project includes supervision of the executive project and works, including signalling and communications systems, as well as assistance in carrying out the necessary tests for the commissioning of the railway infrastructure.

According to the Uruguayan government, it is a relevant infrastructure for the multimodal transport system and the most important in the railway sector in recent years. The standard for freight train circulation will be increased to 80 kilometres per hour and 22.5 tons per axle. The project includes an initial double-track section of 26 km of mixed traffic, a dozen secondary tracks for railroad crossings, a section of track for industrial access and more than 40 railway bridges that are reinforced or are being newly built.

In 2018, Ineco had already provided technical assistance to the Ministry of Transport and Public Works of Uruguay for the tender for the concession of the renovation and maintenance of the railway line's infrastructure. Both orders come from the infrastructure and transport cooperation agreement signed in 2017 between the transport ministries of Uruguay and Spain.

The design, construction and maintenance of the line for 15 years (extendable to 22), was awarded to the Grupo Vía Central Consortium (Sacyr-Saceem-NGE-Berkes) through a public private participation contract (PPP). The planned investment is 1,000 million USD.







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Uruguay

WORKS ON THE HIGH-SPEED RAIL BALTICA LINE

Ineco, in consortium with two Spanish engineering firms, signed three contracts in 2019 for the Rail Baltica project, a modern high-speed corridor that will connect Estonia, Latvia and Lithuania over 870 kilometres to finally link up with the rest of Europe through Poland.

Rail Baltica is a high-speed railway line that will extend over 870 km through the three Baltic republics, and which will connect Europe through Poland. It is the largest infrastructure project in the Baltic region in the last 100 years and will form part of the Baltic-North Sea corridor of the Trans-European Transport Network (TEN-T). The line will be mounted on an electrified double track, with maximum design speeds of 249 km/h for passengers and 120 km/h for freight, and will have the state-of-the-art European rail traffic management system (ERTMS).

In 2019, Ineco signed three contracts for the Rail Baltica high-speed corridor: energy subsystem, maintenance bases and design of the 56 km stretch that will cross Riga, the most technically complex of the entire route, totalling 870 kilometres

In 2019, Ineco signed three contracts for the project in consortium with two Spanish engineering companies. The first, with Ardanuy, for the study of the energy subsystem of the entire line. It consists of an in-depth analysis to assess the best available technologies and a design aimed at reducing life cycle costs. The purpose of the study was to choose optimal technological solutions for the different areas of the energy subsystem (traction, catenary and remote control substations), define how to tender its design and construction and specify the implementation strategy.

Another contract, in consortium with the same firm, is the study of the location and development of the maintenance and assembly bases for the entire railway line, along with maintenance strategies. A study of alternatives was carried out and, finally, the chosen proposals were developed. Other aspects such as spatial and environmental studies, work plan and economic-financial model were also included in the project.

The third, with the largest volume, in consortium with Idom, consists of the design of the 56-kilometre high-speed section as it passes through Riga, the capital of Latvia. The technical design is the most complex on the line as it crosses several densely populated municipalities and runs parallel to the railway corridor of the Latvian railways. It consists of three subsections: Upeslejas-Riga Central Station, the sub-section between Tonsakalns-Imanta and the section between Riga International Airport and the Misa River. The project, awarded in July 2019, has a duration of 24 months.





Estonia, Latvia y Lithuania

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RAILWAY PROJECTS IN INDIA AND TURKEY

During 2019, Ineco continued to work in Turkey, in the supervision of the modernisation of the 377.8 km Samsun-Kalin line, where the railway signalling and control system ERTMS / ETCS-L1 was to be installed and other work carried out. In India's 1,300 km Eastern Dedicated Freight Corridor, Ineco assisted the public company Dedicated Freight Corridor Corporation of India Limited (DFCCIL) to contract the ETCS railway signalling and control system. These projects join those previously carried out in both countries.

Turkey: Modernisation of the Samsun-Kalin

line. In 2015, Ineco, in a consortium with two other partners, won the contract to supervise and direct the modernisation of the 377.8 km railway between the cities of Samsun on the Black Sea coast and Kalin in the centre of the country, where it joins the Ankara - Sivas line. The project, carried out by the Turkish Ministry of Transport, aims to improve the connection between the interior of the country and the Black and Mediterranean seas. The original single track non-electrified line was completed in 1932 and runs through a mountainous area. It has 47 tunnels totalling 7,259 metres, the longest being 556 metres, and 29 stations. In 2019, construction work was completed along the whole line, except the Gelemen branch. After which the fault notification period may begin, with an expected duration of 12 months, prior to acceptance and commissioning of the line. Ineco's work will last until December 2020.

Within the consortium, Ineco supervised signalling, communications and power supply, and coordinated the electromechanical installation team. The ERTMS/ETCS-L1 signalling system will be implemented throughout the line to increase the maximum circulating speed of 70 to 120 km/h. Work was also carried out on the complete renovation of the road infrastructure, bridges, viaducts and overpasses, ballast, the track and sleepers, level crossings and switches. In the stations, 40,800 metres of track were renovated and a further 800 were built, as well as new platforms at Turhal, Zile and Kizoğlu stations. In 2010, Ineco won another similar contract for the supervision of work to adapt the high-speed line of the Inönü – Köseköy section, in the centre of the Ankara-Istambul line.

The renovation of the Samsun-Kalin line, in Turkey, where Ineco has been working since 2015, is in its last phase, while in India assistance for the acquisition of railway signalling and control systems will continue until 2021

India: Railway signalling and control for the Eastern Rail Freight Corridor. In 2019, Ineco, with financing from the World Bank, provided assistance to the public company Dedicated Freight Corridor Corporation of India Limited (DFCCIL), under the Ministry of Railways of India, for the acquisition of railway signalling and control systems TPWS (Train Protection And Warning System Works for the Eastern Dedicated Freight Corridor, in two 1,300 kilometre sections: Dadri-Khurja-Bhaupur-Allahabad-Mughalsarai-Sonnagar (896 km) and Sahnewal-Pilkhani-Khurja (404 km). The entire Eastern Corridor will be more than 1,800 kilometres long. Ineco's projects will last until 2021.

The company has also carried out other projects in India, such as technical and financial

feasibility studies for future 1,500-kilometre New Delhi-Kolkata high-speed lines; Mumbai – Nagpur, 772 km, in 2016, and Haldia and Howrah, 135 km, in 2012, all of them including the Diamond Quadrilateral, an 11,000-kilometre high-speed railway network that will connect the four large cities of India, Mumbai, Kolkata,



Asia

Chennai and Delhi. In 2017, it also carried out a study for a 90 km commuter corridor between Delhi and Meerut, provided technical assistance in the Mumbai metro project in 2009, and advised Indian Railways in the design and implementation of the strategy for a suburban train service

HS2 PHASE 2B: HIGH SPEED BETWEEN BIRMINGHAM AND SHEFFIELD

During 2019, Ineco continued working on the preliminary design of civil engineering and environmental impact studies for lot 2, phase 2B of the HS2 high-speed line in the United Kingdom. More than one million people will be connected to the capital city of London in just one hour.

Work from the second contract awarded to Ineco in 2017 for the high-speed line (HS2) that was to link London to Manchester and Leeds continued in 2019. The company, together with US-based Aecom and the British company Capita, will be responsible for the preliminary design of civil works and environmental impact studies for lot 2, a section of Phase 2B of the project (Crewe-Manchester and Birmingham-Leeds).

This work will be carried out in the southern section, around 90 kilometres long, and extend from the phase-1 connection, which ends in Birmingham, all the way to the south of Sheffield. The aim of the contract is to submit the project to Parliament for consideration through the so-called Hybrid Bill, which is subject to the scrutiny of a Select Committee, due to which the design and environmental evaluation process is fully detailed and documented.

2019 started with the review of the results of value engineering developed during the last quarter of 2018 and conclusions obtained in Working Draft Environmental Statement public consultations were incorporated. This led to significant savings being achieved in the total cost of the work on the section, which were incorporated into the main design in May, followed by the initial delivery of the third and last control point in July, which includes the design, logistics construction plan, new budget, programme and risk analysis.

In the second half of the year, focus was on developing the last stage of the FES (Final

Environmental Statement), and advancing the preparation of documentation for the presentation of the project in Parliament (Hybrid Bill) scheduled for June 2020, along with the completion of the design review and assurance period in October, as well as the final field investigations to support the FES. This period has turned out to be the most intense of the entire contract so far, with more than 400 people involved in it.

In 2019, focus was on the design, the last stage of the Environmental Statement and the preparation of the presentation of the project to Parliament

In December, HS2 communicated its intention to introduce a pause in the programme to improve the integration of phase 2B, of which this project is part, with other railway investment programmes in the Midlands and the north, for which it expects have the support of Ineco and its partners during 2020 in redefining and relaunching the programme.

Ineco started working on the HS2 line in 2012, in the first phase between London and Birmingham (225 kilometres), which is expected to start operating in 2026.



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United Kingdom

PREVENTIVE AND PREDICTIVE MAINTENANCE IN DC TRACTION ELECTRICAL SUBSTATIONS

Ineco was commissioned by Adif to review and adjust DC traction electrical substations throughout the Spanish network. In 2019, this work continued and it was fundamental to guarantee the quality and reliable operation of railway lines, and in which Ineco has more than twenty years of experience. Every year an average of 77 substations are inspected.

Adif, the Spanish railway infrastructure manager, has 381 DC electric traction facilities distributed throughout the country. Their smooth functioning requires correct preventive maintenance and periodic thorough checks to determine their condition, degree of obsolescence, operational problems due to equipment wear and tear and adjustment of protective devices by variations in the operation of the line and in the use of these.

In order to achieve adequate levels of quality and reliability in railway operations, it is necessary that traction substations supplying power to electrical units through the overhead contact line be in optimum condition These thorough checks must be carried out by highly specialised personnel, with complex measurement equipment and tests, and complement the preventive maintenance checks conducted by Adif. For more than twenty years, Ineco has been carrying out these tasks, and has the necessary equipment, some of it exclusively for use in traction substations.

Every year, preventive and predictive maintenance checks are carried out on between 75 and 80 traction substations, with an annual average of 77.



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SUPPORT FOR THE PREPARATION OF THE SPANISH INDICATIVE RAIL INFRASTRUCTURE STRATEGY

Ineco supports the Secretary of State for Transport, Mobility and Urban Agenda in preparing the Indicative Strategy for the Development, Maintenance and Renovation of the Rail Infrastructure.

The need to carry out the Indicative Strategy arises from the fulfilment of the obligations established by Law 38/2015 of the Railway Sector, which implies the incorporation into the Spanish legal system of Directive 2012/34/ EU, on the establishment of a single European railway sector. In addition, the Indicative Strategy meets the criteria established by Law 21/2013, of 9 December, on environmental evaluation, so it must be submitted to the ordinary Strategic Environmental Assessment process. Ineco is supporting the Secretary of State for Transport, Mobility and Urban Agenda in its preparation.

The Strategy should define planning that contributes to decision-making in the railway sector and that serves as the basis for the establishment and approval of activity programmes of infrastructure managers The Indicative Strategy will cover at least a temporary period of five years and will be renewable. The general framework for its development is based on economic and social efficiency and on the sustainable financing of the railway system, with the aim of defining planning for the infrastructures comprising the General Interest Railway Network (RFIG).

The first step consists of defining the strategic objectives of the Indicative Strategy based on a diagnosis and analysis of the current railway network, as well as the surrounding environment, in order to detect strong points and possible weaknesses.

The action plans are set out after making the diagnosis and defining the objectives, indicating the general guidelines for action, basic principles, and proposals for development and improvement in order to meet users' mobility needs.

The general financing guidelines for the development of the action plans are defined which involve actions normally requiring large initial investment, and a considerable amount of funds to be able to carry them out, due to the very nature of the railway infrastructures.

The work will end with the drafting of the Indicative Strategy for the development, maintenance and renovation of the railway infrastructure, which will be submitted to the ordinary Strategic Environmental Assessment process together with the appropriate environmental documentation.



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HIGH-SPEED RAILWAY ACCESS TO THE ADOLFO SUÁREZ MADRID-BARAJAS AIRPORT

Ineco supports the Secretary of State for Transport, Mobility and Urban Agenda in the preparation of the first phase of the informative study of the actions necessary for connecting the high-speed network with the Adolfo Suárez Madrid-Barajas airport.

One of the five major strategic objectives for the 2012-2024 Infrastructure, Transport and Housing Plan (PITVI) as a planning framework for infrastructure and transport in Spain is to promote the functional integration of the transport system as a whole through an intermodal approach. To do this, one of the strategic lines of action to follow is the strengthening of airport nodes to connect air and land transport, and synergies between high speed and air mode.

In this first phase of the informative study, different operating schemes of the new high-speed station are analysed, be they terminuses or through stations, so the track is extended to connect with the HSLs Madrid-Barcelona, Madrid-Valladolid, or both

Specifically, the PITVI covers the connection of the high-speed network with the Adolfo Suárez-Madrid Barajas airport. Ineco supports the Secretary of State for Transport, Mobility and Urban Agenda in preparing the first phase of the informative study, whose aim is to analyse the actions necessary to make this connection. This involves characterising the different scenarios considered from different technical perspectives, so that they can be compared in an orderly and systematic way. The study analyses operating schemes of the new high-speed station, be they terminuses or through stations, so the track is extended to connect with the HSLs Madrid-Barcelona, Madrid-Valladolid, or both.

The operation of high-speed services to and from Barajas airport, as well as determining the design of the airport access routes, has repercussions on the rail network approach, especially at Chamartín and Atocha stations. The results of this first phase, which culminates in a multicriteria analysis, determine which scenarios will be developed later in phase B of the informative study.



FUNCTIONAL DESIGNS AT ADOLFO SUÁREZ MADRID-BARAJAS AND JOSEP TARRADELLAS BARCELONA-EL PRAT AIRPORTS

During 2019, the necessary studies were carried out to prepare the functional design of the T4 terminal building and the T4S satellite building and associated aprons at the Adolfo Suárez Madrid-Barajas airport, as well as the functional design of the expansion of terminal T1, new satellite and apron at the Josep Tarradellas Barcelona-El Prat airport.

For more than 15 years, Ineco has been working for Aena's Directions of Planning and Environment in preparing, monitoring and processing master plans, as well as in various airport planning instruments. These include functional infrastructure designs. They are the next step to the overall vision of the master plan and define the infrastructure with a greater degree of precision and, above all, assurance of its proper functioning.

The objective of these studies is to propose the necessary actions to ensure the correct operation of both airports in accordance with future traffic demands

The growth of traffic in recent years at both the Adolfo Suárez Madrid-Barajas airport and the Josep Tarradellas Barcelona-El Prat airport, and medium-term forecasts in both, would render the current infrastructure insufficient to manage traffic. It is therefore necessary to adapt the facilities to future demand. Based on the review of Aena's master plans, Ineco carried out the necessary studies in 2019 to prepare the functional design of the T4 terminal building and the T4S satellite building and associated aprons at the Adolfo Suárez Madrid-Barajas airport, as well as the functional design of the expansion of terminal T1, a new satellite and apron at the Josep Tarradellas Barcelona-El Prat airport.

Different simulations were carried out using different tools aimed at verifying the feasibility of the proposed final solution, including the AviPlan software for simulating aircraft stands gateways and taxiways; ArcPORT for simulation of taxiways, aprons and terminal buildings, and microsimulations with AIMSUN software to simulate the departure and arrival roads next to the façades of the terminal buildings under study.





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ASSISTANCE FOR SWEDAVIA IN THE CREATION OF A SPECIALISED ORAT DEPARTMENT

Swedavia, a Swedish public operator that manages 10 airports handling around 42 million passengers per year, signed in 2019 a framework agreement with Ineco as a specialised ORAT (Operational Readiness and Airport Transfer) consultant to assist it in the process of creating its own ORAT department in order to strengthen its management capacity.

Due to Sweden's growth in air traffic over the last decade, the operator needs to undertake various expansions at its airports. To carry out the operational readiness and transfer of these new infrastructures, Ineco provided Swedavia with its consulting services in 2019 in order to identify resources and define the methodology to optimise these tasks.

The final objective of the Swedish public operator Swedavia is to have a new ORAT department that will be created with the specialist advice of Ineco

Ineco's study was carried out in several phases. Using the current situation as a starting point, the work will focus on determining the organisational structure and the dimensions of the new ORAT department, as well as the method of adapting it to Swedavia's organisational environment. The Swedavia ORAT methodology, specific to the Gothenburg – Landvetter airport expansion project, was then analysed as a pilot project. The final stage was the definition of the organisation of the new ORAT department in Swedavia's structure. Ineco has 20 years of experience in Spanish airports across the Aena network and others internationally such as Newark in the US and Abu Dhabi in the United Arab Emirates, where the company ran an ORAT project between 2014 and 2019.



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Sweden

NEW TERMINAL AT SCHIPHOL AIRPORT

The Spanish-Dutch consortium KL AIR, formed by the architects Kaan and Lamela and the engineering companies ABT and Ineco, won the international tender in 2017 to design the new terminal at the Amsterdam-Schiphol airport.

The Spanish-Dutch consortium KL AIR, formed by the architects Kaan and Lamela and the engineering companies ABT and Ineco, won the international tender in 2017 to design the new terminal as an extension of terminals 1, 2 and 3, to the south of "Schiphol Plaza". Ineco, as airport engineering, provides the consortium its specific knowledge in this field: airport planning, safety, baggage process, commercial, airport systems, signage and information, compliance with EASA regulations, maintenance, accesses and apron.

In 2019, work was carried out on the redefinition of the preliminary design and progress was made on the conditioning of the space for the construction of the new terminal.

During 2019, several changes took place in the conditions and scope of the KL AIR contract with the Capital Programme of the Schiphol Group, brought about by the decision of the airport operator to give more flexibility to the design of the building in order to accommodate different types of traffic. This led to the redefinition of the project at the preliminary design detail level, before advancing to the final design phase, to be delivered in early 2020. Progress was also made in the additional works for conditioning the space for the construction of the new terminal, reaching the maximum level of detail (technical design), after which some of the demolition and site preparation tasks were awarded and started.

The spatial distribution of the new terminal and its design seek integration with the existing airport, the railway station and other future expansions. This will be possible thanks to the architectural proposal presented that gives the terminal a great spatial amplitude and different scenarios in an environment full of natural light. Inside the building, the overlapping of passenger flows at different levels will make it possible to distinguish perfectly the departure hall and the baggage reclaim area. On the other hand, the access roads to the terminal will be integrated urban elements that will contribute to keeping Amsterdam a "compact city". Furthermore, this project is also developed using BIM technology.



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Netherlands

FEASIBILITY STUDY FOR THE INSTALLATION OF AN ILS AT SÃO VICENTE AIRPORT

In 2019, Ineco carried out a study for the installation of an ILS (Instrument Landing System) at São Vicente airport, in Cape Verde, for the public company ASA, Aeroportos e Segurança Aérea. This project accompanies many others developed in the archipelago since 2003 to improve and expand its airport network.

The objective of the study carried out in 2019 was to determine the technical, operational and economic feasibility of the installation of an Instrumental Landing System or ILS at the Cape Verdean Cesaria Évora airport in São Vicente, one of the country's four international airports.

This technical and economic feasibility analysis for the installation of an ILS at the São Vicente airport represents one of the most recent projects in Cape Verde, where Ineco has been present since 2003

The study analysed whether operating minimums for feasible ILS manoeuvres at each of the runway thresholds would be lower than the currently published instrumental minimums, as well as whether the costs of installing this ILS system would be offset if the number of operations affected by adverse weather were reduced. With the same objective, operating minimums were calculated for two more GNSS-based approaches, a PNR APCH with LNAV/VNAV minimums and a PNR AR. This project accompanies many others that Ineco has carried out since 2003 for Cape Verde, an archipelago located on the African Atlantic coast about 500 kilometres from Senegal, consisting of 10 islands, seven of which have an airfield. The fact that it is an island and tourist attraction has boosted the demand for air transport in recent years, so the company has been collaborating with Cape Verdean authorities for 16 years in improving and modernising its airport infrastructures.

The first projects date back to 2003, with the project and construction management of the new Boa Vista international airport, which opened in 2007. Since then, a multitude of studies, projects and supervision of subsequent improvements have been carried out; the review of master plans for Sal, Boa Vista, Praia and São Vicente, in 2012, easement studies, analysis of technical and economic feasibility of night operation in Boa Vista and São Vicente, etc. In 2014, ASA also commissioned Ineco to prepare the master plans for the three domestic airports: Maio, Sâo Nicolau and Fogo, and between 2015 and 2018, construction management of the expansion works of the passenger terminals at the international airports of Boa Vista and Sal, etc.





Cape Verde

GALILEO PROGRAMME

In 2019, Ineco continued to lead the activities of the European Centre of Services to users of the Galileo programme (GNSS Service Centre, GSC), located in Madrid. A nerve centre that serves users of Satellite Navigation Systems (GNSS) from all over the world. There are currently 22 Galileo satellites in operation and this number will increase until forming a constellation of 30.

In 2019, Ineco continued to provide highly qualified engineering services for the development and operational validation of the GNSS User Services Centre (GSC Centre), for which it designed the procedures and processes for the operation, maintenance and definition of products and services. After completing preparatory work in 2017, Ineco became responsible for operation and maintenance. The GNSS User Services Centre, located in Torrejón de Ardoz (Madrid), is integrated and coordinated with the two European Galileo System centres, located in Germany and Italy.

Ineco led the operation of the User Services Centre of the European Galileo satellite navigation system, located in Torrejón de Ardoz, Madrid These activities are part of a 10-year global framework contract, awarded in 2016 to Spaceopal (formed by the Italian Telespazio and the German DLR GfR) for over 1,000 million euros.

Ineco's participation in the Galileo project began in 2010 when it carried out a study to define the scope of the GSC Centre for the European Commission, funded by Aena under the supervision of the Ministry of Transport, Mobility and Urban Agenda. In addition, key Spanish space engineering companies participated: Indra, GMV, Deimos, Hispasat, INSA and INTA. However, since 1998, the company has been providing engineering services in the field of satellite navigation under various contracts signed with the European Commission, the European Space Agency (ESA) and the European Global Navigation Satellite Systems Agency (GSA).





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Europe

ENVIRONMENTAL SUSTAINABILITY PLAN FOR DAMMAM AIRPORT

The Sustainability Management Plan of Dammam King Fahd International Airport, in Saudi Arabia, developed for the Damman Airports Company (DACO) mainly involves improving waste management and reducing water and energy consumption, as well as avoiding soil contamination.

Like other countries in the region, Saudi Arabia is rethinking its future with an economy less dependent on its main natural resource, oil, so it is committed to sustainable development understood in a broad sense: not only environmental, but also social and economic.

The Sustainability Plan is Ineco's second project for Dammam airport, following the Master Plan completed in 2018

This is the context of the Sustainability Plan for the country's third airport, King Fahd of Dammam, which Ineco developed in 2019 for the Dammam Airports Company (DACO). The airport was opened to commercial traffic in 1999. Its 780 km² of surface area makes it the largest in the world (although only about 37 km² are used). It sees an annual traffic of more than 10 million passengers, and is located about 20 kilometres north-west of the city of Dammam, in an arid environment.

The work consisted of carrying out an environmental assessment, identifying the objectives established until 2030 and proposing the actions and measures to achieve them, in addition to monitoring their implementation and supervising the actions. This is Ineco's second project for Dammam Airport, after drafting its Master Plan, completed at the end of 2018. The main recommendations of the Sustainability Plan include increasing storage efficiency and waste collection and segregation, encouraging reduction and recycling, reducing water consumption by improving its management and control, preserving soil resources and avoiding contamination. It also includes some proposals related to air quality, fauna, energy, climate change and mobility. No significant conditions have been detected in relation to noise, biodiversity, land use, landscape integration or cultural heritage.





Saudi Arabia

AIRPORT AND RAILWAY ORAT IN ABU DHABI AND THE USA

In 2019, Ineco continued to provide ORAT (commissioning and operational transition) services for the expansion of the international airports of Abu Dhabi, and Newark, in the USA, where it also worked on the new railway interchange in New York, the Moynihan Train Hall.

The ORAT services (Operational Readiness and Transfer) comprise the development of the programme and the Concept of Operations, CONOPS, of the new infrastructure. Also included are the definition of the new operation, implementation and maintenance model, allocation of spaces, design of different types of tests prior to commissioning, familiarisation of personnel with the new facilities and planning of the final move. The company has two decades of experience in the implementation of large transport infrastructures in Spain, both in airports (more than 20, including those in Madrid, Barcelona, Alicante and Malaga) and in some thirty railway stations, amongst which are the largest in the country, Atocha, in Madrid, and Sants, in Barcelona.

Ineco has worked with Aena Internacional since 2014 on the commissioning of Abu Dhabi (UAE) Airport's new terminal, the Midfield Terminal Complex. When completed, the new terminal will have the capacity for over 40 million passengers. It will occupy 742,000 m², will have 65 plus 14 non contact aircraft stands, a baggage handling system capable of processing more than 19,000 bags per hour and two car parks (short and long stay) with capacity for almost 5,000 vehicles. Among the most outstanding milestones of 2019 are the completion of more than 25 airport operation tests, in which the passenger and baggage check-in processes, security controls and boarding, dibarkation and passenger transit processes were revised. The complete operation of the airport's automatic baggage system and the operation

around aircrafts on apron were also verified through a large-scale operational test in June with the participation of 800 extras and two aircraft.

In the USA, Ineco has provided services for the first ORAT phase of the new Moynihan Train Hall interchange, a historic construction in the heart of New York, next to the current Penn station, the one with the highest passenger traffic in the entire USA. The

The company applied its two decades of experience in ORAT in Spanish infrastructures in the new terminals of the airports of Abu Dhabi, in the UAE, and Newark, in the USA, where it also worked in the new railway interchange in New York

building is being renovated to become a modern rail interchange and is expected to be operational in early 2021. Ineco's work started in 2018 and terminated in September 2019.

In addition, the work started in 2017 was increased in 2019 to the commissioning and operational transition (ORAT) of the new terminal of Newark Liberty International Airport in New Jersey for the Port Authority of New York and New Jersey (PANYNJ). Terminal 1, which will replace the old terminal building A built in 1973, will feature 33 boarding gates, a new aircraft parking apron, a public car park with 2,750 spaces and new access roads. The opening of the first phase is scheduled for the last quarter of 2021.



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International

AIRPORT PROJECTS IN LATIN AMERICA

In 2019, the company was involved in projects at the Lima, Iquitos and Tumbes airports in Peru, and at Santa Marta in Colombia, which are undergoing improvements and expansion. It also began to study the implementation of Apron Management Services (AMS) at Eldorado International Airport, in Bogotá.

Supervision of the expansion of the Jorge Chávez airport in Lima. Ineco has provided services to the airport of Peru's capital city since 2014, along with a Peruvian engineering company to supervise expansion works until 2025. These include the construction of a second 3,500-meter runway and new taxiways, a new control tower, expansion of the aircraft parking apron and new passenger and cargo terminals and other projects. This will be the largest expansion of the airport to date: it will cover nearly 7 million m², compared to its current 3 million.

Ineco is involved in the improvement and expansion of several Latin American airports: Lima, Iquitos and Tumbes, in Peru, and Eldorado and Santa Marta, in Colombia

Jorge Chávez airport reached 23 million passengers at the end of 2019, according to data from the company that has managed it since 2001, Lima Airport Partners (LAP). Under the concession contract, the operator must deal with the investments, while the Peruvian government carries out the expropriations of the land necessary for the expansion, which was handed over in 2018. In December 2019, earthworks began in an area of more than 600 hectares, for the construction of the second runway and a new control tower.

Renovations at the airports of Iquitos and Tumbes. In both contracts, Ineco led the consortium with a Peruvian engineering company that is responsible for the Air-side Upgrade and Maintenance Project (PRMLA) of the airports in the north of the country, which is managed by the concessionaire Aeropuertos del Perú. The work consisted of preparing the technical file for the works to improve the runway, taxiways, aircraft parking apron and perimeter fence. The airport of Iquitos, a city with half a million inhabitants, is of great strategic importance because it is located in the heart of the Amazon jungle and there are no land communications, only river and air. Tumbes, located on the border with Ecuador, is a tourist area due mainly to its beaches and natural spaces.

Master Plan for Santa Marta and AMS in Eldorado. The company is also in charge of the consortium with a Colombian engineering firm that will carry out the update of the Simón Bolívar airport in Santa Marta for Aerocivil the Colombian aeronautical authority. This will include the analysis of alternatives for airport infrastructure development until 2050, in which the feasibility of expanding the current 1,700 metre runway over the sea will be analysed.

Also, Ineco will also carry out studies for Aerocivil for the implementation in 2021 of the Apron Management Services (AMS) at Eldorado International Airport, in Bogotá. The AMS service is provided from the control tower, and its function is to manage aircraft traffic on the ground. In 2011, the company designed and equipped the current control tower and worked on the design and technical supervision of the renovation of the southern runway.



Latin America

INSPECTION OF THE NEW PASEO DEL BAJO IN BUENOS AIRES

On 27 May 2019, the Argentine capital opened a new 7.1-kilometre route that crosses the city from north to south, saving drivers up to 40 minutes of travelling time. Ineco, with its local partner AC&A, was responsible for the inspection of one of the three sections of this complex construction, one of the largest civil works ever in the country.

The Paseo del Bajo, a new 7.1 kilometre road corridor that opened in May 2019, crosses the city from north to south, connecting the Buenos Aires-La Plata and Illia motorways. It has a total of 12 lanes, four of which run in the semi-underground central road section (trench) that is exclusively for heavy traffic and operates as a highway: every day more than 15,300 lorries weighing 12 tons or over and more than 800 coaches travel this section according to the Buenos Aires Department of Urban Development and Transport.

The new 7.1 kilometre Paseo del Bajo crosses Buenos Aires from north to south with no traffic lights in 10 minutes and is one of the country's major civil works projects

The rest of the traffic - consisting of around 76,000 private vehicles a day and public transport - use the eight surface lanes situated on both sides of the trench, four on each side (two in each direction), on Avenidas Alicia Moureau and Huergo. The left-hand lanes are designed for through traffic and cars are not allowed to stop. The project also included the building of nine bridges along the Paseo to connect both sides of the road and 60,000 m² of green areas, bicycle lanes and a large pedestrian stairway by the Puente de la Mujer bridge which connects Plaza de Mayo to the Puerto Madero district of the city.

Ineco, together with its local partner AC&A, has been carrying out inspections for AUSA (Autopistas Urbanas SA) since 2017 on the new infrastructure's section B, the 'southern semicovered trench,' which improved the mobility of the three million inhabitants of the Argentine capital which, together with the population from the metropolitan area, amounted to around 12 million people. It is one of the most important civil works projects in the country and, thanks to it, travelling time has been cut from 50 to 10 minutes. The new road enables freight traffic to travel from the Buenos Aires-La Plata motorway, cross the city centre without having to stop for traffic lights and directly access the port and Retiro bus terminal.





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Argentina

NEW SECTION OF THE A-23 AT CONGOSTO DE ISUELA-ARGUIS, IN HUESCA

The Ministry of Transport, Mobility and Urban Agenda opened the Congosto de Isuela-Arguis section of the Mudéjar A-23 motorway in October 2019, which was a project in which Ineco had provided technical assistance and supervised the environmental surveillance programme. Thanks to this and other works, the full length of the Monrepós mountain pass can now be traversed on a motorway, reducing travel times and increasing safety levels.

The A-23 –E-07 according to the European nomenclature– began to be built in 1999 to connect the Mediterranean coast with the French border, from Sagunto, in Valencia, to Jaca, in Huesca, along 435 km, of which 413 are already in service. In the year 2000, the A-23 reached the capital of Huesca. Due to the challenging geology of the terrain and, in particular, the Monrepós mountain pass which, at 1,262 metres above sea level is the highest in the Huesca Pyrenees, the final stretch to Jaca was the last to be completed. Caldearenas-Lanave, and also, since October 2019, the 3.3 kilometres between Congosto de Isuel and Arguis.

In the latter, Ineco provided technical assistance to the construction management team between May 2007 and April 2016. Significant technical problems were found due to the terrain, with slopes between 4 and 7%, making it necessary to build numerous structures: six viaducts, two walkways, a reinforced concrete wall and six reinforced soil walls.

The most remarkable feature of the section is the 920-metre long Arguis tunnel. It is a double lane single-tube tunnel with a safety area and three emergency evacuation galleries. In addition, three N-330 bridges built over the Isuela River in 1982 were repaired and adapted due to their significant degree of deterioration and were reinforced at the sides and embankments.



now be traversed on a motorway

In 2019, the Ministry of Transport, Mobility and Urban Agenda, through the Demarcation of the Aragón State Roads, opened three new sections of road, meaning that the 39 kilometres between Huesca and the Monrepós are entirely motorway. The sections in service are: Alto de Monrepós-Caldearenas,





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CONTROL AND MONITORING OF WORKS ON THE NEW GAZNATA BRIDGE

Ineco, commissioned by the Ministry of Transport, Mobility and Urban Agenda, undertook the supervision and surveillance of the works to construct the new La Gaznata bridge over the Burguillo reservoir in Ávila. Its inauguration signifies the end of bottleneck traffic problems for users of the existing narrow arched bridge.

Following its inauguration on 28 November 2019, the new bridge over the Burguillo reservoir, in the province of Ávila, represents a notable improvement in mobility and safety for the 5,000 road users whose daily journey takes them past the 100-kilometre mark of the N-403 road, which spans the provinces of Toledo, Madrid, Ávila and Valladolid. Access to the bridge has also been improved by a new roundabout to ease horizontal alignment. In total, the works covered almost a kilometre.

The new Gaznata bridge improves the mobility of 5,000 daily users, since the narrowness of the existing one only allowed one-way traffic

Ineco provided technical assistance services for the supervision and surveillance of the works for the General Directorate of Roads and the Ministry for Transport, Mobility and Urban Agenda. At 11 metres wide and with one lane for each direction of travel, the new bridge replaces the narrow crossing offered by the old arched bridge, whose single carriageway measuring just 4.5 metres wide meant that users had to cross from each direction alternately. It was planned and constructed in the 1920s by engineer Eugenio Ribera, and is of both historical and technical significance as one of the first bridges to be built using reinforced concrete in Spain.

The new concrete and steel structure is a 212-metre-long straight bridge (beam type), over two 18-metre-high concrete 'V' piles, with an 11.3-meter-wide deck and three spans of 40, 120 and 50 m. The central span is divided into three sections, two in cantilevered concrete and one 42-metre-long in steel and concrete. One of the highlights of the project was the floating transfer and subsequent lifting of the 115 ton central metal stretch of this section up to a height of 20 metres to put it in place.





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BIM-GIS INTEGRATION IN A SECTION OF THE A-76 MOTORWAY

Ineco has taken another step towards digital transformation in drawing up projects, applying the BIM methodology and its integration into a GIS (Geographic Information System) environment to the management of the Ponferrada-Ourense A-76 motorway construction project, section: Villamartín de la Abadía-Requejo, that it has drafted for the General Directorate of Roads of the Ministry of Transport, Mobility and Urban Agenda.

The section on the A-76 is one of the first road projects in which the BIM (Building Information Modelling) methodology has been applied. The Villamartín de la Abadía-Requejo section, a connecting link of the future A-76 motorway with the A-6, has been chosen for its complexity: it has more than 10 kilometres of branches, and requires the construction of 11 structures and the channelling of the Valtuilles

BIM-GIS integration enables a threedimensional or "digital twin" scenario to be created in which all project information can be intuitively consulted

stream.

The integration consists of connecting the BIM methodology that focuses on the threedimensional model of the infrastructure, with geographic information systems, GIS, which provide references to real coordinates. Both have in common that they combine geometric elements with associated alphanumeric data (attributes) and, therefore, speak the same language. This has led to the creation of a three-dimensional scenario, in the form of a puzzle in which models provided by the disciplines of alignment, road surface, land, drainage, structures, affected services and signalling, beaconing and barriers are added, using interoperable formats that have allowed the integration of digital information in a GIS environment, creating a "digital twin".

A GIS online 3D viewer has been developed so that all those participating in the infrastructure may consult, intuitively, all project information by scanning the QR code created through a mobile phone, or through the URL address and Internet connection via mobile device or computer. This innovative method improves the technical quality of the solution as a whole, as well as the environmental integration of the project; explores the potential of consultation and visualisation of results for a better understanding; and optimises coordination between the different disciplines involved through a shared information environment.







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DIGITAL ADMINISTRATION AND CYBERSECURITY: SUPPORT FOR ELECTRONIC JUDICIAL ADMINISTRATION AND THE PROVISION OF SHARED SERVICES

Ineco has collaborated, since 2016, with the General Secretariat for Spanish Justice Administration of the Ministry of Justice, in its modernisation process through new information technologies. Also since 2016, the company has supported the General Secretariat for Digital Administration (SGAD) of the Ministry of Territorial Policy and Public Administration, in the provision of shared services in the field of telecommunications and in the quality control and security of its most critical common services. The company has also expanded its collaboration with the Administration in the field of cybersecurity, in which there has been a growing interest and widespread demand.

Modernisation of the Administration of

Justice. The Subdirectorate General of New Technologies for Justice (SGNTJ) is in charge of the works. These are divided into three large sections: support for electronic judicial administration, management of a development centre and digital transformation of judicial seats and other actions.

During 2019, Ineco continued to provide support to the main strategic objectives and programmes related to electronic judicial administration and the service that the Ministry of Justice provides to the Administration of Justice. The main achievements of this year include the development and commissioning of new applications that facilitate the daily work of personnel at the service of the Administration of Justice, as well as improvement of interoperability between the management applications of the State Attorney General's Office in order to have access to the automation of certain procedures and direct access to the viewer of judicial files from its management system.

It is also worth mentioning the development of the system that allows the exchange of European electronic investigation orders with other European countries through the Portal of International Legal Cooperation, and with the European system for the secure exchange of information in civil and criminal law eCodex; as well as improvements in digital signatures.

Support for the provision of shared services to different entities of the General State Administration. Ineco collaborates in cross-cutting activities of the SGAD, mainly integrated in the Commission for the Reform of Public Administrations (CORA). To respond to the shared service schedule, the main activity is focused on supporting the management of the unified telecommunications service of the General State Administration, reengineering, quality control and security of SGAD information systems, in addition to the optimisation of its critical service platforms and support for the adoption of its solutions by third parties.

Throughout 2019, the support for the management of the Centralised Telecommunications Contract of the AGE

In 2019, major projects included the development of an exchange system for European investigation orders and improvements in digital signature for the Ministry of Justice, as well as support for the transition between phases of the provision of shared services of the General Secretariat for Digital Administration continued, facilitating the transition from phase I to phase II, collaborating both in the technical assessment for its award and in the transfer of technology and knowledge between phases.

Furthermore, the process of technological improvement and updating continued in the area of data processing centres through physical equipment migration.

Ineco's main achievements in the field of cybersecurity included continuous audits of the SGAD's most critical services and prior actions required for adapting its systems to the National Security Scheme.



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SMART PROJECTS: CITYNECO, GRANADA AND SMART CAMPUS OF THE UNIVERSITY OF ALMERÍA

Three new projects were developed in 2019 in the field of "smart" urban mobility: the new version of the Cityneco technological platform, improvement of mobility in an area of the city of Granada and a master plan for the implementation of a "smart campus" for the University of Almería.

The company developed the Cityneco technology platform for the smart management of different urban services in 2016, as part of an innovation project. In 2019, a new version 2.0 was developed that offers an improvement in performance. Cityneco is especially mobility-oriented, and has been designed with a modular architecture and a layered structure that make it easily scalable and interoperable. In addition, there is a version that is offered in the form of Software as a Service (SaaS), which allows medium-sized cities to use it without having their own infrastructure.

Cityneco collects traffic data (CityNECO Mobility) and other sources (CityNECO Surveys) and makes continuous predictions in the short term (at 15, 30, 45 and 60 minutes), which serve to adjust traffic light plans to minimise the impact of possible future jams.

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The platform features several vertical modules, not only those related to mobility but also for each local council or organisation's management areas. Its modular architecture facilitates the incorporation of new vertical levels to adapt to new requirements. Its IoT functionality (the Internet of Things), allows it to connect to sensors located throughout the city while simultaneously integrating and processing multiple sources of information, from social networks to video feed. The information is displayed simply and intuitively through dashboards, based on both real-time data and management indicators, and in the case of mobility, with a GIS viewer (Geographical Information System).

Cityneco, which has been tested in the city of Granada, collects multiple data and makes continuous traffic predictions in the short term, allowing measures to be taken in advance to improve mobility, such as regulating traffic lights

Cityneco has been tested in a real environment thanks to a collaboration agreement with the Granada City Council, by analysing historical traffic data, reading data on the state of traffic in a limited area of the city, and capturing tweets related to transportation. 16 gates (sensors that measure the number of vehicles passing through a section), located at 10 traffic lights, were monitored, in which up to 8 different traffic lights were implemented. Cityneco offers a real time traffic light plan that will generate less congestion at each intersection and in the area as a whole, up to 60 minutes in advance.

In 2019, a Master Plan for the implementation of a smart campus was also developed for the University of Almería (UAL). With a few methodological adjustments, the document incorporates intelligent management proposals similar to those that would be applied to a small city. A total of 21 services are contemplated in the plan: irrigation, lighting, cleaning and waste collection, environmental noise and light pollution; water and energy,



Spain

traffic and parking, infrastructure and urban equipment, etc. The plan puts emphasis on actions related to the environment which is called a green smart campus - in particular on optimising the use of water and energy, as well as improving mobility, given its location far from the urban centre that prevents access on foot and generates a large influx of private vehicles.

The Master Plan includes indicators that allow the smart evolution of the UAL to be measured, establishes the creation of a Steering and Coordination Committee and a Monitoring Committee and proposes that the document be reviewed every two years to ensure that it is kept up to date.

Coso AGENDA



FIRM COMMITMENT TO 2030 AGENDA AND SDG

Ineco has been firmly committed to the SDG and 2030 Agenda since the beginning. In 2019, it approved a plan defining its commitment through solidly contributing to its direct and indirect success, first through the development of its business activity and second through the different actions of Corporate Responsibility that the company promotes.

Ineco's Agenda 2030 Plan is comprised of four different but interlocking phases:

- **1. Integrate** the Sustainable Development Goals in the business strategy.
- 2. Inform and raise awareness about the content and goals of the 2030 Agenda, promoting its dissemination to as wide a target audience as possible.
- **3.** Act, implementing concrete actions throughout all the months of the year.
- **4. Evaluate** the results obtained in order to guarantee the implementation of a continuous improvement model.

Taking into account the four phases of action described and the fact that Ineco contributes directly to the achievement of **Sustainable Development Goals 9 and 11**, due to its intrinsic activity, four priority fields of action were established throughout 2019:

• Alignment of Ineco's Strategic Plan with the 2030 Agenda, so that all the company's activities are oriented towards contributing to the SDGs. Ineco has incorporated its own Agenda 2030 Plan in its Atenea 2019-2022 Strategic Plan, which is comprised of five specific programmes: equality, conciliation, sustainability, solidarity and compliance.

• Internal awareness and external dissemination with the aim of reaching as many people as possible. It is worth noting communication of this Plan to employees through videos of the Companies4SDG campaign.

•Development of a series of different kinds of actions promoted by Ineco to contribute to the achievement of the 17 Sustainable Development Goals.

• Evaluation process, which allows us to know the level of achievement of the plan, the goals achieved and the areas where it is necessary to reinforce the actions to be carried out.





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EQUALITY

At the end of 2019, Ineco signed the new Equality Plan with the aim of continuing to guarantee the principle of equal treatment and opportunities between women and men according to legal requirements. Among the main measures is to continue reducing the wage gap by at least half a point annually. From 2012 to 2019 it was reduced by 40%.

A series of assessable measures were introduced in the following spheres of action:

- Selection and recruitment.
- Communication and awareness. •
- Training
- Professional development. Conciliation and co-responsibility.
- Wage policy.
- Occupational health, prevention of moral, sexual or gender-based harassment and gender-based violence.

At Ineco, we consider equality training and awareness as basic pillars of professional and personal development, so it is necessary to continue maintaining a balanced level of training between the women and men present in the organisation and their hierarchical distribution. In 2019, a 189-hour course on equality was given.

On the other hand, the professional development of women with high potential in Ineco continued to be promoted through the programme based on MUJERES IN mentoring and training techniques.

With regard to the prevention of moral, sexual or gender-based harassment and genderbased violence, every effort has been made within the Equality Commission to sign the Protocol on harassment based on sex, gender or sexual orientation.

A Guide to rights against gender-based

violence has also been published, the content of which has been agreed within the Equality Commission. In this sense, different actions have been carried out to promote the hiring of these people and favour their inclusion in the labour market.

Ineco's aim is to achieve the presence of 40% of women in the company, participating in conferences, forums and talks for high school students and thus promoting the study of Engineering careers among students.





Action areas



SELECTION AND RECRUITMENT

Maintain transparent selection processes, encouraging greater participation of women in areas with lower female representation



COMMUNICATION AND PUBLIC AWARENESS

Promoting a culture of information, communication and awareness on equality



5.

WORK-LIFE BALANCE AND JOINT RESPONSIBILITY

Continue to implement measures to balance the personal, family and working lives of all staff and encourage joint responsibility



TRAINING

Continue to promote a training policy based on equal treatment and opportunities



PROFESSIONAL DEVELOPMENT

Promote equality in professional development within the company



OCCUPATIONAL HEALTH AND PREVENTING HARASSMENT

To prevent and correct any behaviour or action that could indicate harassment at work, as well as to disseminate, apply and review the legally established rights of women victims of gender violence and to strengthen the gender dimension in Health and Safety

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8.



REMUNERATION POLICY

Promote equal pay between women and men for work of equal value



MONITORING AND ASSESSMENT

Monitoring is an essential instrument for analysing the development of the Equality Plan. It allows to know the degree of functioning and to make its contents more flexible
CONCILIATION

As a responsible company, Ineco signed the **Concilia Plan** in December 2015, with the aim of promoting greater consolidation of personal, family and professional life among all its professionals. It is one of the main driving forces for attracting and retaining talent, as well as a tool for maintaining social peace within the company. In December 2019, the extension of this Plan was signed, which consists of 18 measures, grouped into four areas of action:

- Organisation of working time.
- Social benefits.

- Leave, absences and breaks.
- Personal development.

Reconciliation is one of the best valued aspects globally in the company. Ineco is among the best positioned public and private sector companies in terms of reconciliation. In 2019, 1,123 workers benefited from at least one of the Plan's measures.

The company also adopts a commitment to encourage an increase in requests for men compared to what is currently registered. The aim of this is to reach an equal figure of shared responsibility.





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Reconciliation measures



Workplace flexibility



Working time flexibility



Turn off lights policy



Attendance at school meetings



Unpaid leave of up to one month for serious family circumstances



Meetings policy



Rationalisation of working hours



Flexibility in enjoying holidays throughout the year



Summer camps and agreements with nurseries



Mas Programme for employees with reduction of working hours



Division of holiday period



Half or complete days for personal matters



Medical care



Continuation of the Training Programme



Leave of absence for up to one year with job security

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Parking place for pregnant employees



Unpaid leave for exams preparation



Collaboration agreements with nursing homes

SUSTAINABILITY

TOWARDS A SUSTAINABLE MOBILITY MODEL

Ineco's activity is focused on offering comprehensive and innovative solutions to advance towards a **more sustainable, safe and efficient mobility model**, contributing to improving the quality of life of millions of people.

As a transportation engineering and consulting company that provides services whilst projects are being developed, it contributes very significantly to the balance between the development of infrastructures, society and the environment.

Sustainable mobility is one of the major challenges on a global scale in which Ineco has extensive experience preparing strategic, national and multi-sector plans, as well as others on sustainable urban mobility from a global perspective, with a view to the integration of key aspects such as security, resilience, equitable access, intermodality and efficiency.

Its contribution to the **fight against climate change** has intensified in recent years, along with the increasing concern over this issue by the Boards of Directors and society in general. Projects such as Adif's Plan to Combat Climate Change, Aena's Climate Change Strategy or those related to rail energy supply or energy certification of buildings are some of the works to be highlighted in this area.

Ineco is aware of the need to mitigate the harmful effects that transport generates for the environment and for people's health, developing various projects aimed at **improving the quality** of life in society. The Strategic Noise Maps, air pollution and hydrological studies or the technical divisions for civil engineering projects are some examples to highlight in this regard. Finally, it is also worth mentioning the company's contribution to **citizens' participation** in transport projects as a key element that improves the viability of projects and favours transparency and efficiency in decision-making. Ineco advances towards the design of inclusive infrastructures and develops many projects in which the general public may participate.

COMMITTED TO THE ENVIRONMENT

Sustainable development constitutes one of the fundamental values of Ineco's corporate identity. The company promotes actions and attitudes that seek a balance between infrastructure development, protection of the environment and social responsibility, in accordance with the values that define the organisation and the principles that govern the United Nations Global Compact.



ENVIRONMENTAL MANAGEMENT SYSTEM

Ineco develops proposals aimed at reducing the impacts that negatively affect the environment, controlling monitoring and measuring environmental performance, transmitting to all professionals the company's commitment to making responsible use of resources, including the prevention of pollution, reuse and proper waste management, as well as the promotion of actions aimed at protecting the environment.

The organisation has implemented a certified Environmental Management System according to the international standard ISO 14001: 2015, following an international multi-site scheme, in a total of 13 countries, in addition to Spain.

Ineco identifies and evaluates its most significant environmental aspects on an annual basis (consumption, generation of waste and emissions, among others) and uses them as the basis for defining annual environmental goals and indicators.

RESPONSIBLE USE OF RESOURCES

The organisation has an environmental management methodology to be followed that includes control of environmental aspects through indicators, data collection, analysis of its evolution and the preparation and publication of periodic follow-up reports.

Ineco is also committed to using renewable energies and making responsible and efficient use of energy. Below is a description of the major initiatives taking place in 2019:

• Information and awareness

During 2019, initiatives were launched in various areas to promote and enhance environmental awareness among employees, including the dissemination of the results of environmental management to all professionals by publishing and updating it on the corporate intranet of the "environmental thermometer".

• Reduction of emissions: calculation and reduction of the carbon footprint

Ineco has calculated its carbon footprint since 2008. The objective is to know and evaluate

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the organisation's greenhouse gas emissions in order to identify opportunities to reduce them. To do this, it calculates the direct emissions generated by the consumption of fuels in the facilities, fuel from fleet vehicles and rented cars and coolant losses in refrigeration equipment, as well as indirect energy emissions due to the consumption of electrical energy in the facilities and others derived from paper consumption, waste production, corporate travel by plane and train, commuting and hotel stays.

The activity carried out by Ineco in 2019 meant the emission into the atmosphere of 9,355 tons of CO2 eq, which represents a decrease of 1.7% compared to 2018. In addition, during 2019, Ineco has collaborated with Bosques Sostenibles to plant 750 trees, absorbing a total of 135 tons of offset CO2eq.

Second Environment Week

During 2019, the second edition of the Environment Week was held under the slogan "no air pollution" to raise awareness of this serious problem worldwide.

The Ineco 2019 Environment Award was also promoted, with the aim of giving visibility to initiatives developed within the organisation that contribute to the preservation and improvement of the environment.

• Energy Efficiency Plan

Ineco has implemented improvements and changes in its headquarters and office facilities with a view to making efficient and rational use of energy, minimising consumption and thus reducing equivalent CO2 emissions into the atmosphere. As a result, a total electricity saving of 5.04% was achieved in 2019 in Spain; and, specifically, at the main headquarters of Paseo de la Habana in Madrid, total consumption decreased by 7.9% (decrease of 8.3% in consumption/person). On the other hand, the total electricity consumption of temporary offices in Spain decreased by 5.26%; and 13.3% consumption per person.

• Mobility Plan

In 2018, Ineco approved the Mobility Plan to promote non-motorised mobility and the use of shared cars, as well as to improve road safety in labour mobility. The commitment to

non-polluting alternative modes of transport is our other main line of action.

Protection of biodiversity

Ineco has established a procedure that provides details of the system to be followed for the management of environmental aspects associated with its activities and services in order to protect biodiversity.



ACHIEVEMENTS



5% savings on electricity consumption in Spain

6.6% reduction in white paper consumption per production in Spain





6% savings on heating fuel consumption

packaging waste per person at company headquarters





Around 2% reduction in Ineco's carbon footprint



Through the use of the voltaic plant at the headquarters, the atmospheric emission of 15,594 kg of CO2eq has been avoided

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9% reduction in kilometres travelled by plane per production



21.7% reduction in



18% reduction in employee stopovers at hotels



Compensation of 135 tons of CO2eq in 40 years

SOLIDARITY

Solidarity has been part of Ineco's identity for years and the arrival of the 2030 Agenda, and its key role in the structure of the company's Strategic Plan, only increases the development of concrete measures, helping to structure and measure its positive impact on each of the SDGs.

The company encourages the participation and involvement of its professionals in solidarity initiatives to achieve a more just and equal society. It therefore has a social action platform, iSolidaria, which is a space directed towards the management of corporate voluntary work where people can consult the initiatives of the company in this field, share experiences or be informed of Ineco's current involvement in social action.

In keeping with its zeal for solidarity, in 2019, the company renewed the collaboration agreement for which it is constituted as Friend Entity of Fundación Lealtad to guarantee the highest level of transparency and objectivity in its participation in the different programmes and social actions.

In 2019, Volunteering and Strategy, an independent organisation specialising in Corporate Volunteering and Social Action projects, also certified Ineco's activity in the field of social action, concluding that the company has collaborated directly with 36 Social Entities in 34 activities, through 971 voluntary participations. These activities are a result of the completion of 3,435 volunteer hours and have directly benefited a total of 214,200 people.





PROFESSIONAL VOLUNTEER

The highly qualified nature of Ineco's to refurbish different areas of the hospital and equip the maternity and paediatric ward, workforce has enabled it, in its social action which will improve the sanitary conditions of initiatives, to focus on activities in which it more than 15,000 people. can best contribute by providing greater added value and which are also in line with **3.** IMPROVED ACCESS TO WATER the strategy of the organisation, based on the continuous improvement of its employees' AND SANITATION AT THE MOULIN capabilities. For a number of years now, Ineco **COMMUNITY HEALTH CENTRE IN** has had a professional corporate volunteer **GROS-MORNE, HAITI.** programme in collaboration with various Led by Cesal, the aim is to contribute to NGOs belonging to Fundación Lealtad, in which employees put their training and the improvement of the service provided by renovating the drinking water system, facilities technical knowledge at the disposal of and toilets. This rural health centre cares for charitable projects in developing countries. more than 6,000 people in the area.

In 2019, 3 projects that were 100% funded by Ineco were started and will benefit from the supervision and management of the company's technical teams. Their completion and commissioning are scheduled for 2020 and will improve the standard of living of over 22,000 people.

. CONSTRUCTION OF A COMMUNITY CENTRE IN RASCOLA/KUDUSURU. INDIA.

The project, led by Itwillbe, promotes the creation of a safe place to develop the potential of the community in which educational activities for children and training for adults can be carried out. In its first 5 years, the centre will have a positive impact on the lives of more than 300 children and teenagers from several neighbouring villages, reducing division between castes and preventing young people from becoming involved in crime by occupying them with more beneficial activities.

2. REFURBISHMENT AND SETTING **UP OF A MATERNITY AND PAEDIATRIC** WARD AT BOR HOSPITAL IN SOUTH SUDAN.

It is a project led by Doctors of the World whose goals are to improve the hygiene conditions of the facilities; prevent and control infections; and provide quality healthcare to the population. Ineco's collaboration will help

INTEGRATION INITIATIVES

In 2019, Ineco continued with the Integration **Plan**, which was intended for people with disabilities or belonging to groups at risk of social exclusion, contributing to improve their employability and promoting social awareness in this regard.

Ineco also awarded five Once Foundation internships in 2019 to highly qualified university students with disabilities in order to contribute to their training and increase their employment opportunities.

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Volunteer participations



Volunteer hours





Direct beneficiaries





Activities

CORPORATE SOLIDARITY DAY

- / Participation of 16 NGO
- / solidarity concert
- Fundraising for each of the four selected projects

NINTH EURO SOLIDARITY CAMPAIGN

Campaign in which employees donate a percentage of their monthly wages to finance the project "Improving nutritional care for children with severe acute malnutrition in Jharkhand, India", led by Doctors Without Borders.

YOU CHOOSE CAMPAIGN

Employees propose and select three NGO with which they want the company to collaborate in support of their social activities.



Ineco once again joined the fight to improve the capabilities and standards of living of the disabled, organising a transport gymkhana in collaboration with the Adecco Foundation and Metro de Madrid.

Outstanding solidarity initiatives

EMERGENCY ASSISTANCE FUND

Since 2009, Ineco has collaborated with the Red Cross through the Emergency Assistance Fund and the organisation's emergency appeals campaigns.

SDG TO SCHOOL

Workshop on SDG given by Ineco volunteers to more than 2,000 primary school children in collaboration with the Volunteering and Strategy Association.

CHALLENGE 2019

Ineco team (made up of 150 volunteers, employees and their families) ran 1,200 km in the charity run organised by Action against Hunger with the aim to provide treatment for children with nutrition problems.

ADAPTED HIKING

Ineco participated in a day of adapted hiking in collaboration with the Fundación Deporte y Desafío (Sport and Challenge Foundation).

EMPLOYMENT PROGRAMME

The company collaborated with the Norte Joven Cultural Association through several corporate volunteer activities to help them sail through their first job interview and further professional career.

GIFT OF COMPANY PROGRAMME

A team of 10 people volunteered to accompany elders for a day organised by Grandes Amigos Association.

YOU ADD CAMPAIGN SOLIDARITY CHRISTMAS

- Operation Kilo: around 100 kg of food that was donated to the Madrid Food Bank
- Toys: donated to the No Child without a Smile Association
- Baby clothes: donated to the Mothers' Network Association

BOTTLE TOPS FOR A NEW LIFE

Ineco employees managed to collect 400 kg of bottle caps for Seur Foundation to raise funds to help children with illnesses not covered by ordinary health systems.

COMPLIANCE

Ineco adopts corporate compliance as an essential part of its corporate culture. The company has a **Compliance Programme** that integrates processes and policies aimed at preventing and avoiding actions that are contrary to the law, and which enables the detection and management of risks of non-compliance with internal and external regulatory obligations in its business area. New safety measures were established to this end in 2019 in order to advance with crime prevention.



The Regulatory Compliance Committee

(CCN), the body in charge of all functions and responsibilities strictly related to surveillance and control in compliance with the Crime Prevention Programme, is made up of members of the company designated by the Board of Directors. Its functions include:

- Analysis and monitoring of inquiries and complaints received.
- Establishment, analysis and monitoring



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of training plans on the subject in question, given to all members of the organisation.

- Analysis and updating of the internal policies that affect the Programme
- Monitoring of legislation and jurisprudence in the field of compliance, for updating and adapting the programme implemented at Ineco.
- Contribution of proposals and actions.

OUTSTANDING ACTIONS

Durante 2019, se han llevado a cabo acciones que conviene destacar:

TRAINING IN COMPLIANCE MATTERS

Training of local staff (branches and subsidiaries) in compliance matters.

STATEMENT OF COMPLIANCE

Preparation of a Statement of Compliance for business partners, both national and international.

ACTIONS DERIVED FROM INTERNAL INVESTIGATIONS

Due to the particular importance given to respect for the integrity of members of the organisation, the CCN has considered it essential to reinforce the latter's values and ethical standards to prevent the occurrence of disrespect or violation of the rights of workers. It has also given a special reminder of the obligation of all members of the organisation, especially those who are in charge of teams, to preserve and maintain the confidentiality of specially protected sensitive personal data relating to affiliation, sexual orientation, religious or political conviction.

COMPLIANCE CHANNEL

Filing of the anonymous complaint in the Compliance Channel - channel for complaints and inquiries addressed to the CCN, available to all Ineco staff. Employees may bring to the attention of the CCN facts or conduct of which they are aware that allegedly took place outside of the company's ethical standards and could constitute a crime.

This organization and management model applies to Ineco, as a legal entity, as well as the following natural persons: company directors and managers; directors, either individually or as members of a collegiate body; and employees, regardless of the position they hold or the type of employment contract signed, including interns and staff made available to the company by temporary employment agencies. In addition to the above, the model has been extended to its suppliers, through the publication on the corporate website of the company's catalogue of forbidden conducts, and a responsible statement that every supplier must hand in signed, as part of the administrative documentation for each purchase file.

Ineco has a high commitment to ethics and creating a true culture of compliance is part of the company's DNA. Ineco's Compliance Program generates a double value: it is a guarantee of respect for legality and of trust in its stakeholders, and it is a mechanism for exonerating or mitigating the company's criminal liability in the event that certain crimes are committed by members of the organization.





7 ANNEX



BALANCE SHEET

ASSETS	2019	2018
NON-CURRENT ASSETS	17,185,997 €	16,736,698 €
Intangible assets	983,912€	671,956€
Computer applications	983,912€	671,956€
Tangible assets	9,211,217 €	9,100,530€
Land and buildings	5,070,334€	5,460,148 €
Technical facilities and other tangible assets	4,140,883€	3,640,382€
Long-term investments in group and associate companies	712,735€	697,852€
Equity instruments	712,735€	697,852€
Long-term financial investments	795,546€	743,999€
Other financial assets	795,546€	743,999€
Deferred tax assets	5,482,587 €	5,522,361 €

CURRENT ASSETS	200,482,739 €	183,482,962 €
Inventory	2,633,435 €	2,198,953€
Advances to supplies	2,633,435€	2,198,953€
Commercial debts and other accounts receivable	106,433,010 €	97,121,026€
Customers for sale and provision services	47,453,488€	43,914,642€
Customers, group and associate companies	54,539,632€	49,104,678€
Various debtors	707,526€	574,594€
Staff	331,265€	939,290€
Other credits with Public Administrations	3,401,099€	2.587,822€
Short-term investments with group and associate companies	7,254 €	40,655€
Other financial assets	7,254 €	40,655€
Short-term financial investments	3,681,300€	2,562,072€
Credits to companies	3,617,534 €	2,507,611€
Debt securities	314 €	-
Derivatives	3,127 €	328€
Other financial assets	60,325 €	54,133€
Short-term accruals	2,486,676€	1,955,456€
Cash and other equivalent liquid assets	85,241,064€	79,604,800€
Treasury	82,892,906 €	79,604,800€
Cash equivalent	2,348,158€	-

NET EQUITY AND LIABILITIES

NET EQUITY
Own Funds
Capital
Capital suscribed
Issue premium
Reserves
Legal and statutory
Other reserves
Results for the year
Subsides, donations and legacies recived

NON-CURRENT LIABILITIES

Long-term provisions Other provisions Deferred tax liabilities

CURRENT LIABILITIES

Short-term provisions
Short-term debts
Derivatives
Other financial liabilities
Short-term debts with group and associate companies
Commercial debtors and other accounts payable
Suppliers
Suppliers, group and associated companies
Various creditors
Staff (compensation pending payment)
Other debts to Public Administrations
Customer advances

TOTAL ASSETS

200,219,660 € 217,668,736 €

As of december 31 st 2019

2018

85,147,105

99,345,445 €

2019

99,321,417 €	85,115,706 €
8,250,660 €	8,250,660 €
8,250,660€	8,250,660€
12,857,007 €	12,857,007 €
56,590,351 €	56,590,351 €
1,650,132€	1,650,132€
54,940,219 €	54,940,219€
21,623,399 €	7,417,688 €
24,028 €	31,399 €

321,682 €

214,511€	251,574 €
214,511 €	251,574 €
55,723€	70,108 €

114,750,873 €

4,189,434€	12,387,071 €
63,241 €	50,270 €
16,350€	3,378 €
46,891€	46,892€
-	-
)3,800,382€	102,313,532 €
41,647,406€	38,390,886 €
292,962€	238,844 €
16,452€	11,216 €
3,496,786€	4,355,788 €
12,368,008€	10,623,879 €
15,978,768€	48,692,919€

118,053,057 €

270,234 €

40,071 €	
-	
103,800,382€	
41,647,406 €	
292,962€	
16,452€	
3,496,786€	
12,368,008 €	
45,978,768€	

PROFIT AND LOSS STATEMENT

CONTINUING OPERATIONS

Net turnover	304,653,566 €	273,786,981 €
Sales	304,653,566 €	273,786,981€
Supplies	(58,180,536 €)	(60,387,065 €)
Works performed by other companies	(58,180,536 €)	(60,387,065)€
Other operating revenue	1,879,994 €	2,170,852€
Accessory and other current revenue	1,356,745€	1,642,255€
Operating subsidies included in income for the year	523,249€	528,597 €
Personal expenses	(177,377,130)€	(158,158,583 €)
Wages, salaries and similar	(129,686,934)€	(115,652,188 €)
Social charges	(48,940,392 €)	(42,506,395 €)
Provisiones	1,250,196 €	-
Other operating extenses	(41,009,115 €)	(46,337,984 €)
External services	(32,108,713 €)	(30,495,123 €)
Taxes	(6,293,920 €)	(7,558,298 €)
Losses, impairment and changes in provisions for commercial operations	(2,606,482 €)	(8,278,435 €)
Other current management expenses	-	(6,128 €)
Amortization of assets	(3,104,234 €)	(2,278,757 €)
Overprovision	553,990€	-
Impairment and result from disposals of fixed assets	(20,009 €)	(1,742 €)
Impairment and losses	-	(1,742 €)
Losses on disposals and other gain and losses	(20,009 €)	
Other results	(19,348 €)	19,839€

2019

2018

OPERATING INCOME

Financial revenues
From stakes in equity instruments
In group and associated companies
From marketable securities and other financial in
From third parties
Financial expenses
For third-party debts
Changes in fair value of financial instruments
Trading portfolio and others
Currency exchanges differents
Impairment losses and income from disposal of financial instruments
Gains/losses on disposals and other
FINANCIAL RESULTS
RESULTS BEFORE TAXES
Income taxes
PROFIT FOR THE YEAR FROM CONTINUING OPERATIONS
RESULTS FROM THE YEAR

As of december 31 st 2019

	27,377,178 €	8,813,541 €
	1,396,974 €	446,811 €
	-	-
nstruments		
	1,396,974 €	446,811€
	(321,559 €)	(195,830 €)
	(321,559 €)	(195,830 €)
	(10,172 €)	(16,727 €)
	(10,172 €)	(16,727 €)
	210,940 €	936,500 €
	3,810€	(35,913 €)
	3,810€	(35,913 €)
	1,279,993 €	1,134,841 €
	28,657,171 €	9,948,382 €
	(7,033,772€)	(2,530,694 €)
	21,623,399 €	7,417,688 €
	21,623,399 €	7,417,688 €



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