



In Ineco, we give priority to our clients. We are well aware that it is not only a matter of satisfying their needs, but also advancing future scenarios to offer them flexible, excellent and high quality solutions This commitment would not be possible without focus on **innovation**

Innovation, key driver



STRUCTURE

Ineco's Innovation program and Knowledge Management model are focused on facilitating the development of Innovation and the best use of Knowledge.















Innovation, key driver



INVOLVEMENT

Relevant figures

Ineco invests in research, development and innovation to increase the competitiveness and quality of its services.

R&D+i effort

2.47 M€

Innovation intensity

1.09%*

Personnel involved in innovation projects

78

persons

Hours dedicated to innovation projects

29,440
hours

% of all personnel involved in innovation projects

7.1%

^{*} Intensity in innovation is understood as the relationship between the effort in innovation and the annual turnover.

Innovation Projects



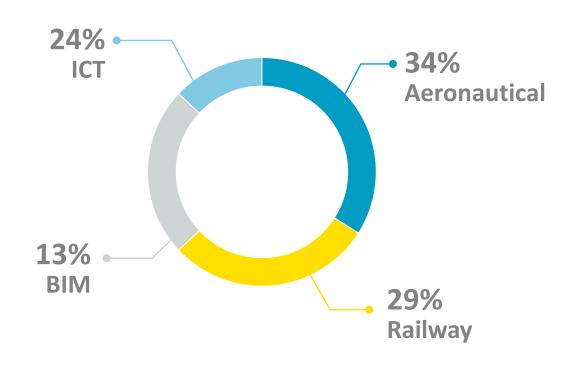
FIGURES AND SECTORAL DISTRIBUTION

INNOVATION PROJECTS DURING 2018

COLLABORATIVE PROJECTS

PROJECTS 37

INNOVATION PROJECTS BY SECTOR



Innovation, key to success

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NEW TRENDS: TRANSFORMING PUBLIC ADMINISTRATION

New technologies have changed our way of life and they are a key factor for Public Administrations, so we must be able to offer new services that create a positive impact on society. DIGITAL TRANSFORMATION MOBILITY AS A SERVICE PREDICTIVE MAINTENANCE **SMART PLATFORMS BIG DATA**

Innovation, key to success



NEW TRENDS: TRANSFORMING PUBLIC ADMINISTRATION

Digital administration improves collaboration between Public Administrations and communication with citizens, through the use of new technologies combined with organizational changes.



Digital transformation of Justice Administration

Ineco provides support to the Spanish Ministry of Justice since 2016 in different activities related to information and communication technologies (ICTs), mainly to electronic administration and the service this provides to Justice Administration.



Support to Central Spanish Administration

Ineco provides support to the General Secretariat of Digital Administration since 2016 to promote some of the strategic information and communication technology (ICT) projects, planned in the Commission for the Reform of Public Administrations (CORA)

Innovation, key to success

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NEW TRENDS: TRANSFORMING PUBLIC ADMINISTRATION

Leaders in BIM methodology: es.BIM coordination and management (Spanish Ministry of Public Works)





es.Bim is a group opened to all the involved agents (administrations, engineering firms, construction companies, universities, professionals ...) and its main mission is BIM implementation in Spain. Ineco coordinates the initiative and participates in several working groups.



BIM methodology is an authentic technological revolution

Collaborative projects



TOP PROJECTS



Participation in SESAR and SESAR 2020 Programs: modernization of air traffic control in Europe.



TERRA: CNS architecture to enable UAVs traffic control in very low flight levels (VLL).



IMPETUS: new information services to enable drone operations.



DOMUS: demonstration of the deployment of the first U-Space system services in Spain.



Capacity4Rail: increase in capacity for the European railway network from an integral perspective.



Next Generation Train Control: new modes of train traffic control.



STARS: addresses the use of virtual ERTMS balises (with GNSS) in low traffic density lines.



ERSAT GGC: research on the use of Galileo for the characterization of railway lines .



VITE: virtualization of part of the on-site ERTMS systems tests.



INFRA-ADAPT: utilization of BIM methodology for the operation of roads, in order to enhance their resilience.

Internal projects



TOP PROJECTS







BLOCKCHAIN: Strategic analysis on the Blockchain technology and its application in the BIM methodology.



AuditBIM: Development of a control procedure for BIM models.



SMART STATION: Study of the transformation of the railway station and the importance of the traveler's experience.



CITYNECO: Smart City Platform that comprises different verticals regarding mobility.



SAID: Solution for the digitalization and cataloging of documents for their transformation and management.



RPAS: Air navigation aids calibration using UAVs.



FACTOR HUMANO: Methodology to identify and mitigate risks due to human factor in infrastructures.



TEACompaño: App that allows to structure and simplify the process of travelling by plane to children with ASD.

Dissemination. Knowledge Management



Innovative culture:

ineco innova...... **Conferences about innovation internal projects,** with the aim of promoting the company's innovation and collaboration between different areas of the organization.



Conference on the deployment of ERTMS in the National Network (July 2018)



Conference on Blockchain (December 2017)





Innova Awards: Annual talent recognition to our company's professionals in their search for the best innovative solutions in the field of transport.

Lessons Learnt Awards: Stimulate the identification of "Lessons Learnt" with the purpose of creating value and generating knowledge for the future.

Participation in Technological Platforms





Spanish Railway Technological Platform



Spanish Construction Technological Platform



Railway Innovation Hub



Spanish Mobility and Automotive Technological Platform



European Innovation Partnership on Smart Cities and Communities

Innovation Dissemination



Ineco seeks to bring the concept of innovation beyond the internal boundaries of the organization:

• Presence in conferences and national and international events in order to give visibility to the company and foster relationships:











Participation in award and competition calls to promote innovation projects



RONIN project

- Awarded with the GoODS! recognition for its contribution to the 2030 sustainable development goals.
- Finalist in the "Ponle Freno 2019" awards (Atresmedia) in the category "Axa Innovation and road safety development"



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