



Annual Report 2018



To mark the end of 2018, and as is customary, Isdefe presents its Annual Report 2018, which includes the company's activities and results during this period, and all the agencies and institutions to which it provides service. The report also reviews the organisation's performance in the three aspects of sustainability: economic, social and environmental. Isdefe, aware of the importance of transparency, integrity and business ethics, has decided once again to endorse this report through the 10 Principles of the United Nations Global Compact and the GRI Standard reporting methodology. By doing so, the company aims to demonstrate its ability to generate shared value in the areas in which it operates and its commitment to its environment.



The digital version of the Annual Report is available at: http://informeanualisdefe.es/en/

In addition, in 2018 Isdefe published its Non-Financial Information and Diversity Statement under Law 11/2018. Some of the data from the statement have been included in this Report.

The Non-Financial Information and Diversity Statement is available at:

https://www.isdefe.es/informaci-n-no-financiera



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President's Letter

For the last year, the Secretariat of State has been making great efforts, after some years of a complicated economic situation, to boost modernisation programmes in those essential capabilities which are required in national defence, the guarantee of our sovereignty, values and welfare.

The new programmes have different objectives including maintaining our influence in the international arena where new initiatives connected to the European Common Security and Defence Policy, such as the European Defence Action Plan and the Permanent Structured Cooperation (PESCO), will constitute a new environment in which it will be essential to foster innovation and to support industrial and technology-based resources in our country.

In this context, it is a privilege to have the opportunity to once again introduce the Annual Report for Ingeniería de Sistemas para la Defensa de España (Isdefe), the pages and website of which describe the activity of the organisation together with its economic, social, environmental and corporate governance management for the year 2018.

Isdefe continues to be a solid and fundamental tool at the service of the Ministry of Defence, carrying out multiple activities among which the support for managing our programmes may be highlighted. Knowledge generated throughout many years has been equally beneficial when applied to other fields of the Spanish Public Administration; Isdefe has become our flagship inhouse technical service provider for defence and security and is active in other fields such as space, transport, public administrations, ICT and energy.

The current pace of technological transformation will pose great challenges and profound changes. The experience acquired by the organisation over more than 30 years, together with its commitment to excellence and its spirit of innovation, are testament to its ability to tackle the objectives the Ministry and the Administration are setting themselves for the future.

The combination of know-how and the daily efforts of each of its employees are the organisation's main assets. With these words, I would like to recognise and thank their work and their vocation for public service, whilst I encourage them to keep working with the same intensity for the common project Isdefe represents.

Ángel Olivares Ramírez
Secretary of State for Defence
Isdefe's President



Chief Executive Officer's Letter Another year has passed and once again I have the satisfaction to introduce Isdefe's Annual Report 2018, which summarises the activities, action lines, business figures, plans, events, and achievements of the Company.

During this year, Isdefe has continued its consolidation as an in-house technical service provider of the Administration, mainly in domains of activity related to defence and security, as well as others of high added value. We may highlight that total revenues in this fiscal year reached €146.6 M, of which the share related to our activity as an in-house technical service provider accounts for 89 %. We have continued to develop our activity within our usual sectors, furthering our activity in areas of the National Security Strategy, and we have strengthened strategic projects in R&D&i, by collaborating with universities and leading institutions. We have also made progress towards developing the areas identified for transformation and development of human resources and digital transformation, and towards ongoing strategic foresight to identify challenges between now and 2030. On the international stage, Isdefe participated in brand new initiatives in the field of European Defence fostered by the European Union, including projects of high national interest.

All our actions have been carried out under a commitment to guarantee the company's sustainability and its financial balance, to maximum integrity and transparency, and to best practices in corporate governance. Once again and following the path taken in previous years, we have renewed our commitment to the United Nations Global Compact, the greatest worldwide public and private alliance for sustainability.

Finally, I would like to thank the staff for their efforts and dedication to achieving results and the high level of satisfaction among our clients recorded during this period. Without their commitment and professionalism these results could have never been achieved.

Isdefe's Annual Report 2018 is available in the usual formats and on the dedicated website www.informeanualisdefe.es/en/

Francisco Quereda Rubio Chief Executive Officer



1 Our organisation

Isdefe (Ingeniería de Sistemas para la Defensa de España, S.A., S.M.E., M.P.) is a State-owned commercial company founded in 1985 and owned by the Ministry of Defence through the Instituto Nacional de Técnica Aeroespacial (INTA) - National Institute for Aerospace Technology - which holds all of its share capital.

Isdefe is the foremost in-house technical service provider to the Spanish Administration in the field of Defence and Security and as such, it provides services to the Ministry of Defence, Home Affairs and the rest of the State General Administration. Likewise, it puts its knowledge and expertise at the disposal of Administrations from other allied countries and international public bodies, participating in initiatives of interest for Defence and Security working for the European Commission, the European Defence Agency (EDA), the European Border and Coast Guard Agency (Frontex), the European Space Agency (ESA), the European GNSS Agency (GSA), and the North Atlantic Treaty Organisation (NATO).



Our Mission, Vision and Values



MISSION

Support the Ministry of Defence, the Public Administrations and international institutions in areas of technological and strategic interest by providing high-end consulting, engineering services, as well as management, technical operation and maintenance services for space sites.



VISION

Grow as a leading company in multi-disciplinary consulting and engineering, by developing high-end innovative, profitable and socially beneficial projects.



VALUES

Independence

We always defend the interests of the Spanish Administration against any kind of industrial, commercial or economic constraint.

Proactivity

We anticipate needs by providing innovation in our solutions.

Global Vision

We are a multi-disciplinary organisation with a great diversity of professional figures which in combination provide a comprehensive service portfolio.

Commitment

We are committed both to the public bodies we provide services to and to our organisation and the rest of the society thanks to a work methodology based on ethics and professionalism.

Expertise and Knowledge

Our activity is geared towards providing knowledge developed over more than 30 years of service and offering efficient solutions.



Sectors of activity and services

We provide engineering and consulting services in the following sectors of activity:



Defence and Security



Space



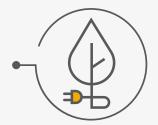
Transport



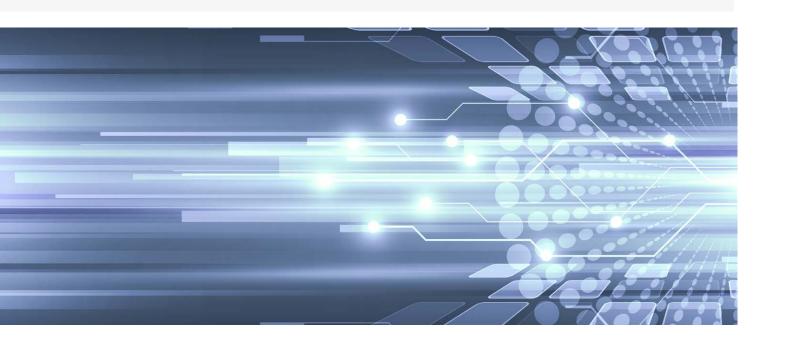
ICT Information
Technologies and
Telecommunications



Public Administrations



Energy





Strategies, objectives and action lines

The most relevant aspects of Isdefe's management in 2018 have focused on consolidating and boosting Isdefe's activity as the in-house technical service provider of the State General Administration (SGA) in engineering, consulting and technical assistance services. Particularly notable are those related to Defence and Security, economic and financial support, quality of products and services, international presence, research and development, and good governance practices and corporate responsibility.

Isdefe, as a key provider of technological solutions to the Ministry of Defence and the entire Public Administration, has continued to conform its strategy during 2018 to the Action Plan 2017-2021

The Plan places special emphasis on bolstering support for the Administration in other areas included in the National Security Strategy and in its technological modernisation, promoting the transformation and development of human resources, modernising corporate services, incorporating new technologies into processes,

and following the guidelines set out in the Digital Transformation Plan for the State General Administration and its public agencies.

Moreover, it consolidates our commitment to participate in programmes carried out by international bodies, particularly, the new framework of the European Defence Action Plan. The Plan will strengthen Isdefe in the activities and environments in which it was created, particularly, those of defence and security, and this will allow us to adapt to new needs by combining our knowledge and expertise with synergies gained in other sectors of activity.

Isdefe, by virtue of its commitment to good corporate governance, has opted for a governance management model supported by ethics, compliance and transparency. This commitment is one structuring element in Isdefe's strategy to fulfil its objective of supporting the Ministry of Defence, the Public Administrations and international institutions in areas of technological and strategic interest through high-end consulting and engineering services, as well as management, technical operation and maintenance services for space sites as stated in the Mission and Values of our company.

In light of the above, activities aimed at maintaining a culture of integrity need to be highlighted. They are based on management practices that assure legal compliance with regulations and standards for good corporate governance.





For the period 2018-2022, the following **strategic objectives** have been set up:



Our **action lines** for the period are focused on:



- Continue working on Isdefe's consolidation as an individualised in-house technical service provider for the Administration in technology-related areas, mainly those associated with defence and security, providing high added value, as well as analysing and adapting the activity in areas considered "non-instrumental".
- Enhance economic-financial sustainability in the short and mid-term.
- Boost modernisation of corporate services by integrating new technologies into processes and following the guidelines set out in the Digital Transformation Plan of the SGA and its public agencies.
- Develop human resources, training, motivation, recognition and talent retention in the framework of the public sector.
- Foster participation in projects and programmes at international bodies and institutions (EU, NATO, EDA, OSCE, ESA, Eurocontrol...) and, particularly, within the new framework set up by the European Defence Action Plan.



Our business in figures

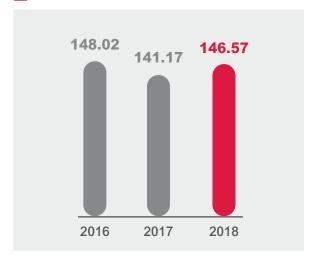
Isdefe is considered the in-house technical service provider of the State General Administration and bodies, entities and institutions linked or attached to the SGA. Due to its nature and under Article 3 of Public Sector Procurement Act 9/2017, services carried out by the Company for the public sector must be higher than 80 % of the overall turnover.

This turnover needs to be indicated on the annual accounts report of the corresponding fiscal year and verified by external auditors and stated on the

Audit Opinion Report. Other activities not included in the role of individualised in-house technical service provider are carried out both for national and international institutions.

Likewise, as it is an instrumental means, this fact determines that its results are the consequence of actual costs plus a margin of sustainability (4 %) established on the resolution of the effective approved fees¹.

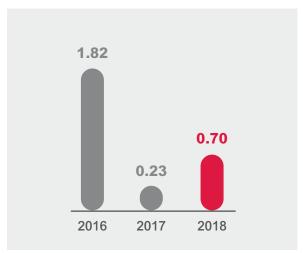
Turnover Net Amount (million €)



Net Result (million €)

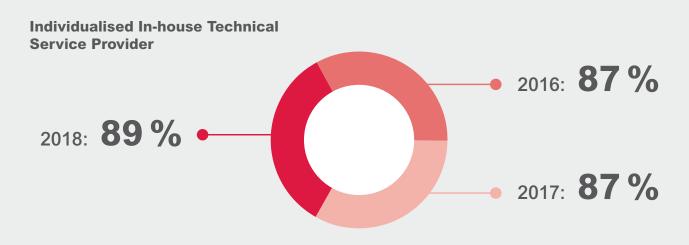


R&D&i Projects (million €)



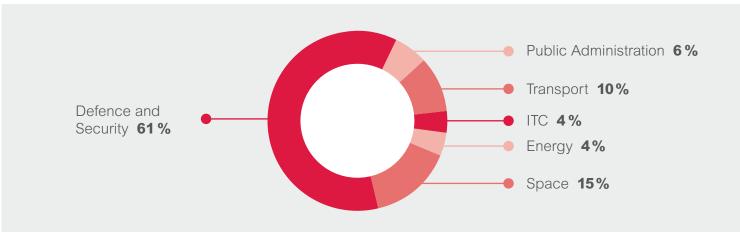
(1) For further information, see section "Fees" on the non-financial information statement: https://www.isdefe.es/informaci-n-no-financiara

For the last three years, the turnover from Isdefe's activity as an in-house technical service provider was:



Engineering and Consulting Activities

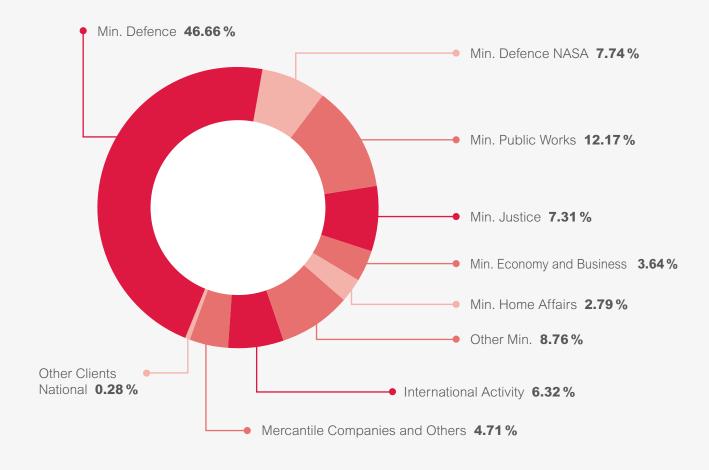
The activities being carried out per sector of activity or entity are:



The three sectors showing the greatest volume of activity for the past year were Defence and Security, reaching 61 % of the total, followed by Space sector (15 %) and Transport (10 %).

Concerning the entities and organisations to which service has been provided, as shown below, activities for the Ministry of Defence represent nearly half of the global activity carried out by the organisation.

Isdefe's Activity per Institutions, Public Bodies and Clients



With respect to turnover, the total reached was €146.58 million, of which 129.88 million come from the activity carried out as an individualised in-house technical service provider, an increase of more than 5 % compared to the preceding year.



Locations

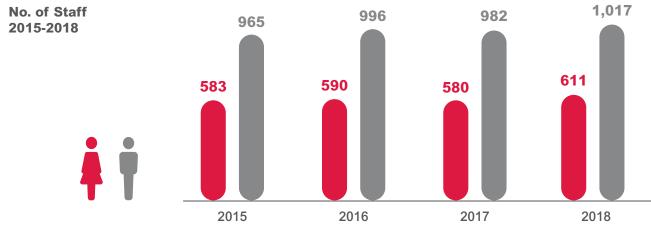
Our corporate office is at Beatriz de Bobadilla, 3, Madrid. There the Company's Management and 77 % of our staff are located. Other work sites in which we carry out some of our activities are in: Torrejón de Ardoz, Robledo de Chavela, Villafranca del Castillo, Cebreros, the Canaries and Cartagena.

However, most of the operational activities are deployed at the work sites of the institutions and clients we provide services to.



Isdefe staff at December 31st, 2018







International presence

Isdefe's activity is mainly focused on performing its mission as the leading in-house technical service provider in defence and security, in areas of technological and strategic interest for the Spanish Public Administration. In this context, apart from the actions Isdefe carries out at national level commissioned by the Administration, there are also other activities which are developed for other international bodies and in other countries, particularly, at european level.



Most of Isdefe's international activity in 2018 consisted in supporting the Ministry of Defence in the new defence-related initiatives at european level, such as the Commission-led European Defence Action Plan (EDAP) and the action lines of the EU's Permanent Structured Cooperation in defence (PESCO). Both initiatives aim to increase cost effectiveness among Member States when acquiring joint capacities, reinforce European citizens' security and foster a competitive and innovative industrial sector.

Defence and Security

European Commission

European Defence Agency (EDA)

European Border and Coast Guard Agency (FRONTEX)

Organisation for Joint Armament Co-operation (OCCAR)

NATO: NATO Communications and Information Agency (NCIA), NATO AEW&C Programme Management Agency (NAPMA), NATO Support and Procurement Agency (NSPA), Allied Command Transformation (ACT), Cooperative Cyber Defence Centre of Excellence (CCDCOE)



Transport

European Aviation Safety Agency (EASA)

Single European Sky Joint Undertaking (SESAR-JU)



Space

European Space Agency (ESA)

European GNSS Agency (GSA)

European GNSS Service Centre (GSC)

European Union Satellite Centre (SatCen)

National Aeronautics and Space Administration (NASA)



Public Administrations & Energy

Support to Debt Conversion Programmes of the Ministry of Economy and Business and FIEM of the Ministry of Industry, Commerce and Tourism.

- Projects in the field of energy (electric grids, renewable energy and new technologies) in Egypt, Jordan, Kenya, Senegal, Madagascar and Bolivia.
- General hospitals (Kawolo and Busolwe), Ministry of Health of Uganda.
- Central American Bank for Economic Integration (BCIE), international airport in Palmerola, Honduras.



Entities and organisations we provide services to

Public Administration

GOBIERNO DE ESPAÑA	MINISTERIO DE DEFENSA	GOBIERNO DE ESPAÑA	MINISTERIO DE SANIDAD, CONSUMO Y BIENESTAR SOCIAL
GOBIERNO DE ESPAÑA	MINISTERIO DE FOMENTO	GOBIERNO DE ESPAÑA	MINISTERIO DE INDUSTRIA, COMERCIO Y TURISMO
GOBIERNO DE ESPAÑA	MINISTERIO DE JUSTICIA	GOBIERNO DE ESPAÑA	MINISTERIO DE ASUNTOS EXTERIORES, UNIÓN EUROPEA Y COOPERACIÓN
GOBIERNO DE ESPAÑA	MINISTERIO DE ECONOMÍA Y EMPRESA	GOBIERNO DE ESPAÑA	MINISTERIO DE POLÍTICA TERRITORIAL Y FUNCIÓN PÚBLICA
GOBIERNO DE ESPAÑA	MINISTERIO DE INTERIOR	GOBIERNO DE ESPAÑA	MINISTERIO DE HACIENDA
GOBIERNO DE ESPAÑA	MINISTERIO DE TRANSICIÓN ECOLÓGICA	GOBIERNO DE ESPAÑA	MINISTERIO DE CULTURA Y DEPORTE
GOBIERNO DE ESPAÑA	MINISTERIO DETRABAJO, MIGRACIONES Y SEGURIDAD SOCIAL	GOBIERNO DE ESPAÑA	MINISTERIO DE AGRICULTURA Y PESCA, ALIMENTACIÓN
GOBIERNO DE ESPAÑA	MINISTERIO DE CIENCIA, INNOVACIÓN Y UNIVERSIDADES	GOBIERNO DE ESPAÑA	MINISTERIO DE EDUCACIÓN Y FORMACIÓN PROFESIONAL
		GOBIERNO DE ESPAÑA	MINISTERIO DE LA PRESIDENCIA, RELACIONES CON LAS CORTES E IGUALDAD

Other public institutions









































Other international organisations

































Multilateral organisations



Values AND COMMITMENTS

86% ENGINEERS AND GRADUATES 1,628

EXPERT EMPLOYEES

37.5%

WOMEN

Knowledge



Defence and security

- > Planning
- Command and Control Networks and Systems
- > Platforms
- > Technology Centres
- > Logistics
- Intelligence Systems and Electronic Warfare
- > Security in information systems and critical infrastructures
- > Strategic infrastructures
- > Border surveillance and control
- Technological and industrial management
- Crisis and emergencies management systems



Transport

- > Traffic Management
- > Transport Centres
- Advanced Concepts



Public Administrations

- Enhancement and modernisation
- Regulation and supervision of markets



Energy

> Energy diversification and efficiency



Space

- Space stations and infrastructures
- > Satellite applications



Information and Communication Technologies

- > Radio-electric spectrum
- Communication systems and networks

42 h.
IN TRAINING
EMPLOYEE/YEAR

84%
PERMANENT CONTRACTS

89%
INDIVIDUALISED IN-HOUSE
TECHNICAL SERVICE PROVIDER

€380,000INVESTMENT IN R&D&I

COMMITMENT TO EXCELLENCE

PROMOTION OF **TALENT**IN TECHNOLOGY

INNOVATION
AT THE SERVICE OF
DEFENCE AND SECURITY

RELIABILITYOF THE ADMINISTRATION

INTERNATIONAL
PRESENCE IN INITIATIVES
FOR NATIONAL DEFENCE

COMMUNICATIONS OF **SATELLITES**AND EARTH

SAFE TRANSPORT

SECURITY
IN INFORMATION AND
CRITICAL INFRASTRUCTURES

SUPPORT TO SGA IN DECISION MAKING

OBSERVATION

GUARANTEE

FOR BUDGET AND PROGRAMMING IN PROGRAMME OFFICES



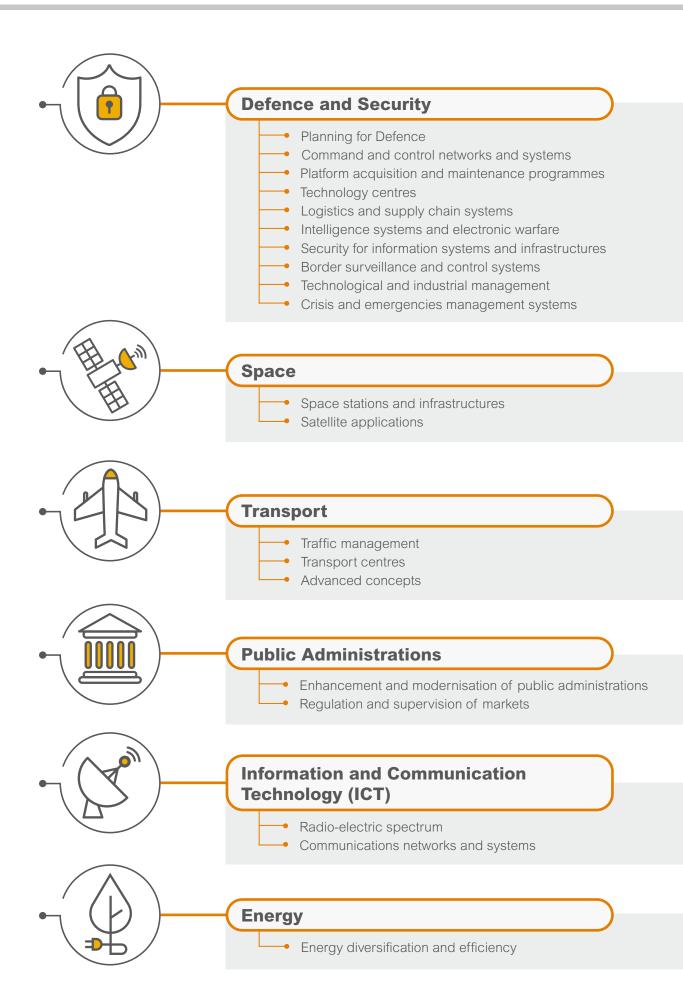
2030 Agenda

EMPLOYEES • ADMINISTRATION • BODIES • SUPPLIERS SHAREHOLDERS • SOCIETY





2 Our activity sectors









Defence and Security Sector

Isdefe was founded with the aim of meeting demands for technological solutions to advanced programmes within the Ministry of Defence and, nowadays, we are the leading in-house technical service provider for the Administration in Defence and Security. We provide technology and strategic consulting to the Ministry of Defence and Armed Forces, Ministry of Home Affairs, National Security and Police Forces and Civil Protection Bodies and international and multilateral bodies, including the European Defence Agency (EDA) and the North Atlantic Treaty Organisation (NATO).



Defence planning

The Ministry of Defence and the European Defence Agency for their processes on military planning use strategic consulting services and the capacity-based planning methodology developed by Isdefe for their military planning processes.

Min. Defence / Secretariat of State for Defence / General Directorate for Armament and Material (DGAM) / Deputy Directorate for Planning, Technology and Innovation (SDGPLATIN) and Defence Staff (EMAD) / Joint Defence General Staff (EMACON)

Participation in the planning process for national defence during its definition and implementation stages:

- Supporting the Joint Defence General Staff in the preparation of the Military Capacities Objective, including the Force's Long-Term Objective. This objective integrates all the material and human resources the Armed Forces need, including the main weaponry systems.
- Support to the General Directorate for Armament and Material in the drafting of the programming of material means (systems and infrastructures) necessary for the Air Force for the years ahead.

Min. Defence / Defence Staff (EMAD) / Joint Centre for Concept Development (CCDC)

Support for defining and developing the concept C-UAS (Unmanned Airborne Systems), and in the methodology for carrying out experiments and data analysis to facilitate the final decision-making process.

Min. Defence I Air Force Staff (EMA)

Support for planning the human and economic resources necessary to implement air operations undertaken by Spain with national and international bodies, both in the field of actual operations and training operations, using the capacities available within the Air Force.

European Defence Agency (EDA)

Continuing service in the field of european defence planning, for updating the Capability Development Plan and in supporting the definition, dissemination and analysis of priorities at european level in terms of defence in order to identify future challenges Europe will face concerning the evaluation and testing of weaponry systems.







Command and control networks and systems

The Ministry of Defence and NATO Communications and Information Agency (NCIA) use Isdefe's services for developing major communications and information System (CIS) and command and control systems at strategic, operational and tactic levels, both in the military scope and for the National Security and Police Forces.

Min. Defence / Secretariat of State for Defence / General Directorate for Armament and Material (DGAM)

Participation in the stages of the process to acquire material resources from the following programmes and projects:

- MC3 Plan (Upgrade of the mobile CIS systems of the Army and the Royal Marines).
- Joint System of Radio Tactics (SCRT).

Support for contracting and monitoring R&D projects related to the national interoperability capacity JISR (Joint Intelligence Surveillance and Reconnaissance) and its evolution based on NATO standards.

Min. Defence / Secretariat of State for Defence / Systems and ICT Centre (CESTIC)

Engineering and management support for the launch and implementation of the Defence Comprehensive Information Infrastructure (I3D) and development and implementation of the Military Command and Control capacities and the satellite communications system (SECOMSAT). Active participation in projects for Wi-Fi local connectivity deployment in military stations throughout Spain.

Min. Defence / Defence Staff (EMAD) / Armed Forces Bureau of Intelligence (CIFAS)

Support for the implementation and maintenance of the JISR capacity in intelligence systems SICONDEF and BICES and for CIFAS participation in JISR manoeuvres (Unified Vision 18, MOPEX18).

Min. Defence / Army / CIS Command (JCISAT)

Supporting the Army CIS Command, Isdefe participated in the definition of national standards for data interoperability and in the international forum of the Multilateral Interoperability Programme (MIP).

Specialised services in the field of architectures of tactical communications systems and C2 based on NAF Methodology (NATO Architecture Framework), and participation in tests associated with adaptation of the Army to the future operational environment (Experimental Brigade 2015, BRIEX 2035).

Support in the control and monitoring of current networks of the C3S (Systems Coordination and Control Centre) for migration to the Information Comprehensive Infrastructure for Defence (I3D) and in the management of the SIMACET network of the Permanent General Headquarters (CGP).

Min. Defence / Defence Staff (EMAD) / Operations Command (MOPS)

Support for the implementation and maintenance of the logistics capacity of J4A of the Operations Command, the NATO Logistics Functional Area Services (LOGFAS) subsystem in the Armed Forces, and the integration of such capacity into other applications; and in the participation in national and NATO manoeuvres.

Min. Defence / Defence Staff (EMAD) Joint Defence General Staff (EMACON)

Support activities for knowledge and information management and participation in multinational programmes to produce military cartography of the geo-strategic areas of interest.

Support to the CIS Command of the Armed Forces (JCISFAS) in issues related to telecommunications, frequencies management and orbit-spectrum integration services.

Support to the Management Centre for Tactical Data Links in technological and transformation issues of Data Links standards and equipment, combined interoperability manoeuvres, and links networks management.

Min. Defence / Army / Army's Command of Logistics Support (MALE)

Participation in updating the Army's command and control networks and systems, support for the specification, verification and validation of new versions of C2 tactic systems.





Support for the implementation of the Air Command and Control System (ACCS) at the entity ARS (Air Control Centre, Recognised Air Picture Production Centre, Sensor Fusion Post) in Torrejón, for decision making on the present and future of the programme in the Air Force, as well as in identifying risks and roadmaps to follow.

Support in planning within acquisition programmes of Air Surveillance capacities in MODO S and MODO 5 and preparation of the technical specifications for their integration at the development phase.

NATO Communications and Information Agency (NCIA)

Management services of NATO programmes for the implementation of information and communication systems of the Alliance in its premises in The Hague and Mons.

Consultancy for collaborating in the technical definition; project implementation follow-up and supervision-monitoring of the tests of the deployable component of NCS (NATO Common Structure): Deployable Ground-Air-Ground (GAG) and Deployable ARS (DARS).



Platform acquisition and maintenance programme

Isdefe's engineering, consultancy and technical assistance services for the lifetime of air, land and naval platforms, including those remotely piloted, guarantee a comprehensive solution including planning, economic and financial, technology-related and maintenance aspects.

Min. Defence / Secretariat of State for Defence / General Directorate for Armament and Material (DGAM) / Deputy General Directorate of for Programmes Management (SDG GESPRO)

Area of land programmes:

Support at the Programme Offices of the Land Systems Command: Pizarro, Ammunition and Wheeled Combat Vehicles (VCR 8x8).

Support to the Land Systems Command in programme management: on-Foot Combatant Information System (SISCAP), in the follow-up and support to the management of the framework agreement for the purchase of 1.5 tonne - wheeled off-road vehicles of the Armed Forces.

Area of rotary-wing air programmes:

Support at the Programme Offices of the Rotarywing Systems Command: NH-90 and TIGRE.

Area of fixed-wing air programmes:

Support at the Programme Offices of the Fixed-wing Systems Command: Eurofighter 2000, A400M, Unmanned Airborne Systems (UAS), and forthcoming air programmes.



Area of naval programmes:

Support at the Programme Offices of the Naval Systems Command:

- Frigate F-110: specialised services for drafting of the Viability Document (DDV) selection of the alternative for obtaining and support to the follow-up of the implementation of Technological Programmes (PROGTEC).
- Submarine S-80: monitoring the building of the first element of the series, S-81P, as well as of the two alternatives for the air independent propulsion system (AIP) to be integrated into the submarine S-80.

Other support services:

In the development and continuing improvement of processes, methodologies and tools for comprehensive management of weaponry and material programmes.

In functional specification in the field of programmes management within the Information System of the Directorate for Execution and Support for Purchasing Armament and Material (SIDEAM).

Participation in NATO Work Group WG1 "Programme Processes" attached to the main group AC/327 "Life Cycle Management Group", currently revising document AAP-48 "NATO System Life Cycle Processes".

Min. Defence / Secretariat of State for Defence / General Directorate for Armament and Material (DGAM) / Deputy General Directorate for Inspection, Regulation and Defence Industrial Strategy (SDG INREID)

Support to Ariane and Multi Role Tanker Transport (MRTT) programmes in activities linked to Official Quality Assurance.

Technical assistance for issuing airworthiness certificates within programmes A400M, NH90 and MRTT.

Support in the implementation of regulations in Spanish Publications of Military Airworthiness Requirements (PERAM) or in the certification processes of inorganic and organic organisations, highlighting the certification process by CAMO (Continuing Airworthiness Management Organisations) of the Air Force.

Permanent support to the processes for the recognition of airworthiness authorities, being relevant the recognition of the US Air Force Airworthiness Authority by Spain and NATO's recognition of DGAM as a Military Airworthiness Authority.



Min. Defence / Secretariat of State for Defence / General Directorate for Armament and Material (DGAM) / Deputy General Directorate for Armament and Material Purchase (SDG ADQUI)

Area of international procurement:

Support for raising the spending ceiling of the Programme EF2000 and the execution, within the Programme A400M, of the agreement addendum signed between the Ministry of Defence and Airbus in September 2016.

Participation in NATO Eurofighter 2000 and Tornado Management Agency (NETMA) decision-making forums and in the Organisation Conjointe de Coopération en matière d'Armement (OCCAR), supporting the DGAM in legal, economic and financial and contractual aspects.

Area of national procurement:

Support for economic and financial control of land programmes: SPIKE, PIZARRO Stage 2 and 8X8, and for the definition of contents in the Execution Order of the Naval Programme F-110 and its Schedules, as well as the implementation of the Supplementary Execution Order of the S-80 Programme.

Min. Defence / Army / Army's Command of Logistics Support (MALE)

Support in the definition and design of the future logistics hub of the Army.

Technical services for drafting the Digital Transformation Plan (4.0) for logistics support 2035. A highlight is the implementation of models on predictive maintenance for determining needs during the life cycle of Weaponry Systems and the proposal for implementing additive manufacturing in the Army's Command of Logistics Support.

Permanent support in the implementation of Lean Manufacturing methodology in OLCs.

Technical support to the Engineering Command of the Helicopter Maintenance Centre (PCMHEL) in the maintenance of the airworthiness of Weaponry Systems HA-28 Tigre and HT-29 NH90GSPA.

Min. Defence / Secretariat of State for Defence / General Directorate of Economic Affairs (DIGENECO)

Support to the Budgetary Office (OPRE): in financial management of the Special Armament Programmes and in the elaboration of the reprogramming files for its approval in the Cabinet Meeting.

Support to the Cost Evaluation Group (GEC):

- Cost estimates of the life cycle of the systems and infrastructures to be purchased by the Ministry of Defence, in order to analyse programme viability and provide valuable information to planning authorities for decision making, both for long-term planning and for single acquisition per programme.
- Analysis of tenders by contractors for the Ministry of Defence and costs of programmes, verifying the accurate application of the rules set out by the Ministry in terms of costs and prices. This same service is provided to multinational organisations (OCCAR, NETMA).
- Audit on fees to be applied by companies for Defence programmes contracted by negotiated procedure.



Min. Defence / Navy / Logistics Support Command (JAL)

At the Engineering and Shipbuilding Management Unit:

Submarine S-80: follow-up of costs and deadlines using the Earned Value as a control tool.

Frigate F-110: support in economic studies and analysis linked to the process of the future programme procurement.

Maritime Action Vessel IS: analysis of the necessary cost estimates for generating its Viability Documents.

Support to activities within the Platform Department, including structural analysis of submarine S-80 Plus and the revision and generation of its logistics partial plans.

Active participation in the biannual meetings of the NATO STSC Group (Specialist Team on Ship Costing) introducing works carried out on new models for cost estimates.

Technical services for the implementation of the submarine certification programme, tutored by the Submarine Safety (SUBSAFE) Department of the Naval Sea Systems Command (NAVSEA) of the US Navy. Moreover, four certification audits have been implemented: two for the programme S80 Plus

and another two for the dry-dock overhaul of the submarine S-71.

At the Maintenance Management Unit:

Advice on the interpretation and application of the Agreement between the Ministry of Defence and Navantia and its Supplementary Rules, in the initiative Astillero 4.0.

Support to operation of the Centre of Supervision and Analysis of Data of the Navy and its evolution to a model based on the application of Neural Networks to analyse trends that have an impact on the maintenance of different units and systems.

Advice to the contracting body and to contracting representatives in the following activities:

- Public procurement, public e-procurement and administrative procedures.
- Current legislative changes.
- · Processing of procurement files.
- Use of contractual information.

Min. Defence / Air Force Staff (EMA)

Studies on flight viability and security of RPAS-DRONES, in Segregated Air space and/ or controlled by the Air Force.



Min. Defence / Army / Logistics Support Command (MALOG)

Support for the acquisition and management of material for new weaponry systems which have been integrated into the Air Force, notably the support given to the management of the C3 contract for maintenance of Eurofighter until 2021, including material needs monitoring, purchase e-orders and material repair of Eurofighter and support to Wings Supplies.

Collaboration in managing initial purchase e-orders and the Interface with NATO Support and Procurement Agency (NSPA).

Technical assistance for on-board armament upgrading and purchasing programmes (AMRAAM C-7, TAURUS missiles, IRIS-T).



Navantia

Technical assistance at Cartagena shipyard for the Submarine S-80 Programme, through a staff team attached to the Spanish Navy working on Special Services, in different tasks related to the Verification of Operational Requirements, support to the "Safety Programme" and preparation of technical documentation.

Min. Public Works / Administrator of Railway Infrastructures (Adif)

Study on the improvement of maintenance and management processes in the High-Speed network, as well as the associated Information Systems including benchmarking, identification of best practices to be implemented and a serious accident and lessons learnt analysis.

European GNSS Agency (GSA)

Services for the European GNSS Service Centre (GSC): Strategic analysis and definition of the Integrated Logistics Support (ILS). Definition of logistics processes and procedures. Preparing the Maintenance Plan. Adaptation to new GSOp environment. Definition of KPIs and metrics for operations control.

Services for the Galileo Security Monitoring Centre (GSMC): Strategic analysis and definition of the Integrated Logistics Support (ILS). Drafting studies on Failure mode, effects, and criticality analysis (FMECA). Preparing the Maintenance Plan. Definition of KPIs and metrics for operations control.

European Union / EDA

Submission of a study for the definition and deployment of a Multinational Capacity of Deployable Camps for military and civil operations, based on a collaborative Pooling and Sharing strategy.

Min. Defence / Emergency Military Unit (UME)

Support in activities of fleet maintenance including maintenance outsourcing strategies and processes, carrying out analysis studies of breakdowns and the definition of the Integrated Logistics Support (ILS) of new purchases.

NATO AEW&C Programme Management Agency (NAPMA)

Within the Programmatic and Engineering Support for the NATO AWACS Final Lifetime Extension, (FLEP), some tasks have been carried out in relation to the fleet maintenance management with the aim of supporting the lifetime extension programme for these aircraft.





Technology centres

We provide for defence research, development and experimentation centres, interdisciplinary work teams boasting the necessary knowledge and experience in scientific, technical and management environments to carry out activities in the aeronautical and space fields and in technologies related to nuclear, radiological, biological and chemical defence.

Min. Defence / Secretariat of State for Defence I National Institute for Aerospace Technology (INTA)

Support to the Cyber-Security Lab, attached to the Cyber-Security and Communications Department of the Technology Institute La Marañosa (ITM) in tasks of security analysis of source code and vulnerabilities of applications developed by the DGAM, including the suite of tools for Support Services to Spanish Military ISR Interoperability (SAPIIEM).

Certification and valuation of different types of military and transport aircraft: A330 MRTT, EF200, F-18, Harrier, C-101, C295MW, CN235, C212 and A400M, Helicopters: Tigre, NH90, AB212 and Cougar, RPAS European MALE, Milano, Siva, Pasi-II, Pelícano.

Developments and operations of Unmanned Air Platforms: target and decoy DIANA aircraft, RPAS Sica and Milano.

Turbojets: participation in tests under different conditions on Rolls Royce engines such as the Trent-900 and Trent-700 engines.

Aeronautical materials and infrastructures: participation supporting the INTA in different projects both national (GENERA, HELADA, EMEP, RAISELIFE) and European (PHOBIC2ICE, SENTINEL 6 or ATHENA).

Space payloads: participation in projects such as: EXOMARS 2020, MARS20, SOPHI, METIS, SEOSAT/ UVAS, MYRIADE, MAGMA, NEWTON

and RAMAN, RDM (Radiation and Dust Sensor for METEO) of the EXOMARS 2020 mission.

ICT: software developments for tests of tactic links Link16 and Link22 to make the link between the PATRIOT weapon system and the Ballistic Missile Defence (BMD) operations centre.

Space solar cells: valuation of space solar cells for JUICE mission (Jupiter Icy Moons). Collaboration in the launch of a stratospheric balloon with the DoD (USA), NRL (USA).

NBQ: participation in manoeuvres of 44 Proficiency Test (PT). Collaboration with Armed Forces, National Security and Police Forces and National Intelligence Centre (CNI) in dog units training and collaboration with the TEDAX group from the National Police in training sessions.

Missiles: support to the management of a project on a micro-launcher for nanosatellites (PILUM), in its viability stage.

Renewable Energies: participation in tests within the HYCARUS European project for supplying aircraft with fuel cells.

Astrobiology Centre: participation in the Insight mission to Mars led by NASA. Support to the centre's activity.



Logistics and supply chain systems

We provide technical support and services to improve the efficiency and control of the Armed Forces logistics systems, offering solutions for the supply chain and management of logistics centres, in addition to possessing in-depth knowledge of the NATO Codification System Processes.

Min. Defence / Secretariat of State for Defence / General Directorate for Armament and Material (DGAM) / Deputy General Directorate for Inspection, Regulation and Defence Industrial Strategy (SDG INREID)

Support to the National Codification Office (ONC) in Spain in the evolution of the Defence Codification System (SICAD) in accordance with the rules provided by AC/135 from NATO. The NATO Codification System (NCS) is undergoing an in-depth review process leading to relevant changes in the application. Isdefe and the ONC are part of the group NDER (NATO Data Exchange Redesign) which is charge of leading this transformation.

Continuing support services to the second steps in codification of the Army, Air Force and UME.

Min. Defence / Army / Army's Command of Logistics Support (MALE)

Participation in initiatives related to improvements in processes and systems, including:

The functionality of the Integrated Management System of Army Logistics (SIGLE), mainly in purchasing and transport subsystems. Implementation in the ATLAS system and improved calculation of inventory levels of own use of units (NUP) based on the RBS model.

Support in the tender process for renewing the outsourced clothing supply contract (AVET Model).

Participation in the drafting of technical specifications for the purchase of a transport routes optimiser to be integrated with SIGLE.

Support to reactivate the e-processing project with supplies companies following AECOC standards.

Support for the streamlining of the logistics system and development of applications and evolution of the Repository of Logistics Data as a basic tool to carry out analysis and forecasts on historic data.

Support to fabrics engineering in the definition, tender and purchase of extreme cold equipment for mission Enhanced Forward Presence (eFP) in Latvia.

Min. Defence / Navy I Logistics Support Command (JAL)

Support for the evolution in logistics applications GALIA, SIGAPEA, PIDA WEB and JALVAROP.

Participation in training actions in collaboration with the Centre of Higher Administration Studies of the Navy (CESIA), in delivering courses on logistics applications, addressed to Administration Officers and other Officers performing the roles of Chiefs/Officers in Purchasing at Navy departments, as well as staff from the Organisation Teams of the Purchasing Services in Arsenals (EOSA).

Min. Defence / Emergency Military Unit (UME)

Continuing support for the evolution of UME's Logistics System (SIGLUME) and its integration into other systems.

Min. Defence / Air Force I Logistics Support Command (MALOG)

Participation in defining and following up deployment kits for Eurofighter, mainly for Baltic Air Policing (BAP 47) in the Vilkas detachment which involved high operativity, reducing the volume and the amount of material deployed and avoiding hindering operativity of the fleet remaining in the Wings.

Follow-up of the activity of the different fleets, coordinating with artillery premises and logistics hubs the organic production planning and support to the drafting of the annual plan of needs 2018. Setting up of the Spare Parts Purchase Plan for aircraft and drafting proposals for processing spare parts files and follow-up of the management of these.

Support for the implementation of "single sky" regulations in different fleets of the Air Force.

European Border and Coast Guard Agency (FRONTEX)

End of the study on the purchasing and maintenance model so that the European Border and Coast Guard Agency may acquire its own air, land and naval means capacities. This study includes a proposal on how to acquire each capacity, as well as the definition of the necessary logistics model including structures, profiles, and processes to be applied to each type of means and acquisition model.







Intelligence systems and electronic warfare

We collaborate with military and police bodies in the engineering of intelligence gathering systems and electronic warfare, as well as the conceptualisation and tests of inhibition, disturbance or non-authorised communications interception systems in order to support strategic, operational, and tactical commands when developing their missions.

Min. Defence / Secretariat of State for Defence / General Directorate for Armament and Material (DGAM)

Support in the design of the SANTIAGO Stage II Programme through the drafting of a full version of the Design and Development Specifications (DDS), in activities concerning systems and programme management engineering.

Collaboration since the launch of the PAZ satellite in consulting activities and documentation of the new capacity of Earth Observation Space Systems (SEOT).



Min. Defence / Defence Staff (EMAD) Joint Defence General Staff (EMACON)

Technical assistance to the Division of support to the Intelligence Gathering Systems at the CIS Command of the Armed Forces (JCISFAS), developing and monitoring the logistics support and maintenance files, both corrective and ongoing, of the SANTIAGO System during stage 1.



Security for information systems and critical infrastructures

We help to ensure the safety of critical systems, covering all the security-related activities from a comprehensive approach (information, persons, facilities), paying special attention to relevant information systems for national defence and security, the normal operation of the Public Administrations and critical infrastructures.

Min. Defence / Defence Staff (EMAD) / Cyber Defence Joint Command (MCCD)

Engineering and technical assistance for the Cyber Defence Joint Command (MCCD) in the areas of cyber-defence, helping MCCD's plans for gaining defence, operation and response capacities to implement military operations in cyber-space. The scope of the technical assistance encompasses Operations Zone, where Isdefe's engineers are part of the military contingent sent by the MCCD to carry out cyber-defence activities (CIS Security audits and inspections).

Another strategic line in the collaboration with MCCD is the technical support to the NATO Cooperative Cyber Defence Centre of Excellence (CCDCoE), taking part in the organisation of international cyber manoeuvres with great repercussion such as LockedShields and CrossedSwords, implementation of international courses and preparation of reports and studies on Red Team.

Min. Defence / Defence Staff (EMAD) / Joint Defence General Staff (EMACON)

Support to the Joint Action Support Command (JAAC) and the CIS Command of the Armed Forces (JCISFAS) for the implementation in the Spanish Armed Forces of the NATO Federated Mission Network (FMN) Concept. Participation in different national and international work panels and groups and in designing and deploying the Interoperability Laboratory.

Min. Defence / Intelligence National Centre (CNI) / National Cryptology Centre (CCN)

Support to the Certification Body of the National Cryptology Centre for activities carried out in the framework of the National Scheme of Evaluation and Certification of ICT Security (ENECSTIC):

- Certification of ICT security products.
- Accreditation of evaluation laboratories within the National Scheme.



Support in the preparation of Sectoral Strategic Plans related to the ICT and Space sectors. Consultancy services to different fundamental operators for the drafting of Operator Security Plans and Specific Protection Plans.

Min. Public Works / State-owned Ports

Collaboration on port security to make progress towards comprehensive security, by optimising both public-public collaboration with National Security and Police Forces and public-private collaboration.

Support in the definition of regulatory criteria on security, security implementation and dissemination actions, control of compliance with regulations on maritime protection, and in the definition of systems allowing implementation of port security regulations.



Min. Justice / Deputy Secretariat of State for Justice / General Directorate for Registries and Notaries (DGRN)

Advice on systems security, interoperability, efficiency and engineering, particularly, in everything related to the implementation and deployment of the New Civil Registry Model. Technical support in application and compliance with the European General Data Protection Regulation (GDPR) and adaptation of the National Security Scheme (ENS) in the services for which the General Directorate is competent.

Min Foreign Affairs, European Union and Cooperation

Support to activities related to classified information managed by the Ministry and certification of the Ministry's information systems that handle national and/or international classified information.

Min Public Works / Port Authorities

Updating of Protection Plans at Port Premises and drafting of the Specific Protection Plan of different port authorities. Support to develop measures related to regulations on critical infrastructures and maritime protection. Collaboration to carry out the necessary activities to conform the National Security Scheme (ENS) and to draft technical specifications for cyber security services.

Min. Justice / General Secretariat of Justice Administration / General Directorate for Justice Modernisation, Technology Development and Retrieval and Management of Assets

Technical and management support to projects on technology modernisation of Minerva, e-communications, Digital Justice and Dashboards for the follow-up of the Justice Administration and support to the Ministry's participation in European Union projects for interconnecting Justice Administrations, such as eCodex, and acting as the Secretariat of the State Technical Committee of Electronic Judicial Administration (CTEAJE).

Support to Change Management at the Justice Administration for deploying new models for Judicial Office and Prosecution Office, services within the Justice Administration, as well as support in public communications activities by the Ministry and in preparing handbooks on procedures related to the implementation of new technological tools such as those for Digital Justice.

Services in the planning, design and implementation of approval tests for judicial IT applications. Management services of the life cycle of the development and management of settings for judicial applications.

Min. Health, Consumption and Social Welfare / General Secretariat for Health and Consumption / General Directorate of Public Health, Quality and Innovation

Support services for the transformation of the Health Information System, including interoperability of the digital medical records and the e-prescription between the Ministry and the Autonomous Communities. Participation in improving the interoperability of medical information at European level, and terminology standardisation of the National Health System for the purpose of statistical consolidation.

Support to the Older People and Social Services Institute (IMSERSO) to improve management in the procurement of projects and services of information systems in order to make the results of this procurement more efficient and secure.

European Space Agency (ESA)

Technical assistance for the certification process of the new version of the Earth Control Segment of the Galileo system, in charge of following up, monitoring and controlling all the satellites of the constellation.

Security analysis to define the future and evolution of the Galileo system, known as Second Generation (G2G), which optimises performance and features of the satellite including reliability, availability, continuity, accuracy and integrity.

European Defence Agency (EDA)

Study of the state-of-the-art of technologies and threats applicable to cyber defence with the aim of identifying and proposing projects contributing to improve military capacities in the field of cyber defence at European Union level.

Min. Territorial Policy and Public Employees / Secretariat of State for Public Employees / General Secretariat for Digital Administration

Carrying out technical support activities in the field of digital administration, by collaborating in making progress and follow-up of actions in the fields of security, interoperability, planning and results report, both at national and international level.

European GNSS Agency (GSA)

Support to EU GNSS Security Accreditation Board (SAB) in certification activities of the European Union satellite navigation systems:

- Independent review of security documentation.
- Technical tests on systems security.

European Union Satellite Centre (SatCen)

Consultancy on information security and certification of systems that handle classified information.

NATO / Allied Command Transformation (ACT)

At the ACT's Cyber Operations Branch, participation in the development of the Capacities Programme by identifying operational requirements which are necessary for future NATO capacities for operations in cyber space.







Strategic infrastructures

We help for the management of strategic infrastructures such as naval bases, police centres or airports, which are essential to the normal operation of a country, through planning, design and management services for this special type of facilities, applying the dual use of engineering both to the military and non-military field.

Min. Defence / Navy / Logistics Support Command (JAL)

Advice on city planning, architecture, building, construction and civil works in the naval context, to the Infrastructure Commands of the Naval Base of Rota, Ferrol Arsenals, Las Palmas, Cartagena and San Fernando, General Headquarters of the Navy and to the Infrastructures Directorate itself. Specialised technical support in the preparation of the technical reports corresponding to the Functional Needs Documents and Requirements Documents (DDR) related to:

- Needs in infrastructures to shelter the new Maritime Action Vessels (BAM).
- New building for the Adjutancy in Las Palmas.
- Building of the Navy General Archive.
- Renovation of the facade of the Navy General Headquarters building.

- Preparation of studies, resolutions and reports of any kind, that within the Navy's infrastructure, have been required of staff located in different premises.
- In the Works Technical Management Unit (Officer for Works Contracts), in the drafting of documents (projects and technical documents) required for carrying out the necessary actions in infrastructure in the Bases, Units and Installations of the Navy attached to their respective Commands.
- For the organisation, regulation and coordination of technical criteria concerning the Navy's infrastructure.

Min. Home Affairs / Secretariat of State for Security

Support to the Secretariat of State for Security for the introduction of a project for the construction of a new police station in the city of Torrejón de Ardoz, province of Madrid, and the evaluation of alternatives to improve the border perimeter of the autonomous cities of Ceuta and Melilla.

Min. Health, Consumption and Social Welfare / National Institute of Healthcare Management (INGESA)

Inception of the Technical Management, Coordination in Security and Health and Technical Assistance in the construction of the new hospital in Melilla. Arsenals supplies (EOSA).



Border surveillance and control systems

Isdefe provides highly technology-based solutions in strategic and technical consultancy in terms of border surveillance and control in which it integrates detection methods, communications, command and control instruments and solutions for the detention and identification of potential threats in sea and land border areas.

Min. Home Affairs / Secretariat of State for Security / Deputy General Directorate of Information and Communications

Technical assistance in planning and management actions leading to the implementation at national level of the European system of entry and exit for border controls Entry-Exit System (EES). In a similar context, monitoring and analysis have been carried out on the regulation and technical documentation generated in the framework of the project for the future European system for travel authorisation; European Travel Information and Authorisation System (ETIAS).

Support to the tender, control and management process of maintenance services for the European Passenger Name Record (PNR) system.

Support for managing processing and application of European Union funds for home security, the Internal Security Fund (ISF), applicable to projects and new developments for border control.

Technical assistance for the State Emergency Digital Radiocommunications System (SIRDEE) and the telecommunications legal interception system, giving support for the definition of the new service contract.



Support for the upgrading and maintenance of the Border Surveillance System (SIVE), the deployment of which extends already for more than 3,500 km around the Spanish coasts and islands, and of European Commission-funded innovation programmes such as the European Test Bed for the Maritime Common Information Sharing Environment (EUCISE), Early Warning for Increased Situational Awareness (EWISA) and Exchange Situational Pictures and Detect and Tracks Small Vessels (ESPIAS), by offering new solutions in the field of interoperability of technical means operated by different agencies and international security bodies.



Technological and industrial

We cooperate to foster the improvement of the national industrial capacity by supporting the definition of technology-based and industrial plans and policies, the management of industrial cooperation, the analysis of industrial capacities, the implementation of technology-based surveillance and competitive intelligence systems and the promotion of innovation platforms.

Min. Defence / Secretariat of State for Defence / General Directorate for Armament and Material (DGAM)

Support for monitoring and implementation of R&D programmes with strategic value for national defence. Particularly activities related to programmes for developing sensors to be mounted on the new frigate F-110, the 3D radar with new mobility capabilities, "Aldebarán and Santiago" of electronic warfare at their updating stage, the European Technology Acquisition Programme (ETAP) to equip the future combatant in the airspace with advanced technologies, and unmanned platform programmes like *Pelícano*, which have been demanding highly specialised support in new technologies for the detection and interception of threats.

Min. Defence / Secretariat of State for Defence / General Directorate for Armament and Material (DGAM) / Deputy General Directorate for Inspection, Regulation and Defence Industrial Strategy (SDG INREID)

Analysis and definition of industrial objectives and participation at national level in the main programmes, including the European Medium Altitude Long Endurance Airborne Unmanned System (EUROMALE), frigates F-110, the Wheeled Combat Vehicle (VCR) 8X8, the SOSTAR satellite and the Future Combat Air System (FCAS).

Analysis of industrial capacities of the national Defence Industrial and Technology Base (BITD) and preparation of sectoral reports, drafting of Annual Report on National Defence industry.

Analysis from the industrial perspective of the European Defence Industrial Development Programme (EDIDP).

Min. Science, Innovation and Universities / Secretariat of State for Universities & R&D&i I Deputy General Directorate for Fostering Innovation

Advice on improving processes and tools of the Reasoned Report system for tax rebates based on business investments in R&D&I.

European Defence Agency (EDA)

Technology prioritisation, Overarching Strategic Research Agenda (OSRA) project to determine and identify technology-related objectives of Member States and their prioritisation. OSRA consolidates the Agency as a key player in topics for future European Defence Funds managed by the Commission.

Technology foresight, the Foresight Project, fouryear framework contract to foresee the stateof-the-art in relevant technology-related areas within the defence sector through sessions with european experts (Human Enhancement Technologies, Artificial Intelligence, Guidance, Navigation and Control Technologies for Unmanned Systems, Smart Textiles, Quantum Technologies, etc.). Min. Defence / Secretariat of State for Defence / General Directorate for Armament and Material (DGAM) / Deputy General Directorate for International Relations (SDG REINT)

Backing for activities related to the internationalisation of the Spanish defence industry: Institutional support, bilateral meetings, re-edition of the Catalogue of the Spanish Defence Industry, identification of activities of interest within the EDIDP programme and in the control of the foreign weapons trade and foreign investments in defence.

Min. Defence / Secretariat of State for Defence / General Directorate for Armament and Material (DGAM) / Deputy Directorate for Planning, Technology and Innovation (SDG PLATIN)

Support services to the Technology Surveillance and Foresight System for defence, participating in different activities including technology foresight and surveillance activities and dissemination activities, such as the organisation of the 6th National Conference of R&D in Defence and Security (DESEi+d 2018).

Support to the management and evaluation of the Programa Coincidente 2018 programme and new programmes fostered by the European Commission, especially the Preparatory Action on Defence R&D and the next European Defence Action Plan (EDAP).







Crisis and emergencies management systems

Isdefe provides technical support to national and international organisations to manage special situations, through consultancy for military and civil protection bodies in the development of crisis control and management centres, paying special attention to command and control and communications systems, in addition to other organisational and managerial aspects.

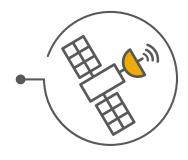
Min. Defence / Emergency Military Unit (UME)

End of works related to obtaining final operational capacity of CIS systems at the UME, started at the end of 2008 with the multiyear contract on Deployable CIS Capacities Supply for the Emergency Military Unit.

Support in CIS systems being used at UME: Land and deployable CIS systems, Emergency Management Integrated System (SIMGE), Emergency National Network (RENEM), Colabora Portal and collaboration tools on Sharepoint.







Space Sector

Isdefe carries out support activities in the field of space and in areas such as communications, satellite navigation, Earth observation and Space Situational Awareness (SSA) for the Spanish Administration, the European Commission and several international space agencies.

Also, it carries out management, operational and maintenance activities for space communications centres and sites in Spain both for the National Institute for Aerospace Technology (INTA) and the European Space Agency (ESA), and the American National Aeronautics and Space Administration (NASA).



Space stations and infrastructures

We provide technical support services for communications and monitoring of satellites and space exploration missions from the space stations in Spain. We also manage operations and maintenance of space complex.

Min. Defence / Secretariat of State for Defence / National Institute for Aerospace Technology (INTA)

Support to PAZ mission launched in February 2018 from the INTA Space Centre Torrejón (CEIT) in Torrejón.

Operation of stations located in the Canaries Space Centre (CEC).

European Space Agency (ESA)

Operation and maintenance of the deep space station in Cebreros.

Support in the data process of the Soil Moisture and Ocean Salinity (SMOS) Mission.

Operations security control services for space launchers and quality in the Space Base in Guyana.

Min. Defence / Secretariat of State for Defence / National Institute for Aerospace Technology (INTA) and National Aeronautics and Space Administration (NASA)

Operation and maintenance of the centre in Robledo de Chavela (Madrid Deep Space Communications Complex, MDSCC), focused on communications with NASA's and other space agencies' spaceships in deep space, giving daily support to more than 30 space missions, all year round.

Technical and administrative support for the construction of two brand new antennas at the Centre, the entry into service of which is expected for 2021.

Administration and maintenance of NASA's Training and Visitors Centre in Robledo de Chavela. Around 28,000 people visited the centre in 2018.



Satellite applications

We provide technical support to develop and implement new satellite applications in the area of satellite navigation and communications; also, we give support to scientific programmes in the space area, for Earth observation and monitoring space trash.

Min. Defence / Secretariat of State for Defence / National Institute for Aerospace Technology (INTA)

Support to different activities within the Global Navigation Satellite System (GNSS) in the three Galileo infrastructures in Spain: Competent PRS Authority (CPA), GNSS Service Centre (GSC) and Backup Galileo Security Monitoring Centre (GSMC).

European GNSS Agency (GSA)

Participation in the operations team at GNSS Service Centre (GSC), which represents the interface with communities of users and gives support to Open Service, Commercial Service, Search and Rescue (SAR) services within the Galileo Programme.

Min. Public Works / Administrator of Railway Infrastructures (ADIF)

Satellite communications management and control service supporting localisation systems in metre-gauge railways (former FEVE).







Transport Sector

Isdefe fosters gaining of new technology capabilities, the improvement of security and the optimisation of operational procedures for bodies in charge of the regulation, surveillance and provision of transport-related services.



Traffic management

Isdefe provides technical consultancy services to manage the implementation and operation of support systems to traffic management, provides technical assistance to national authorities in areas such as regulation and supervision, in addition to providing technical services and operational security audits.

Min. Public Works / ENAIRE

Air traffic management activities:

Commissioning of the new "eCOS" architecture of the Air Traffic Control Automated System (SACTA).

Entry into service of data communications between controller and pilot (CPDLC).

Entry into service of the first phase of version 3.Z5.80 of the SACTA system.

Forthcoming management system of European flight plans (iTEC).

Progressive implementation of the new Voice and Data Air Navigation Network (REDAN V).

Execution of Land-Air communications projects, with VoIP technology, such as the control tower at Huesca airport and communications centres in Paracuellos, Linares and Almería.

Update of the Integrated Automatic Message Relay System (CRAMI).

Implementation of the Contingencies General Plan of Air Navigation Services.

Drafting of ENAIRE's Innovation Management Plan and Services Programme for Drones (both in the framework of the Flight Plan 2020 within ENAIRE's Strategic Plan). Services for the set-up of the validation platform of the SESAR programme and improvement of functionalities of the internal management tool for SESAR projects.

Support in management and development of the Network Management Centre (SYSRED) by drafting technical specifications for the new system and supporting evaluation of proposals, evidencing processes and procedures used, defining high level needs and requirements, analysing existing technologies and tools, defining the new operational model, preparing the services catalogue and information model, and carrying out commissioning tests.



Min. Public Works / General Secretariat for Transport / General Directorate for Civil Aviation (DGAC)

Collaboration in setting out sector policies through airport strategies, air navigation and air transport, by drafting strategic studies on market evolution, fixing of public prices, access to new operators and other public service obligations.

Regulatory development of Single European Sky (SES) and its transposition to national legislation.

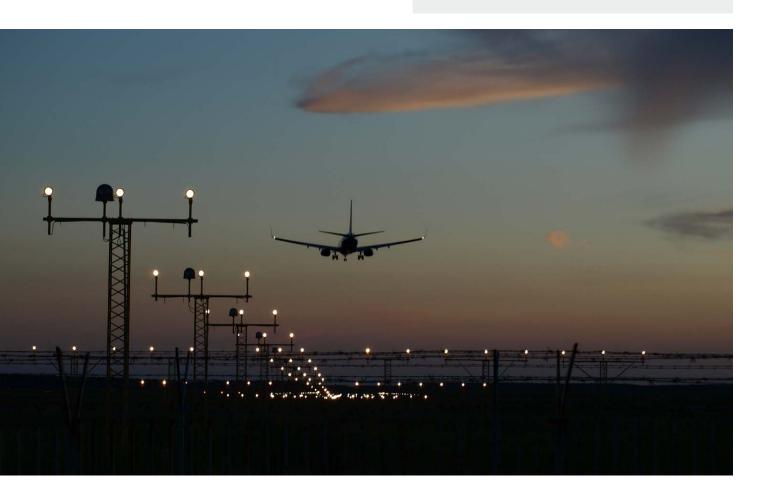
Technical support to the Civil Secretariat of the Interministerial Defence-Public Works Commission (CIDEFO) and the Universal Safety Oversight Audit Programme (USOAP) bureau for the surveillance of the implementation in Spain of the regulations arising from the International Civil Aviation Organisation (ICAO).

Min. Public Works / Aviation Safety and Security Agency (AESA)

Support in inspection activities for monitoring compliance with operational security regulations by air navigation service providers, airport management entities, air transport operators and aeronautical staff. Consultancy oriented to the implementation of new operation-related concepts and the study of the ongoing improvement in air security.

Min. Public Works / Civil Aviation Accident and Incident Investigation Commission (CIAIAC)

Support to assistance tasks to the CIAIAC Plenary Session Secretary, through the analysis of severe air transit incidents, assessment and treatment of recommendations concerning security and carrying out specialised studies for accident classification, internal procedures within the research groups and drafting of corporate reports.





Isdefe collaborates with authorities in charge of transport management and control centres in activities both for the specification of information systems, and for the verification, validation, and certification of applications and equipment, contributing to develop and implement protection strategies for transport systems and facilities.

Min. Public Works / AENA

Support in managing the life cycle of applications for airport operations and security both at the specification and testing stages and at the stage of supporting their implementation and deployment in airports within the network. The most important activities to be highlighted are:

- Support to the Advanced Control Tower project in different airports.
- Support in the project for connecting airports, Collaborative Decision Making (CDM) with the Network Manager (Eurocontrol) in order to improve predictability and accuracy in air operations.

- Coordination and support in the process of deploying devices to localise the position of agents of reduced mobility staff (RMS).
- Support for certification of automatic doors in security spots.
- Collaboration in deploying Automated Border Control (ABC) equipment within the network of airports.
- Support for setting in operation the International Airport of the Region of Murcia.
- Support in testing and deploying ICT systems and infrastructures allowing control of the entry and exit of vehicles gaining access to the "rent-acar" parking lots.

Min. Public Works / General Secretariat for Transport / General Directorate for Civil Aviation (DGAC) and Aviation Safety and Security Agency (AESA)

Collaboration in the implementation of the National Air Security Programme (PNS) in every airport of the national network by carrying out audits, inspections, tests, and drills in every airport, to supervise compliance by airport services providers with the physical security programme.

Collaboration with AESA in the inspection and supervision of operational security of the airport system and security provided by airport services providers of ground-handling services participating also in evaluation processes of security through internal technical audits.





Advanced concepts

Isdefe collaborates in developing new concepts and technologies in the field of transport operations, by supporting the drafting and implementation of regulations and fostering multi-modal operations, working for the implementation of transport operations based on satellite navigation (GNSS) and providing support to the integration of unmanned aerial systems (RPAS) in the non-segregated airspace.

Min. Public Works / ENAIRE

Installation of the data acquisition system, Ground Based Augmentation System (GBAS) CAT II/III, in Tenerife Norte airport.

Definition of the operational concept and technical specifications of the use of dual frequency multiconstellation avionics.

Definition of "Alternative-Position Navigation and Time" (A-PNT) technology solutions in case of unavailability or degradation of satellite navigation services.

Project on the evolution of the portable GNSS monitor by ENAIRE for monitoring the CAT II/III approach service based on GPS L1 (GAST D) corrections in airports which require multiple VHF ground-air Data Broadcast (VDB) antennas.

Participation in international work groups for defining European regulations on the implementation of PBN flight operations and the air navigation strategy of the European Union, as well as developing the GBAS operational concept and CAT II/III standards.

Single European Sky Joint Undertaking (SESAR-JU)

Analysis of passengers' door-to-door times, as well as the effects of air traffic incidents on expenditure at the airport and on waiting times by using new geo-localised data sources (4G, Google, Twitter, credit cards), within BigData4ATM project under the SESAR 2020 Exploratory Research programme.

Participation as Linked Third Party of ENAIRE in the following projects under the SESAR 2020 programme Wave 1 sub-phase:

- Pj.03a Integrated Surface Management, for RPAS integration in ground operations at airports.
- Pj.04 Total Airport Management, for the integration of airports in the ATM network.
- Pj.14 CNS, for GNSS developments in the SESAR environment.
- Pj.19 Content Integration, for harmonisation of the features of all the projects within Wave 1 and development of the operations concept.
- Pj.24 Network Collaborative Management, for the integration of airports in the network through the timely information exchange of data from the Airport Operations Plan/Network Operations Plan (AOP/NOP).

In the SESAR DOMUS project, scenarios were defined using a U-Space architecture based on an ecosystem manager for managing RPAS flights in low altitude flights.

Isdefe's internal projects

In the ARES UTM project, the outcome of the third call for proposals within the programme for gathering and managing R&D&i ideas by Isdefe, a functional architecture was defined for U-Space services addressed to RPAS in low altitude flights and also technical requirements for their realisation.









Public Administration Sector

As a result of the need for strategic planning and management required by agencies of the State General Administration, Isdefe has designed technical support and specialised advisory services oriented to the enhancement and modernisation of public administrations, so that they can increase their capacities, efficiency and sustainability to respond to citizens' demands.



Enhancement and modernisation of public administrations

Isdefe provides services in strategic consultancy and in technological modernisation and digital transformation through solutions that enhance and modernise the Public Administration.

In the field of economic management of public bodies, Isdefe provides support for defining and implementing procurement strategies, price estimates and analysis and development of cost analysis accounting models.

Strategic Consultancy

Min. Defence / Secretariat of State for Defence / General Directorate for Armament and Material (DGAM)

Support to the Managing Body in defining management processes for General Management and in the maintenance of its Comprehensive Command Unit.

Min. Defence / Air Force / Air Force Staff (EMA)

Support to activities within the Plans Unit in the areas of planning armament and materials resources and definition of Air Force needs.

Assistance to the Staff Command (MAPER) when developing integrated staff information reports, and in the analysis of staff forecasts and evolution. Teaching Managing Unit (DEN) information needs, information obtaining process have been analysed and improvement proposals done which are already being implemented.

Min. Defence / Army / Army's Command of Logistics Support (MALE)

Implementation of new data analytical models on the anuBls platform, such as "Control of Lifetime, Expiration and Probable Lifetime of ET materials", "Observatory for TN ZO Materials" and "List of Assigned Material".

Min. Home Affairs / Secretariat of the Ministry of Home Affairs / General Directorate for Traffic (DGT)

Support to the Legal Unit in drafting studies and reports on the effects of new traffic regulations and new mobility strategies and policies. Support to General Secretariat to establish the functional model and implement a solution that enables this body to acquire analytical information on a regular and automatic basis for managing the accounting of unpaid duties which have been enforced, especially those related to fines.



Min. Public Works / Administrator of Railway Infrastructures (Adif)

Support to the definition of its new Strategic and Transformation Plan (Transforma Plan 2020), for deploying its strategic objectives within the corporate and operational managing units through the setting out of operational objectives, the design of Key Performance Indicators (KPIs) and the programming of the strategic projects portfolio.

Min. Economy and Business / Secretariat of State for Digital Progress (SEAD)

Support to set up, set in motion and run the Intermediate Body in the ICT sector, for the ERDF Operational Programme in Smart Growth, for the programming period 2014-2020.

State Agencies: Aviation Safety and Security Agency (AESA) / Spanish Agency of Medicines and Medical Devices (AEMPS) / Spanish Agency for International Development Cooperation (AECID) and the State Meteorological Agency (AEMET)

Consulting and technical assistance services for defining and setting up requirements for the objective-based management model until this is deployed and implemented within organisations.

Implementation of the full cycle of performance planning and management aided by indicator systems, in the analysis and improvement of economic and financial management, in setting up fees and public prices based on market studies and analysis and proposals for self-funding strategies, optimisation of management thanks to re-engineering and automation of processes and procedures and in the improvement of project and programme management.

Technological Modernisation and Digital Transformation

Min. Home Affairs / Secretariat of State for Security / Deputy General Directorate for Information and Communications for Security (SGSICS)

Technical support in the analysis, management and follow-up of the Digital Transformation Project within the Central Services of the Deputy Secretariat of the Ministry of Home Affairs. Compilation of information on the ensemble of Services of Digital Administration and, from the Digital Transformation Office, carrying out of a study on the specific information from each service in order to evaluate functionality and options to be integrated with newly created systems which are being fostered by the Deputy Directorate.

Min. Economy and Business / Secretariat of State for Digital Progress (SEAD)

Support to the technical department for managing the National Plan on Natural Language Technologies and in the coordination of ICT actions and projects in this respect with the European Commission.



Min. Ecological Transition / Secretariat of State for Energy / Institute for Energy Diversification and Saving (IDAE)

Management of the e-learning training platform at IDAE, preparation of training materials and delivery of training sessions (articles 12 and 17 of Directive 2012/27/EU).

European Union / European Aviation Safety Agency (EASA)

Support for integrating data and statistics on European and World air traffic for use in an operational environment (business intelligence).

Min. Work, Migrations and Social Security / State Public Service for Employment (SEPE)

Services of Programme Office in the strategic definition, planning, management and control, and monitoring, quality and security of information systems, processes and services, giving support to guarantee meeting interoperability needs and information exchange between SEPE systems and those from the rest of Public Administrations and external bodies, coordinating actions in the field of the Information System of Public Employment Services.



Support to Economic Management of Public Bodies

Min. Defence / Secretariat of State for Defence / General Directorate of Economic Affairs (DIGENECO)

Drafting of the Annual Contracting Plan of the Ministry of Defence (PACDEF) for year 2019.

Preparation of the Procurement Report of the Ministry of Defence 2017.

Implementation of a Model of Excellence for purchase management within the public sector, based on the requirements laid down by UNE-15896 to evaluate the purchase function in public bodies in general and that of the Ministry units in particular.

Support for the drafting and processing of regulations on procurement, particularly, of the project for a new Ministry Resolution within the scope of the Ministry of Defence.

Drafting purchase strategies of centralised categories of the Ministry and follow-up of these.

Carrying out market analysis and internal needs analysis for future tenders.

Design of procurement data analysis with data from the IT System of Economic Management and Administrations (SIDAE).

Support in the revision and implementation process of analytical accounting models based on the ensemble of activities carried out by the Ministry of Defence: Ministry and Deputy Secretariat, EMAD, SEDEF, Army, Navy and Air Force.

Support in carrying out requested studies on demand to establish public prices for those activities the Ministry of Defence could carry out for other bodies.



Assistance in the area of economic-financial management and administrative processes, notably the implementation and validation by the State Public Accounts Department (IGAE) of the analytical accounting model based on the activities in the CANOA system.

Min. Defence / Secretariat of State for Defence / General Directorate for Infrastructure (DIGENIN)

Assistance to the Deputy General Directorate for Planning and Environment:

- Tender, control and follow-up of centralised electric energy supply contracts.
- Implementation and follow-up of the Framework Agreement on supply of fuel in bulk.
- Design of the Framework Agreement for centralised procurement of natural gas.
- Consultancy at international forums on energy efficiency.

Min. Industry, Commerce and Tourism / General Secretariat for Industry and Small and Medium Enterprise (SGIPYME)

Consultancy services in planning, management, control, follow-up, quality and security of incentive programmes in the framework of the public policy of reindustrialisation and promotion of industrial competitiveness in Spain.

Min. Defence / Navy / Logistics Support Command (JAL)

Support for the CIS Area attached to the Maintenance Management Unit in defining and monitoring installations maintenance and communication equipment contracts in the Navy.

Min. Defence / Air Force / Air Force Staff (EMA)

Assistance in the Area of Financial Resources and to the Economic Affairs Management Unit (DAE) in the yearly planning of financial resources and their control, as well as technical and economic advice in the management and follow-up of credit generation.

Min. Economy and Business / Secretariat of State for Digital Progress (SEAD)

Support for defining, designing, implementing and operating improvements in the management and control system of public incentives to R&D&i within the ICT sector.

Min. Industry, Commerce and Tourism / Secretariat of State for Commerce

Consultancy for controlling projects funded by the Business Sector Internationalisation Fund (FIEM), allowing to meet the objectives set by the Ministry.

Min. Industry, Commerce and Tourism / National Innovation Company (ENISA)

Analysis and evaluation of economic and financial solvency of companies' applications submitted to the calls for proposals 2018 within the *Industria Conectada* 4.0 Programme.

Min. Finance / Deputy Secretariat of Finance / General Directorate of Streamlining and Centralisation of Procurement

Support and advice on centralised procurement of electric energy and fuel in pumps supply, as well as in the process of compliance and adaptation to the General Data Protection Regulation (GDPR) and the National Security Scheme (ENS).

Min. Foreign Affairs, European Union and Cooperation / Secretariat of State for Cooperation / Secretariat of State for International Cooperation and for Latin America and the Caribbean (SECIPIC)

Specialised consulting in data analysis for information processing and assessment of Official Aid for Development (AOD), as well as support in preparing information for the Spanish delegation before the OECD's Development Assistance Committee and other international forums.

Min. Health, Consumption and Social Welfare / Secretariat of State for Social Services / Older People and Social Services Institute (IMSERSO)

Support in the analysis and improved procurement of IT services and supplies.

Reina Sofía National Art Center Museum (MNCARS)

Support in economic and financial and contractual management and in tasks aimed at the review of the analytical accounting model, based on activities in the CANOA system.

Spanish Radio and Television Corporation (CRTVE)

Assistance in control and follow-up of the centralised contract on electric energy supply and consulting services for defining the strategy and preparing specifications for the new centralised contract.

Min. Ecological Transition / Secretariat of State for Energy / Institute for Energy Diversification and Saving (IDAE)

Technical assistance for managing the ERDF operational programme "Sustainable Growth" 2014-2020. Support in managing IDAE's different actions lines, especially in its relations with the European Investment Bank (EIB) for managing financial aid instruments.

Technical assistance to the Verification Unit in Calls for:

- Aids for Renovation of Energy Installations in existing buildings (PAREER-CRECE Programme) to be co-funded by the European Regional Development Fund (ERDF), supporting meeting the objectives of the Verification Unit in relation to justification of actions within this programme and with ERDF.
- Aids (National Fund for Energy Efficiency -FNEE) co-funded by ERDF for renovation of street lighting installations, for energy efficiency actions in SMEs and big companies of the industrial sector and for actions of modal change and more efficient use of modes of transport, supporting meeting the objectives of the Verification Unit in relation to justification of actions within this programme.







Regulation and supervision of markets

Isdefe provides consultancy services for designing strategies, policies or plans and the analysis of economic and technical information for bodies regulating and supervising services within regulated markets, in the transport, telecommunications and energy supply and operation sectors; as well as in supporting ongoing programme management, assessment, monitoring and audit.

National Commission on Markets and Competition (CNMC)

Verification of results of accounting models to determine costs of services regulated in the area of telecommunications.

Revision and verification of results of the cost models of railway managers to determine fees and carrying out different simulations of scenarios for price regulation of supervised services.

Revision of economic, technical and operational conditions of the use of postal networks of the prevailing operator by alternative postal services providers.

Collaboration for implementing and exploiting a Costs Regulatory Information (IRC) Model for regulated activities such as electricity and natural gas transport.

Itelazpi

Support to the processes of analytical review for fixing fees, decision making and improved quality in company management.





Information and Communication Technologies (ICT) Sector

In the field of the Information and Communications Technologies (ICT), Isdefe has extensive experience in the provision of engineering and consultancy services for the definition of public digital and e-administration services, the planning and management of the radio spectrum, the management of the digital dividend and the reduction of the digital divide. In this area, our teams support the State Secretariat for Digital Progress (SEAD) attached to the Ministry of Economy and Business, as well as other competent bodies in matters of regulation and oversight of ICT services.



Radio-electric spectrum

Support to planning and management of the radio spectrum for different radio communications services in all the Spanish territory, assuring quality and universal availability at the service of society. In this area, Isdefe carried out actions for the definition and monitoring of the National Transition Plans to the Terrestrial Digital Television (TDT) and for managing the Digital Dividend.

Min. Economy and Business / Secretariat of State for Digital Progress (SEAD)

Support to planning and management of the radio spectrum for different radio communications services in all the Spanish territory, in the following actions:

- Planning and management of the radio spectrum for providing radio-communications services: broadcasting and wireless fixed loop, point-to-point links of land line and satellite land line services, mobile and space services.
- Ongoing collaboration in the transformation of terrestrial digital television, from its implementation to assistance in the execution of frequencies migration processes (first and second Digital Dividend) for use by electronic mobile communications services when deploying 4G and 5G technologies, as well as support to the follow-up and execution of the 5G National Plan.
- Technical assistance to the staff of the Secretary of State for Digital Progress in planning and promotion
 of technology innovation programmes and in institutional missions in the ICT Sector to international bodies
 and the European Union.



We carry out specialised technical support activities in Information Security and Digital Trustworthiness, providing support for managing and executing communications programmes such as the New Infrastructures programme fostering the deployment of ultra-rapid networks and broadband infrastructures, in addition to providing consultancy services on the telecommunications market regulations and analysis.

Min. Economy and Business / Secretariat of State for Digital Progress (SEAD)

Technical support in communications programme management and implementation such as the New Infrastructures programme for fostering deployment of ultra-rapid networks and broadband infrastructures.

Spanish Radio and Television Corporation (CRTVE)

Strategic consultancy services in the context of the Corporation's technology transformation and support to review its strategic plan for technologyrelated investments and in the updating of its corporate network infrastructures.

Min. Home Affairs / Penitentiary Work and Training for Employment (TPFE)

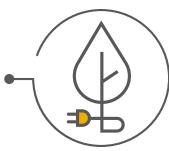
ICT services consultancy, for the strategic definition, planning, control and monitoring of networks and information systems, within the agency's e-government and digital transformation policies.

National Commission on Markets and Competition (CNMC)

Analysis of the evolution of broadband infrastructures at national level and competition conditions in the telecommunications market.







Energy Sector

Isdefe provides technical support to the major plans and programmes of the Administration in matters of Energy Efficiency and Renewable Energies. Isdefe's activities in this area are carried out in the framework of the application and development of the Energy-based Security concept, as defined in the National Energy Security Strategy.



Energy diversification and efficiency

We have extensive knowledge and experience in the design, implementation and monitoring of programmes and projects for the Public Administration: design of security and energy efficiency policies and in renewable energies and in technical consultancy for the development, technical management and follow-up of this type of project.

Min. Ecological Transition / Secretariat of State for Energy

Modelling of the national energy system through energy forecasting tools to implement the Integrated National Plan on Energy and Climate (PNIEC). Technical support for reducing the electricity tariff deficit and contribution to system sustainability for the application of the new compensation system of electricity generation through renewable energy, cogeneration and waste.

Min. Ecological Transition / Secretariat of State for Energy I Institute for Energy Diversification and Saving (IDAE)

Support to the Technical Department in the management and coordination of actions arising from Article 5: European Union Directive 2012/27 on "Exemplary role of public bodies' buildings".

Technical advice, carrying out of studies and works related to energy efficiency in buildings, support for the revision and development of specific software and the management of Grant Programmes.

Support within the Aid Call for Energy Installations Renovation in Buildings and Infrastructures of the SGA, in the technical and administrative assessment of submitted projects. Preparation of reports documenting modifications, rejection or approval. Identification and counting of valid renovated surface to document the renovation goal set forth by Directive 2012/27/EU, Article 5.

Min. Public Works / State-owned Ports and Port Authorities

Advice on the application of European regulations on infrastructures for alternative marine fuels, particularly Directive 2014/94/EU of the European Parliament and of the Council.

Support in the definition of energy strategies for the Port System of General Interest.

Viability analysis on developing electricity supply infrastructures for container ships in the ports of Barcelona, Valencia, Algeciras, Bilbao and Las Palmas.

Viability analysis, proposals of alternatives and description of business models suitable for setting up electricity supply infrastructures for cruise ships, ferries and container ships in the ports of Barcelona, Tenerife and Balearic Islands.

Development of a project for monitoring the consumption of electricity in the ports of Algeciras, Tarifa and Campamento.





R&D&I Activities

At Isdefe innovation pursues objectives closely linked to its nature as an in-house technical service provider of the State General Administration (SGA): knowledge generation, anticipation of needs and improvement of engineering and consultancy services in strategic areas for the Administration. For this reason, we have focused on R&D&I activities as the tool that will enable us to identify and understand which technologies await in the future, to better anticipate the repercussion these technologies will have, particularly in the field of Defence and Security.

By developing R&D&I activities Isdefe's competitiveness and positioning in strategic areas are improved, consolidating the company's vocation as the flagship in-house technical service provider. In terms of sustainability, the investment in R&D&I boosts this idea, as it allows us to be more innovative by developing new products and services of public interest, an investment that improves the quality of consultancy and engineering services we provide to the Administration.

The practical application of the results of the R&D&I activities we take part in provides us first-hand knowledge which will help us to anticipate the future and foresee the opportunities and challenges that the Administration we serve will have to face.

All this helps to consolidate Isdefe's role as a transforming public agent within R&D&I whilst we increase staff skills in strategic areas of the company.

In the field of innovation, the Business Development Management Unit prepares, oversees and coordinates

the implementation of R&D&I to, among other issues, guarantee its alignment with the company's strategic areas. An example of this activity is the Horizontes Network, a corporate initiative created to reinforce the corporate values of innovation and anticipation, which channels the capacities of the organisation in the analysis and anticipation of new future challenges for the SGA, and develops innovative ideas and proposes solutions to these challenges.

Investment in R&D&I ensures the future of the company while its results benefit the Administration and society in general.

In 2018 we have strengthened our contribution to national R&D&I putting in place an R&D&I management model based on two areas:

- Innovation activities.
- Research and development activities.





Horizontes Network

The Horizontes Network is the instrument around which Isdefe's innovation revolves. Through this Network, the company gains the capacity to anticipate opportunities and challenges the Public Administration will be facing. The Network identifies and draws on existing sources of knowledge in the

innovation ecosystem, sets up a range of action lines focused both on staff and the SGA bodies and makes tools available to the organisation to foster corporate innovation-based culture among the staff.

The Horizontes Network develops activities in technology and methodology surveillance and foresight and in the areas of strategic interest for Isdefe, mainly by using the University-Isdefe collaboration network structured through the six observatories created in 2016.

In addition to academic knowledge, the Network is nurtured by knowledge from staff, from the agencies it works for, from national and international partners and collaborators. The Network also uses information from open sources.

The Horizontes Network supports the internal knowledge management system through its knowledge communities: heterogeneous groups made up of Isdefe employees who share their experiences and knowledge within a collaborative framework. In 2018, the europeanisation community and the funds management community were created. Moreover, the R&D&I evaluators community and the GNSS community were strengthened.

In 2018, the Horizontes Network launched Challenges 2030, a foresight activity whose

objective is the identification of challenges to be addressed by the Public Administration in 2030 in the areas of action for Isdefe. Challenges 2030 is the first study carried out by the Horizontes Network involving academia, employees and the agencies for which Isdefe works, and this will lead to the creation of discussion groups to verify the Network's results. In the first stage of this activity, more than 120 employees were involved together with the universities associated with the observatories, several academics and the main agencies Isdefe works for.

In order to make both the objectives and results of the Horizontes Network public, in 2018 several promotion and dissemination activities were carried out. It should be noted that significant participation was recorded in 2018 in the National Conference of R&D in Defence and Security (DESEi+d), held by the General Directorate for Armament and Material in which several papers were presented on the results of the work being carried out, one of which was awarded the prize to the best paper of the Conference.



Horizontes Network Nodes

To achieve the objectives, the Isdefe Horizontes Network has developed a University-Company collaboration model and includes a network of experts at national and international level to promote existing knowledge in the organisation, universities and Administration.

The Horizontes Network is made up of six nodes which cover the main strategic lines within our organisation:

Observatory for Defence and Security / UNIVERSIDAD POLITÉCNICA DE MADRID

Technical School of Telecommunication Engineering.

In 2018, the observatory made RPAS state-of-the-art analysis available to Isdefe staff - these documents included sensors, detection and neutralisation methods - as well as analysis documents on autonomous platforms and equipment for electronic warfare and the combatant of the future.

Observatory for Space / UNIVERSIDAD CARLOS III

Polytechnic School.

In 2018, the observatory made available to Isdefe staff a document on surveillance and monitoring of space objects which analyses the institutional framework of the main current research and development lines in this area.

Observatory for Cyber Security / UNIVERSIDAD DE ALCALÁ DE HENARES

Technical School of IT Engineering.

In 2018, the observatory made available to Isdefe staff reports on web architectures for scraping and crawling and the deep web as a source of information for data mining.

Observatory for Air Navigation and ATM / UNIVERSIDAD POLITÉCNICA DE MADRID

Technical School of Aeronautical and Space Engineering.

In 2018, the observatory made available to Isdefe staff multiple documents on the analysis of parameters of influence in the definition of 4D trajectories in risk analysis between RPAS and standard aircraft in a non-segregated airspace and on the analysis of the runway capacity in Barcelona-El Prat through TBS implementation, and others.

Observatory of Economy and Public Management / UNIVERSIDAD COMPLUTENSE MADRID

Faculty of Business and Economic Sciences.

In 2018, the observatory made available to Isdefe staff its own model for action lines in economic and financial security and its risks, a predictive model for human resources management and a management model for major investments by the State.

Observatory for Systems Engineering, Logistics and Programmes Management / UNIVERSITY OF SOUTH-EASTERN NORWAY

School of Technology, Natural Sciences and Sea Sciences.

The areas of work are related to knowledge and disciplines conforming the core competences in the origin of the creation of Isdefe: Systems Engineering, Programme Management and Logistics. In 2018, the observatory made available to Isdefe staff REPSEO, a repository containing around 600 technical papers on systems engineering, project management and logistics, including those generated by Isdefe employees participating as speakers in Conferences and Seminars such as ASEM, INCOSE IS, SoSE, and others.



Research and development activities

R&D&I Ideas Attraction and Management Programme

In 2018 the fourth edition of the most relevant Programme on R&D&I Ideas Attraction within the company was held, a programme helping to maximise participation of all the employees in the process of generating research, development and innovation projects aided by in-house applications and addressed to our clients.

The Programme fosters corporate culture in R&D&I and is developed with the aim of undertaking and raising awareness in all the organisation on the significance of innovation and the leading role it has in the process of generating value for the company.

The winning projects for the Calls for Tenders 2018 were the following:

SHERLOCK - Tool for automatic analysis of documents through processing of natural language

Objective: Analyse applications of artificial intelligence techniques to the context of Defence and Security. The project's result will be a White Paper on the most relevant applications. Additionally, a pilot case will be carried out consisting of obtaining a software tool that, based on Artificial Intelligence techniques and, particularly, on natural language processing techniques, will automatically analyse documents. The pilot case will be carried out at the National Conference of R&D in Defence and Security DESEi+d and with the White Paper this will have a direct application within the Europeanisation community.

Interest for SGA: Ministry of Defence - General Directorate for Armament and Material.

Integration in Isdefe's Innovation Network: Project supplementing activities of Isdefe's Horizon in Defence and Security.

Status: Project under authorisation process.

Aviation Real-time Emissions Token Accreditation

Objective: Draft a technological architecture and solution to collect relevant information on real-time emissions in air routes by applying Big Data techniques, with subsequent tokenisation, supported by blockchain infrastructure for a potential exchange of emissions rights, certification and analysis on such emissions likely to be processed using Machine Learning techniques for predicting/impacting pollution in different air routes.

Interest for SGA: National scope AESA (Aviation Safety and Security Agency), international scope EASA (European Aviation Safety Agency).

Integration in Isdefe's Innovation Network: Project supplementing activities of Isdefe's Horizon in Air Traffic Management.

Status: Project under authorisation process.

Collaborative projects

Isdefe continues to consolidate its participation in European project programmes such as the 7th Framework Programme, Horizon 2020, SESAR 2020 and GSA, as well as in the brand new PADR, Preparatory Action on Defence Research, launched by the European Commission as a preliminary action of the next European Defence Research Programme (EDPRP).

During 2018 Isdefe participated in the following R&D&I projects:

NEW

ARES-UTM - Design of a Spanish UTM architecture for RPAS flight management

Start: 2018.

Status: Project finished.

R&D&I Line: Transport - Advanced Concepts. **Funding programme:** Isdefe's R&D&I Ideas Attraction and Management Programme.

The project's goal is to define a Spanish architecture for an Unmanned Traffic Management (UTM) for Remote Piloted Aircraft Systems (RPAS) flight management in low altitude flights. In Europe a (SESAR U-Space Blueprint) roadmap has been considered to address the use of these systems for flight management and a schedule has been set up for development. The project includes analysing requirements set out by groups involved in European and World initiatives to draft systems specifications and an architecture definition.



BigData4ATM - Passenger-centric Big Data Sources for Socio-economic and Behavioural Research in ATM

Start: 2016.

Status: Project finished.

R&D&I Line: Transport - Advanced Concepts. **Funding programme:** SESAR - Exploratory

Research.

NEW

COPKIT - Technology, training and knowledge for Early-Warning / Early-Action led policing in fighting Organised Crime and Terrorism

Start: 2018.

Status: Project in process.

R&D&I Line: Defence and Security - Intelligence and Electronic Warfare.

Funding programme: H2020 - Secure Societies.

The COPKIT project addresses the challenge to analyse, investigate and mitigate the use of new information and communication technologies by organised crime and terrorist groups. This is a key challenge for policy makers and National Security and Police Forces due to the complexity of this phenomenon and the number of elements and agents involved, a challenge that will be met by developing an early alert system, based on intelligence both at strategic and operational levels. EUROPOL is a participant in COPKIT and is the chief of the Advisory Committee and the SOCTA report 2017 "Crime in the Age of Technology" asserts that "This is maybe now the greatest challenge for National Security and Police Forces worldwide".



DOMUS - Demonstration of Multiple U-Space Suppliers

Start: 2018.

Status: Project in process.

R&D&I Line: Transport - Advanced Concepts. **Funding programme:** SESAR - Connecting

Europe Facility.

The DOMUS project is the result of the proposal submitted to the call for tenders CEF-SESAR-2018-1 U-SPACE the goal of which is to prepare a quick deployment of U-Space services for U2 phase, including those deployed for U1 phase, which will enable RPAS low altitude operation in:

- Beyond Visual Line of Sight (BVLOS) flights.
- Flights in rural environments.
- Flights in urban environments.
- Flights in suburban environments.

Deployment of these services will facilitate processes and authorisations for certain RPAS operations. For this, DOMUS will perform a series of real RPAS flights using a U-Space architecture developed by the Spanish industry and operated by different U-Space service providers and ENAIRE, the services provider for Spanish air navigation.

NEW

EMEGEWEA - Global Structured Methodological Ecosystem for Public Safety

Start: 2018.

Status: Project in process.

R&D&I Line: Defence and Security - Intelligence

and Electronic Warfare.

Funding programme: Isdefe's R&D&I Ideas Attraction and Management Programme.

The goal of the project is to define and design a Global Structured Methodological Ecosystem (EMEG) in the field of public security to gain "customised intelligence" based on the threat and the timeline considered, making it easier to make efficient decisions and provide the National Security and Police Forces with a tool for critical thinking and systematic and systemic planning of operations and gaining capabilities. The efficient use of OSINT will support timely and accurate decision making, facilitating anticipation of criminal or terrorist events, subjects and organisations that threaten citizen security. Therefore, the conclusions and recommendations of this R&D&I project will enhance and optimise, both at operational and strategic level, the response capacity of the General Administration of the State to challenges in security that today's society faces.



MEDASCAT - Methodology for Defining the Safety Zone in Firing Ranges

Start: 2015.

Status: Project finished.

R&D&I Line: Defence and Security - Intelligence

and Electronic Warfare.

Funding programme: Isdefe's R&D&I Ideas Attraction and Management Programme.

NEW

PETRUS - PRS JTA - MS: PRS Joint Test Action

Start: 2018.

Status: Project in process.

R&D&I Line: Space - Systems and Earth

Observation.

Funding programme: European GNSS Agency.

The PETRUS project responds to the needs of the Galileo European Agency (GSA) in the areas of: 1) Provision of testing data and results to the programme supporting the validation of the PRS service; 2) Provision of testing and demonstration results to evaluate the adequacy of the ERP to meet potential users' needs; 3) Provision of lessons learnt on different characteristics of the PRS service: quality and security of PRS service, performance, operational concept and definition of cases of use; and 4) Carrying out of awareness-raising actions on the uses and actions of PRS.

PJ08 AAM - Advanced Airspace Management

Start: 2016.

Status: Project in process.

R&D&I Line: Transport - Advanced Concepts. **Funding programme:** SESAR - Very Large

Demonstrators (Wave 1).

NEW

MEDEA - Mediterranean practitioners' network capacity building for effective response to emerging security challenges

Start: 2018.

Status: Project in process.

R&D&I Line: Defence and Security - Crisis and

Emergencies Management Systems.

Funding programme: H2020 - Secure Societies.

The Mediterranean and Black Sea region is characterised by a very volatile and dynamic security environment featuring serious threats and challenges for societies and prosperity. The MEDEA project, during its 60-month implementation period, provides funds for four interrelated actions: 1) Establish and operate the MEDEA network, a multi-disciplinary network made up of security professionals; 2) Involve participants in forward governance on new security challenges; 3) Promote the "co-creation" of innovations in security technology and capacities between innovation professionals and providers in the areas and 4) Establish and update on a yearly basis the Mediterranean Security Research and Innovation Agenda (MSRIA).

PJ10 PROSA - Controller Tools and Team Organisation for the Provision of Separation in Air Traffic Management

Start: 2016.

Status: Project in process.

R&D&I Line: Transport - Traffic Management. **Funding programme:** SESAR - Very Large

Demonstrators (Wave 1).

PJ14 EECNS - Essential and Efficient Communication Navigation and Surveillance Integrated System

Start: 2016.

Status: Project in process.

R&D&I Line: Transport - Advanced Concepts. **Funding programme:** SESAR - Very Large

Demonstrators (Wave 1).



PJ24 NCM - Network Collaborative Management

Start: 2016.

Status: Project in process.

R&D&I Line: Transport - Traffic Management. **Programa de Financiación:** SESAR - Very Large

Demonstrators (Wave 1).



SESAR PJ04 - Total Airport Management

Start: 2016.

Status: Project in process.

R&D&I Line: Transport - Transport Centres. **Funding programme:** SESAR - Very Large

Demonstrators (Wave 1).

PJ19 CI - Content Integration

Start: 2016.

Status: Project in process.

R&D&I Line: Transport - Traffic Management. **Funding programme:** SESAR - Very Large

Demonstrators (Wave 1).

PRS4 ASMON - Methodological Design of a Global Asset Control System and Loads

Start: 2016.

Status: Project finished.

R&D&I Line: Systems and Earth Observation. **Funding programme:** Isdefe's R&D&I Ideas Attraction and Management Programme.

SESAR PJ03 SUMO - Surface Management Operations - Surface Operations by RPAS.

Start: 2016.

Status: Project in process.

R&D&I Line: Transport - Advanced Concepts. **Funding programme:** SESAR - Very Large

Demonstrators (Wave 1).

STARRY (STARs that 'R' Young)

Start: 2016.

Status: Project in process.

R&D&I Line: Space - Space Stations and

Infrastructures.

Funding programme: H2020 Marie Curie.





The project ARES UTM was created in the framework of the 3rd Call for proposals of the R&D&I Ideas Attraction Programme launched by Isdefe's Business Development Unit in June 2017. The idea arose from a need to develop an air traffic management system for remotely piloted aircraft

systems at low altitude, taking into account all users and competent authorities, and enabling interaction with conventional air traffic. This need is framed within the UTM (Unmanned Traffic Management) initiative launched by NASA and brought to Europe by means of the U-Space concept.

Project rationales:

- 1. Design of a Spanish UTM architecture.
- 2. Participation in work line E2L8-2 of the Innovation Plan of the Ministry of Public Works.
- **3.** Participation in work lines E2L2-1 and E1L1-6 of the Strategic Drone Plan.

Objectives:

- 1. Design of a Spanish UTM architecture.
- **2.** Participation in activity A2 of the work line E2L8-2 Platform for Unmanned Aerial Vehicle Traffic Management within the Innovation Plan of the Ministry of Public Works.
- **3.** Participation in the work groups of the Ministry of Public Works in lines: E2L2-1 Action Plan for the implementation of U-Space and E1L1-6 Participation in the definition of U-Space standards.

Characteristics

Operation of remotely piloted aircraft systems is more and more in demand from a myriad of users. To guarantee this operation is efficient and safe, the UTM or U-Space concept has started to be developed (in Europe). This system has to provide a range of services. In Europe, these services have been defined in the U-Space Blueprint drafted by the SESAR Joint Undertaking.

The ARES UTM project will consist of designing a Spanish architecture able to provide these services and that guarantees access and the interests of institutions and bodies attached to the Public Administration.



Core services of the U-Space concept are:

- Registry.
- Identification, surveillance and monitoring.
- Navigation.

- Geo-fencing.
- · Orchestration.

For this purpose, an approach associated to Systems Engineering will be followed:

- Formulation of the problem.
- Identification of stakeholders.
- Development of an operation concept.
- Definition of stakeholder requirements.
- Definition of System requirements.
- · Functional analysis.
- Design of system architecture.

As interest in remotely piloted aircraft systems has been generated in Public Administration and industry, several work lines have been launched in both plans. The first plan has been developed by the Ministry of Public Works. This innovation plan includes the work line known as "E2L8-2 Platform for Unmanned Aerial Vehicle Traffic Management". Within the ARES UTM project, and under this work line, we will participate in developing deliverable 5 "Document on the consolidation of advanced architecture and support technologies for the provision of services to drones". The second plan is the Strategic Drone Plan. Within this Plan, the ARES UTM project will give the necessary support when needed due to the kind of group work to be done in these two work lines.

R&D&I Indicators

Number of R&D&I projects per area of activity

	2017	2018
Innovation activities	1	1
Research and development activities	16	17
In-house projects	3	4
Collaborative projects	13	13
Total	17	18

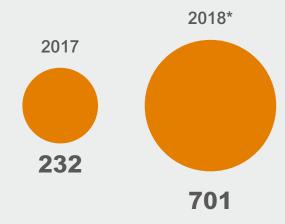


Areas of knowledge	2017	2018
Defence and Security —	4	4
Space —	2	3
Transport -	9	10
Public Administration ————————————————————————————————————		
Multi-area -	1	1
Total —		18—

Cost Breakdown in R&D&I projects per area of activity (thousand €)

	2017	2018
Innovation activities	259	202
Research and development activities	685	471
In-house projects	117	90
Collaborative projects	568	381
Total	945	673





^{*} R&D&I funding activities for 2018 also include funding received for works carried out in 2017.



Commitments to our stakeholders



Dialogue with our stakeholders

A crucial part of our business strategy is actively listening to our stakeholders, with whom various communication channels are always open.

	Employees	Clients Organisms	Suppliers	Society	Shareholders	Partners
Corporate Web	•		•	•		-
Transparency Portal	_		-	_		—
Annual Report —	-		•	-		-
Corporate Network	_					
Employees Portal	-					
Argos Newsletter and Classroom ———————————————————————————————————	_					
Generic E-mail Accounts	-					
Internal Announcements	_					
Regular Internal Meetings	-					
Annual Satisfaction Survey ————————————————————————————————————						
Regular Visits						
Technical Days						
Contractor's Profile on the State Platform				_		
Alliances with Associations/Forums				-		
Collaboration Agreements and University Collaboration —				-		-
Social Projects —				-		
Monthly Report to BD						-
General Meetings						

Dissemination good corporate practices is also a communication and active collaboration tool with our stakeholders, and prevents and mitigates potential negative impacts on human rights. For this reason, Isdefe through reference entities in Corporate Social Responsibility such as the Spanish Network for the UN Global Compact and Forética, works on the dissemination of these business success stories.





Committed to our clients

With the aim of our projects and works being recognised by the entities and bodies we provide services for as benchmarks in quality, excellence and commitment, we undertake to carry out our activities in consultancy, technical assistance and development in systems engineering under the most demanding methods in order to meet such expectations.

For this purpose, the following guidelines have been set:



The ordering body/client is the core element for Isdefe's focus.



Every Managing Unit and Department is responsible for achieving quality in services and products throughout all the execution stages, within the deadline and following the conditions established according to the schedule. Therefore, the quality of services and products that Isdefe generates is the responsibility of all the company staff.



Isdefe's staff are responsible for setting up the ongoing improvement process in their area of activity, fostering and supporting teamwork and the relevant training.



The Management implements regular reviews of the Quality System to ensure prevention, early detection and quick correction of non-conformities.

Quality, excellence and innovation

Isdefe is committed to excellence and ongoing quality improvement in services seeking to meet the expectations and needs of entities and bodies to which services are provided and to be a leader in innovation

To guarantee quality in our activities, we have a Quality System that is adapted both to national and international markets demands. This way, the company ensures that all applicable legal and regulatory requirements and those specific to the bodies/clients we provide services for are effectively understood and complied with.

Likewise, we assess risks and opportunities which might have an impact on the conformity of services and products and direct all the processes towards higher client satisfaction.

Our Quality System is certified by the following standards:

AENOR Certification on Quality Management System, based on the UNE-EN ISO 9001:2015 standard (ER-0929/1998)

Activities of consultancy services and technical assistance provision in Defence and Security, Aerospace, Transport, Public Administrations, Information and Communication Technologies (ICT) and Energy sectors.



Certification from the Ministry of Defence on Quality Management System, based on the PECAL/AQAP 2110 standard (EXP. N°-0077/03/01/01)

Activities of consultancy services and technical assistance provision in Defence and Security, Aerospace, Transport, Public Administrations, Information and Communication Technologies (ICT) and Energy sectors.





Our goal: client satisfaction

In order to meet our clients' expectations and demands, we carry out "Satisfaction Surveys" to determine the global satisfaction level for our services and its evolution over time with respect to the different elements:

Satisfaction surveys



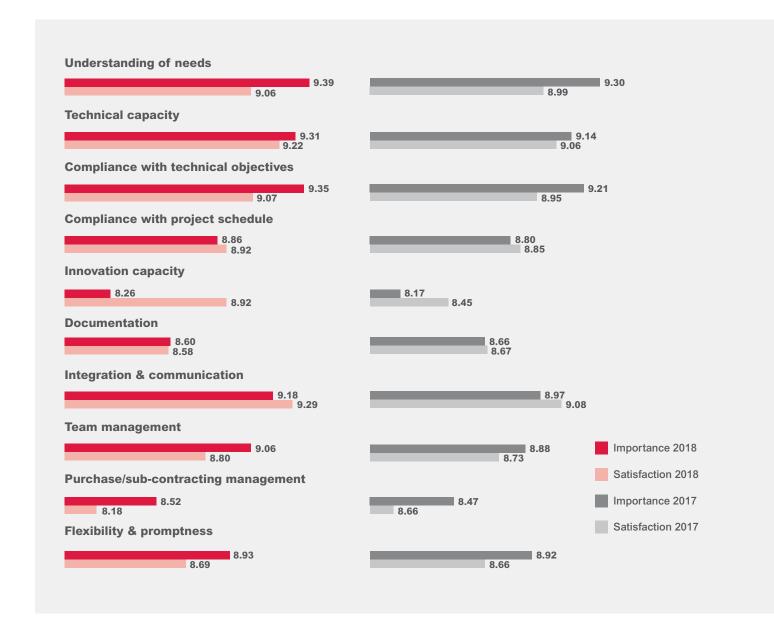
In 2018, this satisfaction survey was sent to all the clients that received Isdefe's services (314), with a response level of 73 %, a very similar ratio to the previous year.

For 2018, we set the objective for the company General Satisfaction Rate at a score of 8.5 or higher. The result was higher than the objective: 8.95



Survey Results for Satisfaction and Importance

As seen in the table below, the aspects that received a higher score than last year are innovation capacity and integration and communication on projects.



Evolution of Global Satisfaction Rate 2015-2018

Likewise, all claims and complaints filed by clients, either on the satisfaction survey or by any other means, are recorded to ensure they are monitored, answered and settled in line with the ongoing spirit for improvement and excellence that guides our activities.





Committed to our employees

As of December 31st, 2018, our staff comprises 1,628 people, 92 % of whom belong to Operational Units (production) and the other 8 % to Corporate Services (administration and management services).

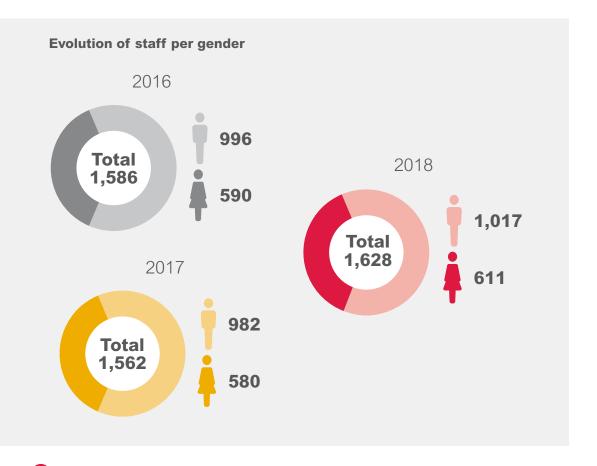
86 % of the staff have higher or technical qualifications and of these, 81 % are qualified in Engineering. Therefore, most of our staff boast

highly specialised knowledge and carry out their activity in the technological, management and specialised services domain, as is the case for aerospace facilities.

On the other hand, it should be noted that 62.5 % of the staff are men whilst 37.5 % are women, a ratio that is reversed among the youngest employees (31-40 years) for whom women outnumber men.

Our team in figures

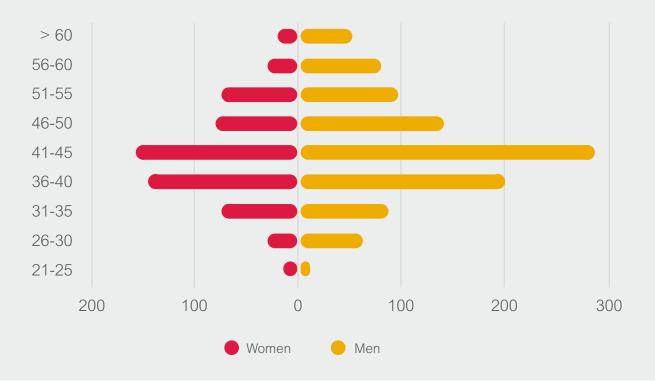
Isdefe has a diverse team that wishes to stay with the company as shown by the following figures:



86 % of staff have higher or technical qualification

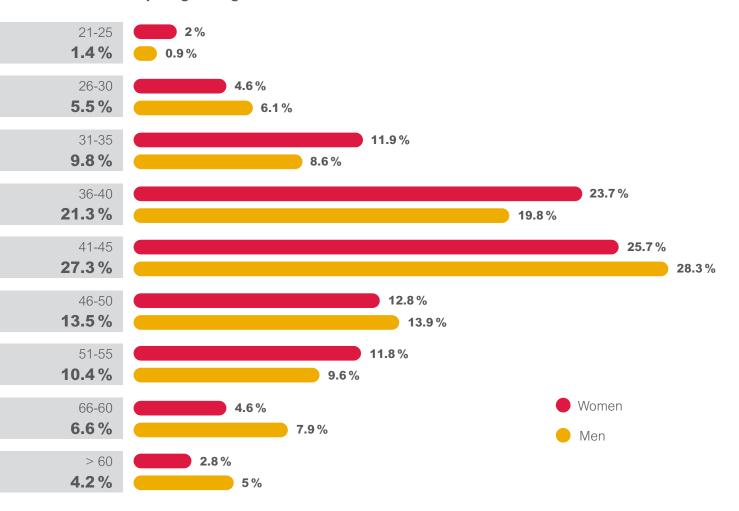
Staff per gender and age 2018

	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	> 60	Т	otal
Women	13	28	73	145	157	78	72	28	17	611	37.53 %
Men	9	62	87	201	288	141	98	80	51	1,017	62.47 %
Total	22	90	160	346	445	219	170	108	68	1,628	100 %





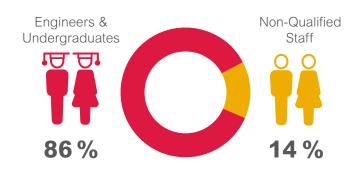
% of staff per age and gender



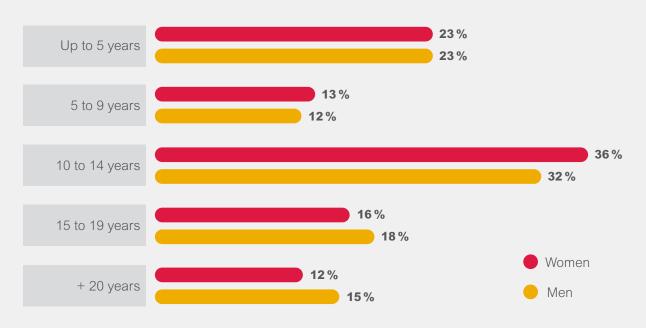
Evolution of staff per qualification

Degree	No. Staff 2018	%	No. Staff 2017	%	
Telecommunications Engineers	357		341		
Aeronautical Engineers	208		211		
Industrial Engineers	218		203		
Computer Engineers	186		172		
Undergraduates in Physics	90	86%	89	85%	
Economists	78		62		
Undergraduates in Mathematics	13		12		
Other Engineers	69		65		
Other Degrees and Qualifications	184		176		
Non-Qualified Staff	225	14%	231	15%	
Total Staff	1,628	100%	1,562	100%	

% staff per qualifications 2018



% of seniority in staff per gender



Average turnover rate¹

Leavers/Rate Women 35 2.20 Men 54 3.40 Total 89 5.60

(1) Average number of employees: 1,587

Absenteeism rate





Hiring Policy

Act 6/2018, July 3, on the State General Budgets for 2018 states that State-Owned Companies may not undertake the hiring of new temporary staff, except in exceptional circumstances and to meet urgent and pressing needs. For this reason, for 2018, the Ministry of Finance authorised the hiring of 92 people within the Replacement Rate and 112 people within the Temporary Employees Quota. Additionally, said Act provides for the possibility to request a Stabilisation Rate of Temporary Employment between 2018 and 2020. In 2018, no hiring was executed under this Rate criterion.

Selection and career development for our employees is based on their skills and performance of their professional roles and on the criteria of merit, equality, publicity, competition and capacity as required for the vacant position to be covered in accordance with the rules set out by the Additional Provision in Act 6/2018, July 3 on the State General Budgets for 2018.

Last year, we carried out 254 selection processes. For these more men applied for the positions (4.19 men for every position) than women (1.57 women for every position). However, in relative terms the number of women selected is higher (women 22.80%; men 15.30%).

Candidate Selection

per gender	Women	Men	Total
Official Candidates	399	1,065	1,464
Rate Candidates/Processes	1.57	4.19	5.76
Selected Candidates	91	163	254
Selection Rate/Official Candidates (W/W; M/M)	22.80%	15.30%	17.34%
Selected/Total	35.83%	64.17 %	100%



Staff per Type of contracts

of contracts	Wo	Women		Men	
Full Time Permanent	499	36 %	882	64 %	1,381
Part Time Permanent	5	100 %	0	0 %	5
Temporary	107	44 %	135	56 %	242
Total	611	38 %	1,017	62 %	1,628

Most of our professionals (85 %) are hired under a full permanent contract.

Career Development

At Isdefe we promote professional and personal development for all our employees, ensuring equal opportunities and fostering a merit-based corporate culture.

+68,000 training hours delivered in 2018 We carry out a process for training needs identification to meet the organisation's needs - this is channelled through the training representatives. Each management unit has a training representative with a category of Manager or Department Director which allows us to gather and analyse needs for subsequently drafting training plans. The training plan is drafted for three years and updated on annual basis. Within the training plan 2018-2020, a greater significance has been given to the online methodology and inhouse training.

The main training activities were focused on:

Aerospace technologies

Cyber security



Obtaining and maintaining certifications

Training oriented to support in public management

Training in management





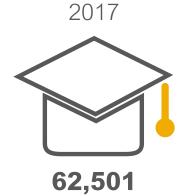
At Isdefe we have our own dedicated Virtual Campus for corporate training (welcome plan, code of ethics, criminal risk prevention, security of classified information, corporate tools, etc.) which is supplemented by training in external training platforms on technical topics (Cyber security,

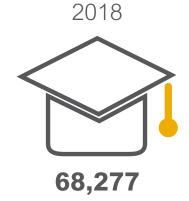
CIVIL3D, RPAS, etc.), IT, languages, skills and management.

This Virtual Campus gives greater access to training to employees who are distributed over various work sites.

Training Hours







Investment in Training (€)







Training Hours per groups & gender

	Women	Men
Higher Qualification	19,415	31,560
Mid-Qualification	3,953	6,045
Non-Qualified Technician	646	4,006
Misc. Functions	N/A	53
Admin. Staff	2,243	358
Total	26,256	42,021

Health and Safety

One of our main corporate objectives is the health and safety of our staff. Top management has to define and authorise the Occupational Safety and Health (SST) Policy within the organisation and make sure that within the scope determined in its SST management system, this policy is suitable for the nature and significance of the risks, including a commitment to damages and health deterioration prevention and to an ongoing improvement of SST management. This encompasses the commitment to comply with applicable legal requirements, which are notified to every person working for the organisation. This policy is regularly reviewed.

Health and Safety Committee

Isdefe features four Health and Safety Committees that hold quarterly meetings, with an equal number of workers' representatives (Prevention Delegates) and company representatives to address occupational risk prevention, risk assessment and the definition of suitable controls; as well as participation in accident investigations or consultations when there are changes affecting health and safety at work.

Occupational Risk Prevention Plan

The Occupational Risk Prevention Plan aims to promote workers' health and safety by implementing measures and developing the necessary activities for the prevention of work- related risks, according to the applicable legislation.

Different company agents take part in the preparation of this Plan (In-house and External Prevention Service, Health and Safety Committees, Prevention Delegates, designated workers and prevention resources) and this is always notified to the staff for their knowledge and application.

The Prevention Plan 2018 stresses the objectives on training and retraining of workers exposed to office-related risks. In this regard, at the end of the year more than 1,000 workers had received the corresponding training. Moreover, retraining for positions at risk of falls from height was carried out.

Another objective achieved this year was the measurement of industrial health conditions in positions exposed to risks arising from chemical pollutants and measurements to determine workers' noise exposure.





Finally, the review, update and new risk evaluations were conducted throughout the year at all work sites and in every workplace.

This system is supplemented by legal audits held every two years. The audit carried out by the company TUV RHEINLAND in 2016 showed a satisfactory result where Isdefe's Prevention Management System is defined as efficient. The last audit carried out by AENOR was held in January 2019.

Health Surveillance

At our Headquarters, a medical service is responsible for Health surveillance. This service

carries out medical examinations which may be mandatory or optional, the objective of which is to guarantee and protect the health of all our workers at their workplace. In 2018, nearly 1,200 examinations were carried out. This medical service also carries out campaigns to improve health conditions and/or vaccinations.

Furthermore, the technical area of the Prevention Service promotes initiatives to improve workers' health and safety conditions as was the case in 2018 with the beginning of the Systematised Management of PPEs (personal protective equipment), the Driving under extreme circumstances Courses and the Mindfulness Days.

Actions for improved health and participants in 2018



Vaccinations (against flu & risk zones; anti-tetanus, hepatitis, cholera, anti-typhoid, etc.)

177 employees

Smoke quitting campaign







High blood pressure detection campaign

28 employees

Colorectal cancer detection campaign





In 2018, spending on medical examinations, mandatory and optional training in risk prevention rose to €115,958.

Accident Rate

Despite all measures being implemented, zero risk is not possible. Although no occupational diseases or deaths caused by occupational accidents or diseases were recorded this year, some accidents at work did happen as shown in the table below:

	Women	Men	Total
Accident with sick leave	1	11	12
Accident with no sick leave	12	10	22
Occupational disease with sick leave	0	0	0
Occupational disease with no sick leave	0	0	0
Total	13	21	34

The total accident frequency rate for each 100,000 hours worked was 1.96.

Equal Opportunities

At Isdefe we promote professional and personal development for all our employees, ensuring equal opportunities.

Equal Opportunities Plan, actions:

Equality Culture and Plan Visibility

Professional Level and Remuneration

Internal and External Communication

Professional Promotion

Staff Recruitment and Selection

Work-Life Balance

Training and Career Development



Sexual and Gender-based Harassment

Work-life balance

With the aim of making equal opportunities effective, we have established a number of measures to facilitate the work-life balance of our staff, helping them to achieve a suitable balance between personal needs and career development, avoiding any kind of discrimination because of this. These measures are:



- Flexibility in working hours of 1 hour and 30 minutes.
- Continuous working day for parents with children under 12 years and staff that care for disabled relatives.
- Accumulation of breastfeeding leave.

In 2010 we were awarded the "Equality in the Company" distinction (DIE), and due to our efforts for effective equality we have renewed this distinction every year since



Remuneration¹

With the aim of contributing to effective equality between women and men, at Isdefe we implement a salary remuneration policy based on internal equality criteria, while seeking competitiveness in the labour market.

Moreover, it should be noted that the company's economic policy improves legally binding economic conditions. The ratio between Isdefe's minimum salary (\in 17,516) and the minimum guaranteed interprofessional wage (\in 12,600) is 1.71.

Labour Relations

Labour relations are governed by the 18th Collective Agreement at national level for Engineering companies and Technical Studies Bureaus published by Order of December 30, 2016, the Workers Statute and different Company-based Agreements. This Collective Agreement is applicable to 100 % of our staff.

Social dialogue at Isdefe is structured through its five Company-Staff Delegates Committees, as well as the six union sections in place. Isdefe conducts relations with these Staff Delegates/Unions through reporting, consultation and negotiation processes laid down in the Workers Statute and the Collective Agreement of the Engineering and Technical Studies Bureaus sector.

€5,141,840 invested in social benefits in 2018

Social Benefits

All our workers enjoy a wide range of social benefits. Temporary staff enjoy the same social benefits as permanent staff, except for life insurance and medical insurance.

- Lunch vouchers or food subsidy
- Creche vouchers
- Transport aids
- Childbirth bonus
- Private medical policy programme on health counselling via telephone and Internet (paediatricians, parents' schools, etc.)
- Possibility to keep the medical policy during leave on the grounds of care of children under one year
- On-site physical therapy service
- City pack service
- Life insurance
- Coverage on the grounds of incapacity/ invalidity (through the life insurance)
- Supplement of 100 % of the salary for maternity or paternity or temporary working incapacity
- Pension funds (currently, company contributions are on hold)

Furthermore, and according to the provisions set out in the applicable Collective Agreement, every Friday throughout the year is a morning-only working day and the special summer working day applies for 4 months a year (June to September inclusive).

The spending on employee benefits amounted to 4.5 % of net income, equivalent to a total of €114,421,405 (revenues - direct expenses required for services different from those performed by staff).



Committed to our suppliers

All our procurement processes are subject to principles such as freedom to access calls for tenders, publicity, transparency, non-discrimination and equal treatment among tenderers, implementing the principle of integrity in all our procedures as set forth in Act 9/2017, of November 8, and due to the consideration we have as a contracting authority.

For complete transparency and traceability, the general principles of public procurement are included in the specifications defined for each of our procedures which are published on Isdefe's Procurement Web Page on the Public Sector Procurement Platform https://contrataciondelestado.es

Also, it should be noted that we demand from the economic operators with which we are entering into contracts the same capacity and solvency requirements that are required by the Administration and the certification that they have the capacity to enter into a contract with the Administration and are not incompatible in the terms set forth by Act 9/2017.

Environmental and Social Aspects in **Sub-contracting**

Concerning social and environmental commitments, Act 9/2017, of November 8, on Public Sector Procurement sets forth for all the procedures the following cross-cutting measures:

- Extension and compliance of suppliers with its environmental policy by including an environmental clause in every specifications document. https://www.isdefe.es/gesti-n-medioambiental
- Obligation for all its suppliers to abide by applicable regulations on labour matters, social security, social integration of disabled people and occupational risk prevention, as well as respecting collective agreements in force, by including in all the specifications documents clauses on working and social conditions requirements.
- Obligation to abide by applicable regulations on labour matters, social security, social integration of disabled people and occupational risk prevention.

There is also a tie-break clause benefiting companies with a higher ratio of disabled workers on permanent contracts in their staff, with lower rates of temporary contracts in their staff or with a higher ratio of women hired in case tender proposals are awarded the same score.

Also, and based on the contract, we establish criteria to reduce greenhouse gas emissions; the use of energy saving and efficiency measures; and the use of energy from renewable energy sources for performance of the contract. For the electricity contracts that we have tendered, a more significant score was added to tenderers offering energy supplied from renewable sources or high efficiency co-generation.

Procurement Supervision and Audit System

Given our consideration of individualised in-house technical service provider and a public company, the procurement processes we launch are subject to all the controls that the Administration exerts on its own units through its control bodies (State Public Accounts Department and Court of Auditors). These controls include the obligation to submit all the contracts and annual accounts to the Court of Auditors and the publication of all the contract awards on the Transparency Portal.

Consumers

Although our activity is not addressed to end consumers, since all our activity targets institutions, mainly within the public sector, we have a generic e-mail account available to entities interested in submitting requests or communications on procurement: UnidadContratacion@isdefe.es



Committed to society

Although management of our main tasks is directly focused on creating value for all citizens, at Isdefe we carry out actions that go beyond our scope of

action, working alongside expert organisations that help us to give our best.



Social investment in the community

Isdefe's Social Action Programme aims to contribute to sustainable development by fostering solidarity initiatives, in collaboration with foundations and NGOs, which are aligned with the company's strategies and values, focused on the field of Public Administrations and especially those linked to Defence and Security field.

Collaboration with Asociación Guardias Civiles Solidarios (AGCS)

Isdefe has continued to collaborate with the Asociación Guardias Civiles Solidarios (AGCS), made up of serving Spanish Civil Guard officers - experts in rescue, civil protection and salvage operations - which cooperates with persons and entities in need of humanitarian aid.

In June, the AGCS awarded Isdefe the "Collaboration Prize 2017" for the support given to Aid Campaigns within the "Aid Vehicle" project, in the premises of the Guardia Civil Command Office in Granada.

The Aid Vehicle is a van equipped to transport humanitarian aid, to locate victims, and is also fitted with advanced technology thanks to a remotely piloted drone equipped with a high definition camera and a screen inside the vehicle. It also has an automated external defibrillator, which helps to reduce the number of fatalities during disasters.



Participation in the civil/military race against drugs

Isdefe participated in the 19th edition of the civil/military race against drugs, organised by the Army and sponsored by the General Directorate for Public Health of the Autonomous Community of Madrid and which was held on October 28, in Casa de Campo de Madrid.

More than 50 Isdefe employees and employees' relatives took part in this 6.5-km race in which soldiers, athletes, running fans and children ran to raise awareness on the dangers of drug abuse. During the race the "Drugs or You" bus was present; this bus of the General Directorate for Public Health goes on an all-year-round tour of the Autonomous Community of Madrid to raise awareness and prevent addiction.



XI Christmas Charity Campaign 2018

In December the eleventh Christmas Charity Campaign was held at Isdefe, during which several initiatives were introduced to share Christmas with the most vulnerable groups such as:

Collaboration with Fundación Madrina

For the two first weeks, toys, baby clothes and maternity wear were collected. Both new and second-hand items were donated by employees for the Three Wise Men Party that the Fundación Madrina holds every year at the Almudena Cathedral of Madrid.

The Fundación Madrina is a charitable entity that helps pregnant women, mothers and families with children at risk of social exclusion. In the 2018-2019 Christmas campaign, the Foundation distributed more than 30,000 toys among 9,000 children from poor families in Madrid. Some of these toys were distributed in areas of extreme poverty in Africa and Latin America.

Collaboration with Asociación Tres Reyes Magos de Verdad

Isdefe joined the initiative of the Asociación Tres Reyes Magos de Verdad, with the aim of giving gifts to every child in families in need at Christmas and, also, that this gift is the one they really want.

For this purpose, in November, the company announced to its staff the challenge for 30 Isdefe employees to become Wise Men by handing them one of the letters written by the children. The challenge was successfully met, proving once again how generous the company's workers are.

The Association works with children that live in foster homes, dysfunctional families or families in great poverty.

In 2018, the Association distributed gifts to more than 11,000 children in different foster centres and homes, in 14 provinces and by 50 Wise Women who coordinated the gift-giving tasks in the foster centres.



XI Campaña Solidaria de Navidad

Del 26 de noviembre al 14 de diciembre



Corporate Volunteering with Masnatur

In the framework of the Christmas campaign, Isdefe held a corporate volunteering activity with the Masnatur Foundation to promote the comprehensive development of disabled people through leisure and to give their families a well-earned break.

The reason for this activity was to hold a Christmas Party in which children and youngsters of the Foundation could enjoy a day of fun at the Hotel llunion Pío XII, which has been awarded the universal accessibility certification.

By developing this project, Isdefe contributes to the social inclusion of disabled people (especially children and youngsters) and strengthens its commitment to the social context it operates in, whilst offering employees the chance to volunteer. It is a collaboration that Isdefe has maintained for nine years now and which generates a clear social impact through its contribution to the well-being of beneficiary families who are given time off for a few hours.

In 2018

Volunteers from Isdefe

Beneficiaries

Hours of volunteering

Hours of

respite care

Since the beginning of Isdefe's collaboration

Volunteers

from Isdefe

Beneficiaries

Hours of volunteering

Hours of respite care

Days of corporate volunteering

"Caps for a New Life" Campaign

Isdefe continues to collaborate with the "Caps for a New Life" project started in 2012 in collaboration with the Seur Foundation, which provides children with medical and orthopaedic treatment that is not covered by the public health system. Moreover, the project has an environmental sustainability aspect due to the fact that it recycles bottle caps.

In 2018, Isdefe staff at the HQ contributed 590 kg of caps, with a value of €118 - meaning the recycling of 295,000 caps. This recycling activity prevents the emission into the atmosphere of 885 kg of CO2, as much as that absorbed by 148 trees in a year.

Every year, the Seur Foundation acknowledges the charity work done by Isdefe staff by issuing a diploma and sending the indicators through its Cap-Culator.



Talent development

Isdefe contributes to talent generation with its grants, internships and prizes to research projects. Notable examples include grants for recent graduates (CITIUS programme) and the extracurricular external internships in undergraduate and master programmes, in addition to prizes to the best research projects.

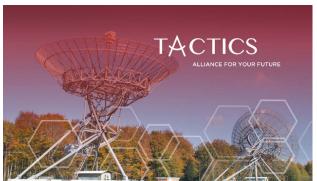
This year we have hosted four external academic internships for Undergraduate and Master students in the framework of the Horizontes Network and 22 grants have been awarded within the CITIUS programme for a total amount of €263,022. CITIUS focuses on specialised training and in-company internships in organisations that join the Programme. The internships are tutored by business and academic tutors and the aim is to complete the training of university graduates and help them to kick-start their professional career.

Moreover, Isdefe and the Universidad Politécnica de Madrid have entered into an agreement to create an Isdefe-UPM Air Traffic Management (ATM) Department for the period 2018-2022.

The prizes awarded in 2018 include the "Antonio Torres" Isdefe Prize for the best paper presented at the National Conference on R&D in Defence and Security; and the prize for the best doctoral thesis

on Security and Defence of the Official Association of Telecommunication Engineers; or the prizes for the best academic records from different technical schools.





Alliances

Isdefe maintains alliances with renowned organisations in the field of Corporate Social Responsibility with the aim of contributing to sustainable development by following national and

international trends in the field of sustainability and participating in technical work groups to exchange knowledge and foster best business practices.

UN Global Compact



In 2018 we celebrated nine years of our commitment to the United Nations Global Compact, an international initiative promoting corporate social responsibility for sustainable development.

By committing to the Compact, Isdefe has integrated the Ten Universal Principles advocated by the United Nations in the areas of human rights, labour regulations, environment and the fight against corruption in its business strategy.



THE TEN UNIVERSAL PRINCIPLES OF THE UN GLOBAL COMPACT

HUMAN RIGHTS - Universal Declaration of Human Rights

- 1 Businesses should support and respect the protection of internationally proclaimed Human Rights.
- Businesses should make sure that they are not complicit in Human Rights abuses.

LABOUR - International Labour Organisation's Declaration on Fundamental Principles and Rights at Work

- 3 Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.
- 4 Businesses should uphold the elimination of all forms of forced and compulsory labour.
- Businesses should uphold the effective abolition of child labour.
- Businesses should uphold the elimination of discrimination in respect of employment and occupation.

ENVIRONMENT - Rio Declaration on Environment and Development

- 7 Businesses should support a precautionary approach to environmental challenges.
- 8 Businesses should undertake initiatives to promote greater environmental responsibility.
- 9 Businesses should encourage the development and diffusion of environmentally friendly technologies.

FIGHT AGAINST CORRUPTION - United Nations Convention Against Corruption

10 Businesses should work against corruption in all its forms, including extortion and bribery.

Forética



Isdefe is a member of Forética, a leading and renowned entity in the field of business sustainability and good practices, which aims to consolidate responsible management and foster strategic alliances based on sustainability.

Thanks to Forética, we participated and collaborated in the following Clusters and Work Groups:

CSR in Public Companies Action Group, collaborative platform that fosters knowledge exchanges in the areas of environment, society and good governance, and that showcases business success stories. Isdefe has been a member since it was founded in 2017. Group members include important entities from the public sector.

Transparency, Good Governance and Integrity Cluster, made up of 48 companies representing more than 20 % of Spain's GDP in turnover. This Cluster stresses quantifying the value of transparency and good governance in companies and its impact on the market.

Social Impact Cluster, comprising 40 major companies, was created as a meeting point for knowledge, debate, exchange and leadership in social aspects. It addresses the link with Sustainable Development Goals, diversity, respect of Human Rights and management of associated social risks.

Other Forums and Associations

In the framework of its institutional relations, Isdefe participates in different associations and foundations related to defence and security, as well as with the rest of its sectors of activity, in order to build partnerships to develop activities and disseminate science and technology in general, and engineering, in particular.

Moreover, Isdefe participates in the main technology-related trade shows, days and seminars in its scope of action¹, which are frequently co-held with the State General Administration.

(1) Please check all the events in Annex IV

Connections to Associations in 2018

Spanish Royal Academy of Engineering

Foundation of Group of Technologies for Defence and Security

Foundation of Spanish Aeronautics and Astronautics

International Council on System Engineering (INCOSE)

Forética

Spanish Network of the United Nations Global Compact

Spanish Association for Quality (AEC)

Spanish Association of Systems Engineering

INCOSE Chapter España (AEIS-INCOSE)

Spanish Association for Maintenance Works (AEM)

Association for the Scientific Development of ATM in Europe (ASDA)

Spanish Association for the Promotion of Information Security (ISMS Forum Spain)

Navy League of the United States Madrid Council

Spanish Maritime Cluster Association

European Organisation for Civil Aviation Equipment (EUROCAE)

Friends of Europe (FoE)

Association for the Development of Management (APD)





Highlights of Forum Participation 2018

World ATM Congress 2018

I National Conference on Systems Engineering

International Conference on Cyber Conflict (CyCON)

Summer Course
"Evolution
of Defence
R&D in Spain
horizon 2020"

World Border
Security
Congress 2018

V ADESyD Conference "Sharing Visions on Security"

Executive Level
Meeting by
MAWA Forum

XXVI Course on High Logistics Management Unvex Security & Defense 2018

High Level
Conference
on Assurance
2018 ISACA
Madrid Chapter

Defence, Security
and Space Forum
(DSS Forum)

75th Anniversary of the Air Force General Academy VI National Conference on R&D in Defence and Security (DESEi+d 2018)

I Conference on Digital Transformation in Alcorcón (Digit@lcor)

V International
Joint Operations
Workshop with the
"Methodological
& technological
contribution
from Systems
Engineering"



World ATM



World Border Security



DESEi+d



Digit@lcor



Unvex Security & Defense



ADESyD



Summer Course R&D iin Defence



CyCON



High Level Conference



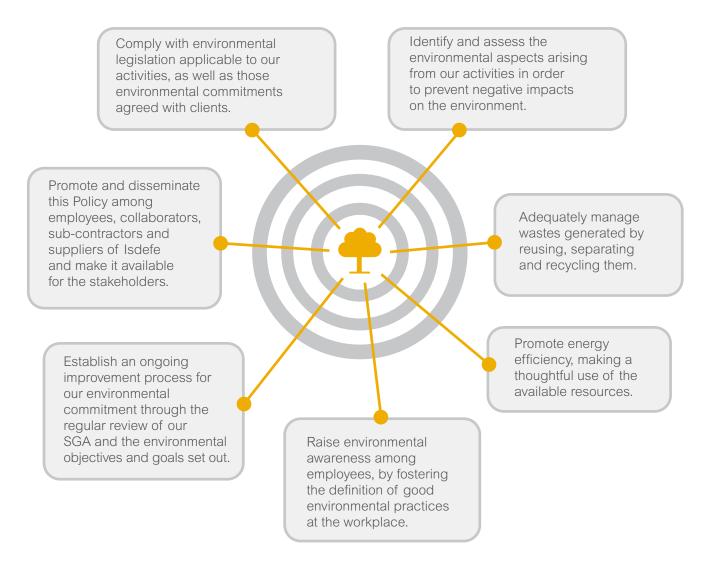
4

Our environmental performance

Tools for Environmental Management

Isdefe has in place an Environmental Policy and an Environmental Management System (SGA) certified in accordance with the UNE-EN-ISO 14001:2015 standard, which is renewed on a yearly basis, ensuring its ongoing suitability and efficiency.

Our Environmental Policy aims to achieve the following objectives:



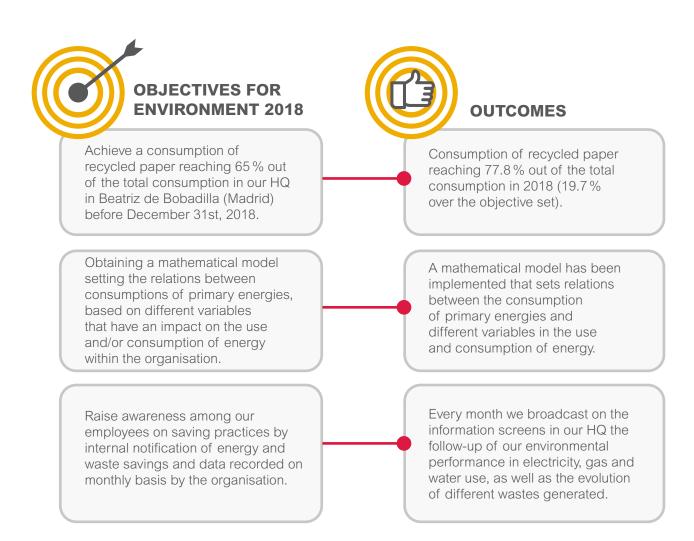
Our Environmental Management System fosters the efficient use of natural resources, active prevention of any kind of pollution, and adequate management of potential waste generated during our activity. The scope encompasses: Provision of consultancy and technical assistance services in the sectors of Defence and Security, Space, Transport, Public Administrations, Information and Communication Technologies (ICT) and Energy. Therefore, our impacts are exclusively generated at our corporate

address in Beatriz de Bobadilla, 3 (Madrid), where 715 people carry out their job.

It should also be noted that, except for the management work that we undertake for the NASA Space Station in Robledo de Chavela (Madrid), the rest of the work sites in which we carry out our activity are not within or next to protected areas or areas with high value for biodiversity.

Environmental Objectives and Performance for 2018

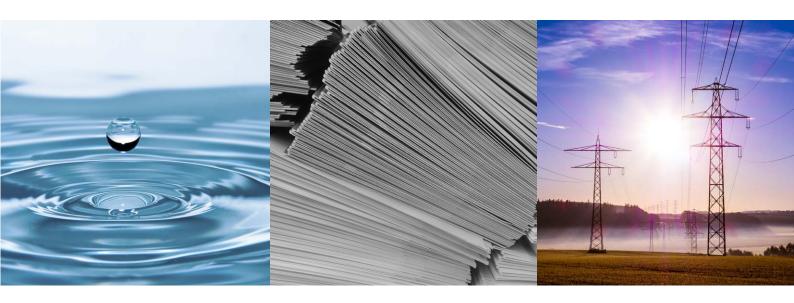
Since we are constantly seeking to improve our environmental performance, for 2018 we set three specific objectives which have produced the following outcomes:



Sustainable use of resources: Water, raw materials, energy

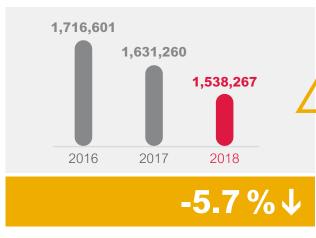
In line with our Environmental Policy and the objectives set for the year in our Environmental Management System, we seek a responsible use and minimisation of natural resource consumption - electricity, gas, water, paper. This is evaluated by controlling and analysing the performance and functionality of equipment and facilities requiring these resources, optimising them and giving priority to those that use renewable energies. A good example of this is the reduction in our bills (electricity and water bills) by 6.86 % compared to 2017.

In 2018 we successfully reduced our energy bill by nearly 7%



The evolution in the consumption of resources for the last three years is shown below. As may be seen, except for natural gas, the consumption of which has increased mainly due to weather conditions, the consumption of the other resources is constantly decreasing as a result of efforts and control policies implemented in preceding years and which are reviewed on an annual basis.

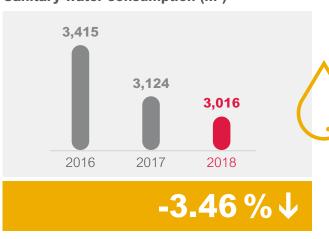
Electricity consumption (kWh)



Electricity consumption (kWh) / employee



Sanitary water consumption (m³)

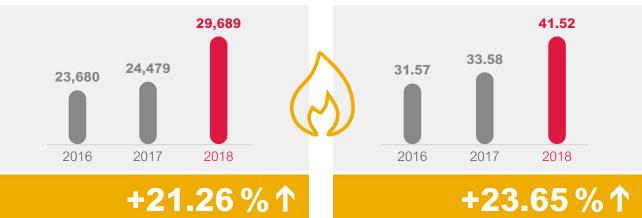


Sanitary water consumption (m³) / employee



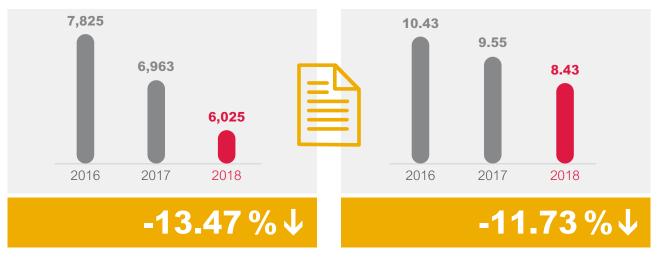
Natural gas consumption (m³)

Natural gas consumption (m³) / employee



Paper consumption (kg)

Paper consumption (kg) / employee





Carbon Footprint

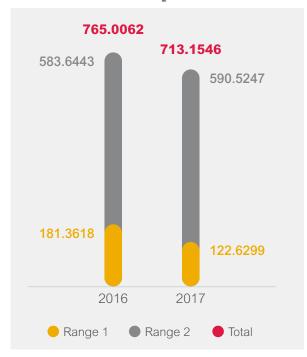
In order to calculate our impact on climate change and identify corrective actions for its reduction, we calculate our Carbon Footprint on a yearly basis. For this purpose, we will use the Carbon Footprint Calculator devised by the Ministry of Agriculture, Food and Environment¹. This tool calculates greenhouse gas emissions associated with the organisation's activities, considering both direct emissions (Range 1) and indirect emissions (Range 2) from the consumption of electricity.

As can be observed in the table below, in 2017 emissions from cooling and air conditioning in our HQ were reduced by 53.2 tonnes compared to the preceding year. According to the study and evaluation of Energy Efficiency in our HQ and its premises, from real energy consumption and demand data for 2017 it was 0.437 within Class B.

Evolution of Carbon Footprint (t C0, eq)

	2016	2017	
Fixed facilities	51.2088	55.0001	
Journeys by vehicles	4.9031	5.0048	
Cooling/Air Conditioning	125.2500	62.6250	
Total Range 1	181.3618	122.6299	
Total Range 2	583.6443	590.5247	
Total Range 1+2	765.0062	713.1546	

Carbon Footprint (t C0, eq)



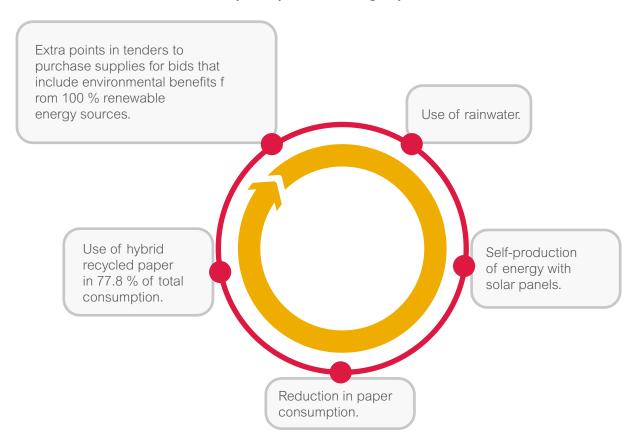
(1) Data for the preceding year are published every year in April, therefore, at the time of producing this document data for 2018 are not still available.

One measure taken to reduce our carbon footprint in 2018 was using electricity from 100 % renewable energy sources.

100 % renewable electric energy in 2018

Circular Economy

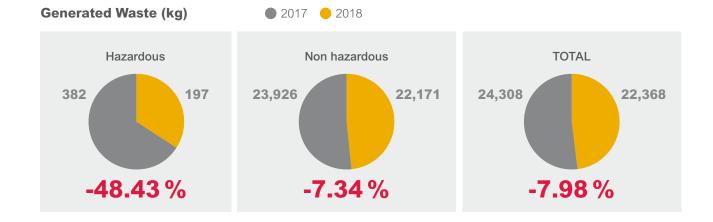
We contribute to the circular economy mainly in the following ways:

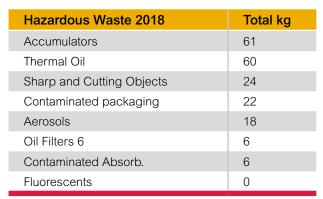


Waste management

Isdefe has a plan for separating waste at origin, through specific containers for each type of waste. At our HQ there is a General Civic Amenity Site which enables us to record the correct separation of waste, the amount generated, the correct labelling and suitable transport for the waste to then be treated by an authorised handler.

Although the amount of hazardous waste as a proportion of the total waste generated is low (0.9 %), in 2018 a very significant reduction was achieved -nearly 50 %- whilst non-hazardous waste was also reduced by approximately 7 %.







Non-Hazardous Waste 2018	Total kg
Organic	10,532
Paper	6,619
Plastic	1,602
Cardboard	1,494
Plastic cups	466
WEEE	358
Glass	239
Scrap	207
Air Filters	190
Wood	168
Toner	107
Batteries	80
Hyg. Prod.	55
CD/DVD/hard disks	54

Investment in Environment

In 2018, €31,176 were invested in environmental expenditure, while the amount spent on waste management decreased because less waste was generated.

Dedicated resources (€) 2017 2018 Waste Management 28,441 21,273 SGA Certificate Renewal 2,735 9,000 TOTAL 31,176 30,273

Challenges for 2019

For the next year and in order to keep working on constantly improving our environmental performance, we have set the following goals:



1. Transport: Install at least 4 e-vehicle charging points in the parking lot of our corporate HQ as a means of fostering transport using low emissions vehicles.



2. Plastics: Eliminate purchases of single-use plastic items (spoons, cups, water bottles, coffee machines, rest areas and meeting rooms, etc.) They will be replaced by other biodegradable and/or reusable materials.



3. Paper: Achieve that a minimum of 30 % of purchases of office paper must be partially recycled or from virgin fibre sourced from certified sustainable forests (FSC, PEFC or equivalent) and ECF.







Legal status and regulatory framework

Ingeniería de Sistemas para la Defensa de España, S.A., S.M.E., M.P.¹, (Isdefe, S.A., S.M.E., M.P.), is a State-owned commercial company pertaining to the State institutional public sector pursuant to Act 40/2015, October 1, on the Legal Framework of the Public Sector, Articles 2 and 84, and which was incorporated in Madrid on October 17, 1985 upon approval in the Cabinet Meeting on September 18

of that same year. Isdefe is attached to the Ministry of Defence. The National Institute for Aerospace Technology (INTA) is the sole owner of the entirety of its share capital. The Company is governed by its articles of association, and by mercantile, civil, labour and criminal law regulations and in matters applicable to it under:

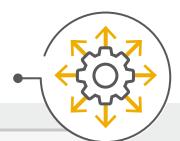
- Act 33/2003, November 3, on Assets of the Public Administrations
- Act 47/2003, November 26, on General Budgets
- Act 4/2007, April 3, on Transparency in financial relations between Public Administrations and Public Companies, and on Financial Transparency of specific companies
- Framework Law 2/2012, April 27, on Budgetary Stability and Financial Sustainability
- Act 19/2013, December 9, on Transparency, Access to Public Information and Good Governance
- Act 3/2015, March 30, regulating the exercise of high office in the State General Administration
- Act 40/2015, October 1, on the Legal Framework of the Public Sector
- Act 9/2017, November 8, on Public Sector Procurement
- Act 11/2018, December 28, on Non-Financial Information and Diversity
- Framework Law 3/2018, December 5, on Personal Data Protection and Guarantee of Digital Rights and Regulation (EU) of 27 of April 2016 on the protection of natural persons with regard to the processing of personal data





Our corporate purpose

In line with our legal and business purpose, the object of our company is:



Provision of engineering, consultancy and technical assistance services, particularly those concerning Defence and Security.

Preparation, development and implementation of projects and programmes concerning contracts for works, supplies and services related to the areas stated in the previous section.

Support, assistance and advice to national industry at the request of the Ministry of Defence.

Provision of advice and assistance services on Industrial Cooperation Agreements related to programmes for material purchase and Defence contracts, as well as support in negotiation, execution and follow-up of international Defence programmes that Spain takes part in and Defence Projects abroad, including humanitarian aid or peacekeeping missions.

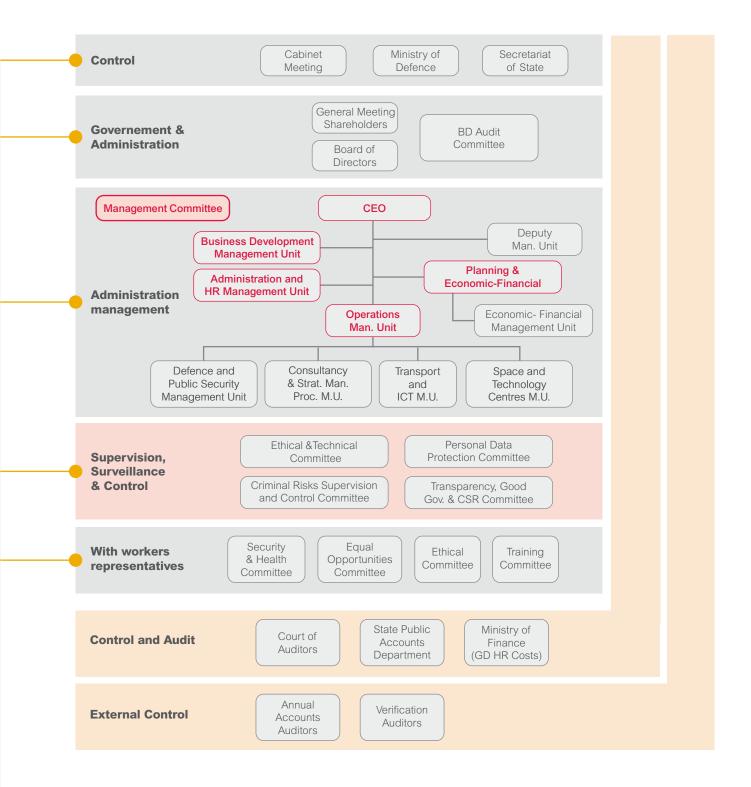
Specialised technical support in the fields of cutting-edge technologies such as:

- Stations for monitoring and collection of data from space vehicles.
- Launch and landing sites.
- Equipment calibration, testing and certification facilities for aerospace projects.
- Experimental facilities for new aerospace projects.
- Aeronautical and space reporting and documentation centres, and processing centres for the analysis, processing and distribution of information from satellites.
- Other activities linked to aeronautical and space engineering.



Government, administration, management, supervision and control structure

Isdefe, as a State-owned commercial company, is attached to the Ministry of Defence. The Secretariat of State for Defence is in charge of the company, which in turn holds the Presidency of Isdefe, the General Meetings and the Board of Directors.



Government and Administration Bodies

General meeting

The General Meeting is formed according to the provisions set out in Act 33/2003, November 3, on the Assets of the Public Administration, stipulating provisions on representation and control of business assets of the State General Administration and special provisions for State-owned commercial

companies, under the legal form of public liability company, whose capital is fully held, directly or indirectly, by the SGA or its public bodies. In the case of Isdefe, ownership is fully allocated to the Autonomous Body of the National Institute for Aerospace Technology Esteban Terradas (INTA).



Roles of the General Meeting

Mechanisms for adoption of agreements

- Matters for which they are competent.
- Appointment of Account Auditors.
- Approval of company management, accounts for the previous period and decision on application of the results.
- Final appointment of Board Members, office renewal and revocation.
- · Modification of Articles of Association.

At the first call, the shareholders present or proxies must hold at least 50 % of the subscribed share capital with voting rights.

At the second call, 25 % of said capital shall be sufficient: and, in any case, provisions in Article 194 of the Capital Companies Act shall be applicable. Agreements shall be always adopted by a majority of the votes cast and in the event of a tie, the vote of the Chairman shall be decisive

Functioning

It shall be called and constituted to address any issue, provided that all the share capital is present and the attendants unanimously agree to hold the Meeting.

Types of Meetings

- Ordinary General Meeting (Art. 18 of Articles of Association): Call by the Board of Directors. Necessary Meeting within the first six months of every year.
- Extraordinary General Meeting: Call by the Board of Directors. Every Meeting not provided for in Art. 18 of the Articles of Association shall be considered extraordinary.

Composition

The Chairman and Secretary of the Meetings shall be those that hold the same respective positions on the Board of Directors, as set forth in Art. 181 of the Act on Assets of Public Administrations and in Isdefe's Articles of Association.

Therefore, the Chairman of the General Meetings is the Secretary of State of the Ministry of Defence.

Meetings during 2018:

- Ordinary General Meeting: 1
- Extraordinary General Meeting: 6



Board of Directors

Isdefe is administered and governed by the Board of Directors, which represents the company and therefore has full powers². The Board of Directors elects its Chairman, the Chief Executive Officer (who chairs the Board if the former cannot attend) and the Secretary of the Board who is not a Member of the Board.



Roles of the Board of Directors

Mechanisms for adoption of agreements

- Corporate representation with full powers.
- Defines the company's strategy.
- Performs the company's control activity.

Agreements are adopted by an absolute majority of votes by Members of the Board present at the Meeting. In the event of a tie, the Chairman shall decide.



Composition of the Board of Directors as of December 31st, 2018

Members with voting rights

Chairman	Other positions	Appointment
Ángel Olivares Ramírez	Secretary of State for Defence	22/06/2018
CEO	Other positions	Appointment
Francisco Quereda Rubio	CEO	13/03/2012 Re-elected on 29/05/2017
Board Members	Other positions	Appointment
Carmen Gandarillas Rodríguez	Deputy General Director Tech. Centralised Procurement	29/11/2012 Re-elected on 19/12/2017
Camino Arce Blanco	Deputy General Director Construction GD Roads	27/09/2018
Santiago Ramón González Gómez	Admiral, General Director, GD Armament and Material	27/04/2018
Carmen Blanco Gaztañaga	Dep. GD Resources, Claims and Rel. w/ Justice Admin.	27/09/2018
Miguel Martín Bernardi	Lt. Gen. Second Chief of the Gen. Staff, SEJEME	27/09/2018
Miguel Ángel Martín Pérez	Air Mshl. Chief of Logistic Support Command of the Air Force	27/09/2018
Francisco Javier Fernández Sánchez	Air Mshl. Second Chief of the Air Staff, SEJEMA	27/09/2018
Ramón Pardo de Santayana y Gómez-Olea	Lt. Gen. Chief of Logistic Support Command of the Army	04/06/2018
José Luís Ruiz Sumalla	Major General, Gen. Dir. Economic Affairs	27/02/2017
José María Salom Piqueres	Lt. Gen. General Director INTA	25/01/2018
Francisco Javier González-Huix Fernández	Adm. Chief of the Joint Gen. Staff, JEMACON	27/04/2018
José Luís Urcelay Verdugo	Adm. Second Chief of the Navy Staff 2nd AJEMA	29/10/2018

Members without voting rights

Secretary and Legal Counsel	Other positions	Appointment
Isabel Torres Fernández	Legal representative	6/02/2012

	Women	Men	Total
Board Members (including Chairman and CEO)	3	11	14
Secretary of the Board (non-member)	1	0	1
Total	4	11	15

Members of the Board of Directors receive remuneration only for meeting attendance, with the exception of the Chief Executive Officer³.

Appointments and dismissals Isdefe in 2018



Appointments

Ángel Olivares Ramírez was appointed Chairman of Isdefe Board of Directors during the Extraordinary General Meeting on 22/06/2018.

Camino Arce Blanco was appointed Member of Isdefe Board of Directors during the Extraordinary General Meeting on 27/09/2018.

Santiago Ramón González Gómez was appointed Member of Isdefe Board of Directors during the Extraordinary General Meeting on 27/04/2018.

Carmen Blanco Gaztanaga was appointed Member of Isdefe Board of Directors during the Extraordinary General Meeting on 27/09/2018.

Miguel Martín Bernardi was appointed Member of Isdefe Board of Directors during the Extraordinary General Meeting on 27/09/2018.

Miguel Ángel Martín Pérez was appointed Member of Isdefe Board of Directors during the Extraordinary General Meeting on 27/09/2018.

Francisco Javier Fernández Sánchez was appointed Member of Isdefe Board of Directors during the Extraordinary General Meeting on 27/09/2018.

Ramón Pardo de Santayana y Gómez-Olea was appointed Member of Isdefe Board of Directors during the Ordinary General Meeting on 04/06/2018.

José María Salom Piqueres was appointed Member of Isdefe Board of Directors during the Extraordinary General Meeting on 25/01/2018.

Francisco Javier González-Huix Fernández was appointed Member of Isdefe Board of Directors during the Extraordinary General Meeting on 27/04/2018.

José Luís Urcelay Verdugo was appointed Member of Isdefe Board of Directors during the Extraordinary General Meeting on 29/10/2018.

⁽³⁾ Remuneration of Governing Bodies may be checked on Isdefe's Financial Information Statement, available on our corporate website.



Juan Manuel García Montaño was dismissed as a Member of Isdefe Board of Directors during the Extraordinary General Meeting on 27/04/2018.

Agustín Coned Bajen was dismissed as the Chairman of Isdefe Board of Directors during the Extraordinary General Meeting on 22/06/2018.

Rafael Eduardo Huerta Prieto was dismissed as a Member of Isdefe Board of Directors during the Extraordinary General Meeting on 22/06/2018.

Isabel Gil Lorena was dismissed as a Member of Isdefe Board of Directors during the Extraordinary General Meeting on 22/06/2018.

Eduardo Zamarripa Martínez was dismissed as a Member of Isdefe Board of Directors during the Extraordinary General Meeting on 22/06/2018.

José María Orea Malo was dismissed as a Member of Isdefe Board of Directors during the Extraordinary General Meeting on 30/07/2018.

José Cordón Perugia was dismissed as a Member of Isdefe Board of Directors during the Extraordinary General Meeting on 27/09/2018.

José Luís Gil López was dismissed as a Member of Isdefe Board of Directors during the Extraordinary General Meeting on 27/09/2018.

Meetings during 2018: 11

A meeting is held once a month or upon request of the Chairman or a third of the Members.



Audit and Control Committee

The Audit and Control Committee is attached to the Board of Directors and is made up of a minimum of three and a maximum of five Board Members, and must have a majority of non-executive Board Members.



Roles of the Audit and Control Committee

Mechanisms for adoption of agreements

- Supervision of economic and financial information to be provided by the company.
- Supervision of the information provided to the General Meeting and the Board of Directors on its actions.
- Supervision of every relevant issue they should be informed on.

Regulations on calls, formation and adoption of agreements set out in the Articles of Association shall be applied to the operation of the Audit and Control Committee.

Composition of the Audit Committee as of December 31st, 2018:

Chairman: Mr. José Luís Ruiz Sumalla Committee Members: Ms. Carmen Gandarillas Rodríguez Mr. Juan Manuel García Montaño Committee Secretary: Ms. Isabel María Torres Fernández

Meetings during 2018: one meeting on 20/03/2018.

Supervision and Control Committees

In addition to the bodies described above, Isdefe has various supervision, surveillance and control bodies. Moreover, as a public company, it is subject to controls and audits by the Court of Auditors, and the State Public Accounts Department, the Ministry

of Finance and independent audits of its Annual Accounts, as well as to independent verifications of the Non-Financial and Diversity Information Statement.

Please find below the most relevant:

Administration and Management Bodies

Management Committee

The mission is to coordinate the implementation of the strategy and carry out the follow-up of the company's evolution in all its scopes of action.



Roles of the Management Committee

Mechanism for adoption of agreements

- Give advice to the Chief Executive Officer.
- Coordinate the implementation of the strategy
- Monitor the company's evolution.

The Management Committee meets when convened by the Chief Executive Officer and also upon the request of the Directors and after consultation with the Chief Executive Officer.

Decisions are made by consensus after debate of the issues on the agenda.



Mission

Ethical & Tech Committee

Disseminate the internal Code of Ethics and ensure compliance.

Personal Data Protection Committee

Guarantee personal data protection (rights and freedoms).

Criminal Risks
Supervision and Control
Committee

Regular supervision on systems for controlling and preventing Criminal Risk established by the Company.

Transparency, Good Governance and CSR Committee Promote transparency in Isdefe's public activity, ensure compliance of publicity obligations, safeguard the right to access public information and guarantee compliance with good governance and CSR provisions.



Other committees

There are other committees, such as the management coordination and advice and workers' representation committees, the Works Council and an External Committee on management.



Age pyramid of governing and management bodies





Risks, policies and action lines

Our policies, objectives and action lines are determined, on the one hand, by our status as a public company and, on the other hand, by how we carry out our own activity. They are all in line with commitments based on our values and action principles, which contribute to make our mission and vision a reality:



ACTION PRINCIPLES

- Culture based on the primary principle of public vocation.
- Guiding principles: Integrity, Professionalism and Respect.
- Decent, honest and reliable behaviour.
- Relation with suppliers and collaboration entities governed by principles of publicity, competition, equal treatment, non-discrimination, transparency, proportionality and integrity.
- Fight against money laundering.
- Transparency and accurate use of information.
- Reputation.
- Loyalty.
- Cooperation.
- Confidentiality.
- · Decent treatment and no abuse of authority.
- Content of Isdefe's Code of Ethics.
- Respect for human rights.
- Decency in treatment and non-discrimination.
- Selection of employees based on skills and merit and capacity criteria.
- Commitment to the environment.

Commitment to efficient risk management

At Isdefe we entrust the achievement of our strategic objectives to an adequate management of identified risks, complying with legal requirements and setting out the necessary internal rules for this purpose. This is stated in our Employees Portal for the proper development of our activity.

As a previous step to the implementation of actions conducive to the elimination and/or minimisation of risks, those linked to Isdefe's activity have been identified, including:

Changes in rules:

may have an impact on individualised in-house technical service providers and budgetary restrictions.

Lack and suitability of means:

restrictions for hiring staff in the public sector and loss of resources due to market conditions.

Capacity to face changes:

transformations and technology obsolescence.

Risks of the context:

related to external facts having an impact on the context in which Isdefe carries out its activities and in which it does not have or has a very limited scope of action.

Strategic risks:

related to changes in directions and activities of the Company changing its structure and size and to which it cannot give an effective and efficient response.

Risks of the digital society:

arising from the company's inability to adapt to changes brought about by the transformation of information technologies.

Compliance risks:

related to noncompliance with applicable legal requirements or mismanaged relations.

Project management and execution risks: related to an inadequate execution or poor

Procurement risks:

related to potential deficiencies in the procurement process and contract execution.

Information technology risks:

follow-up of project development.

related to information security, cyber-attacks, availability and obsolescence of IT systems and affecting the development and continuity of the Company's activities.

Human Resources risks:

related to restrictions and management of resources and/or misconduct of people.

· Financial and economic risks:

related to economic and financial sustainability weakening the company's financial balance.

Information reporting risks:

related to any type of communication or information generated within the Company with the final purpose of making decisions or being of general interest for the Company.

At the top of our risk management system we find Isdefe's **Senior Management**, who are involved in the global supervision of risk management through their participation, both in the acceptance and follow-up of risk. Management is carried out through specific mechanisms which are defined for every area.

Thus, in matters of **Information Security**, we have established security principles for Classified Information of the highest level, with which we define rules, procedures, practices and technical, organisational and technology security measures which are necessary to achieve the suitable, proportionate and reasonable degree of security for classified information, which is required by our commissioning bodies and clients.

Within **Personal Data Security**, we manage risks through a Committee which informs, advises and supervises compliance with measures the Company needs to take in order to ensure that data treatment complies with GDPR (General Data Protection Regulation), and personal data protection (rights and freedoms), and ensures security and the correct processing of data.

Moreover, we have in place a **Criminal Risk Prevention Programme** (PRP) adding to normal

control done by the Company prevention and management of criminal risks which might affect the company in accordance with its activity and business sector. The Programme also includes other elements to strengthen compliance with criminal regulations such as dissemination and training for all staff on this subject, the existence of a Criminal Risk Supervision and Control Committee and the Reporting Channel for potential irregularities. We permanently provide specific training on this topic and from September 2016, every new recruit of Isdefe has a contractual obligation to take the Criminal Risk Prevention course. In 2018, 95.6 % of the staff had taken the training course, either face-to-face or online, through Isdefe's Virtual Campus.

Additionally, the **General Procedure for Technical Risk Management** for project execution describes the methodology to be implemented to manage risks in the execution of management contracts/commissions with the aim of attaining planned objectives.

Occupational Risk Prevention is also developed as an integrated system within the Company's activity in order to avoid, minimise and manage these risks, as well as planning the prevention of said risks.



Commitments to responsible action

The **Code of Ethics** is an integral part of Isdefe's governance model and is based on the guiding principles of integrity, professionalism and respect which set the standards for the behaviour its professionals.

Over the last few years an ethical culture has been consolidated thanks to ongoing training and dissemination of the values stated in the Code, the management of the Ethical Box and the existence of a Technical-Ethical Committee for management and monitoring.



It also includes the non-mandatory principles laid down by international guidelines, such as the Universal Declaration of Human Rights, the United Nations Global Compact and the OECD Principles of Corporate Governance, which establish international values related to human rights, labour relations, the environment and the fight against corruption.

In recent years we have consolidated an active ethical culture throughout the organisation by training, disseminating and communicating the values stated in our Code of Ethics, which is integrated into the employment contracts of our workers. Our Code is public and may be consulted on our corporate website:

https://www.isdefe.es/files/2018_Codigo%20Etico_ Isdefe(2).pdf

Our employees must show decent and considerate treatment to every person with whom they have a professional relationship, must not abuse their power, and must acknowledge the value of people and their performance. In every single moment,

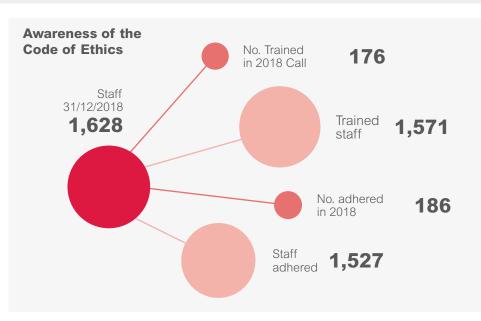
they must abide by applicable Spanish regulations and the laws of the countries in which they carry out their activities and respect fundamental human rights and internationally accepted public freedoms. Likewise, they must treat all with decency and respect and avoid any action which may lead to discrimination.





- Decent, honest and honourable behaviour with people, organisations and in relations with clients.
- At international level, compliance with applicable legislation and commitments included in the Code of Ethics.
- In relationships with suppliers and collaborating entities, iensure that this relationship is governed by principles of publicity, competition, equal treatment, non-discrimination, transparency, proportionality and integrity.
- Isdefe's employees may not accept, directly or indirectly, any gift, donation, invitation, favour or compensation of any kind.
- Fight against money laundering: economic transactions of unusual nature or amount, both collections and payments, and making payments to tax havens shall be avoided.
- Application of transparency at all levels as far as internal and external communication is concerned and the correct use of information.
- Be aware that the reputation of Isdefe relies on actions and decisions of every member of the staff.
- Loyalty to the company and conflicts of interests.
- Corporate image and reputation.
- Cooperation and dedication.
- Health and safety.
- Management of the company's resources.
- Confidentiality and knowledge.

For an adequate understanding and the internationalisation of all these principles, our staff take a course on "Awareness-Raising on the Code of Ethics" during which fundamental aspects of human rights are addressed, such as applicable legislation, public freedoms, respect and decency in treating people, equal opportunities and non-discrimination and protection of the environment.



Commitment to transparency

Act 19/2013, December 9, on Transparency, Access to Public Information and Good Governance states in the Preamble: "Countries with greater levels of transparency and good governance rules have stronger institutions promoting economic growth and social development".

In this regard, Isdefe contributes to the attainment of this general principle by complying with obligations set forth in said Act on the publication of institutional, organisational and planning information, as well as economic, budgetary and statistical information on its Transparency Portal.

Throughout 2018, we have upgraded and updated our **Transparency Portal**, by developing a reinforced model based on the same principles set forth in the law and following the recommendations of the Transparency and Good Governance Council.

Our objective is to consolidate a corporate culture based on integrity and transparent good governance.



Commitment to maximum quality

Furthermore, we have in place a **Quality Management System** based on the ISO 9001 Standard, ensuring quality in services, as well as an Environmental Management System according to ISO 14001 Standard aiming to minimise potential environmental risks associated with Isdefe's activity.



Commitment to sustainable development: Agenda 2030

The **Agenda 2030** was approved in 2015 at the United Nations Sustainable Development Summit. This Agenda includes 17 universally applicable goals known as the Sustainable Development Goals (SDGs), which aim to guide efforts of all countries to achieve a sustainable world by 2030 based on the principle of "leaving no one behind".

Both the European Union and national governments have endorsed Agenda 2030 and have integrated it into their action lines. An example of this commitment is the appointment by the Spanish Government of the High Commissioner for Agenda 2030, attached to the Prime Minister's department, in September 2018.

In the framework of Agenda 2030, Isdefe also contributes to sustainable development through the creation and promotion of the Horizontes Network (made up of universities, public institutions and other agents) the aim of which is identify challenges society must tackle in the future for sustainable development.

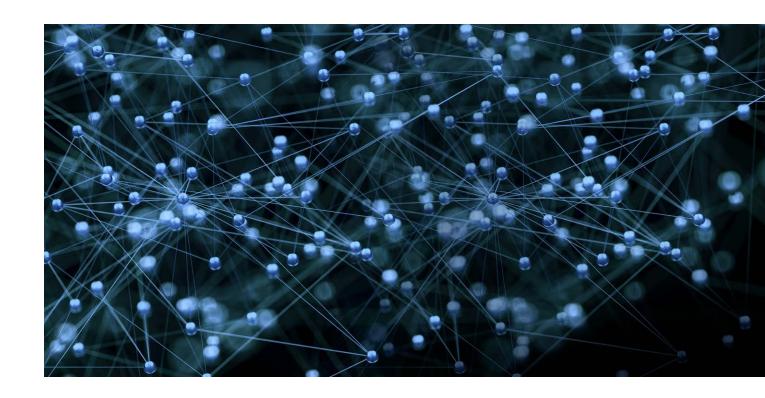
This Network's aim is to reinforce corporate values related to innovation, help to channel analysis and foresight capacities for public administrations, and develop innovative ideas and offer forward-looking solutions to such challenges and share the knowledge that is gained (University-Isdefe).

The Horizontes Network is based on six observatories set up with leading universities in Spain and Europe which carry out foresight activities in Isdefe's strategic areas of knowledge. For further information on these observatories, please check page 74.

In line with this commitment, in 2018 Isdefe carried out a viability analysis of the most relevant SDGs to



which it is contributing. The analysis differentiates between direct SDGs, linked to the company's activity, and indirect SDGs, to which contributions are made through responsible management and social action.







SDG 16 "PEACE, JUSTICE AND STRONG INSTITUTIONS"

In 2018, Isdefe participated in the preparation of the "Practical Guide for the Contributions of Public Companies to Agenda 2030", presented by the CSR in Public Companies Action Group in an event chaired by the High Commissioner for Agenda 2030, Ms. Cristina Gallach.

As a member of this Group, the company worked on designing a roadmap as a guide on making progress towards integration of SDGs in corporate strategies. The presentation event held on December 4 at ICO HQ stressed the role of public companies as a model of sustainability for the private sector and their commitment to Agenda 2030 was underscored.

Our contribution to the Guide was in SDG 16 "Peace, Justice and Strong Institutions" by means of the Project on Upgrading and Updating the Transparency Portal, the objective of which was to enhance corporate culture based on transparent good governance.

http://www.foretica.org/guia_practica_contribucion_empresas_publicas_ods_foretica.pdf



SDG 8 "DECENT WORK AND ECONOMIC GROWTH"

Isdefe participated in the Enterprise 2020 initiative, introducing the Talent Attraction Programme (Tactics) launched in 2017, the objective of which is to recruit the best candidates newly graduated in Telecommunication, Computing, Aeronautical and Industrial Engineering, with a high level of English, to integrate them into multidisciplinary teams in the company with high specialisation and expertise with a view to integrating them fully into the structure at the end of the programme.

The Enterprise 2020 initiative is a platform showcasing examples of leading companies that integrate technology, making considerations of ethical, environmental and social criteria in their decisions. Particularly, within social aspects, business examples are needed to showcase the capacity to improve people's conditions at their workplace, and to create opportunities for young people who will become employees in the near future.

"Tactics: Alliance for your future" recruits the best candidates and provides them with training so that they may specialise in our consultancy and engineering activity and become part of the company in the future. Thus, Isdefe fosters employability and talent among young people, through the STEM skills and by supporting education-business links.

Through this good practice, Isdefe contributes to the achievement of SDG 8: "Decent Work and Economic Growth".





SDG 10: "REDUCED INEQUALITIES"

Through Foretica's Cluster on Social Impact, Isdefe delved into measuring the social impact of its charity actions, by publishing the "Guide on Tools for Measuring and Assessing Corporate Social Impact", a good practice on the impact of volunteering activities carried out with the Masnatur Foundation to promote the comprehensive development of disabled people.

 $https://www.foretica.org/midiendo_el_valor_del_impacto_social_empresarial.pdf$









Balance Sheet as of 12/31/2018

ACTIVO	2018	2017
A) NON-CURRENT ASSETS	123,407,143.36	125,172,926.78
I. Intangible fixed assets	478,694.66	762,719.88
3. Patents, licenses, trademarks and the like	0.00	671,57
5. IT applications	478,694.66	762,048.31
II. Tangible fixed assets	87,636,002.56	89,189,732.50
1. Plots and buildings	85,723,975.66	86,803,965.69
2. Technical facilities and other tang. fixed assets	1,912,026.90	2,375,844.11
3. Fixed assets under construction and advances		9,922.70
III. Investment in real estate	1,066,820.79	1,099,386.03
1. Plots	389,170.24	389,170.24
2. Buildings	677,650.55	710,215.79
IV. Long-term investment in group companies and associated co.	32,454,000.00	32,454,000.00
1. Assets instruments	32,454,000.00	32,454,000.00
V. Long-term financial investments	70,776.91	106,043.66
2. Credits to third parties	59,835.43	95,102.18
5. Other financial assets	10,941.48	10,941.48
VI. Deferred tax assets	1,700,848.44	1,561,044.71
B) CURRENT ASSETS	56,069,424.12	49,173,371.76
II. Inventory	0.00	0.00
6. Advances to suppliers	0.00	0.00
III. Trade and other receivables	26,455,714.00	39,982,619.46
Clients per sales and services provision	6,394,587.45	5,794,804.72
2. Clients, groups companies and associated co.	19,867,974.67	32,945,125.62
3. Misc. Debtors	9,833.09	59,787.10
4. Staff	30,899.04	32,023.85
5. Current tax assets	2,015.88	815,557.35
6. Other credits with Public Administrations	150,403.87	335,320.82
V. Short-term financial investments	45,432.66	42,347.70
2. Credits to companies	32,293.15	30,208.18
5. Other financial assets	13,139.51	12,139.52
VI. Short-term accruals	98,947.67	439,122.06
VII. Cash and other equivalent liquid assets	29,469,329.79	8,709,282.54
1. Liquid assets	29,466,591.60	8,694,729.91
2. Other equivalent liquid assets	2,738.19	14,552.63
TOTAL ASSETS (A+B)	179,476,567.48	174,346,298.54

Equity and Liabilities

	2018	2017
A) EQUITY	149,509,578.23	145,343,888.41
A-1) OWN FUNDS	149,509,578.23	145,343,888.41
I. Capital.	41,372,100.00	41,372,100.00
1. Subscribed capital	41,372,100.00	41,372,100.00
III. Reserves.	101,971,788.41	97,985,787.67
1. Legal and statutory	4,169,698.90	3,571,098.83
2. Other reserves	97,802,089.51	94,414,688.84
VII. Year result	6,165,689.82	5,986,000.74
B) NON-CURRENT LIABILITIES	663,520.28	783,768.57
II Long-term debts	663,520.28	783,768.57
5. Other financial liabilities	663,520.28	783,768.57
C) CURRENT LIABILITIES	29,303,468.97	28,218,641.56
I. Liabilities linked to non-current assets kept for sale	0.00	0.00
II. Short-term provisions	5,699,870.14	4,860,002.84
III. Short-term debts	924,838.00	957,753.89
5. Other financial liabilities	924,838.00	957,753.89
V. Trade and other payables	22,678,760.83	22,400,884.83
1. Suppliers	7,484,549.41	8,851,066.39
4. Staff (pending remuneration)	6,836,709.97	5,895,232.08
5. Current tax liabilities	462,668.96	0.00
6. Other debts with Public Administrations	4,501,405.83	4,540,363.91
7. Advances of clients	3,393,426.66	3,114,222.45
TOTAL EQUITY AND LIABILITIES (A+B+C)	179,476,567.48	174,346,298.54



Loss and profit account for fiscal year ended as of December 31st, 2018

	2018	2017
A) CONTINUED OPERATIONS		
1. Turnover net amount	146,575,279.88	141,169,830.36
a) Sales		
B) Service provisions	146,575,279.88	141,169,830.36
2. Stock variations for services provision	0.00	0.00
3. Works made by the company for its assets	0.00	0.00
4. Supplies	-27,507,022.23	-24,639,542.94
a) Consumption of goods	-1,988,081.58	-1,230,977.04
b) Consumption of raw materials and other usable materials	0.00	0.00
c) Works carried out by other companies	-25,518,940.65	-23,408,565.90
d) d) Goods, raw materials deterioration and other supplies		
5. Other operating revenues	803,953.90	363,300.18
a) Non-Core and other current operating revenues	103,247.89	131,661.77
b) Operating aids integrated to year result	700,706.01	231,638.41
6. Staff expenses	-99,967,976.20	-97,963,888.74
a) Wages, salaries and the like	-74,590,460.45	-72,540,403.77
b) Social charges	-25,377,515.75	-25,423,484.97
c) Provisions		
7. Other operating expenses	-9,335,806.32	-8,563,204.98
a) External services	-7,686,948.99	-7,820,098.06
b) Taxes	-405,996.33	-397,908.50
c) Loss, deterioration and variation of prov. trade transactions	-1,242,861.00	-337,753.96
d) Other operating costs	0.00	-7,444.46
8. Amortisation of fixed assets	-2,393,585.45	-2,361,254.44
9. Allocation of grants related to non-financial fixed assets and others	0.00	0.00
10. Provisions surplus	70,620.65	227,915.56
11. Deterioration and result of alienation of fixed assets	-3,000.56	-512.88
a) Deterioration and losses	6.63	0.00
b) Results for alienations and others	-3,007.19	-512.88

	2018	2017
A.1) OPERATING RESULT (1+2+3+4+5+6+7+8+9+10+11)	8,242,463.67	8,232,642.12
12. Financial revenues	260.06	0.00
a) From participations in asset instruments.	0.00	0.00
a1) In groups companies and associated co.		
a2) In third companies		
b) From tradable securities and other financial instruments	260.06	0.00
b1) From groups companies and associated co.		
b2) From third companies	260.06	0.00
13. Financial expenses	-3,562.79	2,227.10
a) From debts with group companies and associated co.		
b) From debts with third parties	-3,562.79	2,227.10
c) From provisions updating	0.00	0.00
14. Variation in fair value of financial instruments	0.00	0.00
a) Trading portfolio and others		
b) Allocation to the result of the year from financial assets		
15. Exchange differences	3,725.22	-180,166.95
16. Deterioration and result of alienation of financial instruments	0.00	0.00
a) Deterioration and losses		
b) Results for alienations and others		
A.2) FINANCIAL RESULT (12+13+14+15+16)	422.49	-177,939.85
A.3) RESULT BEFORE TAXES (A.1+A.2)	8,242,886.16	8,054,702.27
17. Tax on profits	-2,077,196.34	-2,068,701.53
A.4) RESULT OF THE YEAR COMING FROM CONTINUED OPERATIONS (A3)+17	6,165,689.82	5,986,000.74
B) DISCONTINUED OPERATIONS		
18. Result of the year coming from discontinued operations after taxes	0.00	0.00
RESULT OF THE YEAR (A.4+18)	6,165,689.82	5,986,000.74



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INFORME DE AUDITORÍA DE CUENTAS ANUALES EMITIDO POR UN AUDITOR INDEPENDIENTE

Al Accionista Único de INGENIERÍA DE SISTEMAS PARA LA DEFENSA DE ESPAÑA, S.A.U., S.M.E., M.P.

Opinión

Hemos auditado las cuentas anuales de INGENIERÍA DE SISTEMAS PARA LA DEFENSA DE ESPAÑA, S.A.U., S.M.E., M.P. (la Sociedad), que comprenden el balance a 31 de diciembre de 2018, la cuenta de pérdidas y ganancias, el estado de cambios en el patrimonio neto, el estado de flujos de efectivo y la memoria correspondientes al ejercicio terminado en dicha fecha.

En nuestra opinión, las cuentas anuales adjuntas expresan, en todos los aspectos significativos, la imagen fiel del patrimonio y de la situación financiera de la Sociedad a 31 de diciembre de 2018, así como de sus resultados y flujos de efectivo correspondientes al ejercicio terminado en dicha fecha, de conformidad con el marco normativo de información financiera que resulta de aplicación (que se identifica en la nota 2 de la memoria) y, en particular, con los principios y criterios contables contenidos en el mismo.

Fundamento de la opinión

Hemos llevado a cabo nuestra auditoría de conformidad con la normativa reguladora de la actividad de auditoría de cuentas vigente en España. Nuestras responsabilidades de acuerdo con dichas normas se describen más adelante en la sección Responsabilidades del auditor en relación con la auditoría de las cuentas anuales de nuestro informe.

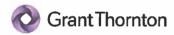
Somos independientes de la Sociedad de conformidad con los requerimientos de ética, incluidos los de independencia, que son aplicables a nuestra auditoría de las cuentas anuales en España según lo exigido por la normativa reguladora de la actividad de auditoría de cuentas. En este sentido, no hemos prestado servicios distintos a los de la auditoría de cuentas ni han concurrido situaciones o circunstancias que, de acuerdo con lo establecido en la citada normativa reguladora, hayan afectado a la necesaria independencia de modo que se haya visto comprometida.

Consideramos que la evidencia de auditoría que hemos obtenido proporciona una base suficiente y adecuada para nuestra opinión.

Aspectos más relevantes de la auditoría

Los aspectos más relevantes de la auditoría son aquellos que, según nuestro juicio profesional, han sido considerados como los riesgos de incorrección material más significativos en nuestra auditoría de las cuentas anuales del periodo actual. Estos riesgos han sido tratados en el contexto de nuestra auditoría de las cuentas anuales en su conjunto, y en la formación de nuestra opinión sobre estas, y no expresamos una opinión por separado sobre esos riesgos.

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Reconocimiento de ingresos

Tal como se indica en las notas 1 y 22 de la memoria adjunta, la Sociedad presta servicios de ingeniería, consultoría y asistencia técnica, en especial, los destinados a la Defensa y Seguridad. El reconocimiento de los servicios prestados supone estimar con fiabilidad el resultado de la transacción, considerando para ello el porcentaje de realización del servicio en la fecha de cierre del ejercicio. Hemos considerado el reconocimiento de ingresos como un aspecto relevante de nuestra auditoria por las estimaciones que la Dirección debe llevar a cabo, fundamentalmente al cierre del ejercicio, al valorar el grado de realización de la transacción en ese momento, lo que conlleva la valoración de los costes ya incurridos en la prestación, así como los que quedan por incurrir hasta completarla y el análisis de la recuperabilidad de los costes incurridos o rendimientos económicos derivados del servicio prestado.

Nuestros procedimientos de auditoría incluyeron entre otros:

- Verificación de que la Sociedad realiza lo esencial de su actividad con el ente que la controla, dando cumplimiento al artículo 32 de la Ley 9/2017 de Contratos del Sector Público. Para ello se ha verificado que más del 80% de la actividad se ha llevado a cabo en ejercicio de los cometidos que le han sido confiados por el poder adjudicador que la controla y a las tarifas aprobadas reglamentariamente.
- Comprobación de la eficacia de los controles relevantes del proceso de reconocimiento de ingresos, así como el procedimiento de contabilización.
- Para una muestra de proyectos, hemos verificado la razonabilidad de los presupuestos de
 costes considerados, de los costes reales incurridos al cierre del ejercicio, del presupuesto de
 ingresos considerado y del cálculo del grado de avance realizado en base al porcentaje de
 ejecución alcanzado al cierre del ejercicio.
- Hemos revisado la coherencia de las estimaciones realizadas por la Sociedad en el ejercicio anterior y los datos definitivos de los contratos en el ejercicio en curso.
- Hemos evaluado si la información revelada en las cuentas anuales cumple con los requerimientos del marco normativo de información financiera aplicable.

Provisiones

Tal y como se indica en la nota 13 de la memoria adjunta, la Sociedad presenta al cierre del ejercicio provisiones por procedimientos administrativos y/o por litigios abiertos por un importe de 5.700 miles de euros. Hemos considerado esta área como relevante para la auditoría por el alto grado de estimación que la Dirección debe llevar a cabo al cierre del ejercicio para determinar el importe necesario que cancelaría o transferiría a un tercero la obligación, así como la incertidumbre existente relacionada con la evaluación de si un pasivo debe ser reconocido y si los importes pueden ser estimados de manera fiable.

Nuestros procedimientos de auditoría incluyeron, entre otros, el análisis de la documentación existente de los procesos, tanto individuales como colectivos, así como la obtención de las respuestas, a nuestra solicitud de información, de los abogados externos de la Sociedad, en las que indican su conformidad o discrepancia sobre la razonabilidad de las estimaciones realizadas y del riesgo derivado de aquellos asuntos de los que se desprenda una diferente estimación. Adicionalmente, hemos evaluado si la información revelada en las cuentas anuales cumple con los requerimientos del marco normativo de información financiera aplicable.



Otra información: Informe de gestión

La otra información comprende exclusivamente el informe de gestión del ejercicio 2018, cuya formulación es responsabilidad de los administradores de la Sociedad y no forma parte integrante de las cuentas anuales.

Nuestra opinión de auditoría sobre las cuentas anuales no cubre el informe de gestión. Nuestra responsabilidad sobre la información contenida en el informe de gestión se encuentra definida en la normativa reguladora de la actividad de auditoría de cuentas, que establece dos niveles diferenciados sobre la misma:

- a) Un nivel específico que resulta de aplicación al estado de la información no financiera, que consiste en comprobar únicamente que la citada información se ha facilitado en el informe de gestión, o en su caso, que se ha incorporado en éste la referencia correspondiente al informe separado sobre la información no financiera en la forma prevista en la normativa, y en caso contrario, a informar sobre ello.
- b) Un nivel general aplicable al resto de la información incluida en el informe de gestión, que consiste en evaluar e informar sobre la concordancia de la citada información con las cuentas anuales, a partir del conocimiento de la entidad obtenido en la realización de la auditoría de las citadas cuentas y sin incluir información distinta de la obtenida como evidencia durante la misma, así como evaluar e informar de si el contenido y presentación de esta parte del informe de gestión son conformes a la normativa que resulta de aplicación. Si, basándonos en el trabajo que hemos realizado, concluimos que existen incorrecciones materiales, estamos obligados a informar de ello.

Sobre la base del trabajo realizado, según lo descrito anteriormente, hemos comprobado que la información no financiera mencionada en el apartado a) anterior se presenta en el informe separado, "Estado de la información no financiera" al cual se incluye referencia en el informe de gestión y que el resto de la información que contiene el informe de gestión concuerda con la de las cuentas anuales del ejercicio 2018 y su contenido y presentación son conformes a la normativa que resulta de aplicación.

Responsabilidad de los administradores y de la comisión de auditoría en relación con las cuentas anuales

Los administradores son responsables de formular las cuentas anuales adjuntas, de forma que expresen la imagen fiel del patrimonio, de la situación financiera y de los resultados de la Sociedad, de conformidad con el marco normativo de información financiera aplicable a la entidad en España, y del control interno que consideren necesario para permitir la preparación de cuentas anuales libres de incorrección material, debida a fraude o error.

En la preparación de las cuentas anuales, los administradores son responsables de la valoración de la capacidad de la Sociedad para continuar como empresa en funcionamiento, revelando, según corresponda, las cuestiones relacionadas con la empresa en funcionamiento y utilizando el principio contable de empresa en funcionamiento excepto si los administradores tienen intención de liquidar la Sociedad o de cesar sus operaciones, o bien no exista otra alternativa realista.

La comisión de auditoría es responsable de la supervisión del proceso de elaboración y presentación de las cuentas anuales.

3



Responsabilidades del auditor en relación con la auditoría de las cuentas anuales

Nuestros objetivos son obtener una seguridad razonable de que las cuentas anuales en su conjunto están libres de incorrección material, debida a fraude o error, y emitir un informe de auditoría que contiene nuestra opinión. Seguridad razonable es un alto grado de seguridad pero no garantiza que una auditoría realizada de conformidad con la normativa reguladora de la actividad de auditoría de cuentas vigente en España siempre detecte una incorrección material cuando existe. Las incorrecciones pueden deberse a fraude o error y se consideran materiales si, individualmente o de forma agregada, puede preverse razonablemente que influyan en las decisiones económicas que los usuarios toman basándose en las cuentas anuales.

Como parte de una auditoría de conformidad con la normativa reguladora de la actividad de auditoría de cuentas vigente en España, aplicamos nuestro juicio profesional y mantenemos una actitud de escepticismo profesional durante toda la auditoría. También:

- Identificamos y valoramos los riesgos de incorrección material en las cuentas anuales, debida a
 fraude o error, diseñamos y aplicamos procedimientos de auditoría para responder a dichos riesgos
 y obtenemos evidencia de auditoría suficiente y adecuada para proporcionar una base para nuestra
 opinión. El riesgo de no detectar una incorrección material debida a fraude es más elevado que en
 el caso de una incorrección material debida a error, ya que el fraude puede implicar colusión,
 falsificación, omisiones deliberadas, manifestaciones intencionadamente erróneas, o la elusión del
 control interno.
- Obtenemos conocimiento del control interno relevante para la auditoría con el fin de diseñar procedimientos de auditoría que sean adecuados en función de las circunstancias, y no con la finalidad de expresar una opinión sobre la eficacia del control interno de la entidad.
- Evaluamos si las políticas contables aplicadas son adecuadas y la razonabilidad de las estimaciones contables y la correspondiente información revelada por los administradores.
- Concluimos sobre si es adecuada la utilización, por los administradores, del principio contable de empresa en funcionamiento y, basándonos en la evidencia de auditoría obtenida, concluimos sobre si existe o no una incertidumbre material relacionada con hechos o con condiciones que pueden generar dudas significativas sobre la capacidad de la Sociedad para continuar como empresa en funcionamiento. Si concluimos que existe una incertidumbre material, se requiere que llamemos la atención en nuestro informe de auditoría sobre la correspondiente información revelada en las cuentas anuales o, si dichas revelaciones no son adecuadas, que expresemos una opinión modificada. Nuestras conclusiones se basan en la evidencia de auditoría obtenida hasta la fecha de nuestro informe de auditoría. Sin embargo, los hechos o condiciones futuros pueden ser la causa de que la Sociedad deje de ser una empresa en funcionamiento.
- Evaluamos la presentación global, la estructura y el contenido de las cuentas anuales, incluida la información revelada, y si las cuentas anuales representan las transacciones y hechos subyacentes de un modo que logran expresar la imagen fiel.



Grant Thornton

Nos comunicamos con los administradores de la entidad en relación con, entre otras cuestiones, el alcance y el momento de realización de la auditoría planificados y los hallazgos significativos de la auditoría, así como cualquier deficiencia significativa del control interno que identificamos en el transcurso de la auditoría.

Entre los riesgos significativos que han sido objeto de comunicación a los administradores de la entidad, determinamos los que han sido de la mayor significatividad en la auditoría de las cuentas anuales del periodo actual y que son, en consecuencia, los riesgos considerados más significativos.

Describimos esos riesgos en nuestro informe de auditoría salvo que las disposiciones legales o reglamentarias prohíban revelar públicamente la cuestión.

Grant Thornton, S.L.P., Sociedad Unipersonal

ROAC nº S0231

Maria José Lázaro Serrano

ROAC nº 17732

24 de abril de 2019

NUDITORES
INSTITUTO DE CEMSORES JURADOS
DE CUENTAS DE ESPAÑA

GRANT THORNTON, S.L.P.

2019 Núm. 01/19/02340 SELLO CORPORATIVO: 96,00 EUR

SELLO CORPORATIVO:
Informe de auditoría de cuentas sujeto
a la normativa de auditoría de cuentas
española o internacional



7 Annexes



This Annual Report 2018 uses as a reference framework the Global Reporting Initiative (GRI) standards, which constitute the best practices at global level to publicly disclose information on economic, environmental and social impacts generated by an organisation and how they are tackled. The preparation of sustainability reports based on these standards provides information on the positive and negative contributions of organisations to sustainable development.

Additionally, the Annual Report meets the organisation's commitment to United Nations Global Compact principles as stated in the GRI table of contents included at the end of the present Annex. Thanks to this, this report also represents the progress report required by the United Nations Global Compact which is published every year on the website of this organisation (https://www.unglobalcompact.org).

This report refers to activities developed by Isdefe in 2018. Isdefe does not have a parent company or subsidiaries. Although the Annual Report 2018 has not been subject to a specific external review, it should be noted that Isdefe carries out an audit on the annual accounts every year and that its Non-Financial Information Statement 2018 was verified by an independent expert according to the provisions set forth by Act 11/2018 on Non-Financial Information and Diversity.

Materiality analysis

For the preparation of Isdefe's Annual Report 2017, Isdefe carried out the determination of material aspects to be included in the Annual Report. The results of this process have been used again as guidance for this Annual Report 2018.

The following process was followed according to GRI guidelines:

- **1.** Identification of relevant issues, through the analysis and evaluation of:
 - Internal sources: Isdefe's Strategic Plan 2017-2021 and corporate plans arising from this; the Annual Accounts; the Criminal Risk Prevention Plan; the Marketing and CSR Plan; Management Coordination and Advisory Committees, and Workers Representation Committees and conclusions drawn from the ongoing debates with groups of interest through the different communication channels available.
 - External sources: legislation in force, public policies applicable to the company, the media and different external studies published at national level concerning CSR.
- 2. Prioritisation: bearing in mind assessments and decisions made by the groups of interest and the relevance of the economic, social and environmental impacts generated by the company, prioritisation and evaluation have been made for all those aspects that have a direct impact when managing the organisation, due to both their external and internal repercussions.

RELEVANT TOPICS	IMPACT
Economic performance	Internal
Market presence	Internal
Indirect economic impacts	Internal + External
Anti-corruption	Internal
Materials	Internal + External
Energy	Internal + External
Water	Internal + External
Emissions	Internal + External
Effluents and wastes	Internal + External
Supplier environmental assessment	Internal + External
Employment	Internal
Labour/Management relations	Internal
Occupational health and safety	Internal
Training and education	Internal
Diversity and equal opportunity	Internal
Non-discrimination	Internal
Human Rights assessment	Internal + External
Supplier social assessment	Internal + External

Principles for report preparation

Compilation of the information included in this report and the wording of it have been carried out according to the preparation principles of GRI reports:

Balance

The Annual Report presents positive and negative aspects of Isdefe's performance and includes the level of compliance compared to the previous year's commitments, making it possible to make a fair assessment of corporate social responsibility management.

Accuracy

All the information described is accurate and is presented in sufficient detail for stakeholders to adequately assess the company's performance.

Clarity

The information provided is stated in an understandable, accessible and useful way.

Comparability

The information included in this Annual Report states, whenever possible, information from previous years.

Timeliness

Isdefe publishes the report on an annual basis as a tangible demonstration of its commitment to CSR.

Reliability

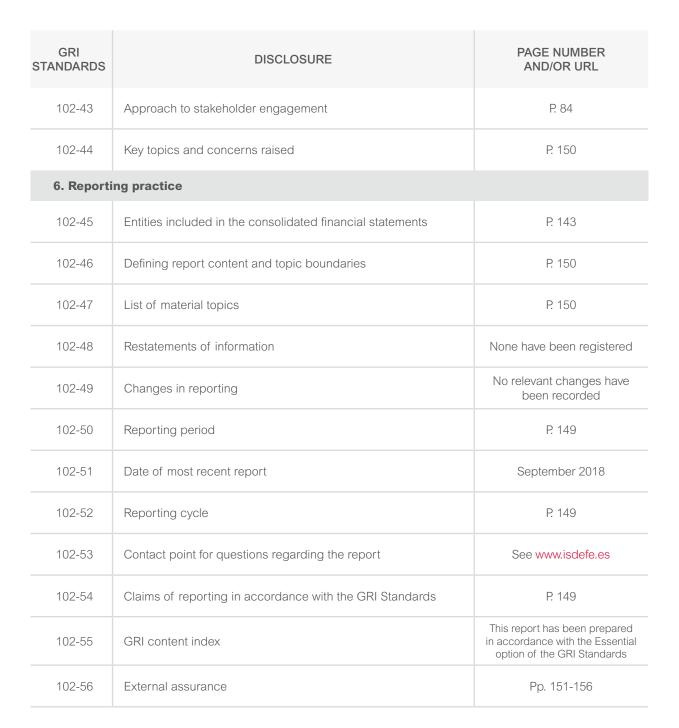
The data contained in this Report are backed by the management systems from the different areas in charge of the respective data. Said systems are managed accurately and transparently.



ANNEX II. Table of Contents GRI Standards

GRI STANDARDS	DISCLOSURE	PAGE NUMBER AND/OR URL			
	GRI 102: GENERAL DISCLOSURES				
1. Organis	sational profile				
102-1	Name of the organisation	Cover			
102-2	Activities, brands, products, and services	P. 24			
102-3	Location of headquarters	P. 18			
102-4	Location of operations	Pp. 18, 19			
102-5	Ownership and legal form	P. 117			
102-6	Markets served	Pp. 19, 23			
102-7	Scale of the organisation	Pp. 21, 139-142			
102-8	Information on employees and others workers	Pp. 18, 93 See also Non-Financial Information Statement 2018			
102-9	Supply chain	P. 100			
102-10	Significant changes to the organisation and its supply chain	Pp. 119, 120			
102-11	Precautory principle or approach	P. 109			
102-12	External initiatives	P. 104			
102-13	Memberships of associations	Pp. 105, 106, 107			
2. Strategy					
102-14	Statement from senior decision-maker	Pp. 5, 7			
102-15	Key impacts, risks, and opportunities	Pp. 129-131			

GRI STANDARDS	DISCLOSURE	PAGE NUMBER AND/OR URL			
3. Ethics and integrity					
102-16	Values, principles, standards, and norms of behavior	P. 9			
102-17	Mechanisms for advice and concerns about ethics	Pp. 129-133			
4. Govern	ance				
102-18	Governance structure	P. 119			
102-19	Delegating authority	P. 119			
102-20	Executive-level responsibility on economic, environmental, and social topics	Pp. 121, 122			
102-21	Consulting stakeholders on economic, environmental, and social topics	P. 84			
102-22	Composition of the highest governance body and its committees	Pp. 121, 122			
102-23	Chair of the highest governance body	P. 122			
102-24	Nominating and selecting the highest governance body	P. 121			
102-25	Conflicts of interest	P. 133			
102-26	Role of highest governance body in setting purpose, values, and strategy	Pp. 121, 122			
102-30	Effectiveness of risk management processes	P. 131			
102-31	Review of economic, environmental, and social topics	Pp. 120, 124			
102-32	Highest governance body's role in sustainability reporting	Pp. 120, 121			
102-35	Remuneration policies	P. 119			
5. Stakeholder engagement					
102-40	List of stakeholder groups	P. 123 See also Non-Financial Information Statement 2018			
102-41	Collective bargaining agreements	P. 99			
102-42	Identifying and selecting stakeholders	P. 84			



GRI STANDARDS	DISCLOSURE	PAGE NUMBER AND/OR URL	OMISSION
	GRI 103: MANAGEMENT APPROACH 20	016	
103-1	Explanation of the material topic and its boundary	P. 150	
103-2	The management approach and its components		

GRI STANDARDS	DISCLOSURE	PAGE NUMBER AND/OR URL	OMISSION
103-3	103-3 Evaluation of the management approach		
	GRI 201: ECONOMIC PERFORMANCE 2	016	
201-1	Direct economic value generated and distributed	Pp. 141, 142	
201-2	Financial implications and other risks and opportunities due to climate change	P. 113	
201-3	Defined benefit plan obligations and other retirement plans	P. 99	
	GRI 202: MARKET PRESENCE 2016		
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	P. 99	
	GRI 203: INDIRECT ECONOMIC IMPACTS	2016	
203-1	Infrastructure investments and services supported	Pp. 101-106 See also Non-Financial Information Statement 2018	
	GRI 205: ANTI-CORRUPTION 2016		
205-2	Communication and training about anti-corruption policies and procedures	P. 133	
	GRI 301: MATERIALS 2016		
301-1	Materials used by weight or volume	P. 112	
301-2	Recycled input materials used	P. 114	
GRI 302: ENERGY 2016			
302-1	Energy consumption within the organisation	Pp. 111, 112	
302-3	Energy intensity	Pp. 111, 112	Information on energy consumption per employee is offered
302-4	Reduction of energy consumption	Pp. 111, 112	

GRI STANDARDS	DISCLOSURE	PAGE NUMBER AND/OR URL	OMISSION
	GRI 303: WATER AND EFFLUENTS 20	16	
303-5	Water consumption	P. 111	
	GRI 305: EMISSIONS 2016		
305-1	Direct (Scope 1) GHG emissions	P. 113	
305-2	Energy indirect (Scope 2) GHG emissions	P. 113	
305-5	Reduction of GHG emissions	P. 113	
	GRI 306: EFFLUENTS AND WASTE 20	16	
306-2	Waste by type and disposal method	Pp. 114, 115	
306-4	Transport of hazardous waste	See Non-Financial Information Statement 2018	
	GRI 308: SUPPLIER ENVIRONMENTAL ASSESS	MENT 2016	
308-1	New suppliers that were screened using environmental criteria	P. 100	
	GRI 401: EMPLOYMENT 2016		
401-1	New employee hires and employee turnover	Pp. 92, 93	
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	P. 99	
401-3	Parental leave	P. 98	
GRI 402: LABOR/MANAGEMENT RELATIONS 2016			
402-1	Minimum notice periods regarding operational changes	P. 99	
GRI 403: OCCUPATIONAL HEALTH AND SAFETY 2018			
403-1	Occupational health and safety management system	P. 99	
403-2	Hazard identification, risk assessment, and incident investigation	P. 97	

GRI STANDARDS	DISCLOSURE	PAGE NUMBER AND/OR URL	OMISSION
403-3	Occupational health services	P. 96	
403-4	Worker participation, consultation, and communication on occupational health and safety	P. 99	
403-5	Worker training on occupational health and safety	P. 96	
403-6	Promotion of worker health	P. 97	
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Pp. 96, 97	
403-8	Workers covered by an occupational health and safety management system	P. 96	
	GRI 404: TRAINING AND EDUCATION 2	016	
404-1	Average hours of training per year per employee	P. 95	
404-2	Programs for upgrading employee skills and transition assistance programs	Pp. 94, 95	
	GRI 405: DIVERSITY AND EQUAL OPPORTUN	NITY 2016	
405-1	Diversity of governance bodies and employees	Pp. 93, 128	
405-2	Ratio of basic salary and remuneration of women to men	P. 99 See also Non-Financial Information Statement 2018	
	GRI 406: NON-DISCRIMINATION 201	6	
406-1	Incidents of discrimination and corrective actions taken	P. 98	
GRI 412: HUMAN RIGHTS ASSESSMENT 2016			
412-2	Employee training on human rights policies or procedures	Pp. 132, 133 See also Non-Financial Information Statement 2018	
GRI 414: SUPPLIER SOCIAL ASSESSMENT			
414-1	New suppliers that were screened using social criteria	P. 100	



ANNEX III. Social action and participation in associations and foundations

Social investment

Isdefe has a Social Action Programme that every year fosters social initiatives in collaboration with foundations and NGOs, and always focuses on charitable entities linked to the field of Defence and Security. The activities carried out were:

- Work Group with Public Companies for fostering CSR
- Collaboration with Association of Guardías Civiles.
- Participation in the civil/military race against drugs.
- 11th Christmas Charity Campaign.
- · Collaboration with Madrina Foundation.

- Collaboration with Asociación Reyes Magos de Verdad.
- · Corporate volunteering with Masnatur.
- "Caps for a New Life" Campaign, Seur Foundation.
- Donation Charity Dinner to Damas del Carmen Association.

Associations and Foundations

In the framework of its institutional relations, Isdefe maintains links with a small selection of associations and foundations related to defence and security, as well as with the rest of its sectors of activity, in order to establish partnerships for developing activities and disseminating science and technology in general, and engineering, in particular.

Association/Foundation	Isdefe involvement
Spanish Royal Academy of Engineering (RAI). Institution at the forefront of technical knowledge promoting excellence, quality and skills in Spanish engineering within different disciplines and scope of actions.	Collaborator
Fundación Círculo de Tecnologías para la Defensa y Seguridad (Foundation of Group of Technologies for Defence and Security). Meeting point and discussion forum of individuals and entities related to the sector in Technologies for Defence and Security.	Founding member
Fundación de Aeronáutica y Astronáutica Españolas (FAAE) (Foundation of Spanish Aeronautics and Astronautics). Entity that fosters dissemination of airspace science and technology by collaborating with entities such as the Air Force.	Supporting Member
International Council on System Engineering (INCOSE). Not-for-profit organisation focused on developing systems engineering and dedicated to increasing professional skills among systems engineers.	Member of Corporate Advisory Board
Spanish Association on System Engineering INCOSE Chapter Spain (AEIS-INCOSE). Spanish division of the International Council on System Engineering.	Member of Corporate Advisory Board

Association/Foundation	Isdefe involvement
Forética. Not-for-profit Spanish association that fosters a culture of ethical and socially responsible management in organisations.	Member
The Global Compact Spanish Network. International initiative promoting corporate social responsibility under UN principles and fostering the achievement of the Sustainable Development Goals (SDGs). The United Nations Global Compact operates in Spain through its Spanish network.	Member
Asociación Española para la Calidad (AEC) (Spanish Association for Quality). Association that brings together professionals and companies around quality management as a strategic element, by preparing materials, holding conferences, sectoral committees and delivering training both to support companies and to certify professionals.	Member
Asociación Española de Mantenimiento (AEM) (Spanish Association for Maintenance Works). Not-for-profit association with the aim of fostering knowledge on industrial and building maintenance, giving support and representing the group of companies and professionals within this maintenance sector.	Member
Association for the Scientific Development of ATM in Europe (ASDA). Independent research entities and universities with research and development activities in the area of air traffic management.	Member
Asociación Española para el Fomento de la Seguridad de la Información (ISMS Forum Spain). Forum promoting development, knowledge and culture of Information Security in Spain to act for the benefit of all the community involved in the sector.	Member
Navy League of the United States Madrid Council. Forum connecting institutions and the defence industrial sector in Spain and the USA.	Business Associate Sponsors
Asociación Clúster Marítimo Español (Spanish Maritime Cluster Association). Entity that brings together industry, services and economic activities associated with the sea, to carry out activities related to maritime transport; engineering and maritime industry; the Navy; ports and port-related services; R&D&i agents; etc.	Member
European Organisation for Civil Aviation Equipment (EUROCAE). Not-for-profit organisation founded in Lucerne, Switzerland in 1963 that is the European forum focused on electronic equipment for air transport. It works exclusively on standardisation of airborne and land systems and equipment for aviation.	Member
Friends of Europe (FoE). Not-for-profit entity at European level that brings together leading experts whose objective is to foster debate to make Europe more inclusive, sustainable and with a view to the future, and a European forum of security and defence is one of its main knowledge hubs.	Member
Asociación para el Progreso de la Dirección (APD) (Association for the Development of Management). Not-for-profit association to foster and promote the training of executives.	Collective member



Isdefe, as a flagship in-house technical service provider in defence and security for the areas of strategic or technological interest of the Ministry of Defence and the State General Administration, attends the main trade shows, seminars and conferences in technology within its scopes of action - these are frequently coorganised with the State General Administration.

World ATM Congress 2018.

The ATM Congress Trade Show organised by CANSO is one of the most important events in the air traffic sector at world level. It is indeed a meeting point for professionals and companies linked to the air traffic sector, and includes exhibitions, conferences and social events of great interest; the exhibiting companies have access to conference rooms to deliver their own lectures and workshops. Isdefe participated in the sixth edition with a stand that was visited by different personalities and delivered two conferences on air navigation of the Horizontes Network at the Tower Theatre: "4D-trajectory predictability and uncertainty management" and "Conflict-resolution algorithms for RPAS in non-segregated airspace".

World Border Security Congress 2018.

International platform that brings together border protection and management policy officers and professionals from the security sector in order to discuss international challenges for border protection. Isdefe participated in the panel on surveillance systems and technologies for border control, and the Manager for Intelligence and Public Security, Jesus Alcázar, delivered a lecture entitled "Surveillance Systems and Technologies on the Border. A Systems Engineering Vision".

Unvex Security & Defense 2018.

Key meeting for the unmanned aerial vehicle sector. It brought together 82 speakers and more than 5,000 visitors from the European defence sector, representing institutions, Armed Forces, industry companies, experts and professionals. Isdefe participated by delivering the lecture "U-SPACE and drone integration in controlled airspace" in "Plenary Room: Integration in air space, a challenge".

6th National Conference on R&D in Defence and Security (DESEi+d 2018).

Conference held by the Deputy General Directorate for Technology and Innovation Planning (SDGPLATIN) from the Ministry of Defence in collaboration with the General Directorate for Military Recruitment and Education, the Defence University Centres and Isdefe; it is a forum for exchanging experiences and disseminating results on the latest advances in research, development and innovation in different areas of knowledge within the defence and security sector. This Conference was brought to a close by the Secretary of State for Defence, Mr. Ángel Olivares and Mr. Juan Carlos Suarez-Quiñones, the Chief of Command of Training and Doctrine, Lieutenant General Mr. José Carrasco Gabaldón, the Deputy General Director of Coordination and Institutional Relations of the Ministry of Science, Innovation and Universities, Mr. Felipe Formariz Pombo and Isdefe's Chief Executive Officer, Mr. Francisco Quereda Rubio.

1st National Conference on Systems Engineering.

Conference organised by Isdefe and the AEIS Incose Chapter Spain which was a technical and dissemination conference held at Isdefe's headquarters in Madrid. There was participation from public managers and industry and university experts on the practice and development of Systems Engineering who shared their vision on the state of this discipline in Spain. The Conference was held from a practical and dynamic approach and included lectures, successful stories and round-table discussions, and it was also possible to take the examination for the ASEP/CSEP certification by INCOSE.

5th ADESyD Conference "Sharing Visions on Security".

Conference that was the meeting point for experts from the military, police, Guardia Civil, academic and business sectors and their associates held at Isdefe's headquarters. The speakers were numerous including the Secretary of State for Security from the Ministry of Home Affairs: Ana Botella was in charge of delivering the opening lecture and Cristina Gallach, High Commissioner for United Nations Agenda 2030 was in charge of the closing session. As far as Isdefe is concerned, the management unit for security systems and critical infrastructures participated with the lecture "Cyber-defence in the context of National Security".

High Level Conference on Assurance 2018 ISACA Madrid Chapter.

Event that brought together experts on systems audits, cyber-security, technological risks management and ICT administration. Isdefe participated in the round table on "Protection of critical infrastructures, an opportunities approach", the speaker being the Manager of Security Systems and Critical Infrastructures, Óscar Pastor.

1st Conference on Digital Transformation in Alcorcón (Digit@lcor).

Conference organised by the Municipality of Alcorcón and promoted by the National Institute for Cyber-Security (Incibe) that addressed new technologies and future challenges for smart cities. The table on "Digital identity and services for citizens" was moderated by Mr. José Félix Balbás, Chief of the Area of Systems Interoperability at Isdefe.

International Conference on Cyber Conflict (CyCON).

Conference organised by the NATO Cooperative Cyber Defence Centre of Excellence (CCDCOE), which every year brings together more than 500 decision-makers and governmental, army and industry experts from all around the world to discuss topics related to cyber-defence from a multidisciplinary approach, thus combining legal, technological and strategic perspectives on this matter. In the Breakfast Panel: #WomenInTech, Isdefe's woman engineer Sandra Bardón - currently assigned to CCDCoE - participated, and Jesús Rubio Melón, an Isdefe engineer assigned to the Joint Command for Cyber-Defence (MCCD), participated in the web security workshop "Web Hacking: The Easy Way" delivering the lecture "HTTP Security Headers Analysis of Top One Million Websites" within the panel On the Path Towards a More Secure Cyber Infrastructure.

Executive Level Meeting del MAWA Forum.

International forum established in 2008 to coordinate European Union Member States in developing a common regulatory framework on military airworthiness that is presided over by the EDA. The meeting of the Executive Level of MAWA Forum was held at Isdefe's headquarters and it was the starting event of its Annual Conference held at the Warfare School of the Army.

Defence, Security and Space Forum (DSS Forum).

Forum organised by the European Microwave Association (EuMA) and Microwave Journal, the topic being the integration of unmanned aerial vehicles (UAV) in defence and security scenarios. Fernando Arias, senior consultant of the Isdefe's Defence and Security Management Unit participated in the round table: "Efforts & Investment needs to drive UAV Technologies to Market".

Presentation of the book Isdefe and R&D&i and presentation of the 6th Conference DESEI+D.

Event held at Isdefe's headquarters to present the 6th edition of the Conference DESEi+d 18 and the Book: "Isdefe R&D&I Awards: The ten finalist papers for DESEi+d 2017". The opening event was presided over by Isdefe's Chief Executive Officer, Francisco Quereda Rubio, and the Deputy General Director for Planning, Technology and Innovation, Deputy Admiral Jesús Manrique Braojos, also participated. The closing session was given by the General Director for Armament and Material, Admiral Santiago Ramón González Gómez.

Anti-drone Workshop, "Technological Day: Drones Detection and Neutralisation".

Technological workshop organised by the Association for the Promotion of Strategic Technologies and Industries (APTIE) in collaboration with the Ministry of Home Affairs and the Ministry of Defence at the premises of the Security Technology Centre (CETSE) in El Pardo. The Business Development Manager, Álvaro Manresa, participated with experts from the National Police and Guardia Civil in the panel "Current situation and needs for the prevention of incidents in State and Citizens Security" and, during his speech, he presented in detail all the threats for defence and security this type of device could generate and the initiatives, challenges and measures to counteract the misuse of drones.

Workshop "SecuDRONE: Drones + Anti-drones + Security Applications".

Technology-related workshop held at the Technological Institute La Marafiosa (ITM) organised by the Association for the Promotion of Strategic Technologies and Industries (APTIE) in the context of needs and issues on drones, anti-drones and security applications. Isdefe took part in this workshop with the lecture "Drone Swarms for Security" delivered by Isdefe's engineer Mariano Gómez Plaza, expert attached to the area of surveillance technologies for public safety.

Seminar on border security and transport (IUISI and Isdefe).

Seminar held by the University Institute for Internal Security Research (IUISI) in collaboration with Isdefe, the Seminar on border security and transport was held at Isdefe's headquarters and the main institutions involved in this field in the country got to participate. The objective was to take stock of the situation for border security, discuss and think over current initiatives and draw conclusions on the experience from different bodies and Guardia Civil Chiefs from different units at national level. The speakers participating in the lectures and discussions were representatives from Guardia Civil, State-owned Ports, Spanish Airports and Air Navigation (AENA), the State Agency for Security (AESA) and the International Air Transport Association (IATA).

Seminar on Cyber-intelligence (IUISI and Guardia Civil).

Cyber-intelligence workshops organised by the University Institute for Internal Security Research (IUISI) and the Information Office of Guardia Civil which were held at Isdefe's headquarters. 28 expert lecturers from Guardia Civil, Armed Forces, Cryptology National Centre from the National Intelligence Centre, the National Centre for the Protection of Critical Infrastructures, the National Cyber-security Institute, the academic sector, Europol, research analysts from United Kingdom and Germany and Isdefe exchanged knowledge and experiences in this area. Isdefe's experts in Public Security from the Defence and Security Office of Isdefe presented the "EU approach through its framework programmes, particularly Horizon 2020" and discussed success stories such as COPKIT + ePOOLICE + MEDEA.

3rd Workshops on Cyber-defence of the Joint Command for Cyber-defence: "Military Operations in Cyber-space".

Seminars addressing the challenge of integrating cyber-defence in the process of operational planning and the impact of attacks both on operators and critical infrastructures, the regulatory framework, etc. Isdefe collaborated and participated in these seminars: in the opening, through the CEO, Francisco Quereda, the manager of Security and Critical Infrastructures, Óscar Pastor, delivered the lecture "Horizontes Network and Observatory of Cyber-security", Isdefe engineer assigned to the MCCD, José Manuel Agrelo, delivered the "MCCD Workshop: SACMAN" and Isdefe engineer Sandra Bardón, who is also assigned to the MCCD, delivered the lecture: "WEI NATO CCD COE: Organisation and future".

Seminars of NITEC'18 "NATO'S Digital Endeavour: Expanding the Ecosystem".

Seminars organised by the NATO Communication and Information Agency (NCIA) and the AFCEA, TechNet International, these industry-oriented seminars provided an overview of emerging technology and cybernetic needs in the Alliance, giving direct access to the programme chiefs of the NCIA and the main players in CIS projects managed by the Agency under the structure of panels and work sessions. Isdefe participated in the specific panel for not-for-profit organisations in which the Manager for Command and Control Networks and Critical Information Systems from Isdefe, César Pérez, described the foundation and mission of Isdefe in its quality as a public company in consultancy and engineering in the field of Defence and Security, and highlighted the experience gained from the collaboration with the NCIA in the programme office of the Bi-Strategic Command Automated Information System - Bi-SC AIS (PMIC).

18th Seminars on Technologies for Defence and Security.

Biannual seminars organised by the Foundation Group of Technologies for Defence and Security which addressed the deep analysis of key technologies behind this digital revolution. Jesús Carrera Martínez, Manager of Platforms and Tactical Service at Isdefe participated in the second session "Robotics and Drones".

13th Meeting of the Spanish Society of Astronomy (SEA).

Event organised by the Spanish Society of Astronomy bringing together more than 800 professional astrophysicists including around 600 doctors in Astrophysics and around 200 junior members. Its main objective is to contribute to promoting the development of Astronomy and Astrophysics in Spain and, particularly, provide an independent forum for discussing interesting issues for the Spanish astronomical community. At the meeting, Isdefe's engineers from the Space Astronomy European Centre participated with two lectures on the field of ESA/NASA collaboration, as well as with different presentations of projects in which the company's scientists and engineers develop their professional tasks.

19th Seminar of the Club of Quality and Innovation Managers.

Seminar organised by ZITEC Consultores, key partner from the Club of Excellence in Management, which had the participation of Tirso Camacho Mira, Chief of the Strategic Planning and Process Area in Isdefe, who presented the Role Model for the Creation of Public Value developed by Isdefe.

Seminar: "The Quality of Data in the Defence Sector".

Seminar organised by the Committee of Industries and Services for Defence, the Spanish Association for Quality (AEC), in the Army Museum in Toledo. The Business Intelligence and Government Analytics Coordinator from Isdefe, Raúl Rodríguez Sánchez, participated in the seminar with the lecture: "Evolution in Quality of Data at the Logistics Support Command of the Army. Lessons learnt". This forum was a meeting point for the Ministry of Defence and the Industries of Armament and Material for Defence (IAMDs).

5th Seminar on Security and Cyber-defence CIBERSEG18.

Seminar organised by the Universidad de Alcalá de Henares - Technical School. Isdefe collaborated in this seminar through the Isdefe-University Department of Cyber-security at the Universidad de Alcalá de Henares and organised the CTF workshop and the "Security in Wi-Fi Networks" workshop recording more than 30 attendees.

9th AMETIC Seminar: "Satellites as a key element for security and defence and government applications".

Seminar held under the direction of Hisdesat and AMETIC. This edition addressed the current scenario of satellite government services during its lectures and round tables.

Mr. Francisco Quereda Rubio, CEO, participated in the round table: "New Programmes and New Space: How does the Spanish Space Sector get ready? and Mr Jesús Alonso Martín, Business Development Manager, in the round table "Technological challenges in satellite services".

75th Anniversary of the Air Force General Academy.

Event supported by Isdefe and which included different actions. The institutional event was presided over by the Minister of Defence, Ms. María Dolores de Cospedal, together with the Chief of the Air Force Staff, Javier Salto Martínez-Avial and a great representation of military and civil authorities.

17th Course of High Strategic Studies for Higher Ibero-American Officers of the High School of the Armed Forces.

Course organised by the High School of the Armed Forces (ESFAS) in which Isdefe participated with a lecture "Systems Engineering at the service of Defence" delivered by the Business Development Manager, Mr. Álvaro Manresa. A debate was held afterwards with the attendees.

Summer Course "Evolution of Defence R&D in Spain Horizon 2020".

Course organised by the High Centre of Studies for National Defence (CESEDEN) and Universidad Politécnica de Madrid, in which Isdefe and public and private bodies related to Defence technology got to participate. One of the objectives of the event was to inform and introduce opportunities arising from the participation of the European Union in the field of Defence. The R&D&i area presented Isdefe's R&D strategic lines.

Summer Course of the Universidad de León on Surveillance and Monitoring of Space Objects.

Course organised by the Universidad de León in which the Space and Technology Centres Manager at Isdefe, Mr. Isaac Domínguez Santos, moderated a round table during which several topics were discussed such as the national strategy on the Spanish Space Surveillance and Tracking S3T programme and its different action lines at civil and military level and the opportunities for the sector within the European programme.

26th Course on High Logistics Management.

Course organised by the School of the Armed Forces (ESFAS) of the Ministry of Defence. Its purpose is to supplement the training of staff assigned to high level positions in logistics management and civilians performing executive roles in companies in the field of Defence, increasing their skills and resources to tackle the complex problems in High Logistics Management. Álvaro Manresa, Business Development Manager was in charge of presenting Isdefe's activity and answering the questions posed by participants.

Summer School on Digital Transformation in Latin America "Digital Transformation in the region of Latin America and Europe".

Summer School organised by the IBEI -Institute Barcelona of International Studies-, CAF (Latin America Development Bank) and CEPAL held at the IBEI. In this fifth edition, the forum brought together renowned specialists, including Isdefe's engineer Sonia Castillo Triguero, Chief of the Regulation of Markets and Telecommunications Area who participated in the expert round table: "Regulation of operators and Digital Neutrality: the European Debate".

Round Table: Surveillance and Monitoring of Space Objects.

Round table organised by Space Horizon (Universidad Carlos III Madrid-Isdefe) of the Horizontes Network. In this Round table the necessary technologies for surveillance and monitoring of space trash were reviewed by experts from the Spanish industry, as well as existing technological challenges for them to be improved.

Workshop "Research and Analysis of Cryptocurrencies".

A workshop held at Isdefe's headquarters organised by the University Institute for Internal Security Research (IUISI) addressing research and analysis on cryptocurrencies with the aim of providing the attendees with a description of the operation of the most widely spread cryptocurrencies systems such as BitCoin, Ethereum, etc. Also included a global overview on the path for research and monitoring of transactions made in this context.

5th International Joint Operations Workshop with the "Methodological and Technological Contribution of Systems Engineering".

Workshop promoted by the General Directorate of Guardia Civil and by the Universidad Nacional de Educación a Distancia (UNED) through the University Institute for Internal Security Research (IUISI); this edition focused on providing information on the situation at the external borders of the European Union; how to carry out a joint international operation and fostering the exchange of knowledge and experiences in the field of public security. Isdefe participated in this forum to explain its role as an in-house technical service provider specialising in Systems Engineering applied to the search of solutions for Defence and Security. The Chief of the Borders Protection Area attached to the Defence and Security Management Unit, Mr. José Antonio Díaz Bermudez, was in charge of presenting the contribution from Systems Engineering in the process of operational skills for Border Control in Joint Operations.

Match Your Company, University-Company Foundation.

Meeting for students or recent graduates in the field of engineering and it provides the chance to talk with millennials from the main multinational companies in different sectors. Isdefe held a round table in which students were welcomed by the youngest HR staff in our company.

Satelec 2018.

Employment and Technology Forum in which Isdefe had a stand. The event was organised by the Telecommunications Alumni Society ETSIT-UPM (Technical School of Telecommunications Engineers - Universidad Politécnica de Madrid) and was a very successful event in terms of the public and companies participating in this latest edition. This Employment and Technology Fair has the purpose of helping young talent to find out about the possibilities each company may offer. This 44th edition was developed just when the information and communications technologies (ICT) sector is transforming our way of life.

Foroempleo 2018.

23rd edition of this annual forum for students and recent graduates looking for their first job and companies seeking newly graduated candidates. Isdefe had a stand in which our HR staff connected with students and recent graduates looking for a job or internship to explain to them the programmes in place for recruiting talent at the company. More than 100 companies participated in the event, which is considered the most important university employment forum in the region of Madrid.



ANNEX V. Participation in awards and distinctions

In order to boost and distinguish innovation in the field of Defence and Security, in collaboration with the Ministry of Defence, the organisation awards the "Antonio Torres" R&D&i Isdefe Award in the context of the National Conference on R&D in Defence and Security promoted by the Ministry of Defence. Moreover, in the framework of the Horizontes Network it also gives distinctions to the best university records, end of degree/master projects in Engineering.

Army Awards.

56th edition of these awards organised by the Army which are an initiative to foster defence-related culture and that offers awards in different categories such as journalism, cinema, fine arts, photography and drawing.

"Antonio Torres" Isdefe R&D&i Awards.

Awards organised by Isdefe in the framework of the National Conference on R&D in Defence and Security (DESEi+d) to the best Conference paper. In this third edition, this award was granted to the paper by Mr. Mateo Burgos García from the Department of Signals, Systems and Radio-communications at the Technical School of Telecommunications Engineers of the UPM: "Study on the capacities of coastal surveillance by the use of collaborative autonomous platforms".

ETSIAE Award to the best academic records in the specialisation "Airports and Air Transport". Organised by the Technical School of Aeronautics and Space Engineering within the Isdefe-UPM Department at ATM.

ETSIT Award.

Isdefe presented the award to the Best Academic Record form the University Master in Telecommunications Engineering organised by the Technical School of Telecommunications Engineering of the Universidad Politécnica (Madrid) which is part of the ETSIT-EMPRESA awards granted to the best academic records in every discipline.

COIT Award.

38th edition of these awards organised by the Official Association of Telecommunications Engineers to the best doctoral thesis in different disciplines. Isdefe grants this award to the Best Doctoral Thesis in Security and Defence.

UAH-EPS Award.

Organised by the Technical School of Universdad de Alcalá de Henares; Isdefe collaborates with the Special Award to the Telematics Engineering Degree through its Isdefe Cyber-security-UAH Department.

Award to the Engineer of the year COIAE.

Organised by the Official Association of Aeronautical Engineers, the award is given at the COIAE annual gala.

Distinctions Isdefe's R&D&i Ideas Attraction and Management Programme.

Isdefe's internal programme fostering participation in internal projects on innovation, development and research. In this 3rd edition, the winners were Jorge Bueno Gómez, who proposed the project "Design of a UTM Spanish Architecture" and Raquel Pastor Pastor and Juan Carlos Iravedra Bellosta, proposing the project "EMEGEWEA, how to optimise public security, by generating customised intelligence based on timeline framework".

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