



# SYSTRA

## ALL TOGETHER FOR A SUSTAINABLE FUTURE

DECLARATION OF EXTRA-FINANCIAL PERFORMANCE 2019

## At SYSTRA,

**working on track alignment**  
means opening the way for thousands of passengers,

**delivering an advanced technology bridge**  
means promoting a territory,

**designing an automated metro network for a metropolis**  
means orchestrating the contributions of key project workers,

**installing the latest railway signalling system**  
means helping to make the world a safer place,

**all of these projects are underpinned by our ecodesign process.**

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We welcome everyone who, day after day,  
rises to the technical challenges of worldwide sustainable development.

We seek to win the confidence of the people we serve,  
by designing safe, sustainable transport solutions.

We put our skills and experience at the service of society  
by sharing our values of Excellence, Connected Teams and Bold Leadership.

To go further, we have chosen to present the three dimensions of our commitments:

### **ACTING FOR THE ENVIRONMENT**

**#1- Our ecodesign process underpins all of our projects**

### **HELPING OUR CLIENTS TO ACHIEVE SUSTAINABLE MOBILITY**

**#2 - Contributing to regional development**

**#3 - Designing solutions for sustainable mobility**

**#4 - Promoting inclusive mobility**

### **ACTING AS A RESPONSIBLE AND COMMITTED EMPLOYER**

**#5 - Guaranteeing an attractive working environment**

**#6 - Acting more responsibly each day**

**#7 - Helping make the world a safer place**

**#8 - Setting an example for ethics**

To deliver on our commitments, we have initiated an improvement process, guiding our actions and measuring our results by means of performance indicators and objectives.

These objectives are verified and published annually.

## EDITO



**PIERRE VERZAT**  
CHIEF EXECUTIVE OFFICER

Sustainable mobility is not just another engineering challenge or equation to solve. It's a challenge that mobilises the qualities we have spent sixty years developing: expertise, innovation, and conviction. It's about responding to an emergency that forces us to think long term. How do we design solutions today that will serve the world of tomorrow?

Climate change tests our ability to adapt our proven methods and to invent new ones. Cities everywhere are growing and with this comes transport issues. We know how to answer these challenges. We have always sensed the usefulness of our projects, serving the needs of our clients and, with them, the needs of their communities. The Covid-19 crisis raises the level of urgency and challenges us to think of virtuous systems able to answer the most immediate needs without jeopardising the development capacity of future generations.

By serving our clients and always going further in the sustainable character of our proposals in every respect, we are developing our usefulness to society. Our projects are meaningful because

those who undertake them believe in having a positive influence on the lives of millions of people.

To achieve such an impact, we need to know how to respond to all the challenges of our age and to anticipate, with our partners, those of the coming decades. What do our clients want today? They want us to help them sustainably support the densification of their territory, planning the inter-modality of cities, to optimise management of their infrastructures, with ever higher levels of safety. In short, that we deliver solutions that support their goals of resilience and give them the means to ensure a better future for their fellow citizens.

We have made ecodesign a major lever within our consulting and engineering offer, a dynamic and changing objective, always at the forefront of needs, enabling us to stay one step ahead. The expectation of excellence is the essence of SYSTRA's signature. It can only be credible if it is in step with its time. The period we are going through reinforces the need to reconcile responses suited to the present while building a sustainable future.

In 2020, we are committed as ever as an actor of change.



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# MANAGING RISKS TO CREATE SUSTAINABLE VALUE

SINCE SYSTRA'S CREATION, OUR ENVIRONMENT HAS BEEN TRANSFORMED.

DEMOGRAPHIC GROWTH WORLDWIDE, URBANISATION, THE ARRIVAL OF NEW TRANSPORT MODES AND HABITS ARE JUST SOME OF THE MAJOR CHANGES TO OUR ECOSYSTEM.

IT IS VITAL FOR US TO UNDERSTAND THESE TRANSFORMATIONS, TO ALWAYS MEET THE EXPECTATIONS OF OUR CLIENTS AND STAKEHOLDERS.

## OUR STRATEGY IS BASED ON A VISION: ACTING TOGETHER FOR A SUSTAINABLE FUTURE

The very nature and range of our activities and geographical locations means that we are constantly exposed to risks that could threaten their future. Our proactive approach to risk management allows us to pursue our development boldly. This is the cornerstone to creating sustainable value.

## GOVERNANCE OF RISK

Measures to manage risk are part of the performance management system. The principal risks linked to SYSTRA's activity are presented in a risk map that is updated annually. It is co-built with all the operational departments and administrative directorates.

The Executive Committee is in charge of risk governance for the Group. It validates the risk map as well as the monthly review of progress on action plans.

In 2019, the Group identified the major extra-financial risks to activity in three principal sectors: human resources, professional health, safety and security, ethics and business compliance.



Environmental problems are not part of our risk mitigation plan. They are one of the priorities for the transformation of SYSTRA, as explained later in this document. The environment and climate risk will be integrated in 2020.

ISSUES	Human resources	Health, safety and security at work	Business ethics and compliance
DESCRIPTION OF THE RISK	Risk of insufficient key resources available for deployment on projects	Risk of physical harm to stakeholders or persons under our responsibility	Risk of legal proceedings for any violation of anti-corruption laws or anti-competitive practice
POLICY	General Policy	3S Policy (health, safety and security at work)	Business ethics and compliance policy
SECTION	P.32-34	P.40-41	P.42-43

## CREATING SUSTAINABLE VALUE

This document focusses on issues where expectations are high, and progress must continue. Whether they concern issues related to the environment (Acting for the environment), staff (Acting as a responsible and committed employer) or society (Helping our clients to achieve sustainable mobility), these issues present opportunities for the Group to develop, and they stimulate the constant development of the services we offer.

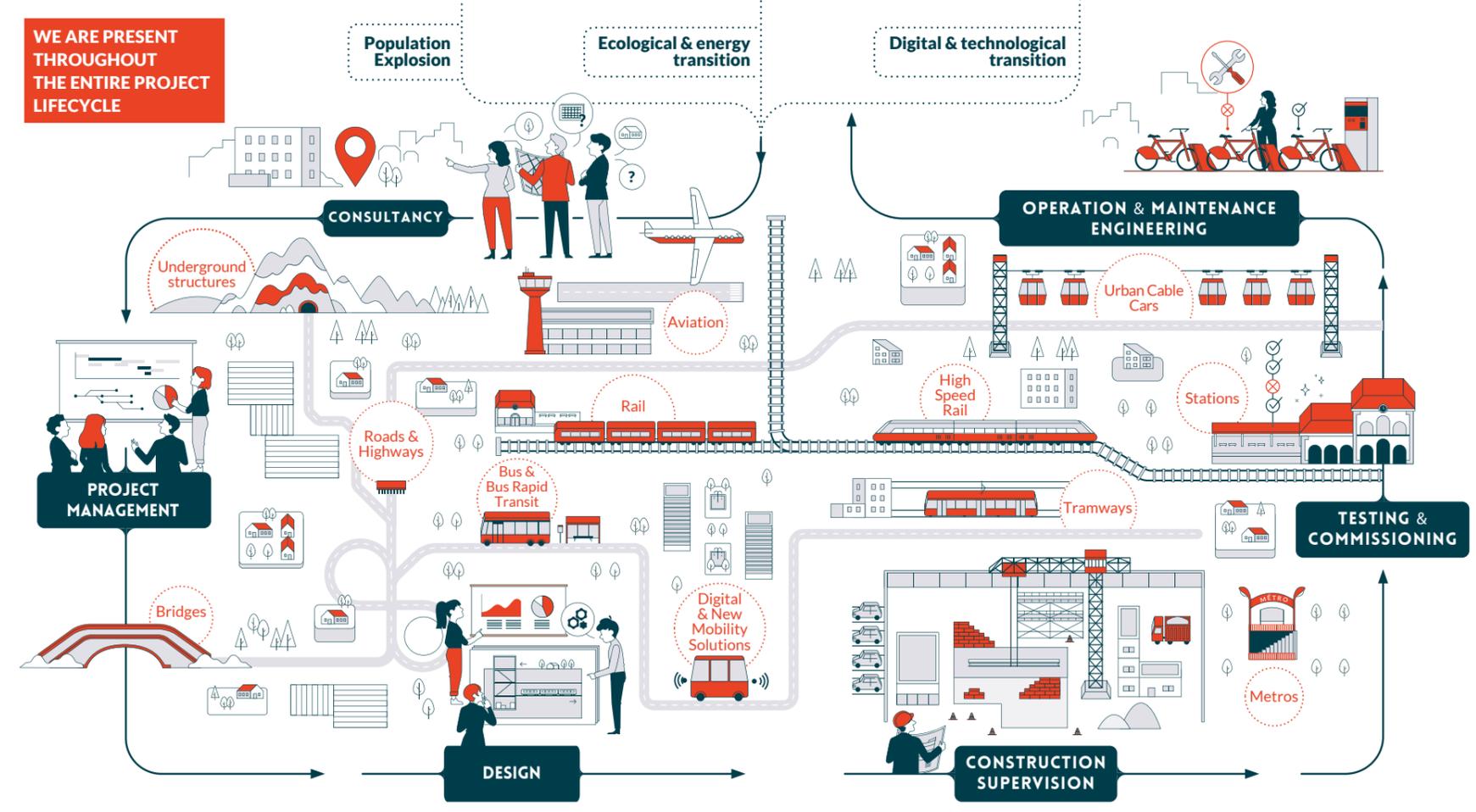
For each issue, we have made commitments and taken practical action to create sustainable value for our clients and all our stakeholders. The results from performance indicators are presented in this report and verified annually by an independent third-party.



# Business model

**MOBILISING OUR RESOURCES**      **TO RESPOND TO CHALLENGES**      **WHETHER CURRENT OR FUTURE**      **AND CREATE SUSTAINABLE VALUE**

- 60+** years of expertise
- 7,336** employees worldwide...
- ...driven by our values of **excellence, connected teams and bold leadership...**
- ...connected through **networks of expertise...**
- ...operating in more than **80 countries...**
- ...accompanied by **industrial, academic, and research partners...**
- ...supported by a turnover of **€631M** in 2019



**OUR ACTIVITIES ARE DRIVEN BY STRONG COMMITMENTS**

- Environment
- Ethics
- Health, Safety & Security

- FOR SOCIETY**  
Designing mobility solutions that are:
  - Sustainable to fight global warming and conserve the planet's resources
  - Inclusive to offer everyone the freedom to get around for a better life
- FOR OUR CLIENTS**  
Developing more efficient transport and new mobility services:
  - Delivering sustainable responses for their needs and those of their users
  - Delivering new responses to society's challenges by leveraging ecodesign and digital
- FOR OUR EMPLOYEES**  
Building a relationship of trust and guaranteeing an appealing work environment, based on the passion for our professions and collaboration
- FOR OUR SHAREHOLDERS**  
Developing SYSTRA's activity through sustained and sustainable growth
- OUR COMMITMENTS CONTRIBUTE TO THE UN SUSTAINABLE DEVELOPMENT GOALS (SDGS)**





**ACTING FOR  
THE ENVIRONMENT**



**HELPING OUR CLIENTS  
TO ACHIEVE  
SUSTAINABLE MOBILITY**



**ACTING AS A RESPONSIBLE  
AND COMMITTED EMPLOYER**

**CREATING SUSTAINABLE VALUE...**

- + considering the environment at every stage of project life cycles, from design through to operating and maintenance;
- + sharing best ecodesign practice;
- + raising awareness of best attitudes.

**Commitment #1  
Our ecodesign process  
underpins all of our projects**

- + helping to enlighten major mobility issues;
- + implementing an innovation programme for historical and disruptive modes of transport;
- + developing new services and solutions to provide mobility for everyone;
- + promoting conversion to low-pollution fleets of vehicles;
- + using data to enable new services.

**Commitment #2  
Contributing to regional  
development**

**Commitment #3  
Designing solutions  
for sustainable mobility**

**Commitment #4  
Promoting inclusive mobility**

- + clarifying and highlighting strategy and opportunities;
- + encouraging team and collaboration through networks of experts;
- + developing new training programmes to promote independence;
- + encouraging gender equality and diversity;
- + inspiring all of our stakeholders to act ethically and safely.

**Commitment #5  
Guaranteeing an attractive  
working environment**

**Commitment #6  
Acting more responsibly  
each day**

**Commitment #7  
Helping make the world  
a safer place**

**Commitment #8  
Setting an example for ethics**



# ACTING FOR THE ENVIRONMENT



## OUR COMMITMENT

#1 - Our ecodesign process underpins all of the projects

IN PARTICULAR, THIS COMMITMENT CONTRIBUTES TO THE UNITED NATIONS' OBJECTIVES FOR SUSTAINABLE DEVELOPMENT



## COMMITMENT #1: OUR ECODSIGN PROCESS UNDERPINS ALL OF OUR PROJECTS

**THE CONSENSUS OF OPINION, INCLUDING THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, IS THAT EACH AND EVERY PERSON MUST ACT, ALL PROFESSIONS IN EVERY STATE AND ECONOMIC SECTOR MUST MOBILISE TO "LIMIT THE RISE OF THE AVERAGE TEMPERATURE OF THE PLANET TO WELL BELOW 2°C COMPARED TO PRE-INDUSTRIAL LEVELS, AND TO PURSUE ACTION TAKEN TO LIMIT ANY TEMPERATURE TO 1.5°C COMPARED TO PRE-INDUSTRIAL LEVELS".**

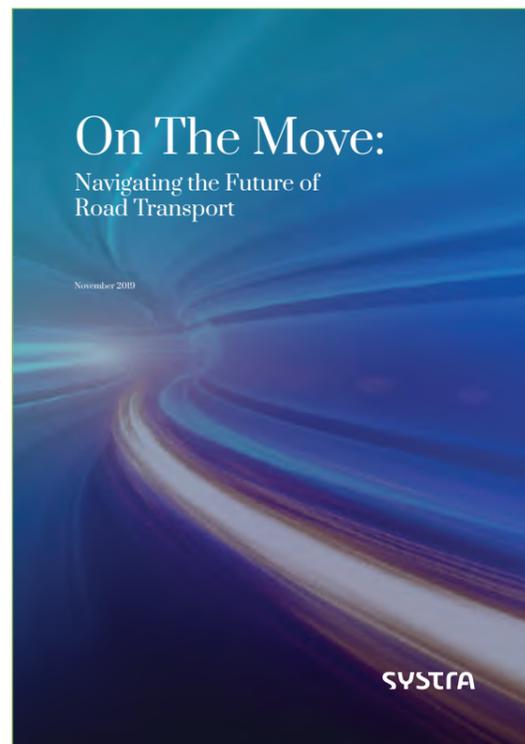
### BUILDING A LOW-CARBON FUTURE

This year, SYSTRA consulted 12,000 consumers in the United Kingdom, Germany, Spain and the Netherlands to study the future of road transport for a report entitled 'On the Move' on behalf of the British oil company BP. The report revealed that 72% of the Europeans consulted are sensitive to climate change and think that the most neutral level of carbon emissions possible must be achieved by 2050.



*'With a suitable combination of transport solutions we will manage to resolve one of the greatest challenges that humanity has ever had to face, in other words global warming. Our shared ambition must be to move towards a low carbon future as fast as possible.'*

**Andrew McNAUGHTON**  
Strategic Growth Initiatives Director



The French agency for managing the environment and energy (ADEME) has published a hierarchy of clean modes of transport. With 13 grams of CO<sup>2</sup> emitted per kilometre, trains are currently among the least polluting modes of transport. They perform better than electric cars, which are estimated to emit 22 grams of CO<sup>2</sup> per kilometre. Diesel, hybrid and petrol-powered cars come far behind with almost 130 grams of CO<sup>2</sup> per kilometre.

Controlling the impact of transport on the environment is not only vital to achieving our countries' commitments, but it is also a general aspiration of society and a question of public health. Thanks to the activity of our multicultural and multinational teams worldwide, SYSTRA can improve the carbon footprint of infrastructure at the planning stage and throughout all ensuing phases from design to testing and commissioning.

Recommending innovative ecodesign processes for infrastructure, encouraging the deployment of new technology, integrating the protection of biodiversity, or studying a better urban organisation, these are just some of the proposals that SYSTRA can offer.

## THE GROUP'S FIRM COMMITMENT



As an engineering company, SYSTRA is bound to facilitate the energy transition of society. The company's actions and decisions must look to the long term, to meet the needs of the present without compromising the ability of future generations to satisfy their own needs.

This year, SYSTRA renewed its environmental policy and signed Syntec-Ingénierie's engineering charter for the climate, which makes a firm commitment to reduce the carbon footprint of the transport sector.

One of our commitments applies to developing and promoting sustainability throughout the life cycle of our projects. Not content to simply comply with standards and regulations, SYSTRA wishes to integrate environmental issues at the pre-project phase, by suggesting solutions for ecodesign and energy optimisation for public transport infrastructure. We wish to contribute to our clients' climate objectives, by suggesting ways of calculating the quality or quantity of reducing the carbon footprint for infrastructure we are working on.

These solutions are passed around among all collaborators in a shared workplace, so that everyone can benefit from best practice and meet the clients' expectations.



*'This shared workplace allows us to publish our ecodesign methods and incorporate them into our signature.'*

**Christelle CHICHIGNOUD**  
Group Sustainable Development Director

### IMPROVING THE CARBON FOOTPRINT OF OUR PROJECTS

By analysing the entire life cycle before the start of a project, SYSTRA can compare the environmental impact by avoiding the energy or climate related pitfalls of overconsumption, as well as by selecting products or procedures with low environmental repercussions.

Although public transport systems play a major role in reducing carbon emissions once they have entered service, we must also assess the infrastructure construction phase, because it makes a signi-

ficant contribution to these emissions. Concrete and steel, for example, are the two materials most widely used during the construction phase. Their production alone accounts for up to 7% of greenhouse gas emissions in the world. Consequently, our decisions about design, particularly the choice of materials, will affect the carbon footprint, particularly during the building phase, but also during service and, to a lesser extent, during maintenance and deconstruction.

This approach can also integrate an all-round approach to the circular economy, to optimise the integration of a project into a territory.

Last November, the 10<sup>th</sup> edition of the Smart Metro & CBTC World Congress in Madrid gave SYSTRA the opportunity to run a workshop on sustainable solutions for the metro of the future. The workshop examined the life cycle of a metro system in three stages: design, operating and maintenance, deconstruction and modernisation. The workshop attracted designers, planners and operators, in search of solutions to reduce the carbon footprints of their projects.



*'This congress was an opportunity to reiterate our determination to integrate the objectives of sustainable development into the life cycle of intelligent metro systems.'*

**Kevin WAHILA**  
Bid Manager for the Systems Business Unit

## FOCUS ON THE IMPLEMENTATION OF AN ECODESIGN PROCESS

### Halving the carbon footprint on a major project (United Kingdom)

After building HS1, the first high speed railway in the United Kingdom, SYSTRA is a stakeholder in HS2, one of the largest infrastructure projects in Europe. The objective is to build a new 565km network of high speed railway lines connecting 25 destinations including London, Birmingham, Manchester and Leeds.

SYSTRA teams are working in a joint venture with Balfour Beatty and VINCI, together with Mott MacDonald. Since 2017, we have been in charge of the principal civil engineering work to connect London and Birmingham, due to enter service in 2026. For each task,

SYSTRA is providing expertise encompassing civil engineering, infrastructure design, planning and environmental services.

SYSTRA has committed to halving the carbon footprint from initial conception to the final version of the design. Staff have chosen 11 indicators for the project life cycle and they are preparing recommendations to reduce carbon emissions.



HS2 Project in the United Kingdom



# HELPING OUR CLIENTS TO ACHIEVE SUSTAINABLE MOBILITY



## OUR COMMITMENTS

#2 - Contributing to regional development

#3 - Designing solutions for sustainable mobility

#4 - Promoting inclusive mobility

IN PARTICULAR, THESE COMMITMENTS CONTRIBUTE TO THE UNITED NATIONS' OBJECTIVES FOR SUSTAINABLE DEVELOPMENT



## COMMITMENT #2: CONTRIBUTING TO REGIONAL DEVELOPMENT

**AS AN ENGINEERING COMPANY, SYSTRA WORKS ON NUMEROUS MOBILITY SOLUTIONS FOR METROS, LIGHT RAIL TRANSIT SYSTEMS OR HIGH-SPEED RAILWAYS, CONSTANTLY HELPING TO TRANSFORM TOWNS AND REGIONS. IMAGINING, ADAPTING AND IMPLEMENTING THE SAFEST, MOST EFFECTIVE AND ECONOMICAL TRANSPORT SOLUTIONS ARE THE GUIDING PRINCIPLES FOR OUR DAILY WORK.**

Our ambition is to be the Signature Team for Transport Solutions. To this end, we constantly adapt our portfolio of services and expertise, to satisfy our clients' latest needs and help them deal with the major challenges of mobility. Our approach to sustainable mobility focusses on regions, mobility solutions, and travellers' new practices. We help our clients plan, design and lead their mobility project throughout the project life cycle, from planning a transport network, engineering and construction through to asset management.

### BUILDING A SHARED VISION

At SYSTRA, we believe that the mobility of the future will be multi-modal and integrated, based on public transport networks associated with secondary modes that are flexible, individual and joined up. Half of our work consists of helping clients upgrade established networks, the other half entails proposing new solutions for mobility and new routes for passengers. The aim is to allow each person to choose their own mobility, offering a wider variety of services that improve efficiency and connections over the whole area.

This year, several of the Group's specialists have presented SYSTRA's capacity to deal with the great challenges of mobility. On our Internet site and

on social networks, they have shared their vision of topics ranging from the consequences of digital technology on transport planning, mobility as a service (MaaS), to the mastery of new so-called 'clean' technologies.

This vision has also been presented at major events and facilitated discussion between peers and decision makers from all over the world.



### LOOKING AHEAD

Two hundred kilometres of automated lines, equivalent to the existing Métro network, 68 new stations, 2 million passengers expected daily, 39 billion Euros invested. The Grand Paris Express is undoubtedly the largest urban transport project in Europe. After being unveiled in 2009, this colossal project will stretch beyond 2030.

SYSTRA is contributing to the consortium that has designed the digital model for the entire Paris region (12,000km<sup>2</sup>). This model contains the map of the future metro, associated infrastructure and 140km<sup>2</sup> of urban development around stations, in other words one million buildings modelled in 3D.

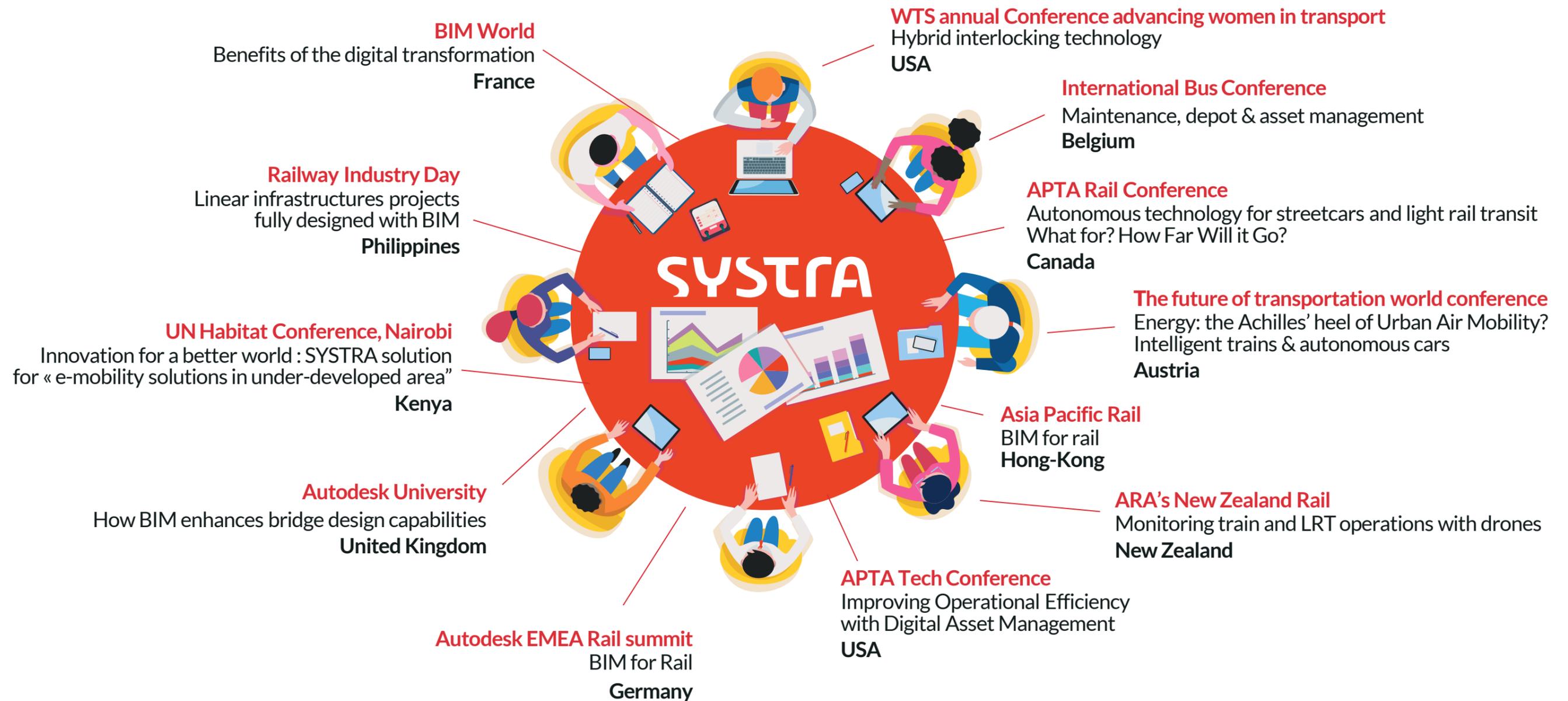


*'Unlike a building that takes eighteen months to rise out of the ground, we are working on the very long term. Société du Grand Paris worked on the design from 2013 to 2017, and the first sections are due to be delivered in 2024. Meanwhile, the town carries on evolving, and new building projects are constantly emerging. The model allows us to anticipate and visualise the consequences, while bringing all the stakeholders on board.'*

**Sylvie CASSAN**  
Sales Manager France



# IN 2019, SYSTRA TOOK PART IN NEARLY 60 EVENTS DEVELOPING SOLUTIONS TO TODAY'S CHALLENGES



## COMMITMENT #3: DESIGNING SOLUTIONS FOR SUSTAINABLE MOBILITY

LOOKING AHEAD CHIEFLY MEANS DEVELOPING SOLUTIONS TO MEET THE CHALLENGES OF MOBILITY. THE DEMOGRAPHIC EXPLOSION, CONGESTION AND URBAN CREEP WILL TRANSFORM THE WAY WE TRAVEL. THE TRANSPORT MARKET IS UNDERGOING A THREE-PRONG REVOLUTION: THE NECESSARY ENERGY AND ECOLOGICAL TRANSITION, DIGITALISATION OF MOBILITY AND TRAVELLING HABITS, NEW TECHNOLOGIES AND NEW MODES OF TRANSPORT. WE ARE HELPING OUR CLIENTS TO CONFRONT THESE CHALLENGES AND BUILD THE FUTURE.

### CO-BUILDING PROJECTS THROUGH NEW USES OF DATA

Digitised solutions for mobility and growing volumes of data enable us to enhance the efficiency of transport networks, but also to measure the overall performance and repercussions of our decisions. By developing new ways of working, the Group is helping our clients to exploit their data.

During the transport analysis and planning phases, new sources of data (mobile trackers, GPS data) and studies of environmental data (quality of air, greenhouse gas emissions) make it possible to make better models of the results of investment decisions. Our collaborative and iterative approach is used to test, assess and discuss several scenarios to promote co-construction.

During the engineering and building phases, the organisation of information, sharing and collaboration between stakeholders and disciplines are simplified by the use of BIM (Building Information Modelling), and this makes for real progress on transport infrastructure projects.

BIM is a collaborative method for developing projects. Beyond design practices, BIM introduces a whole new approach that enables specialist, in-house and external stakeholders to work together and build the digital twin of the future transport infrastructure.

As from 2020, our engineers will factor in costs, timelines and greenhouse gas emissions, to supplement the three physical dimensions of their project studies. This will enable us to recommend the best energy performance, based on the environmental quality of materials and real-time assessments of carbon emissions.

The deployment of a BIM process also helps accelerate the performance of a project in terms of asset management. In particular, SYSTRA is helping its clients to bring their buildings and infrastructure under closer control during the operating and maintenance phases.

For our clients, in addition to promoting a unified approach, it is quite simply a way of designing more sustainable and economical infrastructure.



*'BIM relies on teamwork, sharing tools and consolidating methods, but it also showcases the excellence and boldness we build into every project. As such, BIM totally epitomises SYSTRA's values.'*

Vladana DARRAS  
BIM Manager



### PROPOSING NEW SOLUTIONS FOR ENERGY TRANSITION

SYSTRA is helping its clients with energy transition, by offering services that can improve the energy performance of their mobility solutions.

#### Reducing fossil fuel consumption by buses

SYSTRA is helping clients convert fossil-fuel buses to low-carbon emissions and is assisting the transport authorities for several metropolises in France and elsewhere to compare solutions (electric, hydrogen fuel cells etc.). In 2020, studies conducted in 2019 will highlight the carbon to be saved by the option chosen for each metropolis. The final result will include multiple environmental benefits: a smaller carbon footprint for the network, improved air quality in the town, less noise and smell for residents. These advantages will be supplemented by reduced maintenance and energy costs.

#### Choosing solar energy for a railway project (United States)

SYSTRA has been selected by the South-Eastern Pennsylvania Transportation Authority to install a new photovoltaic power supply for signalling systems. This project seeks to reinforce resilience in the face of climate change, by using solar panels as a back-up power supply that enables the signalling systems to operate even during power outages.

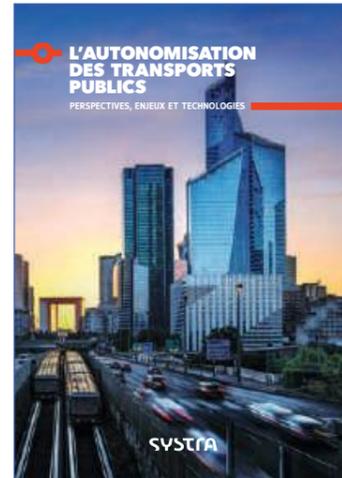


## DEVELOPING MORE EFFICIENT TRANSPORT

By 2050, demand for mobility will increase three-fold, according to a study by the United Nations. The planet is expected to have 43 towns of over 10 million inhabitants. All urban areas, whatever their size, will have to reinvent their own mobility.

New emerging technologies are transforming the world of mobility: new modes of transport, new practices, new stakeholders. Our innovation programme analyses the value and feasibility of deploying new technology on disruptive and historical modes of transport.

In a world increasingly concerned about the environment, the value of energy efficiency and the importance of public transport for capacity, performance and safety are established facts. In this context, and following work on autonomous vehicles, automated public transport looks to be a field of opportunity. For SYSTRA, it opens the way to safer, more flexible and ecological driving, as well as enhancing the use of networks and fleets, increasing capacity and improving the performance of transport systems.



SYSTRA has conducted research on autonomising public transport, to communicate about the challenges and opportunities raised by autonomous technologies.

Our work was rewarded by the 'Vision of the Year' prize at the annual Global Light Rail Awards in London. This is a major event promoting excellence and innovation in urban light rail and guided transport systems.



## FOCUS ON AUTONOMOUS TRAINS

SystemX, SNCF, Alstom and SYSTRA have launched 'DOS', the second section of a project aiming to automate the observation functions currently carried out by the driver, particularly reading lineside signalling and detecting obstacles on the track. The solution being developed uses various detectors (lidar, cameras etc.) to produce data that can be processed immediately by algorithms, some of which use artificial intelligence. The project is part of the autonomous train programme conducted by Groupe SNCF, aiming to develop in two years a prototype that satisfies the demands for performance and safety before service can start.



▼  
*'Our aim is to gain a better understanding of the strengths and weaknesses of new solutions for mobility, to assess the maturity of technologies, their repercussions on the environment and the organisation of conventional transport, while ensuring that they fulfil the needs of travellers. For us, this entails understanding how the market for mobility is changing, through test projects like this one, alongside stakeholders for new ecosystems.'*

Tristan VANDEPUTTE  
Vice President Innovation

## FOCUS ON AN INNOVATIVE PROJECT

### Urban Air Mobility

Since June 2018, several SYSTRA teams around the world have been working alongside Airbus to test the feasibility of developing an innovative transport service, Urban Air Mobility. The aim is to cater for demographic growth while reducing carbon emissions through the use of electric power.



## COMMITMENT #4: PROMOTING INCLUSIVE MOBILITY

PAYING ATTENTION TO REGIONS MEANS ABOVE ALL SERVING THE INHABITANTS, PARTICULARLY THE MOST VULNERABLE PEOPLE. IT ENTAILS ADAPTING SOLUTIONS FOR MOBILITY TO MEET EVERYBODY'S NEEDS, ENABLING EVERYONE TO PLAN FOR THE FUTURE AND PREPARE FOR IT IN THE BEST POSSIBLE CONDITIONS.

### DESIGNING INFRASTRUCTURE ACCESSIBLE TO EVERYONE

The essence of our activity is to serve residents by providing access to the greatest number, particularly the most vulnerable people.

Since 2010, SYSTRA has been working on design and construction phases in the United States and in France, to provide access to infrastructure for persons of reduced mobility. For the New York subway alone, that represents adapting 180 stations by 2030. In France, it involves transforming 160 railway stations by 2024 (raising platforms, warning systems for partially sighted persons, fitting lifts for wheelchair users etc.).



*'We should seek out such assignments. They are complex, multidisciplinary operations that call upon the best of our skills. Furthermore, ensuring accessibility is at the heart of our duty to serve residents, since people with handicaps are the most vulnerable members of society.'*

Didier TRAUBE  
Senior Vice President, France

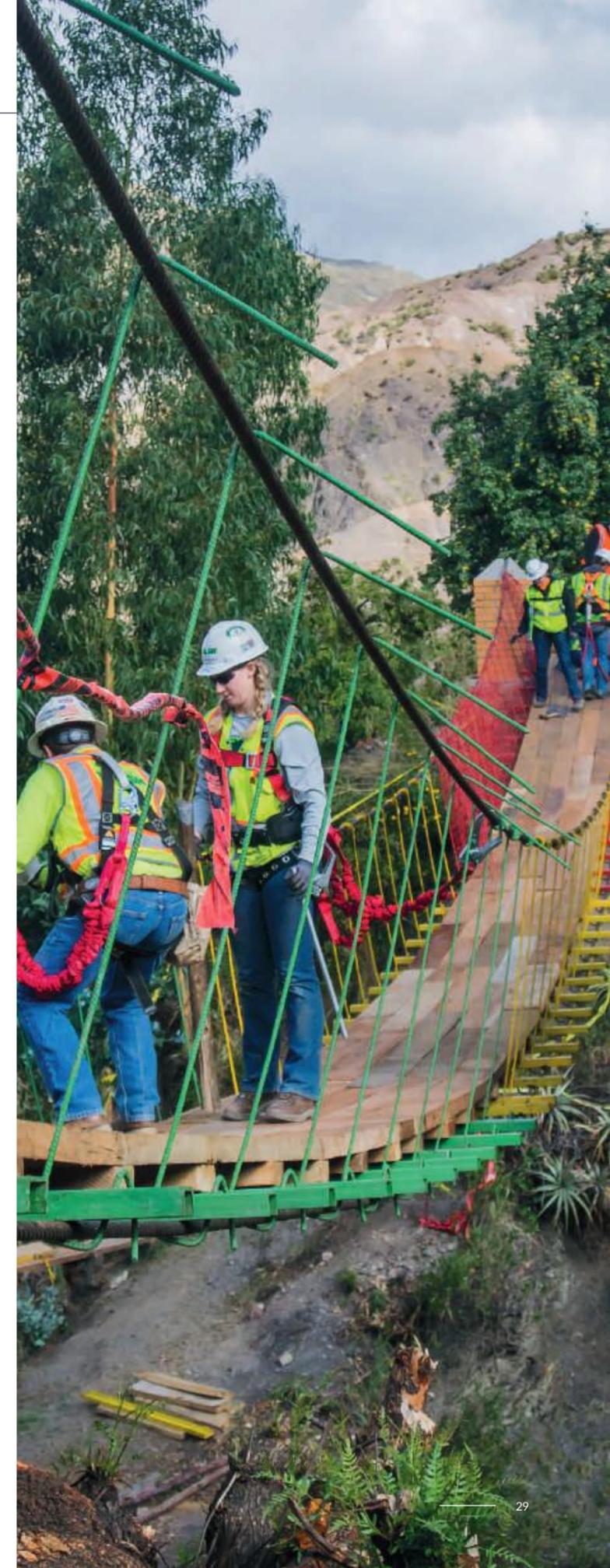


### COMMITTING TO OPENING UP ISOLATED AREAS



In developing countries, one out of seven people do not have safe, permanent access to essential services, due to insufficient infrastructure. Working hand-in-hand with residents and the non-profit Bridges to Prosperity, SYSTRA is helping build footbridges for pedestrians to open up isolated rural populations with no means of building them for themselves.

This association has already built 300 footbridges in 20 countries, on behalf of a million people.





# ACTING AS A RESPONSIBLE AND COMMITTED EMPLOYER

## OUR COMMITMENTS

**#5-** Guaranteeing an attractive working environment

**#6 -** Acting more responsibly each day

**#7 -** Helping make the world a safer place

**#8 -** Setting an example for ethics

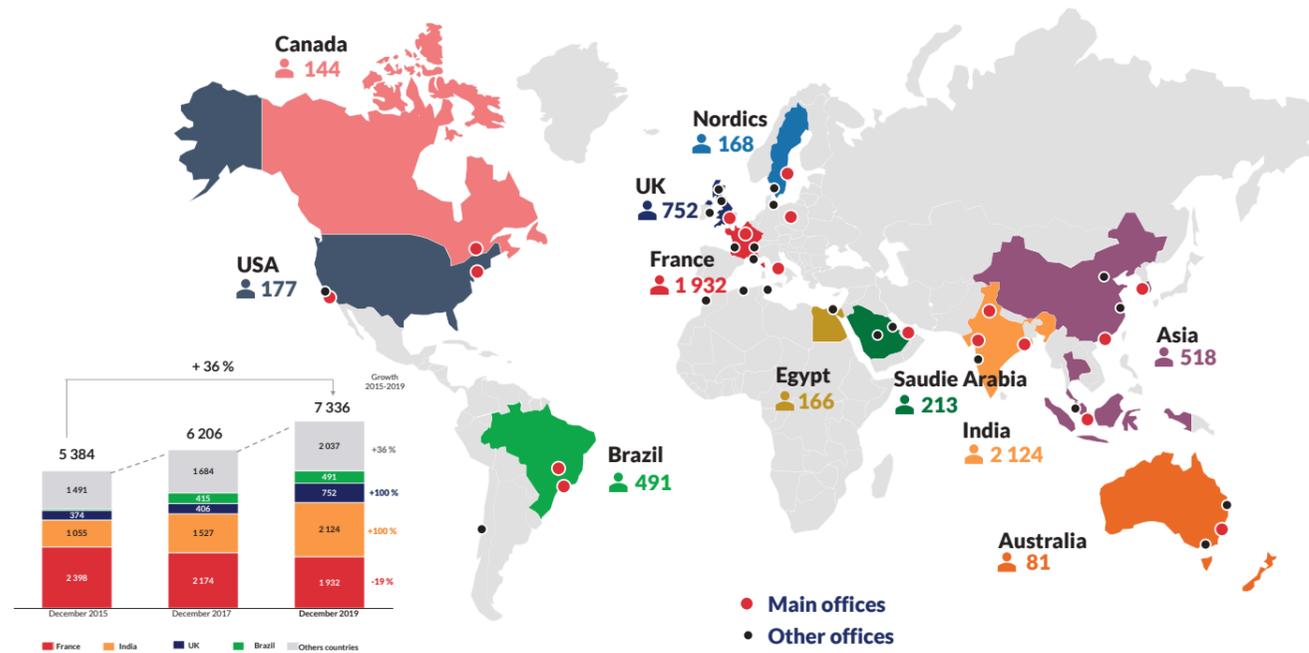
IN PARTICULAR, THESE COMMITMENTS CONTRIBUTE TO THE UNITED NATIONS' OBJECTIVES FOR SUSTAINABLE DEVELOPMENT



# COMMITMENT #5: GUARANTEEING AN ATTRACTIVE WORKING ENVIRONMENT

**SYSTRA HAS DECLARED OUR SHARED VALUES OF EXCELLENCE, CONNECTED TEAMS AND BOLD LEADERSHIP, TO UNITE ALL EMPLOYEES OF EVERY NATIONALITY AND FROM EVERY CULTURE. TEAMWORK IS PART OF SYSTRA'S DNA. OUR CAPACITY TO MUSTER TEAMS AND ENABLE THEM TO WORK TOGETHER IS A KEY TO OUR SUCCESS.**

The Group headcount has reached 7,336 employees<sup>1</sup>, an 18% increase on 2018



The increase in staff is mainly due to subsidiaries in India, and the acquisition of TSP Projects, a multi-skilled engineering firm in the United Kingdom.

<sup>1</sup> This figure for 31 December 2019 includes only private sector staff. Expatriated staff have been counted in their host countries.

SYSTRA currently has to deal with a number of challenges: recruiting, talent retention and building bridges between specialist activities. To do so, a staff development programme 'Investir sur les hommes et les femmes' (invest in people) has been implemented. It is based on four pillars: 'Look ahead', by paying attention to strategy and opportunities, 'Evolve' to encourage mobility, 'Be trained' to acquire new skills, 'Be recognised' through the system for rewarding commitment.

## EVOLVE

Looking ahead in the company also entails getting a clear idea of prospects for professional development.

Advertising job opportunities means making a commitment to simplify and assist in-house mobility worldwide. For a start, SYSTRA allows everyone to change their position every two years and encourages international mobility by organising an ambitious programme of exchanges between countries.

## LOOK AHEAD



Our first objective is to give a purpose and perspective to our staff. For this reason, SYSTRA communicates regularly to staff about our ambitions and priorities.

The sessions organised to encourage discussion of the Group's principal challenges also satisfy this need to communicate, enabling staff to interact in real time. In 2019, 24 such sessions were organised in France and elsewhere to discuss topics like 'Sustainable development', 'Invest in people', and 'Innovation, digital technology and new services'.

For instance, the target for 2020 is to organise 30 international programmes for world-wide staff (like the VIE system<sup>2</sup>).

<sup>2</sup> Volunteering for International Business

### In 2019 this consisted of:

- + **300 situations vacant** on the in-house employment exchange;
- + **7 job forums** organised in France, India, the Middle East and Canada, to discover the situations vacant throughout the Group;
- + **71 long-term international postings** for staff from 10 different countries.

### BE TRAINED

SYSTRA's ambition is to become a learning company that encourages each employee to play a part in developing their own set of skills. Staff can join thirty different communities for specialist activities or expertise, to learn from their experience and share knowledge.

In addition to the Group's training programme which focusses on key sectors, new working methods and technology to meet the needs of our clients and partners, training courses encourage self-sufficiency, by providing on-line learning modules that are permanently available for everyone.

In the meantime, several e-learning modules about the Group's principal risks are also on offer:

- + The Ethics Code and the Anti-Corruption Code
- + The Environmental Approach
- + Introduction to the 9 Life-Saving Rules, Travel Security, Protection of Information, Introduction to Risks Outside the Office.

In 2019, 738 employees were trained in France, with an average of 16 hours per person and a total of 11,958 hours.

In 2019, over **60%** of the hours of SYSTRA's training plan focussed on SYSTRA's special expertise

### BE RECOGNISED

In addition to the actions for our 'Invest in people' programme to constantly enlarge the experience of our staff, SYSTRA has set two additional objectives to make sure that everyone is recognised and rewarded:

- + Pay attention to staff, to meet their needs. For the past two years, an annual survey of staff commitment has been conducted in India, involving 30% of the entire Group staff;
- + Organise more unifying variable remuneration systems for the Group.

### OUR OBJECTIVE FOR 2020

To launch a survey of satisfaction and commitment for the staff of the whole Group



## DIVERSITY

SYSTRA GROUP IS CONVINCED THAT DIVERSITY IS AN ASSET, SO WE HAVE LAUNCHED AN AMBITIOUS INCLUSION POLICY PROMOTING GENDER EQUALITY AND ACTIONS TO INTEGRATE PEOPLE WITH DISABILITIES.

### ACT FOR DIVERSITY

For several years, SYSTRA has been acting to promote professional equality between men and women. An action plan for professional equality between men and women was launched in SYSTRA in October 2019, to increase the numbers of feminine staff and guarantee a work-life balance.

### THE GENDER EQUALITY INDEX AT SYSTRA SA<sup>3</sup>

SYSTRA rated **85/100**, this demonstrates our commitment to promoting gender equality in the company.

In 2019, women amounted to 31% of SYSTRA SA's headcount, a stable figure compared to 2018. NB: during the same year, women comprised 28% of the staff recruited (compared to 33% in 2018). The results are clearly different in other countries of the Group, essentially for historical reasons: 29% of women in the United Kingdom, a slight reduction on the previous year, 25% of women in Brazil and 9% of women in India, levels identical to 2018.

**Gender equality index<sup>3</sup>:** Indicator n°1: Pay gap between women and men (40 points) - Indicator n°2: Difference between individual pay rises (20 points) - Indicator n°3: Disparity between rates of promotion for men and for women (15 points) - Indicator n°4: Percentage of staff receiving pay rises during the year following their return from maternal leave (15 points) - Indicator n°5: Diversity among the 10 highest remunerations - 10 points



Based on this evidence, a women's network 'Women@SYSTRA' has been launched to help women manage their careers, and to encourage a new female approach to leadership.

In 2019, at SYSTRA, **17%** of the Group's TOP 100 managers were women.

The Women@SYSTRA network aims to promote gender equality and diversity in the SYSTRA Group. This network is open to all. It aims to encourage women to take on more responsibility, to showcase and promote their professional experience.

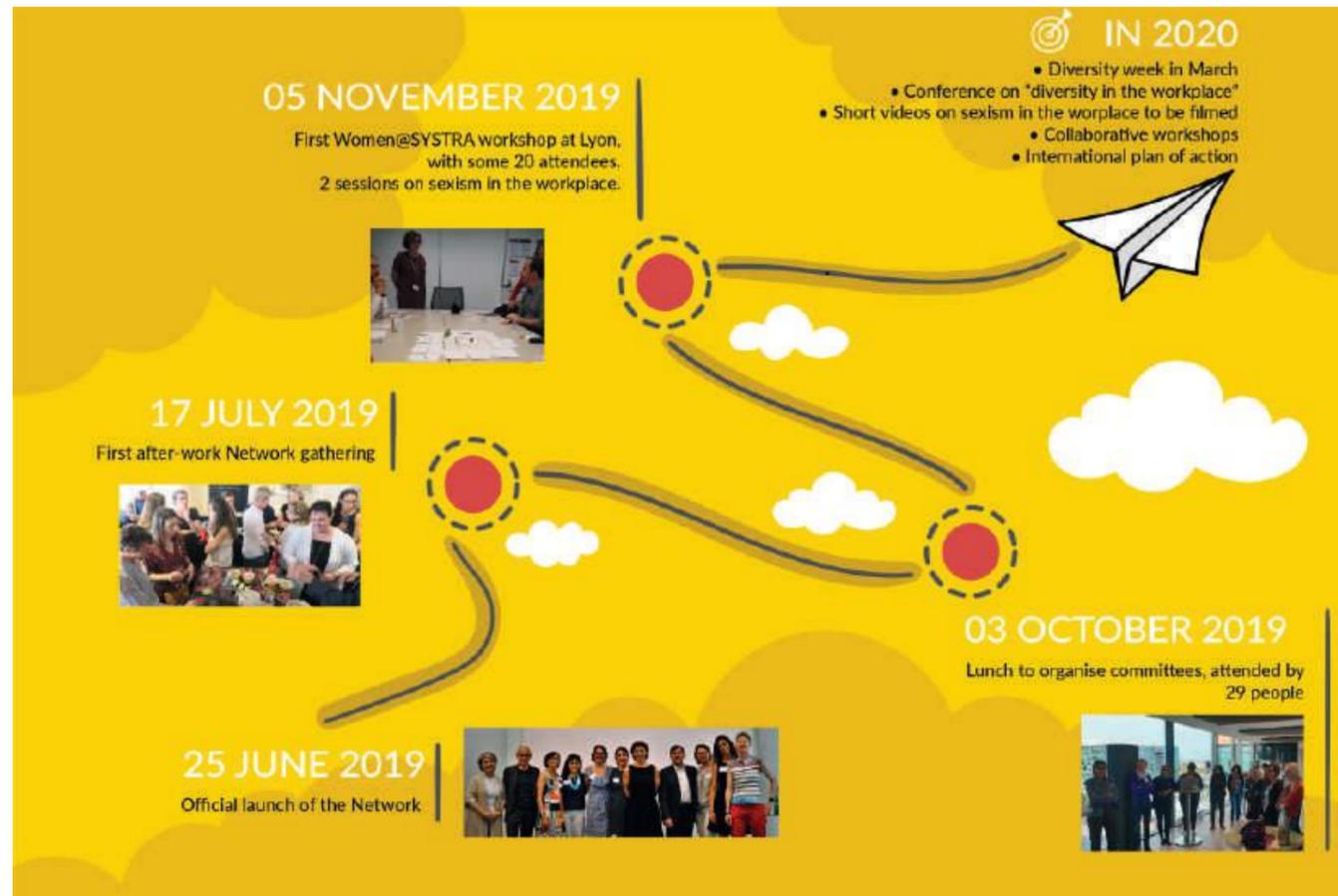
The network focusses on 4 priorities:

- + acting to promote and encourage women's careers;
- + promoting the benefits of gender equality in the firm;
- + building links and sharing experience worldwide;
- + abolishing the gender stereotypes and cognitive bias that feed on common sexism.



*'There are already 300 active members of the Women@SYSTRA network!'*

**Aude RIO**  
President of the Women@SYSTRA network



## ACTING FOR PEOPLE WITH DISABILITIES

SYSTRA fights resolutely against any form of discrimination, and in favour of guaranteeing the best working conditions for any employees with disabilities.

SYSTRA once again took part in the European week to promote employment for people with disabilities, organising events such as a lecture on autism in the workplace, especially Asperger's syndrome.

SYSTRA is helping with the #activeurdeprogrès (progress activator) initiative by AGEFIPH (the French agency that encourages private companies to employ and retain employees with disabilities), and is receiving assistance from Handiamo to organise events to improve knowledge and understanding of disabilities.

Last May, the fourth edition of DuoDay took place, to change our attitude to disabilities. Staff from different roles and sites volunteered to receive people with disabilities, present their work and the Group. It was an opportunity to raise employees' awareness of disabilities, to share a special moment and meet some exceptional individuals.



SYSTRA is also backing Pierre CABON, who lost the use of both his legs in the terrorist attack on the Bataclan music hall. He and his partner are planning to go around the world on an electric tandem, to demonstrate that a disability does not prevent travelling.



Solidarity races are also being organised to encourage teamwork and mutual support, in France with the 'Ensemble' race and in Brazil with the 'Mova-se Por Uma Causa' (get moving for a cause), to raise money for charities.



In 2019, **2,5%** of SYSTRA SA's staff had disabilities.

## COMMITMENT #6: ACTING MORE RESPONSIBLY EACH DAY

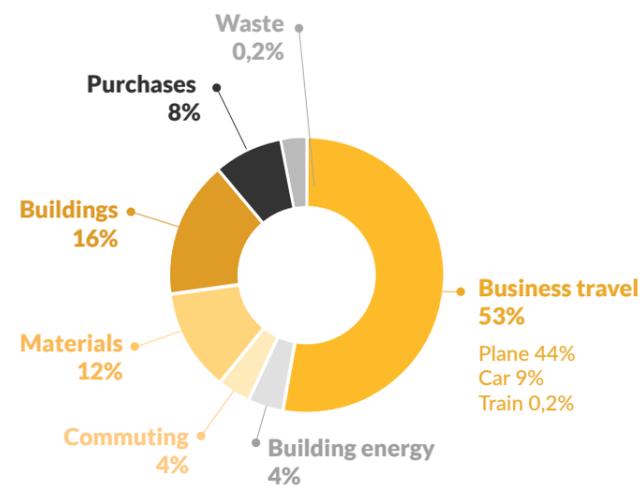
**REDUCING OUR CARBON FOOTPRINT IS NOT JUST A CHALLENGE FOR PROJECTS, IT IS ALSO AN EVERYDAY CONCERN FOR OUR STAFF.**

This year, SYSTRA's environmental approach took a step forward with the signing of Syntec-Ingénierie's engineering charter for the climate, and the appointment of a Vice President for Sustainable Development in January 2020.

Meanwhile, an in-house network of experts in sustainable development was created to promote the Group's activity and to share their expertise in ecodesign and circular economy.

Events are regularly organised worldwide to raise awareness of sustainable development in our working practices and specialist activities. During the year, the European week for sustainable development provided the opportunity to present several lectures on these topics.

The environmental and climate emergency requires us to change our behaviour and way of travelling. For SYSTRA, professional travel is the biggest source of greenhouse gas emissions. The Group has committed to providing effective communication media such as videoconference and connected displays, and to promoting home working.



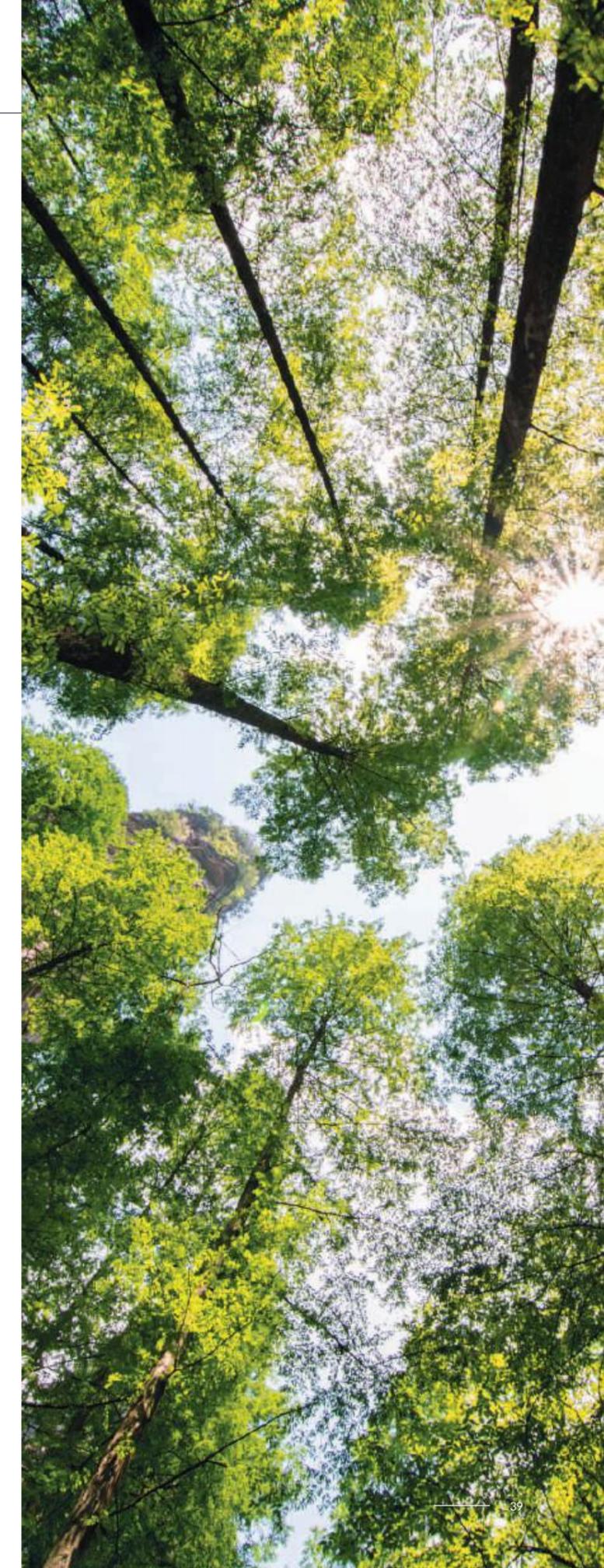
Greenhouse gas emissions from our sites in France in 2017

## OUR OBJECTIVE FOR 2020

To achieve the objectives of the 2015 Paris climate agreement aiming to limit global warming to +1.5°C, we promise to cut our greenhouse gas emissions in France by 7.6% per year<sup>4</sup> on the basis of 7.8 tonnes of CO<sup>2</sup> equivalent per employee



<sup>4</sup> On the items detailed above (scope 1, 2 and 3) and on the basis of a ratio per employee of 7.8 t CO<sup>2</sup> eq in 2017.



## COMMITMENT #7:

### HELPING MAKE THE WORLD A SAFER PLACE

AS THE SIGNATURE TEAM FOR TRANSPORT SOLUTIONS, SYSTRA CONSIDERS EXCELLENCE IN SAFETY AS AN ESSENTIAL COMPONENT OF OUR TECHNICAL EXCELLENCE. THIS IS THE PURPOSE OF OUR 3S POLICY.

Our ambition, what really motivates us, is not only protecting our staff, subcontractors and all our stakeholders, but also designing safer, more reliable transport solutions for travellers.

#### SAFETY AS A PRIORITY

- + 100% owner
- + 100 % aware
- + 100 % learning
- + 100 % leader

In 2019 the reinforcement of health risk management marked a turning point, and these standards were deployed throughout the Group (programmes to prevent health risks, planning for emergency situations, medical fitness etc.). Actions were accompanied by an ambitious training programme on health, safety and security (3S), which has trained almost 600 people since 2018.

#### A SPECIAL DAY FOR SHARING AND REWARDING BEST PRACTICE

This year, all our offices joined in a worldwide event convened by our headquarters in Paris. The aim was to share the best practice and initiatives implemented worldwide on a range of topics including technical safety, psychosocial risks, safety on construction sites.



The Global Managers Conference (GMC) was the occasion to reward the best initiatives. Here are some examples:

- + The United Kingdom for training first aiders to deal with psychosocial risks;
- + Dubai, for their leadership on the 'Route 2020' project, where SYSTRA is working on communication routines for 3S, health safety and security (safety moments);
- + Algeria, for work on crisis management;
- + India, for developing a digital application for managing risk.



*'The health safety and security (3S) of our clients and staff are fundamental responsibilities for everyone.'*  
Project director in France

*'Promoting awareness and rules for health safety and security (3S) must be the top priority for each of us.'*  
Quality engineer, India

*'We need to learn from our mistakes and near-misses to continuously improve, to analyse risks not just at the start of a project, but whenever any of the factors change.'*  
Assistant project director, Canada

For SYSTRA SA, the frequency of accidents with time off<sup>5</sup> reached 1.86 compared to 0.77 in 2018, while the level of severity<sup>6</sup> fell from 0.03 in 2018 to 0.02. The rate of absenteeism<sup>7</sup> for private sector staff was 1.7%, a fall compared to the previous year (2.4% in 2018).

### OUR OBJECTIVE FOR 2020

To reinforce the international network of health safety and security (3S) representatives and to establish managerial routines for 3S

<sup>5</sup> Number of days lost because of temporary incapacity X 1,000 of the number of hours worked

<sup>6</sup> Number of work-related accidents with time off X 1,000,000 of the number of hours worked

<sup>7</sup> Number of calendar days' absence (work-related illness and accidents, any other non-holiday absences) compared to the theoretical number of days

## COMMITMENT #8: SETTING AN EXAMPLE FOR ETHICS

Our presence in more than 80 countries means that our Group is the privileged partner of all stakeholders, including transport-organising authorities, infrastructure managers, railway and urban transport operators, financial organisations and backers.

The Group's business ethics and compliance do not entail simply respecting regulations and controlling risk. Our objective is to change our stakeholders' behaviour, by encouraging them to take a positive attitude to ethics. As an engineering company, we place ethics at the heart of our work in order to always act as a trustworthy partner for our clients and business partners. SYSTRA promises to extend our anti-bribery management system to our principal home countries, and to ensure that they apply it.



*'Regardless of the constraints posed by the environment, notwithstanding the ferocity of competition in our market, however ambitious our objectives, every SYSTRA employee, wherever they work, whatever their position in the company, must remember in all circumstances that the ethics, integrity and loyalty of our commercial practices and our respect for others are non-negotiable; no compromise will ever be tolerated.'*

**Pierre VERZAT**  
Chief Executive Officer

### RULES TO BE APPLIED BY ONE AND ALL

SYSTRA has laid down clear rules for all Group staff, applicable to all conflicts of interest, political contributions, sponsorship, and relations with business partners. An Ethics 'Directorate' and a network of compliance managers run the process alongside an Ethics Committee.

The business ethics and compliance policy has been revised during the year to focus on four commitments to combat corruption, anti-competitive practice, fraud and any coercive practice:

- + Engaged
- + Exemplary
- + Promoter
- + Connected.



*'We wanted to make this policy more practical, containing more detailed information and serving more measurable objectives. All staff are now expected to embody these 4 commitments and always to consider the consequences of their action. This will help us commit to a fairer world.'*

**Jérôme HERNOT**  
Group Compliance Officer

The Group has a Code of Ethics and an Anti-Corruption Code. They constitute the terms of reference to which everyone can refer, in order to understand the ethical issues they may confront in their work. They thereby help staff to make decisions or adopt attitudes in line with the Group's principles.

For three years, SYSTRA has been consulting the Top 100 managers about their respect for our commitment to ethics. In 2019, the level of response was 90%.

In 2019:  
**46% of Group staff attended a training course on the Code of Ethics; and 50% on the Anti-Corruption Code**



SYSTRA has provided all staff with an Ethics Alert System so that everybody can report any ethics-related issue such as corruption, nepotism, conflicts of interest, fraud, discrimination or harassment. In 2019, the system reported 35 alerts to the Ethics 'Directorate' (compared to 26 alerts in 2018).

## OUR OBJECTIVE FOR 2020

More than **50%** of the Group staff to be covered by the **anti bribery ISO certification**

# CORRESPONDENCE WITH THE OBJECTIVES FOR SUSTAINABLE DEVELOPMENT



## OBJECTIVE 5: GENDER EQUALITY ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

SYSTRA's initiatives in 2019 to attain this objective

- + Creation of a network 'Women@SYSTRA' to help women manage their careers and to encourage a new female approach to leadership.



## OBJECTIVE 8: DECENT WORK AND ECONOMIC GROWTH PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

SYSTRA's initiatives in 2019 to attain this objective

- + Organisation of sporting events and lectures for the European week to promote employment for people with disabilities.
- + SYSTRA is a partner of the #activeurdeprogrès (progress activator) initiative by AGEFIPH (the French agency that encourages private companies to employ and retain employees with disabilities), and is receiving assistance from Handiamo to organise events to improve knowledge and understanding of disabilities.
- + Launch of the international 'Global Safety Day' and an important training programme on health safety and security (3S) issues.
- + The new business ethics and compliance policy focusses on four commitments to combat corruption, anti-competitive practice, fraud and coercive practice.
- + Code of Ethics, Anti-Corruption Code, Ethics Alert System and certification for the fight against corruption (ISO 37001).
- + SYSTRA is certified ISO 9001 (quality), ISO 14001 (environment) ISO 45001 (safety of people) and ISO 37001 (anti-bribery).



## OBJECTIVE 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALISATION AND FOSTER INNOVATION

SYSTRA's initiatives in 2019 to attain this objective

- + SYSTRA allows experts to share their vision of ongoing mutations in transport and mobility .
- + Attending almost 60 events and round tables to build solutions to tackle the issues of the future.
- + An innovation programme that includes historical and disruptive modes of transport.
- + Investment in BIM, supported by a special community of experts and the deployment of practices throughout the Group.



## OBJECTIVE 11: SUSTAINABLE CITIES AND COMMUNITIES MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

SYSTRA's initiatives in 2019 to attain this objective

- + SYSTRA has signed the Syntec-Ingénierie engineering charter for the climate, committing to projects and our own in-house operations.
- + Publication of the 'Ecothèque' catalogue of ecodesign solutions to share best practice.
- + Innovation programme for the ecological transition, including research on new methods of reducing, reusing and recycling materials throughout their life cycle.
- + Adapting our infrastructure to the needs of persons of reduced mobility, at the design and construction phases.

# METHOD NOTES

## THE DOCUMENT FOCUSES ON OUR PRINCIPLE CHALLENGES. THESE CHALLENGES REPRESENT OPPORTUNITIES FOR THE GROUP TO DEVELOP. THESE PAGES PRESENT OUR BUSINESS MODEL, FOLLOWED BY OUR PRINCIPAL COMMITMENTS TO SUSTAINABLE DEVELOPMENT.

This report on our commitments to a sustainable future presents SYSTRA Group's intention to comply with the new statutory requirements of articles L225-102-1 and R. 225-105-2 of French commercial law, to report extra-financial performance in our Declaration of Extra-Financial Performance. The report period covers the calendar year from January 1 to December 31, unless otherwise indicated<sup>8</sup>. Please note that not all of the data is available for every indicator during the preceding year (N-1), due to changes to methods, scope or the introduction of a new indicator.

Following the first declaration in 2018, the Group goes further this year, detailing our commitments and the action taken to achieve them. For each of our commitments, we present the relevant sustainable developments goals, with significant examples from the last year.

The information and data presented are based on the Group's risk map and strategy. The quantitative information presented in the social and environmental sections mainly concerns SYSTRA SA France and the French subsidiary SYSTRA Foncier. It does not yet include branches, which represent 2,028 employees, 28% of the Group's employees on 31 December 2019.

The following performance indicators have been excluded, because they do not apply to the Group's activity: prevention of food waste, the fight against food precarity, respect for animal rights, responsible, equitable and sustainable food.

<sup>8</sup> For training indicators, data is complete until 11/30/2019.

For rates of attendance to the E-Learning modules for the Ethics Code and the Anti-Corruption Code, the figures show the total since the launch, excluding staff who left during the year.

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