



2021 ACTIVITY REPORT

Contents

■ ABOUT US

- P. 3 Our Executive Committee
- P. 4-5 Interview with Jérôme Stubler, CEO of EQUANS
- P. 6-7 A new leader in multi-technical services
- P. 8 Our mission: empowering transitions
- P. 9 Our overall performance plan

■ PERFORMANCE & ROBUSTNESS

- P. 10 Making people and equal opportunity true corporate priorities
- P. 11 Health & Safety
- P. 12 Ethics & Compliance
- P. 13 Cybersecurity
- P. 14-15 Operational excellence

■ OUR CLIENTS AND AREAS OF EXPERTISE

- P. 16-17

■ OUR EXPERTISE

- P. 18-19 HVAC - Air quality and Climatic engineering
- P. 20-21 Cooling and Fire protection
- P. 22-23 Construction, Maintenance, Facility Management & Energy efficiency
- P. 24-25 Digital & ICT

- P. 26-27 Electrical engineering

- P. 28-29 Fluidics, Mechanics & Robotics

■ OUR SECTORS

- P. 30-31 Smart buildings
- P. 32-33 Cities and smart cities, Intercity services and networks

■ OUR SPECIALTY AREAS

- P. 34-35 Transportation
- P. 36-37 Defence, Marine & Offshore
- P. 38-39 Energy production & Renewable solutions, Nuclear
- P. 40-41 Food & Beverage, Biotech & Pharmaceuticals
- P. 42-43 Data centers, Microelectronics & New technologies

ABOUT US

Our Executive Committee



Marc Dirckx
CEO BELUX
(Belgium & Luxembourg)



Jean-Philippe Loiseau
CEO UK & Ireland



Bruno Charrade
CEO AMAUS



Richard Dujardin
CEO Western and
Central Europe



Jérôme Stubler
EQUANS CEO



Pierre Hardouin
CEO France



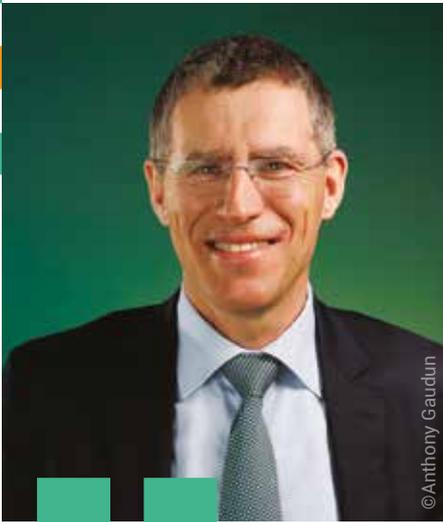
Olivier Hérout
Chief Human
Resources Officer



Etienne Jacolin
Chief Financial Officer



Thomas Jung
Director of Operational
Excellence



Interview with

Jérôme STUBLER, CEO of EQUANS



EQUANS, world leader in multi-technical services, was launched on 1 July 2021. What is the company's promise?

We have created EQUANS, bringing together more than 800 entities, with the conviction that our expertise could address 3 essential transitions in society:

- the **energy transition**, no doubt the greatest issue of our times in an increasingly electrified world;
- the **digitalisation** of buildings, infrastructures and industries;
- the **reindustrialisation** of territories through local investments in new technologies.

The fast creation of EQUANS was made possible by the incredible energy of our 75,000 employees in Europe, North and South America and Oceania, as well as by the enthusiasm for our business plan in tune with the world's challenges and based on decentralised decision-making.

Why did you choose the EQUANS brand name?

"EQUANS" clearly spells out our mission: we want to provide the best answer (ANSwer) to help our clients solve the equations (EQUations) set by the necessary transitions.

EQUANS offers engineering and design services as well as construction, maintenance, energy

optimisation and digital services. The events of the beginning of this year show that transitions are going to accelerate.

What were your first impressions of the company?

I was impressed by the talent and diverse skills that interact across all our areas of expertise which allow us to combine them to deliver optimised tailor made solutions.

In 2021, I saw the incredible dedication of our teams and their high level of know-how. In the space of just months, we built a common organisation founded on operational excellence, convinced that if we stayed laser-focused on training and on bringing that excellence, we would thrive and better serve our clients while continuing to make progress on safety issues.

In concrete terms, what are your areas of intervention?

We work to connect, power and protect buildings, industrial facilities, cities, territories, infrastructures, ships and their energy and transportation systems. We have in house an incredible toolkit of solutions ranging from design to the actual implementation, operation and maintenance.

Climatic engineering, energy engineering, high voltage, low voltage, electronic, audiovisual, digitilisation, IA,



data science, fire protection, cooling, HVAC, mechanics and robotics, predictive maintenance – our technicians address challenges wherever they are.

How is EQUANS organised?

Our organisation is built on two great strengths: on the one hand, **highly dense local networks** organised geographically, enabling us to be at less than 2 hours from our clients' facilities and to deliver first-rate service whether for buildings, cities or for electrical and telecommunication networks. And on the other hand, **an organisation by specialised sectors**, with a series of key expertise in Transportation, Defence, Marine & Offshore, Energy production, Nuclear, Biotechnologies & Pharmaceuticals, Microelectronics, Data Centers and more.

How do you serve the 3 transitions?

Whenever energies are greener, we can provide electrical and thermal solutions **to decarbonise our customers' activities**.

Our knowledge of electrical, electronic and telematics systems allows us to be at the very heart of the IOT: by digitising processes, **we can enrich our customers' value proposition from their data**. That's the mission of EQUANS DIGITAL.

Finally, we offer **to optimise industrial processes and client productivity** – and ultimately, to reindustrialise our territories – through our ability to build the

technical installations of the most modern factories, from clean rooms to specialised laboratories.

How do you see EQUANS' future in 2022 and beyond?

I see EQUANS as a **network of entrepreneurs**, based in various companies but sharing knowledge and talent, dedicated to serving clients in the best possible way. They are all autonomous and empowered to decide and bring the best solutions to our projects. This network structure allows our clients to benefit everywhere from the best solutions – and team commitment.

This ambition is captured in our tagline "Empowering transitions": EQUANS makes transitions possible, by making everyone empowered to better serve our customers.

EQUANS is built around many fine and recognised local brands. We are heirs to recognised industrial expertise. Through the sustainable solutions we are developing for future generations, we are working towards a more sober world.

Our aim is to organise the company to provide operational excellence and trust with our clients.



ABOUT US

EQUANS is a new leader in multi-technical services

EQUANS connects, protects, and supplies energy to territories, cities, buildings, industries and transport infrastructures through bespoke solutions that improve industrial, energy and digital performance and client uses.

Demanding, visionary, performance-based

Our company hails from a tradition of unique skills and talents. Though we remain humble about today's challenges, we are proud to be a leader in multi-technical installation and maintenance services. We want to be partners in a world that needs to radically decarbonise and digitally transform itself at the same time, with the aim of saving energy, simplifying transport, reinventing industry and improving the efficiency of industrial processes. Our goal is to support our clients' energy, industrial, and digital transitions in the coming decades.

Our ambition

We aim to achieve the **best operational performance in our fields** of expertise by cultivating strengths:

- **Strong focus on employees:**
By developing team spirit, by optimising production processes, by constantly improving safety. Our objective: zero serious accidents.
- **Proximity to clients:**
By building trust, by anticipating their needs, by offering innovative solutions that optimise their installations and services.
- Keeping our word, **doing things first time right**, with faultless quality assurance.

2021 Key figures



75,000
SKILLED EMPLOYEES



30
NEW EMPLOYEE CONTRACTS
signed everyday



15,000
JOBS
proposed per year



€ 13 billion
2021 REVENUES
+ 12%



Close at hand

Present in more than **20 countries**, with some local brands which names have been existing for over **200 years**.

Performing work in nearly **80 countries** each year.

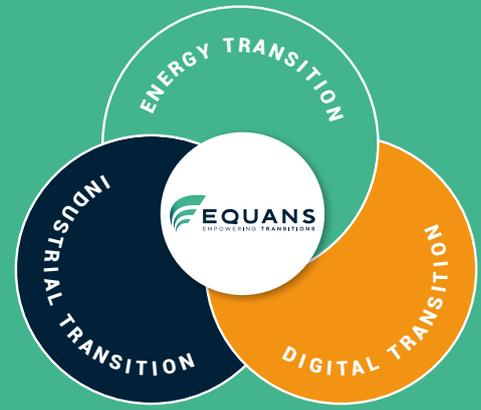


ABOUT US

OUR MISSION: Empowering transitions

Businesses, industries and cities face economic and environmental challenges that are reshaping our modes of production, travel and work.

These new constraints open the way to opportunities for reinvention, bringing economy and value, both individually and collectively. Our mission is to put these opportunities into action.



We are focused on being the **performance partner of our clients to connect, power and protect** territories, cities, buildings, facilities and energy & transportation systems. Our teams are bringing skills and agility to design, construct and maintain solutions to meet our customers expectations.



ENERGY TRANSITION: limiting carbon footprint

The shift to renewable and decentralised energies; the spike in global electricity demand between now and 2050; the growth in electric thermal solutions and in the hydrogen, transit and electric vehicle charging territories; the optimisation of building and industrial sites' energy efficiency; and the retrofitting of older infrastructure and buildings are just some of the issues to which we bring our long-standing expertise:

- Energy efficiency & carbon reduction
- Energy storage
- Retrofitting of building, energy and transport infrastructure
- Electrification
- Renewable energy
- Electrical network and grid management
- Smart energy controls



DIGITAL TRANSITION: digitalising processes

The explosion of data and connectivity, the development of advanced technologies and smart solutions, the digitalisation of infrastructures, and the energy management of Data Centers are some of the new challenges we work on, delivering tailor-made solutions to meet clients' needs:

- 5G Mobile connectivity
- BIM smart buildings
- Predictive maintenance
- Data collection/management & Artificial Intelligence
- Security – Cybersecurity
- Smart transportation
- Real time dashboards



INDUSTRIAL TRANSITION: optimising productivity, reindustrialising territories

We digitalise and optimise industrial sites and processes, develop industrial robotics, and construct clean rooms for our clients.

- Robotics and automation
- Utility monitoring and process optimisation
- Industrial twinning
- Fluidic systems
- Clean/Dry rooms
- Industrial relocation
- Carbon neutral production

Our overall performance plan: **OUR IMPACT**

We are committed to empowering the energy, industrial and digital transitions.



PERFORMANCE & ROBUSTNESS

Making people and equal opportunity TRUE CORPORATE PRIORITIES

At EQUANS we know and appreciate how important it is to have motivated, proactive, vitally engaged employees who feel a sense of responsibility. We believe that being attentive and deeply respectful contribute creating the best possible work conditions to deliver our performance and to progress.

EQUANS is working closely with employee representatives to be considered one of the “Best Places to Work” by providing job safety, promoting equal opportunity and sharing the fruits of our performance.

We commit to training for all employees.

Everyone must have the opportunity to grow and develop, contribute to our operational excellence, advance in their careers and be in it for the long term. To put this goal into action, we have created EQUANS Academies all over the world for our technicians and have launched an extensive development programme in our operational branches for project managers, profit center managers and engineers.

We are also determined to become a leader in social inclusion by improving workplace diversity, particularly gender equality on our managerial teams, and investing heavily in the young people we train.

Our goals



100%
OF EMPLOYEES TRAINED
each year



+20%
MORE WOMEN MANAGERS
by 2026



**GLOBAL DEPLOYMENT OF
DEVELOPMENT PROGRAM
FOR KEY OPERATIONAL
EMPLOYEES**

Our Academies

We rely on a network of local EQUANS Academies which train our technicians and our engineers. In France, 7 Academies exist on our key businesses: HVAC, Electricity, Cooling, Transportation, Nuclear, Fire Safety, Studies and Engineering. More than 3,000 employees were trained in 2021, i.e. nearly 50,000 hours of training. In Belgium and Luxemburg, the EQUANS Academy, created 2 years ago, trained 2,000 people in 2021. With 35,000 employees trained in all our EQUANS Academies last year, training is a key lever of the professionalisation and continuous improvement of our teams in the service of operational excellence.

PERFORMANCE & ROBUSTNESS

HEALTH & SAFETY

Our plan is to work on 5 ways of daily improvement to continuously develop our safety culture and make sure everyone comes back safe at home.

We have three "must-have" not negociable: health & safety, ethics and cybersecurity. Our priority is to protect our teams, our businesses and both our clients' and our own data.

Ensuring the health and safety of the employees who provide our outstanding service is the only way to deliver operational excellence. Continuing to reduce the number of severe worksite accidents is our top priority. And that means working every day to automate our methods and processes so that we optimise safety and performance and better serve our clients.



Our safety measures

We seek success all over the world by pursuing 5 levers of progress:

- 1 MANAGERIAL COMMITMENT**
All managers are trained in Health and Safety leadership and demonstrate exemplarity in monthly site visits.
- 2 TRAINING & ON-BOARDING**
Everyone must have training and on-boarding process related to their job's specificities.
- 3 A CULTURE OF SAFETY**
Promote a positive and transparent management in all our entities: to learn from mistakes, practices of recognition and fair sanction, etc.
- 4 PRODUCE SAFELY**
Prepare worksite at design stage, processes and workstation ergonomics, identify risks and treat them on site. Absolute attention to electrical risks.
- 5 ROOT CAUSE ANALYSIS**
A learning culture is developed at all levels. Sharing successes as well as failures is an essential condition for success. Every severe accident and HIPO is subject to a root cause analysis.

A few examples of progress

In Latin America, a major honour in Chile

The Chilean Safety Association (ACHS) recognised EQUANS Chile for reducing its accident rate by 34% in 2021.

In Europe, a milestone in the Netherlands

EQUANS Netherlands reached an exceptional safety milestone: 12 million working hours in almost 1 year without a lost-time injury (LTI). A great achievement for our 5,500 EQUANS Netherlands colleagues, our partners and the hard-working employees.

In France, over 150 agencies ended the year with no lost-time injuries in 202.



PERFORMANCE & ROBUSTNESS

ETHICS & COMPLIANCE

EQUANS is committed in all circumstances to act in accordance with laws and regulations in force in the countries where it operates. These ethical principles guide us on a daily basis whether in the strategic decisions of our management, or in any of our business activities and behaviors of our employees.

“ For EQUANS, ethics is an integral part of its strategy, management and professional practices. It is a vector of performance. ”

Jérôme STUBLER, CEO OF EQUANS

A message of “zero tolerance” with respect to our ethical principles shortcomings and particularly any forms of fraud, corruption or cartel is regularly communicated by our top management including our CEO. All managers at all levels of the Group convey the same message.

All EQUANS employees are to observe and act in accordance with the Group's main ethical principles:

- **Acting in accordance with laws and regulations:** EQUANS companies and employees must in all circumstances observe international, federal, national and local laws.
- **Behaving honestly and promote a culture of integrity:** integrity is about avoiding all conflict between personal interests and the Group's interests. It thereby creates a climate of trust and acts as a shield against corrupt practices.
- **Be loyal:** group employees must be totally scrupulous in fulfilling their roles. Whenever they communicate within or outside the company, they do so constructively and in good faith with the intention of giving genuine, accurate and comprehensive information.
- **Respecting others:** this principle applies particularly to respect for the rights of individuals, for their dignity and for their differences, as well as respect for other cultures and equality of man and women. It also applies to tangible and intangible goods belonging to others. Any form of sexual harassment is not tolerated.

These principles apply in all circumstances within the three main areas in which the Group conducts its business, being:

- Our Group - all employees, entities and subsidiaries, together with their shareholders
- Market - customers, suppliers and competitors
- Society - communities, local authorities, different cultures, and the environment.

The principles are rooted in international conventions, in particular (but not limited to):

- The Universal Declaration of Human Rights and Additional Protocols
- The Standards of the International Labour Organisation
- The Guidelines for Multinational Corporations laid down by the Organisation for Economic Cooperation and Development
- The United Nations Convention against Corruption

We built a strong Ethics, Compliance & Privacy (ECP) network that oversees the incorporation of ethics into the Group's strategy, management and practices. It proposes ethics and compliance policies and procedures for the Group. It supports their implementation at all levels of the Group.

This network is coordinated by the Ethics, Compliance & Privacy Department and the Group Ethics Officer.

Since the beginning of EQUANS, the ECP network is effective across the entire Group:

- More than 90 people in Ethics & Compliance
- More than 50 people in Data Privacy

PERFORMANCE & ROBUSTNESS

CYBERSECURITY

We think cybersecurity for every digital activity of the company. At all levels of the company, clear expectations in terms of individual and collective behaviour are defined within the framework of our "Cybersecurity Champions" pillar dedicated to cybersecurity.

Cyber-resilience pact

Our ambition is to become the reference in terms of cybersecurity for our ecosystem. We strive to involve our partners, customers and suppliers in our security strategy.

Therefore we take a risk-based approach to protect our customers, operations and critical infrastructures. We prepare for the worst-case scenario and are able to respond to any incident. We leverage the cloud's ability to industrialise, homogenise and secure by design.

Our ambition is to prepare ourselves with our clients for the future "cyber rating" that will become the norm.



Strengthening the group's cyber resilience and its ecosystem's involves

- Maintaining a register of internal and external cyber risks (supply chain).
- Monitoring, detection, management and analysis of cyber incidents.
- Deploying general and specific cyber protection programmes (technical audits) to assess the actual level of cyber protection across the group (including subsidiaries and acquired companies).
- Awareness raising and training on cyber security and data protection, with a focus on the most exposed employees.

PERFORMANCE & ROBUSTNESS

OPERATIONAL excellence

Our main ambition is for clients to see us as the standard setter for performance. We strive to be an essential partner and so aim for lasting and productive relationships based on mutual respect and commitment. We're known for our expertise and very high quality work, whether in terms of health and safety, worksite organisation, maintenance operations, on-time delivery or contractual performance.

The pursuit of excellence

To deliver the best solutions to clients, we draw on the know-how and qualifications of our technicians.

So we make it a top priority to provide our operational teams with the tools they need to do the job and the training they need to do it right. Whether in terms of professional development, work methods (project management, digital tools, worksite organisation, equipment, workstation ergonomics) or procurement and logistics chain optimisation, we work just as hard on improving our processes as we do on identifying innovative client solutions.



Proposing integrated solutions from A to Z

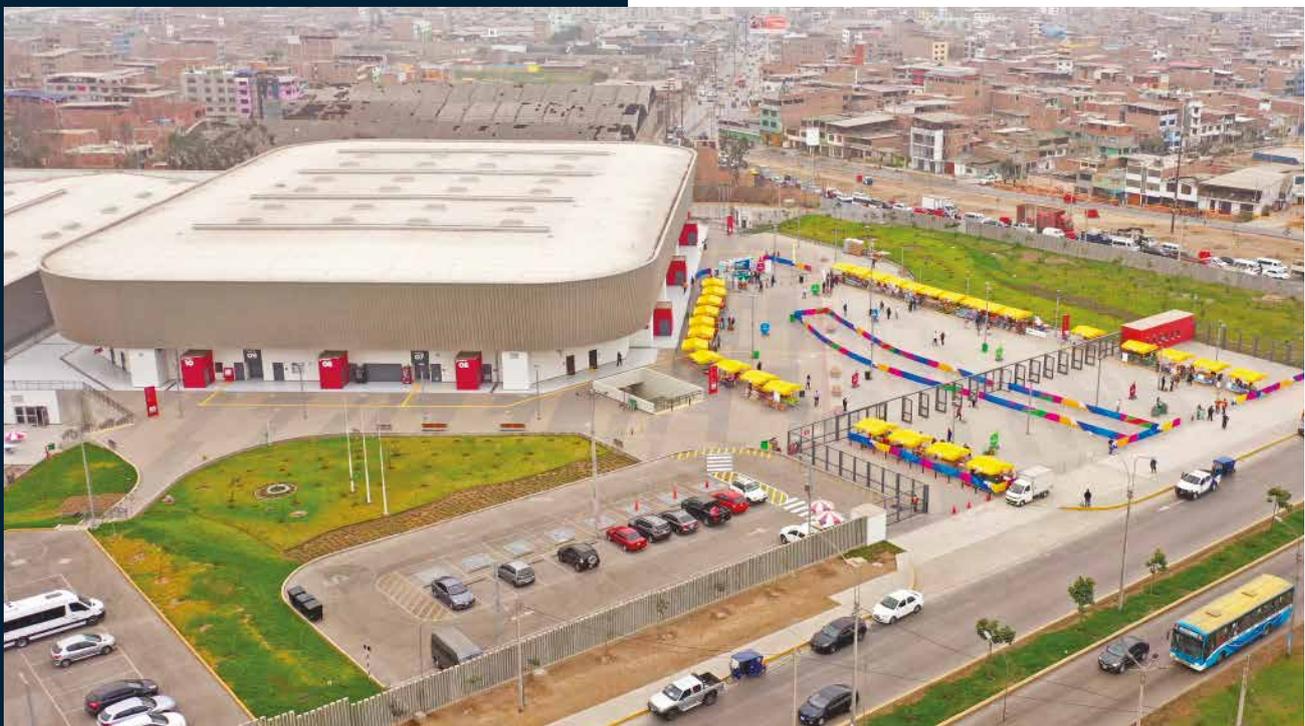
We handle every aspect of projects to guarantee top quality and ready availability throughout its lifecycle: planning, construction, operations and upkeep, all backed by a performance guarantee.

Working hand in hand as partners

Clients are not just clients for us but actual partners. We aim to work to develop the most appropriate solutions, adding the benefit of our engineering know-how. Through our feedbacks, we try to bring and share the best ideas that have been delivered elsewhere in the world.

Our operational excellence attracts note in Latin America

The Peruvian government recognised our Facility Management expertise as part of the G2G (Government to Government) contract for the Legado site. It asked EQUANS to help draft the rules and standards for the country's public infrastructure maintenance contracts.



EQUANS Peru wins CIMers 2021 award for best collaborative project for total facility management services with the Legado project.

OUR CLIENTS & AREAS OF EXPERTISE

No matter the field, EQUANS offers customised solutions and responds to current needs in terms of decarbonisation and improved performance.

2
Our local networks
€9 billion

We equip, supply, connect and maintain buildings, factories, cities and everything that links them together.

1
Our six areas of expertises cover all fields of activity.



Private and Public Buildings & Offices



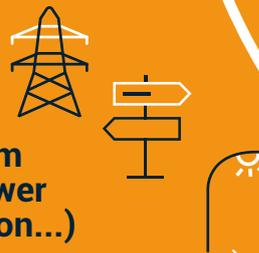
Industrial Buildings



Cities and Smart Cities



Inter-cities (telecom networks, power distribution...)



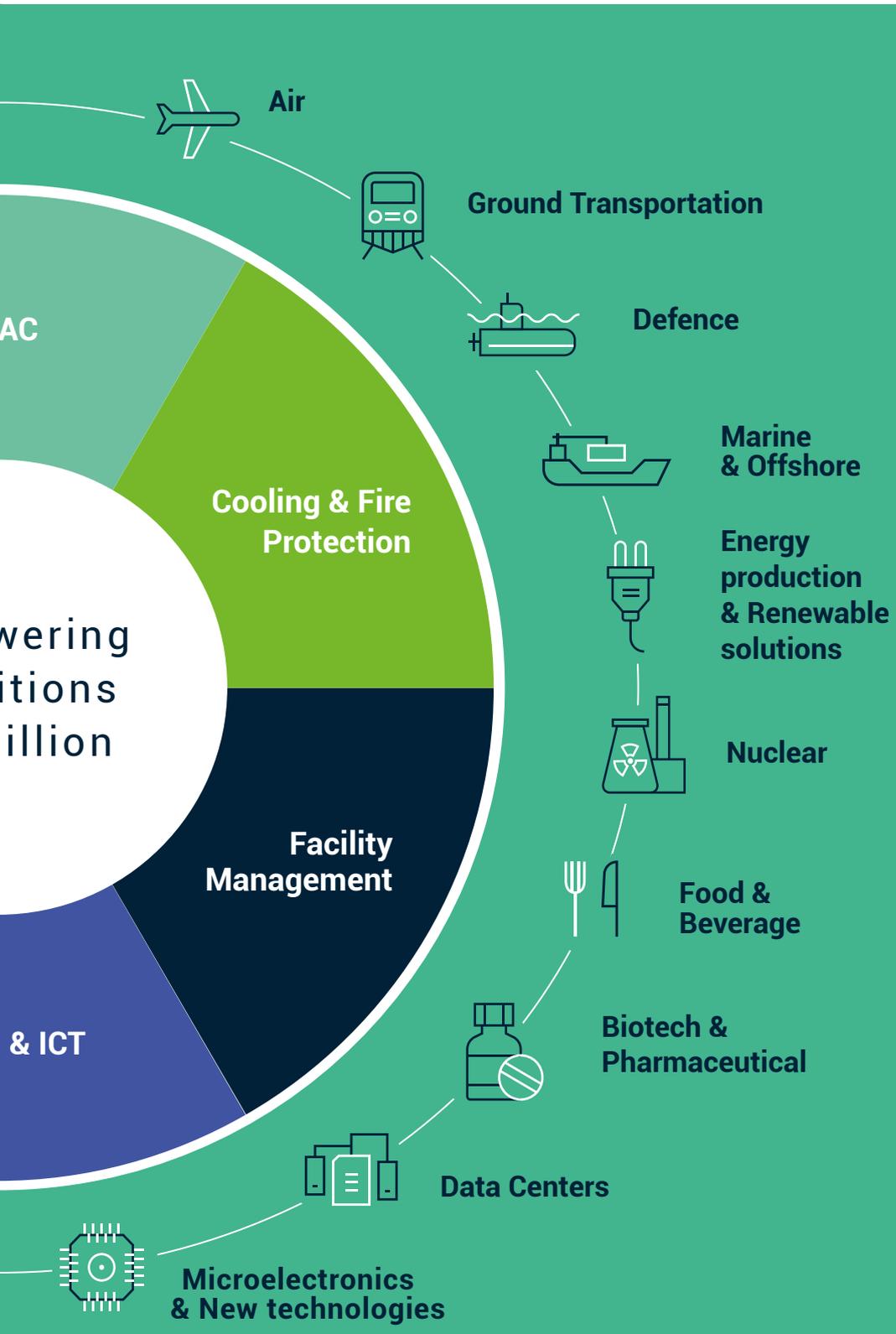
Mechanical & Robotics

Electrical

Digital

**Empowering transition
€13 billion**

HV



3
 Our specialties
 €4 billion

Our teams provide the best service and best technologies in processes and speciality fields at the most advantageous price.

1. OUR EXPERTISE



HVAC - AIR QUALITY AND CLIMATIC ENGINEERING

Challenges

Because our clients provide care, welcome the public, build tunnels and ships, manufacture batteries and run nuclear facilities and "pharmaceutical factories", EQUANS designs and installs air treatment and indoor climate control solutions that ensure the well-being and safety of users and the quality of the processes while delivering performance that lasts.

EQUANS offers state of the art solutions in HVAC to provide:

- High performance heating and cooling systems based on the latest generation of heat pumps
- Air control systems providing clean air in buildings, hospitals, ships, transport infrastructures, nuclear activities, clean and dry rooms...

Our main difference is our integrated model from design - and using the most sophisticated flow calculation software and energy optimisation - to installation, maintenance and operation.

A high tech, low energy, state of the art "super hospital", Belgium

EQUANS takes part in the installation of electrical and HVAC equipment for the largest hospital in Wallonia, the Grand Hôpital de Charleroi (GHdC): 156,000 m², 23 operating rooms, 32 intensive care units, 986 beds.

The EQUANS teams are concentrating on the buildings called "hotfloor" and "Factory" which will house the most critical medical activities (such as surgery rooms and intensive care units) where every detail is important.



Heating and air conditioning

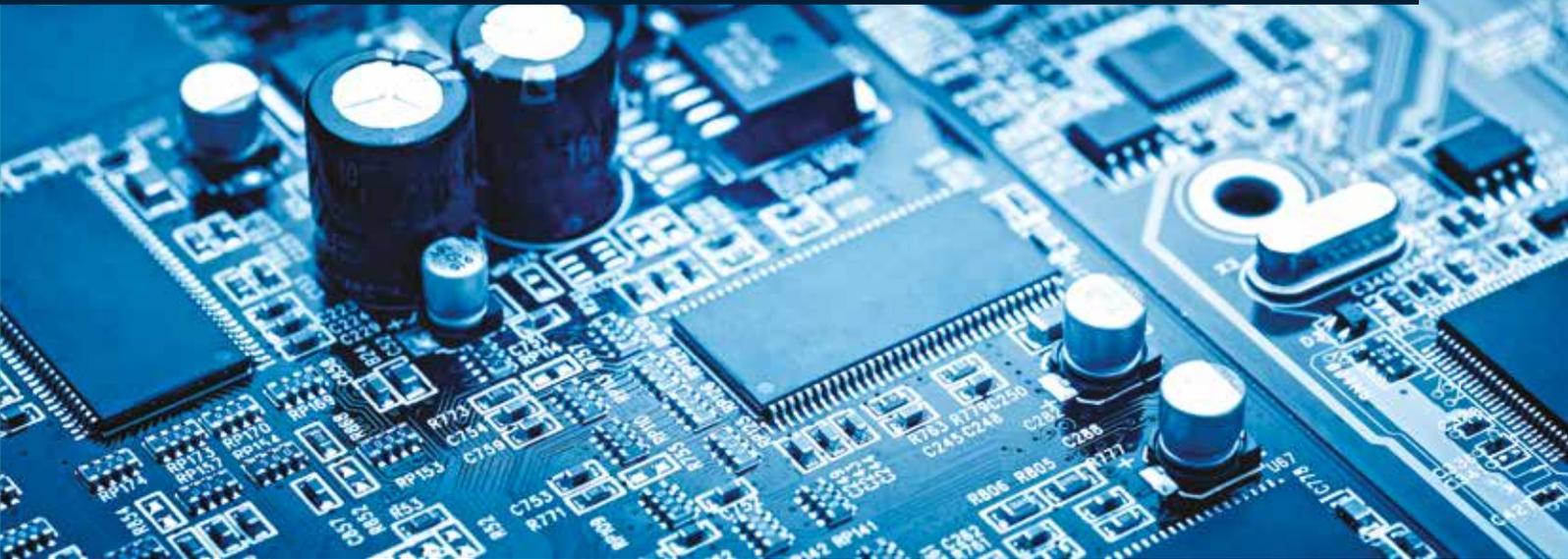
State-of-the-art heating and air conditioning systems are installed:

- Chillers 10 MW
- Ventilation is provided by around a hundred air handling units, installed in the technical rooms of the building, for a total flow of 1,200,000 m³/hour.

Electrical installations

We are working on the complete electrical solutions for the building: 1,300 km of structured copper cabling, 12 km of fibre, 2,325 badge readers for access control, 6,300 nurse call devices, nearly 10,400 fire detectors and 31,500 kVA standby generator sets to guarantee continuity of services in all circumstances. Lighting will be controlled via the KNX protocol, which will offer great flexibility and the possibility of achieving significant energy savings, etc.

The entire project is carried out within the framework of a BIM (Building Information Modelling) procedure.

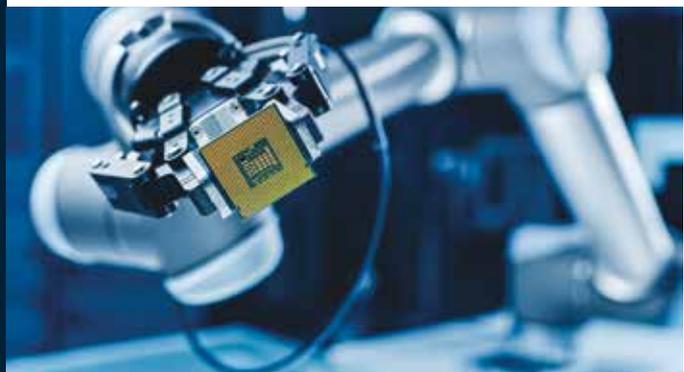


STMicroelectronics, Italy, France

In order to both increase its production capacity and boost its competitiveness, STMicroelectronics launched the construction of its R3 plant at its Milanese industrial site in early 2019. Production is expected to start in the second half of 2022. STMicroelectronics has entrusted EQUANS Industrie des Procédés with all the HVAC installations, as well as all the process fluid networks required for the operation of their wafer production. A project completed in record time (12 months) in the midst of a health crisis and shortage of raw materials, with the Italian teams of Omega Concept Impianti e Sistemi and the engineering team of Axima Concept France. In France, in Crolles (Isère), on one of the group's most important sites, another project concerns the creation of approximately 6,000 m² of clean room producing 300 mm units, as well as all the technical installations necessary for its operation. STMicroelectronics has entrusted EQUANS with the HVAC/ Process Fluids work packages, particularly concerning thermal fluids, solvent exhaust networks or process gas distribution. Estimated completion date: March 2023.

Electric battery "gigafactory", Sweden

Northvolt built an electric battery "gigafactory" in Skelleftea in northern Sweden featuring 48,000 m² of anhydrous rooms. EQUANS entity AXIMA provided design and construction of the anhydrous clean rooms, which ensure extremely low relative humidity.



1. OUR EXPERTISE



COOLING

Challenges

In response to industrial or commercial cooling needs, EQUANS offers tailor-made solutions based on its long-standing expertise, which we can back up with energy performance contracts. Natural refrigerants, carbon capture installations, digitalised maintenance, and our network of EQUANS specialists close to our customers' sites complete our cooling offer.

Semiconductor production plant, USA

Set on ushering the automobile industry into a cleaner, more efficient future, our client sought to build a manufacturing plant from the ground up and Systecon, one of EQUANS' entities, has been selected to provide a Turnkey Modular Utility Solution.

When the client developed plans for a fabrication facility in Marcy, NY set to produce a new form of silicone carbide semiconductors for electric automobiles, they required a partner with the capabilities to deliver contemporary cooling technology in time for a targeted 2022 opening.

Our solution

Our modular method to factory construction relies on the pre-fabrication of key apparatuses. The modular solution approach allows for in-house time-saving prep work that results in the delivery of pre-constructed plant components designed in line with the customers unique project requirements. On this project, we are set to produce and transfer a system for chilled water pumping via a stainless-steel pump.

Performance

- **200 million** silicon carbide chips to be produced
- **Up to 10%** more energy efficiency in vehicles
- Systecon has completed their portion of work on this project in line with the client's 2022 production start deadline.

Our contribution

Cooling products - accurately, at the right temperature, whether positive or negative - is one of our many areas of expertise. At EQUANS our commercial and industrial cooling work is known for its environmentally friendly refrigerating fluids.

Our strength resides in our reliable fresh produce conservation and industrial warehouse solutions that we implement from A to Z.

We select the fluids used according to operational, reliability, safety considerations and CO₂ mitigation. We design single or cascade cooling systems to client temperature requirements and can produce any type of customised installation, especially in the agri-food or petrochemical industries. We use clean gases and can also upgrade existing equipment.

In addition to conventional maintenance, we also offer predictive maintenance: we use our own analysis technologies to directly track changes in client installations via sensors. Our algorithms detect issues and alert our teams to launch an urgent or planned intervention. This can greatly reduce general maintenance costs and business interruption risks.

We also provide energy performance contracts to guarantee results. We work with our clients to define a performance level, with a shared savings system.

As in other fields, EQUANS has a cooling R&D department. As an example, our research teams have developed processes for capturing and purifying CO₂ to reach food-grade quality.



FIRE PROTECTION

Challenges

EQUANS ensures the fire safety of tertiary, industrial or commercial buildings by developing customised solutions in strict compliance with insurance regulations. We install and maintain systems and offer training, including for specific industrial risks. Using our engineering expertise, we develop supervision and information feedback modules to ensure continuous remote monitoring and site safety.

Our contribution

Fire protection is an evolving critical and highly regulated field. Standards can differ from one country to the next, as can insurance companies requirements. Thanks to our international scope, EQUANS can respond wherever clients are located.

One of our strengths is the design, installation and maintenance of all client installations using studies from our own fire engineering department. Our expertise in the electrical and HVAC fields also allows us to optimise our solutions on site.

We work on large commercial sites, office buildings, industrial sites, storage warehouses, railway stations, and more. For each installation we design a personalised architecture based on the client's requirements and legal standards.

Fire detectors, mobile fire extinguishers, fire hose stations, sprinklers, water reserves and supervision modules are just some examples of what we can offer.

Once we have commissioned the installation, we offer preventive maintenance. We can also intervene on existing installations, checking them and ensuring durability, even bringing them up to standard if necessary.

For industrial settings, we have expertise in specific risks such as hydrocarbons, special chemicals or for data centers... To reduce risks, we also train our clients on fire safety standards and processes and first-level maintenance. With all this, we have one of the most comprehensive fire safety offers.

Industry, France

AXIMA was chosen by Interra Log - a company specializing in the logistics of dangerous goods - to bring the fire protection of its site (classified SEVESO high threshold) into compliance. Objective: to complete the project in less than 7 months. Surface area concerned: 11,000 m².

EQUANS' performance

EQUANS installed SprinkeCO, its solution for keeping sprinkler pipes frost-free by circulating heated water, a more ecological (replacing glycol) and more economical solution.

16,000 sprinkler heads were installed and the site was equipped with 77 high expansion foam generators.

14 control stations were installed.



1. OUR EXPERTISE



CONSTRUCTION, MAINTENANCE, FACILITY MANAGEMENT AND ENERGY EFFICIENCY

Challenges

EQUANS provides complete multi-technical maintenance, facility management, construction and energy efficiency solutions for all buildings and utilities to help reduce operating costs, lower the carbon footprint and improve economic performance. Choosing EQUANS to design and/or manage buildings and utilities frees clients to focus on their core businesses and work to make their companies more competitive and agile. They improve the work-life's quality of employees while simplifying their work.



Our contribution

EQUANS offers customised maintenance, facility management and energy efficiency solutions that cover everything from building and occupant services to workspace management. We regenerate and rejuvenate buildings to inject life into cities and communities. We ensure that technical installations on industrial and tertiary sites are operating properly and we guarantee their performance. Our energy performance contracts are a particular help for

meeting client greenhouse gas reduction targets. We also provide services for employees, directly or through our partners, such as guest reception, caretaking, security, landscaping, parking, corporate car-sharing fleets and catering. We have also developed a digital tool to optimise workspaces. With our international facility management expertise, clients are assured of quality service that reduces direct and indirect costs.



Outstanding global education is at the core of our mission; the University is passionate about investing in high-quality, affordable accommodation for our students to enhance their on-campus experience. We look forward to working with Equitix and EQUANS.

Simon BRAY,
DIRECTOR OF CAMPUS SERVICES AT THE
UNIVERSITY OF BIRMINGHAM



Regeneration of student accommodation, UK

Construction, regeneration and facility management for the University of Birmingham. The University chose EQUANS, along with its partner, EQUITIX to create new ultramodern student accommodation at the Pritchatts Park Student Village.

EQUANS' solutions

Low-carbon new-build solutions, energy efficient internal and external building refurbishment and facility management services - which will enhance the student experience – are all playing a role to reach a low carbon environment and to enable the UK to reach its carbon targets.

EQUANS is responsible for all of the construction, renovation and energy performance technology requirements and will refurbish 734 existing student housing units, build 496 new units and also provide long-term operational management of the site.

Performance

After the construction phase, EQUANS will provide full facility management services for the accommodation campus for a 50-year period.

1. OUR EXPERTISE



DIGITAL & ICT



EQUANS DIGITAL is born

EQUANS DIGITAL brings more than 1 B€ digital technology into the heart of the business and helps improve the overall performance (energy, technical issues, usage) of facilities. To support digital transition, EQUANS DIGITAL can provide effective, innovative and scalable solutions for IT infrastructure, automation & robotics, hypervision or BIM management.



Our contribution

Our 5 areas of expertise
for essential digital services

- **Telecommunication networks and connectivity services**
- **Video and audiovisual services**
- **Automation services** to monitor building technical installations or industrial processes
- **Robotics integration**
- **Scan and BIM (Building Information Modelling) services**, for the added value of flow simulation, indoor air quality simulation, asset management, work simulation, and even more through digital twin optimisation

3 areas of transversal expertise
to deliver overall coherence and meet specific requirements

- **Our cybersecurity services** guarantee that all our digital solutions meet the highest cybersecurity standards
- **Data management and interoperability services** make it easy for our clients to mine all the data from one or multiple sites and leverage it using artificial intelligence
- We design, develop and maintain **application solutions** with our partner software publishers to create customised applications



Industry, France

We helped SOITEC (semi-conductor production) with their digital transformation and gradual implementation of Industry 4.0 through data mining.

EQUANS' solutions

- Automation: automations + command-control system/supervision
- Data:
 - A data warehouse for data consolidation
 - Indicators and dashboards
 - Data science to optimise certain processes via data mining
- BIM/Digital Twin: integration of automation information and SOITEC's data in a 3D BIM model for simulation purpose

Performance

5 to 7% gain in performance
Costs cut by 12 to 15% (gas bill)



Building, Australia

Installation of AV and network cabling in new Victoria Police State Headquarters - the biggest of the south hemisphere - in 18 months.

EQUANS' solutions

- EQUANS delivered AV digital systems in the new Victoria Police State Headquarters
- Full turnkey solution designed and delivered by EQUANS AV – contract won via partnership with Telstra
- Critical response, control rooms, collaboration spaces
- 39 levels with centrally controlled digital video and audio
- Quality of delivery resulted in 5 years support contract and additional upgrade opportunities in other VP locations and electrical and fire services.

1. OUR EXPERTISE



ELECTRICAL ENGINEERING

Challenges

EQUANS offers customised solutions to help the growth of renewable energy, and to decarbonise buildings, infrastructures and facilities.

Our contribution

EQUANS covers the entire electrical engineering spectrum, with integrated design, construction and maintenance solutions.

EQUANS offers innovative solutions that already meet future decarbonisation, support renewable growth and performance needs.

EQUANS is working across the entire electricity value chain from power plants to transport and storage of energy in buildings, cities, rail, road and maritime transport infrastructures and in factories. EQUANS works with national (public and private) power network operators to build renewable power plants with the energy storage needed to strengthen networks and keep them balanced and secure.

EQUANS carries out vital work packages (low and high voltage, safety, fire safety, technical management) drawing on BIM modelling tools and innovative systems.

In urban environments, we improve performance and safety by deploying high-speed networks, public lighting and video surveillance and by securing roads and pedestrian passageways.

To help decarbonise mobility, EQUANS is expanding electric vehicle charging options across the public and private sectors. We are also part of European pilots on dynamic charging for heavy vehicles.

In the future, most bus, car and commercial transport fleets will be decarbonised, and we already have effective solutions to meet these new needs.

In the maritime and river transport sectors, emissions-free navigation has become possible thanks to mobile storage solutions and charging stations in the main hubs.

EQUANS also deploys rail transport systems that incorporate line electrification, signalling, and related telecommunications.

Regional authorities are developing energy-efficient solutions for secondary networks in France and across Europe to revitalise mobility around peri-urban and regional areas with targeted infrastructure investments.



EV charging, Netherlands

Installation of public electric vehicle charging stations in Rotterdam and 16 other municipalities including The Hague.

4,000 charging stations provide green energy that is 100% Dutch, mainly produced by local wind turbines and solar panels. They feature smart charging technology that absorbs the power grid's peaks and troughs.



Construction of a high voltage substation for Ailes Marines, Belgium

The future Ailes Marines electrical substation for the offshore Saint-Brieuc wind farm (62 turbines) is being built on the banks of the river Scheldt, in Hoboken, District of Antwerp. The topside – an enormous modular construction measuring 53.55 m long, 31 m wide, and 21.5 m high (which will weigh 3,400 tons when completed) – has been built by EQUANS, in association with Eiffage.



High voltage, France

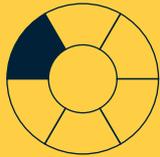
Located in Toulouse and Marseille, SCLE SFE (EQUANS group) is a high-tech company specialized in high-voltage networks that develops innovative and sustainable solutions for the energy and rail industries.

SCLE SFE designs protection relays and creates systems that automate transformer stations, with high availability requirements. It develops SIL 4 safety signalling equipment that contributes to the safety of rail and urban transport networks, in compliance with normative constraints. SCLE SFE also imagines new solutions for the electrical networks of the future: energy management systems, electricity storage, system services, micro-grids.

SCLE-SFE is participating in the RINGO experiment, developed by RTE: on 3 sites, the aim is to store the surplus of renewable energy produced, thanks to specific batteries, in order to avoid losing it, and to simultaneously destock it elsewhere where it is needed. The SCLE - SFE teams are responsible for the design, supply, testing and commissioning of the electrical components, the power conversion system, the ESS (Energy Storage System) control system and the high-voltage substation that supplies it.

Start of the experiment: June 2022.

1. OUR EXPERTISE



FLUIDICS, MECHANICS & ROBOTICS

Challenges

Thanks to our expertise, we can strongly improve performance in industries such as automotive, oil & gas, biopharmaceuticals, electronics, health care, food production, and new technologies.

EQUANS is supporting the transition to Industry 4.0 by incorporating new digital technologies into production lines and logistics.

Our contribution

Fluidics:

Installation of secure multi-scale fluidic networks with automated flow control and microflows.

Mechanics:

EQUANS has specific expertise in

- Manufacturing and mechanical remachining
- Industrial piping, including induction bending
- Welding, black steel, stainless steel
- Manufacturing modular installations and skids
- Manufacturing sheaths, etc.

Robotics:

Safe working conditions, flexibility and increased production.



Industrial robotics is key to reindustrialisation. Robotics can make our industries and economy more competitive while creating jobs. And it can benefit our clients' employees by reducing the number of repetitive or undesirable tasks.

Jean-Dominique ROUSSEAU, DIRECTOR OF EQUANS FRANCE'S ROBOTICS LAB





Robotics

Logistics, France

Food rations are packaged, stored and distributed to French troops by the Etablissement Logistique du Commissariat des Armées d'Angers (17,000 m²). It asked EQUANS to modernise and improve its two preparation lines, significantly increase production capacity and enhance its automated quality control systems all while improving operator working conditions and cart flow.

EQUANS' solutions

INEO Center's Robotics Lab and INEO Atlantique's Maine Anjou agency are handling all design work and deliverables (electrical and mechanical design studies, automation, robotics, machine integration, industrial computing, assembly, cabling, commissioning and training). The existing facilities are being modernized and updated with innovative order preparation solutions that call on robots and vertical storage systems.

Performance

The Ministry of the Armed Forces wants to turn this facility into a showcase for its 4.0 approach, as French military rations set the international standard.

This comprehensive intralogistics solution can also be applied to other fields.

Key figures

- 14-month project duration
- 7,200 rations processed/day

Automation

Industry, USA

Since its inception in 1992, Indicon, one of EQUANS entities, has emerged as a leading Control System Integrator and the largest and most technologically advanced UL Panel Builders in the Industry. Its areas of expertise include Conveyor Controls, Tooling Controls, Process Controls, Vision System Integration, and UL Certified Control Panel Fabrication.

Over the last 30 years, Indicon has earned a reputation as the leader in Controls Design and Integration in the Automotive and Industrial marketplace. With a staff of over 90 Controls Engineers, ePlan Specialists, and Demo 3D experts, Indicon is ready to take on the most challenging automation projects.

Performance

Indicon's state-of-the-art expertise has been recognised in the automobile industry for three decades. Among other achievements, the company, based in Michigan, has designed and built Control Systems and built UL Certified Control Panels for nearly every major Automotive manufacturer in the world. Also, their five (5) UL Certified Panel Build facilities gives Indicon the necessary capacity to deliver on large 'Blanket' Purchase Orders for GM, Ford, Stellantis, Applied Materials and ABB, just to name a few.

Finally, Indicon's Vision Group is now harnessing the incredible power of Artificial Intelligence to take Machine Vision and Vision Guided Robotics to an unprecedented level. This expertise has earned Indicon Tier 1 Supplier status with General Motors, Ford & Stellantis and we've achieved Certified Integrator status with all major Camera manufacturers.

2. OUR SECTORS



Smart buildings: private and public buildings & offices

The construction and real estate sector aims to sustainably extract value from buildings or building stock. We help by offering high-performance connectivity, improving building energy efficiency (particularly through electrification) and controlling costs and risks by ensuring that spaces and uses are flexible.

EQUANS is the multi-technical partner that allows them to design, install and maintain their buildings in compliance with current regulations all while reducing their carbon footprint.

Electrifying heat for Sunderland residents through ground-source heat pumps, UK

From energy consultancy to net zero delivery, EQUANS is committed to supporting its clients on their own energy transitions. In the UK, an example of this is the project for Gentoo Housing Association, in Sunderland to electrify the heating and hot water of 364 homes across seven high-rise tower blocks by installing a system of ground-source heat pumps. The completion of this project, believed to be the largest of its kind in the UK, has introduced high efficiency cost-effective heating, improved comfort for residents and will also save more than 2.6 million tonnes of CO₂ over a 20 year period.

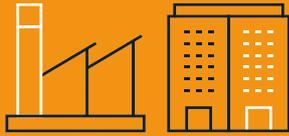


The first all-electric hospital, Netherlands

The construction consortium TDE (Trebbe, Dura Vermeer and EQUANS) delivered the first all-electric hospital in Meppel. The building no longer uses gas: in addition to being connected to the electricity grid, it benefits from 400 solar panels and storage units that provide part of its energy. A 25-year maintenance contract was also signed.



EQUANS took part in an ambitious project: creating the first all-electric hospital in the Netherlands with the highest standards of sustainability, energy savings, hygiene, flexible use of space and comfort.



Smart buildings: industrial buildings

Industrial building owners are extremely concerned about improving the overall performance of their sites. To support, EQUANS offers:

- Installation services
- Preventive and predictive maintenance solutions that cut costs
- Solutions to comply with prevailing environmental regulations and ensure the safety of employees and processes
- Digitalisation of production processes
- Self-generation of energy to overcome price volatility

All while guaranteeing service continuity.

A Siemens Gamesa offshore wind turbine plant in Le Havre, France

EQUANS France worked on the construction of industrial and tertiary buildings for a Siemens Gamesa Renewable Energy plant. The 22-hectare facility is the first in the world to manufacture all the main components of an offshore wind turbine at the same site. We took charge of the following work:

- Low-and high-voltage systems
- Fire protection with extinguisher systems (sprinklers)
- Utility production and distribution: gas, hot and cold water, compressed air
- Heating, ventilation and air conditioning (HVAC)
- Humidification
- Dust removal via a centralised evacuation system
- Sanitary plumbing for tertiary sites
- Building management system



Our commitment: help our clients transition to carbon neutrality through the creation of next-generation energy infrastructures that are safer and more energy-efficient.

2. OUR SECTORS



Cities and Smart Cities

To make their cities attractive and competitive, local and regional authorities aim to make public spaces safer, reduce energy costs and carbon emissions and promote climate resilience, all to improve people's health and well-being.

As a multi-technical partner, EQUANS helps them do this by:

- Improving the energy performance of buildings (municipal, schools, protected heritage, flexible surfaces)
- Connecting housing to urban heating networks
- Electrifying and decongesting mobility (parking, charging stations)
- Offering optimised and smart management of public lighting
- Using landscaping solutions to develop public spaces
- Developing public tranquillity through CCTV (Closed-Circuit TeleVision)

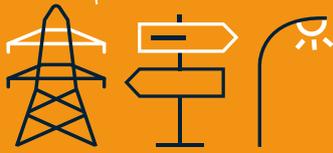
Public lighting solution for Washington DC, USA

This project will be the District's first public-private partnership and is the nation's largest urban streetlight modernisation project using the P3 procurement model. Together with its partners, EQUANS will deliver an upgraded smart infrastructure while saving the District \$76 million. The project will convert the District's entire streetlight network of 75,000 street and alley lights to energy-efficient LED technology; will install smart city technology components (SCT), including wireless access points, to leverage the streetlight system and the District's extensive fibre optic network, DC-Net, delivering expanded broadband Wi-Fi coverage; provide a 50% reduction in energy use; and, help DC meet their climate goals by significantly reducing greenhouse gas emissions and light pollution. EQUANS will play a key role as asset manager of the existing street light network (during the design and construction period) and of the improved streetlight network (after conversion) for the full 14 year contract term.

Public lighting solution in Santiago, Chile

EQUANS Chile signed a 15-year contract with the municipality of Santiago to maintain 37,054 street lights and replace 22,892 of them between 2020 and 2035. This contract features smart technology – a 24/7 call center, on-site management, intelligent control systems – and involves some 40 employees.





Intercity services and networks

Public and private decision-makers and developers play a major role in mobility, connection and communication between cities at the community, regional and national levels. Strengthening ties with other cities and metropolitan areas has come to be a key objective given the competition between geographical areas. It is also a response to growing demands from both current and future residents.

Some of the challenges they face include eliminating “white” spots with 5G, accelerating fibre-optic coverage and developing all forms of mobility, particularly by increasing the density and electrification of transport networks.

To decarbonise human activity, local decision-makers must also use more renewable energy to build new energy transmission lines and promote self-production of electricity through new uses and new forms of cooperation. EQUANS is at the forefront of today’s connected world and is there to help every step of the way.

High voltage success, Germany

Powerlines Energy Germany, a subsidiary of EQUANS’ Powerlines Group, who specialises in the electrification of railway and energy transmission infrastructures, has won a contract for the installation of a new 9.3 km section of 380-kV overhead power line for the Ochsenkopf Attendorn project.

Powerlines teams will build the new section of line, which will entail the installation of 220 km of conductor cables and 28 pylons. The project, for client Amprion GmbH is part of the overall installation of a 126 km long section of a power line between Kruckel, near Dortmund, in North Rhine Westphalia and Dauersberg, in the region of Rhineland Palatinate.

The completed power line will increase the flexibility and the efficiency of the German power grid and will help integrate the increasing share of renewable energies.

Orange chooses EQUANS, France

Orange has launched a major consultation in 2021 for the renewal of its subcontracting contracts for work on the fibre and copper network in private homes, as well as the maintenance and extension of these same networks throughout the country. To respond to this consultation, INEO Infracom, an EQUANS entity, proposed an organisation dedicated to the project (national governance, regional management, departmental relays). The contract now covers 11 counties instead of 8.



3. OUR SPECIALTY AREAS

These fields require our most expert knowledge for specific, highly specialised or even entirely new solutions.



Transportation

Transport professionals need a reliable partner to build and maintain transport infrastructure, ensure the safety of ground and air systems and rehabilitate or renovate existing networks and port platforms. EQUANS can manage flows (through signalling) and improve service quality. We can even develop spaces to their full potential (unused land, stations, airports) and provide hands-on help with decarbonisation (shift to green fuel/hydrogen).



Air

EQUANS ANZ expands its service delivery with Adelaide Airport, Australia

EQUANS ANZ will expand its facilities management delivery at Adelaide Airport after being awarded the contract to manage its fire protection services. Since 2007, EQUANS has worked with Australia's fifth biggest airport, delivering routine and reactive HVAC maintenance services across the highly critical facility, which occupies an 800-hectare site 7 km from the city's central business district. The new fire protection contract will cover planned preventative, reactive and ad hoc services as well as the wet, dry, passive and portable fire protection equipment. This latest contract is a strong example of the company's ability to rapidly increase service delivery to meet changing customer demand.



We are proud of our record of delivery and our strong relationship with Adelaide Airport. As the terminal expansion continues, it is an exciting time for the facility, and we are happy to be playing a role in that process. This contract is also a result of our strong record of delivery, and we thank the airport for continuing to entrust facilities management services to us at this critical part of Adelaide's metropolitan infrastructure.

Michael COLEY, HEAD OF STRATEGIC BUSINESS DEVELOPMENT AT EQUANS ANZ



Ground

Launch of the DAKAR Regional Express Train, Senegal



This 40 km line connects Dakar to Diamniadio in 20 minutes (versus more than an hour's drive) with 15 trains serving 13 stations and a daily capacity of 115,000 passengers. EQUANS developed this solution in collaboration with THALES, generating a seven- to ten-fold decrease in CO₂ emissions per person per km travelled.

Grand Paris Express, France



200 km of metro lines and 68 new stations will be built by 2030 to better serve the inner and outer suburbs of Paris. Four new metro lines will be built and one existing line will be extended. Thanks to the expertise of its teams, EQUANS Transport won ten major contracts as part of this colossal project: deployment of the LTE mobile network, construction of ventilation systems, smoke extraction and decompression of the new lines' tunnels, traction work and installation of platform facades.



Premium Wi Fi connection for the Pacific Surfliner, USA

On the 565 km route between Los Angeles, San Diego and San Louis Obispo, EQUANS' Icomera X-Series mobile gateway will provide Pacific Surfliner passengers with a significantly enhanced user experience: 35% to 52% more devices will be able to connect to the network on board the trains, 34% to 48% more data per trip.



Having an Internet connection is no longer seen as a luxury by passengers, but as a necessary service that operators must provide to remain competitive.

Magnus FRIBERG, MANAGING DIRECTOR OF ICOMERA

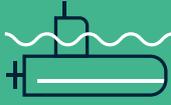


Renovation of the Annie Cordy tunnel, the longest tunnel of the country, Belgium



- Renovation of all electromechanical equipment
- Safety and security systems: fire protection, new emergency exits, AID and ANPR cameras, etc.
- New LED lighting reducing electricity consumption by over 70%
- Automation: centralised technical management system (SCADA)

3. OUR SPECIALTY AREAS



Defence

EQUANS has worked in Defence and National Security to design and implement state-of-the-art solutions for its platforms and fixed and mobile equipment.

As partners in the upstream R&D phases, we can offer proven solutions in electrical and climate engineering, special air treatment systems, electromagnetic analysis, space optimisation, noise reduction and vibration control. EQUANS also provides logistics, maintenance and renovation solutions for Defence and National Security heritage infrastructure. And we offer "as a service" options to improve operational efficiency, boost economic competitiveness and lower carbon footprints.



INEO Défense acquires EXAVISION, France

INEO Défense has launched a development strategy to secure environments, protect sites and monitor areas with "cyber by design" products. This EQUANS France entity is integrating production of equipment and systems that combine optics and electronics that the Navy and Army use.

VIVO: Maintenance work for Defence built estate and service family accommodation, UK

VIVO Defence Services, a 50/50 Joint Venture (JV) between EQUANS and Serco, will deliver a number of services which will support the UK's defence capability. A contract has been secured to maintain the built estate across more than 200 sites and around 19,000 buildings. The core services include planned and reactive maintenance, as well as mandatory safety checks. In addition, to support service family accommodation (SFA), VIVO has also secured two regional accommodation maintenance service (RAMS) contracts that will see the joint venture take responsibility for improving the lived experience of service families across 27,000 homes in the south-west and south-east regions of the UK, This represents 60% of SFA's overall estate.



The future defence infrastructure contracts represent an increased investment in maintenance by the Ministry of Defence to deliver the facilities that the military need to live, work, train and deploy.

David BREWER, CHIEF OPERATING OFFICER, DEFENCE INFRASTRUCTURE ORGANISATION





Marine & Offshore

Our public and private clients require technical solutions adapted to their specific environment, whether they own surface vessels, merchant fleets, specialised ships or offshore or submarine platforms. They also want a modicum of onboard comfort even in the most difficult conditions. In response, EQUANS provides tailor-made solutions for refrigeration, fire safety, climatic and electrical engineering. We also provide ship technical support with tailor-made ship repairs. This reduces installation and operating costs and helps to achieve carbon-free goals. Currently, 2,000 of our systems are used around the world every day. We can also offer technical management systems for their ships.

EQUANS equips the Wonder of the Seas, France

In November 2021, Chantiers de l'Atlantique ("the French shipbuilder") delivered Wonder of the Seas, a giant cruise ship (length 362 m, width 64.8 m, height 72 m, weight 227,000 tons with 2,867 cabins, 1,800 of which have sea views).

EQUANS AXIMA carried out the coordination studies and installation, assembly of sheaths, piping and electricity for the 77 mechanical rooms that control the ship's air conditioning and ventilation.

Approximately 150,000 hours of work were required to carry out this project, the main difficulty of which lay in the compactness of the technical air-conditioning premises: a great deal of expertise on the part of AXIMA Marine in St Nazaire (France), a leader in this field.



3. OUR SPECIALTY AREAS



Energy Production & Renewable Solutions

As a partner to energy producers, EQUANS designs, builds and maintains energy plants to guarantee the highest level of production. Our teams build and help transform, store and recover the energy produced, reducing the facility costs, risks and ensuring the safety of people and the plant.

We guarantee service continuity and ensure compliance with regulations (monitoring, discharge levels, environmental protection).

We can also renovate and improve existing infrastructure, then oversee later decommissioning and disassembly.

A solar project that benefits all in a rural area, Texas, USA

CONTI, a subsidiary of EQUANS USA, took charge of the installation of Anson Solar in Texas, a large-scale energy project (capacity: 200 MW). CONTI was selected as the prime electrical contractor to deliver the installation of PV modules across 2,200 acres of land and to complete the installation on time and on budget. The client had to assess the risks to all neighbouring environments and acquire the required permits. CONTI had to commission the project with as little ecological impact as possible while staying in line with the client's budgetary and scheduling targets. The impact of performed work on all local stakeholders needed to be considered at each step in the process.

Biomass replaces gas at wood-fired power plant, Switzerland



The gas-fired boiler system that supplied steam to the DSM Nutritional Products production facility in Sisseln (Switzerland) was out-of-date and had to be replaced. There was a clear goal in mind – to create a progressive, sustainable system and make fossil fuels a thing of the past. The new solution also had to create value for the region and make use of local energy sources.

The old gas system was replaced with a wood-fired CHP (Combined Heat and Power) plant. The power plant is fuelled by wood chips from the local area, and produces steam and electricity. The electricity the plant produces is fed into the local grid. The wood-fired CHP plant features new technologies, such as fixed sensors used to measure the moisture content of the biomass supplied. This system is the first of its kind to be used in Switzerland. The new wood-fired combined heat and (CHP) power plant achieves a high rate of efficiency and saves 50,000 tonnes of CO₂ per year.



This project included the installation of all PV modules, a mechanical tracker system, structural pile supports, PCS (SCADA), a fibre-optic communications loop, medium voltage and all DC wiring, instrumentation, and built and installed combiner boxes.



Nuclear



The nuclear industry needs all the features of an industrial site plus extremely high levels of safety and availability. This entails the control of nuclear ventilation

and air conditioning networks. It also entails electrical engineering for on-site electrical distribution to guarantee service quality and continuity, instrumentation and control to ensure process reliability, site protection, radiation protection and monitoring systems for curative, preventive and predictive maintenance. It also involves multi-technical integration and the implementation of innovative technological solutions that contribute to the nuclear industry of the future.

EQUANS can provide all these services, including long-term projects, thanks to our expertise and the multiple skills of our technicians and engineers (safety officers, electricians, data analysts, radiation-protection officers, etc.).

INEO Nucléaire oversees a comprehensive maintenance contract for ORANO, France

With the added backing of the EQUANS Group, subsidiary INEO Nucléaire has renewed its contract – with a performance commitment – for ORANO's Tricastin and Malvési industrial platforms, which provide 20% of the world's enriched uranium, a vital component in the fuel used in nuclear plants. INEO Nucléaire is lending its know-how as a multi-trade integrator and calling on Group partners such as AXIMA Nucléaire and others (electrical and mechanical engineering, HVAC, decontamination, radiation protection, scaffolding, insulation, etc.). The objective across the value chain (engineering, processes, methods, purchasing, maintenance and works, obsolescence management, etc.) is to optimise performance through continuous improvement and operational excellence.



EDF EPR Hinkley Point C, UK

AXIMA Nucléaire, an EQUANS subsidiary, is handling the ventilation and air conditioning in the nuclear block (contaminable and non-contaminable premises) of the pumping station and the effluent treatment building for the EDF Hinkley Point nuclear power plant.

The work includes the following steps:

- Updating the 3-D models with the AXIMA HVAC catalogue, aerodynamic calculations and fan selection, seismic calculations, and updating the support materials in the PDMS models
- Supplying ventilation equipment
- Qualifying safety equipment during accident conditions (fire, earthquake, irradiation, ageing, etc.)

The challenges we faced:

- A new design relative to previous EPRs
- CDM approach: ergonomic anticipation and HSE constraints from the beginning of the design phase

Key figures

- More than 1 million hours of engineering
- 150 employees during the peak work period
- 14,000 pieces of classified equipment
- 31 buildings
- 23 classified HVAC systems
- 190 qualification tests

3. OUR SPECIALTY AREAS



Food & Beverage

EQUANS KÄLTECHNIK develops high-performance cooling and heatpump solutions, Austria

The meat and sausage producer Greisinger GmbH has doubled the size of its plant in Münzbach (Upper Austria) in accordance with the latest hygiene standards of the food industry. EQUANS' KÄLTETECHNIK subsidiary in Wels engineered, delivered and will service the high-performance 6.0 MW cooling system for the multi-storey production and cooling rooms as well as for a large logistics center. In order to ensure highest energy efficiency and environmental sustainability the natural refrigerants NH₃ and CO₂ were used. The year-long contract (September 2021 - August 2022) is one of the largest in the history of refrigeration plant construction.

Food and beverage manufacturers must limit their energy consumption and maintain the cold chain.

EQUANS teams help our clients reduce the carbon footprint of their refrigeration units (changing HFC fluids, charging stations), produce their own energy (photovoltaics) and improve single or multi-site energy performance to comply with international's energy and climate law regulations.

Our clients must also ensure their distribution sites present a high level of appeal, so we offer them solutions to optimise indoor air quality, sound insulation, temperature management, fire safety, pollution reduction and connectivity.





Biotech & Pharmaceuticals

Pierre Guerin boosts production of the LFB laboratory, France

The EQUANS subsidiary produced and installed 80 bespoke tanks for the Arras-based laboratory to produce blood derivatives. Objective: triple the site's production and bolster France's sovereignty in the industrial and health sectors.

The pharmaceutical and “healthtech” (biotechs, medtechs, e-health) sectors are undergoing a significant change. Many discoveries (gene therapy, genome sequencing, stem cells that can develop into any kind of human tissue, molecular techniques that modify the genome as if correcting a text, and more) are generating countless applications in health care, cosmetics, and environmental fields. EQUANS is the multi-technical partner that can help these sectors overcome health, environmental and economic challenges (optimising costs, modernising the industrial base).

We build clean rooms or rooms with specific air requirements and handle fluidics requirements. We also build critical installations (for fire protection or air treatment) and optimise predictive maintenance with our digital solutions. **Pierre Guerin, a specialised subsidiary of EQUANS, provides turnkey solutions to produce cutting-edge, high-efficiency bioreactors.**



3. OUR SPECIALTY AREAS



Data Centers

With more data being processed and stored, there is a need for rapid construction of safe, cyber-secure and energy-efficient facilities.

With its combined expertise in electrical, thermal and digital engineering, EQUANS can deliver on this requirement.

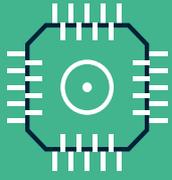


EQUANS builds state-of-the-art data center, France

Our teams handled construction of the new COLT data center in Les Ulis: the INEO Tertiaire des Mureaux and Agence Projets Complexes teams for high voltage work, the Agence AXIMA Paris III team for HVAC work and the Léon Grosse teams for the building carcass. This 14,000 m² facility meets several international standards, including EHS (Environment Health Safety). Delivery is scheduled for September 2022.

Key figures

- Construction duration: 1 ½ years
- 14,000 m² floor space (100 m² installed per day!)
- 20 MW of total electrical output, enough to light 3,500 homes
- 200 employees



Microelectronics & New Technologies

Microelectronics is playing an increasingly strategic role. It seeks to miniaturise chips so they consume as little energy as possible. Machine and vehicle makers are all big consumers of these increasingly advanced calculation and storage devices. EQUANS has been active in microelectronics since its inception in Europe and the US, in plants, clean rooms and their inertisation. We hone and refine our industrial solutions all the time, making them ever more efficient and quick to implement. Our goal: to help industrial facilities attain their zero carbon objectives.



Clean rooms, Netherlands

ASML is a leader in the semiconductor industry. The company provides microprocessor manufacturers with the tools and services to produce the highest performance micro circuits through its lithography technology. EQUANS has developed an important activity in clean rooms for ASML in the past few years.

Last year, EQUANS launched, as part of a consortium, a 5 year partnership with ASML for the integrated maintenance and management of most of the manufacturer's Dutch facilities. This consortium, named the Maintenance House, is the joint maintenance team of ASML.



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