

# **INTRODUCING THE EUROCONSULT GROUP SPACE TRAINING SERVICE OFFER**

**TOPIC 4:  
SPACE INDUSTRY & MARKET DYNAMICS**

**2020 | 2021**





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- Our Training Service Offer In A Nutshell
- Topic 4: Space industry & market dynamics
- Contact Information
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# FROM STRUCTURING MARKET TRENDS TO TRAINING NEEDS

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- Whatever their form or origin, **space infrastructure ambitions and related procurements follow less and less frequently « dry » or « blind » purchase rationales**, as:
  - They are increasingly part of a much broader picture, with related plans no longer limiting themselves to the sheer ownership — or even operational use — of the acquired capacity
  - Many national players from emerging countries — either established as space agencies, research centers or even satellite operators — have been mushrooming worldwide since the mid-2000s, translating into a flurry of “domsat” projects strongly hitting the market
- ...which increasingly places **capacity building issues at the center of related strategies**, as much powerful and efficient vehicles for:
  - Fostering inherent skills and a buildup of how-how
  - Gaining independence
  - Installing greater prominence, visibility and credibility amongst the international space community



## GENERAL SERVICE APPROACH (1/2)

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- Our training service offer provides **interdisciplinary knowledge transfer to governments, the private sector and not-for-profit organizations wishing to increase their expertise in the space sector**
- Fully adapted to customers' specific needs, it **customizes both the content and format** of associated training programs **to match customers' specific skill development goals**
- Delivered with an emphasis on **flexibility, accessibility** and **experiential learning**, this tailored service provides both **functional and executive-level training** with **defined outcomes**, among which:
  - Interdisciplinary training on all key aspects of the space industry: technical, markets, program management, etc.
  - Ability to benefit from prepackaged programs or create a customized program
  - Benchmarking, profiling, best practices and lessons learned from key players of the space sector
  - Possibility to organize tours of government and private industry facilities and meetings with international executives and officials
  - Flexibility in choosing a suitable training location, ranging from on-site training on customer premises, in our offices or in a prestigious third-party location
  - Exposure to training in a variety of mediums and formats, from videoconferences to face-to-face seminars, and hands-on exercises, over a few hours, days or week-long sessions



# GENERAL SERVICE APPROACH (2/2)

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## TARGETED AUDIENCES

- Typical customers:
  - Satellite operators
  - Government organizations
  - Service providers
  - Financial institutions
  - Satellite manufacturers
  - Launch service providers
- Typical attendees:
  - Executives
  - Middle managers
  - Program managers
  - Operators
  - Technicians

## KEY CUSTOMER BENEFITS

- Fully flexible content that can be either specifically designed or based upon standard packages
- Experiential learning enabling both demonstrable knowledge transfer and networking opportunities
- Access to a unique line-up of seasoned industry experts with extensive sectorial experience
- Combined access to a suitable selection of training venues, industry visits & customer care services

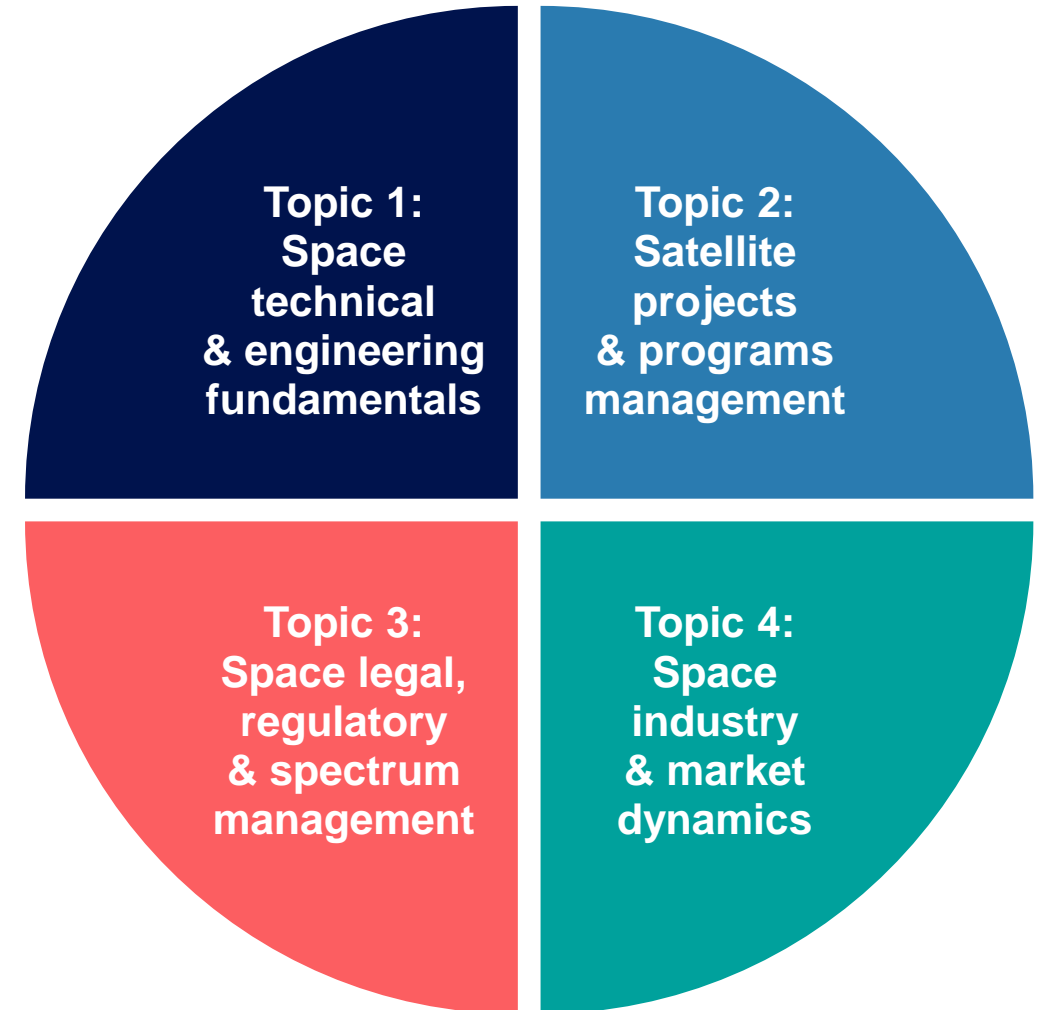
## SUPPORT SERVICES

- Adaptation of training course language if required
- Great variety of delivery mediums and formats
- Industrial/cultural visits and networking opportunities
- Flexibility for the most suitable training location
- Customer care service and follow-up



# FROM TRAINING TOPICS TO DELIVERY MODES

- Our training service offer is based upon **four main topics** covering, over a total of **38 individual training modules**, the **full spectrum of issues to be considered to operate in the space sector**, i.e.:
  - Space technical & engineering fundamentals
  - Satellite projects & programs management
  - Space legal, regulatory and spectrum management
  - Space industry & market dynamics
- ...available in **two alternative delivery modes** depending upon customer objectives, requirements, and constraints, i.e.:
  - Pre-packaged
  - Customized





# TRAINING CATALOG OVERVIEW

	<b>Topic 1: Space technical &amp; engineering fundamentals</b>	<b>Topic 2: Satellite projects &amp; programs management</b>	<b>Topic 3: Space legal, regulatory &amp; spectrum management</b>	<b>Topic 4: Space industry &amp; market dynamics</b>
<b>Nb. of training modules</b>	17	7	5	9
<b>Typical module duration range*</b>	0.5 to 2 days	0.5 to 2 days	1 to 3 days	1 to 2 days
<b>Typical contents</b>	End-to-end technical and engineering space industry fundamentals	Space program management topics, from business planning to risk management assessment	Legal, regulatory and frequency challenges impacting business plans, investment and programs	Space industry policy and market perspectives and trends
<b>Available delivery formats</b>	Face-to-face or online	Face-to-face or online	Face-to-face or online	Face-to-face or online

\* Depending upon customer objectives, requirements, and constraints.



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# TRAINING CATALOG DETAILS

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- Structured along a topic-by-topic basis, the following slides provide **an overview of each of our 9 individual training modules** in terms of:
  - Objectives
  - Prerequisites
  - Related modules
  - Typical duration and delivery format
  - Topics covered
  - Course director
- None of the content presented in this catalogue shall be considered as contractual. Any interested customer is kindly invited to contact us for **a detailed technical and commercial proposal that will be derived from his specific objectives, requirements and constraints**



# TOPIC 4: SPACE INDUSTRY & MARKET DYNAMICS

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## TRAINING MODULES LIST

4.1 Introduction to the global space industry & markets

4.2 Government space policies, governance & financing

4.3 Satellite manufacturing market & players

4.4 Space launch service market & players

4.5 Ground segment market & players

4.6 Satellite communications services market

4.7 Satellite Earth observation services market

4.8 Satellite navigation services market

4.9 “New space” markets & players



# TOPIC 4: SPACE INDUSTRY & MARKET DYNAMICS

## MODULE 4.1: INTRODUCTION TO THE GLOBAL SPACE INDUSTRY & MARKETS

### OBJECTIVE

- The objective of this course is to present the structure and organization of space activities worldwide and the changes in progress in the whole ecosystem, both in the uses of space and in terms of market players.
- Upon completion of this course, trainees will have a better understanding of where their organization is situated in the global space ecosystem.

### PREREQUISITES

- No higher education degree (neither technical nor business) required.

### RELATED MODULES

To be mastered

To go further

Connected with

1.1, 1.2

### TYPICAL DURATION & FORMAT

- 1 day (8 hours)
- Face-to-face or online delivery

### TOPICS COVERED

- **The four dimensions of space activities**
  - Satellite services on Earth
  - Space science & exploration
  - Man in space
  - Access to space
- **Overview of the satellite value chain**
  - From satellite systems to satellite services and end-users
- **Changes in the space sector**
  - Disruptive trends along the value chain
  - Impact of “new space” changes on the ecosystem
- **Government and private investors in space activities**
  - Established and newcomer space countries
  - Established and newcomer private satellite operators
- **Space industry to manufacture and launch satellite systems**
  - GEO satellites
  - Small satellites and cubesats
  - Constellations

### COURSE DIRECTOR

- Ms. Rachel VILLAIN, Principal Advisor, Euroconsult



# TOPIC 4: SPACE INDUSTRY & MARKET DYNAMICS

## MODULE 4.2: GOVERNMENT SPACE POLICIES, GOVERNANCE & FINANCING

### OBJECTIVE

- The objective of this course is to present the structuring role and high importance of government for space activities worldwide in terms of civilian and military expenditures.
- Upon completion of this course, trainees will have a better understanding of the key government investors in space and of their rationale for space development.

### PREREQUISITES

- No higher education degree (neither technical nor business) required.

### RELATED MODULES

To be mastered

4.1

To go further

Connected with

3.1

### TYPICAL DURATION & FORMAT

- 1 day (8 hours)
- Face-to-face or online delivery

### TOPICS COVERED

- **Governments investing in space activities**
  - To develop domestic technology base and industry
  - To procure operational satellite systems and services
- **Governance models of space activities**
  - Established space countries
  - Newcomer space countries
- **Budgets & programs by domain**
  - Space science & exploration
  - Space transportation
  - Human spaceflight
  - Satellite applications: communications, navigation, Earth observation, meteorology
  - Specific military applications: ELINT, IMINT, SSA

### COURSE DIRECTOR

- Mr. Simon SEMINARI, Principal Advisor, Euroconsult



# TOPIC 4: SPACE INDUSTRY & MARKET DYNAMICS

## MODULE 4.3: SATELLITE MANUFACTURING MARKET & PLAYERS

### OBJECTIVE

- The objective of this course is to present the various markets and key players in satellite manufacturing, whatever the satellite application, mass, size, orbit, etc. may be.
- Upon completion of this course, trainees will have learned the structure and organization of the satellite manufacturing industry, as well as its key players with their distinctive offerings.

### PREREQUISITES

- No higher education degree (neither technical nor business) required.

### RELATED MODULES

To be mastered

4.1

To go further

2.4

Connected with

n/a

### TYPICAL DURATION & FORMAT

- 1 day (8 hours)
- Face-to-face or online delivery

### TOPICS COVERED

- **Structure of the satellite manufacturing industry**
  - By company: large aerospace contractors, pure players, vertically-integrated satellite operators (satop)
  - By client: government agencies and/or commercial satop
  - By product: satellite platforms, payloads and ground systems
- **Technology roadmap per type of satellite systems**
  - Geostationary communications satellites
  - Small satellite constellations for communications & Earth observation
  - Cubesats/nanosats for technology demonstration and for operational missions
- **Key players by country type**
  - Established space country
  - Emerging space country

### COURSE DIRECTOR

- Ms. Rachel VILLAIN, Principal Advisor, Euroconsult



# TOPIC 4: SPACE INDUSTRY & MARKET DYNAMICS

## MODULE 4.4: SPACE LAUNCH SERVICE MARKET & PLAYERS

### OBJECTIVE

- The objective of this course is to present the various markets and key players in space transportation, whatever the orbital destination of the spacecraft may be.
- Upon completion of this course, trainees will have learned the structure and organization of the space launch market, as well as its key players with their distinctive offerings.

### PREREQUISITES

- No higher education degree (neither technical nor business) required.

### RELATED MODULES

To be mastered

4.1

To go further

1.6, 1.7

Connected with

n/a

### TYPICAL DURATION & FORMAT

- 1 day (8 hours)
- Face-to-face or online delivery

### TOPICS COVERED

- **Structure of the space launch service industry**
  - Government-backed launch service providers
  - Privately-owned launch service companies
  - Dedicated and multi-vehicle spaceports
- **Technology roadmap per type of launch systems**
  - Heavy lift launchers
  - Medium lift launchers
  - Small launchers
- **Key success factors for launch services**
  - Anchor client
  - Launch rate
  - System's reusability
  - Spaceport

### COURSE DIRECTOR

- Mr. Maxime PUTEAUX, Principal Advisor, Euroconsult



# TOPIC 4: SPACE INDUSTRY & MARKET DYNAMICS

## MODULE 4.5: GROUND SEGMENT MARKET & PLAYERS

### OBJECTIVE

- The objective of this course is to present the various markets and key players in the ground segment of a satellite system, either to communicate with a satellite and/or to receive the data from Earth, atmospheric and scientific observation.
- Upon completion of this course, trainees will have learned the structure and organization of the ground segment market, as well as its key players.

### PREREQUISITES

- No higher education degree (neither technical nor business) required.

### RELATED MODULES

To be mastered

4.1

To go further

1.8

Connected with

### TYPICAL DURATION & FORMAT

- 0.5 day (4 hours)
- Face-to-face or online delivery

### TOPICS COVERED

- **Structure of the ground segment market**
  - Value chain in the satellite ground station market
  - Gateways for satellite communication networks
  - User terminals for satellite communication networks
  - Satellite data reception stations
- **Technology roadmap for ground stations**
  - High Throughput Satellites & broadband constellations
  - Traditional Cassegrain vs. flat electronic antennas
  - Satellite operation as a service, network digitization
- **Key players for global ground segment services**
  - Incumbent and new pure players
  - Cloud service providers
  - Vertically-integrated companies

### COURSE DIRECTOR

- Ms. Rachel VILLAIN, Principal Advisor, Euroconsult



# TOPIC 4: SPACE INDUSTRY & MARKET DYNAMICS

## MODULE 4.6: SATELLITE COMMUNICATIONS SERVICES MARKET

### OBJECTIVE

- The objective of this course is to describe qualitatively and quantitatively the various markets for satellite communications (satcom) services and their growth dynamics.
- Upon completion of this course, trainees will have learned the structure and dynamics of key market verticals for satcom services.

### PREREQUISITES

- No higher education degree (neither technical nor business) required.

### RELATED MODULES

To be mastered

4.1

To go further

1.9 to 1.12

Connected with

3.2

### TYPICAL DURATION & FORMAT

- 1 day (8 hours)
- Face-to-face or online delivery

### TOPICS COVERED

- **Overview of the satcom services market**
  - Value chain from bandwidth to managed services
  - Market players: GEO operators, constellations, service providers, end users' terminals
  - Competition and complementarity with terrestrial networks
  - Changes in satcom services: price, capacity, market access
  - Regional focus on satcom systems & service providers
- **Market dynamics by vertical**
  - Backhauling & trunking
  - Consumer broadband access
  - Enterprise & government private networks
  - Mobile connectivity (in-flight, maritime)
  - TV broadcasting

### COURSE DIRECTOR

- Mr. Xavier LANSEL, Senior Consultant, Euroconsult





# TOPIC 4: SPACE INDUSTRY & MARKET DYNAMICS

## MODULE 4.7: SATELLITE EARTH OBSERVATION SERVICES MARKET

### OBJECTIVE

- The objective of this course is to describe qualitatively and quantitatively the various markets for satellite-based Earth observation (EO) data and value-added services (VAS).
- Upon completion of this course, trainees will have learned the structure and dynamics of key market verticals for satellite Earth observation.

### PREREQUISITES

- No higher education degree (neither technical nor business) required.

### RELATED MODULES

#### To be mastered

4.1

#### To go further

1.14 to 1.16

#### Connected with

3.3

### TYPICAL DURATION & FORMAT

- 1 day (8 hours)
- Face-to-face or online delivery

### TOPICS COVERED

- **Overview of the EO services market**
  - Value chain: from satellite systems to data & VAS
  - Data producers: government & privately-owned companies
  - VAS providers
  - Regional focus on EO satellite systems and services
- **EO data and VAS market by vertical**
  - Satellite sensors and applications by vertical
- **Market dynamics by vertical**
  - Defence & maritime
  - Agriculture, natural resources & environment
  - Infrastructure & energy
  - Disaster management, insurance & finance

### COURSE DIRECTOR

- Mr. Alexis CONTE, Senior Consultant, Euroconsult



# TOPIC 4: SPACE INDUSTRY & MARKET DYNAMICS

## MODULE 4.8: SATELLITE NAVIGATION SERVICES MARKET

### OBJECTIVE

- The objective of this course is to describe qualitatively and quantitatively the various commercial markets for satellite navigation (satnav) services permitted by the global navigation satellite systems (GNSS).
- Upon completion of this course, trainees will have learned the structure and dynamics of key market verticals for satellite navigation.

### PREREQUISITES

- No higher education degree (neither technical nor business) required.

### RELATED MODULES

To be mastered

4.1

To go further

Connected with

### TYPICAL DURATION & FORMAT

- 0.5 day (4 hours)
- Face-to-face or online delivery

### TOPICS COVERED

- **Value chain for satnav services**
  - Government-funded global systems (U.S., Russia, China, and Europe)
  - Regional augmentation systems (India, Japan, ...)
  - Installed base of GNSS devices
  - VAS by vertical
- **Value added services by satnav verticals**
  - Consumer solutions (location-based services)
  - Transportation (road)
  - Other verticals (agriculture, geomatics, ...)
- **Key changes in satnav services**
  - Alternative technologies
  - In-space applications

### COURSE DIRECTOR

- Ms. Rachel VILLAIN, Principal Advisor, Euroconsult



# TOPIC 4: SPACE INDUSTRY & MARKET DYNAMICS

## MODULE 4.9: “NEW SPACE” MARKETS & PLAYERS

### OBJECTIVE

- The objective of this course is to describe the emerging markets for new space activities and new applications and/or the new players that compete/cooperate with established players.
- Upon completion of this course, trainees will have learned the key markets and players of the new space economy.

### PREREQUISITES

- No higher education degree (neither technical nor business) required.

### RELATED MODULES

To be mastered

To go further

Connected with

### TYPICAL DURATION & FORMAT

- 0.5 day (4 hours)
- Face-to-face or online delivery

### TOPICS COVERED

- **Business logic of new space markets**
  - Startup fundraising
  - Value propositions
  - Time to market
  - Existing customers or Blue Ocean Strategy
  - Creative destruction
- **Key players of the new space economy**
  - Venture capital
  - Small satellites and small launch vehicles
  - COTS satellite electronics
  - New technologies
  - Government as a customer

### COURSE DIRECTOR

- Mr. Maxime PUTEAUX, Principal Advisor, Euroconsult



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# CONTACT INFORMATION

## YOUR CONTACT POINT

Mr. Pierre VALENTI  
Senior Affiliate  
Euroconsult



## CONTACT DETAILS

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☎ +33 6 27 69 73 82 (mobile)

## CAREER ABSTRACT

Pierre VALENTI has spent most of his 25-year career in the space sector, leveraging a proven track record and practical knowledge of all key functions associated with marketing and sales at large including business planning and development, business intelligence and market research.

His previous experience includes a ten-year tenure (1999-2009) as Marketing & Sales Manager with the Telecommunications Satellites business unit of Airbus Defense & Space, Space Systems. He also acted as Arianespace's Marketing Director from 2009 to 2011.

In addition to this solid industrial experience, Mr. VALENTI also worked for such renowned consultancies as Accenture (1994-1996), Euroconsult (1996-1998) and Satconsult (2011-2012). More recently, he served as Deputy Managing Director (2012-2013), then Managing Director (2014-2019) of the Institut Aéronautique & Spatial (IAS), a training agency operating under the French Aerospace Industries Association. In 2020, he decided to join forces with Euroconsult to develop a dedicated training service offer.

Mr. VALENTI is a French national born in Paris in 1968. He has been based and working in Toulouse since 2001.



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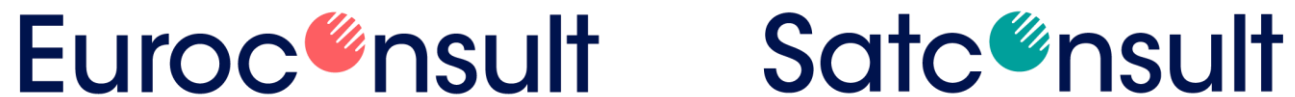
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# LEADING INDEPENDENT GROUP

Euroconsult Group is the **leading global consulting group** specializing in the **space sector** and **satellite enabled verticals**.

## Euroconsult Group



- Privately owned
- Fully independent
- 40 years of experience
- 5 global locations
- 600 clients
- A team of over 100 multidisciplinary experts



# FOUR COMPLEMENTARY ACTIVITIES



**TAILORED  
CONSULTING  
SERVICES**



**THEMATIC  
TRAINING**



**THEMATIC  
RESEARCH  
PRODUCTS**



**EXECUTIVE  
SUMMITS**

- Unique model with synergies and complementarity of our four activities
- End-to-end capability in support of our partners and clients
- Strict separation of information and respect of confidential client information.





# EUROCONSULT IN A NUTSHELL

**~80** consulting missions  
in **>20** countries every year

**15** market studies  
every year

600 clients for the range of our  
products and services

**>1000** participants to  
the *World Satellite  
Business Week*

**3 million**  
data point collected and maintained  
on the market

85% of our activity  
dedicated to export

**100 experts**  
in **5** countries

**100%**  
independent

**100%**  
dedicated to the  
space sector

Euroconsult



# EXPERTISE

Our **expertise and skills** enable us to focus on the unique requirements of each of our projects.

Our **independence** guarantees our **commitment** to optimize value creation for our clients.

## Euroconsult

Corporate strategy

Strategic assessments

Government programs & policies

Market assessment

Due diligence

Training

Feasibility studies

RFI/RFP process

Satellite & ground segment construction monitoring

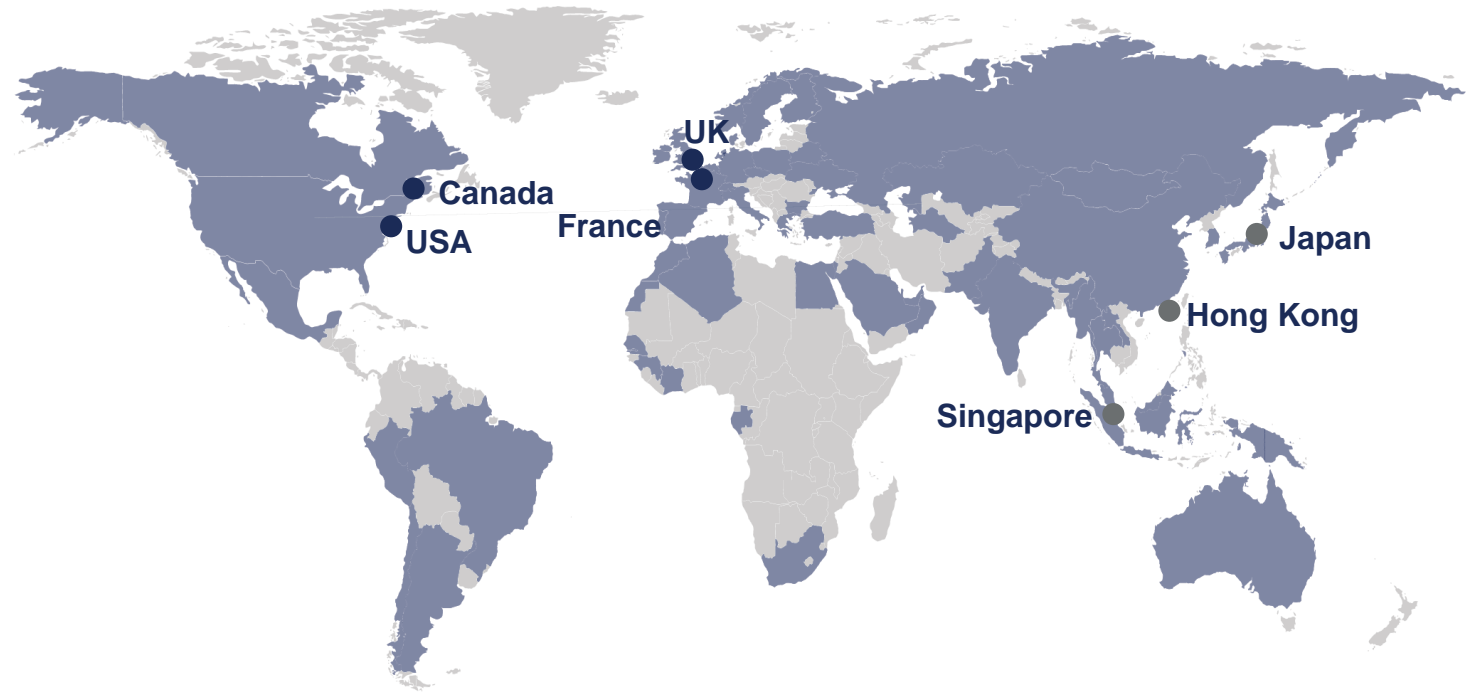
Program management & operations support

Sateconsult  
Member of Euroconsult Group



# OUR CLIENTS

600 clients in 50 countries – 5 global locations



- Countries in which clients are based
- Office locations
- Representatives



# OUR LEADERSHIP

**Pacôme Révillon**  
CEO

Euroconsult CEO since 2004  
20 years of experience in strategic and financial oriented process in the space industry



**Steve Bochinger**  
COO

Part of EC Executive team since 2004  
20 years of experience ; lead role for institutional and industrial affairs



**David Chégnion**  
Managing Director, Satconsult

Satconsult MD since 2018  
25 years of experience in the space industry, with executive positions in leading aerospace groups



**Lorraine Whitfield**  
Chief Events & Marketing Officer

Part of EC Executive team since 2008  
20 years of experience in events organization, marketing and sales



Experienced  
& international  
management team

**Nathan de Ruiter**  
Managing Director, Canada

Part of EC Executive team since 2008  
15 years of experience in strategic and financial oriented process



**Susan Irwin**  
Managing Director, USA

Part of EC Executive team since 2010, 35 years of experience in the telecom and space industry



**Laurent Valignon**  
VP Business Development, Satconsult

Part of SATC Executive team since 2008  
20 years of experience in the space sector

