

Euroconsult Group
Training

Introducing Euroconsult Group's space training service offering

2022 | 2023

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Business line development rationale

From evolving market needs...

- Customers seek **less frequently dry content purchase** – while requesting **more interactive content and in-house knowledge development**
- **Multiplication/diversification of space sector's players worldwide** looking for **capacity/knowledge building opportunities**
- Training gradually growing into a **key lever for skills development** that goes far beyond the mere acquisition of space infrastructure
- Space industry players offering training solutions as an **essential tool for customer relationship management**

...to inherent internal synergies

- Training stands at the **crossroads of our services**
- **Leverages** a unique combination of in-house skills and expertise
- **Fully synergetic initiatives and solutions** delivering unique value to our customers
- **Building upon Euroconsult's and Satconsult's long experience** in delivering ad-hoc training modules, workshops and presentations to space stakeholders worldwide



General service approach

Our training service offering 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

Key customer benefits



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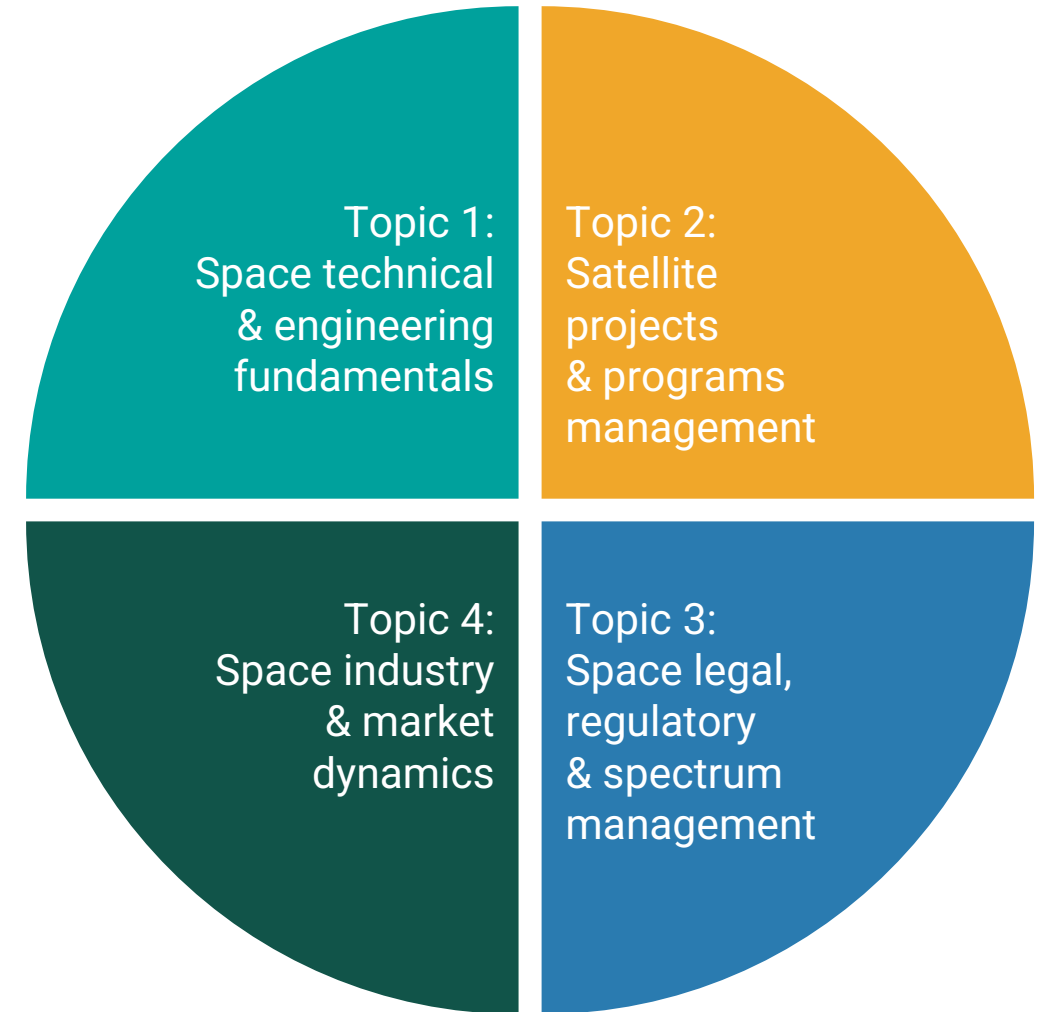
From training topics to delivery modes

Our training service offering is based upon **four main topics** covering, through **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 & spectrum management
- Space industry & market dynamics

Related contents are available in **two alternative modes** depending upon customer objectives, requirements, and constraints:

- Pre-packaged
- Customized



Training catalog overview

	Topic 1: Space technical & engineering fundamentals	Topic 2: Satellite projects & programs management	Topic 3: Space legal, regulatory & spectrum management	Topic 4: Space industry & market dynamics
Nb. of training modules	17	7	5	9
Typical module duration range*	0.5 to 2 days	0.5 to 2 days	1 to 3 days	1 to 2 days
Typical contents	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, market perspectives and trends
Available delivery formats	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.

Training catalog details

Structured along a topic-by-topic basis, the following slides provide **an overview of each of our 38 individual training modules** in terms of:

- Objectives
- Prerequisites
- Related modules
- Typical duration
- Topics covered
- Module 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**

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

MODULE 4.1: Introduction to the global space industry & markets

OBJECTIVE

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

PREREQUISITES

- No specific higher education degree (neither technical nor business) is required to attend this module.

RELATED MODULES

To be mastered

To go further

Connected with

1.1, 1.2

TYPICAL DURATION

- 1 day (8 hours)

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

MODULE DIRECTOR

- Ms. Rachel VILLAIN, Principal Advisor, Euroconsult

MODULE 4.2: Government space policies, governance & financing

OBJECTIVE

- The objective of this module 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 module, trainees will have a better understanding of the key government investors in space and of their rationale for space development.

PREREQUISITES

- No specific higher education degree (neither technical nor business) is required to attend this module.

RELATED MODULES

To be mastered
4.1

To go further

Connected with
3.1

TYPICAL DURATION

- 1 day (8 hours)

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

MODULE DIRECTOR

- Mr. Simon SEMINARI, Principal Advisor, Euroconsult

MODULE 4.3: Satellite manufacturing market & players

OBJECTIVE

- The objective of this module 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 module, 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 specific higher education degree (neither technical nor business) is required to attend this module.

RELATED MODULES

To be mastered
4.1

To go further
2.4

Connected with
n/a

TYPICAL DURATION

- 1 day (8 hours)

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 roadmaps 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

MODULE DIRECTOR

- Ms. Rachel VILLAIN, Principal Advisor, Euroconsult

MODULE 4.4: Space launch service market & players

OBJECTIVE

- The objective of this module 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 module, 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 specific higher education degree (neither technical nor business) is required to attend this module.

RELATED MODULES

To be mastered
4.1

To go further
1.6, 1.7

Connected with
n/a

TYPICAL DURATION

- 1 day (8 hours)

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

MODULE DIRECTOR

- Ms. Rachel VILLAIN, Principal Advisor, Euroconsult

MODULE 4.5: Ground segment market & players

OBJECTIVE

- The objective of this module 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 module, trainees will have gone through the structure and organization of the ground segment market, as well as its key players.

PREREQUISITES

- No specific higher education degree (neither technical nor business) is required to attend this module.

RELATED MODULES

To be mastered
4.1

To go further
1.8

Connected with

TYPICAL DURATION

- 1 day (8 hours)

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

MODULE DIRECTOR

- Ms. Rachel VILLAIN, Principal Advisor, Euroconsult

MODULE 4.6: Satellite communications services market

OBJECTIVE

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

PREREQUISITES

- No specific higher education degree (neither technical nor business) is required to attend this module.

RELATED MODULES

To be mastered
4.1

To go further
1.9 to 1.12

Connected with
3.2

TYPICAL DURATION

- 1 day (8 hours)

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

MODULE DIRECTOR

- Mr. Dimitri BUCHS, Senior Consultant, Euroconsult

MODULE 4.7: Satellite Earth observation services market

OBJECTIVE

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

PREREQUISITES

- No specific higher education degree (neither technical nor business) is required to attend this module.

RELATED MODULES

To be mastered
4.1

To go further
1.14 to 1.16

Connected with
3.3

TYPICAL DURATION

- 1 day (8 hours)

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

MODULE DIRECTOR

- Mr. Alexis CONTE, Senior Consultant, Euroconsult

MODULE 4.8: Satellite navigation services market

OBJECTIVE

- The objective of this module 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 module, trainees will have learned the structure and dynamics of key market verticals for satellite navigation.

PREREQUISITES

- No specific higher education degree (neither technical nor business) is required to attend this module.

RELATED MODULES

To be mastered
4.1

To go further

Connected with

TYPICAL DURATION

- 0.5 day (4 hours)

TOPICS COVERED

- **Value chain for satnav services**
 - Government-funded global systems (U.S., Russia, China, 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

MODULE DIRECTOR

- Ms. Rachel VILLAIN, Principal Advisor, Euroconsult

MODULE 4.9: “New space” markets & players

OBJECTIVE

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

PREREQUISITES

- No specific higher education degree (neither technical nor business) is required to attend this module.

RELATED MODULES

To be mastered
4.1

To go further

Connected with

TYPICAL DURATION

- 0.5 day (4 hours)

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

MODULE DIRECTOR

- Mr. Maxime PUTEAUX, Principal Advisor, Euroconsult

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Contact details



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References & achievements

- Designed and/or managed the successful implementation of more than 50 training programs for space stakeholders worldwide over the past decade (2012-2022), including: ADD (South Korea), AEB (Brazil), Azercosmos (Azerbaijan), Bank Rakyat Indonesia (Indonesia), CONIDA (Peru), GMV (Spain), MEASAT Satellite Systems (Malaysia), MTCIT (Oman), Türksat (Turkey)...
- Designed and continuously upgraded Euroconsult's training service offering since 2020.

Career abstract

- Pierre VALENTI (<https://www.linkedin.com/in/pierrevalenti>) has spent most of his 28-year career in the space sector, leveraging a proven track record in such key functions as business planning, business development, business intelligence, market research and training.
- His previous professional 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, Pierre 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 aegis of GIFAS, the French aerospace industries association.
- In 2020, he decided to join forces with Euroconsult to structure and develop a dedicated training service offering (<https://www.euroconsult-ec.com/training>).

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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
- 7 global locations
- 600 clients
- A team of over 100 multidisciplinary experts

Clients



Governmental & international organizations



Financial institutions & insurance



Service providers



Satellite operators



End users

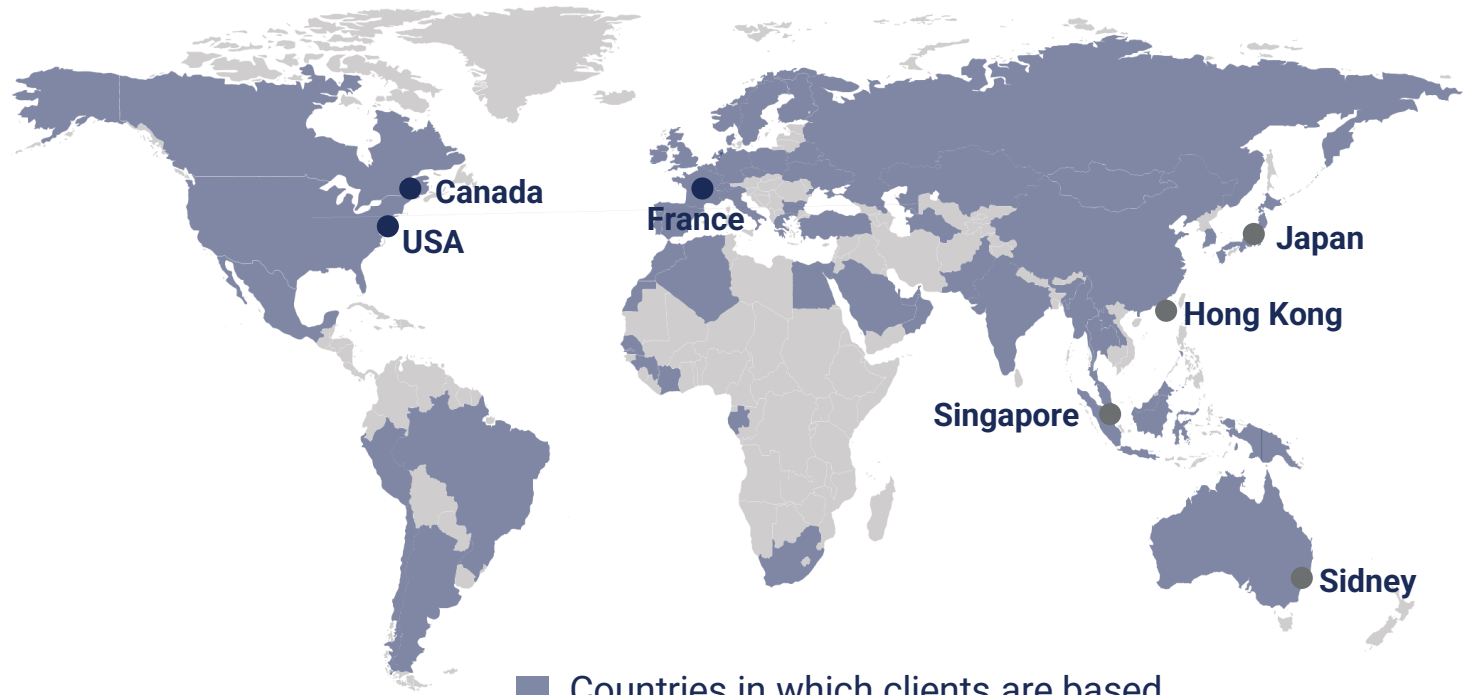


Satellite & equipment manufacturers



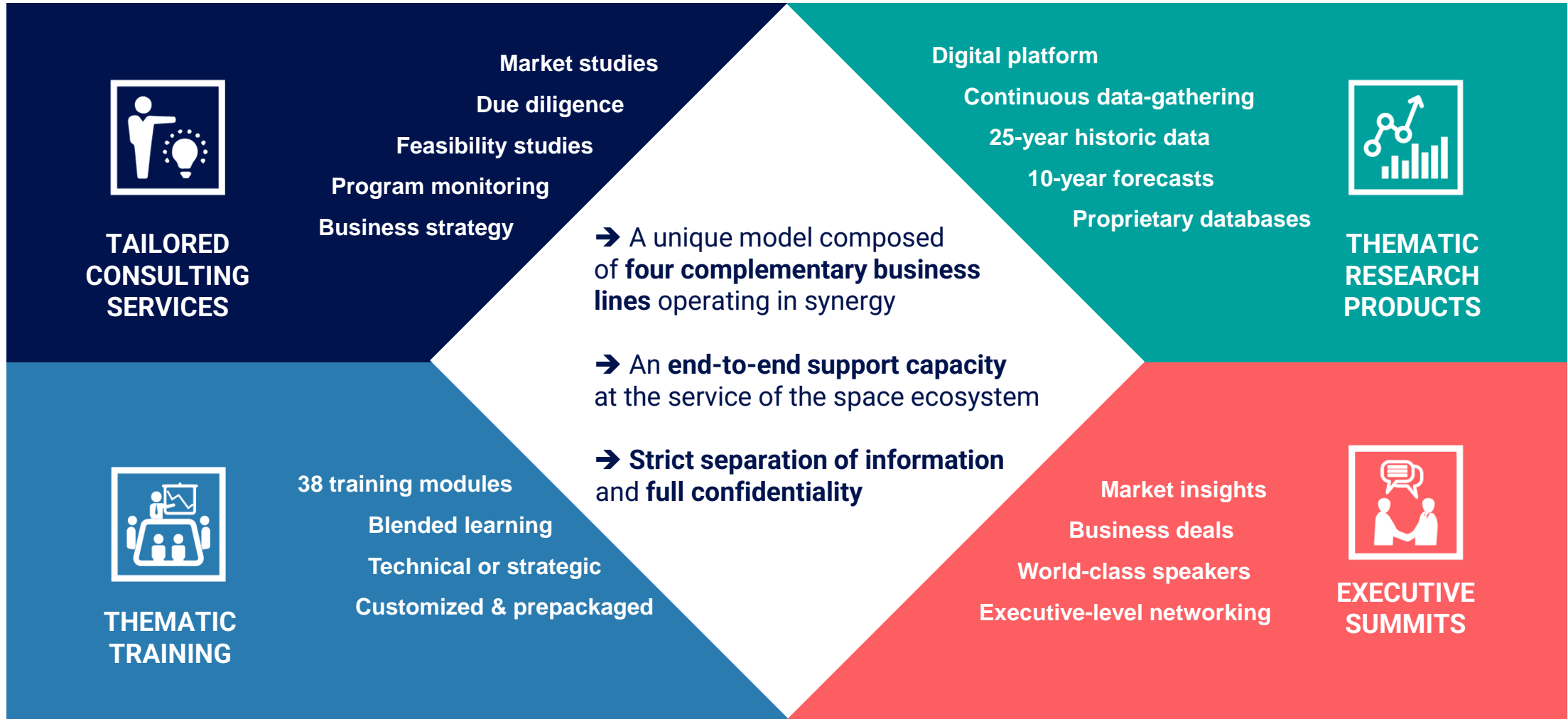
Launch service providers

600 clients in 50 countries
7 global locations



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

Business lines



Euroconsult Group

Training



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