INTRODUCING
THE EUROCONSULT GROUP
SPACE TRAINING SERVICE OFFER

TOPIC 2:
SATELLITE PROJECTS & PROGRAMS MANAGEMENT

2020 | 2021
• Whatever their form or origin, space infrastructure ambitions and related procurements follow less and less frequently « dry » or « blind » purchase rationales, as:
  o 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
  o 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:
  o Fostering inherent skills and a buildup of how-how
  o Gaining independence
  o Installing greater prominence, visibility and credibility amongst the international space community
GENERAL SERVICE APPROACH (1/2)

• 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:
  o Interdisciplinary training on all key aspects of the space industry: technical, markets, program management, etc.
  o Ability to benefit from prepackaged programs or create a customized program
  o Benchmarking, profiling, best practices and lessons learned from key players of the space sector
  o Possibility to organize tours of government and private industry facilities and meetings with international executives and officials
  o 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
  o 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)

TARGETED AUDIENCES

• Typical customers:
  o Satellite operators
  o Government organizations
  o Service providers
  o Financial institutions
  o Satellite manufacturers
  o Launch service providers

• Typical attendees:
  o Executives
  o Middle managers
  o Program managers
  o Operators
  o 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.:
  o Space technical & engineering fundamentals
  o Satellite projects & programs management
  o Space legal, regulatory and spectrum management
  o Space industry & market dynamics

• ...available in **two alternative delivery modes** depending upon customer objectives, requirements, and constraints, i.e.:
  o Pre-packaged
  o Customized
## TRAINING CATALOG OVERVIEW

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<td>Space program management topics, from business planning to risk management assessment</td>
<td>Legal, regulatory and frequency challenges impacting business plans, investment and programs</td>
<td>Space industry policy and market perspectives and trends</td>
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* Depending upon customer objectives, requirements, and constraints.
• Structured along a topic-by-topic basis, the following slides provide an overview of each of our 7 individual training modules in terms of:
  o Objectives
  o Prerequisites
  o Related modules
  o Typical duration and delivery format
  o Topics covered
  o 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 2: SATELLITE PROJECTS & PROGRAMS MANAGEMENT

TRAINING MODULES LIST

2.1 Satellite mission technical roadmap: from concept to operations
2.2 Satellite project business plan definition
2.3 Satellite project financing
2.4 Satellite program tender management
2.5 Satellite program contract negotiations & management
2.6 Satellite industrial contract management
2.7 Satellite program risk management & insurance
OBJECTIVE

• This course will propose a complete roadmap for the development of a satellite system.

• Upon completion of this course, trainees will understand the general process to be conducted for the end-to-end development of such a system, including design, procurement, integration, deployment and validation phases.

PREREQUISITES

• In order to take full advantage of this course, trainees should have some knowledge of a space systems' architecture and operational concept, related contract negotiations and management of its development follow-up.

RELATED MODULES

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TOPICS COVERED

• General program conduction roadmap
  - High-level program development timeline
  - High-level description of each phase

• Project feasibility phase
  - Business assessment
  - Regulatory assessment
  - Technical feasibility, architecture and cost estimate
  - Business models definition

• Procurement phase
  - Contractual breakdown
  - Tender development

• Development, deployment and verification phase
  - Development monitoring scheme
  - Progressive validation principles

TYPICAL DURATION & FORMAT

• 0.5 to 1 day (4-8 hours)
• Face-to-face or online delivery

COURSE DIRECTOR

• Mr. Yann LE DU, Technical Advisor, Satconsult

MODULE 2.1: SATELLITE MISSION TECHNICAL ROADMAP: FROM CONCEPT TO OPERATIONS
TOPIC 2: SATELLITE PROJECTS & PROGRAMS MANAGEMENT

MODULE 2.2: SATELLITE PROJECT BUSINESS PLAN DEFINITION

OBJECTIVE

- This course will include a review of the key elements to support the development of a business plan. Versions of this module will be based on the type of satellite activity (such as connectivity, earth observation).
- Upon completion of the course, trainees will have acquired the skill to develop a business plan for the satellite project including financial forecasts.

PREREQUISITES

- In order to take full advantage of this course, trainees should have some knowledge of space systems and services, and of economics and financial metrics.

RELATED MODULES

- **To be mastered**: 2.1
- **To go further**: 2.2 to 2.7
- **Connected with**: 1.3, 4.6, 4.7

TYPICAL DURATION & FORMAT

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

TOPICS COVERED

- **General business plan development roadmap**
  - High level Business Plan development timeline
  - High level description of each phase
- **Market assessment and top line assessment**
  - Assessing demand dynamics in target markets
  - Competitive assessment
  - Business Models definition
  - Market prioritization and revenue forecast
- **Capital expenditure and operating costs**
  - Capex components with main principles
  - Review of the main components of the operating costs
- **Financial modelling, financial structuring**
  - Revenue and cash flow modelling
  - Profitability performance ratios

COURSE DIRECTOR

- Mr. Nathan DE RUITER, Managing Director, Euroconsult
**TOPIC 2: SATELLITE PROJECTS & PROGRAMS MANAGEMENT**

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**MODULE 2.3: SATELLITE PROJECT FINANCING**

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**OBJECTIVE**

- This course will complete the module on the business plan development. It will focus on the usual structuring of a satellite financing process.

- Upon completion of the course, trainees will have acquired the full understanding on financing processes for satellite programs.

**PREREQUISITES**

- In order to take full advantage of this course, trainees should have some knowledge of space programs, of economics and financial metrics, of balance sheet principles and on general sources of financing.

**RELATED MODULES**

- To be mastered: 2.1, 2.2
- To go further: 2.3 to 2.7

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**TOPICS COVERED**

- Overview of potential sources of financing
  - Typical sources of financing vs. the type of program
  - Overview of the general process
  - Review of a potential financial roadmap

- Equity raising
  - Typical financing rounds for satellite programs
  - Key success factors and typical conditions

- Debt raising
  - Main sources of debt financing, including export credit
  - Process review and key success factors

- Other options for financing and capex optimization
  - Strategic partnership with a third party on the satellite system
  - Other forms of structured transactions

**TYPICAL DURATION & FORMAT**

- 0.5-1 day (4-8 hours)
- Face-to-face or on-line delivery

**COURSE DIRECTOR**

- Mr. Nathan DE RUITER, Managing Director, Euroconsult
TOPIC 2: SATELLITE PROJECTS & PROGRAMS MANAGEMENT

MODULE 2.4: SATELLITE PROGRAM TENDER MANAGEMENT

OBJECTIVE
• The objective of this course is to outline the main principles and specifics unique to satellite system procurement.
• Upon completion of this course, trainees will understand the key capabilities to structure and run a satellite program tender phase.

PREREQUISITES
• In order to take full advantage of this course, trainees should have some knowledge of a space system’s architecture, satellite program contract negotiations and management, as well as a space system’s development logic.

RELATED MODULES
To be mastered To go further Connected with
2.1 2.2, 2.3, 2.5, 2.6, 2.7

TYPICAL DURATION & FORMAT
• 0.5 to 1 day (4-8 hours)
• Face-to-face or online delivery

TOPICS COVERED
• Introduction to the procurement process
  o Upstream phases: from concept to feasibility assessment
  o The role of the Request for Information (RFI)
• Tender phase preparation
  o Tender type: from negotiated to open tender
  o Preparation of a Request for Proposal (RFP) package
  o Key components (contract, statement of work, technical appendices, instruction to bidders)
  o Tender planning
  o Defining the tender evaluation and shortlisting process
• Managing the tender
  o Main phases
  o Interactions with bidders
  o Evaluation, ranking and down selection
  o Negotiation phase: the role of BAFO and negotiation rounds

COURSE DIRECTOR
• Mr. Laurent VALIGNON, VP Business Development and Program Management, Satconsult
OBJECTIVE

• The objective of this course is to outline the main principles and specifics unique to satellite and launch services contracts.

• Upon completion of this course, trainees will have acquired the capabilities to steer the performance of a project based on an international turnkey contract.

PREREQUISITES

• In order to take full advantage of this course, trainees should have some knowledge of a space system’s architecture, management, and development logic.

RELATED MODULES

To be mastered

To go further

Connected with

2.1

2.2, 2.3, 2.4, 2.6, 2.7

TYPICAL DURATION & FORMAT

• 1 day (8 hours)

• Face-to-face or online delivery

TOPICS COVERED

• Structure of a satellite contract
  o Types of contracts
  o The concept of “turnkey contracts”
  o What a contract must say
  o Three key concepts
  o Summary of contract terms
  o Contract and project performance
  o Signature and EDC

• Satellite contract management
  o Everything goes smoothly
  o In the event a party cannot fulfil its obligations

• Launch services contract overview

COURSE DIRECTOR

• Mr. Jean-Pierre NOTE, Contract and Risk Management Expert, Satconsult
TOPIC 2: SATELLITE PROJECTS & PROGRAMS MANAGEMENT

MODULE 2.6: SATELLITE INDUSTRIAL CONTRACT MANAGEMENT

OBJECTIVE

• The objective of this course is to outline the main principles and specifics pertaining to the management of the manufacturing phase of a space program

• Upon completion of this course, trainees will have acquired the main principles and best practices applied in the frame of the management of the design, construction and deployment of a space program

PREREQUISITES

• In order to take full advantage of this course, trainees should have some knowledge of a space system’s architecture, satellite program contract negotiations and management, as well as a space system’s development logic

RELATED MODULES

To be mastered

To go further

Connected with

2.1

2.2, 2.3, 2.4, 2.5, 2.7

TOPICS COVERED

• Introduction to a satellite program

• Procurement and main contract

• Organization
  o Company & program
  o Work breakdown structure
  o Program management plan

• Management
  o Delegation, reporting, decision process
  o Program phase: meetings and reviews
  o Mission quality and performance
  o Schedule & cost management
  o Risk management
  o Monitoring of human relationships, external suppliers, anomalies, interfaces, contractual change notices, deviations, waives, etc.

TYPICAL DURATION & FORMAT

• 1 to 2 days (8-16 hours)

• Face-to-face or online delivery

COURSE DIRECTOR

• Mr. Vincent ASTIER, Senior Project Manager and Platform/Launch System Expert, Satconsult
**TOPIC 2: SATELLITE PROJECTS & PROGRAMS MANAGEMENT**

**MODULE 2.7: SATELLITE PROGRAM RISK MANAGEMENT & INSURANCE**

**OBJECTIVE**

- The objective of this course is to outline the main principles of satellite program risk management and space program insurance.

- Upon completion of this course, trainees will have learned the fundamentals of satellite project risk management, insurance organization, players, services and operational management.

**PREREQUISITES**

- In order to take full advantage of this course, trainees should have some knowledge of a space system’s architecture and development logic.

**RELATED MODULES**

- To be mastered: 2.1, 2.5, 2.6
- To go further: 2.2, 2.3, 2.4
- Connected with: 2.2, 2.3, 2.4

**TYPICAL DURATION & FORMAT**

- 0.5 to 1 day (4-8 hours)
- Face-to-face or online delivery

**TOPICS COVERED**

- Risks to be covered
- Satellite project risk management
  - Typology of risks
  - Risk management strategies
  - Risks associated with project phases
- Space insurance market
- Factors impacting the insurance cost
- Operational approach
  - Broker selection
  - Risk management strategy
  - Insurance coverage
- Case studies

**COURSE DIRECTOR**

- Mr. Jean-Pierre NOTE, Contract and Risk Management Expert, Satconsult
CONTENTS

- Our Training Service Offer In A Nutshell
- Topic 2: Satellite projects & programs management
- Contact Information
- Euroconsult Group Presentation
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.
CONTENTS

Our Training Service Offer In A Nutshell

Topic 2: Satellite projects & programs management

Contact Information

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

LEADING INDEPENDENT GROUP

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

- 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
- >1000 participants to the *World Satellite Business Week*
- 3 million data points collected and maintained on the market
- 600 clients for the range of our products and services
- 100 experts in 5 countries
- 100% independent
- 100% dedicated to the space sector
- 85% of our activity dedicated to export

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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.
600 clients in 50 countries – 5 global locations

- Government
- Financial institutions
- Service providers
- Satellite operators
- End-users
- Manufacturers
- Launch service providers

Countries in which clients are based:
- Canada
- USA
- France
- UK
- Japan
- Hong Kong

Office locations
Representatives

600 clients in 50 countries – 5 global locations
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

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

Experienced & international management team