



Euroc  **nsult**

The essential tool for business
planning & investment decisions
in the ground segment industry

**Ground Segment
Market Prospects**
Forecasts to 2028s

euroconsult-ec.com

GROUND SEGMENT MARKET PROSPECTS PART 1, FORECASTS TO 2028

nsult GROUND SEGMENT MARKET PROSPECTS

© Euroconsult 2019 - Unauthorized reproduction is a copyright violation

The commercial satellite ground segment market, including satcom applications, EO applications and user terminals for satcom applications, is going through significant expansion in terms of both capabilities and demand and will grow from \$264 million in 2018 to nearly \$360 million in 2028. The aggregated market value in the next decade is expected to achieve \$4 billion. The initial Euroconsult report covers only large gateways, while the second part of the report dedicated to user terminals will be published in several months.

2018 has entailed a point of inflexion in the ground segment industry with the preparation of the OneWeb ground network, the launch of additional HTS systems and the need of further ground stations to provide connectivity with EO constellations. After some years of market consolidation in the teleport industry for satcom applications, the number of ground sites is expected to grow from 2019 driven by new installations in emerging regions. In the EO ground segment, the number of ground stations is steadily growing to serve the increasing demand on EO data and value-added services.

In the last five years, numerous companies have announced new satcom and EO satellite solutions, largely based on constellation projects but also on large HTS systems, aiming to capture new customers. Their feasibility and sustainability are usually focused on the space segment, whereas their business cases need to evaluate them as end-to-end systems, including the ground segment that will be required. Their ground segment CAPEX and OPEX is not negligible and will have an impact on the market adoption of these solutions. Finding a sweet spot between space segment performance, ground segment features, along with service provided and price, will be key for the success of new EO and satcom satellite systems.

The space sector is pushing for substantially more productive satellite infrastructure and ground segment at a lower cost. This trend is expected to intensify over the next decade, coupled with an increasing push for standardization in satellite manufacturing and ground segment equipment. New technological developments (notably SaaS) seek a more productive infrastructure with the aim of making lower cost end-to-end services.



ABOUT GROUND SEGMENT MARKET PROSPECTS

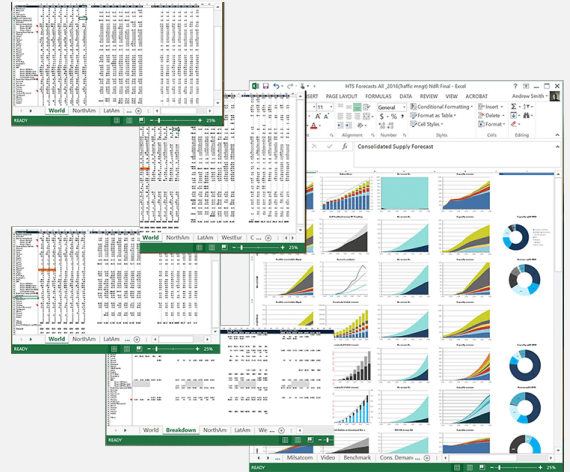
Ground Segment Market Prospects: Part 1, Forecasts to 2028 covers the different application chains in the ground segment including both satcom and EO applications. **Part 2 of the report, due to be published later in 2019, is dedicated to user terminals.**

EXTENSIVE FIGURES & ANALYSIS FOR THE COMING DECADE

All Euroconsult reports have, at their core, data derived from over 30 years of tracking all levels of the satellite/space value chain. To this we add dozens of dedicated industry interviews each year, along with the continual refinement of our data models, and the collection and interpretation of company press releases and financial filings. Our consultants have decades of experience interpreting and analyzing our proprietary databases in light of the broader value chain.

When you purchase research from Euroconsult, you receive thousands of data points and the expert interpretation of what this means for specific verticals and sectors of the satellite value chain, including forecasts based on years of data and highly refined models.

This report contains thousands of data points.



METHODOLOGY:

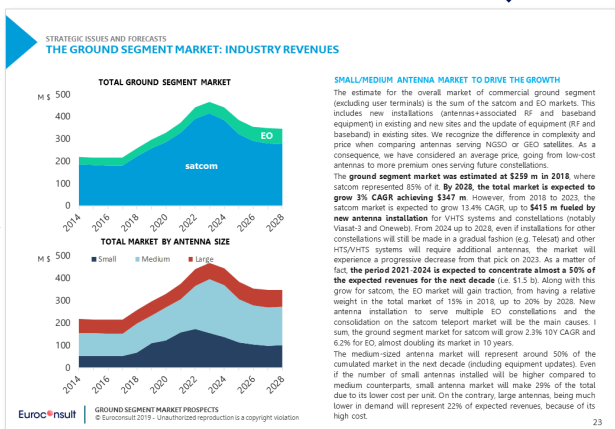
The analysis, data and estimates of this report rely on multiple information sources, including:

- A proprietary database on EO and satcom satellites, such as for user terminals, built over the last ten years that includes several million data points on the overall space sector; we enrich and refine this database on a yearly basis.
- A dedicated ground site data bank, from different sources, validated almost individually by visual inspection of each using Google Maps.
- More than 30 international events that we cover involving satellite communications, EO and different application segments.
- A review of industrial, commercial and financial information for relevant stakeholders across the value chain, including teleport operators, satellite operators, service providers and industrial players.
- Dedicated interviews with stakeholders located in the different regions.

REPORT STRUCTURE

ANALYSIS

REFERENCE INDICATORS



WHO WILL BENEFIT FROM THIS REPORT:

- ✓ Ground equipment manufacturers
- ✓ User terminal manufacturers
- ✓ Satellite operators
- ✓ Ground segment service providers
- ✓ Investors
- ✓ Space agencies
- ✓ Other government institutions



TABLE OF CONTENTS

INTRODUCTION

- Executive summary
- Objectives, scope & segmentation
- Definitions
- Methodology
- Selected acronyms

1 STRATEGIC ISSUES & FORECASTS

- The importance of the ground segment
- Typical ownership and location of antennas
- Overview of end-to-end satellite communication elements
- Perimeter of communication elements included in this report
- Satcom ground segment market: Key market forces
- Satcom ground segment market: Technology roadmap
- EO ground segment market: Key market forces
- EO segment market: Technology roadmap
- The ground segment market: Sites
- The ground segment market: Antennas
- The ground segment market: New antennas
- The ground segment market: Industry revenues
- World map of ground station distribution (2018 data)
- Ground segment market – Growth matrix
- Synthesis of strategic trends for the value chain/ecosystem: key business drivers
- Synthesis of strategic trends for the value chain/ecosystem: Additional issues
- Industry main stakeholders



TABLE OF CONTENTS - CONTINUED

2.1 GROUND SEGMENT FOR SATCOM APPLICATIONS

- Satcom ground segment value chain
- Overview of satcom satellites by frequency
- Overview of main satcom broadband constellations
- Technology trends for satcom ground sites
- Euroconsult's estimates on satcom demand
- Quantification of satcom ground segment sites
- Quantification of satcom ground segment antennas
- Geographical intensity coverage of satcom antennas: Areas of interest
- Satcom ground segment sites: Impact of constellations
- Quantification of new satcom ground segment antennas
- Satcom ground segment sites: Case studies on cost
- Satcom ground segment: Cost distribution
- Satcom ground segment sites: Cost per equipment type
- Satcom ground segment sites: Overall cost estimates
- Market forecasts for satcom ground segment sites

2.2 GROUND SEGMENT FOR EO APPLICATIONS

- EO ground segment value chain
- Overview of EO satellites by frequency
- Overview of main EO constellations
- Technology trends for EO ground sites
- Euroconsult's estimates on EO demand
- Quantification of EO ground segment sites
- Quantification of EO ground segment antennas
- Geographical intensity coverage of EO antennas: Areas of interest
- Case study: Optimal zone location for optical ground segment (OGS)
- Quantification of new EO ground segment antennas
- EO ground segment sites: Case studies on cost
- EO ground segment: Cost distribution
- EO ground segment sites: Cost per equipment type
- EO ground segment sites: Overall cost estimates
- Market forecasts for EO ground segment sites

Note: table of contents will be updated, including the user terminal section, in the second release of this report within a few months



ORDER FORM

(1/2) (COPYRIGHT ON REVERSE SIDE IS MANDATORY)

GROUND SEGMENT MARKET PROSPECTS: PART 1, FORECASTS TO 2028

Please complete this form and return by e-mail to reports@euroconsult-ec.com or by fax to + 33 1 48 05 54 39. If you have any questions about ordering, would like to enquire about specific corporate licenses or would like to order for multiple locations and/or legal entities, please contact reports@euroconsult-ec.com or call +1 (514) 903-1001. **All prices are in Euros. All orders must be prepaid** (if not possible, please contact us). Applicable VAT taxes will be added in Euros.

1

Product		Price	Total
eFiles (Including a PDF of the report)		€ 4,500	
Additional eFiles license	Qty:	€ 450	
Enterprise license		€ 11,250	
VAT if applicable companies based in France must add VAT 20%			
Product Total in Euros (€)			

3

Accounting Dept. E-mail: _____

4

Invoicing Address (Please use capital letters)

First name _____

Last name _____

Company name _____

Occupation _____

Address _____

Zip Code _____ City _____

State _____ Country _____

Phone _____ Fax _____

E-mail _____

2

Payment Information

Company VAT n° (required for all companies) _____

Credit Card

Please check credit limit with bank prior to submitting form.

VISA MasterCard AMEX

Cardholder Name (as it appears on card) _____

Cardholder Number _____

Expiration Date (month/year) | Cryptogram (last 3 digits on the back) _____

Cardholder's Signature _____

Bank Transfer

(All bank charges are to be paid by the sender)

to EUROCONSULT, please NOTE IMPERATIVELY:

Swift-BIC code: CM CI FR PP

IBAN: FR76 3006 6109 1500 0200 6760 132

Account n° 00020067601

CIC Nanterre Enterprises, 105 Rue des 3 Fontanot, 92022 Nanterre Cedex, France.

Cheque or Money Order Enclosed

Payable to Euroconsult:

86 Blvd. Sebastopol, 75003 Paris, France

5

Delivery Address (If different from invoicing address)

First name _____

Last name _____

Company name _____

Occupation _____

Address _____

Zip Code _____ City _____

State _____ Country _____

Phone _____ Fax _____

E-mail _____



COPYRIGHT AGREEMENT

(2/2) (COPYRIGHT ON REVERSE SIDE IS MANDATORY)

GROUND SEGMENT MARKET PROSPECTS: PART 1, FORECASTS TO 2028

Please complete and return the order form & copyright agreement by e-mail to reports@euroconsult-ec.com or fax to + 33 1 48 05 54 39. Each team user must sign a copy of the copyright agreement. Please complete the information below for each user of the research files.

Please read this license agreement carefully.
By using the research files, you are agreeing
to adhere by the terms of this license.

SINGLE USER LICENSE

a) This product is licensed only for a team working together on a project, working on the same site in the same company. The person signing this agreement is responsible for the use of the research files. Euroconsult must be informed of all users of the research files before use. The information may not be shared with other company sites or other work teams in the same or other companies in any form, neither photocopied nor reproduced, including for internal use. The content of the research files may not be stored, transferred, or copied to any type of electronic storage device.

b) No part or extract, in any format whatsoever, must be transmitted to any other organization, including cooperative entities and subsidiaries. All licenses purchased at the additional license price are for internal use only by the organization ordering (same company name, same location as indicated on original order form). Euroconsult must be informed of the users of the additional licenses purchased.

c) All data or information extracted from the research files for use in other documents must rightfully use the copyright reference: *Euroconsult, name of report, year*. Before any other use of the information contained in the research files, prior written consent by Euroconsult is required.

d) This Agreement shall in all respects be governed by the laws of the Republic of France. The user agrees that the proper jurisdiction and forum for the resolution of any claim arising under this license shall be at Euroconsult's sole option.

Research Report User

First name _____

Last name _____

Company _____

Occupation _____

E-mail _____

Date _____

SIGNATURE: _____

Research Report User (For additional user)

First name _____

Last name _____

Company _____

Occupation _____

E-mail _____

Date _____

SIGNATURE: _____