



PRODUCTION OF SATELLITES AND EQUIPMENT FOR SATELLITES

PROJECT

For implementation there is provided a project on manufacturing of satellites and equipment for satellites.

The project is considered promising due to the following reasons:

- **Military complex, telecommunication sector and navigation services companies** are the largest consumers of satellites and equipment for satellites now.
- **189.5 billion USD** was a volume of global satellites and services market in 2012. **Satellites market has tripled** since 2001.
- Euroconsult suppose that **1220 satellites** will be constructed by 2019. Revenues from the production and launch of 1220 satellites experts estimate 194 billion USD.
- Belarus has a successful experience in the contraction and launch of the satellite.
- Manufacturing of satellites and equipment for satellites is oriented on the **BRIC countries, CIS countries and Gulf countries markets**.
- **Capex** varies between **USD 100-500 mn, IRR 25-40%**.

Markets

Foreign markets:

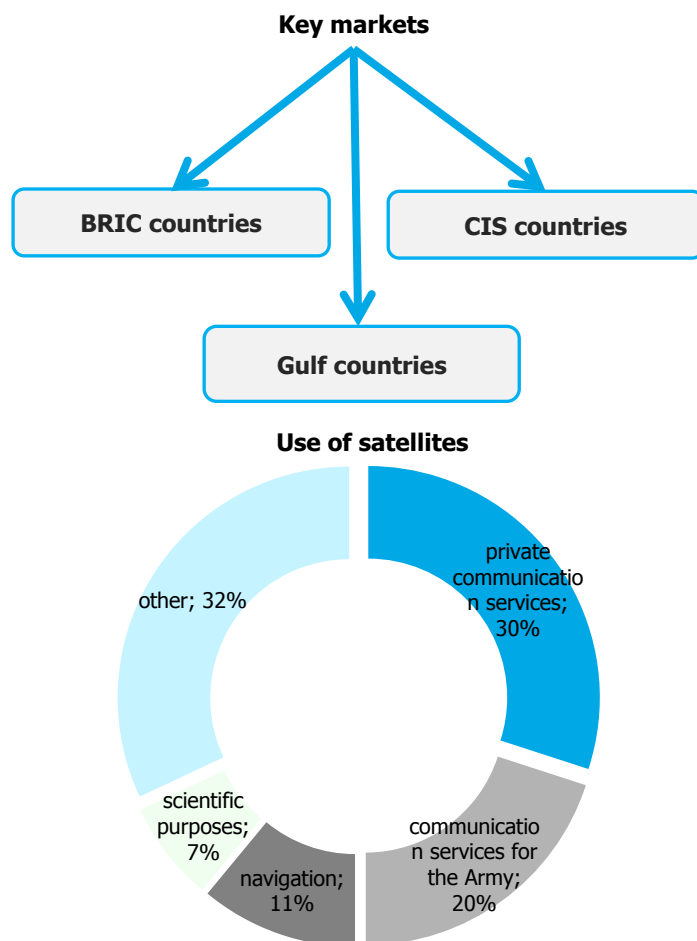
- **BRIC countries, CIS countries and Gulf countries** are the key markets for satellites and equipment for satellites.
- **USA (32%), China (23%) and EU (22%)** are the largest satellites markets in the world.
- **62%** is a share of commercial satellites in the USA. Military satellites dominate Russian market.
- Rapid growth is expected in commercial satellites segment.
- **Military complex, telecommunication sector and navigation services companies** are the largest consumers of satellites and equipment for satellites now.

Russian market:

- **16%** is a share of Russian Federation in global satellites market.

Market of China:

- **By 2020 China** plans to reach **15%** from global satellites market.



MARKET OPPORTUNITIES

Global opportunities:

- **189.5 billion USD** was a volume of global satellites and services market in 2012. **Satellites market has tripled** since 2001.
- **7% was CAGR** of global satellites and services market for last 5 years.
- **The USA own 41.2%** of all the satellites.
- **14.6 billion USD** was a volume of global satellites and equipment for satellites production in 2012. **9% was CAGR** for last 5 years.
- Manufacturing of satellites is one of the most promising segment in satellites market. Growth rate of the segment was 23% in 2012.
- Euroconsult suppose that **1220 satellites** will be constructed by 2019.
- Revenues from the production and launch of 1220 satellites experts estimate 194 billion USD.
- "Lockheed Martin" - 16.1%; "EADS Astrum" - 9.5%; "Thales Alenia Space" - 7.6%; "Space Systems" / "Loral" - 6.7%; "Boeing" - 6.4% are the largest satellites producers.

Regional opportunities:

- Substantial funding of satellite industry is planned according to the Russian broadcasting development program.
- French Thales Alenia Space and Russian JSC "Information Satellite Systems" create a joint venture for the production of satellite systems.
- Till 2020 Russia plans to spend **300 billion USD** according to the military-industrial complex development program.

ATTRACTIVE SEGMENTS

Communication services satellites

production of remote sensing satellites

production equipment and systems for satellites

POTENTIAL INVESTORS

Large producers of satellites from China, Japan, France and Russia.

INVESTMENT OPPORTUNITIES

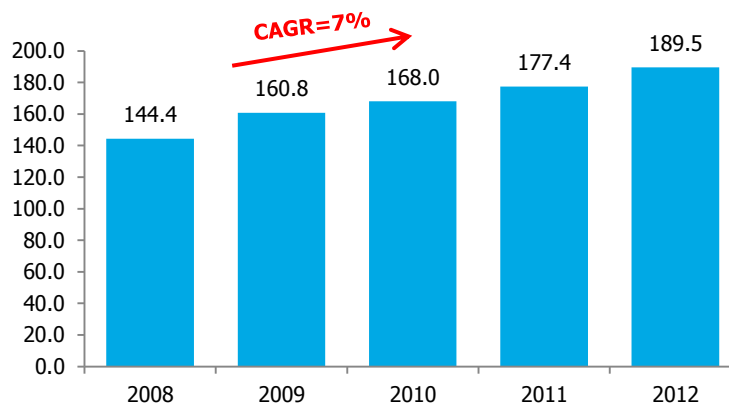
CAPEX

100 - 500 million USD

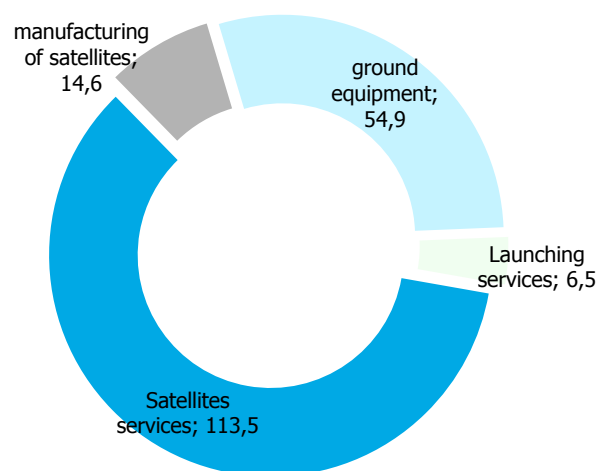
IRR

25-40%

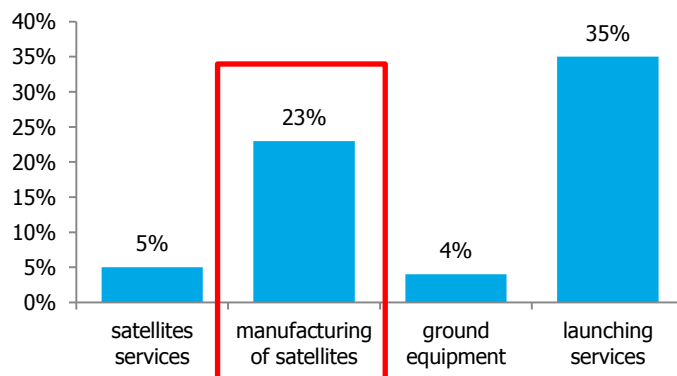
Global satellites and services market, billion USD



Structure of global satellites market, billion USD, 2012



Growth rate of the main segments of satellites market, %, 2012



Global satellites and equipment for satellites market, billion USD

