

# Small GEO Satellite Workshop

29-30 June 2006

**Saab Ericsson Space Group**

**Bengt Mörtberg, CEO**



# Saab Ericsson Space Group

## The Independent Space Equipment Supplier



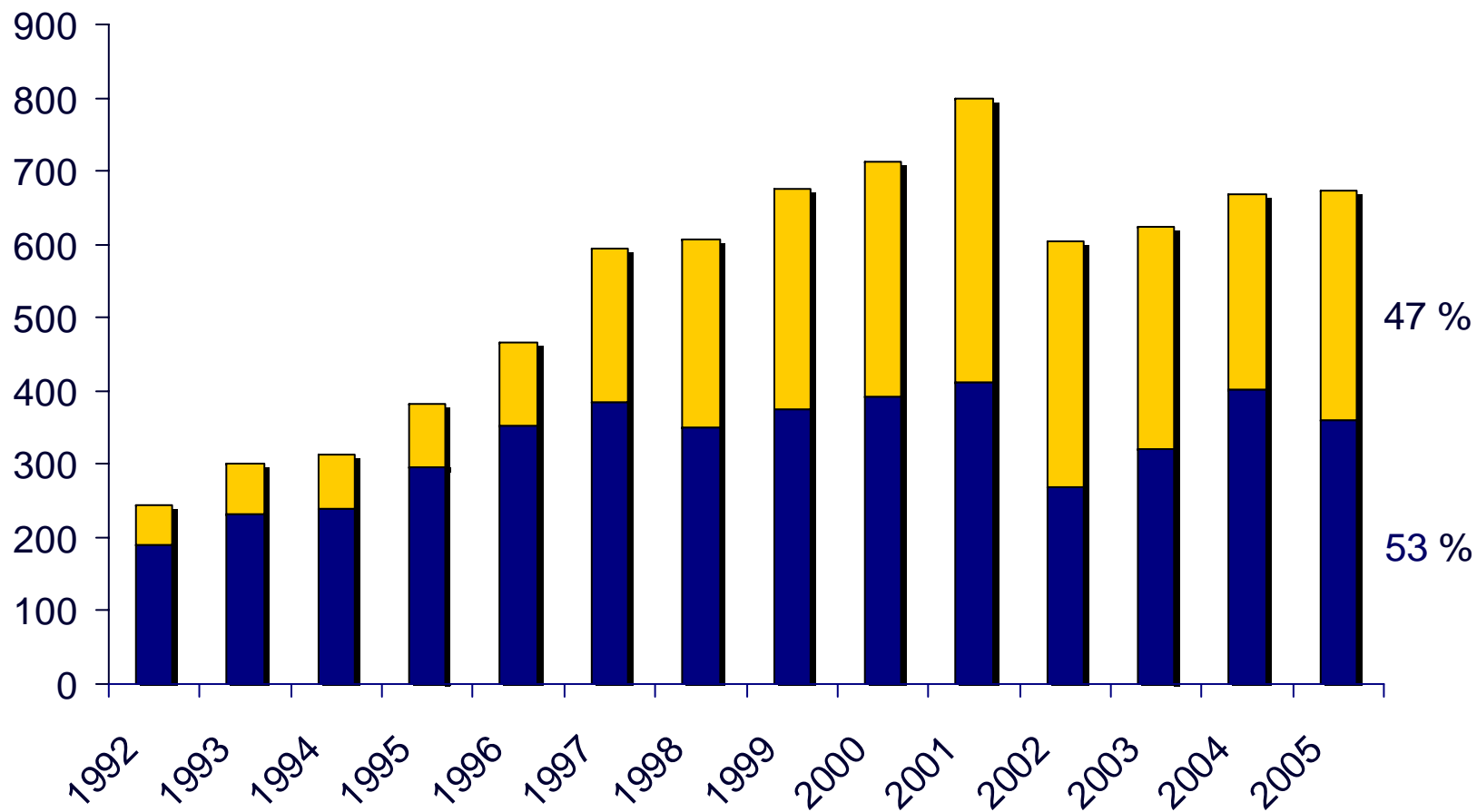
**2005**

**Sales:** 673 MSEK [ 90 MUSD / 72 M€]  
**Orders received:** 555 MSEK [ 74 MUSD / 60 M€]  
**No of employees:** 527



# Sales 2005

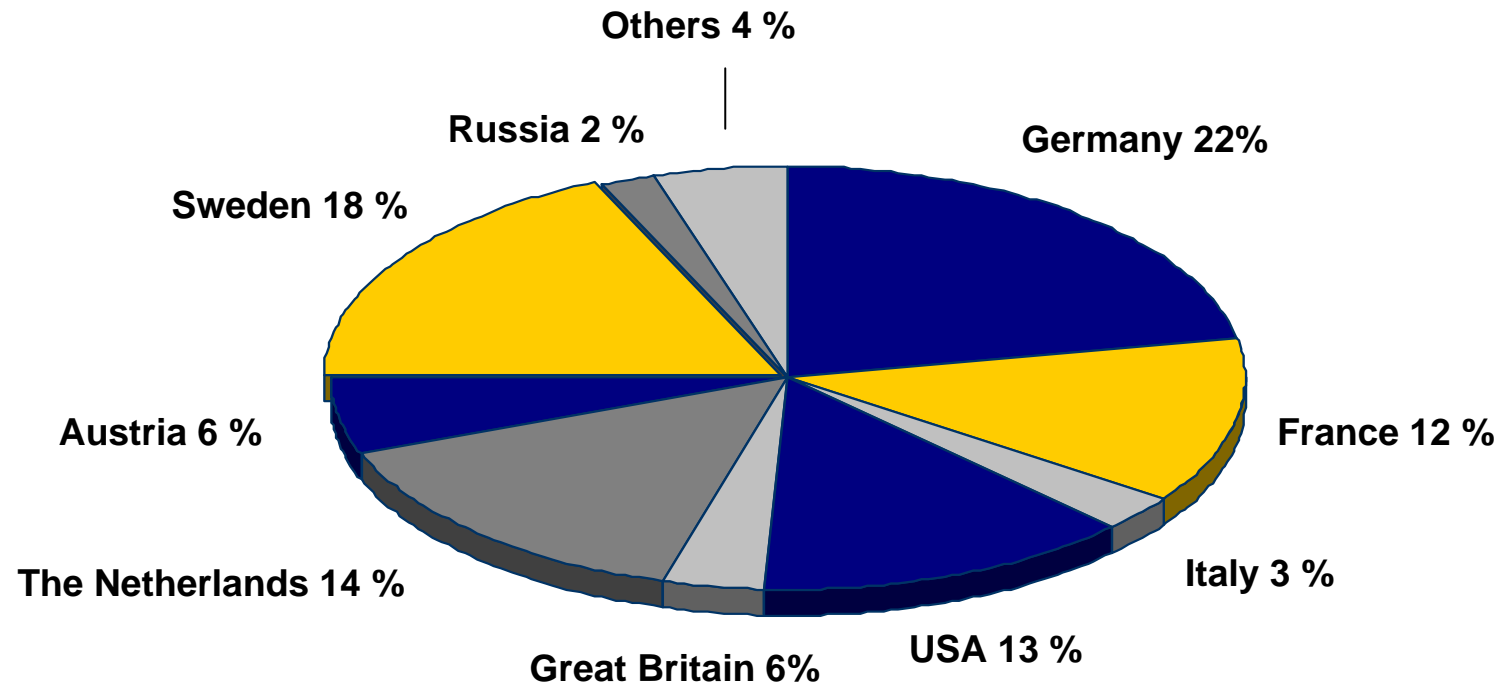
MSEK



Total sales 2005 Saab Ericsson Space Group: 673 MSEK [ 90 MUSD / 72 M€ ]



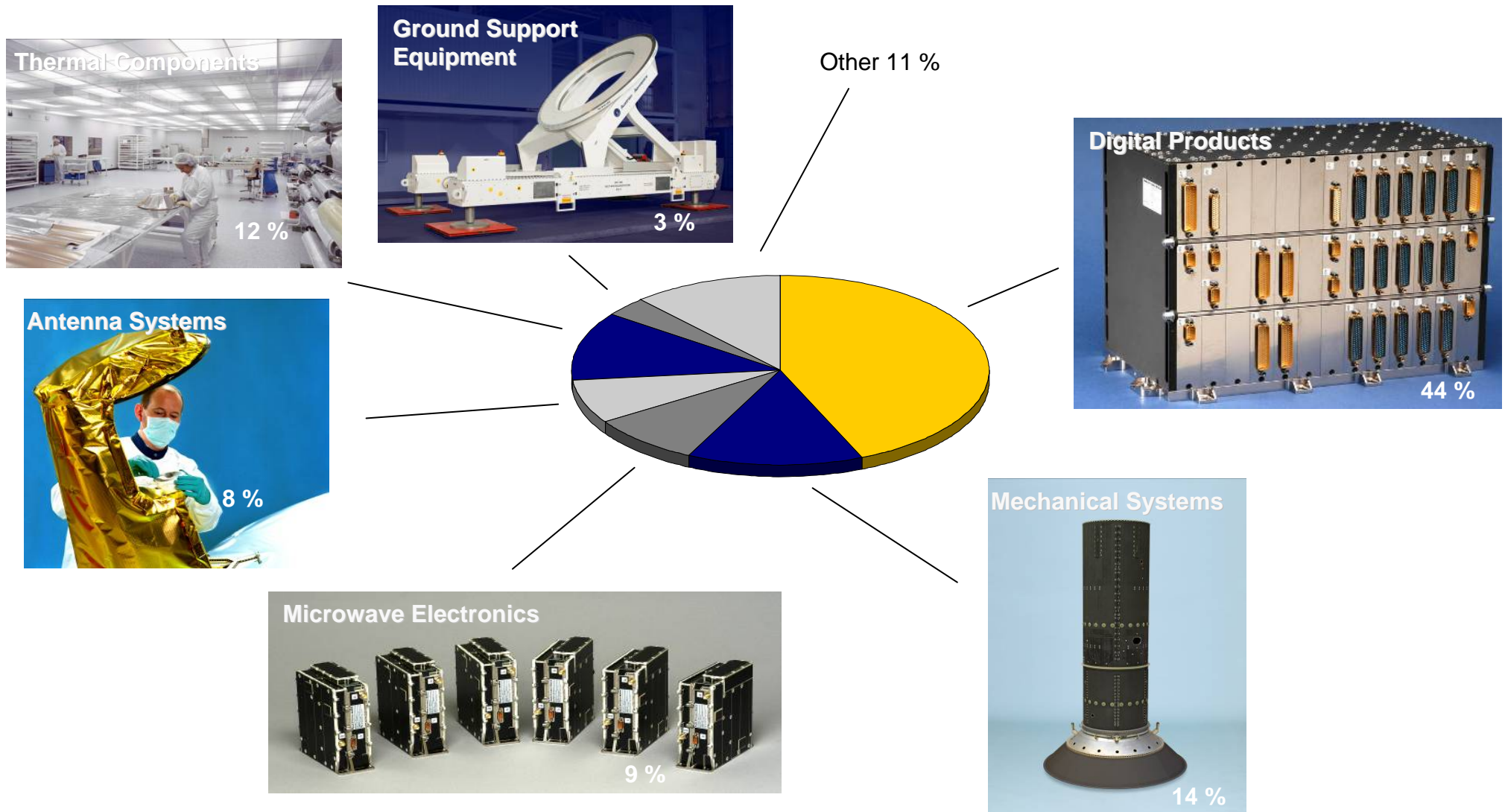
# Orders received 2005 - Countries



Total orders received 2005 Saab Ericsson Space Group: 555 MSEK [ 74 MUSD / 60 M€ ]



# Sales 2005 - Product Areas



Total sales 2005 Saab Ericsson Space Group: 673 MSEK [ 90 MUSD / 72 M€ ]



# Customers

## USA

NASA  
Boeing  
Sea Launch  
Lockheed Martin  
ILS  
Ball  
OSC  
NSGT

## Europe

Arianespace  
EADS-Astrium  
Alcatel/Alenia  
OHB

## Asia

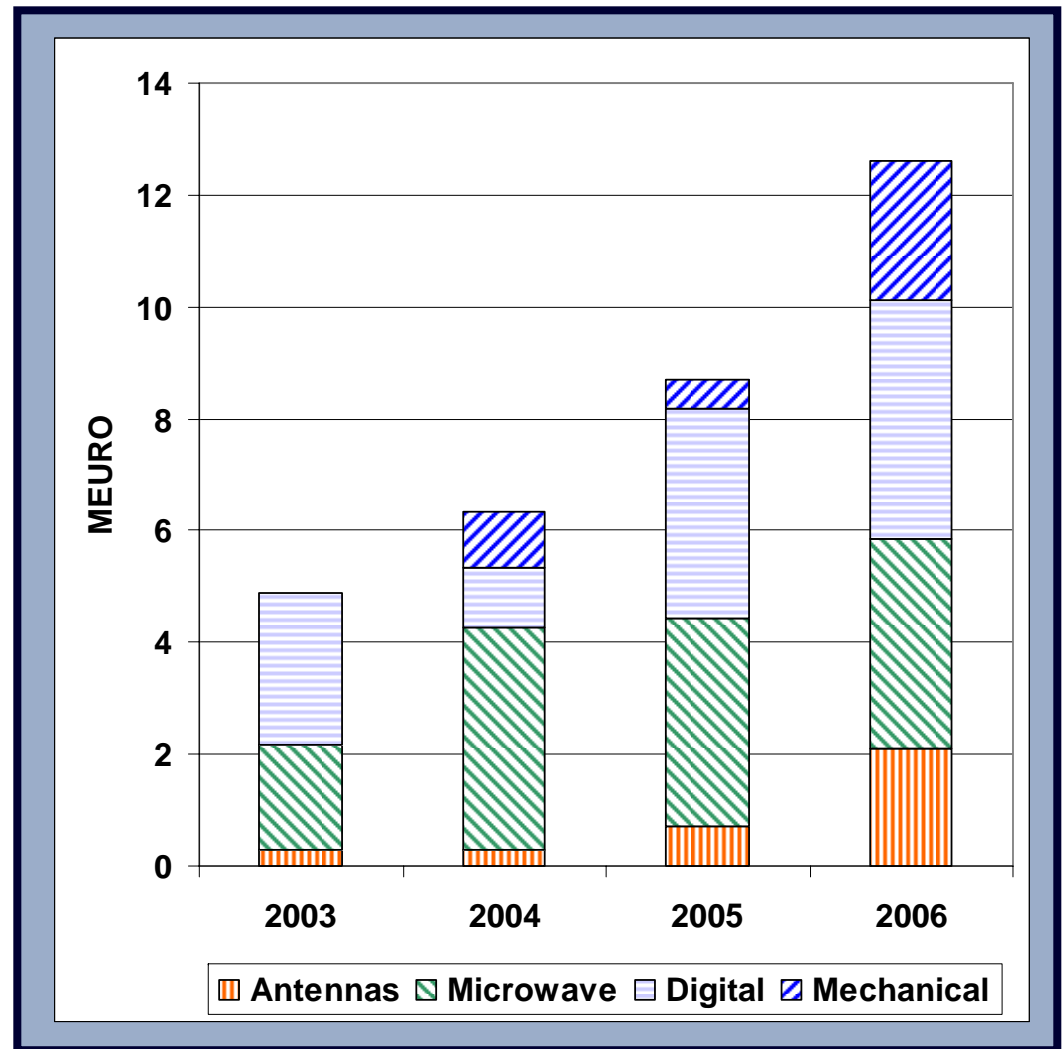
Khrunichev  
Mitsubishi



# Technology & Product Development

## Continuous product development to:

- Reduce cost
- Shorten lead time
- Avoid ITAR components
- Handle new services
- Respond to end customer need



# Digital Electronics

## Command and Data Handling Systems

- **to more than 80 satellites in telecom, science and earth observation:**
  - StarOne
  - PanAmSat
  - Eutelsat
  - Pleiades
  - Galileosat
  - and more...
- **New computer core offers:**
  - 30% reduction in # of boards
  - Higher Processor performance
  - Higher memory capacity
  - Flexible building blocks
- **New I/O module concept will offer:**
  - 30 – 50% reduction in # of boards
  - 50% lower power consumption

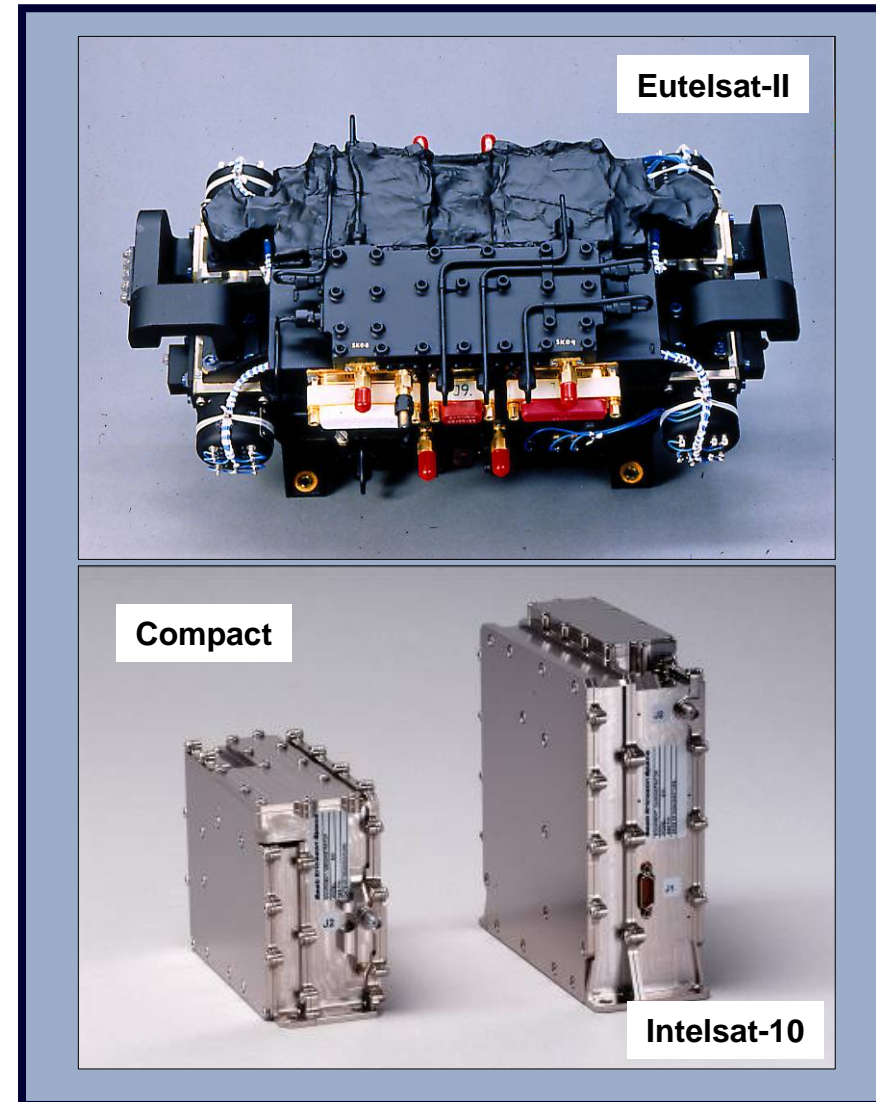




# Microwave Electronics

## Receivers/Converters

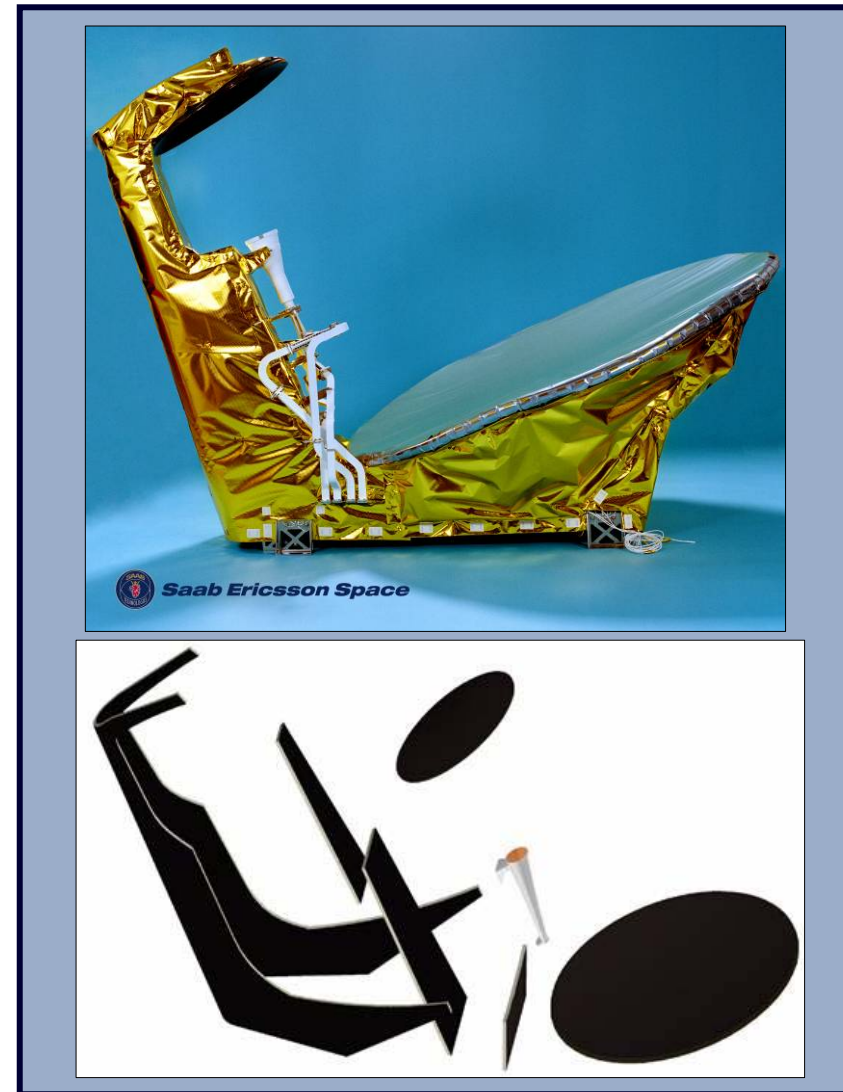
- **Bent-Pipe payloads**
  - Ku-band and C-band (more than 200)
  - Ka-band (more than 300)
- **On-Board Processing**
  - Ku/C/S/IF bands (more than 200)
  
- **New compact design offers:**
  - 40% less mass
  - 20% lower price
  - 2 months shorter delivery time



# Antennas

## Reflector Antennas

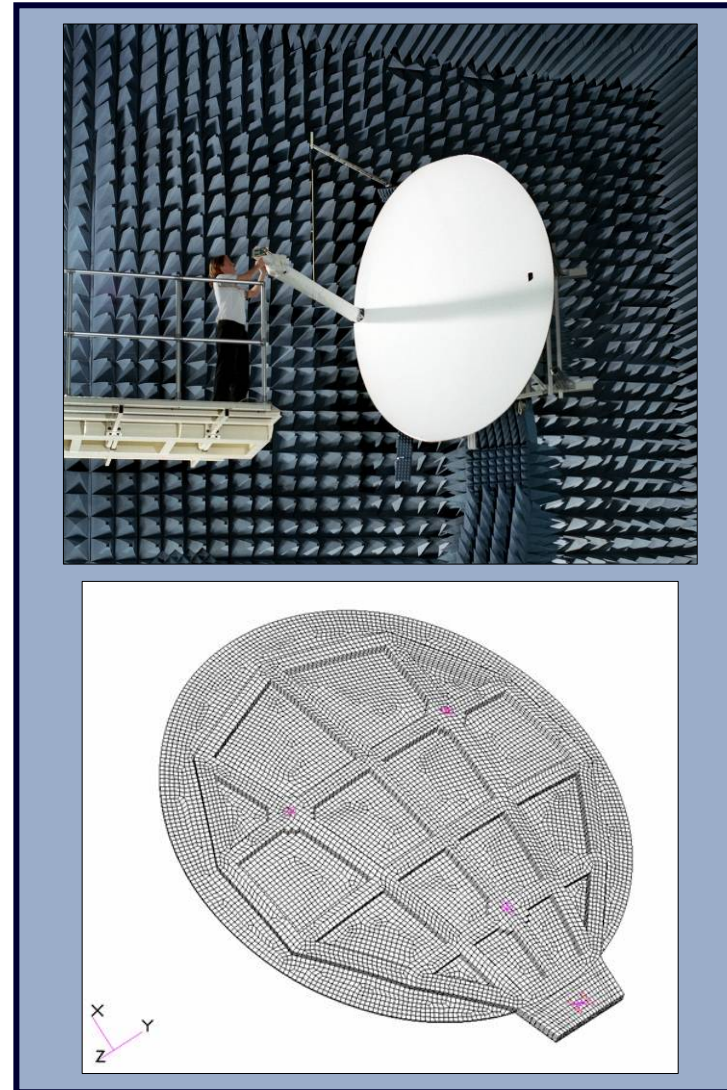
- **Gregorian earth deck antennas to**
  - Sirius**
  - Eutelsat**
  - AMC**
  - StarOne**
  
- **Simple generic design offers:**
  - Very low mass**
  - Competitive price**
  - Short delivery time**



# Antennas

## Reflector Antennas

- Large fixed or deployable to
  - SAR Lupe
  - Cryosat
  - Rosetta
  - and more...
  
- New patented mfg method will bring:
  - Surface accuracy & stability for Ka-band
  - 30% lower mass
  - 30% lower price
  - 3 months shorter delivery time



# Antennas

## Array Antennas

- **Arrays for mobile services to**
  - ICO**
  - Thuraya**
  - Artemis**
  - EMS**
  - several thousands delivered**
  
- **New development will give:**
  - 50% reduction in # of elements (Tx + Rx)**
  - Dual polarization in each element**
  - Increased power handling capability**

