



AeroSpace and Defence
Industries Association of Europe

ASD- EUROSPACE

EUROPEAN INDUSTRIAL SPACE POLICY



Alain GAUBERT

Eurospace Secretary General



Eurospace : The Association

Founded in 1961

- April 2004: Eurospace becomes the Space Group in ASD
 - The AeroSpace and Defence Industries Association

Eurospace is the professional organisation of the European space manufacturing industry

- Mandates
 - Promote space activities in Europe
 - Define, adopt and express common views for the European space manufacturing sector
 - Act as industry spokesperson viz. European institutions
- Membership
 - Eurospace members are **European companies active in design, development and manufacturing of space systems**
 - Eurospace membership represents more than 90% of the total European manufacturing industry employment
 - Eurospace members are distributed among 14 ESA Member States

President of Eurospace

- Ms Pascale Sourisse (CEO Alcatel Alenia Space)

Learn more at:

- www.eurospace.org
- www.asd-europe.org



The Association of European
Space Industry
ASD-EUROSPACE
15 avenue de Ségur
75007 PARIS-FRANCE
+33 1 44 42 00 70 –
Letterbox@eurospace.org

The European Space Industry in 2005

- Main data from *Eurospace facts and figures* annual survey:
 - Sector evolution
 - Industry segments (launcher/satellite/ground)
 - Market segments (institutional/commercial)
 - Country by country situation
- Trends and structures: a look into the future
- International landscape:
 - The balance of space power is changing
- Markets trend:
 - Stability at best
- Conclusions

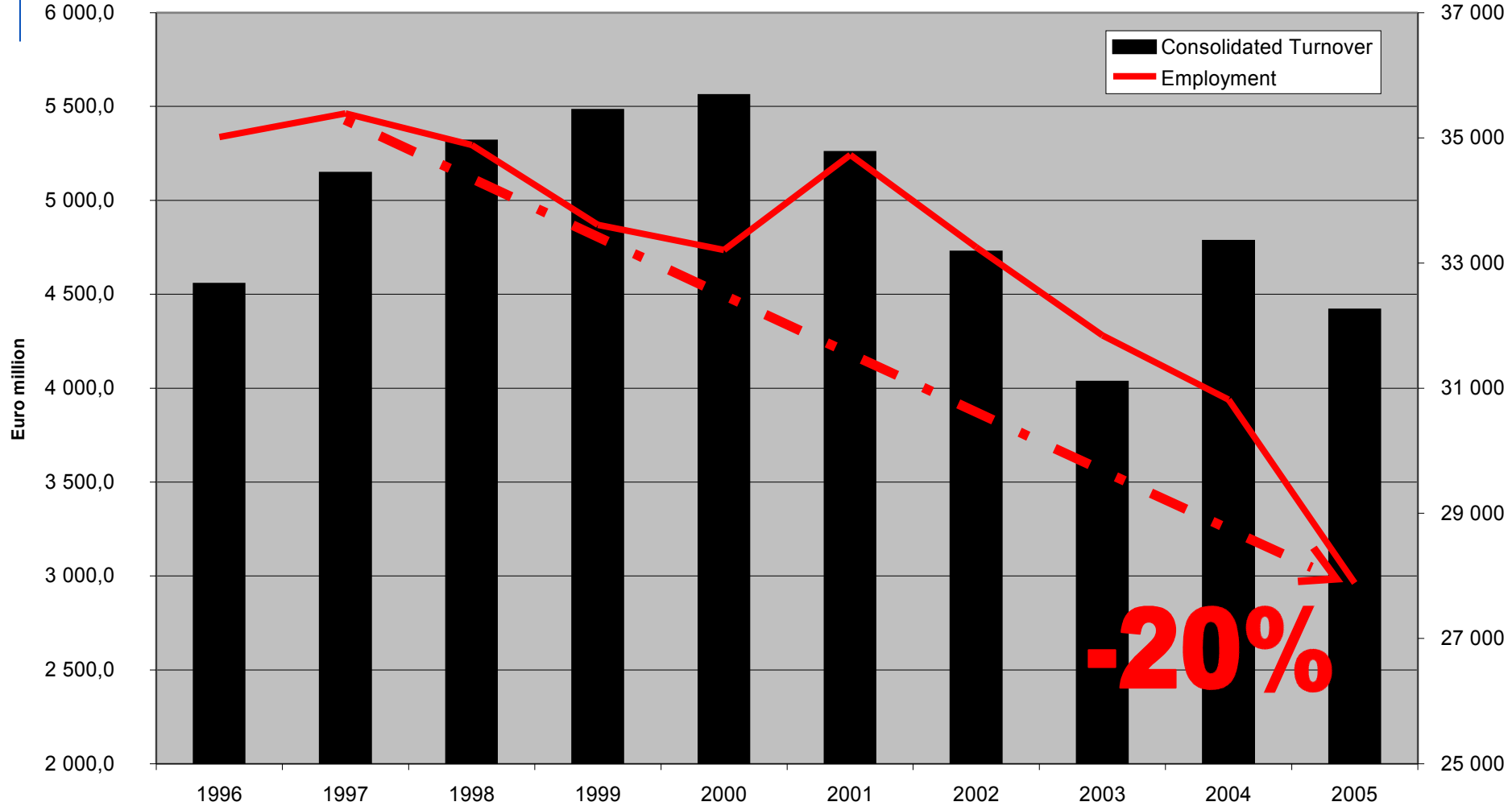
What Industrial Policy for which purpose

Agencies' role



Recent trend

Employment and turnover evolution 1996-2005



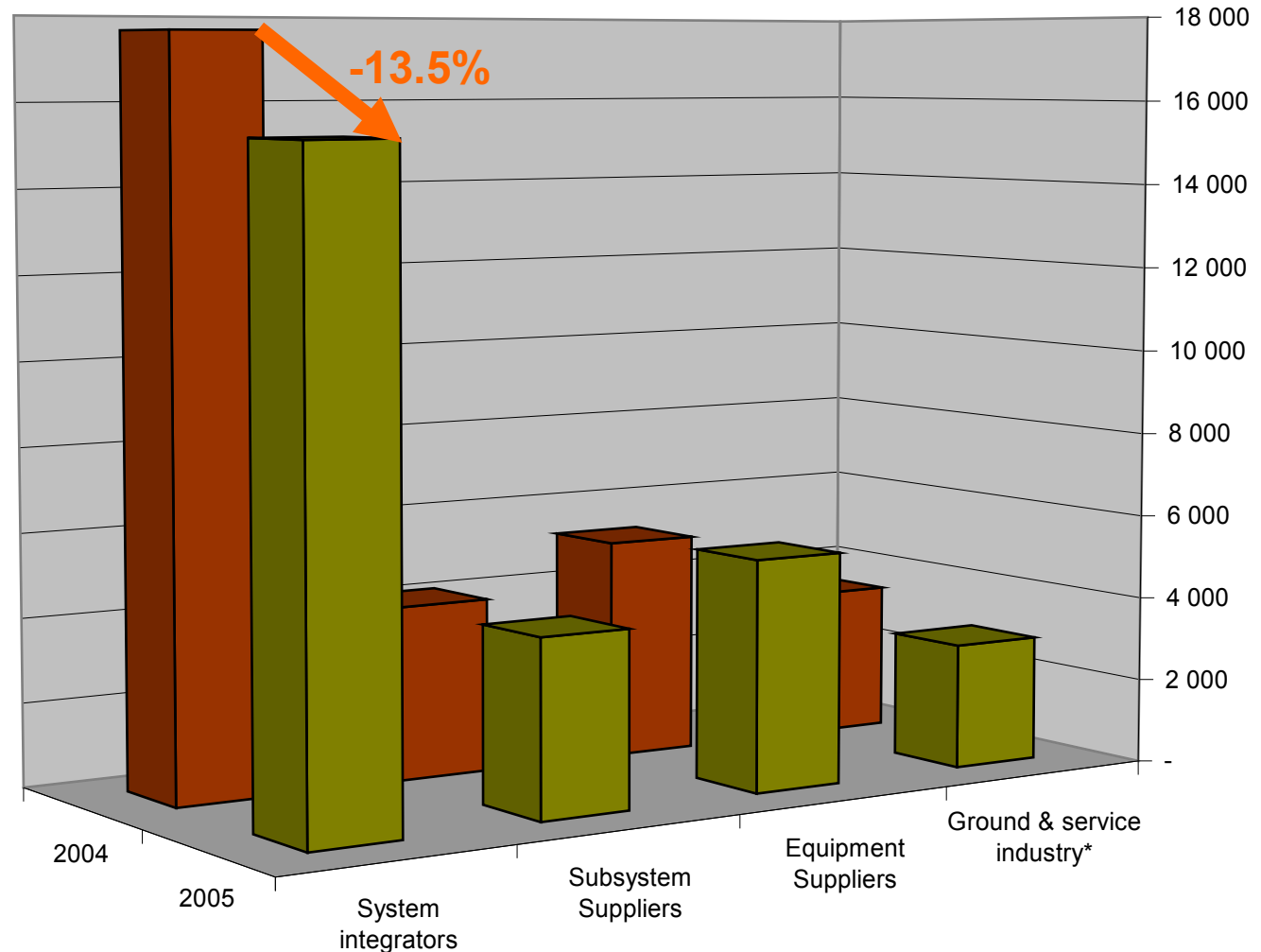


Employment by company type

Employment evolution 2004-2005 by company type

The sector overall has lost 2640 jobs in 2005

- Employment reduction at all levels of the supply chain
- System integrators have lost 2400 jobs in 2005

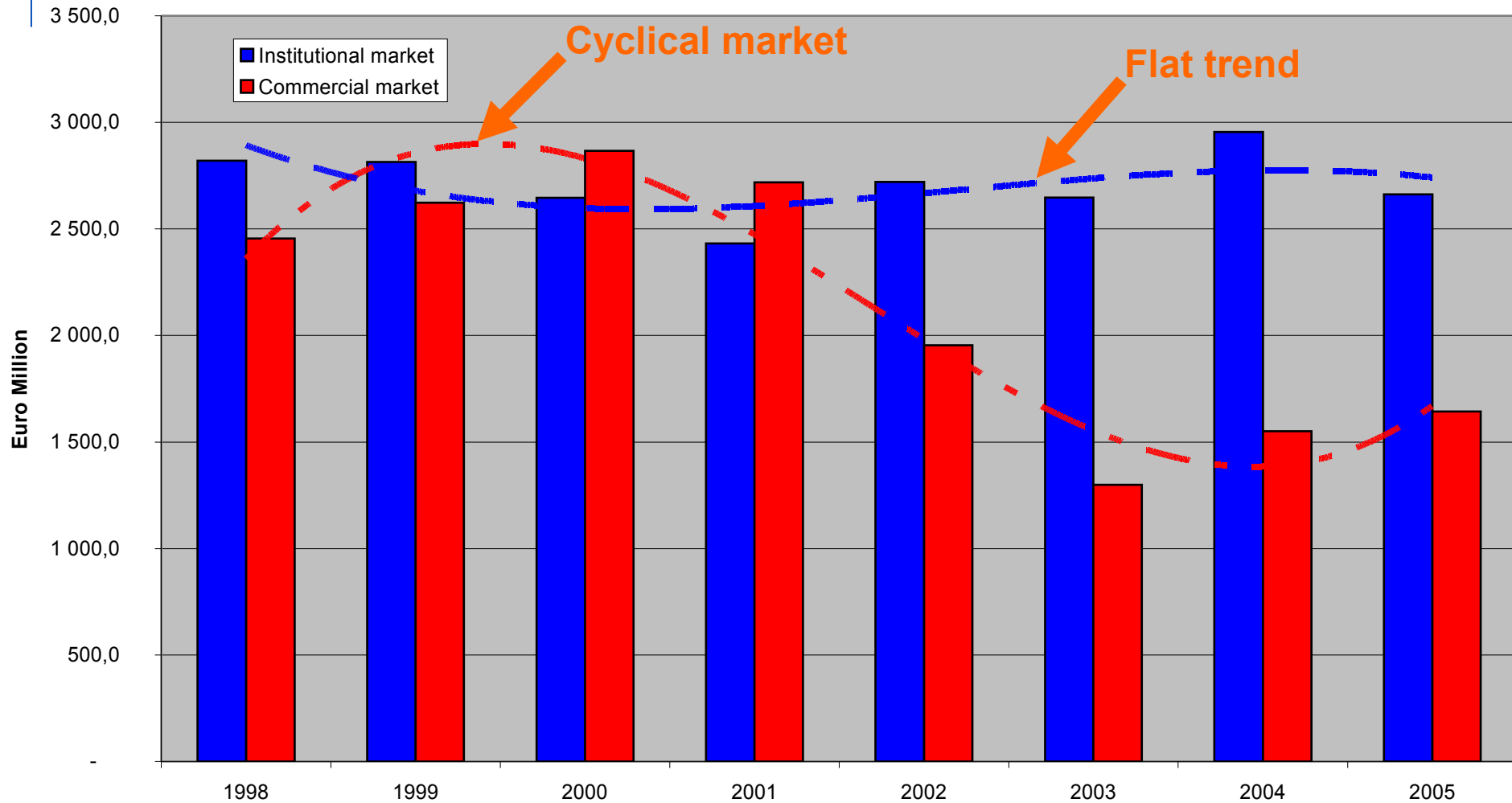




Institutional vs. commercial,

Institutional vs. Commercial Turnover 1998-2005

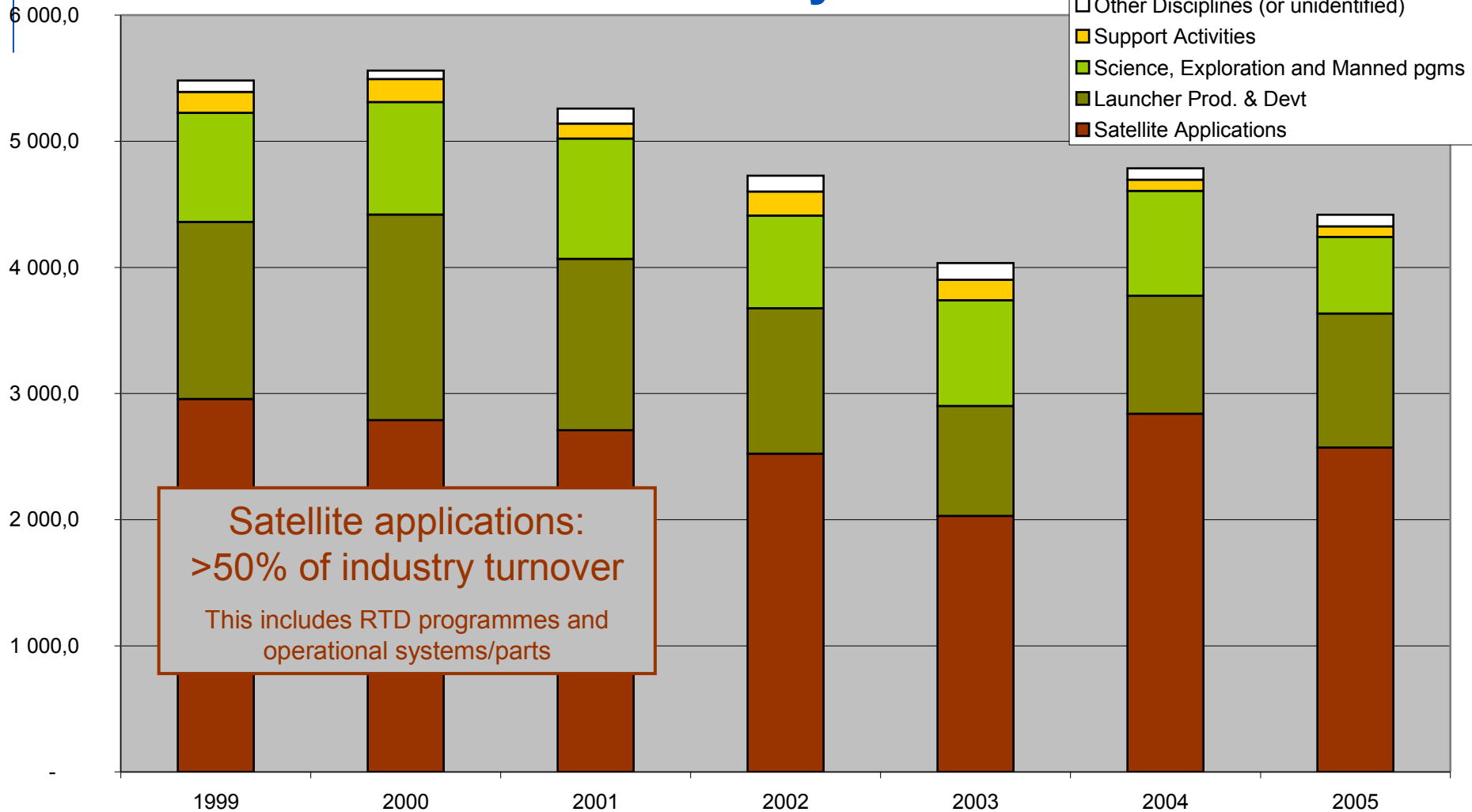
M€





Turnover distribution by activity

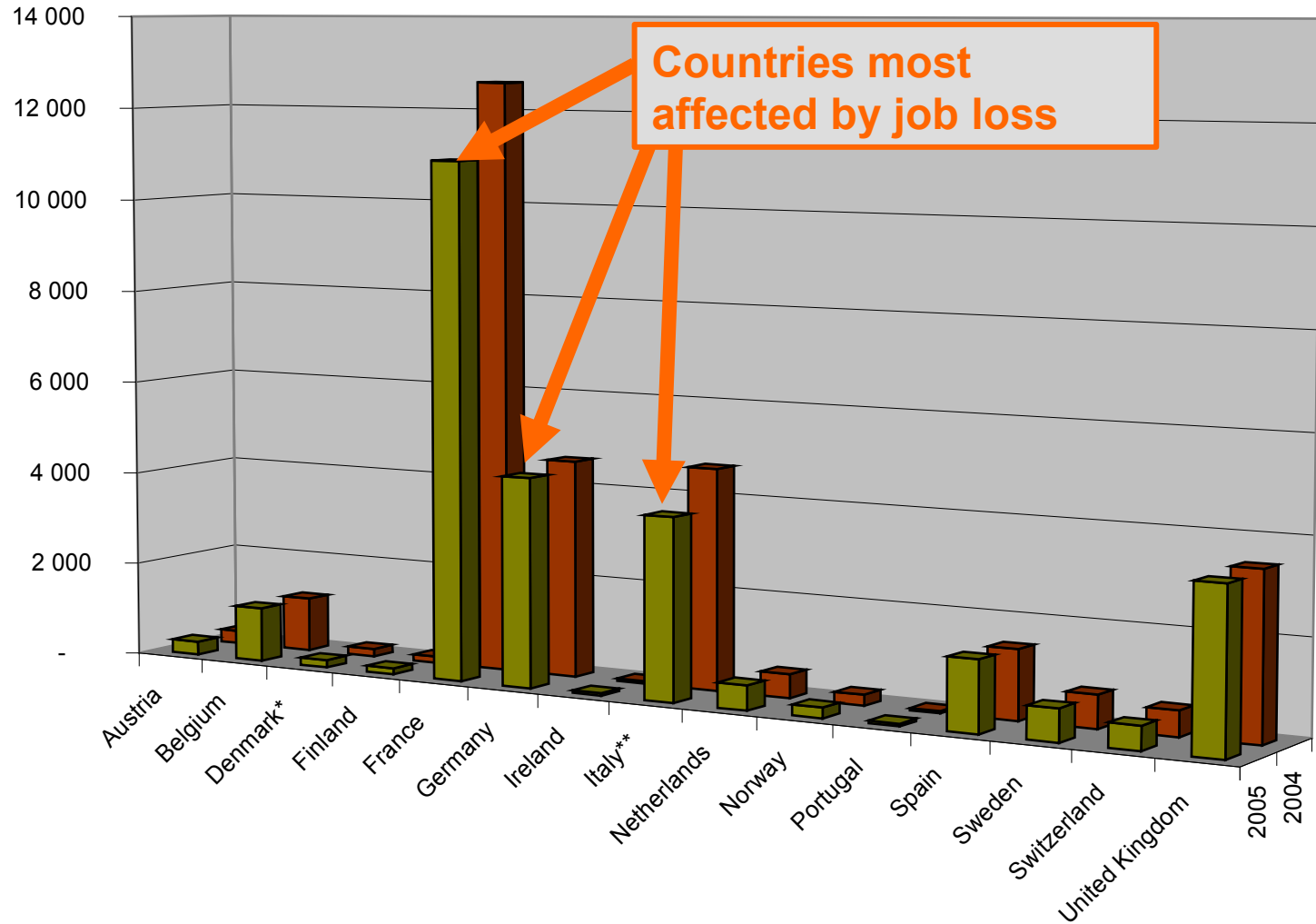
Turnover evolution 1999-2005 (€M)



Satellite applications:
>50% of industry turnover
This includes RTD programmes and operational systems/parts



Employment by country 2004-2005



*Alcatel Space Denmark stopped activities in 2004

**Perimeter change: Telespazio non relevant business and employment excluded



Where to find this information

The results of *Eurospace facts and figures* annual survey are published on

www.eurospace.org

(see: *Industry Facts and Figures*)

The balance of space power is changing

- China is now established as a main player
- India becomes a serious player
- The USA have announced great plans for the Moon and beyond
 - Without reducing the spending on military space programmes
- Russian capabilities are maintained in operational state

A growing number of countries show interest in space

- The Japanese effort in space now reaches 2.5 B\$ with a stronger space policy following reorganisation
- Other nations in Africa, Asia and the Middle East have concrete space activities

As a result, the institutional support of space activities grows worldwide...

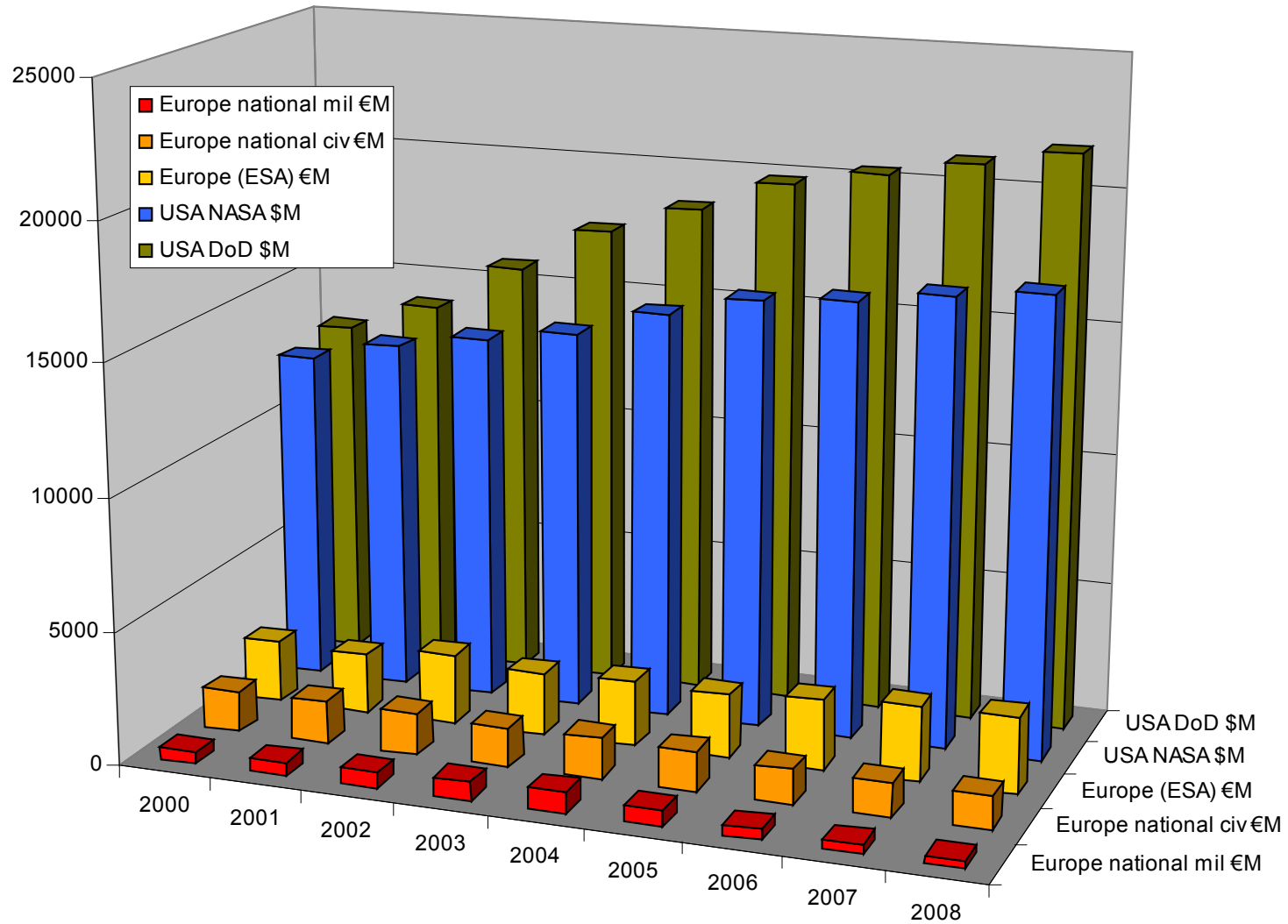
- particularly with regard to military support

...except in Europe

- In Europe industry growth was mostly supported by commercial markets
- military efforts in Europe, still scattered, are far below those of the USA or Russia



Space institutional budgets: USA vs. Europe





European industry situation

The success of European industry is measured by its exceptionally good penetration of commercial space markets

- European systems are competitive

Drawback: European industrial structures are highly exposed to market variations

- Since 1997 the European space industry turnover is more or less evenly split between institutional customers and the commercial market
- With market downturn some key resources become under-critical: this jeopardizes the sustainability of the whole European space policy
 - Preservation of capabilities is difficult
 - Innovation is slowed down
 - Cost cuttings raise the technological risk level
- The competitive pressure currently met by the European industry is aggravated by the €/€ exchange rate.
 - European initiatives are needed to support the competitiveness of European industry in emerging segments and applications
 - Technology preparation plays a significant role in competitiveness

This is a unique situation worldwide

- In all countries the principal source of revenue (and often the only one) for the space industrial sector are state budgets.

Slight trend towards market recovery

- Commercial market structures have changed with the turn of the century
 - Between 1998 and 2001, telecommunication satellite operators ordered an average of 27 satellites/year
 - Between 2002 and 2005, average annual orders have dropped to 15.
- GEO commercial satellite orders in 2005:
 - 22 satellites were ordered in 2005 (worldwide) on which 6 were awarded to European Industry
- Backlog in 2005:
 - 60 satellites end 2005 on the order books of space industry worldwide
- European industry competitive positions are at risk in an unstable market environment

- European Institutional markets: stability foreseen. This weakens Europe ...
 - European Space Agencies: stable budget perspectives at best
 - Defence: growing expectations at both National and European level
 - Defence and security applications of space are growing
 - National/bilateral solutions are still the main focus
 - EDA: very limited budget, no particular focus on space technologies yet
 - Significant space budget improvement with New Financial perspectives (FP7, 2007-2013) but remains below expectations
 - But EC: no significant increase before 2008-2009.
 - FP7 calls in 2007-2008 will be very limited, later FP7 calls should be more important
 - Galileo: 900M€ for infrastructures (not sufficient) and 350M€ for R&D activities (FP7)
 - GMES: will receive 85% of the FP7 space available funds (1,2B€); need to find more appropriate types of EU funding for GMES or adapt existing ones.
 - Security: space applications are relevant to most of the security missions selected by EC for its FP7 funded activities in this field

As soon as public money is spent and as the resulting capacity is essentially concentrated in Industry, one can ask several questions regarding Agencies' responsibilities:

After 45 years of continuous spending

- Is Europe able to answer all European needs (to-day and to-morrow)?
- What is the durability of the developed capacities?
- Is European Industry competitive?,
- etc.



Where are we to-day?

Yes, the European Space Industry is able to answer all European needs

The durability of its capacities is depending upon the durability of public spendings

Yes, the European Space Industry is competitive, as shown by its successes on the commercial market

Industry competitiveness remains a key issue

- Satellite competition is driven by technology development and validation.
 - Technology programmes for operational systems need to be complemented by in orbit demonstration and validation programmes for operational services
 - US satellite industry supported by DoD massive investment in technology and operational systems
 - The strengthening of R&T efforts is mandatory,
 - » Time to market, technology validation, and market driven developments are keys to success
- Launchers: Europe has to compete with non-market economies
 - The preservation and development of European launcher capabilities are critical for the independence of European space policies and programmes
 - Similarly, the European space port in Guiana is a critical asset for European independence in space

European budgets do not match European ambitions

- Decision makers : absence of a dynamic vision for Europe in space
- The next ESA Council at Ministerial level (2008) needs to be prepared without delay
 - Goodwill have to be translated in action and budgets (new programmes)
- EC/EU perspectives:
 - New funds/mechanisms for space systems procurement will be required

- Fair return has shown it was a great cohesion factor in Europe, allowing excellent achievements for the benefit of all
 - But un-necessary duplication of capacity should be avoided. The ESA harmonization process is fundamental

Conclusion

S

All this call for a SPACE Policy at European level. There is no Industrial Policy without a sound space policy with programmes. In our opinion, this policy should have the following qualities:

1. **DURABILITY**. Industry is ready to adapt as soon as its environment is not subjected to uncertainty of European commitment into space.
2. **LEGIBILITY**. Industry needs a clear vision of what governments want.
3. **DIALOGUE**. A European Space Policy (and the associated Industrial Policy) needs to take into account all factors which constitute Space activities : Users, Agencies and Industry.
4. **EXPLANATION**. All actors should understand all other concerns.