

**«New career paths and professional skills
in Shipbuilding and Yachting sectors:
Overview by CESA »»**

EUROPEAN MARITIME DAY

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Lidia Luca, CESA

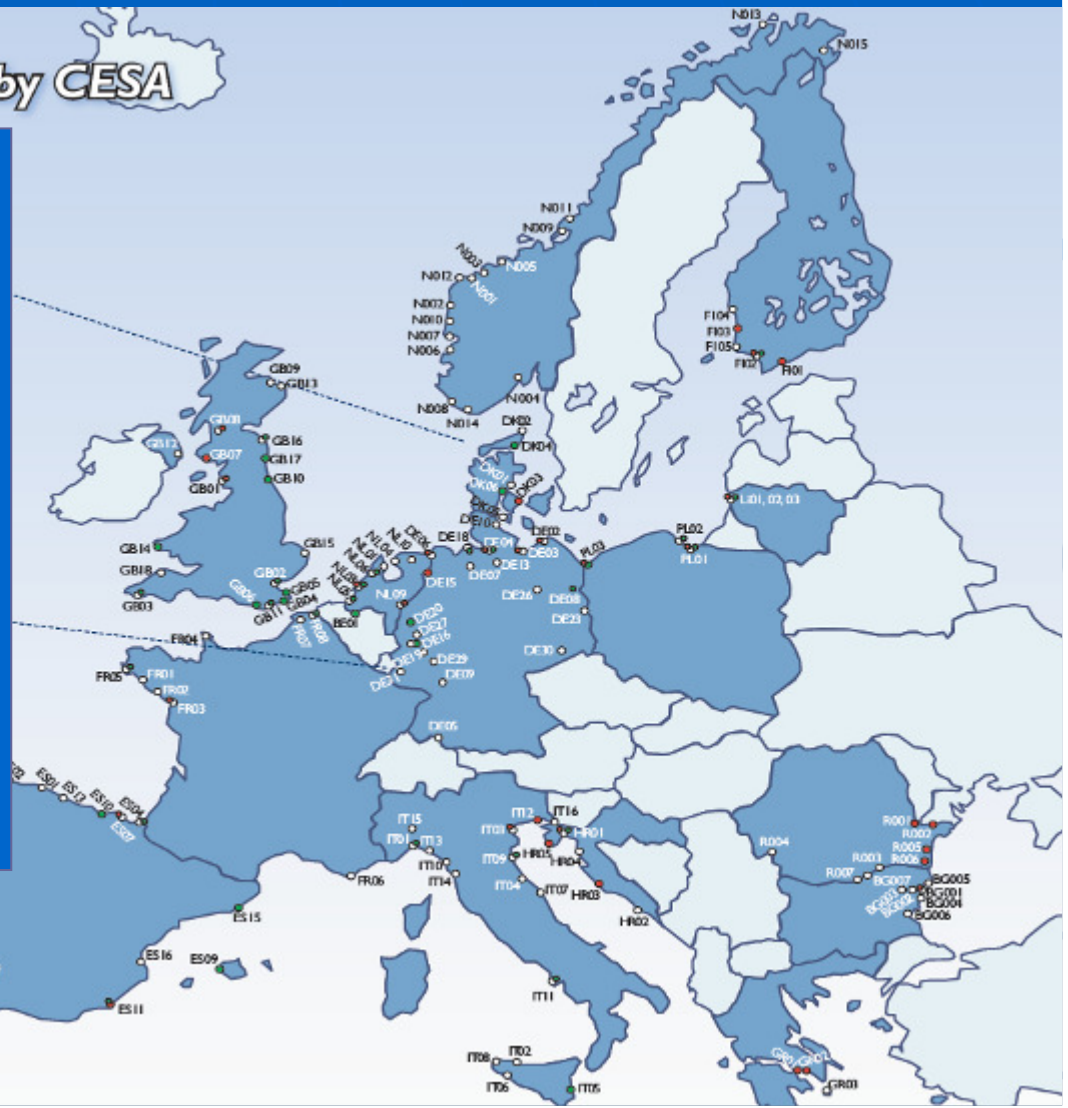
European Shipbuilding Industry

Shipyards represented by CESA

**Global market, strong industry in Europe:
300 shipyards in 16 countries
Turnover in bill. €**

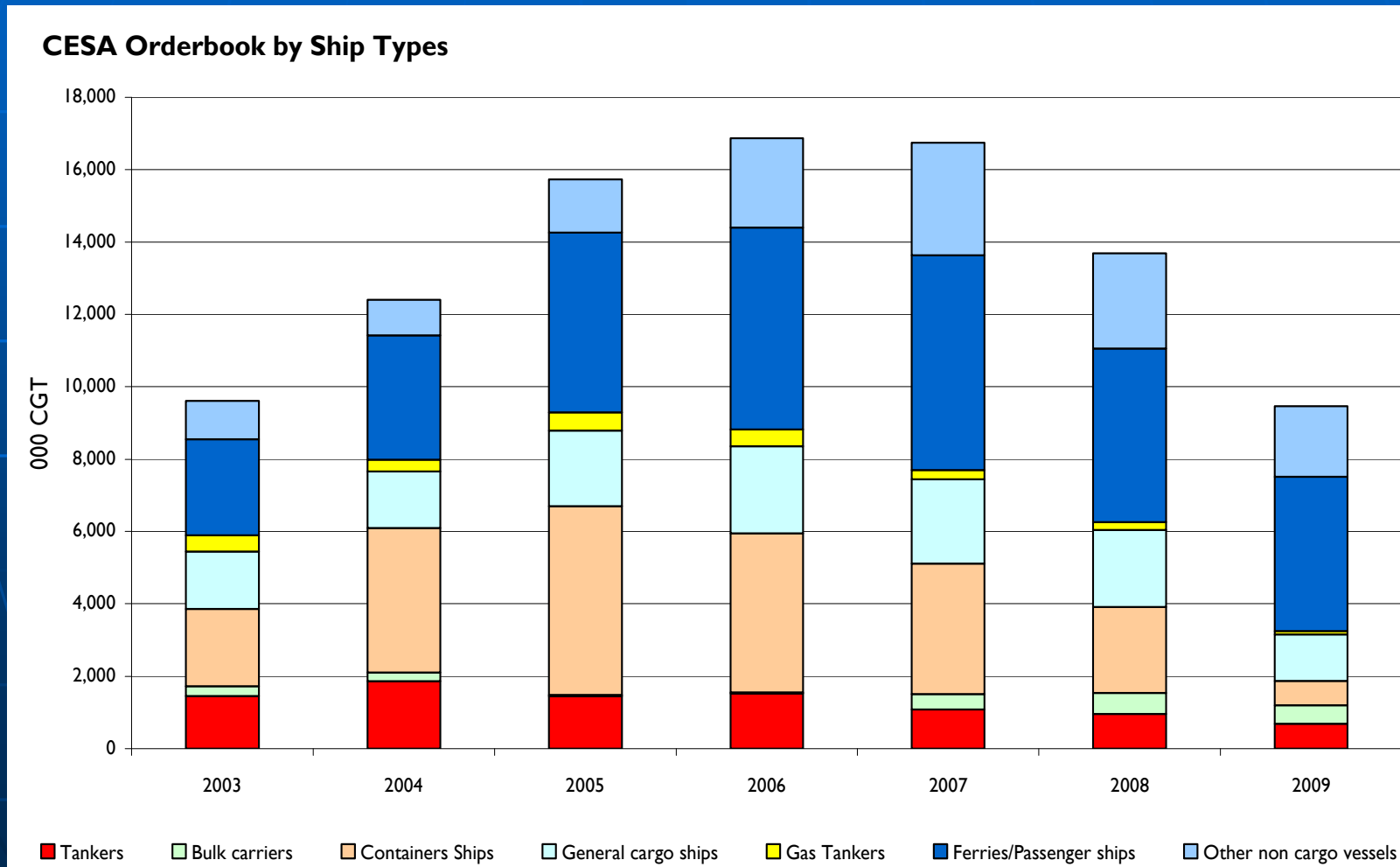
- 16 merchant shipbuilding
- 10-15 naval ships
- 3-5 ship maintenance, repair & conversion
- Yards and spin-off jobs: **~500.000**

- Large shipyards (with ~1000 employees and more)
- Shipyards undertaking exclusively repair and conversion
- Other shipyards (small and medium sized; newbuilding & repair & conversion)



Focusing on High Tech Products

= Competences, Jobs and Skills



EMF/CESA HR Projects

- ✓ Koudekerke Report (SSDC/2008) 'Demographic Change & Skills requirements in the European Shipbuilding & Ship repair Industry'
- ✓ IKEI Report (2009/EU) 'Comprehensive sectorial analysis of emerging competences and economic activities in the European Union'
- ✓ 'Ecorys Study (2009/EU) 'Study on the competitiveness of the EU Shipbuilding Industry'

Aims:

- Analyse age structure, qualification profiles and skills requirements in European shipbuilding and ship repair sector (14 countries)
- Provide an outlook for the next 10-15 years on qualification and skills requirements
- Formulate and implement strategies

Conclusions from studies: size, structure, age

- 127,500 direct employees (of which 81% technical employees: technical sales, design, engineering, work preparation and production)
- 600,000 employed directly and indirectly (reflecting strong focus on subcontracting)
- Production remains prime focus of sector: 2% of workforce in sales, 12% design & engineering, 86% in production
- Age distribution comparable to EU average:
 - 11% under 25 yrs (EU 12%);
 - 36% 25-40 yrs (EU 39%);
 - 40% 41-55 yrs (EU 38%);
 - 13% over 55 yrs (EU 12%)

Conclusions from studies: size, structure, age

- Variations in age distribution between countries, generally: SEE countries have younger workforce than North West European countries
- Italy: largest technical workforce below 40 years of age (67%); Portugal: oldest workforce with 75% of employees over 40 years of age
- Romania: highest proportion of workforce under 25 years of age (but high migration of skilled workers)

Conclusions from studies: size, structure, age

- SB Industry has a higher proportion than EU average of employees with science and technology education -19% MSc/BSc graduates against EU average of 15%.
- 66% of workers with vocational training and vocational certificate (countries employing unskilled workers: PL, IT, NL, UK, DK, SP)
- With 13% of technical workforce over 55 yrs about 1% of European shipbuilding workforce will retire annually over next 10-15 years
- Finland, UK, NL and DK will loose over 20% of their employees in the next 10-15 years!

Conclusions from studies (Pre-crisis outlook)

Future Skills Needs

- 11,000 new technical employees needed annually over next 5 years!
- Mainly production: 80 % but design & engineering and sales function growing: 17% and 3 %.
- No need for unskilled labour, 25% graduate level, 74% vocational level
- NB: All new recruits have vocational certificates or a degree - unskilled work is disappearing.



Recommendations

Short term: Outsourcing

- No new capacities in new MS, growing demand met by subcontracting mainly (design, engineering and production)
- Migration can help address the shortages of skilled labour but leads to shortages of skilled workers in countries of origin

The international dimension of skills supply is important - it represents a growing element of competition for EU yards for talent



Recommendations

Long term Strategy:

- A European design academy
- A harmonized European vocational / educational system to improve the transparency of qualifications between the member states (through the European Qualifications Framework and other initiatives) - Mobility within EU but also maritime cluster approach
- Support creation of shipbuilding training centres in Eastern Europe
- Non-formal knowledge to be transferred between old and new generations
- Recruit more women; Proactive LLL strategies
- More cooperation with schools to attract young people, education towards the sector has to start at an early stage

Recommendations

Image:

- Image is improving but not fast enough to meet rising demand for new recruits

Key Recommendation:

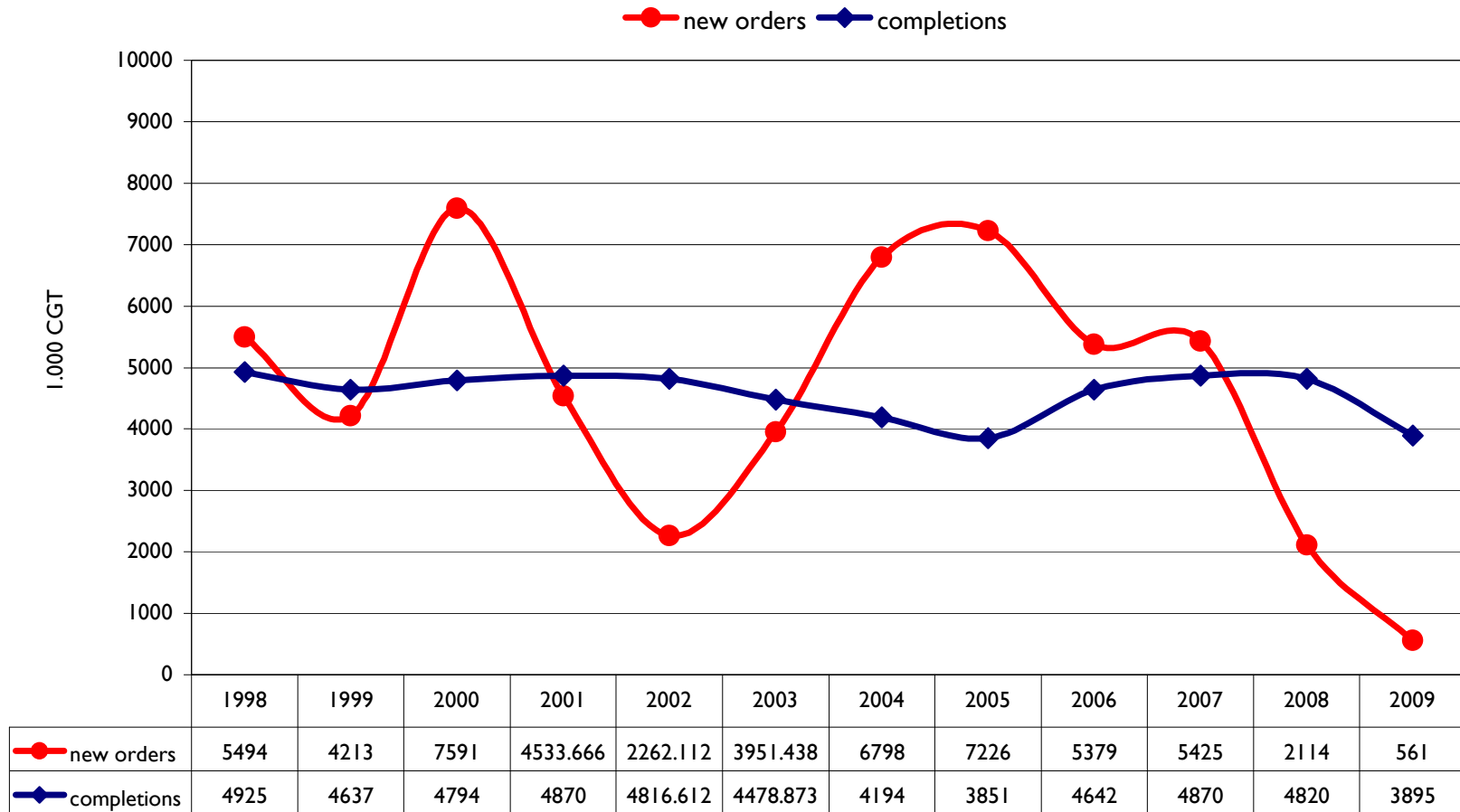
- Actions at all levels to promote the shipbuilding industry as a career option and raising public awareness.

→ European Shipyard Week
2006, 2008, 2009



But... the current situation

CESA Output and New Orders
(2009 full year term)



Crisis - Threat of irreparable damage



Next drivers for skills demand

Pre-crisis

- Economic evolution
- Globalisation
- Demographics
- Consumer demand

Post-crisis

- **Economic revolution**
- **Environmental change**
- **Technology Development**
- **Changing values**



Extensive and Complex Skills Chains need to be safeguarded now!



Pre crisis

standard design,
serial production,
high degree of automation

One skill employee

Post crisis

specialized,
one-of-a-kind prototypes
new concepts

Multi-skilled employee

Role of stakeholders

- Need for governments to support strategy and vision for the sector
- Need to keep skilled workers within sector in cyclical downturns - those made redundant to be enrolled in education and skills improvement to emerge from crisis stronger
- The most efficient way:
filling the temporary demand gap!

Thank you for your attention!

All studies are available for download at

www.cesa.eu