



E-Business in the Transport and Logistics Sector

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Industry characteristics

- Transport and Logistics is an important sector in Europe
 - The transport sector currently generates 7% of European Union gross domestic product (GDP) and for around 5 % of employment in the EU.
- The study Covers NACE Rev. 2 Division 49.1-49.4, 52, 52.10, 52.24 and 52.29
 - Land transport of goods and passengers
 - Logistics services
- The availability of high quality transport and logistics services is of paramount importance for growth and competitiveness of the European economy.
- 3 sub-sectors
 - Land freight transport
 - Land passenger transport
 - Logistics services



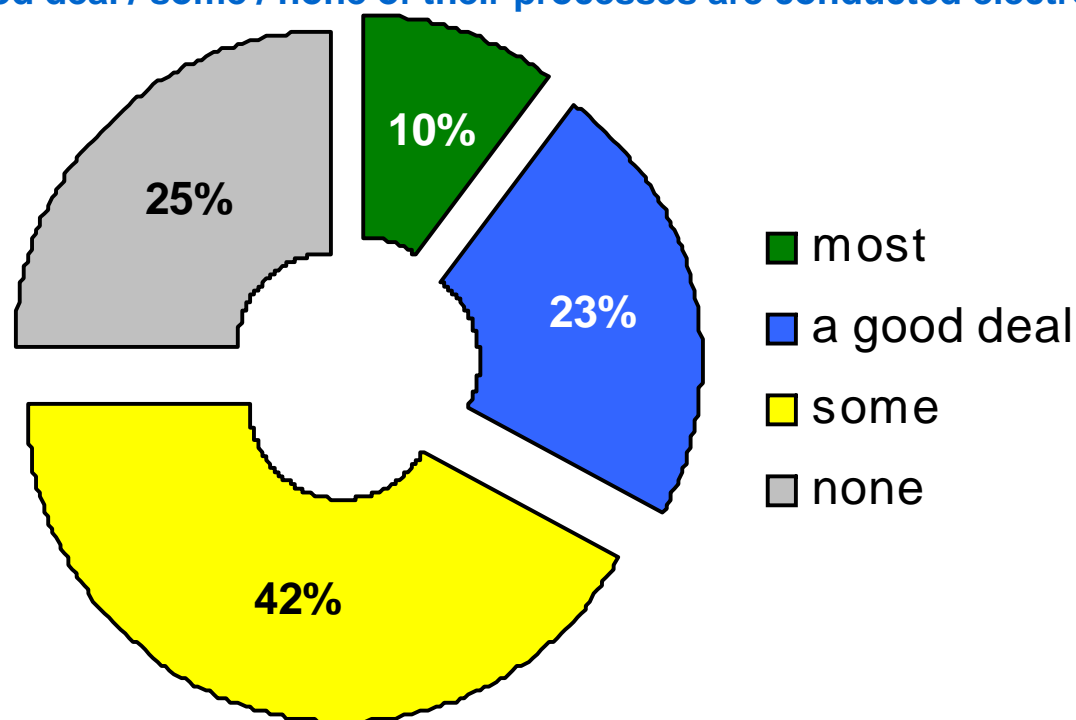
Methodology and objectives



- e-Business Watch Survey
 - Telephone interviews with 1097 T&L companies
 - France, Germany, Italy, Poland, Spain, Sweden, UK and USA
 - 12 case studies
- Objectives
 - The most common T&L applications of e-business
 - The main drivers and barriers for e-business adoption in the sector
 - The impact of e-business on companies: competitiveness, productivity, employment and economic growth.

Deployment of e-business in the T&L sector

Overall deployment of e-business in the T&L sector: % of companies* saying that most / a good deal / some / none of their processes are conducted electronically (2007)

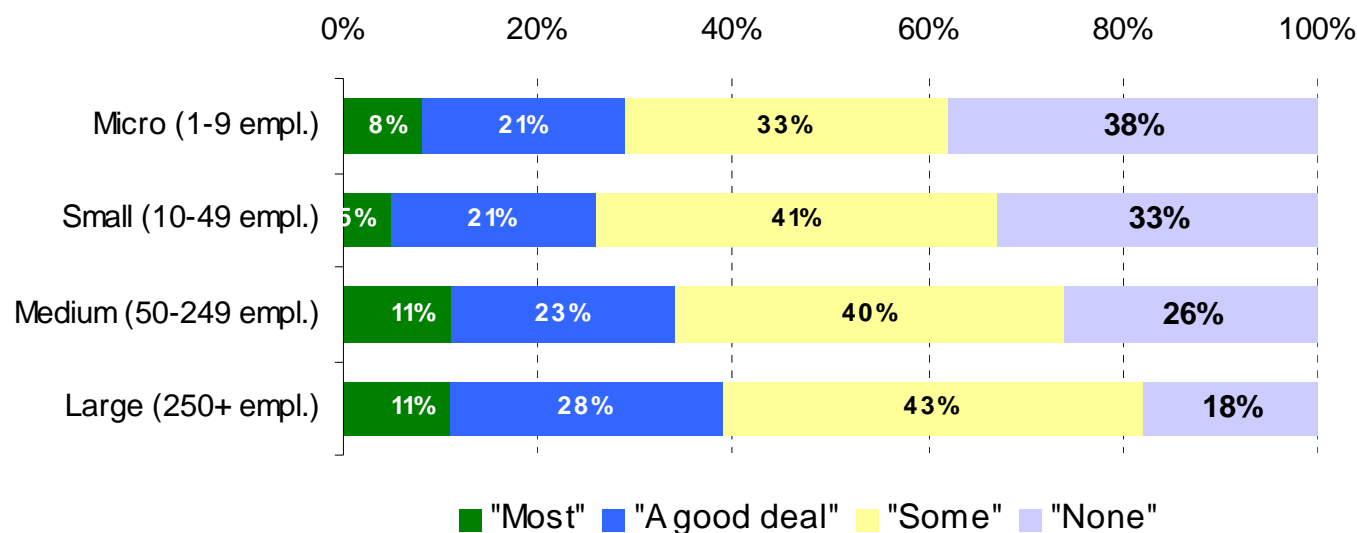


3 of 4 companies in the TLS industry use e-business in one way or another to realize their business activity

* weighted by employment ("firms representing x% of employment say that ...")

Deployment of e-business in the T&L sector by firms' size

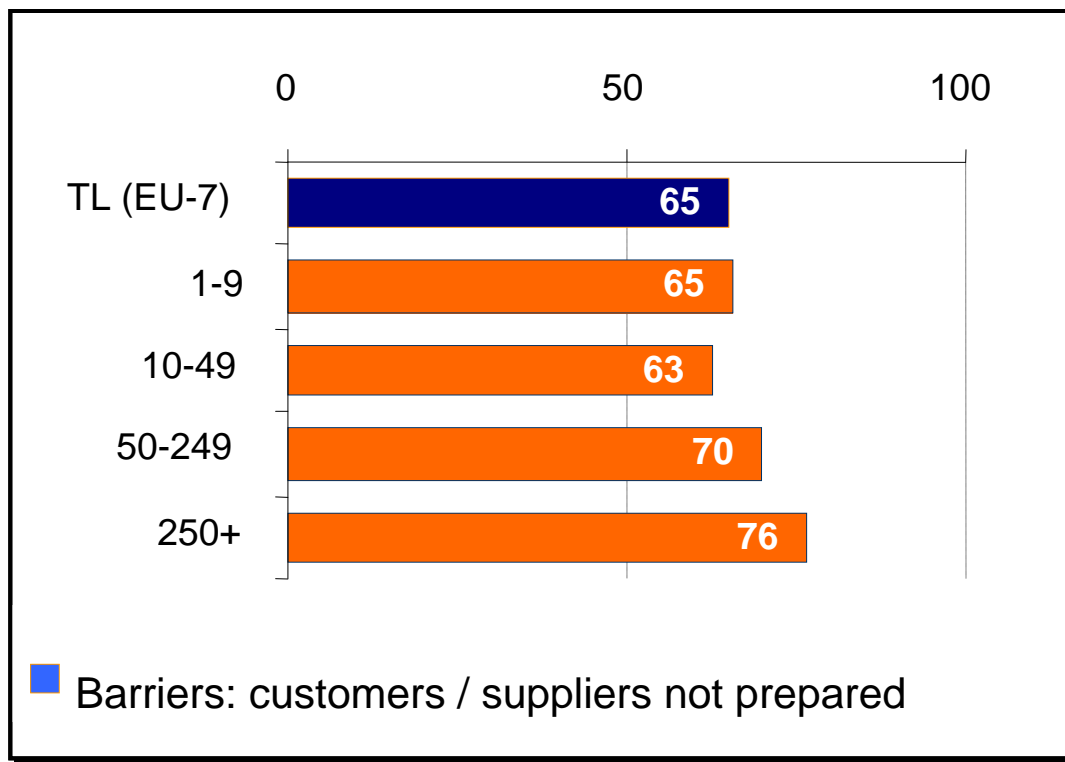
% of companies saying that most / a good deal / some / none of their processes are conducted electronically (2007)



**53% of micro-sized firms
67% of small-sized firms
74% of medium-sized firms
82% of large-sized firms
have adopted e-business in some more
or less significant way**

T&L sector e-business usage barriers. Customers / suppliers preparation

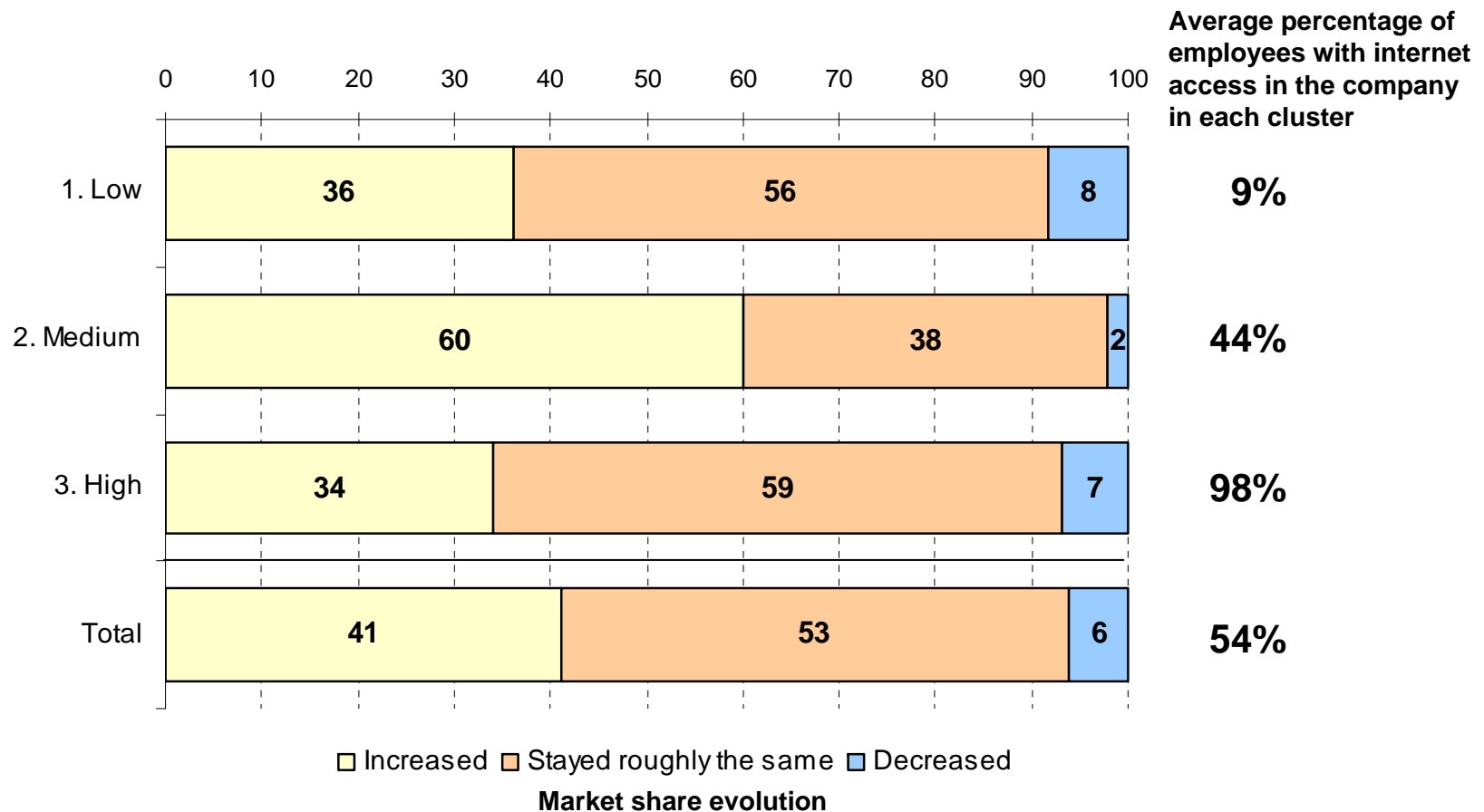
The e-business preparation of customers / suppliers also is perceived as an important usage inhibitor for companies, mainly for bigger companies (50+ and 250+ employees)



Perceived barriers to e-business adoption: % companies saying that customers/suppliers not prepared is an important reason for not using e-business more intensively

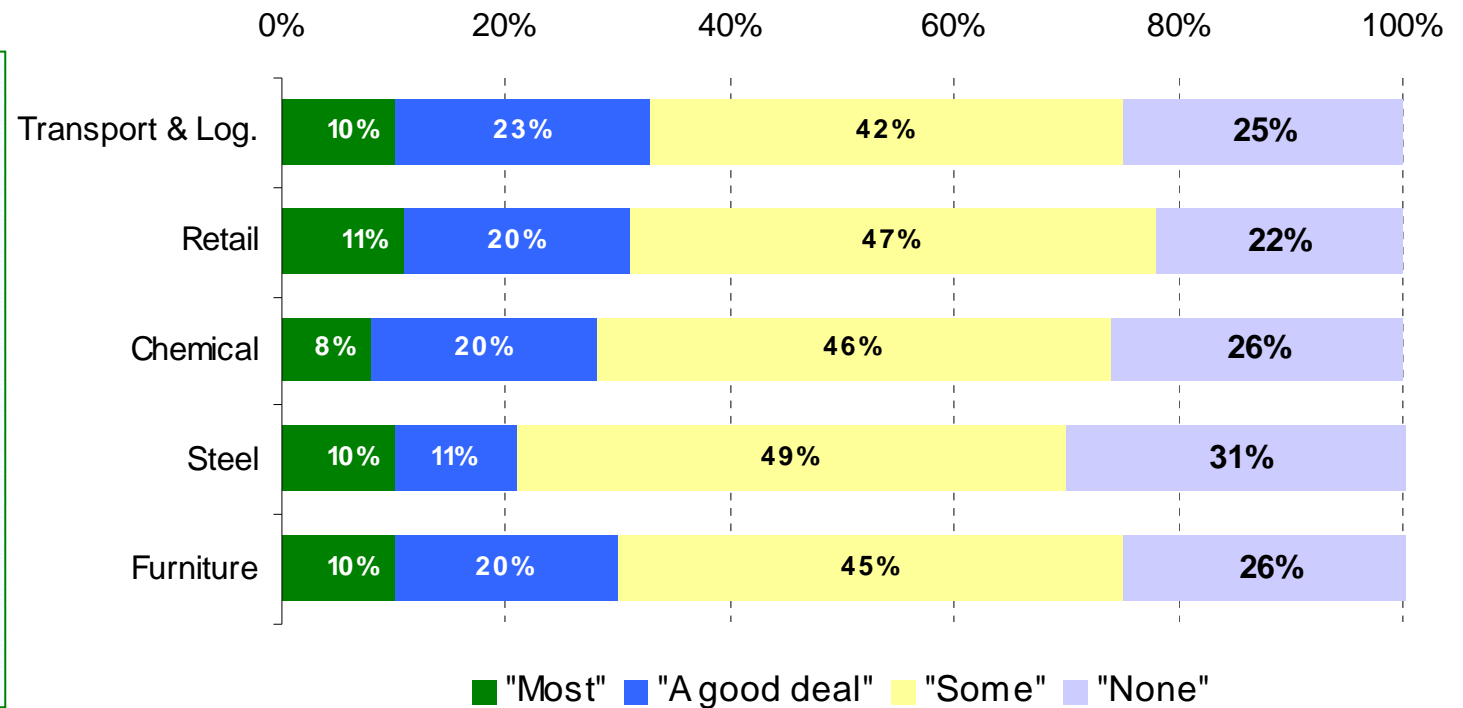
Cluster analysis

The companies of the medium cluster of Internet access by employees shows a higher relative percentage of market share increase.



Deployment of e-business: processes conducted electronically

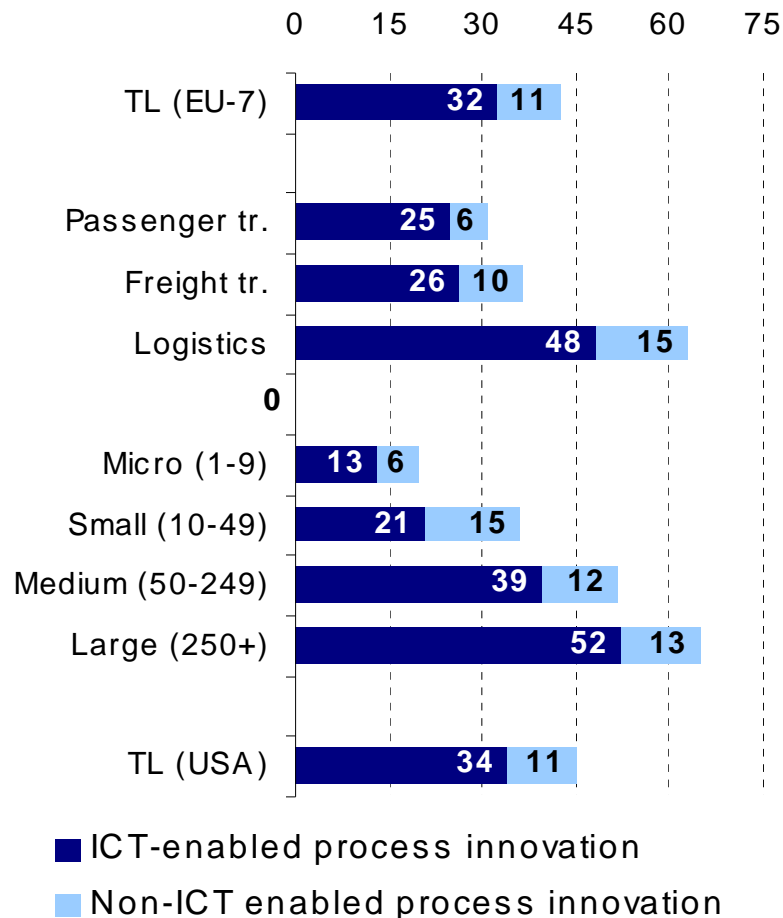
Deployment of e-business in five studied sectors: % of companies* saying that most / a good deal / some / none of their processes are conducted electronically (2007)



The TLS sector presents, compared to four other sectors studied by e-Business W@tch in 2007, a very similar uptake of e-business

* weighted by employment ("firms representing x% of employment say that ...")

% of companies having introduced
process innovation



- ICT-enabled process innovation is higher than non-ICT process innovation in the T&L sector
- The levels of process innovation in T&L EU7 companies is similar to the level in T&L USA companies
- Logistics is the most process innovative sub-sector
- The size of the company is positively correlated to the level of ICT-enabled process innovation



Main e-Business impacts on T&L companies (case studies)



- **Higher company efficiency and speed of processes due to the usage of ICT and e-business in the company areas**
- **Increased customer satisfaction with the services (i.e. electronic ticketing, B2B, etc.)**
- **Cost and time optimization and increase in productivity in the areas and processes where e-business is used**
- **Boosted transport security and improvement in environment related aspects due to ICT systems**

Some significant results

- **ICT practitioners.** Only medium (33% of firms) and large-sized firms (66% of firms) can afford employing ICT practitioners, while small companies usually do not employ practitioners.
- **ICT standards.** The size of the company has too an enormous influence on the adoption of standards. About one third of medium-sized companies and more than 40% of large firms report that they use EDI. Only 7% of micro and 12% of small companies use EDI-based standards.
- **Open Source Software.** The use of OSS increases by firm size. In particular Internet browsers based on OSS appear to be widely used by companies from the sector.
- **RFID.** There's a very limited use of RFID technologies yet. Only 2% of firms have declared that they do use this technology, mainly large-sized firms.

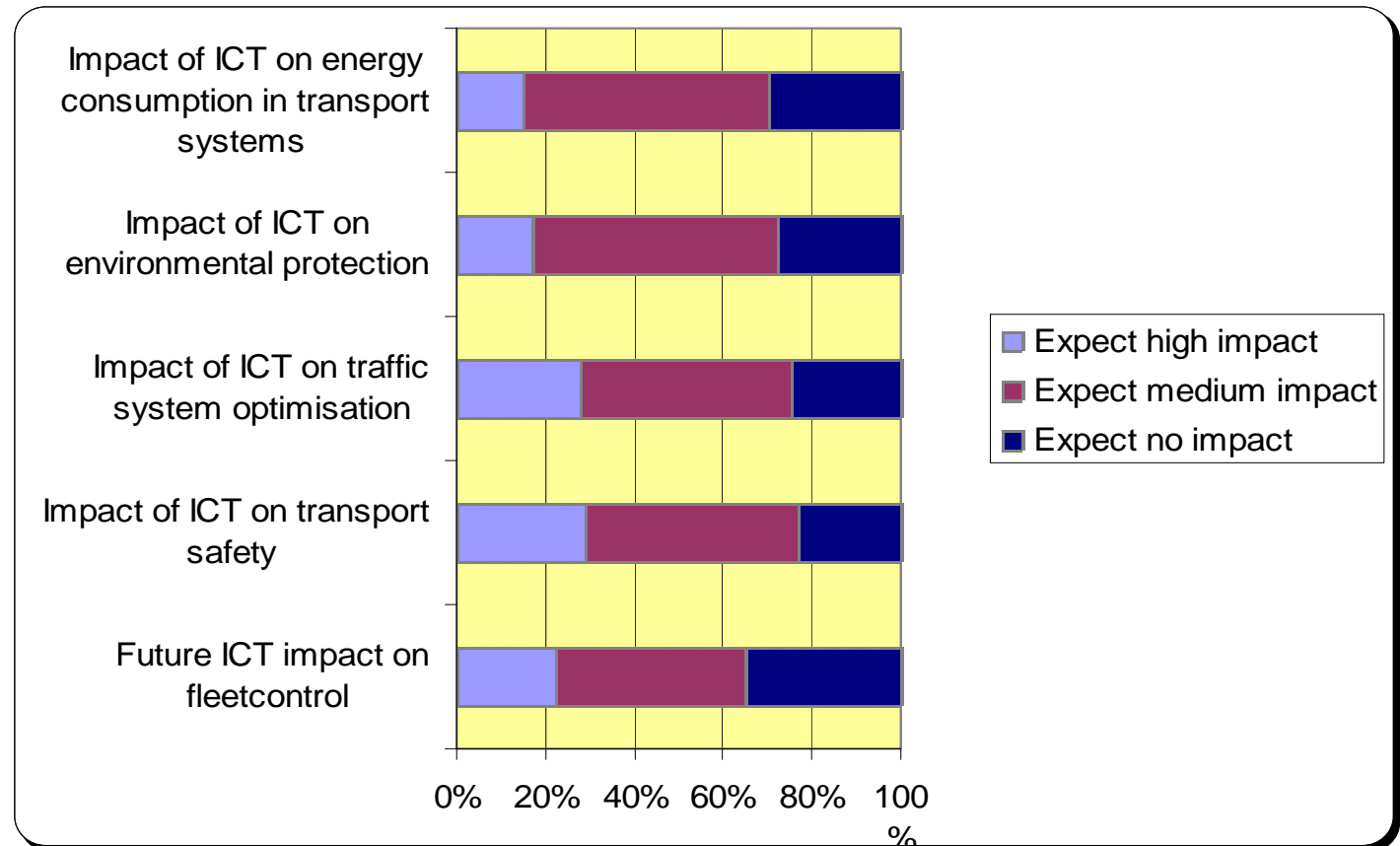
Some significant results

- ***Sectoral comparison.*** The sub-sectors comparison shows a higher development of ICT adoption in logistics than in the other two analysed sub-sectors (passenger and freight transport).
- ***International comparison.*** In international comparisons, EU TLS enterprises are – on average – level with their counterparts in USA in their use of ICT.

Expected ICT impact on some TLS sector specific areas

Companies from
T&L sector expect
that ICT will have a
high or medium
impact on business
areas such as:

- Energy consumption in transport systems (70%)
- Environmental protection (72%)
- Traffic system optimisation (75%)
- Transport safety (77%)
- Fleet control (65%)





Possible actions to boost e-Business in the European TLS



- Promoting ICT solutions for SMEs, especially the development of affordable ERP systems for SMEs
- Improving ICT skills and managerial understanding and skills for e-business
- Promoting efforts towards innovation

Conclusion

**Transport and Logistics
sector needs to take
advantage of the benefits
from ICT and e-business**

More information:
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