



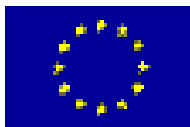
Sectoral e-Business Watch: ICT and e-Business Impact in the Transport & Logistics Industry

29 November 2007

alTran

**Interim report presentation
Brussels, 29 November 2007**

A programme of the



**European
Commission**



The European e-Business
Market Watch

ICT Adoption and impact in transport and logistics industry

**First results of Sectoral e-Business Watch
Study**

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An initiative of the



**European
Commission**

29 November 2007, Brussels

INTRODUCTION

- **The transport and logistics services sector has not been covered before by sector studies of e-Business W@tch. The availability of high quality transport and logistics services is of paramount importance for growth and competitiveness of the European economy.**
- **Sectoral scope of the study: Road transport, Rail transport and Logistics services. Related sectors.**
- **Contents of this presentation: Interim report summary, study objectives, sector scope and some preliminary results: ICT and e-business adoption, barriers and impacts.**

Study Objectives

- **The most common applications of e-business technology in the T & L industry, and the extent to which these applications are actually used by companies.**
- **The main drivers and barriers for e-business adoption in the sector.**
- **The impact of e-business on companies and on the sector as a whole, specifically in terms of competitiveness, productivity, employment and economic growth.**
- **The role of RFID and other ICT innovations on Logistics (telematics, toll collect, fleet control, etc.)**
- **The main differences in e-business adoption between European countries and among different sub-sectors.**
- **Policy implications that arise from these developments.**

Sector definition – scope of the study

NACE Rev. 2	NACE Rev. 1.1	Business activities
49.1		Passenger rail transport, interurban
49.2		Freight rail transport
49.3		Other passenger land transport
49.4	60.24	Freight transport by road and removal services
52	63	Warehousing and support activities for transportation
52.10	63.12	Warehousing and storage
52.24	63.11	Cargo handling
52.29	63.40	Other transportation support activities

Study methodology

Data and information sources

- SeBW CATI Survey (2007)
- Eurostat Community survey on ICT usage in enterprises (2006)
- 10 case studies
- In-depth interviews
- Information from industry federations

Data analysis

- Descriptive statistics
- Analytical statistical methods: Multivariate analysis, Transport and Logistics eBusiness Index, clustering, factor analysis, regression, etc,

Industry background

- **The transport sector currently generates 7% of European Union GDP and for around 5% of employment in the EU.**
- **Road transport services account for 1.6 % of the EU GDP and employ 4.3 million people**
- **44 % of the goods are moved by trucks (compared with 41 % for short sea shipping, 10% for rail and 4 % for inland waterways) and 85 % of the persons are moved by cars, buses or coaches (compared with 5 % by air and 6 % by railways).**
- **For the 25 Member States of the European Union, the modal share of rail freight declined from 19.6 % in 1995 to 16.4 % in 2004 .**
- **The modal share of passenger transport by rail in the EU25 (excluding air and sea transport) dropped from 6.3 % in 1995 to 5.8 % in 2004. The goal of the European Commission to achieve in 2010 is to maintain the modal share of rail transport at the same level of 1998, thus reversing the decline of rail transport observed over the last 30 years.**

Industry background: Logistics

- **The global logistics industry is estimated at roughly EUR 5.4 trillion, or 13.8% of the global EU GDP.**
- **Although logistics is becoming increasingly important, there is a lack of reliable statistical information on the situation.**

ICT and T&L sector

Some key-words that indicate the impacts of ICT on the T&L sector

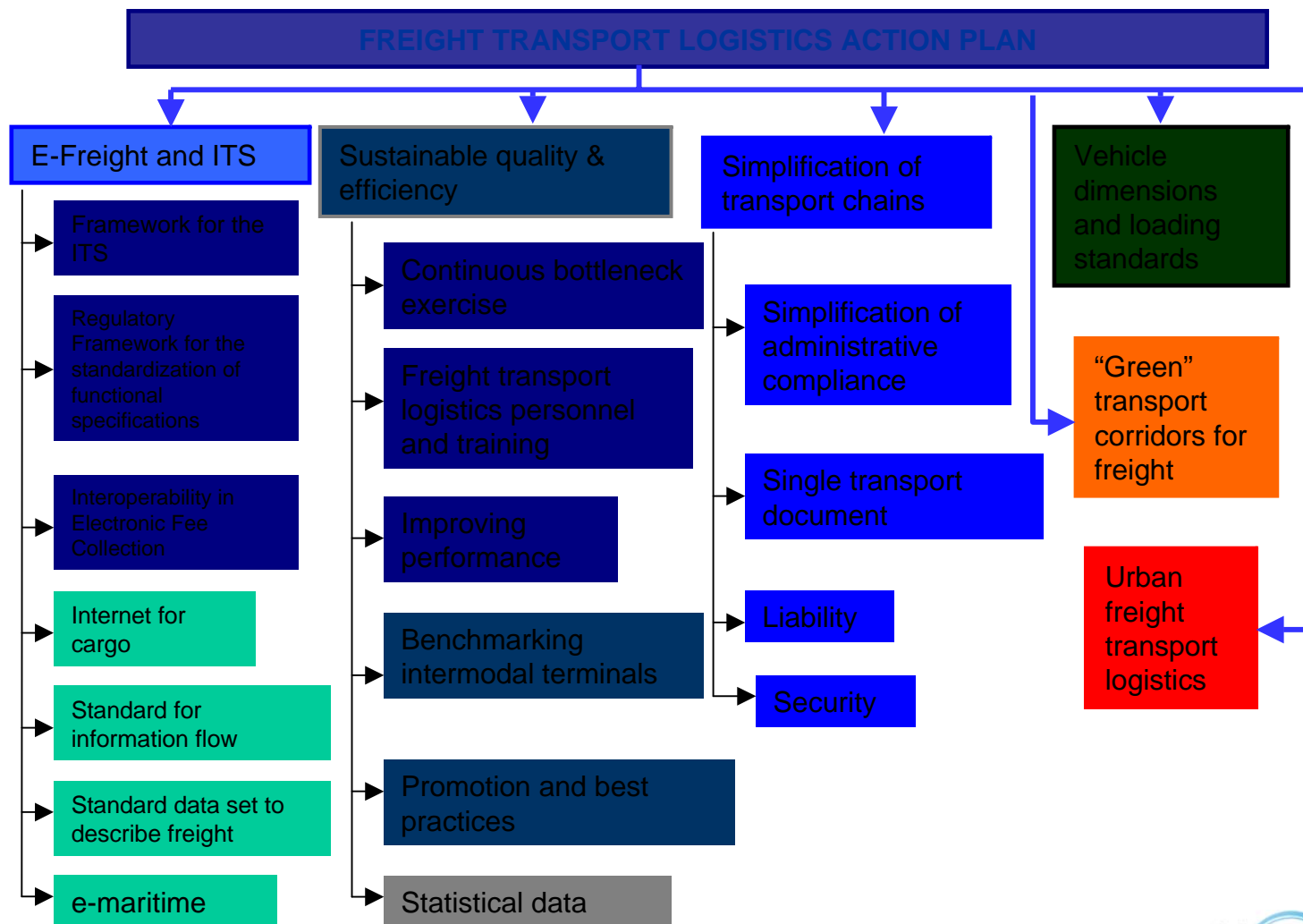
- **Collective information systems**
- **Automatic traffic control**
- **Automated Warehouse Systems**
- **e-Integrated Supply Chains**
- **e-Freight**
- **Fleet control system**
- **Individual navigation**
- **Computer-based security systems**
- **RFID-chips**
- **Train management systems**
- **Electronic booking and ticketing**

Trends and challenges for the sector

- **Combining all modes of freight transport logistics**
- **Revitalising the railways**
- **Centralised vs. decentralised logistics**
- **Efficient and effective Urban Transport**
- **Performing information and communication systems**
- **Road safety**

EC Freight Transport Logistics Action Plan

The present Freight Logistics Action Plan is one of a series of policy initiatives jointly launched by the European Commission to improve the efficiency and sustainability of freight transport in Europe

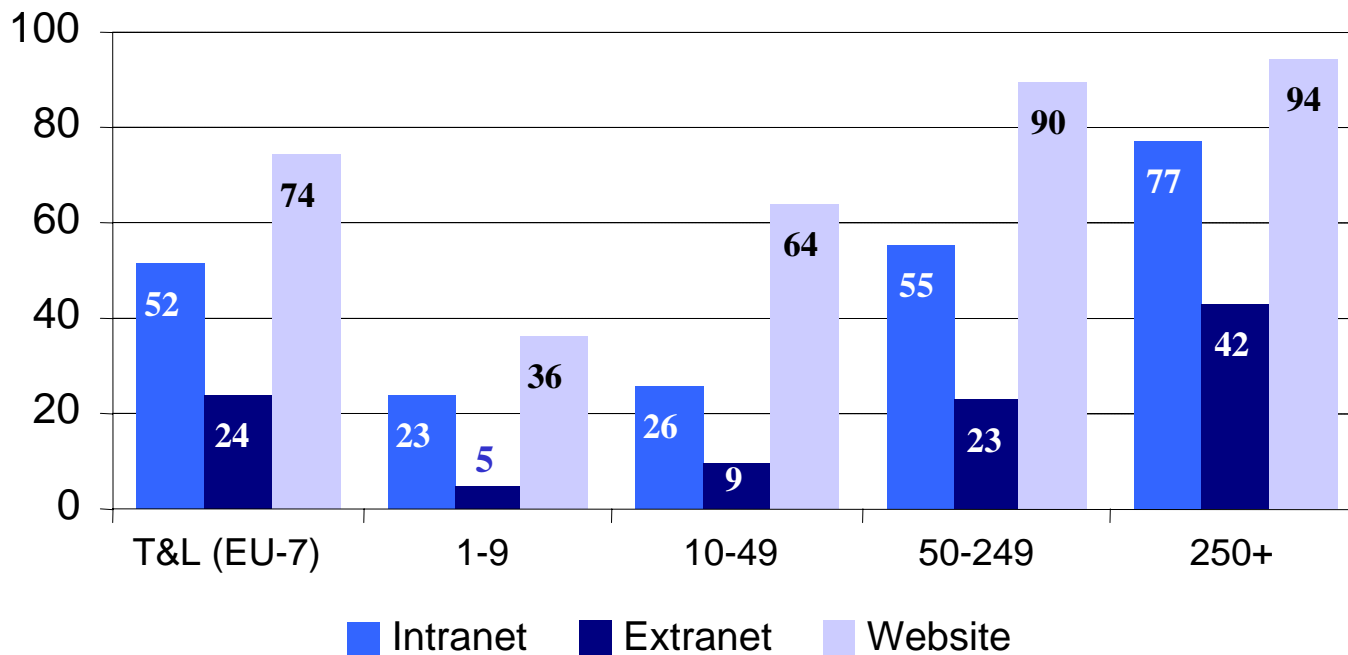


BACKGROUND SECTOR INFORMATION, ICT INFRASTRUCTURE AND e-BUSINESS ADOPTION

ICT infrastructure: INTRANET, EXTRANET & WEBSITE

The adoption level of intranet, extranet and website infrastructures is positively correlated to company sizes

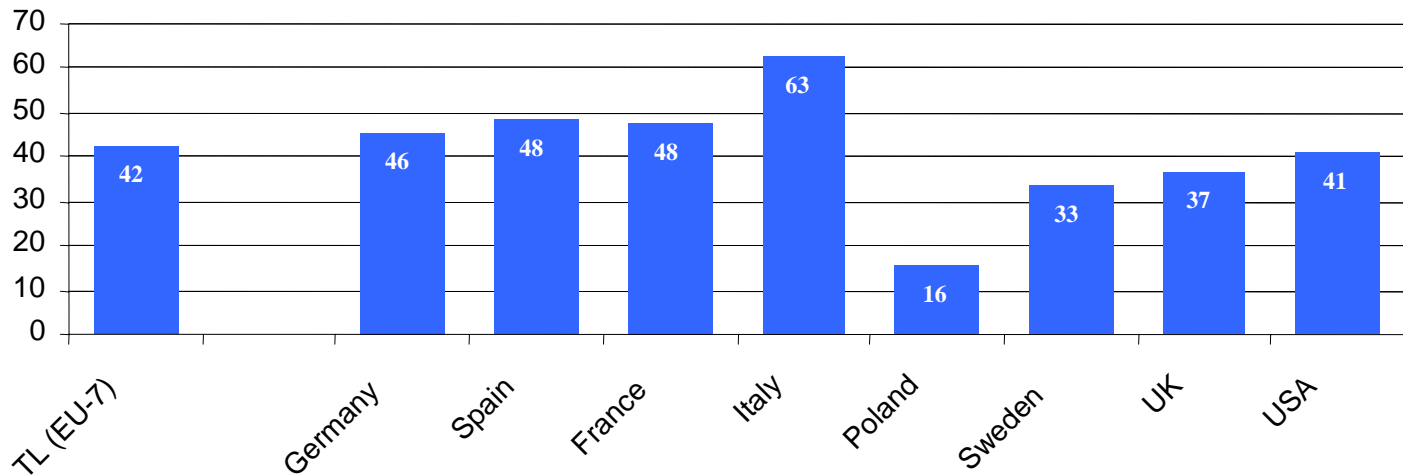
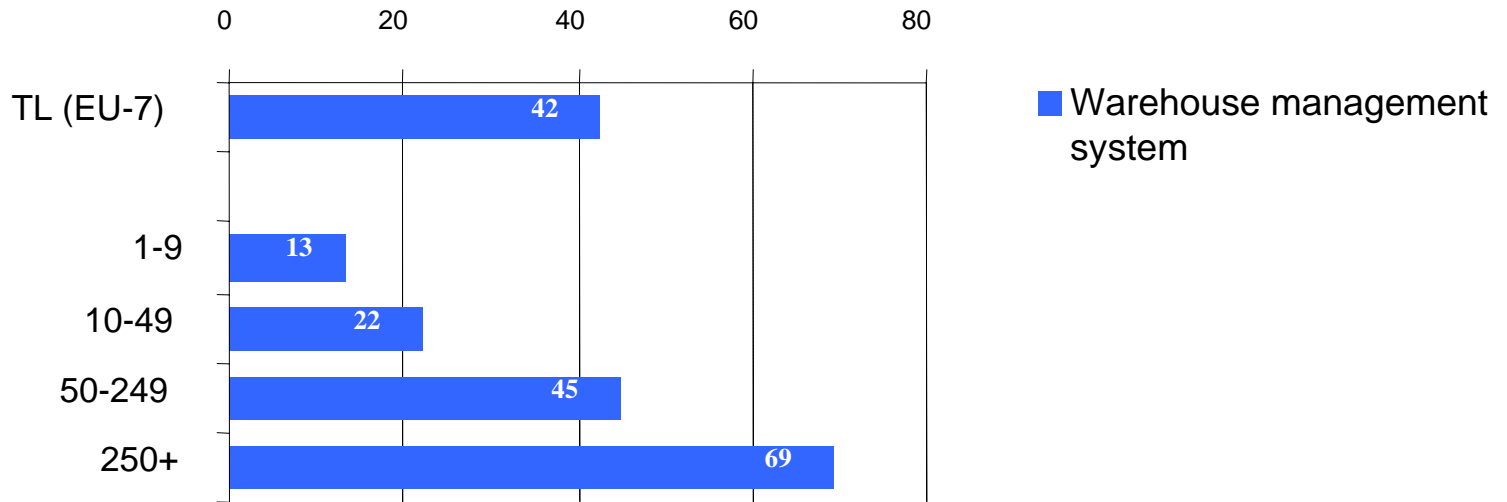
Only three quarters of the companies have website, in the smallest companies (1-9 employees) this share is just above one third, in the 250+ employees the share of adoption is 94%.



General ICT infrastructure adoption

	Internet Access	Bandwidth > 2Mbit/s	LAN	Intranet	Website
Germany	99	56	76	52	85
Spain	99	70	83	47	67
France	99	28	75	42	65
Italy	100	45	91	59	76
Poland	97	13	42	34	47
Sweden	100	65	71	50	75
UK	99	45	79	65	89
T&L (EU7)	99	41	75	52	74
USA	100	45	93	70	78

Warehouse management systems



e-Business Software adoption share

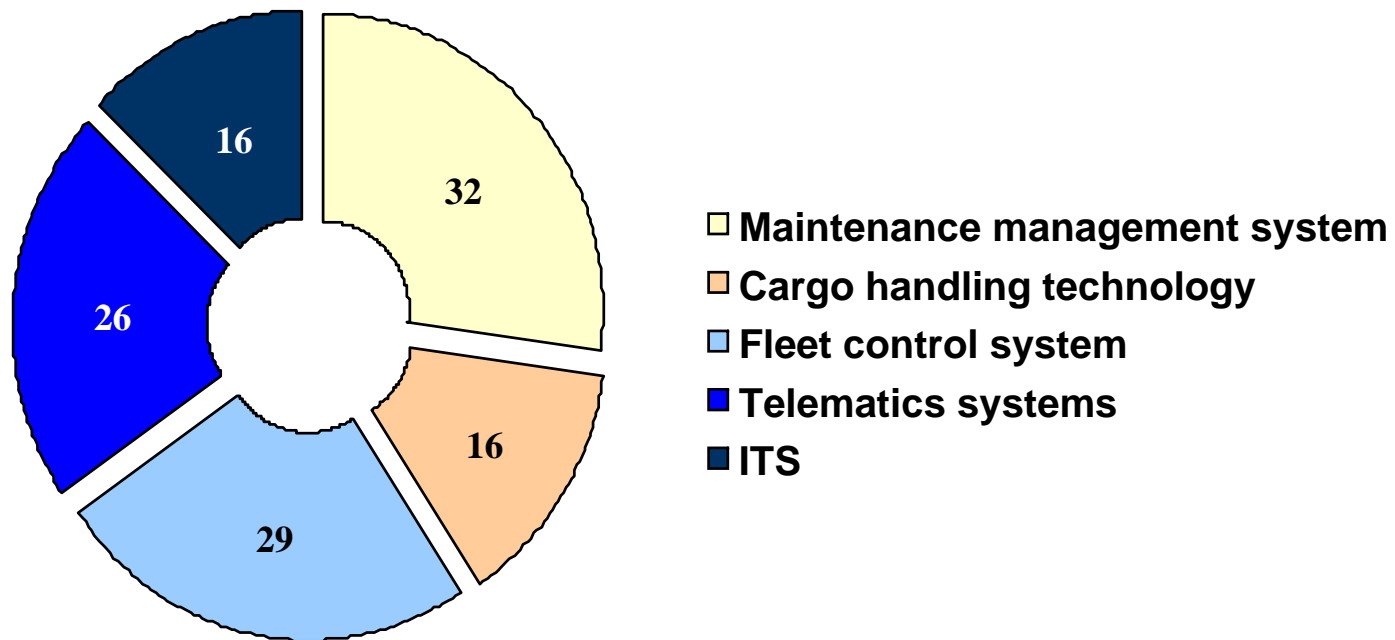
	Voice over-IP	ERP	SCM	CRM	WMS
Germany	15	39	22	22	46
Spain	15	33	25	25	48
France	19	21	22	11	48
Italy	27	16	16	23	63
Poland	22	7	8	16	16
Sweden	16	14	9	22	33
UK	21	18	37	9	37
T&L (EU-7)	21	21	21	17	42
USA	21	16	13	16	41

Adoption share

T&L specific ICT infrastructure and e-business software

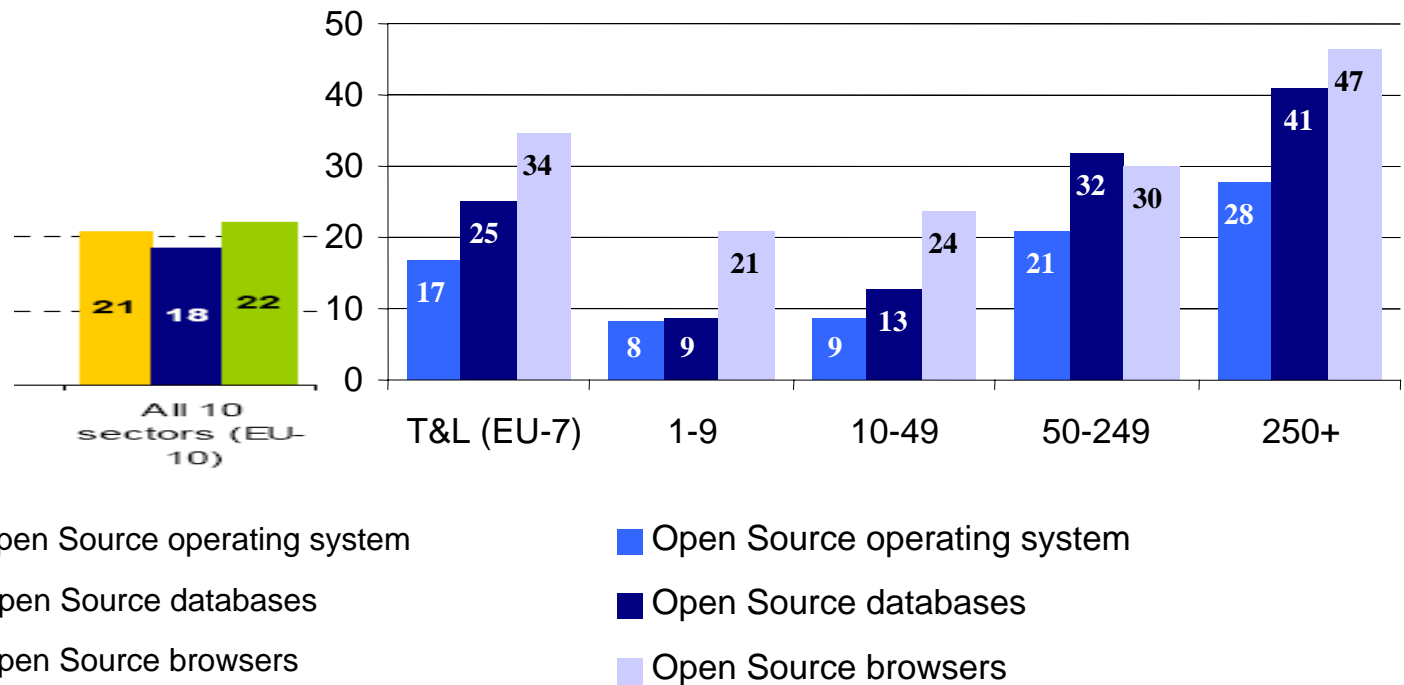
The most used T&L specific ICT infrastructure and e-business software are Maintenance management system (32% of the companies) and Fleet control systems (29% of the companies)

The Intelligent Transport Systems technologies are adopted by 16% of the companies



OPEN SOURCE

The adoption level of Open Source operating system is lower in the T&L sectors, compared with the sum of the sectors included in 2006 eWB, however the adoption level of Open Source databases and browsers is higher in the T&L sector than in the total sector average in the 2006 eBW study

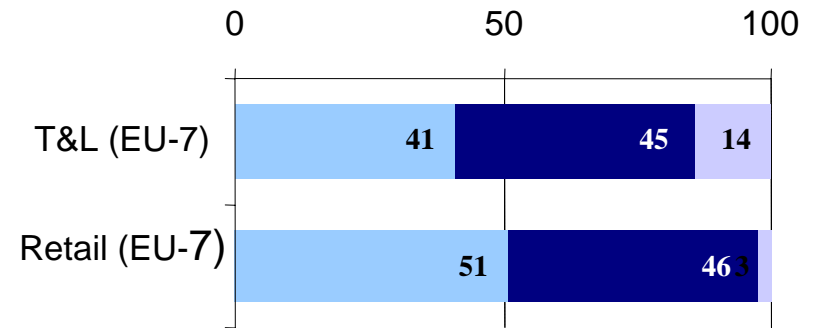
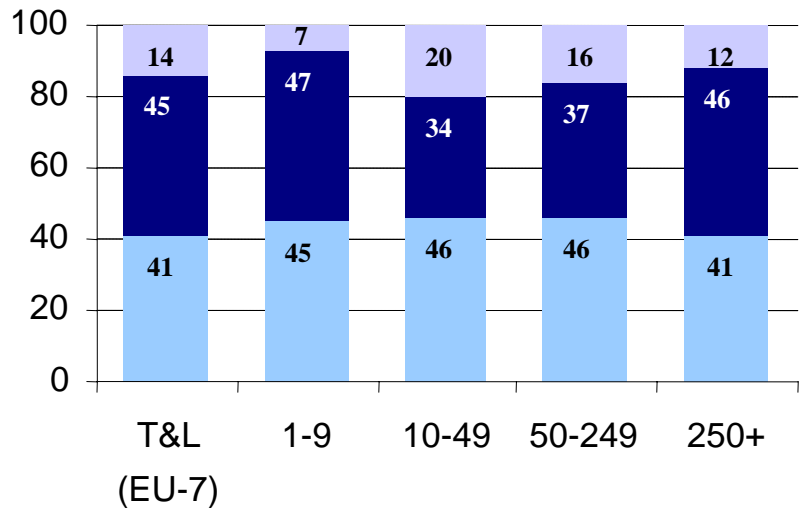


Source: 2006 e-Business W@tch Report (EU-10)

e-BUSINESS RESULTS BARRIERS AND IMPACTS IN TRANSPORT AND LOGISTICS SERVICES SECTORS

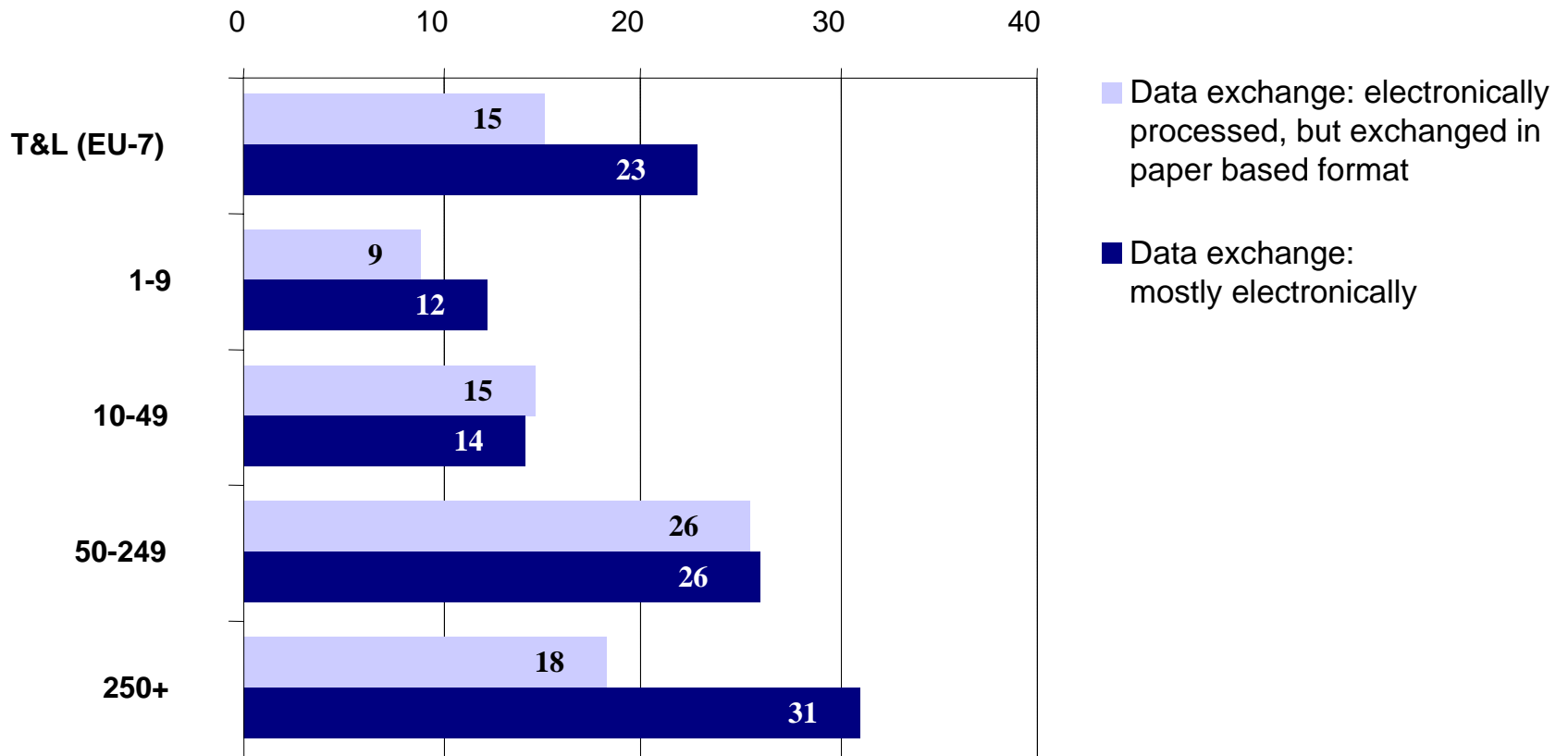
Exchanges with customers and suppliers: Online Customers

T&L sector has a share of 14% international online customers, meanwhile Retail sector has 3% international customers



- International online customers
- National online customers
- Regional online customers

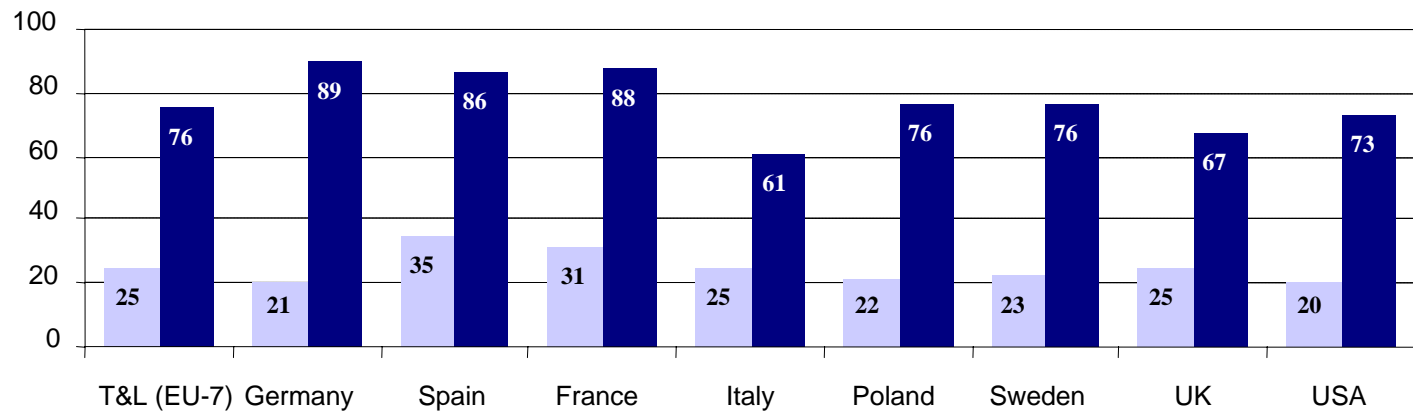
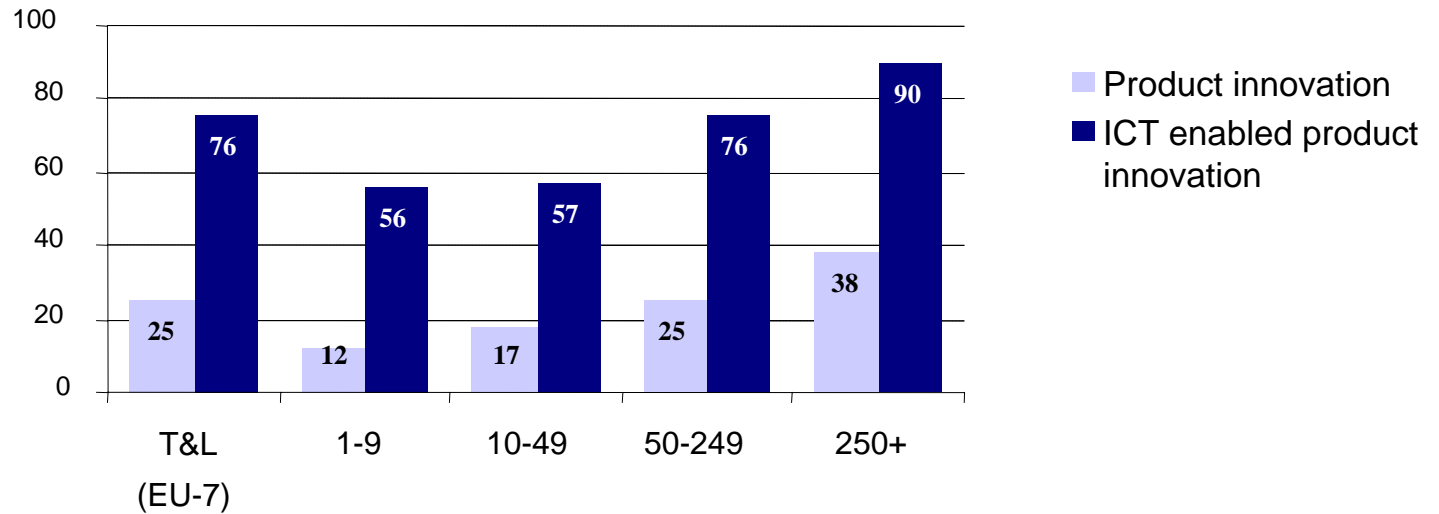
DATA EXCHANGE



DATA EXCHANGE

	Data exchange: Electronically processed, but exchanged in paper based format	Data exchange: Mostly electronically	Data exchange: mostly in Paper based format	Send e-invoices	Receive e-invoices
Germany	27	22	26	35	50
Spain	22	19	39	37	57
France	10	17	46	20	45
Italy	17	18	49	37	68
Poland	14	15	29	26	42
Sweden	6	34	15	36	35
UK	5	38	31	41	64
T&L (EU-7)	15	23	36	33	55
USA	28	25	16	65	64

ICT & INNOVATION



ICT SKILLS & INNOVATION

	ICT practitioners	eBiz impact on skills requirements	New patents	New patents related to ICT	ICT Investments in Previous year
Germany	35	50	1	0	79
Spain	23	51	2	27	71
France	31	31	4	86	74
Italy	47	43	8	4	77
Poland	17	65	2	7	76
Sweden	45	42	0	0	74
UK	42	38	1	60	74
T&L (EU-7)	35	45	3	26	76
USA	14	46	7	50	54

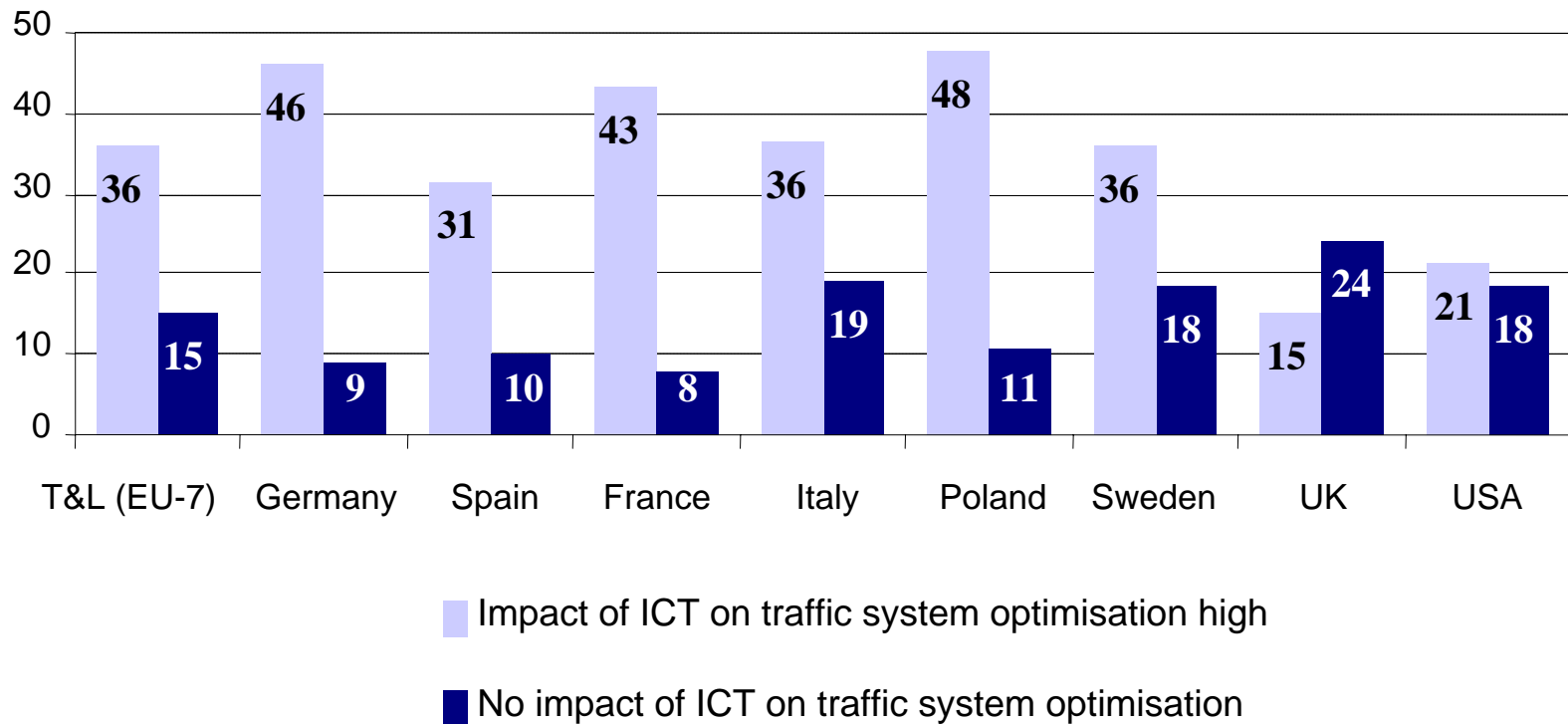
ICT Barriers 1

	eBiz share: good deal of processes	eBiz share: none	Barriers: Company too small	Barriers: e-business Technologies too expensive	Barriers: Technology too complicated
Germany	31	24	42	39	24
Spain	23	20	54	47	21
France	5	43	34	34	24
Italy	28	30	22	17	11
Poland	31	9	79	49	43
Sweden	11	47	38	33	25
UK	18	21	38	38	41
T&L (EU-7)	23	25	40	34	27
USA	17	28	42	44	34

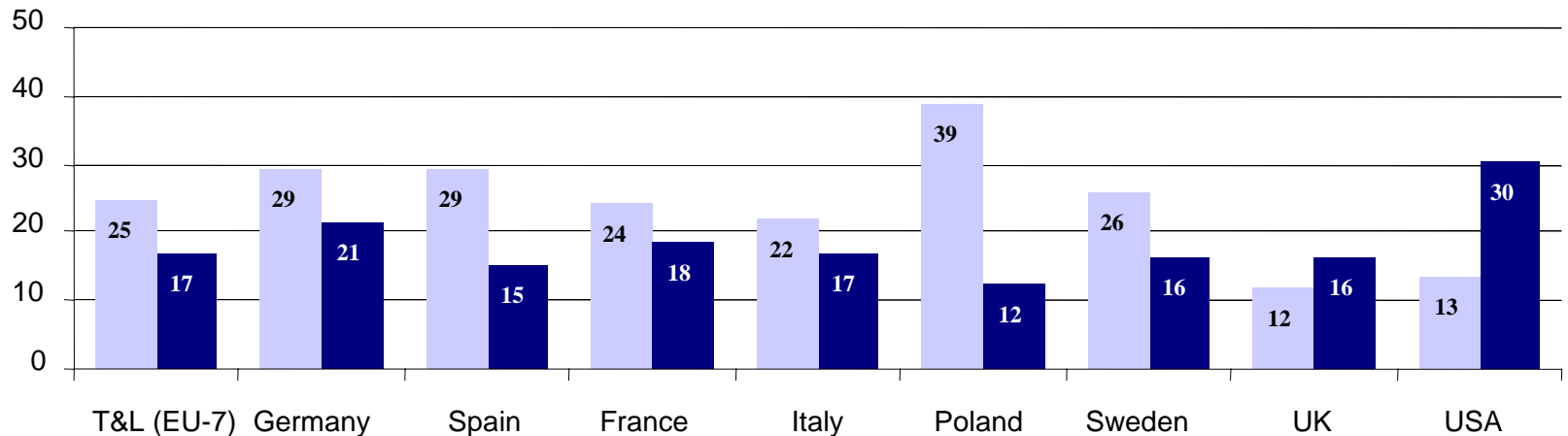
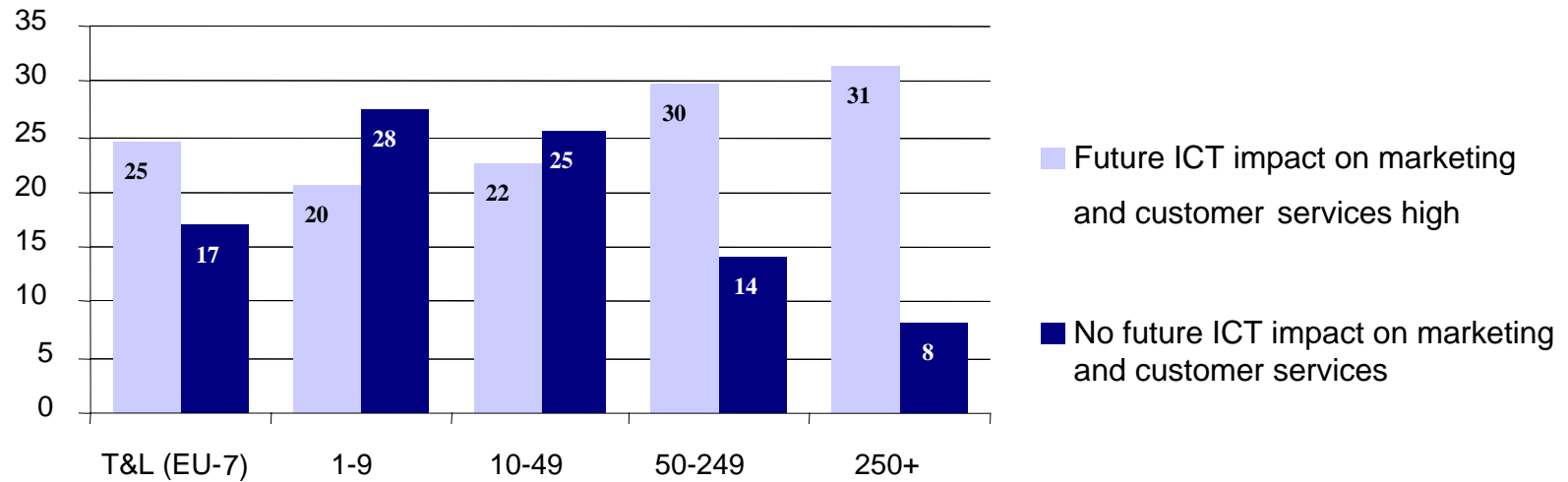
ICT Barriers 2

	Barriers: customers / suppliers not prepared	Barriers: Security issues	Barriers: legal challenges	Barriers: IT suppliers
Germany	70	31	43	16
Spain	82	34	44	37
France	76	39	27	26
Italy	71	12	7	15
Poland	75	31	32	47
Sweden	19	22	12	18
UK	69	42	20	17
T&L (EU-7)	70	31	24	23
USA	60	48	17	23

Impact of ICT on traffic system optimisation high vs. no impact of ICT on traffic system optimisation



Future ICT impact on marketing and customer services high vs. no future ICT impact on marketing and customer services high



**THANK YOU VERY MUCH
FOR YOUR ATTENTION!**