



European Commission:  
Information society DG

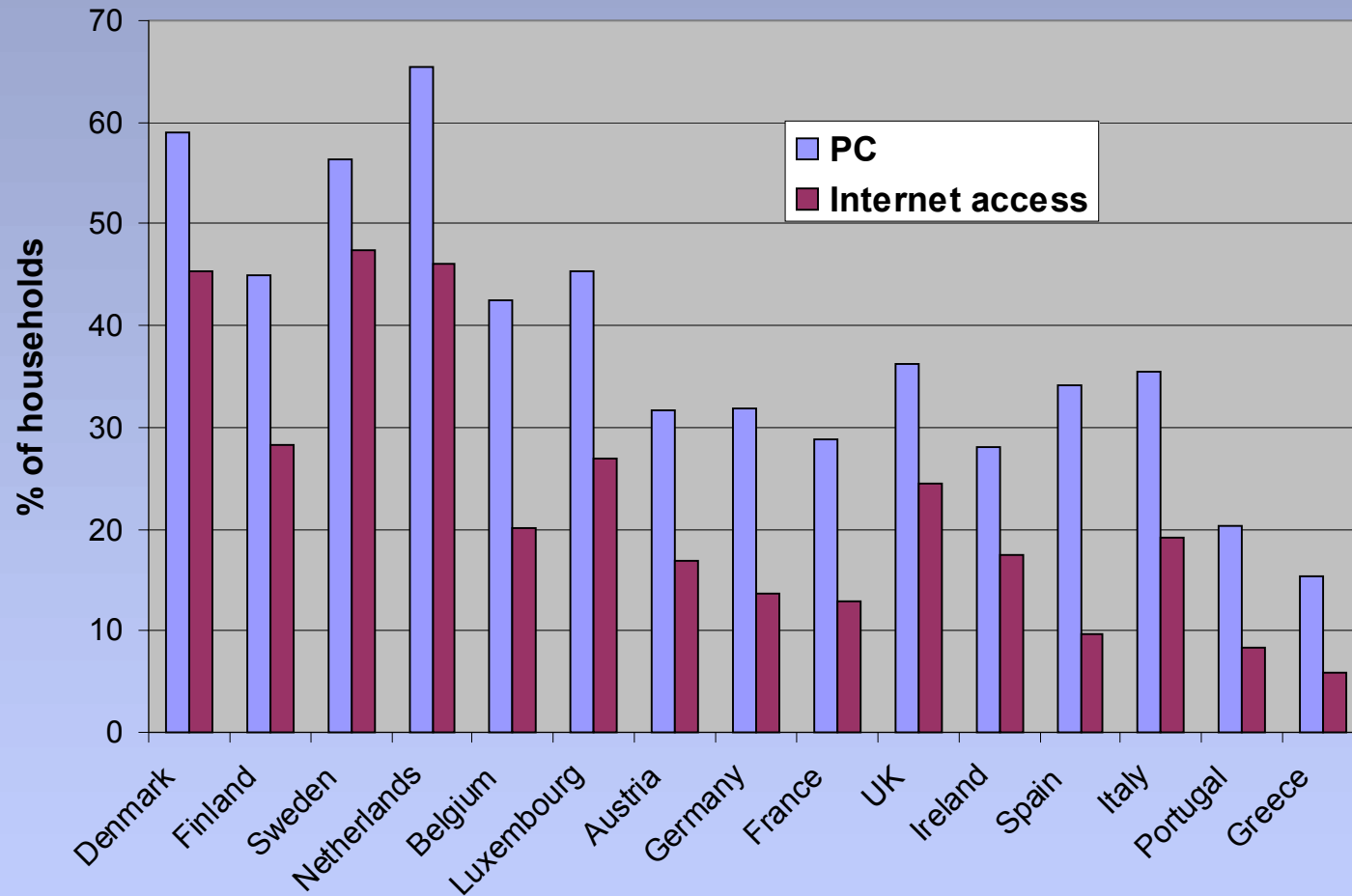
# E-Europe and the IST Programme

Dr Jean Millar

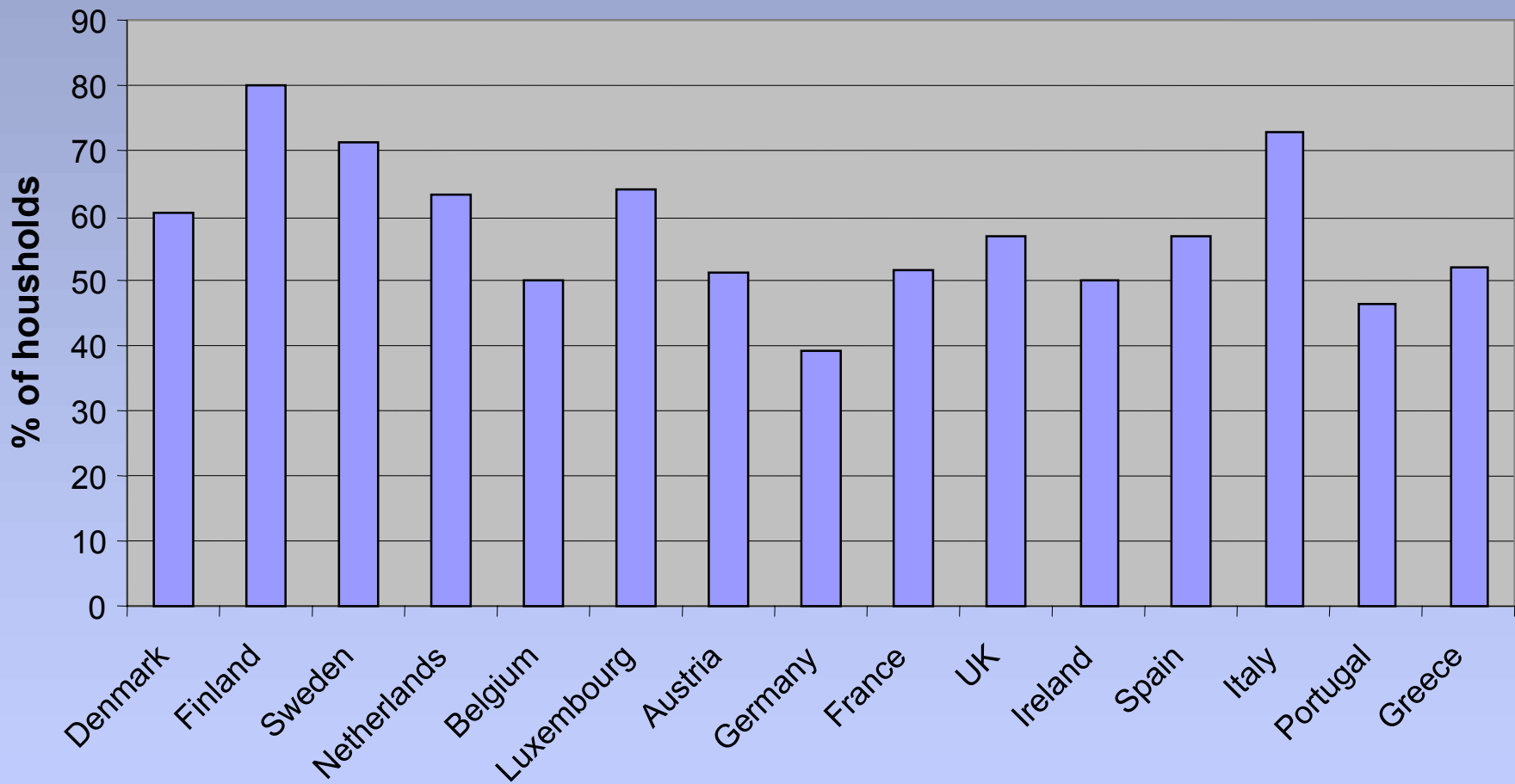
Directorate: E-Commerce and New Methods  
of Work

Delivered at the 'Where in the World?' Conference, Budapest 24/25 October 2000  
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# PC and internet access at home: Europe June 2000



# Mobile phone use: Europe June 2000



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# Technology perspectives in 2005

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- ◆ **10-fold increase in computing power**
  - **Things that think**
- ◆ **250-fold increase in communication capacity**
  - **Things that link**
- ◆ **Multi-media everywhere**
- ◆ **Voice interfaces and 3-D displays**



# The Lisbon Summit: March 2000

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## A new strategic goal:

- ◆ **“To become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs, and greater social cohesion”**



# eEurope and the Lisbon Summit

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- ◆ **Increase participation in employment from 61% to near 70% by 2010;**
- ◆ **Increase the participation rate of women from 50% to 60% by 2010;**
- ◆ **Ensure that all school-leavers are “digitally literate”**



# The *e*Europe Action Plan

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**62 Action lines in 11 areas, in 3 themes:**

◆ **Cheaper, faster, secure Internet**

◆ **Investing in people and skills;**

**Actions for young people;**

**Working in the knowledge economy;**

**Participation for all.**

◆ **Stimulating use of Internet**



# The changing nature of work

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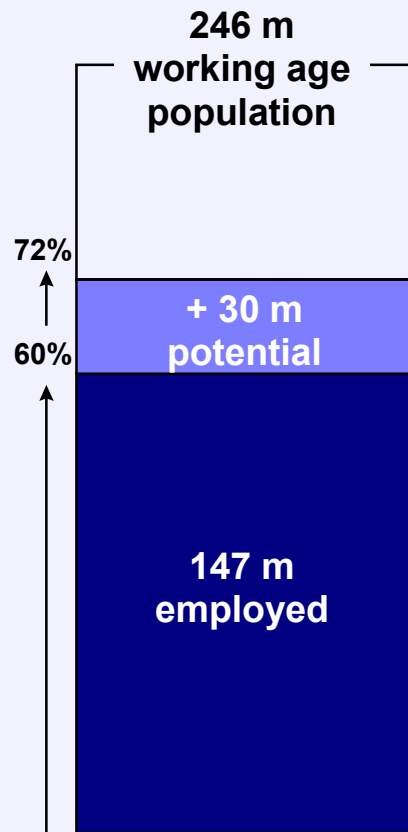
- ◆ New services
- ◆ New value chains
- ◆ Globalization
- ◆ A faster pace of change:  
Lifelong learning - A shared responsibility with business



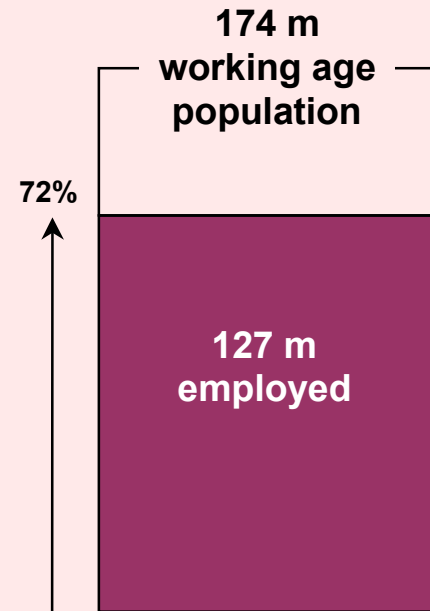
# Europe's employment potential

1998

## Europe

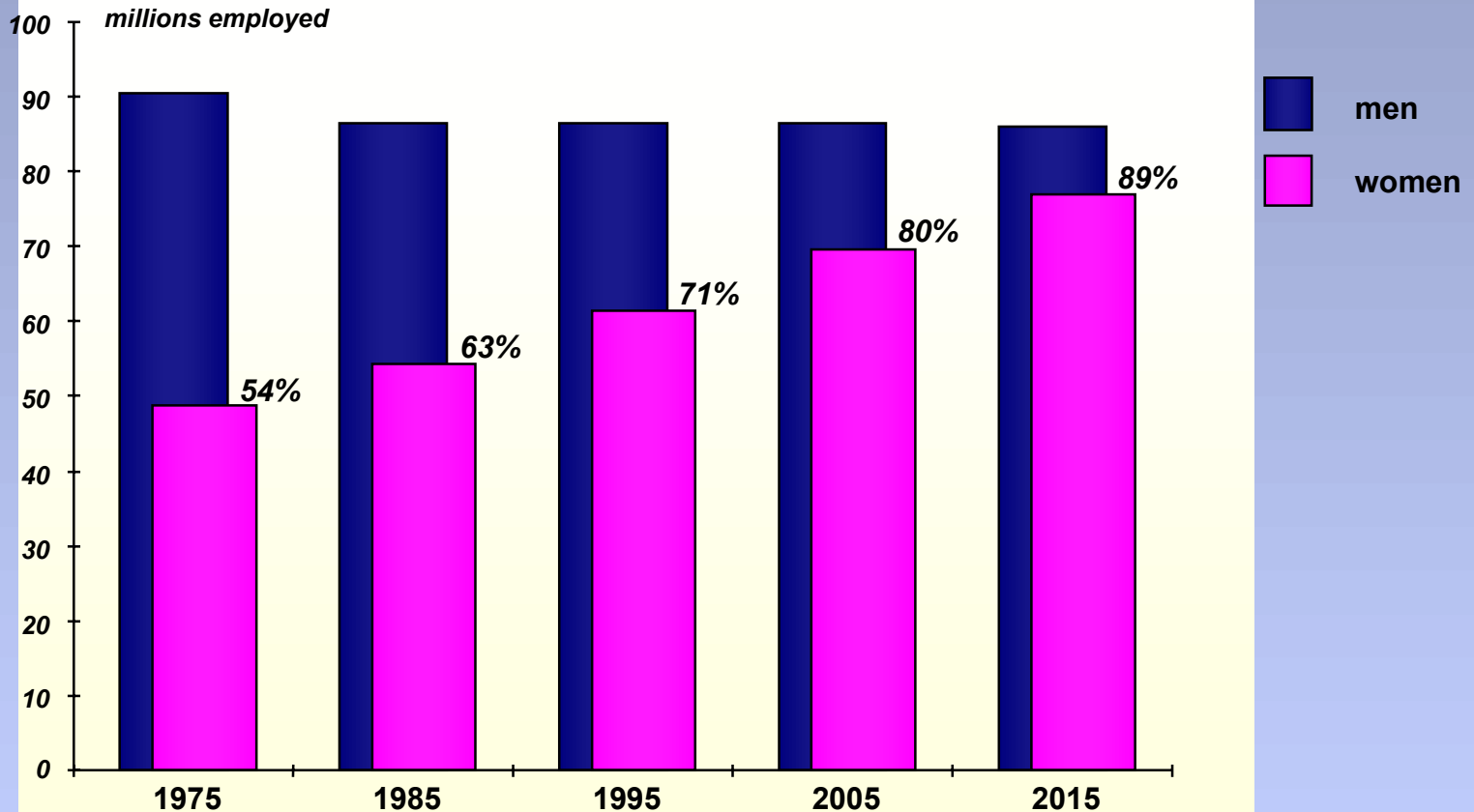


## USA



# Closing the Gender Gap

- women employed as % of men employed -



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# *e*Work development priorities

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- ◆ **Telework: Flexibility and accessibility**
- ◆ **New workplace technologies for creativity;**
- ◆ **A better work/life balance;**
- ◆ **New workplace concepts for sustainable development in a knowledge economy.**



# eWork Status report: Sept 2000

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- ◆ eEurope policy priorities
- ◆ Telework status across Europe: ECaTT;
- ◆ The current situation in each Member State;
- ◆ New RTD priorities;
- ◆ Key events;
- ◆ Active European Projects;
- ◆ Web-sites and key publications.



# An Information society for all

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- ◆ Competition in local access by end 2000
- ◆ Fully liberalised telecoms by end 2001
- ◆ All schools on-line by end 2001
- ◆ e-Access to public services/procurement by 2003
- ◆ Closing the “Skills Gap”; life-long learning; and priority actions for target groups



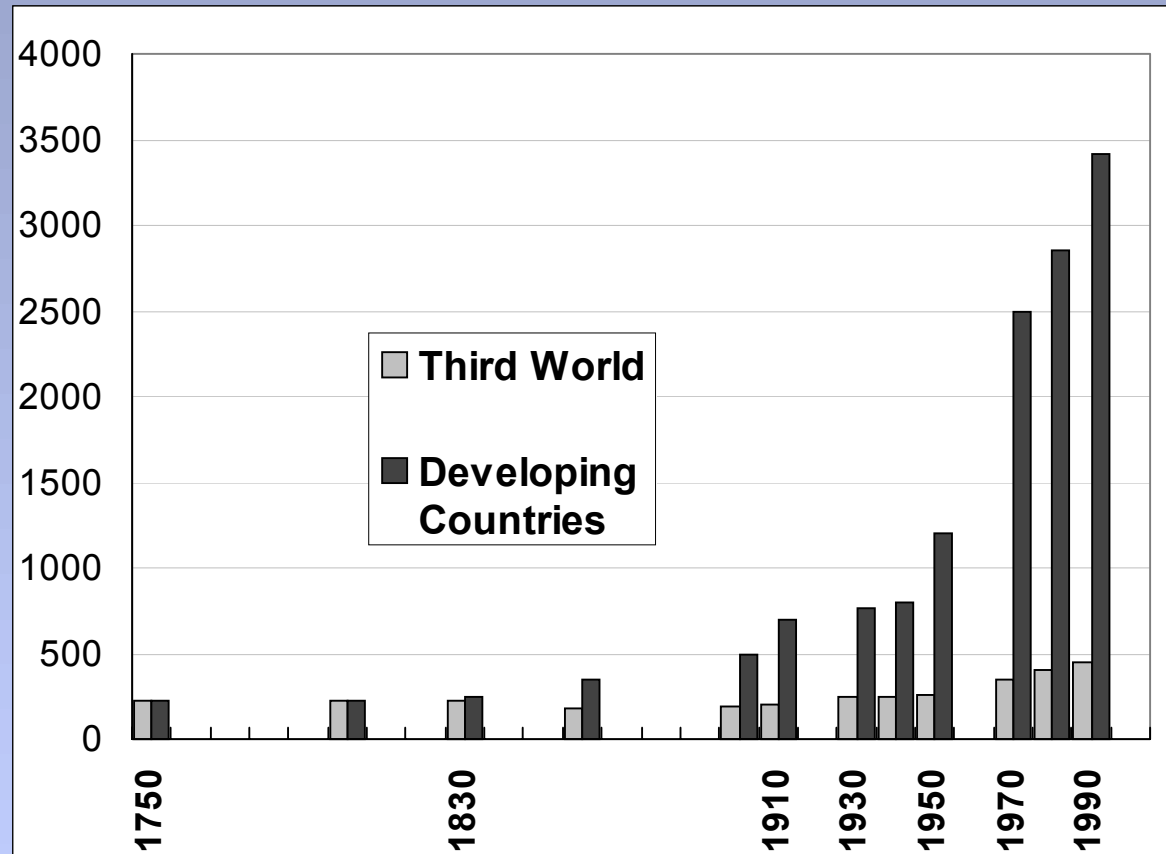
# Global dialogues:

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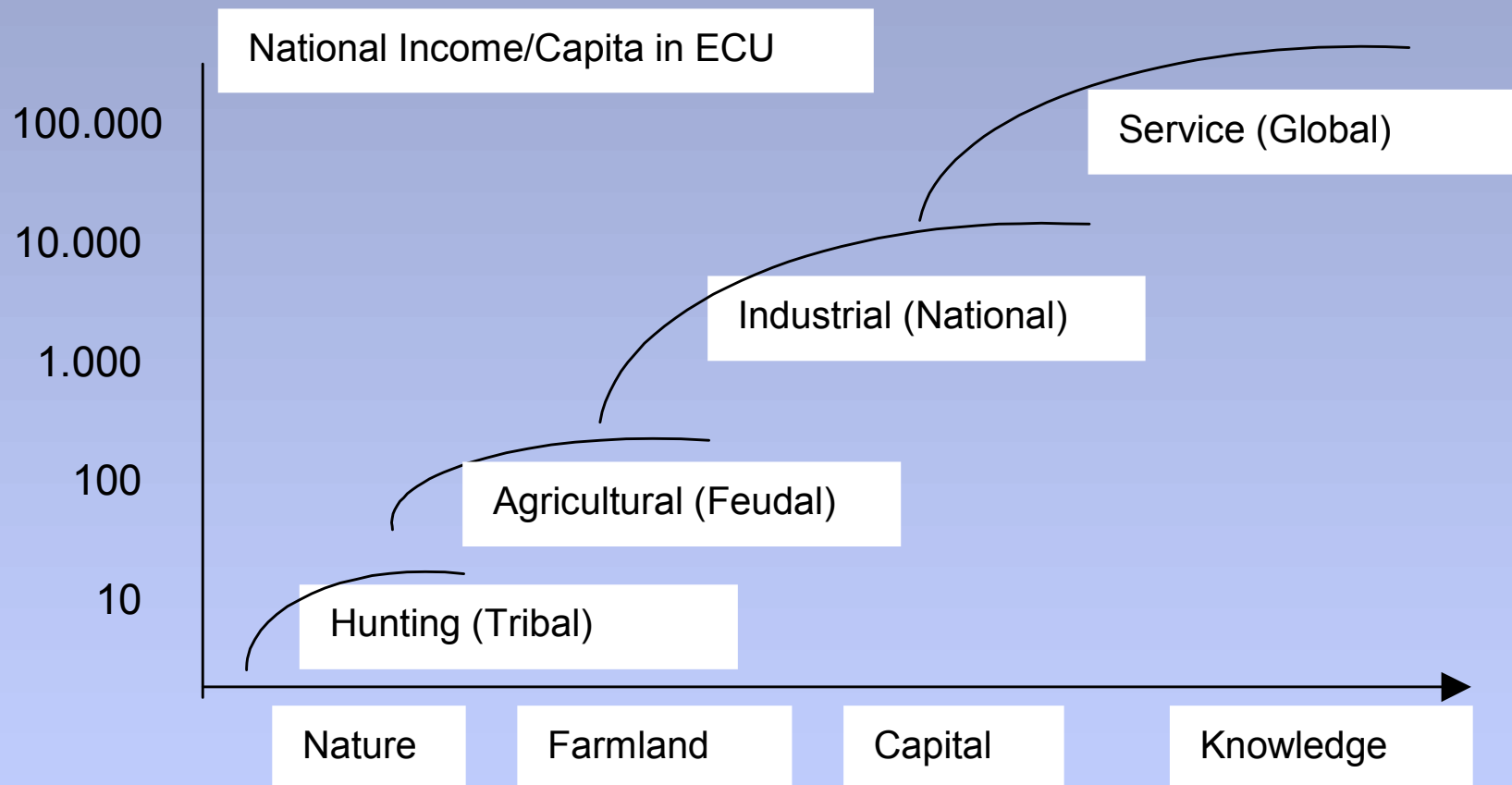
- ◆ The problem is global;
- ◆ The commitment to change must be widely shared by business, Governments and NGOs
- ◆ Lifestyle aspirations must be changed;
- ◆ A new framework for Social Dialogue



# Divergent trends in GDP per Capita: 1760-1990



# The next revolution?



# Economic stability:

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- ◆ European Monetary union: The Euro:
- ◆ Budgetary discipline;
- ◆ An independent Central Bank;
- ◆ Is the “New economy” stable?



# Sustainable use of resources

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- ◆ **Add more immaterial value to products**
- ◆ **Convert products to immaterial services**
- ◆ **Use material resources more efficiently:**
  - **Shared use**
  - **Better logistics**
  - **Longer usage**
  - **Recycle**



# Resource use is still rising

Since 1980:

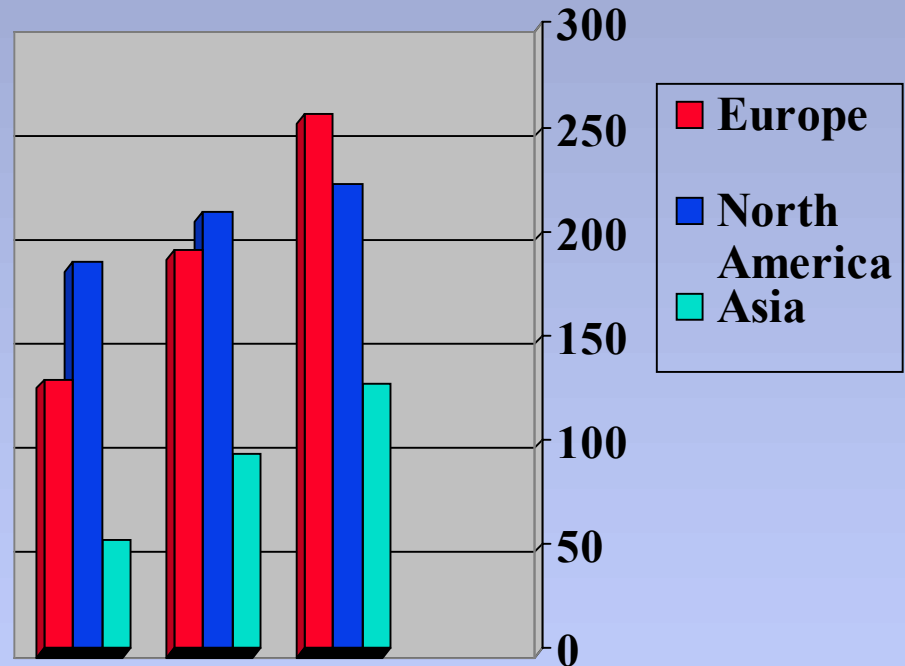
100% more air miles

100% more cars;

60% more car-miles;

75% more freight  
traffic

Millions of vehicles



# Building and construction

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**100% increase since 1980;**

**The largest single capital investment today**

**Heating and lighting now represents:**

- ◆ **50% of energy consumption;**
- ◆ **50% of CO2 emissions;**
- ◆ **40% of raw material use**

**BUT!**

**Usage rates of less than 10% for most office space**



# Strategies for sustainable development

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- ◆ **Shared work facilities;**
- ◆ **Transport demand-reduction;  
(Telecommuting)**
- ◆ **Local community telecentres**



# Change the way people work

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- ◆ **For global competitiveness**
  - flexibility; adaptability; high-skill
- ◆ **To compensate for low mobility**
  - bring work opportunities to all
- ◆ **To increase the quality of working life**
- ◆ **To improve the sustainability of growth and employment**



# The Commission's Telework Pilot project

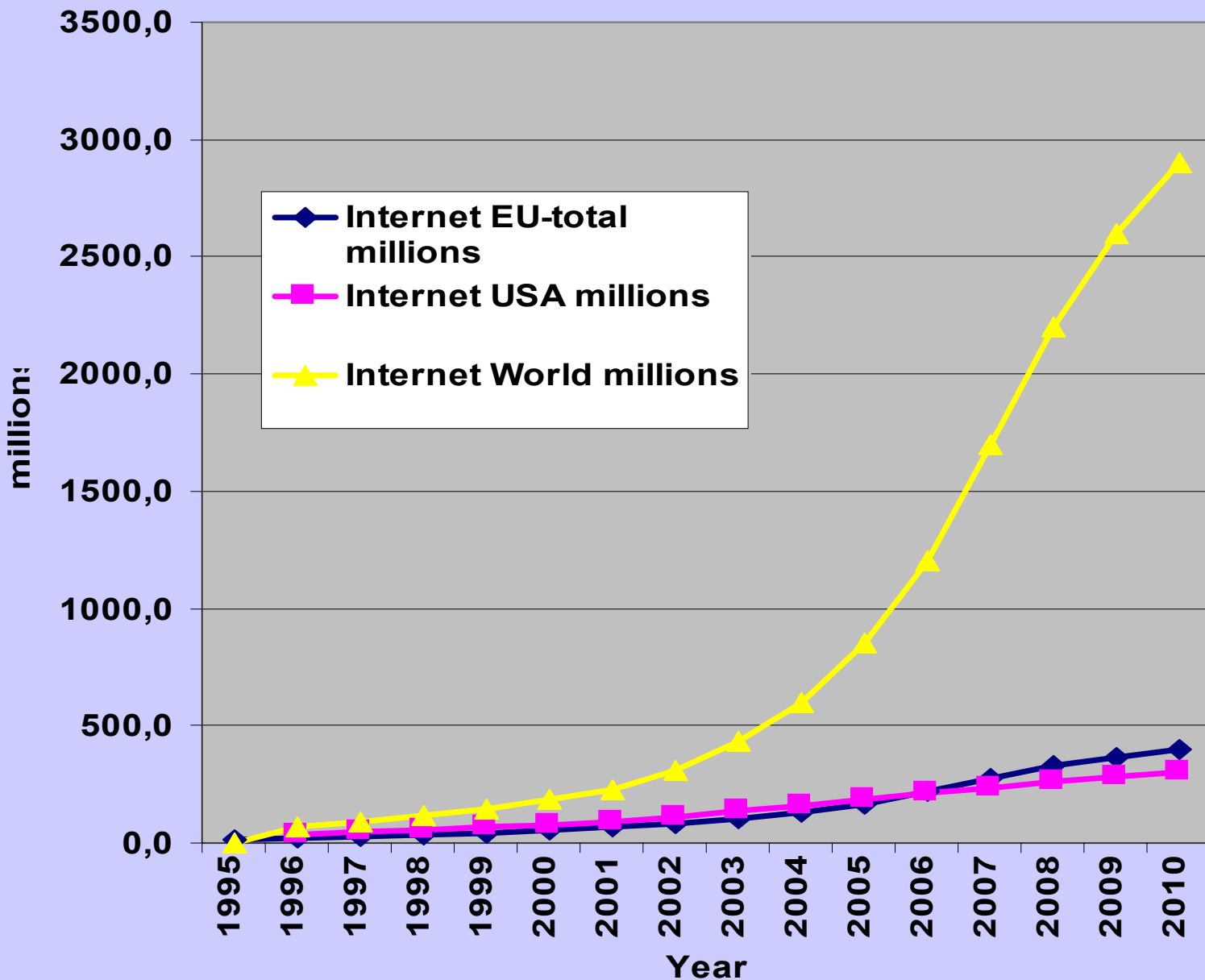
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- ◆ **DG-INFISO** : Co-ordinated by C1 in liaison with:
  - R1 (Personnel); R4 (Informatics)
  - DG -Employ; DG-ADMIN
  - “Staff Consultative” and “Health& Safety” Committees
- ◆ **80 volunteers: 10% of DG-INFISO statutory staff**
  - “Mobile”; “alternating office-home”; “Other EC building”.
  - Positive interim evaluation in 1999: Final in 5/2000

**Input to Reform of the Commission**



# Internet:EU and US vs World



# EU research priorities

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- ◆ Smart organisations;
- ◆ Sustainable workplace design;
- ◆ **Social and economic research on “new perspectives for work and business;**
- ◆ **Promotion of broad adoption of *e*Commerce and *e*Work in regional and sectorial frameworks.**



# Working in the Knowledge economy

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- ◆ Digital literacy for all in Life-long learning;
- ◆ Gender equality in re-inforced technology training;
- ◆ European diploma for IT skills
- ◆ **Greater flexibility in work: telework framework agreements;**
- ◆ Networked learning centres;
- ◆ **Public-access to tele-centres with eWork facilities in all communities.**



# New Methods of Work

The individual's perspective:

The whole workforce will be affected

## Scope

Work organisation: Flexible,  
remote & adaptable.

New work tools,

In new work environments.

## Key issues

Work efficiency

The Quality of working life

New job creation

Work opportunities for all

Sustainable development

Demand side interest in telework: Any kind of telework



70% of the EU workforce would like flexibility in time and place of work



# Where are we in Europe today?

## Some Key figures

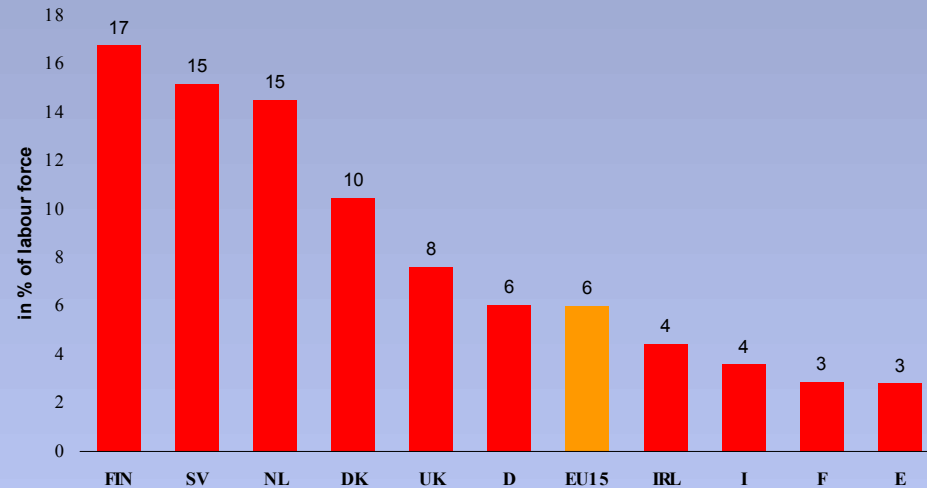
70% of the workforce uses PCs;  
130 million Europeans use GSM

**6% of the EU workforce  
now teleworks**

(17% in Finland, Sweden, NL)

50% of the Danish workforce  
covered by National Framework.

All teleworkers in Europe in % of total labour force



## New work environments

Call centres, Telecentres, Hot-desking, Furnished office space; Home Offices; Mobile working.....



# Building bridges

To other policy areas:  
Sustainable development;  
Regional development  
Accession and development  
**Information Society Forum**  
**Club of Rome**  
**EXPO 2000**

To EU and National  
Employment policies:  
**EWON; National Action Plans**  
**European Assembly;**  
**Social Dialogue**



Between RTD projects  
**- In C1; across C**  
**- With other KAs**  
**- Across the 5th FP**

To European  
Structural Policy  
Initiatives:  
**ESF/EQUAL**



# Key new Activities in 1999

## Key Partners

### New IST projects: RTD

Productivity in Call centres  
Media production teams  
Virtual presence  
Virtual mobile teams  
Remote maintenance  
Working across time-zones  
Distributed manufacturing

### Events

European Assembly on “New Ways  
to Work” - **Telework 99**.  
European Telework Week  
European Telework awards

- ◆ **Telecommunications:** BT; Telecom Italia;..
- ◆ **Mobile technologies:** NOKIA; Motorola; SIEMENS...
- ◆ **Research centres:** VTT; TNO; Fraunhofer..
- ◆ **Industry:** AeroSpatale; Bae, SAAB; STATOIL;
- ◆ **Trade Unions:** CGT; CWU

### Social & economic research

Working conditions in Call centres  
Millenium Benchmark on Telework  
Re-localising tele-mediated work



# Key focus for 2000

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**New IST RTD**

Mobile e-Work

Sustainable Workplaces

**Take-up measures**

Articulation with new Structural  
and Accession initiatives

**Key Events**

Special EU Employment Summit

7th European Assembly on “New Ways to  
Work” (London, 9/2000)

EXPO 2000; Global social dialogue  
e-Work & employment week



**Social & economic research**

Globalisation and employment  
Sustainability of I.S development



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# IST workprogramme 2001

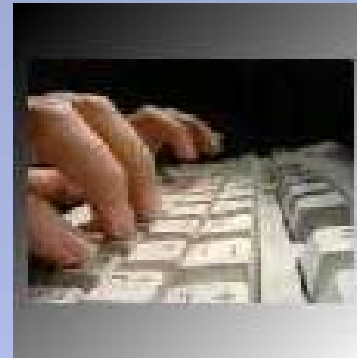
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## **Social & Economic Research**

Social, economic, industrial, technological  
& legal aspects of e-commerce & e-work

incl. models and scenarios:

- wider participation in the knowledge economy (incl. QoL & equality)
- skills, competencies, user friendliness
- stimulate take-up for existing Euro business & SMEs, also start-ups (incl. contractual & liability issues)
- knowledge economy, business paradigms & sustainable growth
- new business scenarios & roadmaps



**Types:**

**Accompanying measures  
RTD, Demos & combined**



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# IST workprogramme 2001

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## Mobile & Ubiquitous E-work & E-commerce

- User-centred models, solutions & practices
- Multidisciplinary, 3rd gen. Mobile, wearable, portable, cognitive psychology, human factors, organisational behaviour, architecture/design, public facilities



**RTD, Demonstrations  
& Combined**



# IST workprogramme 2001

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## Mobile & Ubiquitous...

### Focus on user-centred concepts:

- outside normal office eg airport, shopping centre, public space..
- open, seamless & secure eg time, location or task sensitive



RTD, demo.& combined

- intuitive solutions for novel interactions between people, smart artefacts & services

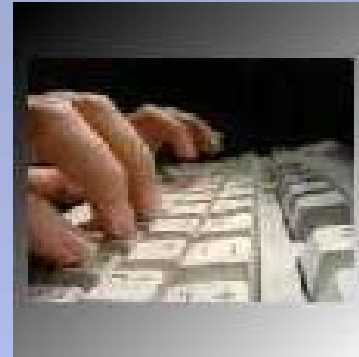


# IST workprogramme 2001

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**RTD, Demonstrations  
& Combined**



# IST workprogramme 2001

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## Other Tasks (1)

- High impact take-up, dissemination & training  
(Action type: Trials, Best practice, thematic networks & non take-up accompanying measures)
- Large scale demonstrators, eg public sector, regional, SMEs  
(Action type: Demonstrations)



# IST workprogramme 2001

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## Other tasks (2)

- knowledge management  
(RTD, Demo.& combined)
- Intelligent workplaces  
(RTD, demo.&combined,concerted actions)
- Smart organisations  
(RTD, Demo, combined, thematic networks)
- Info- & network security  
(RTD, Demo, Combined, thematic network)



**RTD, Demonstrations  
& Combined**



# IST workprogramme 2001

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## **Cross-programme Action: CPA 7 Social & Economic Research**

**Focus on economic and societal issues of  
the Lisbon Council and E-Europe:**

- **Mid- to longterm modelling & scenarios**
- **shorter term socio-economic indicators  
identified in E-Europe for the New  
Economy**



**Types:  
RTD, Demos & combined,  
Accompanying measures,  
concerted actions, thematic  
networks**



# IST workprogramme 2001

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## **Cross-programme Action: CPA 8 E-learning for European youth in a digital age**

**Transition to a knowledge based society:**

**Strategic, large scale experiments:**

- skills for digital age eg collab.working, creativity, multidisciplinary, adaptiveness, intercultural communication & problem solving
- broadband access and support for real time interaction
- integrating knowledge sources eg libraries, cultural heritage
- local business communities and lifelong learning



**Types:**

**Accompanying measures  
(excl.take-up)**

**RTD, Demos & combined**

