

State Secretary Oluf Ulseth Ministry of Trade and Industry

> R&D & ICT Forum Brussels, 31 January 2003







Population: 4,5 mill

**GDP 2001:** € 207 bill.

Exports 2001:€ 93 bill.

**Imports 2001:€ 41 bill** 

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<b>%</b>
3%
3%
3%

- Current account surplus € 30 bn; 14,4% of GDP
- Independent Central Bank, 2.5% inflation target
- High economic activity, high level of investments and low unemployment





# ...based on free trade and open markets

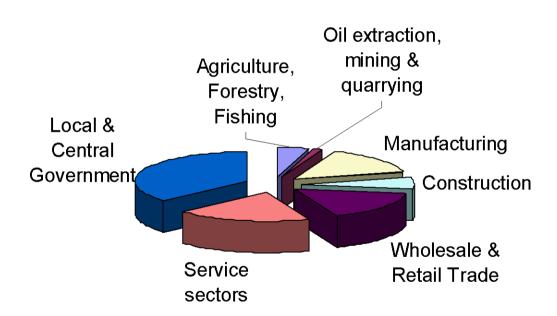
# **Exports close to 50% of GDP**

# Norwegian Foreign Trade Various manufacturing goods Machinery and transport Metals Chemical products Norwegian Foreign Trade Fish Gas and Oil

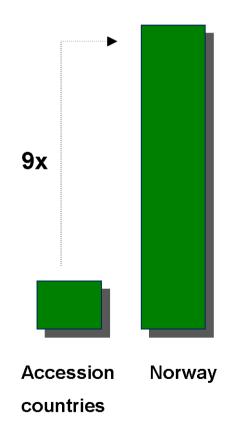


# Securing growth demands labour

# **Employment by Industry, Norway**

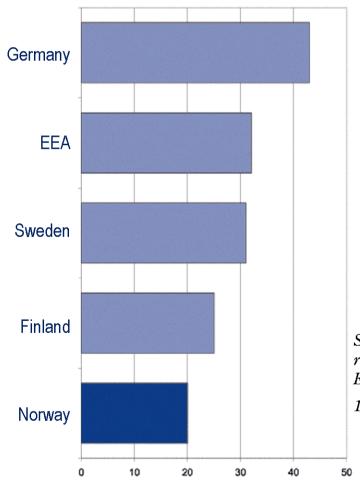


## Average monthly salary









- Innovation is needed to sustain and strengthen competitiveness in industry
- New knowledge and new technology promotes innovation. This requires research and development
- Hence: Policy for research and education is important in industrial policy

Share of turnover from new or renewed products in industry in EEA-countries 1996 (Norway

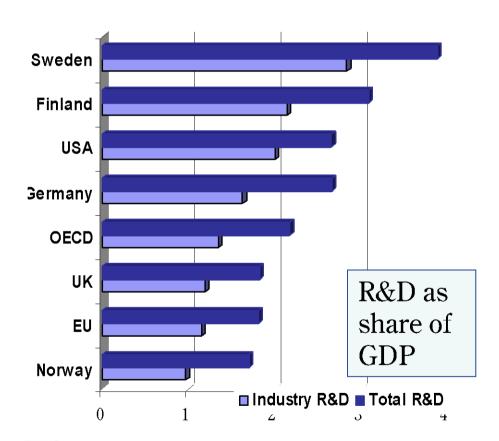
1997). Percentage.



Source: Nås (2000)

# ... supported by more research and development

- Target to reach OECD average on R&D spending by 2005
- Tax deduction for R&Dexpenses in companies
- Strengthened cooperation between industry, university and colleges
- Participation in international programs for research and technology, ERA and more







# Transforming (a large) public sector

# An efficient and high quality service provider

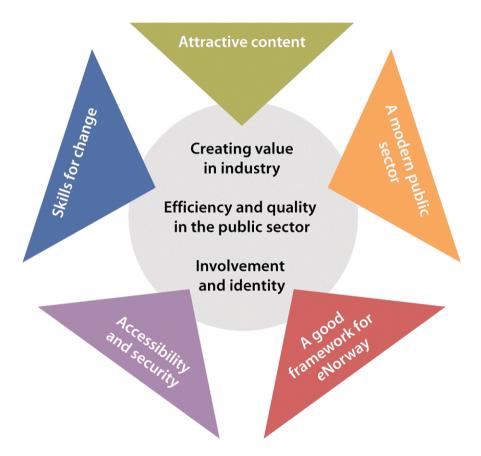
- Re-engineering to simplify and improve
  - ✓ Develop public service offices and e-government
  - ✓ Better co-ordination of benefits related to employment, social security and social services
- Developing tailor-made services to meet individual needs
  - ✓ Increase the freedom to choose
  - ✓ More flexible and user-oriented organisations
- A more efficient public sector
  - ✓ Splitting up demand and supply functions
  - ✓ Opening up for competing service providers
  - ✓ More delegation and decentralisation





# Using new technology: eNorway 2005



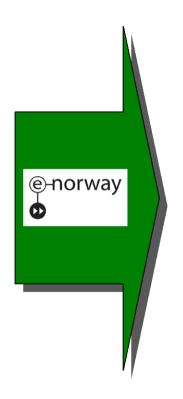






# Strategy for ICT-research 2003-2004

# Focusing on:



- 1. Priorities in research policy
- 2. ICT-research in a European context
- 3. National Challenges
- 4. Objectives and measures



# Policy conclusions from the ICT research plan

- Strengthened allocations to user-controlled, applied ICT-research
- Seven priority areas chosen

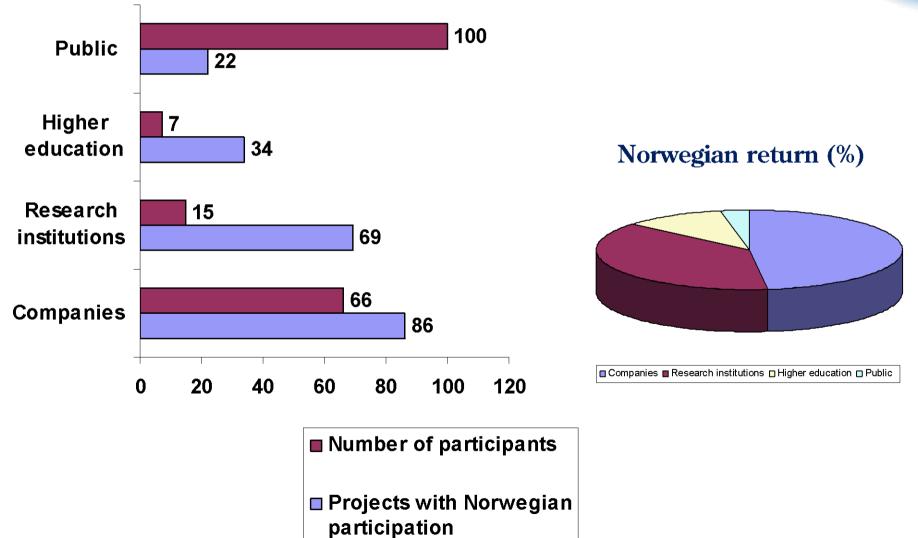
Areas correlate with 7 out of 23 strategic priorities within the EU:

- ✓ Micro- and nano-systems
- ✓ Broadband
- ✓ Security and trust
- ✓ Mobile applications and services
- √ Semantic knowledge systems
- ✓ ICT in business (eBusiness) and public sector
- √ eHealth

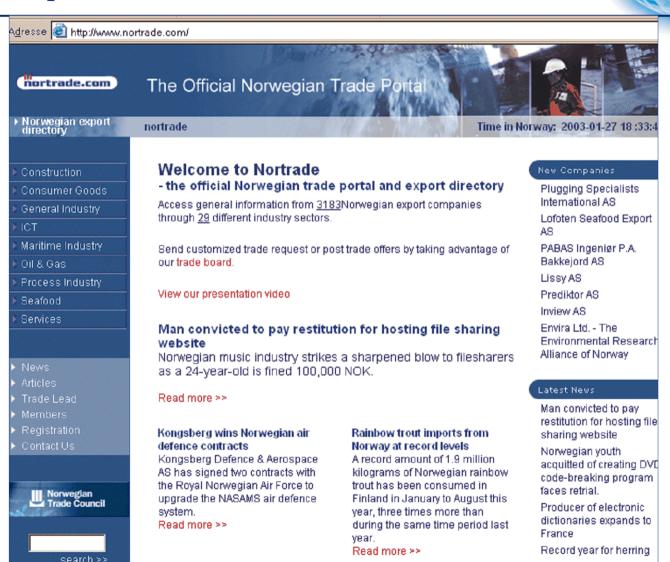


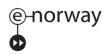
# Norwegian IST/FP5 participation (1999-2002)





# A revised export portal: nortrade.com





# eNorway – Status report, January 2003

- A tool for going from plans to action
- No custom-made indicators, but a collection of already existing statistics from a large number of sources
- Aims to coordinate figures with eEurope indicators, for benchmarking



The eNorway Plan sets ambitious targets for IT development. Norway is well-positioned in many areas when compared with other European countries, and is a leader in certain fields. But we also face particular challenges. Developing the infrastructure presents a challenge in a country with such enormous distances between north and south. Norway's industries include very many small enterprises, and the deployment of new technology will be challenging with regard to available expertise. There is a general impression that we do not always manage to reap the rewards that could be gained from a clearly-understood application of new technology.

## PROGRESSING WELL

The figures recorded for some areas indicate that we are making good progress towards achieving our targets.

- Access to the electronic infrastructure is extremely widespread in Norway. We have excellent access to fixed telephony, mobile telephony and digital satellite services. This is not true of broadband, howaver.
- In several areas there have been schemes to modernize the regulatory framework, and also to map out and implement EU regulations. This has resulted in the removal of most of the formal obstacles to electronic communication in the regulatory framework.

## THE USE OF SYMBOLS IN THIS REPORT

Each target and principal observation is assessed in relation to a simple scale. The symbols indicate the degree of progress in the achievement of these targets, but must not be regarded as final and absolute.

- Progressing well Progress is excellent, and/or Norway is leading the field internationally.
- Mixed progress Progress is being made, but not without a number of obstacles and problems that could slow progress somewhat.
- Some way to go Norway does not have a leading position and/or not much progress is being made in this area at present.
- More knowledge required More knowledge required, but the initial phase may often be satisfactory.

amount to billions in the corporate mark

- Norwegian schools are well equipped, and in most respects only Denmark, the US and Canada are ahead of them. Teacher's skills are higher than previously assumed. But the actual beneficial use of electronic aids by pupils is lower than in comparable countries.
- Norway enjoys a high level of expertise in IT as a special field but there are, however, problems relating to other relevant skills, such as mathematics and physics.
- There are a large number of Norwegian journals and magazines on the Internet, and the most

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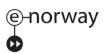
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performance in relation to OE for Research and Developmen

- Electronic signatures are being Government and in trade and a significant requirement for cappears that practical use of eis modest so far.
- Communications networks in vulnerable, and there is a neec capacity in the infrastructure, the central network hubs, as a natural disasters and sabotage
- There is a great need for more concerning issues of harmful (

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# The Status Report: Some observations

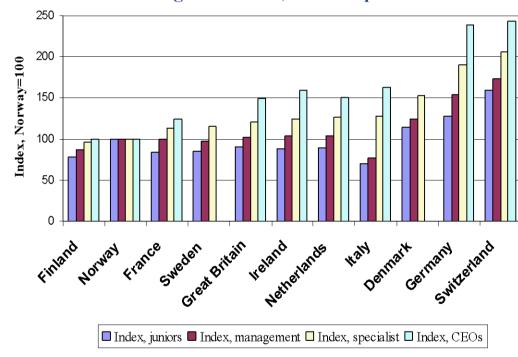
- Norway has the possibility, the equipment and the infrastructure for doing very well, both in public sector, education and industry
- We have a high level of human expertise, both in R&D and on the user/customer side
  - ✓ But aim to spend more on R&D
- But we are not using the technology well enough to unleash the possibilities, for instance to reorganize and to reap benefits
- Special challenges: Broadband and geography, R&D in industry, public sector reform, security and vulnerability issues





- Full market access to Europe
- GDP per capita close to €30 000 at PPP
- Skilled workforce and relatively "cheap" experts, managers and CEOs
- Advanced users of new technology





Hay Group and the Economist Intelligence Unit





