

1<sup>st</sup> Public Econ@Tel Workshop  
(COST Action IS0605)  
<http://www.cost605.org/>

# Towards a New European ICT Policy Agenda: Post i-2010

Interim Results from a Study Commissioned for the  
Swedish Presidency 2009

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## Today:-

- Give a background of the project
- Present the project and findings so far
- Solicit your views and inputs
- Present and discuss the report layout

# A key question must be answered for the post i-2010 agenda

What are the (10) most important policy questions that the EU faces with regard to ICT and the information society to around 2015?

2 key sub-questions:-

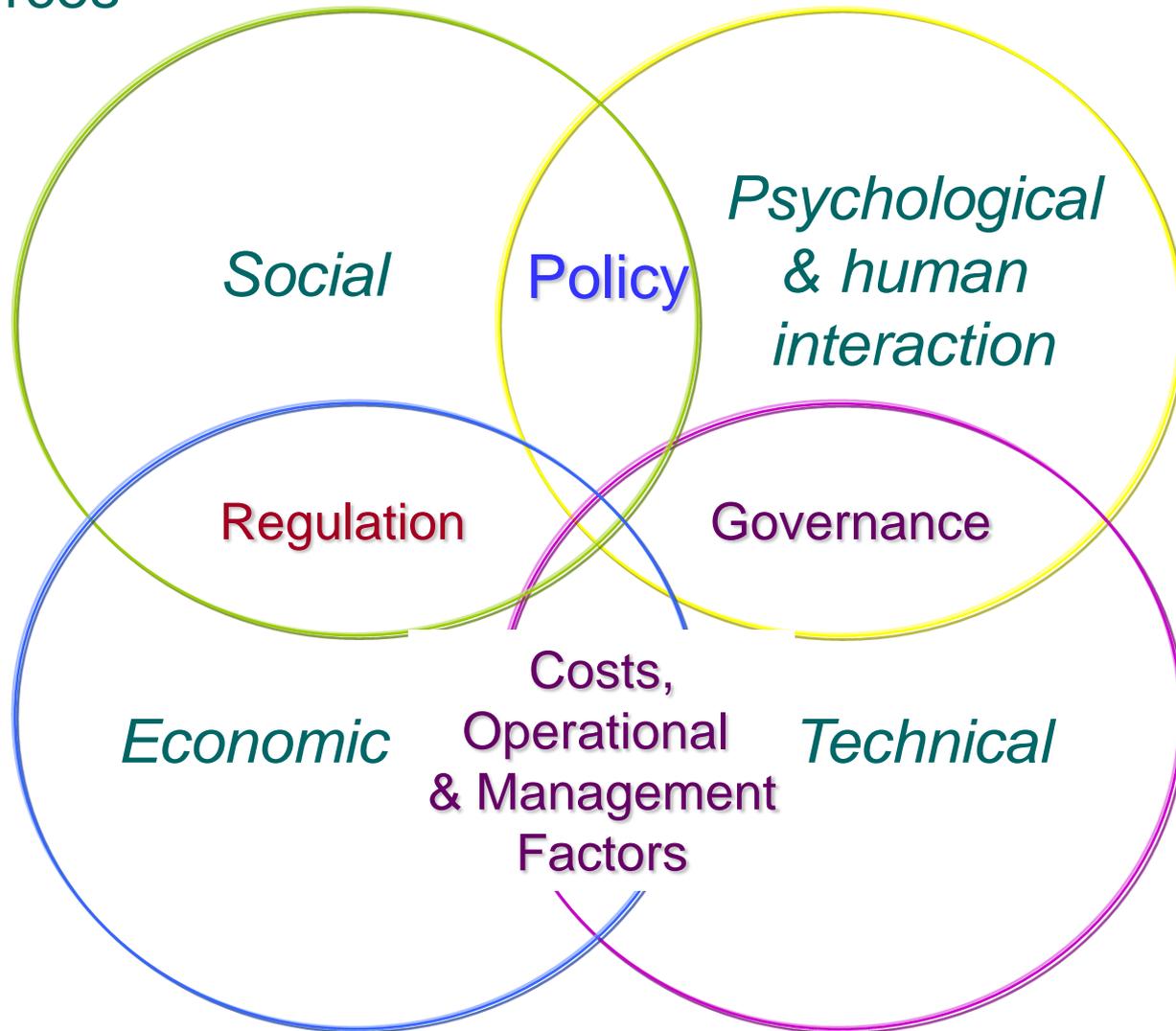
- What are the *new* major policy questions now appearing?
- What *trends* underlie or affect these new policy questions?

The project should also:

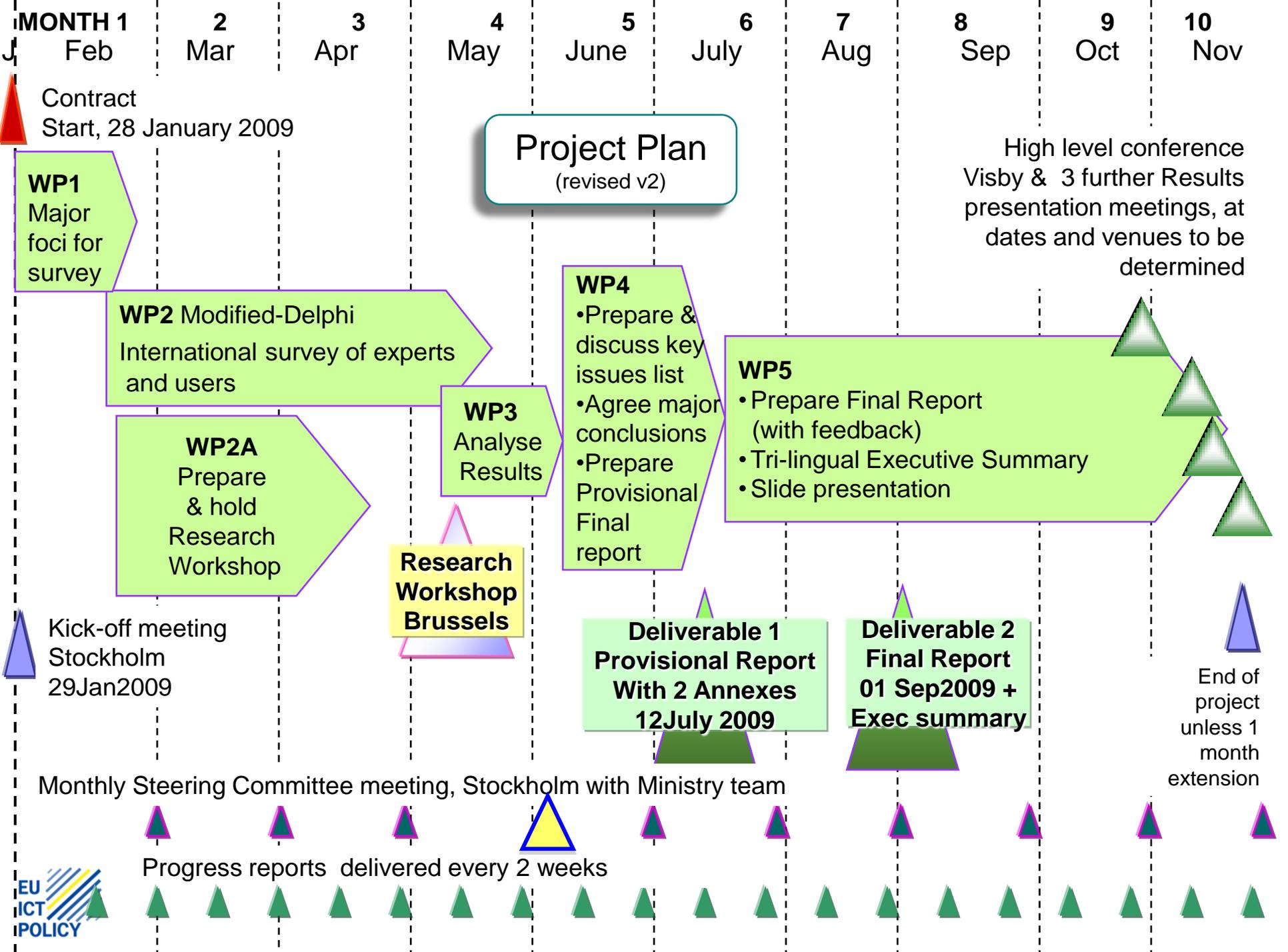
And resolve the challenges of:-

- Presentation – the medium and packaging as well as the message
- Level of discussion – for policy makers
- Clarity of arguments

The future trajectory to an EU Information Society is governed by 4 key forces



*Each these forces raise questions for ICT policy*



# Approach to the study in outline

Form Experts List

Perform Research :-

A survey to gather inputs from a range of stakeholders and experts across Europe and other countries (– specifically the USA, Japan, South Korea, China and Brazil, and perhaps others)

Workshop on key themes with outside experts + desk research

Analysis of the results and preparation of the key policy issues with their influencing parameters and trends

**Report and presentations**

# Interviews – under analysis – contrasting views on what is important

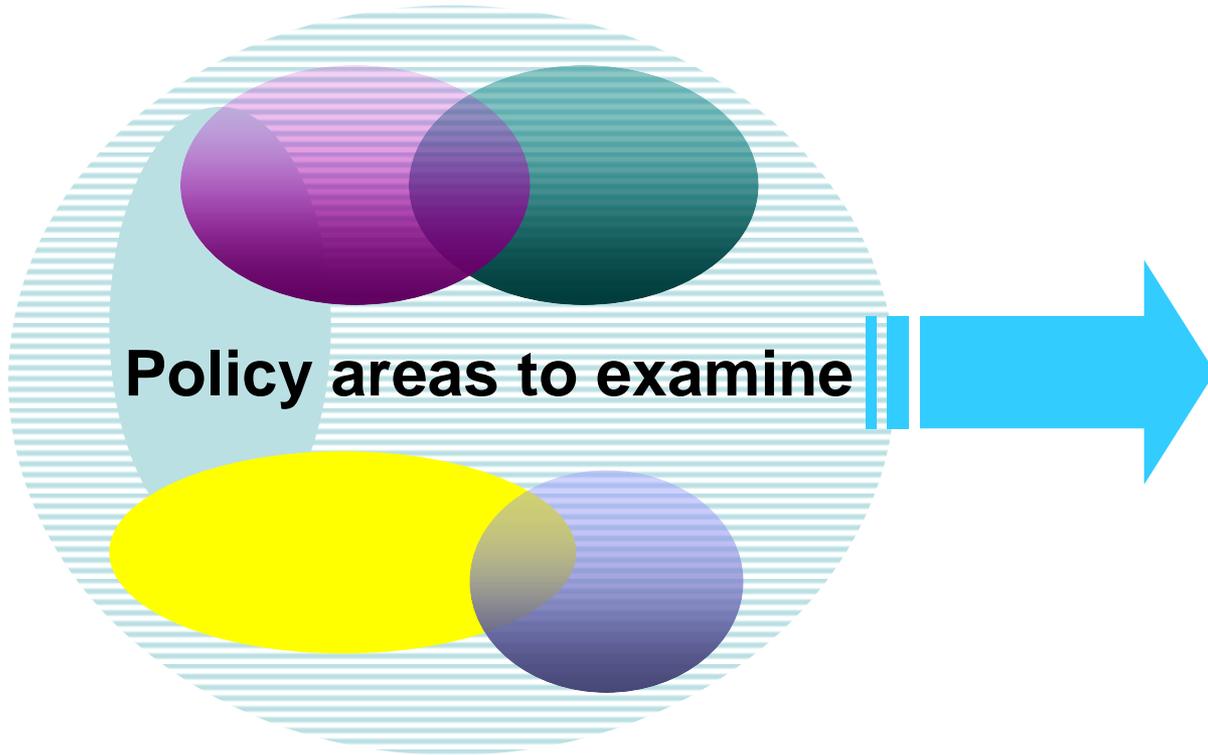
•Some 50 interviews with:-

- Thought leaders and academics
- ICT Industry
- Consumer organisations
- Governments and regulators
- European Commission, especially DG InfSo
- MEPs
- International bodies – OECD, ITU



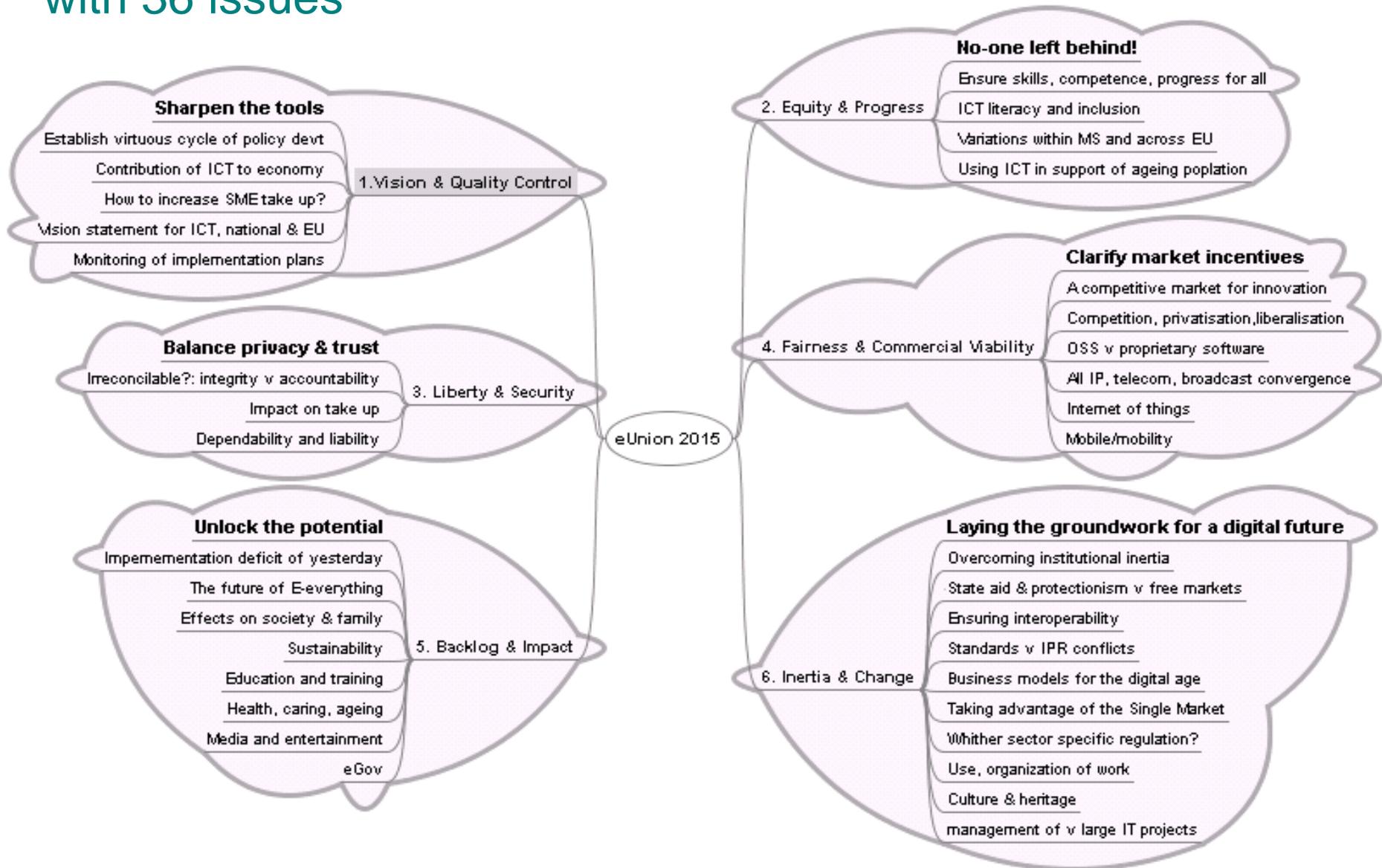
***Some early  
initial views***

On the promise of non-attribution if requested

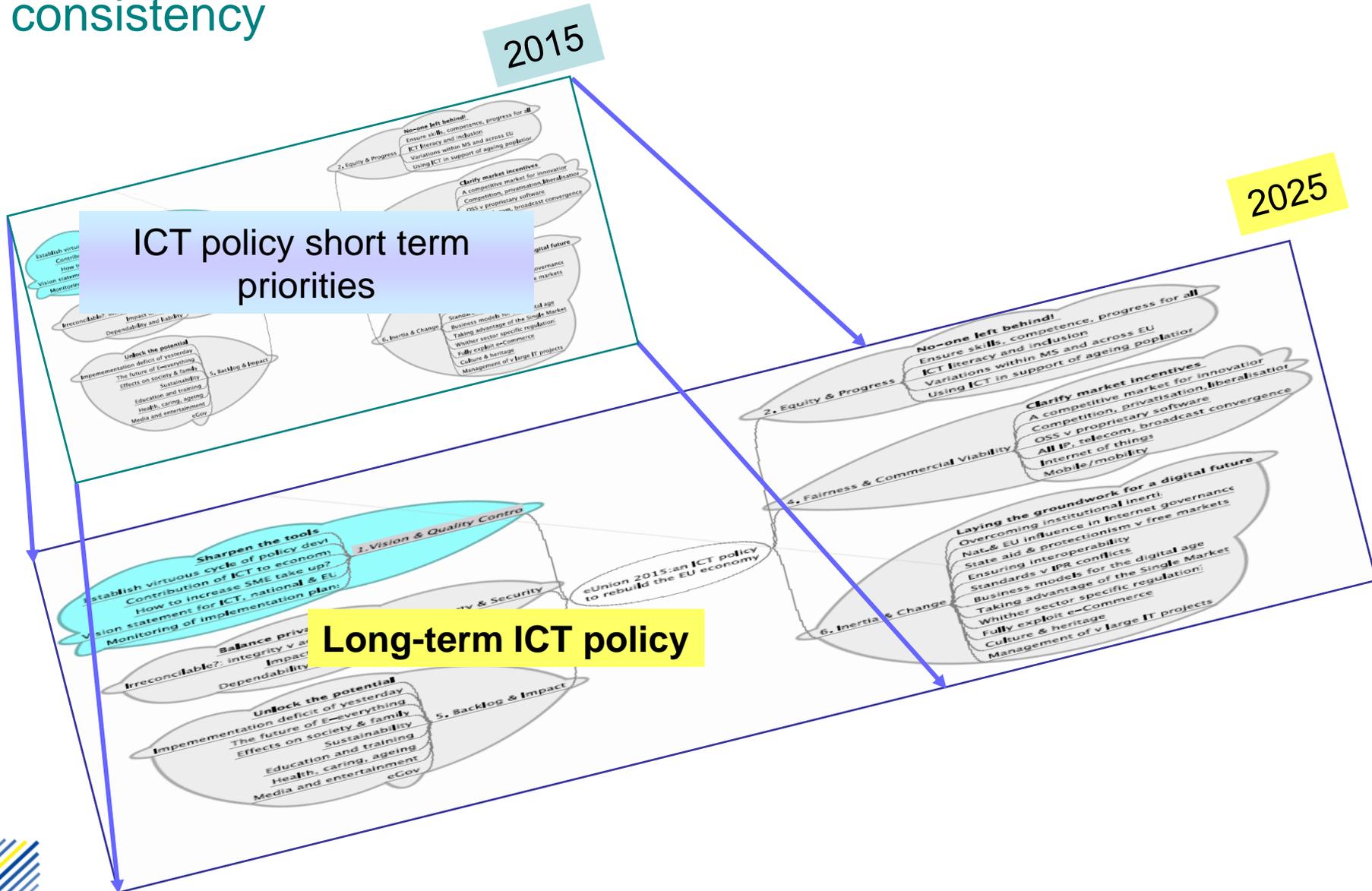


**issues in  
each area**

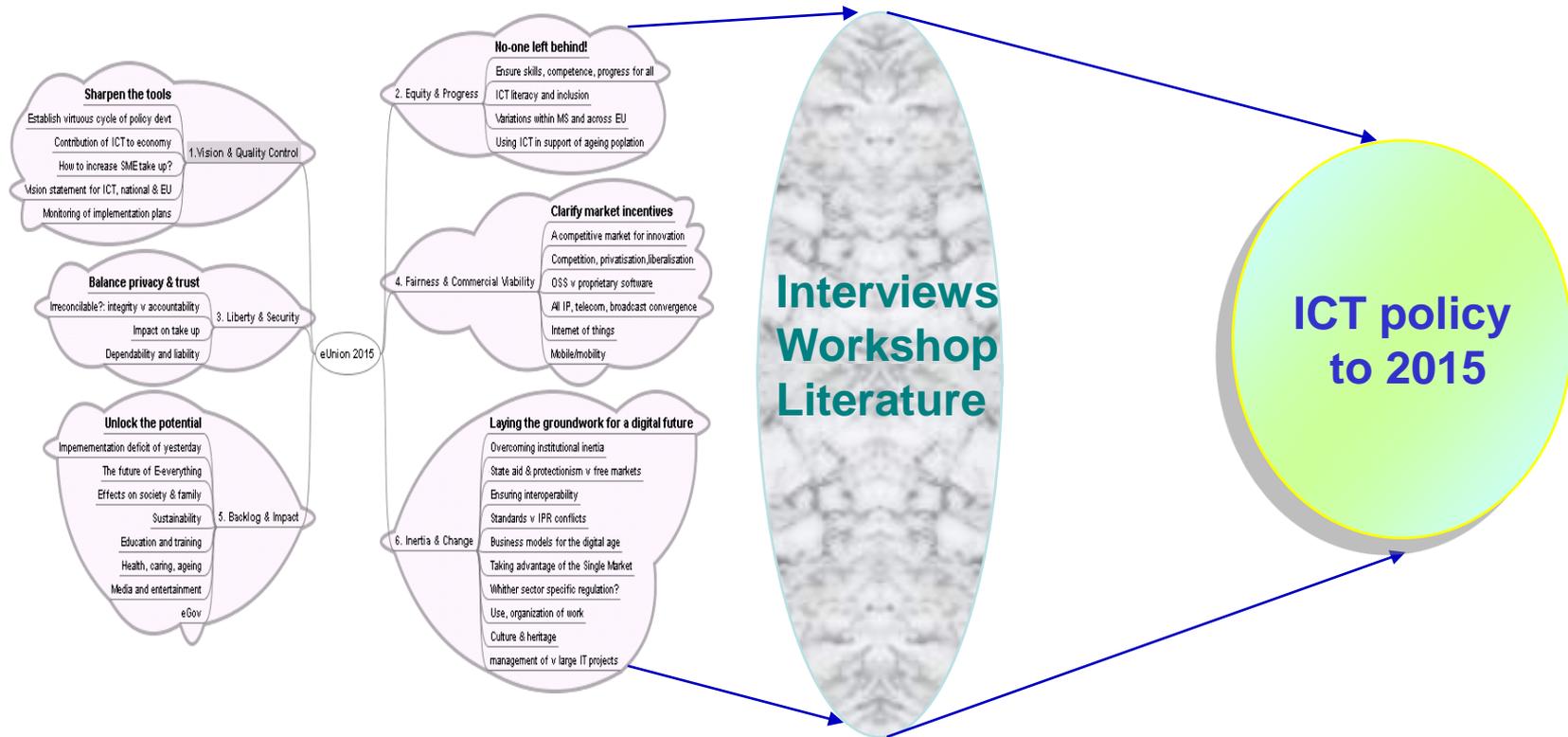
# We started with a view of ICT policy as a set of 6 linked areas with 36 issues



However a shorter term policy should also lay the infrastructure 'rails' for longer term policy – relevance and consistency



# The project need to formulate views of future policy through several steps

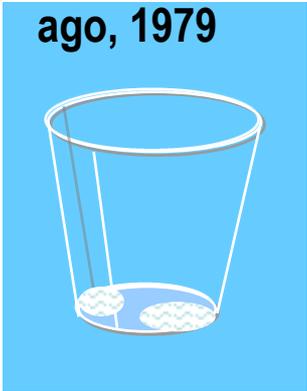


# Most general finding – the trend to set overall policy direction

-ICTs are moving to the centre of society - no longer just the economy, or specific sectors – so ICT Policy must move centre stage - or evolve to be sectoral

EU Manufacturing still significant

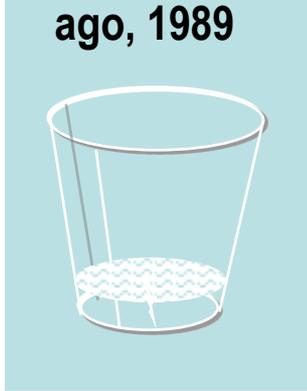
30 years ago, 1979



Some corporates, real time process controls, military

EU Service sector rises, Manufacturing declines

20 years ago, 1989



OECD Corporates

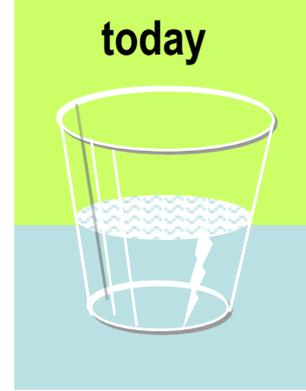
10 years ago, 1999



All business in OECD  
Personal computing OECD

Service sector dominant, Information society arrives  
Knowledge based industries emerge

today



All business globally  
Social & entertainment

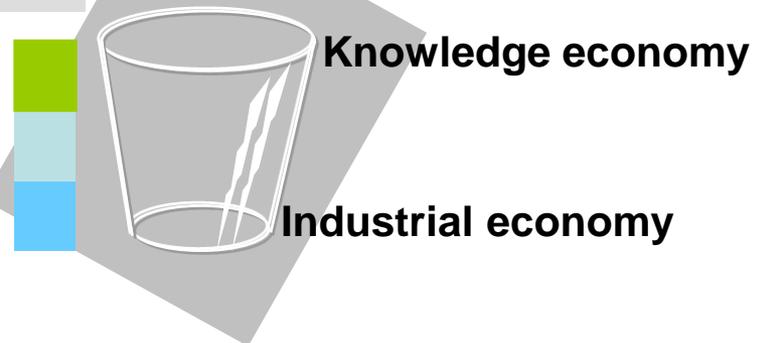
2015



All economy, & much of society

How much of our everyday life depends on ICTs?

All economy, & increasingly society  
The economy  
Specialist point applications



# ADDITIONALLY are we at a crucial point as the global financial crisis turns into a global downturn ?

**In the 4th quarter of 2008:**

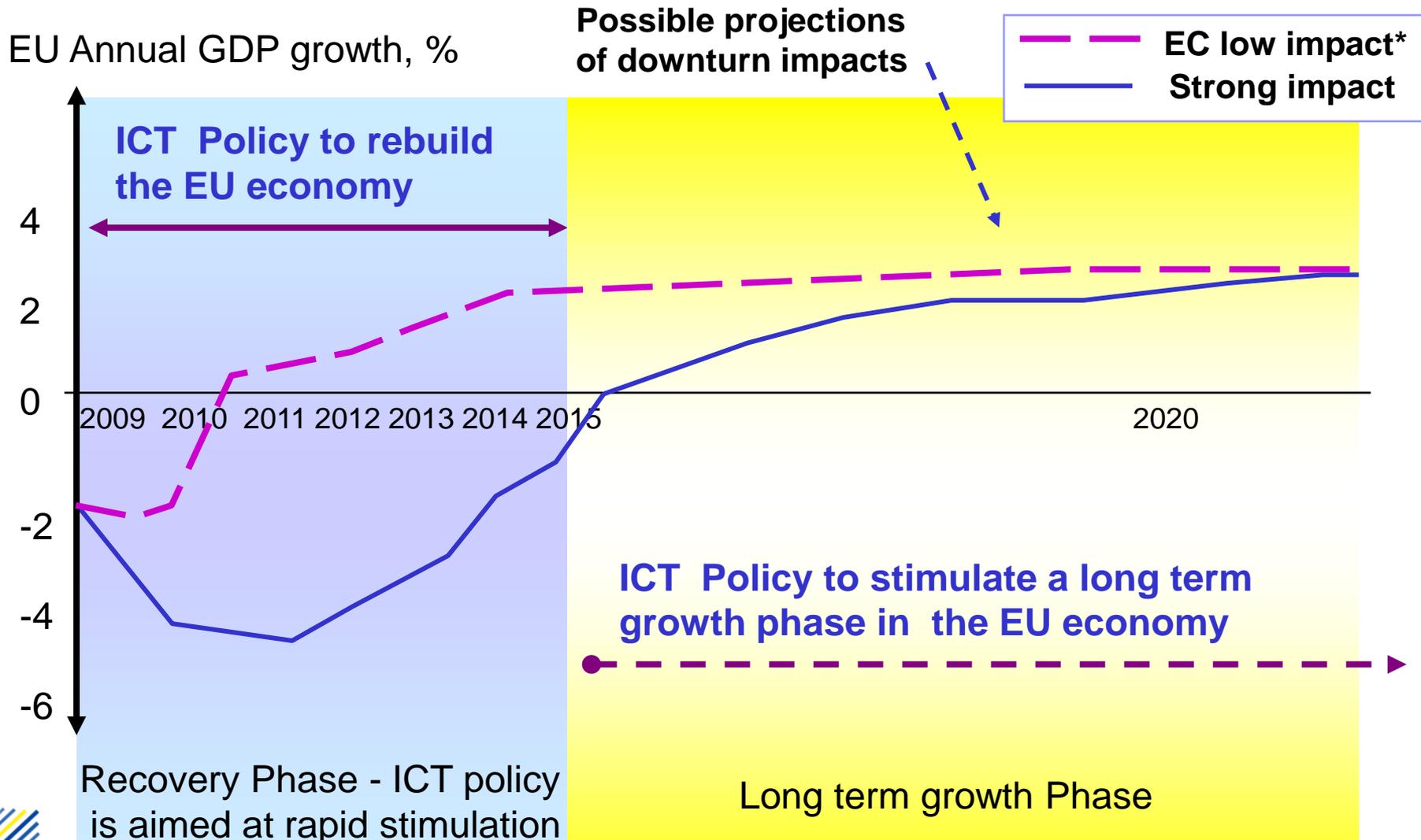
	Annualised GDP growth rates	Industrial production
Germany	- 8.2%	-12%
UK	- 5.9%	- 9%
USA	- 3.8%	-10%
Japan	-12.7%	-21%
S. Korea	- 20.8%	-19%

**EUROZONE expected growth rate for 2009 : - 2%**

So is there a new role for ICT policy ..... ?

# Should we rethink ICT policy as a series of phases forced by the near-term economic crisis?

## Then ICT policy becomes a key component of economic policy



\* Based on Eurostat release 19Jan2009 & presentation by Joaquin Almunia, European Commissioner for the Economy

# Going forward we need a new vision and framework

The Policy Framework to make the vision happen:



ICT policy  
to 2015  
to implement  
the new  
vision

# The 'ICT vision for Europe'

- Move from service/ industrial level to a knowledge economy
- Create more jobs and new businesses
- Improve education and health
- Fruitful use of high tech ICTs by SMEs
- Appropriate and useful e-government
- No exclusion - human interfaces for all
- Unleash creativity for all
- Innovation builds EU's intellectual capital
- Solve security and privacy problems
- Protect consumers in an Internet world



# The 'new framework'

A framework to make the vision happen:-

- Regulation with clear guidance for implementation
- Strong leadership by the EU
- Clarification of governance and regulation responsibilities - roles of MS governments, the EC, the EP and the Council
- Human rights/digital rights always in mind:-
  - ICTs in the service of society
  - Humanity not machines
  - Offering and enabling, not imposition
  - Intuitive interfaces people can understand
  - A safe, useful Internet

# What are the key policy areas to enable the vision? Work in progress

This **preliminary** list emerges from the findings of the survey, the workshop and desk research. Perhaps unsurprisingly it revolves around the themes of the economy, human rights and sustainable development:-

1. **ICT and sustainability**
2. **The economic boost : unleashing Europe's creative and innovative potential in ICTs**
3. **Knowledge society as inclusive society– ensure digital rights part of fundamental rights**
4. **Europe's SME's and ICT**
5. **Strategic plans for vulnerabilities due to dependence on ICTs (eg cyber attacks)**
6. **Investment in soft infrastructure –education and training, higher education, health, etc**
7. **Single European market for ICT goods and services**
8. **Balancing next generation infrastructure investment with open competitive ICT markets**
9. **Revolutionising eGovernment**
10. **Clear leadership and transparency - rethinking the EU's policy making process**

these are tentative and may well change.

# What did the thought leaders give us as policy issues?

(initial analysis)

Social networking techniques in applications / services for Europe  
Services for all ages  
Online behaviour effects  
Critical infrastructure protection  
Cloud computing and SME protection  
Open standards enforcement  
Recession recovery - invest in ICT infrastructure  
Transition from a physical to a digital environment  
Legal implications- major conflicts in legal domain for ICTs  
Government responsibilities for ICT infrastructure –operation/creation  
'Digital domicile' for the citizen - safe and easy to use  
Sector specific reg- replace by competition law & consumer protection  
Infrastructure = broadband politically (economics dubious)  
Getting agreement of 27 MS on ICT investment (difficult /impossible)  
ICT policy for economic recovery  
ICT policy and social policy to be much more integrated  
Spectrum management & its harmonisation across EU  
No convincing argument for NGN investment  
Current economic crisis sets agenda in policy  
Green economy and ICT  
Standards- open and interoperable  
Migration and rural depopulation  
EU user interface – mobile to be dominant , including Internet  
Internet governance (more important in future)  
User centred design  
R&D support in industrial policy

•**Infrastructure: build & investment; Vulnerability; Recession recovery; Hard and Soft; Sharing**

•**Citizens rights and the state's obligations**

•**Social ICT policy for 2015**

•**Sustainability: green economy**

•**Regulation evolution (now Internet)**

 **Policy Issues**

**Policy areas**

# What did ICT industry give us as policy issues? (initial analysis)

Knowledge economy not ICT policy  
Infrastructure is less important than cultural change  
Empower innovation without permission  
Keep telecoms competitive  
Invest in education  
Modernise recycling rules  
ICTs underpin all sectors & all policy areas  
EU Competitiveness in ICT Policy  
Climate change- impacts on industry  
Single market  
E-Inclusion  
Education and training - invest in education for skilled workers  
Industrial policy to stimulate sector  
Research policy as part of industrial policy  
ICT sector is key factor in EU economy  
Clarity, democracy of policy process  
Consistent EU leadership  
Vision of ICT policy  
Roadmap of ICT policy  
Transparent consultation  
Tels Industry restructuring with flat rate IP pricing & retail / wholesale  
Digital dividend on WRC2015 agenda  
Incentives to invest  
Unbundling the NGN  
Revision of the Telecom Package again in 2014

- **New policy paradigm**
- **ICT education**
- **ICT sustainability**  
- recycling, etc
- **Single market**
- **E-Inclusion**
- **Industrial policy to stimulate sector**
- **Regulation process and structure**
- **Further industry restructuring (esp. Tels)**

# Did we find major differences in Asia ?- more of difference in emphasis than substance - ICT policy is a top level priority (NB a snapshot only- not statistically valid)

Infrastructure means FO and more 4G mobile for broadband (via wireless)  
 ICT infrastructure, especially telecoms, builds the economy  
 Training all population in ICTs – Confucian culture  
 Consistency on policy across government agencies  
 Industrial support for core electronic devices  
 Support for very large scale IC equipment and processing investments  
 IPR – now on the agenda everywhere  
 ICT applications for all sectors  
 No ICT policy any more – now at sector level  
 ICT to be diffused into society  
 Education services via ICTs  
 Green Growth  
 No ICT policy- ICT no longer single industry, rather an infrastructure for all  
 Digital divide- social cohesion  
 ICT support for sustainable development -green growth & energy efficiency  
 ICT for knowledge accumulation  
 Fusion technologies such as ICT-bio  
 Health and Society, distance medi-care  
 Disaster warning  
 Infrastructure including network and Cloud computing  
 Security, reliability, dependability of  
 Elderly people support  
 Remote healthcare  
 Bio-tech  
 Recovery from current downturn  
 ICT support for sustainable dev.- substitution mechanisms  
 E- inclusion - improve education



- Infrastructure
- ICT policy by sector (no ICT policy per se)
- ICT socio- economics (education, elderly, Knowledge Economy)
- Green growth



# What did interviews with the USA tell us? (NB a snapshot only- not statistically valid)

## The change of administration has revised policy directions considerably

New business models displacing old – Internet and generally

Restructuring work environment

Stability of Knowledge-based economies

Government and infrastructure -ICTs are now everyday life –policy needed- so is government ICT policy more Interventionist now?

New regulatory concepts for a new world

New competition policy for new players

Cloud computing- new policy factor- as large as Internet and needs suitable competition policy

Role of government in driving standards by procurement and suitable regulation

Open source software

Cyber security for industrial Infrastructure

Position of EU in ICT sector when Asia produces and USA designs?

- Revising regulation for new business models, players and paradigms, eg cloud computing, 'embedded wireless' and further ICT industry restructuring (esp. Web)

- Role of government in infrastructure

- Competition policy (esp. software - open standards)

- Industrial policy to stimulate sector

- Regulation process and structure

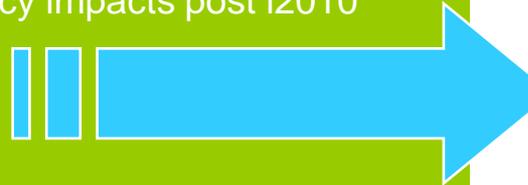
 **Policy Issues**

**Policy areas**

# What did we learn from 14 interviews with the Commission ? -

## - What constitutes ICT policy is very diverse:-

ICT support for sustainable development  
Single Market – common regulation for ICTs especially Telecoms  
Exclusion- closing the digital divide and assuring e-inclusion: innovation  
Support high tech SMEs- Link R&D funding to SME support  
Support for education, research and thus Innovation  
ICT is part of each service policy – ie Health care needs to own its ICT  
EU-wide e-healthcare roll-out  
Digital rights including Privacy especially minors' protection  
Impact of current recession  
International relations and ICTs- eg Internet role for EC and MS  
EU dependence on the Internet- Future Internet for e-Europe  
EU industrial support policy  
E- government (failure)- user at centre, not government as now  
Demographic and ageing challenges – ICT solutions and inclusion  
Formation of the new Commission and ICT policy impacts post i2010  
ICT support for sustainable development  
Cyber-attack  
E-health, E-learning and Lifelong learning  
Infrastructure renewal  
Behavioural/ societal change through ICTs  
Aggressive Competition policy for EU  
Merge structural-regional funds & central R&D for much larger fund  
Invisible infrastructure  
User at centre, not technology as now- User interfaces as R&D focus  
MNOs block VoIP  
Adapting copyright to digital era - slowness of change in media regulation  
Transition to NGA – issues of public funds and balanced regulation



- What is the policy vision post i2010?
- Supporting SMEs
- Single Market
- Sociology of ICTs – inclusion
- Competition policy and international relations
- Sustainable growth via ICTs
- E-services, principally health and education
- User centred ICT development
- Infrastructure renewal

# What did the consumer protection agencies tell us?

Privacy and security for the consumer – minimal ID  
Digital rights – as part of human rights, consumer protection, etc  
Compelling people to become e-literate rather than allowing to choose  
Riga declaration of citizens' rights to access and inclusion (2006) not met yet  
E-Health, across EU- but equal access?  
Who monitors, who enforces digital consumer rights unclear  
Threats from nanotechnology  
Digital market and IPR management  
Human side of the information society  
E-services - greater alienation  
ICT support for sustainable dev.



• **Human side of the information society is the priority –eg alienation**

• **Human / citizens' rights (forced e-participation)**

• **Privacy and security**

• **IPR and digital rights**

• **E-health access**

• **Monitoring & enforcement of digital rights**

**Policy Issues**

**Policy areas**

(Extra Context slides)

# The context for the study and its overall objectives

Thus the Swedish Ministry of Enterprise, Energy and Communications, Division for Information Technology Policy, has invited a study on the new directions and trends in ICT issues, leading to a report, with three objectives:-

1. To provide a general focus for discussion for the conference with an analysis of the current situation, trends, developments and their potential consequences for the citizen, and for EU companies and governments, highlighting the key issues.
2. To assess the value of the progress made so far in i2010, in terms of what still needs to be done, and so to provide an insight on the policy questions remaining for the EU in the future, up to 2015
3. To identify promotional and catalytic actions needed for delivery of the 'Information Society' with innovative ideas and new thinking, identifying the policy questions not being addressed at this time

# The context for the study - and its overall objectives

- This research was commissioned in the context of the framework initiative for a European information and media policy launched by the EU in 2000, as i2010, to support the move to the '*Information Society*', with policy, regulation and R&D actions.
- Key question - How to further the development of a common European Information Society, during the Swedish presidency of the EU in the autumn of 2009 - this demands a further debate before taking action?
- This debate will be focused by a major conference, in November 2009, at VISBY with the Member States, the Commission and the various stakeholders