

*Horizon Scanning Through Science:  
Defining The Future*

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# OST's Role in Horizon Scanning

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- A key element of horizon scanning in Government rests with the OST and the Strategy Unit in Cabinet Office
- OST work is both reactive and proactive
- Example:
  - ⇨ Reactive - 2001 FMD epidemic
  - ⇨ Proactive – Foresight, Guidelines 2000

# Science + Horizon Scanning = Foresight

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- Virtually all of the subject matter for horizon scanning lies in the scientific arena
- Horizon scanning should be cross-cutting, covering natural and social sciences including political, economic considerations
- Foresight examines current science and technology developments to address key future challenges for society

# UK Foresight

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- In operation since 1994
- Until 2002, a broad, panel-based process
- 92 reports published in 1<sup>st</sup> and 2<sup>nd</sup> rounds
- Up to 40 officials in OST, plus 500 people on panels and task forces
- Covered all research sectors – linked to research agendas
- From 2002, project based, 25 staff and wide range of expert external support

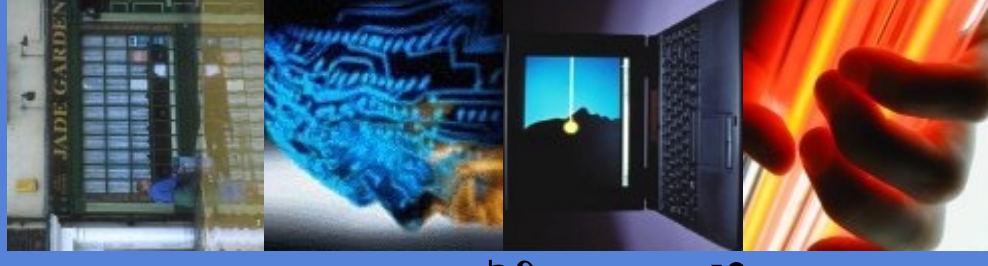
# New Foresight in OST

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- Foresight projects envision opportunities and emerging challenges for tomorrow's world
- Agenda setting - Challenging visions of the future to ensure effective strategies now
- Encourages interdisciplinary thinking and work
- No more than four projects to run at any one time, two new projects announced on 10 March 2003
- Current projects are:

# Foresight Projects

- **Flood and coastal defences**
  - ⇨ Impacts of and responses to climate change
- **Cognitive systems**
  - ⇨ Linking brain science and computing
- **Cyber Trust and Crime Prevention**
  - ⇨ Next generation IT risks and rewards
- **Electromagnetic Spectrum**
  - ⇨ Exploiting emerging science



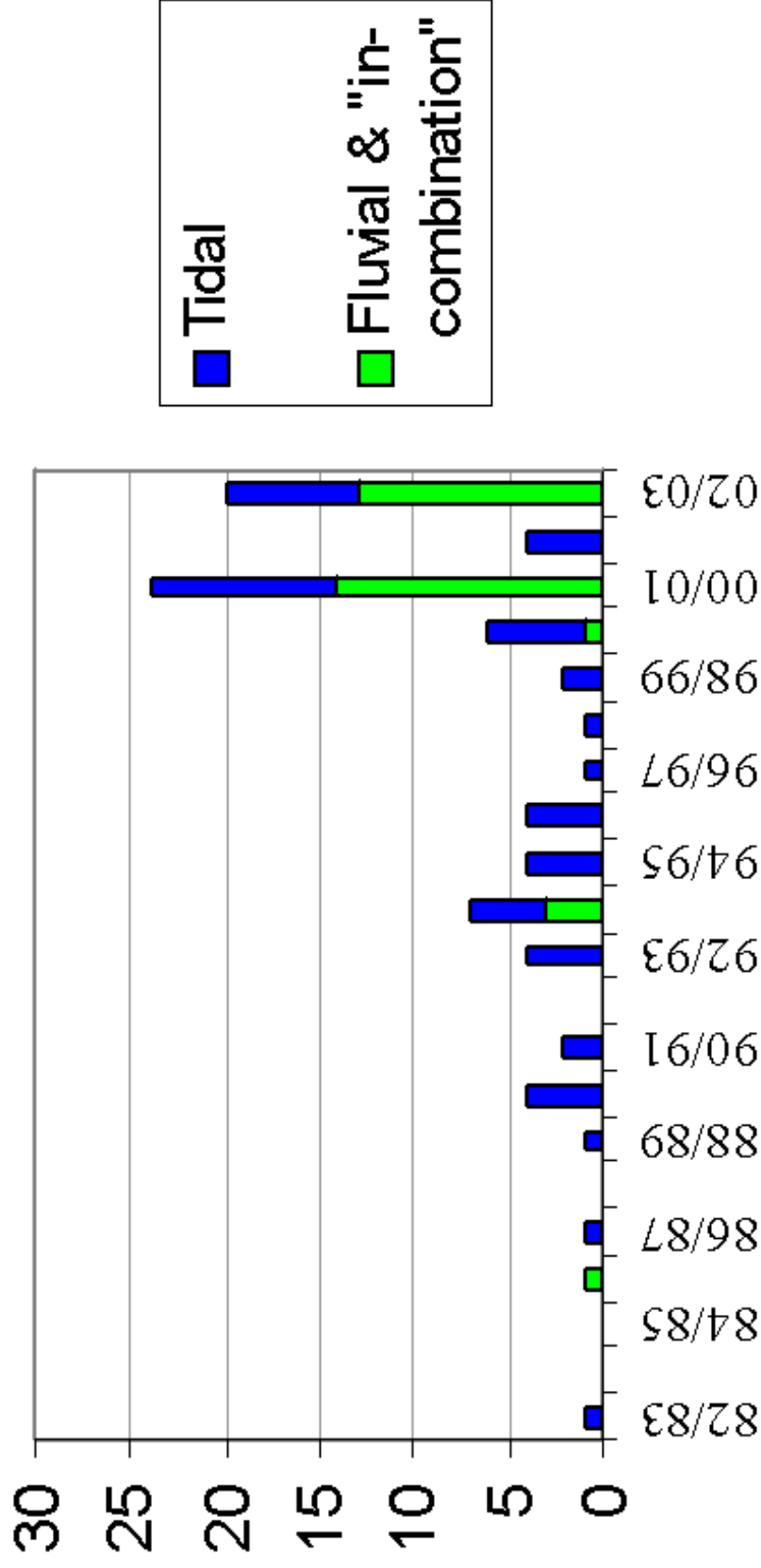
# Flood and Coastal Defences

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- Finalising impacts, will move on to responses
- Many drivers and an emerging pattern of a variety of types of risk
- In most scenarios some risks increase by 2030, 2080 under present policies



# Thames Barrier Closures - Tidal, Fluvial, Fluvial & "in-combination" and "in-combination"



ENVIRONMENT  
AGENCY

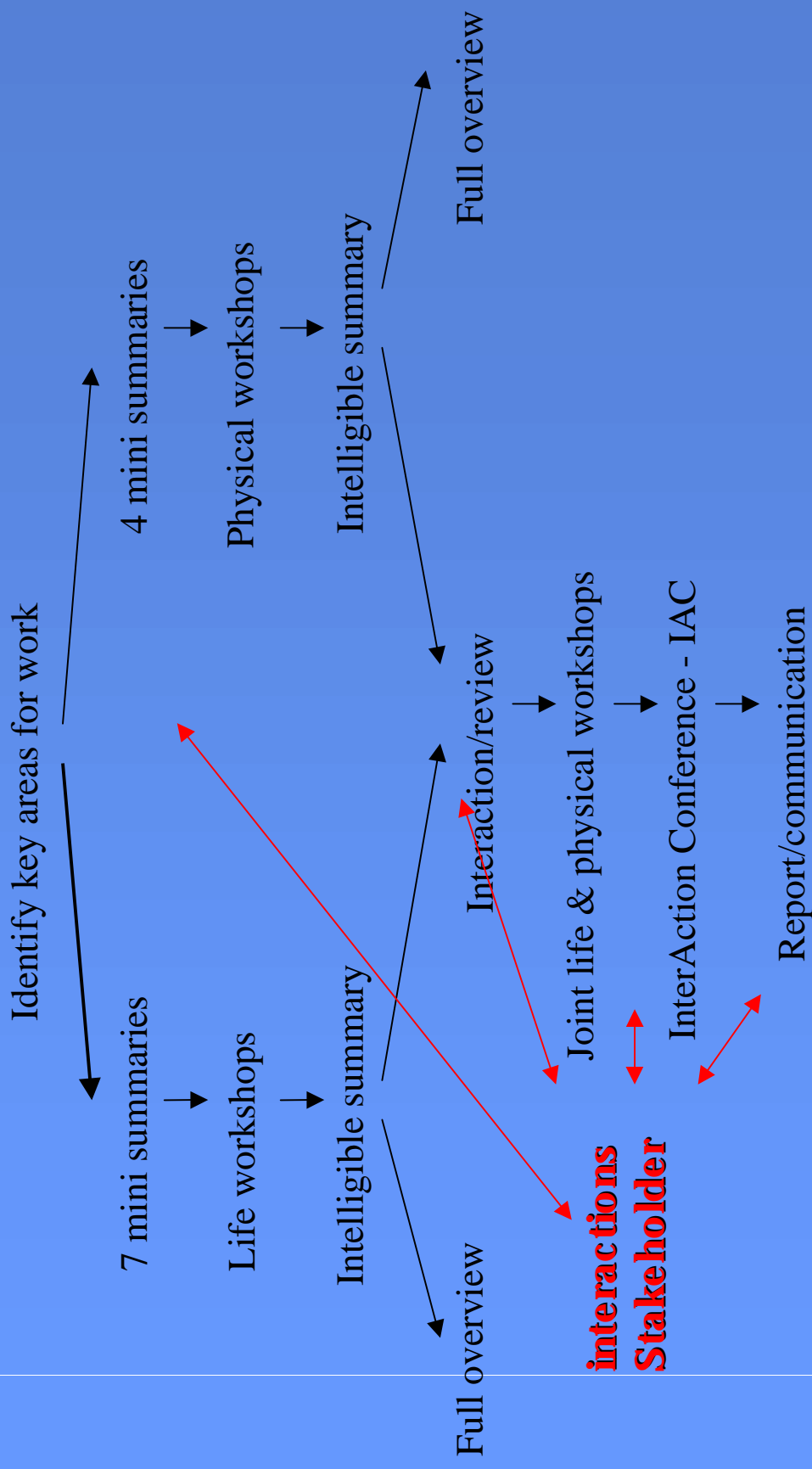
# Foresight: Cognitive Systems

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- Learning about how to develop and set interdisciplinary research agendas
- Identifying potential research manifestos
- InterActive Conference (IAC) - September 2003



# The Project Process



# Foresight: Cyber Trust and Crime Prevention

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- Applications and implications of next generation information technologies
- Identity, surveillance, system robustness, security and information assurance
- Interaction and trust



# Exploiting the Electromagnetic Spectrum

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- Identify key areas of opportunity across the spectrum
- Assess these against UK capabilities
- Agree a plan of action to help the UK exploit these areas



# Foresight in the UK

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- Initiatives started under “old” Foresight continue outside of OST
- Young Foresight – design & technology for 14-16 year olds
- Regional Engagement – RDAs and RTCs
- Other Departments and Research Councils – much greater effort on strategic planning

## Summary

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- Horizon scanning is an ongoing process used in and by all Departments
- Difficult to test horizon scanning
- Sharing knowledge of horizon scanning between departments is essential
- [www.foresight.gov.uk](http://www.foresight.gov.uk)