

**XIe Carrefour AVRIST**

**Public debate and scientific challenges - trajectories of ideas from experts to public policies.**

Role of influence networks and think tanks

Paris

19<sup>th</sup> December, 2007

# Managing policy-maker's expectations – risk management and science advice

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Title:

Managing policy-maker's expectations – risk management and science advice

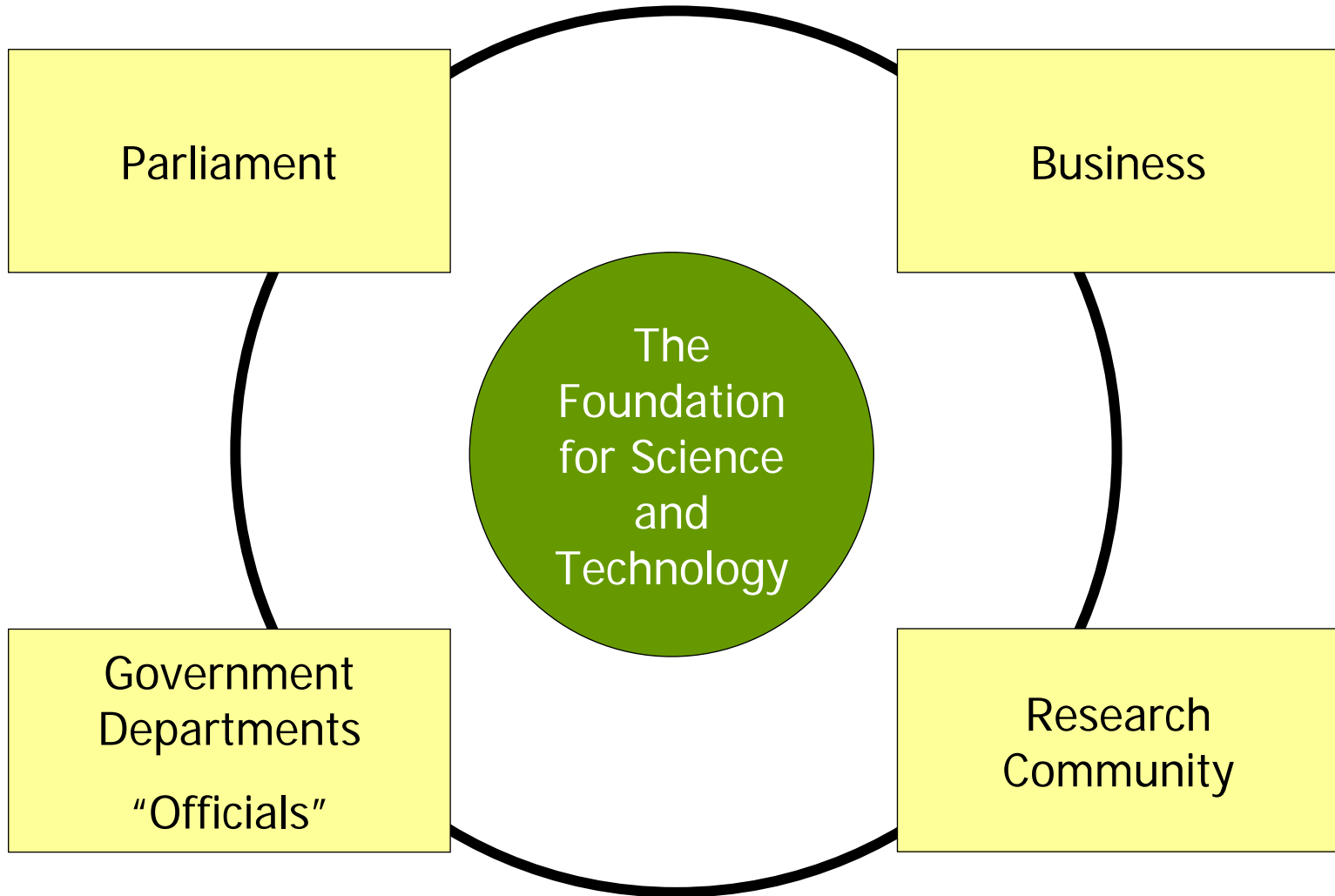
Abstract:

Governments and businesses have to hope for the best and plan for the worst. R&D strategy is often driven by seeking a better understanding of a risk or to reduce the risk from an innovative product or service. For example governments are prepared to fund very large programmes of research to understand climate change because actions to respond to climate change will consume significant resources. Narrowing uncertainties is required before these tough resource allocation decisions can be made.

Alternatively R&D is undertaken to determine how to counter a threat - for example the possibility of an influenza pandemic or a Foot and Mouth Disease (FMD) outbreak. The strategic framework used to decide what R&D government supports should start with an inventory of risks.

Business R&D strategies are driven by maximising value. Optimal application of resources to create the greatest value is a risk decision - commitment by pharma companies to drug discovery requires confidence that out of the hundreds of thousands of possible new drugs tested that a few will be blockbuster winners.

Neutral platform to promote debate on policy issues that have a science, engineering, technology or medical element



# A Government Perspective

Does the UK  
government  
manage risk  
well?

Transport

Planning

Foreign Affairs

Pensions and Social Support

Health

Risk management to optimise resource allocation

Immigration

Housing

Criminal Justice System

Energy  
Security of Supply  
Demand Management



Education

Government of the UK

Revenue Collection

Emergency Planning

Enterprise and Innovation

Lifelong Learning

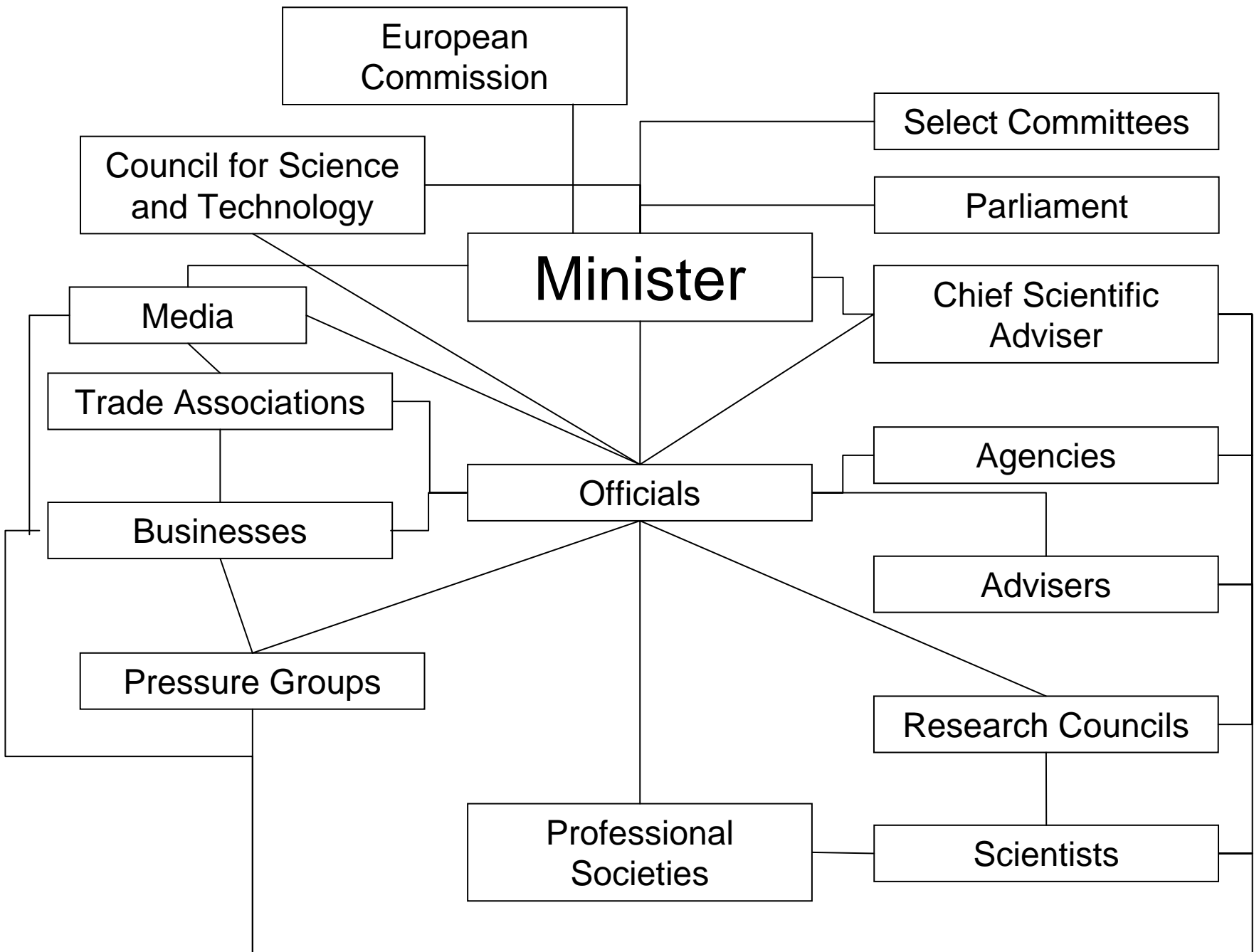
Environment

Defence

Security Services

# Examples of policy issues

- Influenza pandemic modelling
- Foot and Mouth Disease Contingency Planning
- Flood risk
- Counter-terrorism
- Pensions policy
- Energy supply forecasts
- Health threats – C deficile
- Transport demand forecasts







# Risk Programme - improving government capability

- 2 yr programme of change
- Civil Service Management Board group
- Cross-government networks
- Learning from public/private sectors
- Treasury Chief Secretary reports to Prime Minister



From Sir David Omand, King's College London

UK Resilience  
a service of the CabinetOffice

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You are here:  
Home >

Last updated: 03/12/2007

## Welcome to UK Resilience

The Government's aim is to reduce the risk from emergencies so that people can go about their business freely and with confidence. This website exists to provide a resource for civil protection practitioners, supporting the work which goes on across the UK to improve emergency preparedness.

### Latest on UK Resilience

- **HIGH PROFILE RISKS**
  - Avian Influenza (Bird Flu)
  - Flooding
  - Foot and Mouth Disease (FMD)
  - Human Flu Pandemic

### Emergency Preparedness

The **Emergency Preparedness section** has advice for practitioners on the pre-emergency phase, with generic material on key frameworks like the **Civil Contingencies Act** and disciplines like **Risk Assessment** and **Business Continuity**, it also contains details of the UK Government **Capabilities Programme**.

### Emergency Response & Recovery

The **Emergency Response & Recovery section** has advice for practitioners on the post-emergency phase, with generic material on key frameworks such as the UK Central Government **Concept of Operations (CONOPS)**[PDF, 26 pages, 376KB] and **Lead Government Department principle**, and the **National Recovery Guidance**.

### Emergencies

The **Emergencies section** has specific assessments and guidance in relation to the broad classes of emergency which our risk framework has identified.

### The Civil Contingencies Secretariat

The **Civil Contingencies Secretariat section** has background information on CCS, explaining our purpose, structures and **key partnerships**, **stakeholder bulletins from the Local Response Gateway** and the latest edition of **Civil Protection News**.

[return to top]

**Search**  
Enter Query  
Advanced Search **Find**

**Cabinet Office sites**

**Latest News**

17/12/2007 - The interim conclusions of The Pitt Review - Learning Lessons from the 2007 Floods

12/12/2007 - Preparing for Pandemic Influenza - Guidance to Local Planners

05/12/2007 - National Emergency Planning Beacon Events: an invitation to all local responders

22/11/2007 - Pandemic Influenza: Revised National Framework and Scientific evidence paper

31/10/2007 - National Recovery Guidance

**Hot Links**

Capabilities Program

Lead Government Departments

Contact your Regional Resilience Team

Contact your Local Resilience Forum

**Related Links**

**Preparing for Emergencies**

The Pitt Review - Learning Lessons from the 2007 floods

Emergency Planning College

Intelligence.gov.uk

London Prepared

**Email alert**  
info@local.gov.uk

www.ukresilience.info

## Risk, Responsibility and Regulation – Whose risk is it anyway?



Better Regulation Commission  
– independent body set up to  
monitor government  
management processes

Conclude:

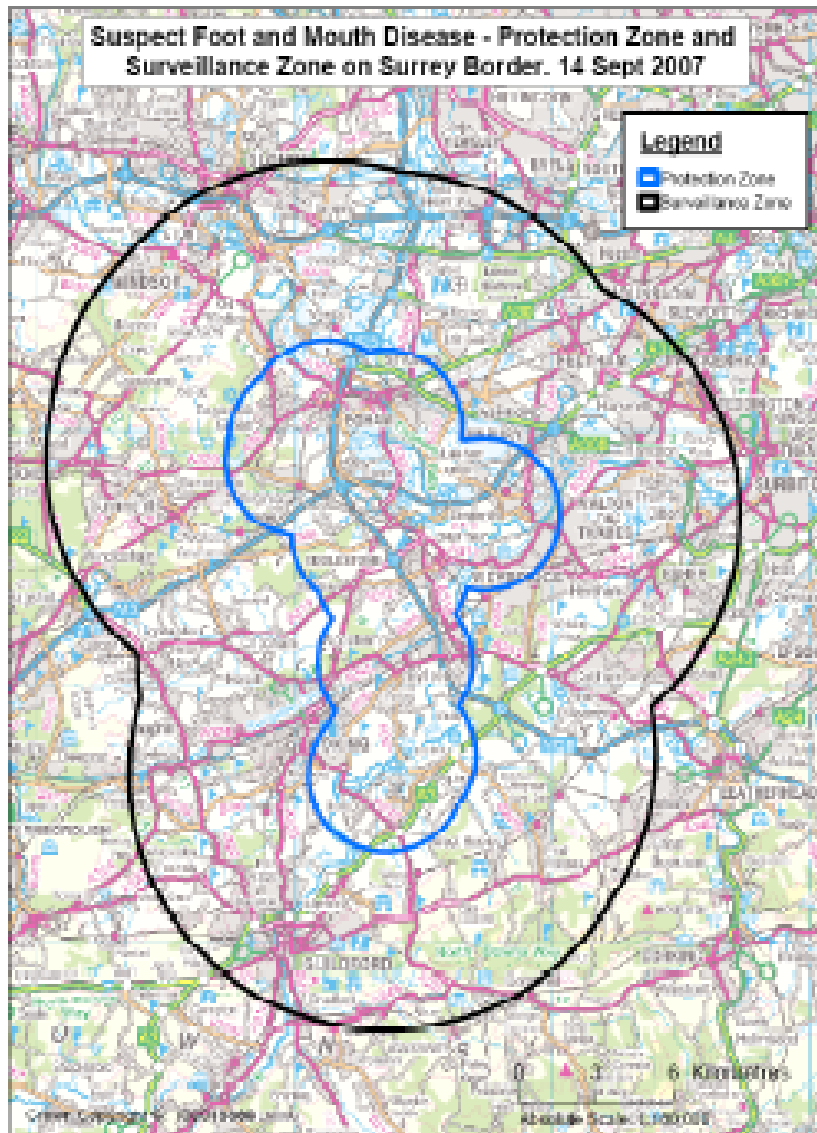
Inconsistent approach to risk  
criteria across departments

Fear of failure, risk aversion  
dominates actions

Time horizon short – one to  
three years

Ministers hate surprises

Policy is driven by events



CREATOR: RADAR Team, Defra



## Foot and Mouth Disease (FMD) Outbreak

Virus escape from a research laboratory – mechanism not immediately clear

Fine balance between managing an outbreak and the impact on the economy of restrictions on the movement of animals.

Particularly acute in September because of lambs and other animals being sent for slaughter.

# Response to the Foot and Mouth outbreak

- Cabinet Office co-ordination of the response
- Expert advice co-ordinated by the Chief Scientific Adviser, Sir David King
- Important roles of the Chief Veterinary Officer, Dr Debbie Reynolds, and the Chief Scientific Adviser, Sir Howard Dalton at the Department for Environment, Food and Rural Affairs
- Economic analysis of policy choices
- Many conflicting views from “experts”

# Intergovernmental Panel on Climate Change

Intergovernmental Panel on Climate Change  
Fourth Assessment Report

Climate Change 2007: Synthesis Report

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## Summary for Policymakers

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**NOTE:** Un-edited copy prepared for COP-13. The entire report is subject to final copy-edit prior to its final publication.

**Based on a draft prepared by:**

Lenny Bernstein, Peter Bosch, Osvaldo Canziani, Zhenlin Chen, Renate Christ, Ogunlade Davidson, William Hare, Saleemul Huq, David Karoly, Vladimir Kattsov, Zbigniew Kundzewicz, Jian Liu, Ulrike Lohmann, Martin Manning, Taroh Matsuno, Bettina Menne, Bert Metz, Monirul Mirza, Neville Nicholls, Leonard Nurse, Rajendra Pachauri, Jean Palutikof, Martin Parry, Dahe Qin, Nijavalli Ravindranath, Andy Reisinger, Jiawen Ren, Keywan Riahi, Cynthia Rosenzweig, Matilde Rusticucci, Stephen Schneider, Youba Sokona, Susan Solomon, Peter Stott, Ronald Stouffer, Taishi Sugiyama, Rob Swart, Dennis Tirpak, Coleen Vogel, Gary Yohe

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2. Causes of change	4
3. Projected climate change and its impacts	6
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References in curly brackets { } in this Summary for Policymakers refer to sections, tables and figures in the longer report of this Synthesis Report.

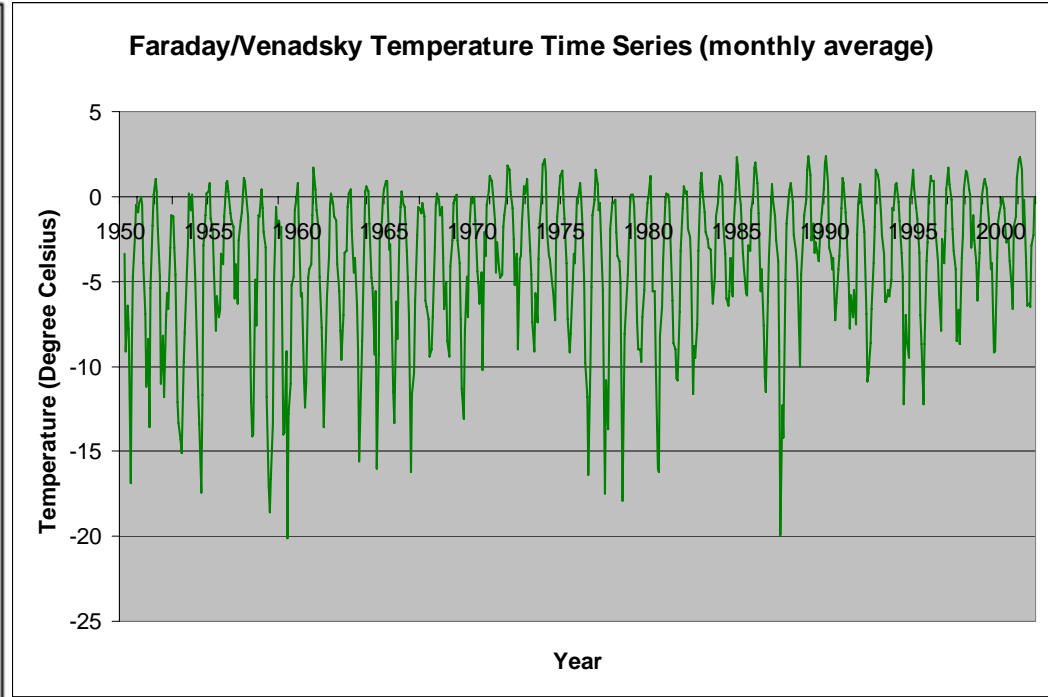
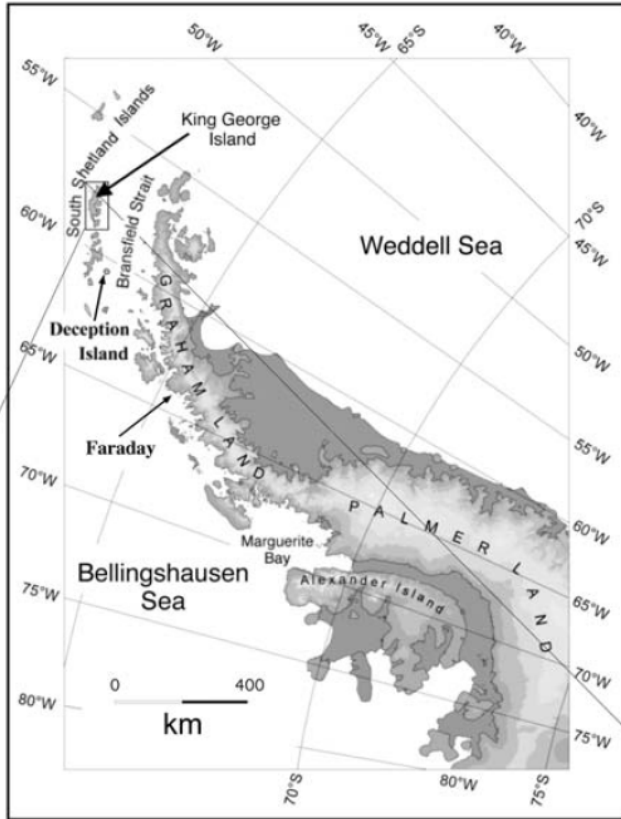
Summary for Policy Makers

Complex process of consensus building to build trust in the recommendations

Peer review essential

Global network of scientists

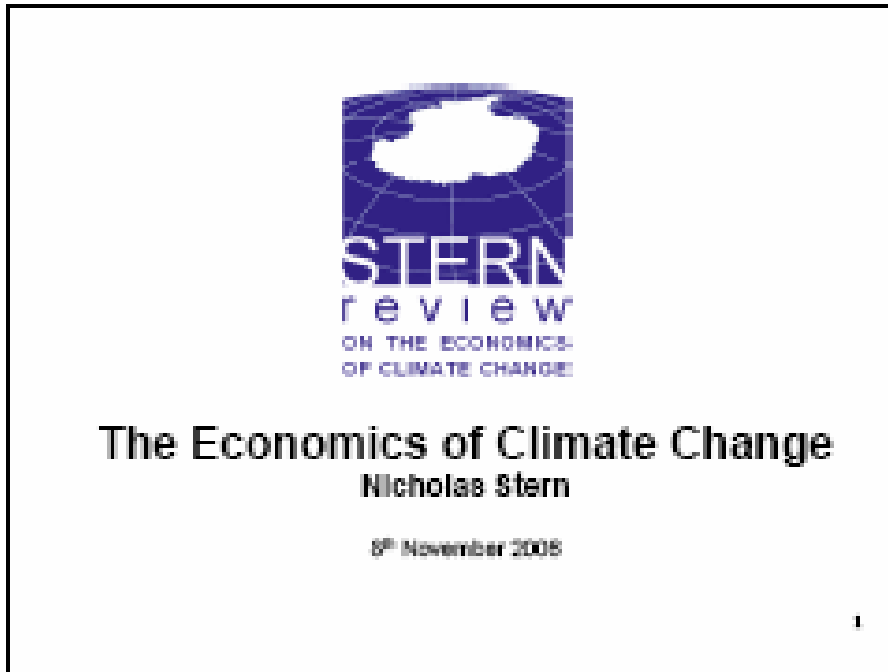
# Managing the communication of uncertainty



Is the Antarctic Peninsula warming?



# Stern Review of the Economics of Climate Change



Professor Sir Nicholas Stern appointed by the Chancellor to review the economics of climate change

Peer review not easy

Recommended action today to protect future generations

A risk management decision



Risk assessment in government  
– science advice is almost  
always required for identifying  
and recommending response to  
risks but Ministers do not  
always use that advice.

Trust is a key issue.

# A Business Perspective

# UK Combined Code on Corporate Governance

“A company’s objectives, its internal organisation and the environment in which it operates are continually evolving and, as a result, the risks it faces are continually changing.

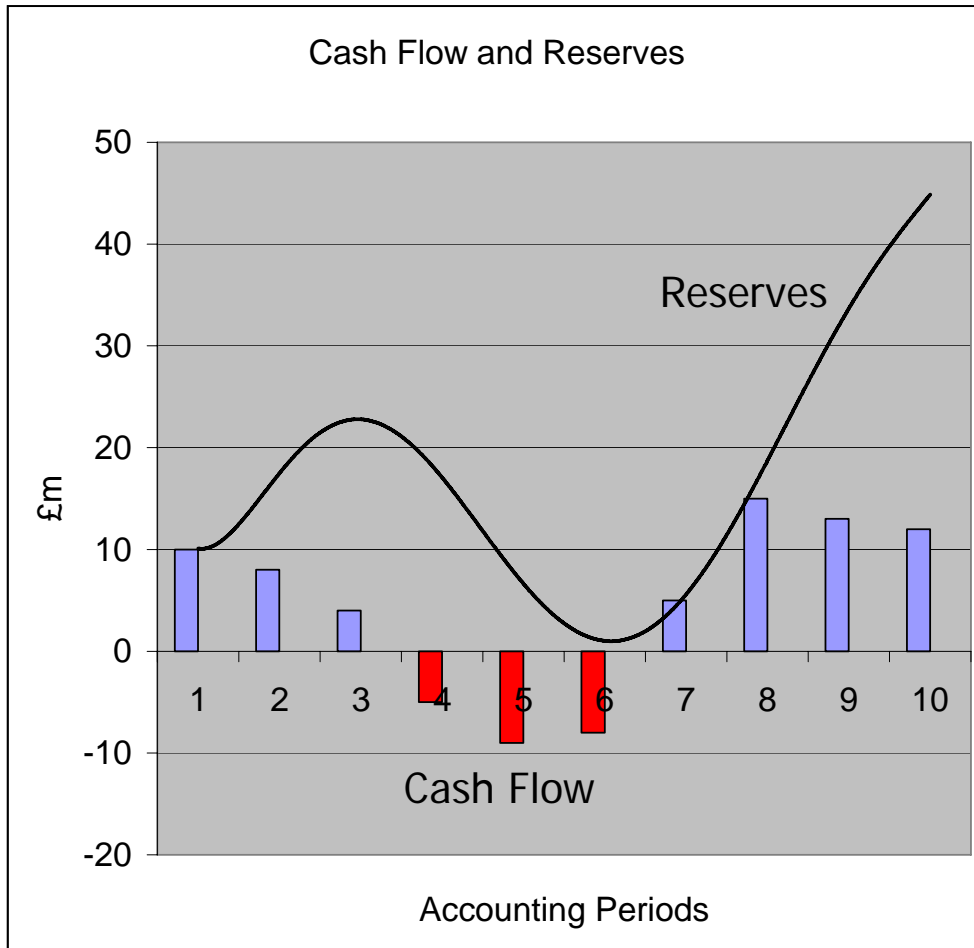
A sound system of internal control therefore depends on a **thorough and regular evaluation of the nature and extent of the risks** to which the company is exposed.

Since profits are, in part, the reward for successful risk-taking in business, the purpose of internal control is to help **manage and control risk** appropriately rather than to eliminate it.”

UK, Financial Reporting Council, 2003 [www.frc.org.uk](http://www.frc.org.uk)

The FRC is the UK’s independent regulator for corporate reporting and governance

# Risk of ruin



Boards manage businesses to protect the company from a deep downside rather than the most likely outcome.

# Deep downsides – only some can be quantified

- Sudden product price or margin fall
- Customers do not pay for goods or services
- Liability claim
- Loss of trust of employees
- **Outrage of the public**
- Projects fail to complete on time and within budget
- Business interruption from natural catastrophes
- Fire or explosion at a facility
- Fraud, accounting or trading failure
- Collapse of a supplier
- Regulatory or tax step change
- and so on...

**Risk level controlled by elimination, management or transfer**

# Role of the regulators



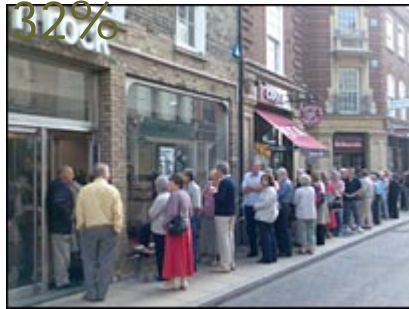
Annual report to help businesses think about risks

## UK Financial Services Authority

### Financial Risk Outlook 2007

- 1 Firms must be prepared to respond to extreme risk scenarios – influenza pandemic, climate change as examples
- 2 Terrorism
- 3 Illiquid financial instruments
- 4 Trade confirmations for derivative trades
- 5 Financial crime
- 6 International regulatory reform
- 7 High levels of personal borrowing
- 8 Consumer understanding of risks
- 9 Fair treatment of customers

## Northern Rock shares plunge



### From the BBC news web site 14Sep07

Some customers were queuing outside Northern Rock branches. The price of shares in one of the UK's largest mortgage lenders, Northern Rock, has fallen 32% after it had to ask the Bank of England for emergency funding. But experts and officials insist that Northern Rock, which has £113bn in assets, is not in danger of going bust.

### Northern Rock web site 14Sep07

Welcome to Northern Rock. If you need some cash - you've got it.

Our typical APR is 7.4%, so take advantage of this low rate loan today.

You can spread your repayments over one to ten years and with a fixed interest rate, you can be sure that what you borrow remains affordable.

# Summary

- Think tanks give advice but do not decide policy
- Ministers are overloaded with advice often conflicting
- Scenario testing and exercising before an event can clarify policy thinking
- “What if” analysis is essential to test all dimensions of a policy decision
- Analysis can only go so far – decisions are often based on a combination of analysis and very nebulous information and context