Report on the Whitehall audit of the Foresight programme / Office of Science and Technology.

Contributors

Great Britain. Office of Science and Technology.

Publication/Creation

[London]: Office of Science and Technology, 1997.

Persistent URL

https://wellcomecollection.org/works/efvb8d9c

License and attribution

You have permission to make copies of this work under an Open Government license.

This licence permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.



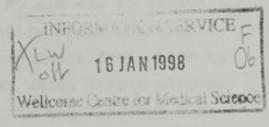
Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
https://wellcomecollection.org



Office of Science and Technology

Report on the Whitehall Audit of the Foresight Programme

October 1997



11906

Scrence and state - Great Bulan Research - Great Bulan



NAMED OF STREET OF PERSONS AND THE DESIGNATION

THE FORESTEE PROGRESS IN SHOUL LOOKING TOWARDS, and INSPECTION OF THE PROGRESS OF THE PROGRESS

development departments have vital roles to play. We should be considered by example. Toling what we are encouraging offices to death any coverance departments are already closely involved and any many programmes. Some are represented on Eurosichi panels are waite any departments and the death and departments departments and the department department and the department department and the death are can be dener.

The second programme across States, I considered as a second of the second seco

THE I NOT NOT BY STREET DIE BELT BE OF DWINDER MEET TENER AND THE STREET AND THE

DE PONTO DE QUESTO ANTICOMENTO LA PRODUCTION AND QUE DALLE SAN MESTA A



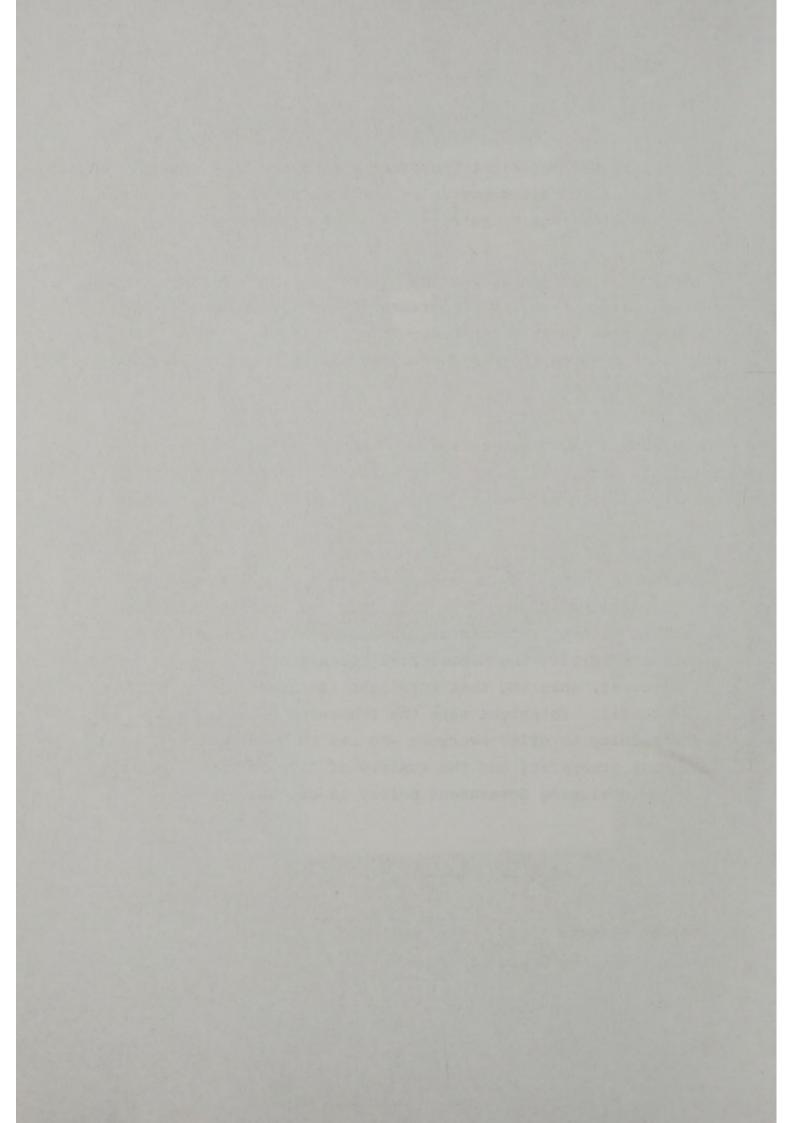
- in future the Foresight Programme will place more emphasis on small and medium sized companies while recognising that larger companies will remain centre stage in many areas;
- the MOD is broadening its involvement to include senior representation from its Procurement Executive on the Defence and Aerospace Foresight panel. This will further strengthen the links between the MOD's equipment procurement and the UK science base; and
- two groups have been established under the Whitehall Foresight Group, to focus on Foresight's contribution to quality of life and wealth creation respectively.

I have asked the Office of Science and Technology to work with departments in the coming months to see that all the recommendations arising from the audit are carried through. I expect to be kept informed of developments through regular progress reports. The Ministerial Foresight Group will oversee this process, ensuring that Foresight is embedded at the heart of Whitehall. Foresight sets the framework for the future. It has something to offer everyone who has to make decisions that influence prosperity and the quality of life in the UK. Its role in developing Government policy is crucial.

Pagarer Beclett.

Margaret Beckett
President of the Board of Trade





Report on the Whitehall Audit of the Foresight Programme

1. This report outlines the key findings of the audit of the Foresight Programme across Government Departments¹. A brief background on the Foresight Programme is given at Annex A. Main recommendations, which might be considered by the Whitehall Foresight Group of officials, are highlighted in bold.

Background

2. The UK's Foresight Programme was first announced in the 1993 White Paper "Realising our Potential". It aims to build partnerships between industry, academia and government and to identify opportunities in markets and technologies which will enhance the nation's prosperity and quality of life. To achieve these aims, Foresight seeks to create science base/industry networks with a culture of forward thinking about markets, and about science and technology and how they can be used to create wealth and improve quality of life. It entails finding a consensus about key areas of science and technology for the economy, so as to inform priorities, for both the public and private sectors. The Foresight Programme is being taken forward by 16 panels, comprising representatives from industry, academia and Government.

Purpose of audit

- 3. The Government made it clear in its Election manifesto that, in office, it would give a boost to the Foresight Programme to improve co-ordination and take-up. As a first step, it commissioned a comprehensive audit of the Foresight Programme covering all government departments. The aim was to provide a benchmark of the departmental response to Foresight against which future progress could be assessed. The audit was not concerned with the effectiveness of the Foresight process per se or its impact on wealth creation and quality of life.
- 4. The audit was initiated by a letter from the President of the Board of Trade to the Deputy Prime Minister and members of the Cabinet on 28 May. Departments were asked to provide responses to the nine questions listed at Annex B which addressed actions to date in support of Foresight and what more could be done.

Nature of responses

In general the flavour of the responses was positive and encouraging.
 Most departments are acting on Foresight messages and recommendations,

¹ The audit also covered Research Councils and Higher Education Funding Councils.

Report on the Whitehall Audit of the Foresight Programme

This report outlines the key findings of the such of the Persupht
Programme course Columniam Departments. A trial background on the
Potential Programme is given at America Adults recommendations, which make
bit considered by the Whitchall Foliasight Group at officials, are highwared in
bold

Background

The LISCE Exception of Summer to build preparation to the stock of the

Europea at pudic

3. The Government mode it clear in its Election manifests that, in other, and would give a boost to the Flagrantine to improve co-ordination and take-up. As a first step, it commissioned a comprehensive audit of the Flagrantine covering all government decembers. This aim uses to provide a benchmark of the departmental response to Foreshift against which fillular program could be excessed. The sudit was not concerned with the elections of the Foreshift process put set or its timetes on a sent covering and quality of the Foreshift process put set or its timetes on a sent covering and quality or the country of the foreshift process put set or its timetes on a sent covering and quality or the

Trade to the Deputy Pame Ministed by a letter from the Previous of the Beard of Trade to the Deputy Pame Minister and moments of the Cabinel on 28 Mey. Demarks and year private to provide responses to be nice resolution and what Annies & which accordingled account to date in suspent of Forest, the end what more could be done.

anonogaes to emiled

in general first flavour of the year own where each cover the enchanging and enchanging to the Asset department of the each excellent to the excellent to the each excellent to the excellent t

and there is a lot going on with departments, and through the Research and Funding Councils, which addresses them or is consistent with them. A number of responses also referred to efforts which are being made to improve dissemination of Foresight material within departments and to foster communication and co-operation with, and between, representative bodies from business and academia. There is thus a good foundation on which to build in taking the Programme forward. However, it is clear from the responses that there is still much more that could be done to improve the effectiveness of the Foresight Programme, and to ensure that it better informs decision-making.

6. The audit uncovered many specific points which are most appropriately pursued by the Office of Science and Technology (OST) bilaterally with the relevant departments. The rest of this paper highlights the key findings which require Ministerial consideration. The points are being pursued by the Whitehall Foresight Group which at official level coordinates Foresight activity across Government departments. Details of the group are at Annex C.

KEY FINDINGS

Linkage between departmental agendas and Foresight

- 7. The audit suggests that linkages between departmental and Foresight activities are not as strong as they might be. This finding is consistent with concerns previously expressed by some Panels about the level of support they are receiving from departments. Panels believe that more could be done to help them further their objectives. Departments generally consider that Panel activities are either not directly relevant to their core objectives or not capable of adding value to those objectives. The need in both cases is to develop closer connections between Panel activities and departmental agendas and for departments to make more use of Panels as a resource which can contribute to the development of longer-term thinking on policies and initiatives relating to wealth creation, competitiveness and quality of life.
- 8. Construction provides a prime example of current best practice in this area. The Construction Panel includes representatives from the Department of Environment, Transport and the Regions (DETR) also functions as a 'Futures Group' for the Construction Research and Innovation Strategy Panel (CRISP), the primary industry-government forum for the development of advice on construction research.
- 9. More generally, Foresight provides a framework for consideration of issues relevant to longer term government policy objectives or cutting across departmental boundaries. Panels are increasingly operating on a cross-sectoral basis (which of itself is likely to increase the relevance of their findings both to business and to departments) and making connections between organisations and different scientific disciplines which would not have been made without Foresight. Current work on aspects of sustainable development provides a good example of this. DETR has also recognised that various

Panels can make a contribution to its thinking on an integrated transport policy but there is a range of issues, particularly relating to quality of life, where Foresight could potentially provide a basis for co-ordinated initiatives. For example, the range of issues related to the changing age distribution of the population impact on most Panels and on several departments (e.g. Department of Trade and Industry (DTI), Department of Health (DH), DETR, Department of Social Security (DSS) and the Treasury) and are relevant to both wealth creation and the quality of life.

The Whitehall Foresight Group should encourage and monitor efforts to foster closer links between the activities of departments and Panels as a key element of the progress reports it has been asked to submit to Ministers.

Timescales

- 10. Some departments argued that, in order to complement, rather than overlap, existing mechanisms for policy development, Foresight should focus on a very long-term horizon, so that its input was distinctive. For example, DETR suggested that a 20 to 30 year time horizon was more appropriate for policy analysis of sustainable development.
- 11. When the Panels were originally set up, they were asked to look 15 to 20 years ahead. In order to appeal to business, however, many Panels subsequently decided to focus on shorter, 5 to 10 year, timescales which, in many sectors, represent the very long term so far as most firms are concerned.
- 12. In practice, this difference between business and departmental timescales is not a problem. Foresight already recognises that the "long term" means different things to different sectors and is flexible enough to allow the most appropriate timescales to be adopted. Thus, OST will make arrangements for the Natural Resources and Environment Panel to set up a sub-Group that looks 20 to 30 years ahead, while continuing to support the work of Panels such as Retailing and Financial Services which necessarily have much shorter time horizons. Panels are therefore being encouraged to be flexible in setting time horizons that they consider most appropriate, given the need both to provide long-term vision and to make their findings relevant to industry.

Departmental representation on and interaction with Panels

13. Most departments are currently represented on Panels by members of their Chief Scientist Units (CSUs). For the most part, these arrangements work well and mean that Panels have direct access to people with a detailed knowledge of departmental science and technology programmes and priorities. In some instances, however, representation from CSUs is not sufficient to encompass all interests that a department might have in the work of a particular

Panel. Where appropriate, Panels themselves would also like to be able to liaise directly with relevant policy people in departments.

14. More broadly, the audit also highlighted the necessity of finding ways to improve dialogue between departments, Research Councils, Funding Councils and Panels about current and future activities. There is a need for Panel Chairmen to have regular meetings with Ministers and senior policy makers and for the Research and Funding Councils to be fully aware of current Panel thinking so that when drawing up their programmes they can build on the good progress which they have already made.

The Whitehall Foresight Group should investigate ways of improving dialogue between departments, Research Council, Funding Councils and Panels.

Departments should consider what additional representation on Panels would be beneficial to reflect the range of their interests.

Education, skills and training

- 15. The Panels and most departments see education, skills and training issues as vital to Foresight implementation. A highly developed and responsive skills base is an essential prerequisite for both better development and better adoption of science and technology. Several departments felt that the Department for Education and Employment (DfEE) should be more closely involved in the Foresight Programme than it has been to date. DfEE's response recognised the relevance and importance of Foresight to the Department's work and that it should play a more active role. An official from its Strategy Division has joined the Whitehall Group and will consolidate existing links and promote new ones between Foresight and Departmental initiatives.
- 16. The Scottish Higher Education Funding Council requires higher education institutions in Scotland to submit a full annual report on their responses to the Foresight Programme and to take Foresight into account in their use of grants based on the Research Assessment Exercise. New grant schemes have also been introduced aimed at improve research capability in Foresight priority areas. In exercising its research funding responsibilities, the Higher Education Funding Council for Wales similarly lays a heavy emphasis on Foresight priorities. In England, the Higher Education Funding Council for England (HEFCE)'s general strategy is to steer higher education over time towards Foresight priorities, taking account of responses from institutions and other funders. Evidence from their strategic plans shows that higher education institutions are increasingly taking account of Foresight in setting priorities and planning developments in research and teaching but there may be scope for doing more to encourage this process.

OST and DfEE officials should pursue these issues bilaterally, taking account of the territorial responsibilities of the Scottish Office, Northern

Ireland Office and Welsh Office, and report back to Ministers through the Whitehall Group.

Resources

- 17. Departmental responses to the audit underlined the fundamental importance of securing greater business involvement and participation in Foresight. They also recognised that engaging business will require practical demonstrations of the importance which the Government itself attaches to Foresight, both in terms of the resources made available for the management and development of the Programme and in terms of action on identified priorities.
- 18. A number of suggestions for demonstrating greater commitment were made in the course of the audit. These included giving larger budgets to Panels to fund a wider range of studies and seminars (such as the recently published work on the relationship between Agriculture, Horticulture and Forestry and the economy) than is currently possible and expanding the OST secretariat servicing the Panels. DTI also suggested that consideration might be given to the creation of a central Foresight pool of money (separate from LINK and sector and local challenges) which would be exclusively for funding projects implementing Foresight priorities. All these suggestions beg questions about relative priorities and value for money and are best considered in the context of the Comprehensive Spending Review.

The question of resources devoted to Foresight should be considered in the context of the Comprehensive Spending Review.

Presentation

19. Whatever the outcome of the Comprehensive Spending Review, it is essential that departmental activities in support of Foresight are presented effectively and in a way which underlines the Government's collective commitment to the Programme. Responses to the audit show that there is a lot going on which is Foresight-related but is not being identified as such. Where departmental initiatives are relevant to Foresight, the Foresight dimension ought to be brought out. DTI, for example, has reviewed the Foresight relevance of the Teaching Company Scheme, LINK and other initiatives aimed at stimulating innovation or the transfer of knowledge from the academic base to business, and presents them as part of its response to Foresight priorities. There would seem to be scope for other departments to follow this lead.

The Whitehall Foresight Group should consider how presentation of activities associated with the Foresight Programme could be more effectively co-ordinated.

Involvement of industry

- 20. Departments with industry sponsorship responsibilities also have a key role to play in current efforts to increase business awareness of and engagement in Foresight. There is a clear need to generate greater engagement from trade associations and other intermediary organisations and to identify business leaders who would be willing to act as spokesmen for Foresight. Some departments considered that some Panels were too driven by academic interests and saw a need to increase business representation. Departments are well placed to suggest appropriate business leaders to serve on Panels and may also be able to provide examples of the practical application of Foresight by businesses which can be used to supply hard evidence of the benefits of Foresight in action.
- 21. Some departments expressed particular concern about the relatively low level of involvement of SMEs. Foresight timescales are too long for most SMEs but there clearly are some who can relate to Foresight and would benefit from it. Identifying and reaching them, however, is not easy. The most obvious lines of approach are through the supply chain, via large companies who are aware of Foresight, and through local and regional networks promoting innovation and technology transfer. Business Links, TECs and other intermediaries have an important role to play. There might also be scope for facilitating the process of technology transfer through the activities of regulators such as the Health and Safety Executive.
- 22. The Treasury said the financial services sector could provide better support for new small high tech companies, and saw a key role for Foresight in addressing this issue. This echoes the views of the Health and Life Sciences and other Panels which have expressed concern about the availability of funding for such companies. This seems best taken forward by an ad hoc group bringing together the Treasury, the DTI's Innovation Unit and other organisations with interests in this topic and involving representatives of the Venture Capital industry and other interested parties from the financial services sector.

Departments should recommend suitable industry figures to serve on Panels.

The OST, DTI and the Treasury should consider setting up a group to look at the role of the financial services industry in supporting high-tech SMEs and report back to the Whitehall Foresight Group.

Whitehall Co-ordination

23. Departments welcomed the reconstitution of the Whitehall Foresight Group as providing a more effective basis for co-ordination at official level. Responses also suggested that specific Ministerial involvement in Foresight through an inter-departmental group would raise the profile of the Programme,

both within Government and outside, and that there was a need to improve the flow of information within Whitehall about Panel activities and Foresight developments more generally.

- 24. The Whitehall Foresight Group has already given some initial consideration to the proposal for a Ministerial Group. It concluded that there would be advantage in setting up a small ad hoc group to review progress reports from the Whitehall Foresight Group and consider other issues relating to the development and presentation of Foresight as and when necessary. Officials believe that the Ministerial Group would help to secure commitment from departments which have not been fully engaged to date and would emphasise the transdepartmental nature of the Programme. (Terms of reference for the group and its composition as given at Annex D)
- 25. The need for better information flows is fundamental and underpins many of the recommendations in this report. Departments need a better understanding of the ways in which they can use Foresight and of the messages which they ought to be putting out to their clients. The Home Office suggested a seminar for officials to communicate Foresight aims and objectives and to disseminate examples of successful projects. The reconstitution of the Whitehall Group is a useful step forward but the prime need is for OST regularly to provide departments with clear, up to date and succinct briefings and to develop a more effective communications strategy. The internal Foresight coordinating committees set up by some departments would provide a useful focus for this activity. There is similarly a need to improve information flows to Research and Funding Councils.

An ad hoc Ministerial Group should be set up to provide a high-level steer within Government to the Foresight Programme.

OST should develop an effective strategy for providing departments with clear, up to date information on Foresight and the current activities of Panels.

Office of Science and Technology October 1997

ANNEX A

The Foresight Programme

The UK's Foresight Programme was first announced in the 1993 White Paper 'Realising our Potential'. It aims to identify opportunities in markets and technologies which will enhance the nation's prosperity and quality of life. It seeks to create sustained competitive advantage by bringing together business, the science base and Government in partnership to respond to these emerging opportunities.

The programme is spearheaded by sixteen panels, set up to explore opportunities in different sectors of the economy. The panels published their first reports in 1995 following widespread consultation involving some 10,000 people. These reports aimed to identify:

- the likely social, economic and market trends that will affect the UK in the medium to long term, and
- the developments required in science, engineering, technology to best address future needs.

Foresight is about preparing for the future. Deploying resources in the best way possible - for competitive advantage, for enhanced quality of life and for sustainable development.

Foresight is about creating a culture change in the way the UK approaches the future. It is about working together in partnership with other organisations, exploring the potential contribution that science, engineering and technology can make to business success.

The Foresight panels are: Agriculture, Horticulture & Forestry; Chemicals; Construction; Defence & Aerospace; Energy; Financial Services; Food & Drink; Health & Life Sciences; IT, Electronics & Communications; Leisure & Learning; Manufacturing, Production & Business Processes; Marine; Materials; Natural Resources & Environment; Retail & Distribution; and Transport.

The programme is managed by the Office of Science and Technology in the Department of Trade and Industry.

Further information about Foresight panels, events and publications is available on the Foresight Web site at http://www.foresight.gov.uk

ANDRES

The Foresight Programme

The UN's Foresten Proportions was instrumented in the 1000 kinds Paper Pacific Strate Paper Pacific Strate Paper Pacific Strate Paper Pacific Strate Paper P

tell void binned or out to a claim missing the beautias or emmission entre tell void binned by a community tell void binned to another transition of the another product of the community of the

Self of 263 and cooks for local abreats revision breaks and so a few and self of the life of the contract montests.

the destroyment secured mountains, argument mountains as a second of the second of the

Foresigns is about prepartic for the future. Deploying resources in the book way passing is for enterpolitive and for exceptional development.

Forestight is about cessing a culture change in the very the UK approximation for future. It is about violating together in parameter with common order orders and approximations and material can make to business success.

The Forceight panels are replacement factorises & Forceig Chemicals
Construction; Detence & Aerospace, Energy, Phaesical Services Food & Driek
Health & Life Sciences; IT, Electronics & Communications; Lobert & Driek
Manufacturing, Production & Business Processes; Market Malana, Malana,

The programme is managed by the Ciffics of Science and Technology in the Department of Trade and Industry.

Further information about Furesight panels, exists and publications is available on the Foresight Web site at http://www.furespit.gov.us

ANNEX B

Whitehall Foresight Audit Questions

The Foresight process

- Q1 How are your Department's interests represented in the Foresight programme and how could these interests be represented more effectively?
- Q2 How does your Department take account of Foresight findings in policy making and the setting of priorities?
- Q3 How does your Department reflect Foresight in any industry sponsorship activities it undertakes and in setting the objectives of bodies for which you are responsible?

Outputs

- Q4 What initiatives has your Department already taken in direct response to Foresight and what resources are committed to these initiatives?
- Q5 What future initiatives does your Department plan in direct response to Foresight and what resources do you anticipate being committed to them?
- Q6 How far are other departmental initiatives relevant to, or capable of being aligned with, Foresight priorities?
- Q7 How well is Foresight regarded within the industries which are sponsored by your department, and how much impact has it had on them?

The way forward

- Q8 How could Foresight be embedded more effectively in the policy making and priorities setting activities in your department?
- Q9 How could Foresight be co-ordinated more effectively across Whitehall?

Whitehold Foresight Audit Guestions

The Ferry left process

Of How one your Denamination interests inproved to the Foreign Control of the Con

SEZ Hotel delica your Elegammant takes secured of Foresigns fordings in eating

Outputte

And Annalistic and which the common all the common and the common

Of sendant transmitted by the sendant of the sendan

Of Index for other dental manufactures relevant to or arguests at the bearing anguest with increasing a requirement.

They seek as a second responsed with me destroy and how work the senance of the s

The way forward

CD. How could Exceed be emperated in the street separate of the party and the party an

City Manual States of States and Associated with the co-part interest Manual Association with the co-part interest Manual Association and the company of the

ANNEX C

Terms of Reference and Membership of the Whitehall Foresight Group

Terms of Reference

"To co-ordinate departmental activities in support of Foresight and, in particular, to ensure that departments have effective arrangements in place for contributing to the work of Foresight, considering the recommendations made to Government and encouraging dissemination and understanding; and to submit regular progress reports to Ministers, including an assessment of the impact of Foresight on the economy and on quality of life."

Membership

Name	Department
Helen Williams (Chair)	Trans Departmental Science and Technology Group Office of Science and Technology
Stephen Spivey	Foresight Director Office of Science and Technology
Stephen Haddrill	Competitiveness Unit
Dr David Evans	Technology and Standards Directorate DTI
Craig Pickering	Industry Division HM Treasury
Richard Harrison	Strategy and Board Secretariat Department for Education and Employment
David Lyscom	Environment, Science and Energy Dept Foreign and Commonwealth Office
David Duncan	Industrial Research and Technology Unit Northern Ireland Office
Michael Markin	Deputy Chief Scientist (Research and Technology) Ministry of Defence
Graeme Dickson	Higher Education Division and Science and Technology Unit Scottish Office
Dr Ron Loveland	Director of Business Services Welsh Office
Bill Billington	Department of Transport
Dr Alan Apling	Office of the Chief Scientist Department of the Environment
Dr Jim McQuaid	Director of Science and Technology and Chief Scientist Health and Safety Executive
A Burne	Head of Research Policy Co-ordination Division Ministry of Agriculture, Fisheries and Food
Paul Wright	Department for Culture, Media and Sport
Dr Ian Haines	Department for International Development
Dr Peter Greenaway	Department of Health

DEBUGA

Tarres of Enforcement and Electropeckip of the Ministral Foregistre Cross

Terms of Reference

To do did the second se

distancionsti

ANNEX D

Terms of Reference and Membership of the Ministerial Foresight Group

Terms of Reference

"To review progress reports from the Whitehall Foresight Group and consider other issues relating to the development and presentation of Foresight as and when necessary."

Membership

The group will be chaired by John Battle (Minister of State for Industry, Energy and Science), Department of Trade and Industry.

Membership of the group will be open to all departments but as a minimum will include representatives from:

The Treasury

Department for the Environment, Transport and the Regions

Department for Education and Employment

Department of Health

The Northern Ireland Office

The Scottish Office

The Welsh Office

G X2UMA

verms of Reference and Monkership of the Ministerial Foresight Group

Torms of Reference

To review progress reports from the Whitehall Forestain Group and consider other assures reliating to the development and presentation of Forestein as and when recessaria.

spidenostweth.

The group will be chained by John Batts (humans of Suns for Industry, Energy

The fourthful of the group will be open to all deciments but as a running of the presentation from

The Tressury

thought and the hope and around on a first manner and the Regions

Department for Education and Employment

Chest to Instruments

The Northern Instant Office

The Scotlish Office

PROTECT CONTRACT WATER