

Mr Andrew Miller
Chair
Science and Technology Committee
House of Commons
14 Tothill Street
LONDON SW1P 3JA

From the President Paul Nurse

24 September 2013
Our ref: PN/LS/JB

Dear Andrew

I am pleased to respond on behalf of the Royal Society to the Committee's inquiry on Horizon Scanning in Government Departments.

Horizon scanning is an important strategic tool for government decision making. The importance and value of independent expert advice and objective evidence-based assessment was demonstrated at the meeting of G8 science ministers and presidents of national academies in June 2013 (which was jointly hosted by the Royal Society) where the issues of horizon scanning and global challenges were discussed.

We welcome government's increasing interest in horizon scanning and the recent cross-cutting government review of this area. In considering the role and practice of horizon scanning, we encourage government to continue to address the following challenges:

- Involving and actively engaging senior policymakers and leading scientists.
- Ensuring civilian and defence functions of horizon scanning are considered and brought together.
- Developing cross-disciplinary, cross-sectoral and international approaches which recognise interdependencies.
- Ensuring clear leadership and coherence across government. More inclusive approaches are desirable but rapidly changing responsibility and structures for horizon scanning across government may lead to fragmentation and duplication.
- Looking beyond short-term political and economic cycles, and recognizing that the contribution that science makes to identifying and tackling long-range, complex problems.
- Considering low probability, high impact events.
- Strategically supporting economic development and high value business, particularly through science and in the longer term.

Often horizon scanning considers difficult but important problems such as climate change or energy security that cross departments, cross disciplines, have timescales longer than the lifetimes of governments, do not present a single decision moment and where it is less obvious that science can help. These sorts of problems were recently identified as particularly challenging for policymakers and scientific advisors by the former Government Chief Scientific Advisor, Professor Sir John Beddington FRS.

National academies play an important role in assisting the horizon scanning efforts of government as part of a network of partners including academia, industry and charities. We bring a combination of strengths, including:

- The expertise of our Fellowship and Foreign Membership.
- Independence.
- The ability to more easily take a longer term approach and consider more challenging scenarios.
- Wide and deep networks, including high-level policy makers and scientists across the globe.

An important role of a national science academy is to bring emerging knowledge that has major potential public and national implications to the attention of government. Its capacity to do so stems from the much greater breadth and depth of knowledge represented by its fellowship than is directly available to government through its civil service. Recent examples include our recent publications on “Shale Gas Extraction” (with the Royal Academy of Engineering), “Science as an Open Enterprise” and the “Ownership and Governance of NERC Centres”. The Royal Society, along with its sister national academies, is well placed and willing to play this role.

The Royal Society has made significant contributions to debates around issues that are the target of horizon scanning such as geoengineering, shale gas and nanotechnology. Our 2012-2017 strategic plan identified providing scientific advice for policy as one of our priorities. Horizon scanning forms an important component of this activity and in the future we will be seeking a greater role in responding to rapidly evolving, high public interest, policy issues.

Yours sincerely

Paul Nurse

+44 20 7451 2507
president@royalsociety.org