

## **AGENDA ITEM 6**

### **Emerging Science and Bioethics Advisory Committee**

#### **Discussion paper**

#### **Horizon Scanning**

##### **Introduction**

1. This paper aims to initiate discussions on how ESBAC is going to engage in horizon scanning. It is not a study on horizon activities or engagement. For the purpose of this initial discussion on the subject, the term horizon scanning is used, but it can be further refined once this function is better defined by the Committee.
2. ESBAC will not have the resources to commission its own horizon scanning activities, although such work will be highly valuable to the success of the Committee.
3. This short paper first explores a broad range of issues which members are asked to comment on and then explores existing horizon scanning activities with a view to making best use of these.
4. In terms of optimising coverage of the information already being collected by other organisations, a multi-prong approach is suggested. It is intended that information will be collected from a variety of sources from Members and the Secretariat and collated for discussion at meetings.

##### **Horizon Scanning Topics**

- Genomics
- Stem cells, mitochondria, regenerative medicine
- Gene therapy
- Genetic screening
- Behavioural genetics (criminality, intelligence etc.)
- Synthetic biology
- Enhancement

- Human/computer interactions
- Organ donation: opt-out, xenotransplantation
- Regulation, including devices
- Research involving animals containing human material<sup>1</sup> (e.g. neuroscience)
- Use of animal models in scientific research
- Biosecurity / research misuse: example of avian flu work H5N1 in the US that was initially withheld from publication because of bioterrorism risk.
- *In silico*
- Neuroethics
- Rare diseases
- Equity of access to treatments and to research
- Management of chronic disease / telecare, m-health and remote technologies for monitoring and delivering healthcare (including access / equity issues)
- Synthetic Biology
- Use of genetically-modified organisms in food chain and pest control
- Informatics- the use of population medical records
- Cell Therapy and Regenerative Medicine products derived from embryonic stem cells
- Horizon 2020
- Regulations
- DH and OGDs policy developments
- Unknown unknowns

Q. Do Members wish to i) add, ii) remove or iii) re-word any of the topics listed above?

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<sup>1</sup> <http://www.acmedsci.ac.uk/index.php?pid=99&puid=222>

Q. As the list above is very generic, are there any specific issues which Members are aware of and should perhaps a second category of better defined topics be in a “keep a watching brief” category instead?

Q. Discussion paper ESBAC 01(05)(02) reports a range of current and recently published topics. Can members add to this list? Developing issues such as those reported by the Nuffield Council on Bioethics could be issues to keep a watching brief. This exercise can be undertaken out of Committee.

Q. As an ongoing activity, members are asked to bring to the Secretariat’s attention any event, which may be relevant to ESBAC’s work.

### Existing Horizon scanning activities

5. No resources are available to dedicate to an ESBAC bespoke horizon scanning project. In addition, to avoid duplication of work, relevant existing horizon scanning activities, to which ESBAC could have access to are listed below.
  - Go-Science horizon scanning centre (HSC). The HSC will facilitate horizon scanning workshops (e.g. on particular topics that could be identified by the group) and will also be updating its own web-based topic briefings that might stimulate ideas (web reference: <http://www.bis.gov.uk/foresight/our-work/horizon-scanningcentre/the-sigma-scan>)
  - Go-Science also have a cross-departmental horizon scanning network.
  - Many organisations are horizon scanning to inform their own work programmes. These include the organisations of members of the group and those we have contacts with such as relevant select committees, think tanks such as the King’s Fund, Science Media Centre etc.
  - HFEA also have horizon scanning activities
  - International links: Nuffield Council on Bioethics, the Academy of Medical Sciences and Royal Society.

Q. Members are invited to suggest additional horizon scanning activities in the UK or elsewhere which could be beneficial to ESBAC’s work.

Q. Members are invited to suggest how to i) best engage with and ii) benefit from the identified horizon scanning activities.

### Specific activities or one off-events

- MHRA and the Academy of Medical Sciences workshop on the regulation of regenerative medicine using stem cells.

Q. Members are invited to suggest additional one off or ongoing events in the UK or elsewhere, which could be beneficial to ESBAC's work.

### Multi-Prong Approach

6. Existing horizon scanning activities are unlikely to cover all the range of aspects that concern the work of ESBAC. It is therefore advisable to have a multi-prong approach to ensure maximum coverage of the information being collected.
7. A number of links have already been established via ESBAC membership in key organisations, as reported in ESBAC 01(06)(02) which seeks to identify stakeholders, with a view to establishing links, including identifying horizon scanning opportunities.
8. To enable this approach to deliver the information needed, it is essential that Members are committed to this activity, in line with the Code of Practice, to keep abreast of developments in health related biosciences and biotechnologies and inform the Secretariat, who will then collate the information.
9. These horizon scanning activities are intended to complement ESBAC's role for networking opportunities for Members as well as a forum to consider and develop coordinated advice across the wider science, health and academic communities to help discuss priorities in response to new developments.

Q. Are Members part of any other organisation which has not yet been identified but could contribute to the horizon scanning work?

Q. Are Members willing and able to collectively be part of the horizon scanning and networking activities for ESBAC?

### Papers for discussion

**ESBAC 01(06)(01)** Horizon scanning (this paper)

**ESBAC 01(06)(02)** ESBAC's stakeholders

