Response from the Royal Astronomical Society

Declaration of interests

This is the official submission from the Royal Astronomical Society to the Select Committee inquiry into the implications of Scottish independence. The Society itself has no financial relationship with any of the bodies referred to in this report. Many of our Fellows however are either employed by these organisations, receive grant funding from them or are involved with them in advisory roles.

1. With more than 3700 members (fellows), the Royal Astronomical Society is the UK body representing professional astronomers, space scientists and geophysicists. As such we are pleased to respond to this inquiry, as the issues raised are of direct relevance to all of these communities.

2. The short timescale for this consultation has however compromised our ability to fully consult scientists and researchers. Given the major changes to the UK research landscape that could result from Scottish independence, this is a cause for concern. We nonetheless invite the Committee to consider two examples, one each in astronomy and in geophysics, that illustrate some of the issues that would need to be addressed.

3. Scotland currently has a very diverse portfolio of research in astronomy and geophysics, research that is well integrated into activity across the UK, but is internationally strong in its own right. In an independent Scotland, the smaller resource base might have an impact on the breadth of activity, particularly in blue skies science such as astronomy.

4. Broader areas for consideration should thus include the support for research in universities and research establishments and how the currently UK-wide research councils would agree to divide assets and grant funding between an independent Scotland and the other nations of the UK. The Society believes that these negotiations would also need to include an agreement on access by scientists to facilities of international importance in both states.

5. The Society urges the Committee to seek independent advice on these issues and to consider the kind of cross-national agreements that would need to be put in place to maintain the health of research activity in both countries.

Astronomy Technology Centre (ATC)

6. A major UK astronomical facility is the ATC (http://www.stfc.ac.uk/ukatc/default.aspx), based in Edinburgh. One of the research establishments of the Science and Technology Facilities Council, this is a key centre for astronomical instrumentation development and support. The ATC is heavily involved with the development of the Mid-Infrared Instrument (MIRI) for the NASA / ESA James Webb Space Telescope in which the UK has a major role.
7. If Scotland becomes independent then we would ask the two governments to broker a cross-national agreement to continue the operation of the ATC.

**British Geological Survey (BGS)**

8. The BGS ([www.bgs.ac.uk](http://www.bgs.ac.uk)) is the body, partly supported by the Natural Environment Research Council that aims to advance geoscientific knowledge of the UK landmass and continental shelf. It has its headquarters in Nottinghamshire and centres in Edinburgh, Cardiff and London.

9. As with other facilities, the Society is not aware of any specific plans for a change to the future of the British Geological Survey in Scotland in response to independence.

10. Much of the science undertaken by the BGS is international and therefore would potentially be little affected if the Scottish Government continued to support the Edinburgh office. The Nottinghamshire HQ would presumably continue on a similar basis as at present. There is discussion in the geosciences community on how independence would affect funding for research in each nation.

11. Some thought would have to go into planning the continued provision of cross-border monitoring activities (seismic and magnetic networks in particular) undertaken by these science teams. How the maritime area is divided up would also affect marine geosciences planning.