INTERNATIONAL REVIEW OF THE MATHEMATICAL SCIENCES – REPORT ON EPSRC TOWN MEETING

The EPSRC Town Meeting to present the draft report of the Review Panel took place in the Senate House of the University of London on the afternoon of 28 January, before an expectant crowd of more than a hundred members of the mathematical science community, staff of EPSRC, and even the occasional journalist. After brief introductory speeches by Professors Adrian Smith (Director General, Knowledge and Innovation) and Tim Pedley (Chair of the IRM Steering Committee), the Chair of the Review Panel, Professor Margaret Wright of New York University, gave a *tour de force* presentation, outlining in 50 minutes the key findings and recommendations of the Review.

From an LMS perspective, the most striking of these were:

- F-1. Overall, mathematical sciences research in the UK is excellent on an international scale, with world-leading researchers in every subfield and closely connected application area considered by the panel.
- F-2. The high quality of UK mathematical sciences research depends critically on the diverse and distributed research community, where 'diverse' includes research area, group size and institution size, and 'distributed' refers to geographical location.
- F-6. Despite improvements, most UK-educated PhDs in the mathematical sciences are not adequately trained to be competitive on the international academic job market; hence a large proportion of postdocs and junior faculty consists of researchers trained outside the UK.
- F-7. Action about gender diversity is not a sufficiently high priority for the UK mathematical sciences research community.

- R-1. To research funders: The panel strongly recommends that diversity and distributedness of the UK mathematical sciences (Finding F-2, above) should be enhanced by providing a variety of funding programmes designed so that the best mathematical sciences researchers can advance their activities in research and graduate education. To provide maximal support for top-quality researchers in this context, it is highly desirable to have flexible funding models that permit geographically distributed researchers working in a broad scientific area to receive adequate long-term funding.
- R-2. To research funders, learned societies and the mathematical sciences community: Open, frank and timely communication between EPSRC and the mathematical sciences community is extremely important. In addition to strengthening existing processes, the panel strongly recommends the establishment, as soon as possible, of a new structure for communication between EPSRC and the mathematical sciences community. A joint effort between EPSRC and leadership of the learned societies is an obvious way to begin to define such a structure.
- R-5. To universities, funders of PhD research and the mathematical sciences community: To complement existing EPSRC programmes that support PhD education (such as Taught Course Centres and Centres for Doctoral Training), UK universities should consider establishing, as a norm, a PhD programme that begins with a special one-year research Master's degree, followed by three years of PhD education and training.

Margaret Wright singled out (R1) and (R2) as being the most important of the Panel's recommendations, and indeed (R2) is described as "an *essential* recommendation" in Section 12.

After Margaret Wright's presentation, Tim chaired a long and lively discussion involving many contributions from the floor, with responses from Margaret and (occasionally) from David Delpy.

The formal proceedings were brought to an end by a short speech from David Delpy.
The final version of the IRM Report will be published as soon as any minor factual errors in the draft have been corrected. Meanwhile, the draft report can be accessed HERE.
Arrangements are in train for a high-level meeting between EPSRC and the Council for the Mathematical Sciences, to discuss how the recommendations of the report can begin to be implemented.

Ken Brown
LMS Vice President
16 February 2011