

REPORT OF THE NEW ACTIVITIES STRATEGIC IMPLEMENTATION COMMITTEE TO THE 69TH IUGS EXECUTIVE COMMITTEE MEETING, 17/18 JANUARY 2016

1. It is my pleasure to report on behalf of the New Activities Strategic Implementation Committee (NASIC) on the progress of advancing the Resourcing Future Generations (RFG) initiative.
2. Since NASIC was established following the 66th IUGS Executive meeting in Paris in February 2013, we have:
 - i. Published an article on RFG in *Episodes*;
 - ii. Produced a 4-page brochure on RFG;
 - iii. Organised a Pardee symposium at the GSA 2013 Annual Meeting in Denver;
 - iv. Promoted RFG on the AGI, GSA, GSL and IUGS websites;
 - v. Organised a symposium and launched a White Paper at China Mining (October 2014).
3. Activity during 2015 has included:
 - i. Addressing the International luncheon at Round Up, Vancouver, in February, introducing the work of IUGS and RFG, and how it links to the inter IGC meeting to be held in Vancouver during 2018;
 - ii. Convening a workshop held in Namibia in July which brought together seventeen experts from geoscience and the social sciences including economics. The report of that workshop is at Annex A;
 - iii. In October, launching a one-page summary of the major outputs of the Namibian workshop for policy makers and sending it to selected opinion formers and policy advisers in Germany and the UK (Annex B);
 - iv. Speaking about RFG at the World Resources Forum and International Resource Panel meetings in Davos, Switzerland in October;
 - v. Speaking about RFG and how it connects to their mission at a symposium marking the 70th anniversary of the founding of UNESCO, held at the GSA annual meeting;

- vi. Pat Leahy (a member of the NASIC Core Group) and I, together with Brian Skinner (Yale, USA) and Neil Williams (Wollongong, Australia) are Theme Champions for a two-day symposium on RFG to be held at the 35th IGC next year;
 - vii. Preparing a paper for submission to Science on the security of future supply of metals that will be needed by the new energy technologies that will be needed to deliver the CO₂ reduction targets resulting from the Paris COP 21 meeting.
4. We were successful in attracting funds from both ICSU and UNESCO which together with a grant from IUGS covered the cost of the Namibian workshop and printing of the report and one-page policy summary.
5. Despite all that has been done to promote the RGF initiative it has attracted no support from industry other than from Vale who paid the travel expenses of Fabio Masotti to attend the Namibian workshop; and no interest has been forthcoming from any National adhering body though some interest has been expressed by some associated bodies including International Association for Mathematical Geosciences and the Commission on Tectonics and Structural Geology.
6. As I commented last year, a fundamental difficulty in moving the initiative forward and developing a coherent, planned programme of activity is the total absence of any identified financial commitment by IUGS for NASIC/RFG over a number of years. The absence of a budget, even at indicative levels and covering a number of years, seriously undermines the effort. To move the initiative forward, at the very minimum there must be a commitment of base funding over a number of years. Without such a commitment it will be difficult, if not impossible, to enthruse those who serve on NASIC to volunteer the time which will be necessary to undertake the range of activities listed below.
7. NASIC has identified possible elements of a future work plan:
 - i. Promote the White Paper and report of the Namibian workshop in the context of the Paris accord after COP21;
 - ii. Continue to try to engage with EuroGeoSurveys. Horizon 2020 could be a mechanism if there was willingness by the EU to raise the issue at a G8/G20 meeting;
 - iii. In the UK, there is potential to work with government officials and advisors, in particular through the Government Office of Science. There will be parallels in other countries, in particular in Germany and the USA;
 - iv. Building links with high technology industries as 'users' of critical materials';

- v. Engage with industry, governments, national geological surveys and funding agencies through multiple approaches seeking their participation and that of the wider research communities;
- vi. Consider if there is scope to address social issues and to engage with different audiences (possibly straddling UN/UNEP/UNESCO/World Bank/World Economic Forum/ICMM);
- vii. Work with IRP on its proposed review of future mineral and metal supply in the circular economy;
- viii. Identify and publish about RFG in high impact journals bridging economics, foreign affairs and science policy in which to place a paper/s;
- ix. Consider producing a book outlining the issues of security of future supply and to couple its launch to an event.

8. In addition we urge the Executive Committee to:

- i. Assess the impacts arising from IUGS funding of its geoscience programme;
- ii. Map some of the IUGS current research funding from its geosciences programmes to RFG;
- iii. Given the need for better constrained geophysics, to explore how elements of the RFG programme can be developed in closer collaboration with IUGG.

Edmund Nickless on behalf of NASIC
22 December 2015