



**British
Geological Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL

Keyworth

Kingsley Dunham Centre
Keyworth
Nottingham
United Kingdom
NG12 5GG

Telephone +44(0)115 936 3100
Direct Line +44(0)115 936 3226
Direct Fax +44(0)115 936 3277
E-mail jludden@bgs.ac.uk
www.bgs.ac.uk

John Ludden
Executive Director

August 2015

Subject Earth Science Board

From John Ludden
To Earth Science Europe, core group

Dear Colleagues

After talking to a few people I feel it is time to take the ESE concept of creation of an “Earth Science Board (ESB)” to an open discussion. The aim of this board will be to provide a forum for various earth science initiatives across Europe. It will not replace individual initiative, but will become a forum at which we can share concepts on the evolution of the earth sciences nationally, in Europe and globally.

We have seen a number of initiatives recently: the EFG promoting their brochure and in particular, the value of a career in earth sciences; EGU has hired a new lead in the policy area; EPOS receiving funding for its implementation phase; creation of Geo8; EGS creating a home for M4EU, to cite but a few. All of which provide different foci for earth sciences from professional to government, academic and for infrastructure.

I submit that the polar and marine communities have boards (see links below) that in general represent their (science) community and that act as a collection point for the various subdivisions of these sciences. While I do not propose that we copy the governance for these boards, the concept of a “home” for earth sciences is just as valid as for polar and marine science. In particular, earth science has a significantly stronger industry focus which would also need to be covered in the ESB.

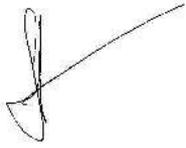
With the help of Vicky Hards (who also pulled the ESE Brochure together) I have produced a short document with outlines of the concept. My suggestion would be to exchange views on this and then to meet in the autumn to discuss the concept and work out how we might structure it and how we could ensure that this ESB was effective for all of its members.



INVESTOR IN PEOPLE



For now I have limited the circulation of this letter to those involved in the ESE document and added a couple of omissions such as the EFG. I would like to keep the discussion informal before and if we move to discussion of an ESB structure.

A handwritten signature in black ink, consisting of a vertical stroke on the left and a diagonal stroke extending from the top left towards the right.

John Ludden
Chair (self-nominated)
Earth Sciences Europe

EARTH SCIENCE EUROPE

Overarching aim: To create a forum and a unified voice for Earth Sciences in Europe.

“Earth science”: the solid earth and its interfaces with the hydrosphere and human usage

Following on from the ESE initiative launched in 2012 and in discussion with numerous interested parties we have decided to take ESE to its next stage. We will need to be more inclusive in this action and will consult widely. We believe that an Earth Sciences Board is essential for the visibility and prominence of our community.

The initiative’s first publication, a brochure aimed at all stakeholders was published in 2014:



<http://www.bgs.ac.uk/earthScienceEurope/downloads/EarthScienceEuropeBrochure.pdf>

An Earth Science Board will be an umbrella to represent the whole Earth Science community, recognised by both the Earth Science community itself, the EC and the wider stakeholder community.

Mandate of an Earth Science Board (ECB)

To provide a pan-European platform for its member organisations to develop common priorities, to advance solid earth science research and to bridge the gap between science and policy, in order to meet future earth science challenges and opportunities. It should be a platform for European engagement in international science programmes and provides strategic science policy advice to the European Commission, National Governments and international bodies.

As an **independent non-governmental advisory body**, the ECB should develop insight and foresight, recognising opportunities and trends, presenting compelling and persuasive arguments that shape the future of earth science research, training and careers in Europe.

The ESB should facilitate enhanced cooperation between national organisations involved in solid earth science (both research institutes and research funding agencies), European

stakeholder networks and wider stakeholder communities, towards the development of common positions on the research priorities and strategies for solid earth science in Europe.

In its strategic role, such a Board would **serve its Member Organisations** and wider Earth Science Community by providing a forum within which earth science research policy advice to national agencies and governments and to the European institutions and agencies is developed, with the objective of promoting the establishment of the European Earth Sciences.

A European ESB would operate via four principle approaches which underpin the Board's main objective of bridging the gap between science and policy;

1. **Forum** – bringing together research stakeholders to share knowledge, to identify common priorities and approaches, to develop common positions and perspectives, and to collaborate;
2. **Synergy** – fostering European added value to national programmes, facilitating access and shared use of national research facilities, and promoting synergy among international programmes and organisations;
3. **Strategy** – identifying disciplinary and inter-disciplinary scientific issues of strategic importance for Europe, initiating analysis and studies, and providing high-level recommendations for European and national programme managers, research funders and policy makers as well as the scientific community;
4. **Voice** – expressing a collective vision of earth science research priorities (and therefore funding priorities!) towards a European strategy for research, in order to meet future science and societal challenges and opportunities.

Structure -A council of ~ 12

Members – organisations and /or individual (see below)

Current examples

Marine Board <http://www.marineboard.eu/>

Polar Board <http://www.esf.org/research-areas/polar-sciences.html>

Earth Science Board

Key themes for the next 20 years

- Integration of research and monitoring efforts
- Harmonisation of methodologies
- Data and sample sharing – and storage/archiving
- Sharing/establish shared facilities, greater integration
- Training and professional needs

Four pillars

1. Earth Science to underpin resource security
2. Earth Science for a safer society
3. Earth science for discovery
4. Engaging with users of Earth science

ESB Key issues to be answered:

Issue 1: ToR and Structure

Issue 2: Host, legal status

Issue 3: Membership

Membership/representation

Necessary for credibility: Top ten/twenty?

Considerations

- Sectors to represent
- Organisations
- People
- Geographic spread

Earth Science Stakeholders by Sector

- European bodies: JRC, ESA
- Universities (Academia) – Key universities in Europe?
- Research Institutes and Laboratories: Geo8, Individual National research organisations
- European GeoSurveys and National surveys:
- Infrastructures, European (and international) Research Programmes and Platforms: ESFRI Infrastructures: EPOS, ECCSEL, TopoEurope, OneGeology, GEM, GEO, GMES, EMSO, IODP (ECORD), ICDP, the Raw Materials KIC
- Industry, Oil & Gas, Raw materials: Proxies: ETPSMR, WssTP
- Professional Bodies (Earth Scientists): European Geoscience Associations: EAGE:European Association of Geoscientists and Engineers (Division leads?), EGU:European Geosciences Union (Division representatives?)
- Geological/geophysical and related Societies,
- European Federation of Geologists (EFG)

Stakeholders that should benefit from this board are:

- The national agencies, funders of ES research in Europe: ERC, EC DG RTD;
- The national and European governments representing the people of Europe;
- Earth sciences teaching institutions at all levels;
- European and international industry; specifically: the raw materials and resources, insurance and environmental sectors..