Global Research Initiatives in Geosciences and Something Else

Alberto C. Riccardi, President IUGS
IYPE Legacy

– **World Geosciences Forum**: all geosciences organizations to talk and endorse all major Geosciences decisions.

**Science-oriented initiative, aiming:**

1) to elicit interest in our science from schoolchildren, the general public and decision makers worldwide

2) to define a limited number of world-class scientific projects with clear project, business and funding plans.
World Class Science Projects

**Constrains:** need to address research issues of direct relevance to society, e.g.:

- relationship to **environment** (climate, urban planning, etc.)
- **strategic resources** (water, oil, etc.).
Other issues to be considered

Differences

in development

in education and capacity building
Work on different Visions

**Long term**: projects for a homogeneous (politically, socially, and economically) World.

**Short term**: projects adapted to different circumstances (collaborative strategy).
Needed

Interdisciplinary approaches
International cooperation
Evidence-based decision-making (national and international)
Sharing of scientific knowledge

i.e. "something else"
Basic Question

In which way would it be possible to coordinate the efforts of the World Geoscience Community to promote any possible World-class science project?
Available Tools

1) GeoUnions (ICSU)

2) Other international geological organizations linked to the GeoUnions
Available Tools: GeoUnions

- Intl. Astronomical Union (IAU)
- Intl. Geographical Union (IGU)
- Intl. U. for Quaternary Research (INQUA)
- Intl. Soc. for Photogrammetry and Remote Sensing (ISPRS)
- Intl. U. of Geodesy and Geophysics (IUGG)
- Intl. U. of Geological Sciences (IUGS)
- Intl. U. of Soil Sciences (IUSS)
- Intl. U. of Radio Science (IURS)
Available Tools: GeoUnions

Questions:

1) What is the current situation?

2) Is this enough for what the Geosciences need globally?
Available Tools:
Other geological organizations linked to the GeoUnions

Situation:

with regard to the need that they should interact among them and with National and Regional geological communities and International Organizations such as ICSU, UNESCO, in pursuing global priorities.
Available Tools:
Other geological organizations

Differences in scope and size

Activities often overlap

Communication among them and with other international bodies is not usually the best.
Available Tools: international organizations

Problems of interaction
Duplication of efforts
Officers of the governing bodies change periodically, work ad-honorem, and come from different institutions and backgrounds
Absence of permanent executive staff

Result: difficulties in long term planning and effective management.
Available Tools: other organizations (e.g. AAPG, AGI, AGU, GSA, GSL)

Permanent executive management
International projection

In origin and top leadership not really international.
Available Tools: organizations

- **Summary:** many internationally established organizations, with different scopes and structures, some of which supplement each other, whilst some others duplicate activities, but in general without any long term coordinated planning.
Available Tools: organizations

Question:
What to do to put all these organizations to work effectively in any world-class scientific project?

Main goal:
To reach a better coordination and to work towards greater efficiency and relevance of activities, reducing existing duplications of functions and efforts.
Possible Solutions

Merge
– e.g. Comité National Français de Géologie, Union Française des Géologues, Société Géologique de France.

Improve coordination and structure

IGC and IUGG Congress Coordination: under study.

Change Statutes

Strategic Plan (IUGS, GeoUnions)
Coordination for what?

As already stated what are needed are not only global research initiatives but to build the common ground on which they should be developed.

Priority items to be considered are: geoeducation and capacity building and transference and sharing of scientific knowledge (geoinformation).
Existing Initiatives on Priority Issues

- **One Geology**: integration of data in standard format within a web portal. Linked to National and Regional organizations of Geological Surveys.

- **UNESCO’s Earth Sciences Education Initiative on Africa**: to promote research projects, exchange of scientists and development of centres of Excellence (IUGS, GSAf, CGMW, CIFEG, AAWG, MCAf).

- **Global Geoscience Workforce**: comparability of data and information on jobs, education, fields, and intl. mobility of geoscientists; global baseline knowledge of quantity and diversity of geosc. workforce; capacity-building strategies for durable global competency in Earth Sci. (AGI, IUGS, UNESCO)
Conclusion

1) Agreement on Global Research Initiatives in Geosciences (GRIG).

2) Improvement in coordination among international geoscientific organizations (structures, statutes, joint working groups)

3) Coordination mainly focused in geoeducation and capacity building and transference and sharing of scientific knowledge (geoinformation), with special reference to GRIG.