25 March 2009

17th Meeting of the ICSU Committee on Scientific Planning and Review (CSPR)

5-7 February, 2009

5 rue Auguste Vacquerie
75116 Paris, France

Decisions

Present: R. Balstad, C. Cesarsky, D. Chen (ex officio), H. Gupta, M. Hoshi, C. Leaver, Y.T. Lee (ex officio), K. Mokhele (Chair), L. Mytelka, K. Raivio (ex officio), R. Ramasamy, P. Ritchie, M. Tchuente (ex officio), H. Vessuri, A. Whyte

Secretariat: P. Cutler, L. Goldfarb, M. Mokrane, H. Moore (item 3), P. Ocampo-Thomason, C. Smith

By Invitation: J. Lawton (item 16), D. J. Baker (item 16, by telephone)

Apologies: B. Abegaz, M. Clegg, H. J. Schellnhuber

1. Opening of the Meeting

The meeting was opened by the Chair, who welcomed the new ex officio members of the committee (President-elect Y.T. Lee, Secretary General M. Tchuente, Vice President for Scientific Planning and Review K. Raivio, and Executive Director D. Chen).

2. Adoption of the Agenda

This 17th meeting of CSPR* was initially targeted as the first opportunity for an annual joint session with the ICSU Officers. It was subsequently realized that it would be more efficient to initiate such a dialogue after the new CSPR begins its term in July 2009. Consequently, the CSPR decision at its 15th meeting to hold a structured discussion on the relationship between the CSPR and the EB at its 17th meeting was to be implemented at a later meeting. CSPR’s February 2010 meeting was proposed as the next opportunity for such a discussion.

**Decision**

To adopt the agenda.

*Annex 1 contains a list of acronyms used in this document*
3. Decisions of the 29th General Assembly  
(not treated elsewhere)

The draft Decisions from the 29th General Assembly (GA) were circulated to ICSU Members in December. Annex 4 of these Decisions contains the three GA Resolutions.

On Resolution 1, which focuses on science in Mozambique, potential initial actions included writing a letter to Members and the Regional Office for Africa reminding them of the Resolution and asking them to inform the Secretariat of relevant ongoing or planned activities. K. Mokhele informed members that he planned to visit Maputo in March 2009 to investigate how best to work with key people in that country to assist with implementing this Resolution.

On Resolution 2, which was concerned with data management, availability, and preservation, the ad hoc Strategic Coordinating Committee on Information and Data (SCCID—see item 7) and CODATA were identified as the obvious actors within the ICSU family to respond.

On Resolution 3, which focuses on internet capabilities of scientific, technical, and educational institutions in Africa and around the world, the International Network for the Availability of Scientific Publications (INASP) was engaged in such matters and was therefore a logical leader within ICSU.

With respect to enhancing the involvement of social sciences in ICSU (item 14 of the GA agenda), K. Mokhele and T. Rosswall participated in the General Assembly of the International Social Sciences Council on 24-26 November 2008 in Cape Town. This was the first time ICSU has been invited and the ICSU presentations focused on introducing and summarizing ICSU roles and processes, with particular emphasis on the role and processes of the CSPR. These presentations were enthusiastically received. ISSC was organizing the World Social Sciences Forum in May 2009 and ICSU was to be represented at this meeting.

**Decisions**

To note decisions of the 29th General Assembly (GA); and, with respect to the GA Resolutions, to note that the Chair will visit Maputo in March 2009 as initial follow-up to Resolution 1, to ask the Secretariat to obtain a report from the Regional Office for Africa and GA organizers on the outcomes of side events prior to the GA and any planned follow-up; to recommend to the Executive Board that it ask SCCID in collaboration with CODATA to take the lead on responding to Resolution 2; and to recommend to the Executive Board that it bring Resolution 3 to the attention of INASP.

4. Decisions of the 16th CSPR Meeting, and 98th and 99th Executive Board Meeting  
(not treated elsewhere)

The draft decisions of the 16th CSPR meeting were circulated and a few corrections incorporated. The agreed decisions were posted on the ICSU website.

The old Executive Board met on 19 October 2008 prior to the 29th GA (22 to 24 October). The new Executive Board met on 25 October. Meeting reports for these meetings became available after the 16th CSPR meeting—also on 25 October.

There was one matter arising from these reports that was not treated elsewhere—that of membership of the Scientific Committee for the new ICSU Programme on Integrated Research on
Disaster Risk (IRDR). Following the decision of the 29th GA to establish the IRDR programme and recognize it as an Interdisciplinary Body, the ICSU Executive Board at its 99th meeting approved the names of 14 internationally regarded specialists from various disciplines of the Natural and Social Sciences to serve on its Scientific Committee. (CSPR had been invited to comment on the names proposed when it was consulted electronically by the Executive Director on 10 October 2008.) In addition, the Executive Board asked the Secretariats of ICSU and ISSC—the other sponsor of IRDR—to seek supplementary proposals to fill certain disciplinary gaps and, at the same time, improve the geographical balance of membership. The ISSC General Assembly in November 2008 concurred with these decisions. Since that time, one of the selected members had declined, and also needed to be replaced. H. Moore updated CSPR on progress towards filling these final gaps on the Scientific Committee and noted that an e-decision by CSPR will be needed ahead of the 100th EB meeting in April. The UN International Strategy for Disaster Reduction would probably become a cosponsor of IRDR. It was expected that three or four National Members would submit bids to host the IRDR International Programme Office, and the latter’s location would be decided upon in the coming weeks.

Decisions
To note that the decisions of the 16th meeting of CSPR have been posted on the ICSU website; to note decisions of the Executive Board at its 98th meeting; to note decisions of the Executive Board at its 99th meeting; and to note progress in the appointment of the IRDR Scientific Committee, it being understood that the CSPR will be consulted electronically prior to the 100th Executive Board meeting.

5. Update on Implementation of the First ICSU Strategic Plan 2006-2011

The Executive Director briefed CSPR on the continued implementation of the ICSU Strategic Plan 2006-2011. The discussion was underpinned by the ICSU planning matrix, which continues to serve as a graphic reminder of the achievements of ICSU over the last three years and of the critical work of CSPR.

The discussion focused on ICSU’s continued engagement with social sciences in the next triennium and in particular on creative and innovative mechanisms for this engagement because of ICSU’s self-interest in tighter links with social sciences. Topics included the importance of having realistic expectations of partners and a diversity of partner roles, the role of the international scientific agenda to bridge to social science expertise, the importance of continued social science expertise on CSPR itself, and the ongoing role of CSPR as a strategic “think tank.”

Decision
To note report on progress in implementation of the ICSU Strategic Plan 2006-2011.

6. Procedure for Appointment of Committees

At the Unions meeting in Rome in April 2007, a number of concerns were expressed about the appointment of various ICSU committees. These concerns were reported to the 15th meeting of CSPR, which decided to fully consider the procedure for the appointment of Review Panels at its subsequent meeting. In the event, this was not possible at the 16th meeting because of time constraints. In the meantime, the Executive Board did discuss this issue in October 2007 and a number of changes had been introduced to make the selection procedure more transparent:

1. A Procedure note for the appointment of ICSU committees was made available on the ICSU website;
2. All newly selected ICSU committee members were now being asked to submit brief ‘bios’, which are published on the ICSU website;
3. The feedback on unsuccessful nominations was provided as soon as committee membership had been agreed and this feedback included a listing of the selected nominations.

There was a presentation and discussion in the Unions Forum at the 29th GA that included a quantitative analysis of successful and unsuccessful nominations from ICSU Members and Interdisciplinary Bodies from 2003 to 2008. This presentation, which showed that ~30% of Union nominations were successful, appeared to address the concerns and (mis-)perceptions of several Unions. CSPR agreed that there would be value in routinely collecting and reporting such data on a triennial basis for GAs and also for the intervening Unions meetings.

The current process for seeking nominations includes sending the Terms of Reference and a summary of the type of person needed. CSPR stressed the importance of this information in ensuring appropriate nominations. It was noted that the general considerations for committee composition were summarized in page 4 of the Procedure note on ICSU’s website, and these could be added to the request for nominations. In addition, nominators should provide a clearer sense of why they were nominating a particular person.

**Decision**

To agree that there is value in routinely collecting and reporting information on nominations; and to routinely include the content of page 4 of “Procedure for Nomination of ICSU Committees” in the guidance documentation when seeking nominations.

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7. **Data and Information Committees**

An *ad hoc* Strategic Committee on Information and Data (SCID) was established by CSPR in September 2006 to advise ICSU on a coordinated global approach to scientific data and information and to guide the reform of two ICSU Interdisciplinary Bodies: the ICSU World Data Centres (WDCs) and the Federation of Astronomical and Geophysical data analysis Services (FAGS). SCID developed key recommendations in a report published by ICSU in June 2008.

SCID recommended the establishment of an *ad hoc* Strategic Coordinating Committee for Information and Data (SCCID) to provide ICSU with broad expertise, advice, and overall strategic direction in the area of Scientific Data and Information.

The committee also recommended the establishment of the World Data System (WDS) as a new ICSU Interdisciplinary Body, overseen by a dedicated Scientific Committee (WDS-SC). It was foreseen that WDS would incorporate much of the WDC and FAGS as well as other ‘state of the art’ data centres and services.

The 29th GA decided to establish both SCCID and the ICSU World Data System. A call for nominations went out in November 2008 to the ICSU membership, including the Interdisciplinary Bodies and ICSU Regional Offices.

CSPR discussed the draft Terms of Reference for SCCID and the WDS-SC. With regard to SCCID, it was suggested that there be more explicit reference to data access in the ToR. With a view to the longer-term, it was noted that SCCID was expected to make recommendations to the 30th GA as to how a strategic coordination function could be most effectively maintained in the future. CSPR also discussed the nominations for membership of these two committees. The discussion on the SCCID nominations focused on geographic and disciplinary balance and identified gaps for Latin America and Life Sciences.
Decisions
To recommend to the Executive Board the Terms of Reference for the ad hoc Strategic Coordination Committee for Information and Data;
to recommend to the Executive Board 12 potential members from the current nominations for the ad hoc Strategic Coordinating Committee, noting that some additional nominations and balancing would be required;
to recommend to the Executive Board the Terms of Reference for the World Data System Scientific Committee; and
to recommend to the Executive Board the membership of the World Data System Scientific Committee.

8. Ecosystems Change and Human Well-being

The decision to establish a major new interdisciplinary programme on Ecosystem Change and Human Well-being was taken at the 29th GA. In consultation with the co-sponsors UNESCO and UNU, Stephen (Steve) Carpenter has been proposed to be appointed as Chair of the Scientific Committee. ICSU, UNESCO, and UNU also proposed that the new programme should be known by the acronym HEW (Humans, Ecosystems and Well-being). A call for nominations for membership of the Scientific Committee was issued by the ICSU Secretariat in July 2008. A proposed list of names for the Scientific Committee and draft Terms of Reference had been agreed upon with the proposed Chair, UNESCO, and UNU, and was presented for consideration by CSPR.

There was some concern about the structure of the draft Terms of Reference, which emphasized specific tasks rather than the role of the Scientific Committee.

CSPR agreed to recommend to the EB that Stephen Carpenter be appointed as Chair, but it was concerned as to the overall disciplinary and geographic balance of the proposed list of members. This could not be addressed with the current nominations from Members. More candidates with expertise in Latin America and Asia regions and more women were required.

Decisions
To request that the Secretariat amend the Terms of Reference before they are presented to the Executive Board;
to recommend to the Executive Board that Stephen Carpenter be appointed as Chair of the Programme; and
to request that the Secretariat continue the consultation process to improve the balance of the proposed committee for consideration by the EB in April.


Concern about the disappointing progress of ISPRE to date was expressed at the 29th General Assembly in Maputo, which made the following decision: to request the Executive Board to consider the future of ISPRE and take necessary actions in the context of ICSU’s overall strategic role in the area of energy.

The problems with ISPRE were reported to the 15th meeting of CSPR in May, 2008. The Panel was established in January 2007, has held three meetings, and is struggling to finalise its first assessment report on biomass, wind, and photovoltaics. This report was supposed to be ready in time for the major Washington International Renewable Energy Conference (WIREC) that took place in March 2008. This important milestone was not reached. At the time of the CSPR meeting, the report had still not been completed, although a plan had now been agreed that hopefully would bring the report to completion by April 2009.
The current chair of ISPRE is J. Luther, formerly Director of the Fraunhofer Institute for Solar Energy Systems in Freiburg. The secretariat support for the Panel (~0.5 days per week) continued to be located at this Institute. The initial financial support came from the German Government. Professor Luther has now moved to Singapore and, whilst he had recently put some effort into finalising the report, it was clear that he was no longer committed to ISPRE.

Following the 29th GA, views have been solicited from individual ISPRE members and co-sponsors—the Renewable Energy Policy Network (REN21), and the International Council of Academies of Engineering and Technological Sciences (CAETS). They were invited to comment both on the functioning of ISPRE and its potential future remit. The individual responses were available here for consideration by CSPR.

The GA decision requested that the future of ISPRE be considered in the broader strategic context of ICSU’s role in relation to energy. One of the major initial aims of ISPRE was to advocate for more public investment in basic research on renewable energies and the recent discussions with REN21 indicated that this is a continuing need despite the substantive recent overall increase in global funding for renewable energies. The responses from ISPRE Panel members indicated that this need for advocacy was perhaps more strongly apparent in developing countries. There were also a number of major recent developments that needed to be considered in relation to ISPRE. These included the launching of a new International Renewable Energy Agency (IRENA) on 26 January, with a proposed role parallel to that of IAEA. The IPCC had also recently commissioned a special report on renewable energy. In addition, ICSU’s own Regional Offices were all developing science plans for sustainable energy in response to specific regional needs.

CSPR discussed the future of ISPRE and noted that there were important lessons to be learned from the failure of the ISPRE model, just as there are important lessons to be learnt from successful initiatives such as the International Polar Year. In retrospect, there were weaknesses in the conception, structure, and implementation of ISPRE. Looking to the future, it would be important to consider the promising Renewable Energy activities of the ICSU Regional Offices in defining any potential additional actions at the global level.

Decision
To advise the Executive Board to terminate ISPRE; and
to ask the Secretariat to capture the lessons learnt from the failure of ISPRE that would be used as a point of reference when new initiatives are contemplated in the future.

10. Grants Programme 2009

Eight proposals were under consideration. Each proposal had been reviewed in depth by subgroups of CSPR and the Committee discussed their assessments. Five of the eight proposals were approved for funding (see Annex 2).

ICSU received a number of invalid applications for the 2009 programme, as it has in the past. It also received few applications in general and the average quality of proposals was not high. 11 Unions were involved in applications, with six Unions on one application. In addition, only two National Members were Supporting Applicants. CSPR discussed measures that could, within the constraints of the current Programme, increase participation by ICSU Members, encourage crisper connections of proposed projects to the aims of the programme, and reduce the number of invalid applications. Targeted guidance on the content of final reports would help CSPR better assess the overall impact of the funded projects.
The Chair expressed concern at the harm that would result to the programme from accepting a reduced quality of applications on the basis of their linkage to initiatives of ICSU Regional Offices or in developing countries in general. He implored the CSPR to ensure that same high quality standards are applied to all proposals, whether or not they focus on developing countries.

**Decisions**

To agree to fund the proposals led by CODATA, IUBMB, and IUTOX; to agree to fund, with conditions, the proposals led by IUBS and IUPHAR; to decline funding the proposals led by GOOS, IUGS, and SCOPE; and to instruct the Secretariat to take steps to improve programme announcements, final reports, and participation by ICSU Members.

11. **Reviews of ICSU Regional Offices**

In the agreements for the establishment of the Regional Offices it was stipulated that they would be reviewed at a specified point. The ICSU Regional Office for Africa was the first Regional Office in line to be reviewed. The process and Terms of Reference for this review would be used as template for the reviews of the other two offices.

The draft Terms of Reference for this first review had been developed and agreed upon in conjunction with the National Research Foundation (NRF) in South Africa. The draft ToRs were sent to members of the Regional Committee for Africa and their comments were tabled at the meeting. It was proposed that the review process would comprise two meetings: an initial meeting in Paris in April/May 2009 organized by the ICSU Secretariat, and a site visit in Pretoria organized by the Evaluation Centre of the NRF. The information gathering component of the review would be conducted by the ICSU Secretariat.

According to the draft ToR, the Review Panel was to be jointly appointed by ICSU and the NRF and would comprise two international members nominated by ICSU and two members from the African region nominated by the NRF (one of whom will be from South Africa). CSPR agreed that the Review Panel should include an extra member, who should chair the Panel and should ideally come from the Asia or Latin America region. It was suggested that all Regional Office review panels should include a member from one of the other regions. CSPR considered the nominations for the Review Panel and agreed three members, with two more to be confirmed jointly with NRF.

The Committee discussed at length the draft ToR and the comments received from the Regional Committee for Africa. A revised version of the ToR was approved (Annex 3). It was emphasized that the model of Regional Offices was a new experiment for ICSU, and the reviews should be constructive and forward-looking.

The final timetable for the Asia and Pacific and Latin America and Caribbean Offices was also discussed and was adjusted to make sure that the reviews serve as timely inputs to the Strategic Review of Science and Technology in Developing Countries (see item 12).

**Decisions**

To approve the Terms of Reference for the review of the ICSU Regional Office for Africa; to recommend that a fifth member of the Review Panel be jointly appointed by ICSU and NRF as chair; to invite B. Heap, L. Lapointe, P. Steyn to serve on the Panel and request that the Secretariat work with NRF to identify two additional panel members; and to approve the final timetable for the reviews of all the ICSU Regional Offices.
12. Strategic Review of ICSU’s Role in Promoting Science and Technology in Developing Countries

The 29th GA decided to request that CSPR carry out a forward-looking strategic review of ICSU’s role in relation to Science and Technology (S&T) in developing countries. The GA also agreed that the Policy Committee on Developing Countries (PCDC) be put in abeyance pending the outcome of this review.

It was envisaged that the Strategic Review should be both reflective and forward-looking and should feed into the ICSU Second Strategic Plan (2012-2017). It should look at ICSU’s role in relation to S&T in developing countries, including the role of Regional Offices in a broader strategic context and the need for other policy activities/structures. The reviews of the ICSU Regional Offices would provide an important foundation for this Strategic Review and might also reveal strategic issues that need exploring further.

CSPR considered the draft review process and timetable. In addition, the Committee discussed the draft ToRs (Annex 4), which it agreed should be divided in three parts: (1) ICSU’s current structures and activities and how these have worked, (2) the broader picture of what is happening in the global context, and (3) forward-looking recommendations.

Decisions
To approve the Terms of Reference for the review;
approving the review process and timetable; and
requesting the Secretariat seek nominations for members of the Review Panel from the ICSU constituency.

13. Science Education

In preparation for the ICSU Strategic Plan, 2006-2011, a Priority Area Assessment on Capacity Building in Science was completed in 2006. When this was considered by CSPR and the Executive Board, it was felt that a potential future role for ICSU in relation to scientific education needed further reflection. It was agreed that an ad hoc group should be established to define ICSU’s future role in relation to science education (ICSU Strategic Plan, pp.36-37). It was noted that this review is one of the outstanding actions to be carried out during the second half of the six-year period of the current strategic plan and that the review should inform the second ICSU strategy for 2012-2017.

ICSU had historically supported dedicated activities in science education, the most recent of these being a Committee on Capacity Building in Science (CCBS) that focused on primary school education and was disbanded in 2006. Also, many of the ICSU Members (both National and Unions), as well as many international groups, have a strong interest in this area and have embarked upon individual efforts in science education. Some of the ICSU Interdisciplinary Bodies, for example the International Polar Year (IPY), have developed active science education networks. The Regional Office for Latin America and the Caribbean has initiated a specific planning exercise on Mathematics education. A key issue for the review would be to identify whether there was any added value that ICSU, at the global level, could bring to these various actions.

CSPR considered the Terms of Reference (Annex 5), process for the review, and types of expertise required. It was emphasized that this was a scoping study to explore ICSU’s potential role, if any. The initial focus should be on what was already happening within the ICSU constituency. The added value of any potential new ICSU activity would need to be carefully assessed.
Decision
To agree on draft Terms of Reference and process for the review; and to request the Secretariat to seek nominations for members of the Review Panel from the ICSU constituency.

14. Preparing for the Second ICSU Strategic Plan

Following a strategic brainstorming session at the 15th CSPR meeting in April 2008, a briefing paper was prepared and presented to the 29th GA. At the 29th GA, Members were invited to submit their initial views on strategic priorities. This was followed up in November with a specific invitation to all Members, Interdisciplinary Bodies, and Associates to provide brief input on their future priorities for ICSU, with specific reference to the GA presentation. The responses were provided for consideration by CSPR and are recognized as an important initial step in the planning process.

Several of the other agenda items for this meeting addressed activities that were expected to directly inform the next Strategic Plan, including: Item 9—ISPRE; item 12—S&T in Developing Countries; item 13—Science Education; item 16—Global Environmental Change programmes; and item 18.1—IPY lessons learnt. Together with the implementation of other actions agreed at the 29th GA, these would require a major commitment of ICSU resources over the next three years, leaving little room for other additional activities. However, one potential strategic planning activity that had been discussed previously by CSPR is a global foresight exercise. A two-stage foresight exercise was carried out in preparation for the first Strategic Plan, which included a commitment to conduct a further foresight exercise:

As part of its ongoing strategic planning, ICSU will carry out a further Foresight Analysis in preparation for the development of the 2nd six-year strategic plan, including analysis of possible regional differences in priorities as a means of ensuring that the international agenda takes account of regional needs (ICSU Strategic Plan, p37)

CSPR discussed such an exercise, the planning for which would have to start immediately so that it can be completed in 2010. In addition, CSPR discussed the main messages emerging from the initial input from ICSU members. These messages included the need to

- develop a clear understanding and expectations of ICSU as an organization
- examine structure-function relationships within ICSU
- take a holistic view of how the broad system of science will evolve and ICSU’s role therein
- engage and stimulate members, including Associates
- consider ICSU’s role as a spokesperson for all of science
- consider how ICSU explores new horizons
- consider how ICSU engages in capacity building
- adopt a strategic approach to fundraising.

Decision
To convey the main messages emerging from the initial feedback from ICSU Members to the new CSPR; and to agree that a foresight exercise should be a component of the next Strategic Plan.
15. **Urban Health**

As reported to the General Assembly, the planning was now underway for a new interdisciplinary programme – A Systems Analysis Approach to Health and Wellbeing in the Changing Urban Environment. This was a joint activity overseen by CSPR and involving several of ICSU’s Unions and the International Institute for Applied Systems Analysis (IIASA).

The Planning Group held its second full meeting in December in Paris and agreed on a skeleton outline for its science plan. One novel feature is that this plan was likely to include a number of illustrative/pilot examples, some of which might be tested experimentally before the report was finalised. P. Ritchie, who was the CSPR liaison on the Planning Group, reported on progress to date.

Committee members were reminded of the process that had led to the establishment of this Planning Group. A preliminary conceptual framework had been developed by an earlier Scoping Group and this had then been discussed at a workshop in January 2008. Some concern was expressed that more substantive progress was not now being reported. At the same time, it was noted that this was a complex, cross-disciplinary area and developing a feasible science programme would inevitably take time.

P. Ritchie would be stepping down from CSPR at the end of June as he had completed the maximum six-year term. In order to ensure continuity in the Urban Health Planning Group, it was proposed that he continue as the CSPR liaison on this Group, taking note of the fact that Dov Jaron who is also a member of the Planning Group had since been elected onto the EB.

**Decision**

To note progress in planning the Urban Health programme;

to approve the continuation of P. Ritchie in the role of CSPR liaison to this Planning Group after his term on CSPR expires; and

to request a full report on this item at the next CSPR meeting.

16. **Global Environmental Change (GEC) Programmes**

16.1 **Introduction**

With the completion of the IGBP and WCRP reports, ICSU had now reviewed three of the four GEC programmes and the Earth System Science Partnership (ESSP). DIVERSITAS would be reviewed in 2010-2011, in accordance with ICSU’s Strategic Plan 2006-2011. There were some common messages emerging from the reviews to date (e.g., the call from within and outside the GEC community for a single GEC programme in the near future) as well differences (e.g., the future role for the ESSP).

16.2 **Review of the International Geosphere Biosphere Programme (IGBP)**

The IGBP Panel, chaired by J. Lawton, presented its final report to CSPR. The CSPR liaison on the review was A. Whyte. This review was conducted in parallel with that of WCRP from December 2007 to January 2009. The process comprised three meetings, including a joint final meeting in September 2008, as well as a visit by the Chair to the IGBP Secretariat in Stockholm. In addition to broad consultations during the process, the Panel received a number of helpful comments on the draft report from members of ICSU and its co-sponsor—the International Group of Funding Agencies for Global Change Research (IGFA). These comments and a summary of the Panel’s response were provided to CSPR in addition to the final report.
CSPR had a very positive reaction to the quality and value of the report. The Committee’s discussion emphasized the need to push the timetable for evolution of the programme and that the next round of science will need to be developed with the end goal of a unified approach (recognizing that some of the Review Panel’s conclusions about the future differ from those of the ESSP Review Panel). It was emphasised that the funding agencies will need to be on board with any future evolution and must be involved in the discussion.

16.3 Review of the World Climate Research Programme (WCRP)

The WCRP Panel, chaired by D.J. Baker, presented its final report to CSPR. The CSPR liaison on the review was C. Cesarsky. As with the IGBP review, IGFA joined ICSU as a sponsor. Two additional sponsors of the programme—the World Meteorological Organization (WMO) and the Intergovernmental Oceanographic Commission (IOC) of UNESCO—joined the review. The methodology and process of this review was similar to that for IGBP, including a visit by the Chair to the WCRP Secretariat in Geneva. To ensure a strong connection between the two reviews, the Panels shared a common member: S. Gadgil, the Chairs consulted each other regularly, and the Panels met jointly for their final meeting. Comments on the draft report were sought from members of all four sponsoring organizations in October. These comments and the Panel’s summary of its response accompanied the final report to CSPR.

CSPR was impressed with the quality of the WCRP report. As with the IGBP report, CSPR’s discussion focused on next steps for ICSU and the roles of the GEC programmes and ESSP. The Committee stressed the need to start by identifying the driving societal questions, as well as the needs for outreach and fundraising on behalf of GEC research.

16.4 Recap of the Review of the Earth System Science Partnership (ESSP)

The ESSP Review, which was chaired by L. Fresco, was published in its formatted form in June 2008. The decision of CSPR in April 2008 was “to recommend to the ICSU Executive Board that the General Assembly invites ESSP to become an Interdisciplinary Body subsequent to an indication from the ESSP that the Partnership is willing make necessary changes.” This was subsequently withdrawn after consideration of the emerging recommendations of the IGBP Review Panel.

The ESSP Review Panel found that Amsterdam Declaration, which launched the ESSP, is more valid today than when it was issued in 2001. The review stated that there was a clear need for an internationally coordinated and holistic approach to Earth system science that integrates natural and social sciences from regional to the global scale, and that ESSP in principle should assume this role. This finding was in contrast to the IGBP review conclusion that “the future role for the Earth System Science Partnership (ESSP), and even the need for it, will require further detailed and critical examination in the context of a holistic examination of the long-term strategy for GEC research.”

CSPR discussed ESSP’s evolution, its role in promoting inter-disciplinarity, and the complexity of the GEC landscape. The notion that the science community needs to come together around research questions in service to society was reiterated (including research questions that inform action on energy and socioeconomic issues).

16.5 CSPR’s Consultation on a Future GEC Research Strategy

At its 16th meeting immediately after the 29th GA, CSPR had started planning a process to explore options and implementation steps for a GEC research strategy. As decided by the 29th GA, CSPR, in cooperation with the other GEC co-sponsors, was organizing a consultative “visioning” process.
centred on a visioning meeting. The process was designed to 1) explore options for a GEC research strategy and 2) propose a way forward. Advised by a small task team comprised of K. Mokhele, K. Raivio, J. Schellnhuber, and A. Whyte, the Secretariat had developed several draft documents for the process.

On 9 January, the task team had conducted a teleconference and it was agreed that for the visioning meeting ICSU should invite a significant number of young scientists (the suggestion was to contact ~10 leading research institutions and ask each one to nominate an early career scientist), schedule the meeting for September/October near Paris, and invite W. Reid to chair the meeting. More generally, the task team had agreed that while the intention was to carry out the consultation process in partnership with other GEC co-sponsors, the foremost goal was to provide ICSU with proposed steps to arrive at a new Earth System research strategy. The term ‘Earth System’ was considered by the task team to be more appropriate than ‘Global Environmental Change’ and it had been decided that ICSU should aim for a five-year time horizon to implement any new initiative. Finally, the need for diplomatic skills throughout the visioning process had been stressed.

CSPR’s discussion underscored the magnitude of this visioning process, the importance of maintaining broad buy in, and that time was of the essence now that the IGBP and WCRP reviews were finished. The discussion over use of the terms Global Environmental Change and Earth System was also revisited, and cautions were expressed over use of the latter term. The visioning process would need three steps:

1) start with the science questions to be addressed—with a focus on urgent societal needs,
2) consider the nature of the organizational structures needed to address these questions, and finally
3) consider how to transition to the needed structures.

CSPR also discussed funding options for such a process and the types of participants needed.

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<th>Decisions</th>
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<tr>
<td>To accept the recommendations from both the IGBP and WCRP Panels—in particular the recommendations that the Programmes should develop programme-wide priorities and that ICSU, in collaboration with the other GEC sponsors, GEC programmes, ESSP, and IGFA, should explore the framework for joint research operation of the GEC programmes and a shared and ongoing strategic advisory mechanism;</td>
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<tr>
<td>to endorse the ICSU-IGFA review of IGBP and approve its publication;</td>
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<tr>
<td>to thank the IGBP Review Panel for its work;</td>
</tr>
<tr>
<td>to endorse the ICSU-WMO-IOC-IGFA review of WCRP and approve its publication;</td>
</tr>
<tr>
<td>to thank the WCRP Review Panel for its work;</td>
</tr>
<tr>
<td>to note the ongoing planning for the visioning process as attenuated at this meeting; and</td>
</tr>
<tr>
<td>to extend the mandate and membership of the task team until the next CSPR meeting and to invite W. Reid to be a member of the task team.</td>
</tr>
</tbody>
</table>

17. Self-evaluation of the CSPR

The terms of the current CSPR members expire at the end of June 2009 and this was the final meeting of the current CSPR. It was therefore useful to discuss how the Strategic Plan had been implemented over the course of CSPR’s term and how it had influenced CSPR’s work plan. This self evaluation discussion was done with a view to assisting the next CSPR. Members raised a number of general observations on their experiences over the last three or more years. These included:
• the quality, breadth, commitment, and cohesiveness of the committee membership
• the ability to make decisions as an important motivator for engagement
• the need for the orientation of new members
• the value of CSPR members attending and meeting at the GA
• the practical constraints (of time and expertise) on what CSPR can achieve
• the need for CSPR to ensure that science arguments are sufficiently asserted in deliberations that also include organizational dimensions
• the interaction with the EB as a work in progress
• how to work effectively in the three and six-year cycles of ICSU, especially on activities that need rapid action
• structure of meetings and the general approach to meetings
• information needs (e.g., on nominations) and the potential need for updates between meetings
• preparation of meeting materials in general
• thematic areas to cover in the CSPR membership and in ICSU as a whole
• the high quality of Secretariat support and the value of additional funds for this role.

A self evaluation template was tabled, and members were invited to individually submit their assessment of CSPR as a whole after the meeting so that all contributions could be distilled by April and presented to the EB meeting by K. Raivio.

18. Any Other Business

18.1 International Polar Year (IPY)

The observance period of IPY was scheduled to end on 1 March 2009 and be marked with a celebration event in Geneva on 25 February. The first of two major IPY “results” conferences would be held in Oslo in June 2010. It was clear that the unique and critical functions served by the IPY International Programme Office (IPO) would be needed in the intervening time, and the signs were currently positive that the IPO will be extended until June 2010. The ICSU-WMO IPY Joint Committee (JC) provides scientific guidance to the IPO, and JC co-chairs had written to ICSU and WMO requesting that the terms are extended accordingly—from the current date of December 2009 to June 2010.

At its 97th meeting in May 2008, the EB decided to evaluate the impacts of and lessons learnt from IPY during the implementation of ICSU’s second strategic plan—in other words after the next General Assembly in October 2011. Upon further reflection, this timeframe, while realistic for the “impacts” component of the evaluation, was probably too long for the “lessons learnt” component, as most of the major lessons in initiating and implementing IPY had already been experienced. The June 2010 Conference (and likely final meeting of the JC, if its term is extended) would offer an earlier, logical opportunity to gather perspectives for this component. The potential role of WMO in this evaluation would need to be explored.

Decisions
To recommend to the Executive Board that the terms of the IPY Joint Committee be extended six months to June 2010; and to recommend to the Executive Board that the evaluation of lessons learnt and impacts from IPY be conducted in two phases, with the first phase on lessons learnt to begin during 2010.
In April 2008, CSPR approved the following decision regarding the Scientific Committee of GCOS: “To recommend that the Executive Board renew I. Wainer’s term for the period 1 January 2009 - 31 December 2010, as well as A. Afouda, Ed. Hill, and D. Kumar’s terms for the period 1 January 2008 - 31 December 2010; to recommend that the Executive Board appoint A. Belward, B. Goodison, M. Kadi, and T. Karl to the GCOS SC for the period 1 January 2008 - 31 December 2009; and to note that consultations with WMO, UNEP, and IOC-UNESCO are necessary.”

The discussions with WMO, UNEP, and IOC-UNESCO had led to a request for more time to arrive at an updated slate of candidates. In addition, GCOS was in the process of replacing its Director. It was hoped that, with the approval of the scientific committee membership and the appointment of a new Director in the coming months, the GCOS SC meeting would occur with a full committee and that the GCOS Secretariat would follow ICSU’s procedure to submit nominations by 1 September for appointments starting the following calendar year.

**Decisions**
To reaffirm and update (re: CSPR April 2008) CSPR’s recommendation that the Executive Board renew I. Wainer’s term for the period 1 January 2009 - 31 December 2010, as well as A. Afouda, Ed. Hill, and D. Kumar’s terms for the period 1 January 2008 - 31 December 2010; to recommend that the Executive Board appoint A. Belward, B. Goodison, M. Kadi, T. Karl, A. Cazenave, K. Onogi, and L. Song to the GCOS SC for the period 1 January 2009 - 31 December 2010; to note that agreement among WMO, UNEP, and IOC-UNESCO on these appointments is necessary; and to request that GCOS submit subsequent SC nominations to ICSU by 1 September for appointments starting the following calendar year.

Khotso Mokhele
Chair, CSPR

Deliang Chen
Executive Director
Annex 1: List of Acronyms

CCBS  Committee on Capacity Building in Science (ICSU committee disbanded in 2006)
CODATA Committee on Data (ICSU Interdisciplinary Body)
CSPR  Committee on Scientific Planning and Review (ICSU Policy Committee)
DIVERSITAS An international programme of diversity science (ICSU Interdisciplinary Body, cosponsored with IUBS, SCOPE, UNESCO)
EB  Executive Board of ICSU
ESSP  Earth System Science Partnership (a partnership of DIVERSITAS, IHDP, IGBP, WCRP)
FAGS  Federation of Astronomical and Geophysical data analysis Services (ICSU Interdisciplinary Body until 2008—replaced by WDS)
GA  General Assembly of ICSU
GCOS  Global Climate Observing System (Joint Initiative of ICSU, cosponsored by WMO, UNEP, IOC)
GEC  Global Environmental Change
GOOS  Global Ocean Observing System (ICSU Joint Initiative with UNESCO, WMO, UNEP)
HEW  Programme on Humans, Ecosystems, and Wellbeing (ICSU Interdisciplinary Body)
IASC  International Arctic Science Committee (ICSU Scientific Associate)
IB  Interdisciplinary Body (of ICSU)
ICSU  International Council for Science
IGBP  International Geosphere-Biosphere Programme (Interdisciplinary Body of ICSU)
IGFA  International Group of Funding Agencies for Global Change Research
IHDP  International Human Dimensions Programme on Global Environmental Change (Interdisciplinary Body of ICSU, cosponsored with ISSC, UNU)
IIASA  International Institute for Applied Systems Analysis
IMU  International Mathematical Union (ICSU member)
INASP  International Network for the Availability of Scientific Publications (ICSU Interdisciplinary Body)
IOC  Intergovernmental Oceanographic Commission (of UNESCO)
IPCC  Intergovernmental Panel on Climate Change
IPO  International Programme Office
IPY  International Polar Year (Joint Initiative cosponsored by ICSU and WMO)
IRDR  Integrated Research on Disaster Risk (ICSU Interdisciplinary Body)
IRENA  International Renewable Energy Agency
ISPRE  International Science Panel on Renewable Energies
ISSC  International Social Sciences Council
IUBMB  International Union of Biochemistry and Molecular Biology (ICSU member)
IUBS  International Union of Biological Sciences (ICSU member)
IUGG  International Union of Geodesy and Geophysics (ICSU member)
IUGS  International Union of Geological Sciences (ICSU member)
IUNS  International Union of Nutritional Sciences (ICSU member)
IUPAC  International Union of Pure and Applied Chemistry (ICSU member)
IUPHAR  International Union of Basic and Clinical Pharmacology (ICSU member)
IUPS  International Union of Psychological Sciences (ICSU member)
IUTOX  International Union of Toxicology (ICSU member)
JC  Joint Committee (for IPY)
NAS  National Academy of Sciences (USA)
NRF  National Research Foundation (South Africa)
PCDC  Policy Committee on Developing Countries (ICSU Policy Committee, currently in abeyance)
REN21  Renewable Energy Policy Network
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ROA</td>
<td>Regional Office for Africa</td>
</tr>
<tr>
<td>SC</td>
<td>Scientific Committee</td>
</tr>
<tr>
<td>SCAR</td>
<td>Scientific Committee on Antarctic Research (ICSU Interdisciplinary Body)</td>
</tr>
<tr>
<td>SCCID</td>
<td>Strategic Coordinating Committee on Information and Data (ad hoc ICSU committee)</td>
</tr>
<tr>
<td>SCOPE</td>
<td>Scientific Committee on Problems of the Environment (ICSU Interdisciplinary Body until maximum 2010)</td>
</tr>
<tr>
<td>ToR</td>
<td>Terms of Reference</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United National Educational Scientific and Cultural Organization</td>
</tr>
<tr>
<td>UNU</td>
<td>United Nations University</td>
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<tr>
<td>WCRP</td>
<td>World Climate Research Programme (Interdisciplinary Body of ICSU, cosponsored with WMO and IOC)</td>
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<tr>
<td>WDC</td>
<td>World Data Centres (ICSU Interdisciplinary Body until 2008, replaced by WDS)</td>
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<tr>
<td>WDS</td>
<td>ICSU World Data System (ICSU Interdisciplinary Body)</td>
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<tr>
<td>WDS-SC</td>
<td>World Data System Scientific Committee</td>
</tr>
<tr>
<td>WIREC</td>
<td>Washington International Renewable Energy Conference</td>
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<tr>
<td>WMO</td>
<td>World Meteorological Organization</td>
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</table>
### Annex 2: Final Grades for Applications to 2009 Grants Programme

<table>
<thead>
<tr>
<th>Lead Applicant / Supporting Applicant(s) (only eligible ones included)</th>
<th>Regional Offices</th>
<th>Amount Requested €</th>
<th>Title of Proposal</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>CODATA; IASC, IPY, IUGG, Netherlands, SCAR, WDS, WMO</td>
<td></td>
<td>30 000</td>
<td>The Polar Information Commons (PIC): Establishing the Framework for Long-term Stewardship of Polar Data and Information</td>
<td>A</td>
</tr>
<tr>
<td>GOOS; IUGG</td>
<td>ROA</td>
<td>30 000</td>
<td>Networking with Capacity Strengthening in Satellite Remote Sensing Applications for Integrated Management of Water Resources and Adaptation to Climate Change towards poverty alleviation strategies for Coastal Communities in Africa</td>
<td>C</td>
</tr>
<tr>
<td>IUBMB; IMU, IUNS, IUPAC, IUPHAR, IUUP</td>
<td>ROA</td>
<td>15 300</td>
<td>Scientific Bonds: International Mentoring</td>
<td>A</td>
</tr>
<tr>
<td>IUBS; NAS</td>
<td>ROA, ROLAC</td>
<td>30 000</td>
<td>Integrating Science and Traditional Knowledge on Natural and Human Induced Disasters brought on by Climate Change</td>
<td>B</td>
</tr>
<tr>
<td>IUGS</td>
<td>ROA</td>
<td>27 410</td>
<td>Use of Volcanic Products from the Cameroon Volcanic line area of the Noun River basin as rock fertilizers: a contribution to food security and sustainable agriculture</td>
<td>C</td>
</tr>
<tr>
<td>IUPHAR; IUOP, IUTOX</td>
<td>ROA</td>
<td>30 000</td>
<td>Building the African Infrastructure for Translational, and Alternative and Complementary Medicine: Integrative and Organ Systems Science</td>
<td>B</td>
</tr>
<tr>
<td>IUTOX; IUOPHAR</td>
<td>ROA</td>
<td>30 000</td>
<td>Building Capacity in Health Risk Assessment in African Countries</td>
<td>B</td>
</tr>
<tr>
<td>SCOPE; IGBP, IHDP, WCRP</td>
<td></td>
<td>30 000</td>
<td>A Synthesis and review of Global Environmental Change and Food Security Research - in close collaboration with GECAFS</td>
<td>C</td>
</tr>
</tbody>
</table>
Annex 3: Terms of Reference for the Mid-term Review of the ICSU Regional Office for Africa

Background

The mandate to create the ICSU Regional Offices was given by the ICSU 27th General Assembly (2002), following recommendations from the Committee on Science and Technology in Developing Countries (COSTED) Review Panel. The Review Panel proposed to replace COSTED with four Regional Offices in and for developing countries and a Policy Committee on Developing Countries (PCDC). The African Regional Office was inaugurated in 2005, Asia and Pacific in 2006, and Latin America and the Caribbean in 2007. The Regional Offices are created by formal agreement between ICSU and the host institution/host country government.

The ICSU Regional Office for Africa is hosted at the National Research Foundation (NRF), Pretoria, South Africa. The ICSU-NRF Agreement was signed for ten years starting 1 April 2005. According to this agreement a mid-term review should be conducted by ICSU and NRF as per the following declaration in Clause 4.2 of the Agreement: “at the end of a five (5) year period from the agreement Commencement Date, ICSU and NRF will review the sustainability and feasibility of the Regional Office and decide on its future existence”. To comply with the Agreement the ICSU Committee for Scientific Planning and Review (CSPR) and NRF will jointly set up a Review Panel to conduct the review.

The review process will comprise two meetings, one in Paris set up by ICSU Paris, and one site visit in Pretoria to be set up by the Evaluation Centre of the NRF.

Terms of Reference

A Review Panel is jointly appointed by ICSU and the NRF, to review the ICSU Regional Office for Africa and make recommendations for the future. The Panel will comprise two members nominated by ICSU, two members nominated by the NRF and a Chair which will be jointly nominated by ICSU and the NRF. The duties of the Review Panel will be to:

1. Review the performance of the Regional Office in implementing the following activities and services as envisaged in Clause 6.5 of the NRF-ICSU Agreement
   i. The Regional Office shall be responsible for the promotion of increased participation of African countries and scientific organisation in the Region, in ICSU programmes and activities and the strengthening of science and capacity building in African countries through collaboration among countries in the region as well as with other developing and developed countries.
   ii. Collect information on strategies developed and priority needs and scientific expertise within the Region and to share this information with ICSU and its associates;
   iii. Assist ICSU and its Union Members and Interdisciplinary Bodies in their strategic planning of activities in the Region, to ensure that their plans and activities are well linked to the science community in the Region, relevant networks and organisations and that it reflects regional priorities;
   iv. Develop and maintain links with national and regional scientific institutions, societies, academies and governments, including current Members, in order to strengthen ICSU collaboration with them;
   v. Facilitate and encourage, in collaboration with the Inter-Academy Panel for
International Affairs (IAP) and the Third World Academy (TWAS) the establishment of
ICSU National Members in countries of the Region where these do not yet exist;
vi. Facilitate the free flow of scientists and scientific knowledge across borders;
vii. Provide support and assistance with co-ordination of scientific networks in the Region
and initiate new networks, where this is identified as a regional priority;
viii. Assist through the establishment of a database of experts, the ICSU family in
identifying scientists for membership of committees and participation in activities
within the ICSU family;
ix. Upon request, act as focal point for regional programme activities of ICSU and its
members;
x. Ensure the efficient and effective transfer of information from ICSU and its family
members to the scientific community in the Region;
xii. Share information and develop collaborative partnerships with UNESCO Regional
Offices for Science as well as with other strategic ICSU partners such as TWAS, the
Third World Network of Scientific Organizations (TWNSO) and the Third World
Organisation for Women in Science (TWOWS).”

2. Review the effectiveness of the governance and operational structure of the Regional
Office
   i. How effective has the Regional Committee been in providing strategic guidance and
      setting realistic priorities?
   ii. Has the Regional Office implemented the decisions of the Regional Committee and
       provided the necessary support for efficient conduct of its meetings?
   iii. Has the Regional Office effectively managed its financial resources?
   iv. Are the existing budgeting processes effective?
   v. Has the Regional Office been able to attract additional funding for its activities?
   vi. Does the Regional Office have a sustainable funding strategy to implement its Science
       Plans and to develop future activities?
   vii. Are the existing reporting frameworks adequate to ensure effective and transparent
       governance?
   viii. Are there effective channels of communication between the Regional Office, the ICSU
       Secretariat, NRF and DST?

3. Review the communications and reach of the Regional Office and key stakeholders
   i. What are the channels of communication between the Regional Office and the ICSU
      family and how effective are they?
   ii. Has ROA effectively assisted ICSU and the ICSU family in planning and
       implementation of their activities in the region?
   iii. Are regional activities and ICSU global activities being developed in a coherent and
       coordinated manner?
   iv. Is the Regional Office effectively engaging (coordinating) with other science
       programmes and initiatives in Africa?
4. **Review the extent to which the strategic roles of the Regional Office, as envisaged by ICSU, are being accomplished. In the context of ICSU overall mission and vision these are:**

   i. Promote increased participation of developing country scientists, national and regional scientific organizations and networks in ICSU programmes and activities;

   ii. Assist ICSU in strengthening science and capacity building in developing countries through South-South and North-South collaboration;

   iii. Identify strategic priorities as input to the development (and implementation) of the ICSU Strategic Plan to ensure that the views of the scientific communities in the regions can be taken fully into account in the development of ICSU global priorities.

5. **Assess how effectively have regional activities been integrated into the overall ICSU strategy and consider what the future plans are in this regard**

6. **Recommend on the future of the ICSU Regional Office for Africa**

   i. This should include considerations of revisions to the current MoU and such other recommendations as the Review Panel may see fit to make.

**Review Panel Composition**

A Review Panel of five members which includes three international members, one from the region and one from South Africa. One member should be familiar with ICSU structures and its functioning and ideally somebody familiar with the ICSU regionalization process. The Chair should be one of the international members.

**Review Process**

The review process must be concluded by 1 October 2009 in order for NRF and ICSU to consider its recommendations and for NRF to consider the possibility for supporting the Regional Office for a second five-year plan in a timely manner.

1. **Information gathering**

   Immediately after the CSPR meeting (Feb, 2009) the ICSU Secretariat will start gathering information for the Review Panel. This information gathering will have four components:

   - Written report by the Regional Director on the performance of the Office and future plans based on a provided template.
   - Written report by the Chair of the Regional Committee based on the same template.
   - Electronic consultation: The ICSU Secretariat will consult (via an online questionnaire) the (i) ICSU family about ROA interactions, (ii) key ICSU partners in the region requesting their review of the value added by the ICSU Regional Office, and (iii) ROA collaboration with other organisations.
   - Published documents, such as the four Science Plans, the Diaspora Project report, etc.

   The above information will be submitted to the Review Panel prior to their initial meeting.
2. **Review Panel initial meeting**

The meeting will take place in Paris (April-May 2009). The Panel will review the ToR and consider the collected information. During the meeting the Panel will identify key issues for follow-up at the site visit. Any additional information required should also be agreed as well as the agenda for the site visit.

3. **Site visit**

The site visit will probably need three days. During the visit the Review Panel will interview the Regional Director, the Chair of the Regional Committee and other staff members. The Review Panel will also meet with key people at NRF and the Department of Science and Technology as well as any other persons that, in the view of the Panel, will provide valuable perspectives and information to assist the Panel in discharging its mandate. The Panel will have a full day meeting to discuss their findings and to agree on conclusions and recommendations and finalize a draft of the report.

The draft report will be sent to ICSU, NRF, the Regional Committee Chair and the Regional Director for the restricted purpose of ascertaining the correctness of facts before the Panel finalizes the report.

4. **Report submission**

The Review Panel will submit its report to CSPR and NRF before 1 October 2009.

**Timetable**

<table>
<thead>
<tr>
<th>What</th>
<th>Who</th>
<th>When</th>
</tr>
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<tbody>
<tr>
<td>Process design</td>
<td>CSPR and NRF</td>
<td>Nov-Dec, 2008</td>
</tr>
<tr>
<td>Agreement of ToR</td>
<td>CSPR and NRF in consultation with RCA</td>
<td>Dec, 2008-Jan, 2009</td>
</tr>
<tr>
<td>ToR approved and Review Panel appointed</td>
<td>CSPR, NRF</td>
<td>February 2009</td>
</tr>
<tr>
<td>Information gathering</td>
<td>Secretariat</td>
<td>Feb-April, 2009</td>
</tr>
<tr>
<td>Review Panel initial meeting</td>
<td>Secretariat</td>
<td>May, 2009</td>
</tr>
<tr>
<td>Review Panel site visit</td>
<td>Review Panel</td>
<td>June, 2009</td>
</tr>
<tr>
<td>Draft report sent to Regional Director, Regional Chair, NRF and ICSU for factual checking</td>
<td>Review Panel</td>
<td>July, 2009</td>
</tr>
<tr>
<td>Final Report and submitted to CSPR and NRF</td>
<td>Review Panel</td>
<td>September, 2009</td>
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</tbody>
</table>

**Cost of the Review**

The cost of the review process will be carried between ICSU and the NRF with ICSU paying for the Paris meeting and the NRF carrying the Pretoria meeting.

**Annexes to Terms of Reference (not included in this meeting report)**

1. COSTED Review 2002
2. ICSU Executive Board document outlining the functions of the ICSU Regional Offices (Date, 2003)
3. Agreement between ICSU and NRF (October 2004)
4. Revised ICSU Executive Board document outlining the functions of the ICSU Regional Offices (2008)
Annex 4: Terms of Reference for the Strategic Review of ICSU’s Role in Promoting Science and Technology in Developing Countries

Background

Until 1966, ICSU’s role with regard to science and technology in developing countries was not formally articulated. Participation in international science, especially in the activities of the Unions and Committees, was largely restricted to scientists from the developed countries. In 1966, ICSU formally acknowledged this position and decided to play a more proactive role in bringing more scientists from the developing countries into its activities. At its 11th General Assembly held in Bombay, India that year, a decision was taken to establish the Committee on Science and Technology in Developing Countries (COSTED) as a Special Scientific Committee of ICSU.

COSTED was charged with the primary mission of promoting science and technology in developing countries and thus facilitating the participation of developing country scientists and scientific institutions in the international activities of ICSU. It was recognised that science and technology form the basis for solving many of the problems of the developing world and that COSTED could identify and promote ways and means of achieving such solutions.

Recognising an increasing need for ICSU to take a strategic approach to the issues of science in and for developing countries, the Committee on Scientific Planning and Review (CSPR) decided to conduct a special in-depth review of COSTED in 2001.

The COSTED Review Panel proposed to replace COSTED with four Regional Offices in and for developing countries and a Policy Committee on Developing Countries (PCDC). PCDC was established by the ICSU 27th General Assembly (GA) in 2002. The 27th GA also gave the go-ahead for creating the ICSU Regional Offices. The African Regional Office was inaugurated in 2005, Asia and Pacific in 2006, and Latin America and the Caribbean in 2007. A fourth Office, for the Arab Region, is also planned.

The overall mandate of the PCDC was to advise ICSU on strategies to enhance scientific activities in developing countries, and its primary goals were:

- to provide vision and advice to ICSU EB on its work relating to developing countries;
- to increase participation of scientists and scientific organizations from developing countries in ICSU; and
- to assist ICSU in strengthening science in developing countries through North-South and South-South co-operation.

The ICSU Regional Offices were established to promote the further development and strengthening of science in the context of regional priorities and bring the science of developing countries closer to ICSU. To achieve that the Regional Offices should:

- promote and implement strategic priorities as input to the development of ICSU Strategic Plans to ensure that the views of the scientific communities in the regions are taken fully into account in the development of ICSU global priorities;
- promote increased participation of developing country scientists and regional scientific organizations in the development and implementation of the ICSU programmes (Strategic Plan 2006-2011); and
- assist ICSU in strengthening science and capacity building in developing countries through South-South and North-South collaboration.
The Offices are also expected to support the work of ICSU and its Scientific Unions, National Members in the Region, Interdisciplinary Bodies and Joint Initiatives, as well as ICSU partners such as UNESCO and the Academy of Sciences for the Developing World (TWAS). The Offices should collaborate with and build on scientific networks in the region and help strengthen them as appropriate.

A preliminary internal review of the PCDC in 2008 found that the mandate of this Committee, elaborated when COSTED had just been terminated, was partly superseded by two related events: the publication of the ICSU Strategic Plan 2006-2011 and the establishment of the ICSU Regional Offices. At its 4th meeting (2007) PCDC noted concerns regarding its functions in relation to other ICSU efforts to strengthen its role in and for developing countries and at its 95th meeting (2007) the ICSU Executive Board appointed a sub-group to develop a proposal for revision of the ToR and composition of the PCDC. The sub-group concluded that the original PCDC goals and objectives continue to be of utmost importance for countries in the developing world; however, experiences showed that the PCDC mandate and composition no longer matched these needs.

The 29th GA in Maputo decided, in preparation for the next Strategic Plan, to request that the CSPR carry out a forward-looking strategic review of ICSU’s role in relation to Science and Technology in developing countries. The GA also agreed that the PCDC will be put in abeyance pending the outcome of this review. The Strategic Review should feed into the ICSU Second Strategic Plan (2012-2017) and should look at ICSU’s role in relation to S&T in developing countries; including the role of Regional Offices in broader strategic context and identification of the need for other policy activities/structures.

This Strategic Review should be both reflective and forward-looking. The ToR are divided in three parts; the first will look at the ICSU’s current structures and activities and how these have worked. The second part will look at the broader picture—what is happening in the global context, and the third will provide forward-looking recommendations.

As part of the ICSU Agreements with the Regional Offices’ host Institutions, the CSPR will be reviewing the Regional Office for Africa in 2009 and the Asia/Pacific and Latin America/Caribbean Offices in 2010. It is envisaged that these reviews will provide a useful foundation for this Strategic Review, and will specifically inform Part 1 (i) of the ToR (see below). The Regional Office reviews might also reveal strategic issues that need exploring further.

The InterAcademy Council Report: Inventing a better future –A strategy for building worldwide capacities in science and technology (IAC, 2004) and the ICSU Priority Area Assessment on Capacity Building in Sciences (ICSU, 2006) should also provide a departure point for this Strategic Review, especially regarding Part 2 of the ToR (see below).

**Terms of Reference**

**Part 1: Current ICSU Activities and Impact**

i) to assess ICSU’s current approach (structures and activities) to strengthen and develop Science and Technology in developing countries, specifically:

- ICSU Regional Offices and Regional Committees
- ICSU Policy Committee on Developing Countries
- ICSU Programmes
- ICSU Interdisciplinary Bodies
- ICSU Members (International Unions and National Members)
ii) to review the extent to which the voice and participation of developing countries in ICSU have been strengthened by the creation of the PCDC and the Regional Offices

iii) to assess the extent to which the ICSU presence has been strengthened in the developing world since the creation of the PCDC and the Regional Offices

iv) to assess the coherence and coordination between regional activities and ICSU global activities

Part 2: Broader Context

v) to examine ICSU’s role in promoting Science and Technology in developing countries in the context of other global developments in this area

vi) to evaluate what developing country scientists, institutions, networks, and ICSU constituency (Programmes, Interdisciplinary Bodies, Partners, International Unions and National Members) want from ICSU in relation to the strengthening and development of Science and Technology in developing countries.

Part 3: Looking Forward to the Future

vii) in relation to vi (above), to specifically consider what are the implications for the development of ICSU’s second strategic plan? What is ICSU’s capacity to meet those needs?

viii) to define an overarching future mandate for ICSU in the strengthening and development of Science and Technology in developing countries

ix) to provide guidance to improve effectiveness of current structures and on other activities that ICSU should put in place to fulfil this mandate.

The Review Process

After appropriate consultations, the CSPR will appoint a Review Panel, which will include a CSPR liaison person. It is envisioned that there would be three meetings during 2009-2010 in addition to telephone/video conferences, as needed. The ICSU Secretariat will play an active role in gathering information for the Review Panel. The draft report will be sent not only to ICSU Members but to the broader consulted constituency (see vi). It is also important that the Review Panel gets direct input from the Regional Offices and the Regional Committees (additional to that of the Regional Offices Review reports)

The Review Panel

The Review Panel will include no more than 6 members, 1 expert per region –Africa, Arab, Asia/Pacific and Latin America/Caribbean and 2 experts from the developed world. Ideally, the Chair of the Review panel should know ICSU activities and structures well and should be from a developing country.

Timetable

<table>
<thead>
<tr>
<th>What</th>
<th>Who</th>
<th>When</th>
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<tbody>
<tr>
<td>Draft Term of Reference approved</td>
<td>CSPR17</td>
<td>February, 2009</td>
</tr>
<tr>
<td>Review Panel approved</td>
<td>CSPR, 18</td>
<td>Sep-Oct, 2009</td>
</tr>
<tr>
<td>Review Panel Initial meeting</td>
<td>Review Panel and Secretariat</td>
<td>Feb-March, 2010</td>
</tr>
<tr>
<td>Action</td>
<td>ROA</td>
<td>ROAP</td>
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<td>-------------------------------------------------</td>
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<tr>
<td>Information gathering</td>
<td>Secretariat</td>
<td>Dec, 2009 -July, 2010</td>
</tr>
<tr>
<td>Review Panel second meeting</td>
<td>Review Panel and Secretariat</td>
<td>August, 2010</td>
</tr>
<tr>
<td>Additional information gathering (if required)</td>
<td>Secretariat</td>
<td>Aug-Nov, 2010</td>
</tr>
<tr>
<td>Review Panel final meeting</td>
<td>Review Panel and Secretariat</td>
<td>December, 2010</td>
</tr>
<tr>
<td>Draft report sent to ICSU constituency</td>
<td>Secretariat</td>
<td>January, 2011</td>
</tr>
<tr>
<td>Final Report submitted to CSPR</td>
<td>CSPR, 21</td>
<td>February-March, 2011</td>
</tr>
<tr>
<td>Report approved by ICSU EB</td>
<td>EB, 104</td>
<td>April, 2011</td>
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**Important dates of Regional Offices reviews**

<table>
<thead>
<tr>
<th>Action</th>
<th>ROA</th>
<th>ROAP</th>
<th>ROLAC</th>
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<tr>
<td>Review Panel site visit</td>
<td>June, 2009</td>
<td>June, 2010</td>
<td>January, 2010</td>
</tr>
<tr>
<td>Final Report submitted to CSPR</td>
<td>September, 2009</td>
<td>October, 2010</td>
<td>March, 2010 (CSPR, 19)</td>
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<td>(CSPR, 18)</td>
<td>(CSPR, 20)</td>
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Annex 5: Terms of Reference for a Strategic Review of ICSU’s Role in Science Education

Background

Good, i.e. effective and stimulating, science education is fundamental for the future of science and for the ongoing development of the global knowledge society. There is concern in many countries that the overall level of scientific literacy is poor and that children are not being attracted to scientific studies and eventual careers as scientists. Given ICSU’s mission of strengthening international science for the benefit of society, science education is an area of obvious interest.

In preparation for the ICSU Strategic Plan, 2006-2011, a Priority Area Assessment (PAA) on Capacity Building in Science was completed in 2006. When this was considered by CSPR and the Executive Board, it was felt that a potential future role for ICSU in relation to science education needed further reflection. A particular issue of debate was the educational level (primary, secondary, tertiary) at which actions from ICSU might best be focussed. In the end, it was agreed that an ad hoc group should be established to define ICSU’s future role in relation to science education (ICSU Strategic Plan, pp.36-37).

ICSU has historically supported dedicated activities in science education, the most recent of these being a Committee on Capacity Building in Science (CCBS, 1993-2006) that focused on ‘hands on’ primary school education and was reviewed as part of the PAA exercise. Many of the ICSU Members – both National and Unions – also have a strong interest in science education, mostly focussed at the tertiary and post-graduate level. And some of the ICSU Interdisciplinary Bodies, for example the International Polar Year, have developed active science education networks. The Regional Office for Latin America and the Caribbean has initiated a specific planning exercise on Mathematics education. A key issue for this review is to identify whether there is any added-value that ICSU, at the global level, can bring to these various actions.

Science education has many stakeholders. At the international policy level, within the UN system, UNESCO has the primary responsibility for both education and science and it a natural partner for ICSU. However, with the exception of a few isolated activities, a productive partnership in science education has not been developed. To what extent ICSU can, or should, be focussing on education policy issues is unclear. It is perhaps at the operational education level where ICSU actions to date, have had the greatest impact (e.g. via CCBS) and here there are a multitude of players, from national and local governments to institutions and individual teachers/lecturers. Increasingly, students and other citizens are also ‘self-educating’ using the worldwideweb. Informal education or learning is an area where the ICSU constituency could also conceivably play a role.

It is timely for ICSU to consider its role in science education as the planning begins for the next strategic plan, 2012 – 2017. This review is designed to feed into that planning process. The Review Group is expected to produce a report for the Committee on Scientific Planning and Review in 2010/11, which will make recommendations to the ICSU Executive Board. Where appropriate, these will then be incorporated into the future ICSU strategy.
Terms of Reference

The Strategic Review will:

1. Assess ICSU’s past and current activities in relation to science education

   I. Consider the past activities of ICSU in science education and identify any successes and failures that should inform future actions.

   II. Consider the interests and activities of ICSU Members, Interdisciplinary Bodies and Regional Offices in science education, identifying gaps, overlaps and synergies and possibly proposing new responsibilities for individual bodies.

2. Consider the broader context for science education

   III. Identify key recent developments in science education that have global implications and should inform any actions that ICSU might consider.

   IV. Identify the key actors in science education at the international, national and local level, highlighting potential audiences and partners for ICSU.

3. Make recommendations on the future mandate, if any, for ICSU in science education

   V. Identify any added value that ICSU can contribute to the field of science education and, if appropriate, define the potential future focus and role(s) for ICSU in this area, for inclusion in the ICSU Strategic Plan 2012-2017.

   VI. Define the activities and resources that will be required to fulfil any ascribed potential future role for ICSU in this area.

Review Committee Membership Profile

Total membership: 8-10 persons to be decided after solicitation of nominations from ICSU Members and Interdisciplinary Bodies

To ideally include:
Natural and social scientists with an active interest in science education and from different disciplines
Science education policy specialist
Science educator/teacher
Expertise in cognitive learning and education
IT and education expert
A student or early career scientist

Balanced for regional representation and gender

Work Plan and Resources

A minimum of two, and ideally three, physical meetings of the panel should take place in 2010/early 2011, supplemented by virtual discussions via email and telephone. Input from the ICSU membership will need to be solicited and analysed between meetings 1 and 2.
Project management and administrative support to be provided by ICSU.
Total cost ~€20k per meeting, i.e. €40k in 2010 and €10k in 2011.