



a g l o b a l n e t w o r k o f s c i e n c e a c a d e m i e s

**DRAFT**

**InterAcademy Panel on International Issues**

**STRATEGIC PLAN  
2007, 2008 AND 2009**

**10 October 2006**

## EXECUTIVE SUMMARY

### 1. WHY A STRATEGIC PLAN?

Created in 1993, the *InterAcademy Panel on International Issues* (IAP) now has 92 members with several applications for membership still pending. Not only membership has grown significantly since IAP's inception, but so did the programmatic activities in which IAP is involved. In turn, growth of IAP activities led to increased organizational complexity and to significantly larger financial resources. This, in a nutshell, explains why it has now become imperative for IAP to adopt a strategic plan for the future.

More specifically, there are three interrelated factors that have prompted the preparation of this first Strategic Plan.

- First, legislation adopted by the Italian Parliament in 2004 now provides IAP with a generous and stable source of funding. For IAP this implies a duty to improve the transparency of decision-making, basing it on explicit criteria, and to strengthen its mechanism for evaluation and accountability.
- Second, IAP has now reached the point where it should make a transition from a rather informal, pioneering approach to a more highly organized *modus operandi*. This is a normal development in the life-cycle of any organization, but for IAP the challenge is not to lose the benefits of flexibility and creativity in the process.
- Third, in the near future IAP must make important decisions ranging from how to proceed with all of its ongoing activities to possibly bringing on board a Director for its Secretariat at TWAS. Such decision should not be taken in isolation, but within the context of an agreed plan for the future.

The first IAP Strategic Plan (SP-I) applies to a three year period: 2007, 2008 and 2009. The reason for this - relatively brief - timeline is that the Plan's life cycle so coincides with the intervals between the meetings of the General Assembly of IAP. However, this does not imply that all plans and activities listed in SP-I must be completed within three years: in reality most of these plans and activities will continue beyond 2009, implying that they will be included in a SP-II or in an extended SP-I..

### 2. MISSION AND CHALLENGES

IAP's core business has been, and will continue to be, strengthening the capabilities of the world's science academies, especially in developing countries. Its mission statement reads as follows.

*IAP and its member academies believe that science, scientific knowledge and scientific progress are an essential part of human culture and are vital to advance human welfare and well being. They also believe that the scientific method has much to offer in the pursuit of just and fair societies. These beliefs are the foundation of IAP and all it does. IAP is therefore committed to making the voice of science heard on issues of crucial importance to the future of humankind. To that end IAP will serve as platform for member academies to develop mutual collaboration, as well as common positions and actions. IAP will help member academies with efforts to improve their functions and structure, especially in relation to their effectiveness in advising governments and society. IAP will also support scientists with the creation of academies where none exist.*

Externally, the five most important challenges facing IAP in the SP-I period are:

- How can IAP strengthen the capacity of academies of science to provide advice to government and society?
- What can IAP do to improve the public perception of science and to attract new generations to a career in science?
- What can IAP do towards achieving the Millennium Development Goals and how can it contribute to the global partnership for development?
- What can IAP do to enhance policy cooperation between the natural sciences and other disciplines, especially the health, social and technological sciences?
- What can IAP do to strengthen cooperation with other international science organizations while developing at the same time a unique profile?

Internally, IAP must focus on two additional challenges in the SP-I period..

- Should the IAP Secretariat at TWAS be strengthened and should that Secretariat be headed by a Director?
- What should IAP do to enhance transparency in decision-making procedures, especially in relation to criteria to be used, evaluation and accountability?

In addressing these challenges it is essential that IAP coordinates with all other relevant international science organizations, especially ICSU, CAETS, IAC, IAMP and TWAS.

### **3. TWENTY ACTION-ITEMS**

In response to these challenges the Strategic Plan identifies 19 action-issues to be taken up by IAP in the SP-I period. These action-items are formulated as decisions to make them as concrete as possible. Perhaps the single most important action-item is that in the SP-I period IAP will focus its activities on two core themes: the empowerment of IAP member academies and the strengthening of its internal organization.

#### **In general**

- |   |
|---|
| <ol style="list-style-type: none"> <li>1. IAP will focus on empowering academies and strengthening its organization</li> <li>2. IAP will continue to act as a overall platform for interacademy cooperation</li> <li>3. For IAP empowering academies equals strengthening their advisory capacities</li> <li>4. The classification of activities in Statements, Programs and Initiatives remains</li> </ol> |
|---|

#### **On Statements**

- |   |
|---|
| <ol style="list-style-type: none"> <li>5. IAP will issue approximately one or two Statements a year and ensure follow-up</li> </ol> |
|---|

#### **On Programs**

- |   |
|---|
| <ol style="list-style-type: none"> <li>6. IAP will review its ongoing Programs and decentralize when desirable</li> <li>7. Capacity building for young academies remains a core IAP Program</li> <li>8. Science education remains within IAP or is transferred to regional networks</li> <li>9. The status of Health education and Water research will be reviewed</li> <li>10. IAP will try to launch new Programs and improve their visibility</li> </ol> |
|---|

**On Initiatives**

- 11. IAP will review the Initiatives on Natural disaster mitigation and GMOs (\*)
- 12. IAP will try to launch new Initiatives and enhance their visibility

**On organization**

- 13. IAP will seek to appoint a Director and to strengthen its Secretariat
- 14. IAP will develop improved procedures for programmatic decisions
- 15. IAP will develop improved mechanisms to enhance accountability

**On funding**

- 16. IAP will seek additional funding and develop a new SP-I based budget

**On risk reduction**

- 17. SP-I is not without uncertainties and risks, but none seem fatal
- 18. Prompt action by the Executive Committee will reduce the risks
- 19. IAP has a permanent Strategy Group

**4. FINAL OBSERVATIONS**

If these twenty action-items/decisions are implemented in the SP-1 period, IAP will have made a most meaningful effort in addressing its external and internal challenges facing it and international science cooperation in general. Additionally, it will also have made the transition from a pioneering organization to a more mature and stable organization. And lastly, IAP will have developed the procedures and the mechanisms that are needed to convince donors and sponsors that it is worthwhile to (continue to) to invest in IAP.

This first IAP Strategic Plan is a result of changes taking place in IAP and in the world in which it operates. At the same time the Plan is also a driver of change, again within IAP and in the world around it. However, one thing should not change: that IAP continues to have the personal commitment of all who believe in its mission. A plan – “Strategic” or otherwise - without commitment is just paper. But commitment needs a plan if it is to have focus and produce action. May this Strategic Plan serve that purpose.

(\*) Genetically Modified Organisms

# TABLE OF CONTENTS

## EXECUTIVE SUMMARY

I.	SETTING THE STAGE	
1.	International science cooperation	1
2.	Past activities of IAP	3
3.	IAP mission statement	4
II.	CHALLENGES AND OPPORTUNITIES	
1.	Changing context	5
2.	External challenges	6
3.	Internal challenges	8
III.	STRATEGIC PLAN 2007, 2008, 2009	
1.	Two core themes	10
2.	Empowering member academies	11
2.1.	Definitions and scope	11
2.2.	Statements	12
2.3.	Programs	13
2.4.	Initiatives	16
3.	Strengthening the organization	18
3.1.	Leadership and staff	18
3.2.	Procedures and systems	19
3.3.	Funding	20
IV	CONDITIONS FOR SUCCESS	
1.	Uncertainties and risks	22
2.	Actions to be taken	23
3.	Long term perspective	23
V.	FINAL OBSERVATION	24
	ANNEX I – Draft protocol: Decisions on Programs and Initiatives	25
	ANNEX II – Draft protocol: Evaluation of Programs and Initiatives	26

## I. SETTING THE STAGE

### 1. INTERNATIONAL SCIENCE COOPERATION

There is general agreement that much of the prosperity of the 20<sup>th</sup> century derived from science based discoveries in health, agriculture, engineering technologies and a host of other areas. But much remains to be done in this century to bring the benefits of science to all of humanity and to anticipate and provide solutions to emerging challenges. In meeting that challenge, a fundamental fact of today's world is that most problems transcend national boundaries and that the successful implementation of solutions demands cooperative international science.

A number of international organizations seek to fill this role by improving research cooperation, by building scientific capabilities and by addressing issues of science and society. In particular, these organizations strive to bring the benefits of science to economic development, to address problems of global environmental sustainability, to protect humankind from global health threats, to address ethical questions related to science, including scientific misconduct, to improve science education and to aid governments by providing science-based advice to problem solving.

At the intergovernmental level UNESCO is of course the most important international science organization. At the nongovernmental level there are - apart from IAP - several organizations that play an active role in international science cooperation: *the International Council for Science (ICSU)*; the *Council of Academies of Engineering and Technological Sciences (CAETS)*; the *InterAcademy Council (IAC)*; the *InterAcademy Medical Panel (IAMP)*; and the *Academy of Sciences for the Developing World (TWAS)*. What are the core functions of these organizations and how do they differ from IAP?

**ICSU** traces its roots to the late 19<sup>th</sup> century, but it was founded in the 1931. It is composed of a matrix of disciplinary unions and national members. The national members are either governmental entities like science ministries or national science academies. ICSU has a long tradition of identifying global science challenges, especially in environmental areas. Its core functions are:

- Facilitating the conduct of science by agreeing on a common language, maintaining global databases and fostering international communication.
- Promoting global research agendas and challenges by initiating such programs as the forthcoming international polar year.
- Representing the global science community to relevant international governmental organizations such as UNESCO.

**CAETS** was founded in 1978 as a non-governmental international organization of academies of engineering and technological sciences. At present it has about 25 active members. Its core functions are to advise governments and international organizations on technical and policy issues; to foster a balanced understanding of the applications of engineering and technology by the public; to provide an international forum for

discussion and communication; and to promote the establishment of new engineering academies in countries where none exist.

**IAP** is an association of science academies founded in 1993. It presently has 92 members, one per country. The core function of IAP is to strengthen the capabilities of science academies in all countries, but especially in the developing world. In particular, IAP seeks to enhance the capacity of science academies to provide effective science-based advice independent from political or religious considerations, avoiding conflicts of interests, to governments and society. IAP pursues this goal by:

- Assisting scientists or groups of scientists interested in founding an academy of science within their country or region.
- Issuing statements on issues of global concern that can be used by member academies in a local context.
- Mounting international programs that can be used by member academies at the national level, but also to strengthen participation in interacademy cooperation .

**IAC** was founded by IAP in 2000 to provide authoritative reports on major issues of global concern. It is governed by a Board of 15 academy Presidents from all regions of the world. International panels composed of the world's most prominent scientists develop IAC reports. The reports are high impact and are aimed at high-level audiences including the United Nations and the policy leadership of national governments. So far IAC had published the following reports.

- *Inventing a Better Future*: presents the case for S&T capacity building in every country as an essential prerequisite for economic development.
- *Realizing the Potential of African Agriculture*: advances a science-based strategy for improving agricultural self-sufficiency in Africa.
- *Women for Science*: addresses the problem of the under-representation of women in science and proposes actions to remedy the situation.

**IAMP** was founded in 2002 and it is composed of some 40 medical academies or the medical sections of science academies. IAMP has a mission very similar to IAP, but it focuses on issues of global health. IAMP has worked to evaluate global health programs and to provide information resources that can be used by individual academies at the national level. In many ways IAMP is still in the process of establishing itself.

Lastly, the *Academy of Sciences for the Developing World*, **TWAS**. Originally named "Third World Academy of Sciences", TWAS was founded in 1983 and now has more than 700 Fellows and Associate Fellows. Its headquarters are at the premises of the Abdus Salam International Centre for Theoretical Physics (ICTP) in Trieste, Italy. Largely funded by the Italian government, TWAS is pursuing the following objectives:

- To recognize, support and promote excellence in scientific research in the South.
- To provide promising scientists in the South with research facilities.
- To facilitate contacts between individual scientists and institutions in the South.
- To encourage South-North cooperation.
- To encourage scientific research on major Third World problems.

Each of these organizations is essential and each fills a distinct niche in the world of international science cooperation.

- ICSU plays an essential role in facilitating the conduct of science, in articulating major international research challenges and in providing a voice for science in international organizations.
- IAP, IAMP and CAETS promote interacademy cooperation and strive to make member academies more effective within their countries or regions and to empower them to provide science-based inputs to governments.
- IAC mobilizes the world's best science and scientists to develop global strategies for addressing mankind's most pressing problems and it reaches out to the world's highest-level decision-makers.
- TWAS is an academy of sciences that aims to give a voice to science and scientists in the South and to address specifically the issues and problems facing the developing world.

## 2. PAST ACTIVITIES OF IAP

Since its inception, IAP has developed a number of mechanisms and instruments to achieve its aims and objectives. Essentially, these mechanisms and instruments fall into three categories: (a) "Statements" on issues of critical importance to society and science; (b) "Programs" on thematic issues that require long term cooperation and action; and (c) "Initiatives" on issues with a more short term perspective, often of direct concern to decision-makers, both at the national and at the international level.

So far, IAP has issued **Statements** on the following topics.

- Population growth, 1994.
- Urban development, 1996.
- Sustainability, 2000.
- Human reproductive cloning, 2003.
- Science education, 2003.
- Health of mother and child, 2003.
- Scientific capacity building, 2003.
- Science and the media, 2003.
- Access to scientific information, 2003.
- Biosecurity, 2005
- Teaching of evolution, 2006

At present, IAP is engaged in four **Programs**.

- *Capacity building for young academies*, especially in developing countries, to strengthen their role in advising government. This program has also contributed to the creation of regional networks of science academies in Africa, America and Asia.
- In its *Science education* program IAP seeks to reform science education by encouraging hands-on and enquiry-based learning in primary and secondary schools; this again through mobilizing science academies.

- *Health education of women* is designed to mobilize academies to advance research on maternal morbidity and mortality and to increase women's awareness of maternal health-related issues and risks.
- *Water research and management* seeks to promote science-based solutions to combat pollution of ground and surface water and mobilizes participating academies to develop training and education opportunities for water managers.

Lastly, IAP is now involved in four **Initiatives**.

- *Access to scientific information* promotes electronic access to scientific information, especially for scientists in developing countries.
- *Biosecurity* examines the benefits and risks of biotechnology for society and considers how best to provide the benefits while reducing the risks.
- *Genetically modified organisms* is designed to review existing studies and reports by scientific organizations on the benefits and risks of GMOs.
- *Natural disaster mitigation* is a new Initiative started after the tsunami disaster of December 2004. A number of workshops have been held to define its scope and methodology.

In addition to these specific activities, IAP has also served as a general platform for bilateral or regional cooperation among its member academies, even when such cooperation did not develop into a formal IAP activity. Accordingly, IAP has been, and continues to be, an important platform for consultation and information exchange among the world's science academies.

IAP's Secretariat, initially at the Royal Society, London, and now located in Trieste, Italy, operates under the administrative umbrella of the *Academy of Sciences for the Developing World - TWAS*. In January 2004, the Italian Parliament passed a law that provides a secure funding base for IAP. Also, many member academies contribute financially and/or in kind to IAP activities.

### **3. IAP MISSION STATEMENT**

In all its activities – past, present and future - IAP seeks to adhere to the following mission statement.

*IAP and its member academies believe that science, scientific knowledge and scientific progress are an essential part of human culture and are vital to advance human welfare and well being. They also believe that the scientific method has much to offer in the pursuit of just and fair societies. These beliefs are the foundation of IAP and all it does. IAP is therefore committed to making the voice of science heard on issues of crucial importance to the future of humankind. To that end IAP will serve as platform for member academies to develop mutual collaboration, as well as common positions and actions. IAP will help member academies with efforts to improve their functions and structure, especially in relation to their effectiveness in advising governments and society. IAP will also support scientists with the creation of academies where none exist.*

## II. CHALLENGES AND OPPORTUNITIES

The previous chapter gave a brief outline of IAP and its past activities, while the next chapter will deal with the plans for the future. The present chapter is a bridge between these two chapters: it will review ongoing developments in the world of international science cooperation that are relevant in defining IAP's future role and activities.

### 1. CHANGING CONTEXT

In the last few decades there have been very significant changes in the relationships and interactions between science and society. A recent report identifies five clusters of changes that take place in science and international science cooperation.

- Changes in relation to the mobility and global flows of science and scientists as a result of developments like the globalization of trade and the use of new information and communication technologies, but also as a result of fears over terrorism.
- Changes in the production of scientific knowledge, largely as the result of the increased involvement of the corporate sector and of closer links between science and policy priorities set by governments or funding agencies.
- Changes in the speed and scale of innovation, producing new risks and uncertainties that may carry adverse physical, social and ethical consequences. Understanding and fairly communicating these risks and uncertainties requires new approaches.
- Changes in the governance of science and technology as a result of science and technology pervading ever more dimensions of life, so creating new demands for accountability and ethical conduct.
- Changes in the nature of expertise on the relations between science and society, especially within NGO's and academia. This new expertise, often under-utilized, offers new opportunities for dialogue between science and society.<sup>1</sup>

Of course, there is more. For example, there is an increased need for science to progress more rapidly in view of the ever greater urgency of the problems that science must address. There also is the fact that for the first time ever there are now developing countries with a real capacity in science. However, the above suffices to make the (obvious) point that the world of science and international science cooperation continues to change. This not only suggests themes and topics for possible IAP activities in the future, but is also serves as a warning: things that have worked well for IAP in the past, may no longer do so in the future.

#### **Changing context**

*The world of international science cooperation has changed significantly in the last decades and this implies that new issues have arisen, while some of the traditional methods may no longer work.*

<sup>1</sup> See International Council for Science. 2005. ICSU Strategic Review of Science and Society: Rights and Responsibilities.

## 2. EXTERNAL CHALLENGES

Within the (changing) context of international science cooperation, what are the most important challenges facing IAP in the next couple of years?

### *Science academies*

In principle, science academies have great potential to contribute to science-based decision-making by governments and other institutions. Academies represent *scientific excellence*; they are *stable organizations* with a long term perspective; and they are, in principle, essentially *independent and impartial*. Yet, fact is that many science academies are weak in terms of impact on decision-makers and society; in terms of supporting science and scientists; and in terms of operations and organization. In some cases the political leadership of a country may even be unaware of the existence of an academy. This situation is not going to improve by itself - in fact, in many countries the situation is deteriorating. This suggests that for the next couple of years IAP must give priority to initiatives and activities that can help member academies, especially in developing countries, to enhance their local and international visibility and to strengthen their capacity to advise government and society.

#### **Challenge 1**

*How can IAP support member academies to enhance their visibility and to strengthen their capacity to provide advice to government and society?*

### *Public perception of science*

New risks and uncertainties are now associated with science. Undoubtedly, this is one of the reasons that in many countries science has a negative image with large parts of the population. This may also explain why in many countries science fails to attract the younger generation as it used to do in the past. However, the question arises whether the answer to low science enrollment lies exclusively in the quality of science education. Another likely driver is that being a scientist does not bring today the same recognition as in the past. Academies of science can do much to improve the perception of science and scientists by demonstrating to decision-makers and the general public that science is an exciting field and that it offers every opportunity for a rewarding career. It is essential that this be done not only with words, but also by action – for example by opening academy membership to younger generations and/or by creating special academies for younger scientists. IAP must support academies with efforts in these directions

#### **Challenge 2**

*What can IAP do to support member academies with efforts to improve the image of science and to attract new generations to a career in science?*

### *Millennium Development Goals*

The Millennium Development Goals (hereinafter: MDGs) have served, and continue to serve, as a driving force to build a global partnership to alleviate poverty and hunger, especially of the world's poorest people. Both the MDGs and the UN Millennium Project

explicitly recognize that science has an important role to play.<sup>2</sup> Of the eight MDGs at least five can only be achieved with the application of scientific knowledge: (a) to eradicate extreme hunger and poverty; (b) to reduce child mortality; (c) to improve maternal health; (d) to combat HIV/AIDS, malaria and other diseases; and (e) to ensure environmental stability. In the past, IAP already took much inspiration from the MDGs when defining its plans and activities; see, for example, the recent IAP Statements on Health of mother and child and on Science capacity building. In the future the MDGs must play an even more important role in setting the agenda of IAP.

### **Challenge 3**

*What can IAP do to achieve the MDGs and to participate effectively in the global partnership for development?*

#### ***Health, social and technological sciences***

There is general agreement that advising decision-makers on real-world problems often requires the (natural) sciences to work together with other disciplines, especially the health, social and technological sciences. Yet, reality is that in many cases such cooperation does not come off the ground. Although many academies include biomedical and technological sciences, while some also include social sciences, in practice most science academies are dominantly concerned with the natural sciences. This has become a handicap in advising governments and society: few academies have the breadth of disciplines needed to develop advice that integrates input from all relevant perspectives. All academies now need the broadest possible academy and disciplinary partnerships if they are to address the needs of society. For these reasons academies must develop mechanisms to engage disciplines and expertise they do not have in-house. Such mechanism may range from bringing in members from new disciplines to cooperating more closely with other academies. IAP should not only support such initiatives, but it must take the lead.

### **Challenge 4**

*How can IAP support member academies with efforts to strengthen cooperation between the natural sciences and other disciplines?*

#### ***Proliferation of organizations***

Each organization mentioned in chapter I was created for good reasons and there is a great deal of cooperation and coordination among them. However, to an outsider the world of science organizations may seem as fragmented as science itself. If that outsider seeks advice from a science organization, a first problem may therefore be to determine the most appropriate organization to engage. For an outsider/decision-maker it may also be difficult to decide which of all the science organizations should receive funding. IAP can not solve this problem on its own, but IAP can help not only by cooperating and

---

<sup>2</sup> For a more detailed analysis, see the report of the UN Millennium Project Task Force on Science, Technology, and Innovation, *Innovation: applying knowledge to development*, Lead authors Calestous Juma and Lee Yee-Cheong, 2005

coordinating closely with other international science organizations, but also by developing and communicating to the outsiders world a profile that is uniquely IAP's and by referring matters to other bodies as appropriate.

**Challenge 5**

*What can IAP do to strengthen cooperation with other international science organizations, while developing at the same time a unique profile of its own?*

**3. INTERNAL CHALLENGES**

The above challenges relate primarily to the outside world. However, there are also challenges that relate to internal, organizational aspects of IAP.

***Leadership and staff***

The drive and energy of Co-Chairs, members of the Executive Committee and staff have been the major drivers to make IAP what it is today. This suggests that IAP is facing important challenges when a new Co-Chair must be elected and when the present Executive Director of TWAS - IAP's host academy – retires. Electing a new Co-Chair is always a critical issue in view of the crucial role of the IAP Co-Chairs, while the retirement of the TWAS Executive Director raises important questions in relation to the structure of the IAP Secretariat in Trieste. The present TWAS Executive Director has most generously and effectively contributed his expertise, time and network to IAP, but it is possible that his successor will not be able to do the same in view of the fact that both TWAS and IAP are enhancing their ambitions and expanding their activities. This suggests that in the near future IAP may have to request TWAS to appoint a Director to head the IAP Secretariat at TWAS. In addition, there also arises a more general question in relation to the size and role of the IAP Secretariat: if IAP expands its activities – as it can and should – the Secretariat may need strengthening if it is to support such a larger agenda.<sup>3</sup> Of course, the costs associated with additional staff need to be balanced against programmatic priorities.

**Challenge 6**

*Should IAP consider creating a position for a Director to head its Secretariat and what else should it do to strengthen that Secretariat?*

***Procedures and systems***

The internal challenges also relate to the internal functioning of IAP, especially the processes and procedures used for decision-making on programmatic activities. The adoption of new Statutes and Rules of Procedure, now being applied provisionally pending final approval at the next General Assembly, is an important first step, but more needs to be done to enhance transparency and accountability. Questions that must be addressed are, for example: according to what criteria does IAP decide to undertake

<sup>3</sup> However, as observed before, strengthening the Secretariat should not result in bureaucracy and loss of flexibility and creativity.

certain activities; how does IAP monitor and evaluate the progress and quality of its activities; and how does IAP terminate an activity when this becomes necessary? Until now – with limited financial resources – IAP was able to decide on these matters rather informally, but with new and much larger financial resources comes an obligation to strengthen the transparency of decision-making, basing it on explicit criteria, as well as an obligation to develop improved systems for evaluation and accountability.

**Challenge 7**

*How should IAP proceed with enhancing transparency of decision-making and with strengthening systems for evaluation and accountability?*

### III. STRATEGIC PLAN 2007, 2008, 2009<sup>4</sup>

The challenges identified in the previous chapter are not new or original. This explains why in many ways IAP has already been addressing them. It also explains why there will be a great deal of continuity between past and future activities. However, even so, new activities will be added, while ongoing activities will be reviewed to determine their future and the role of IAP.

#### 1. TWO CORE THEMES

Building upon past achievements and addressing new challenges, IAP will focus on two core themes in the SP-I period. These are:

- Empowering member academies, both in relation to their individual functions and structure, as well as in relation to their participation in interacademy cooperation.
- Strengthening the organization, both in relation to leadership and staff and in relation to systems and procedures – this without losing flexibility and creativity.

The first of these themes addresses the challenges 1, 2, 3, 4 and 5 of the previous chapter, while the second theme relates to the challenges 5, 6 and 7. Overall, both themes fit within the mission of IAP as formulated in chapter 1, while they also will give IAP more focus internally and a sharper profile externally - so that outsiders have a better understanding of what IAP stands for and what its core business is.

**Decision 1: IAP will focus its activities on two core themes**

*In the SP-I period IAP will focus its activities and resources on two core themes: (a) empowering member academies; and (b) strengthening the organization.*

This focus on two core themes can of course not be absolute. There still are academies with few, if any, international activities and for these academies the first priority is not empowerment as just mentioned, but opening a window to the world. For this reason IAP has always given priority to promoting interacademy cooperation. In fact, the essential purpose behind the various IAP Programs has been to create vehicles for interacademy cooperation and to engage as many academies as possible in international activities.<sup>5</sup>

This implies that IAP should always be able to serve as an informal platform for, and initiator of, cooperation and information exchange among science academies – regardless of whether or not this falls within the two core themes. Such an overall platform function is especially valuable in situations where it is difficult for academies to cooperate directly on a bilateral or regional bases. However, it follows from the informal and ad hoc nature of the activities in this category that there is little point in discussing them in more detail in a strategic plan. Except to acknowledge explicitly that they will – and should – take place.

<sup>4</sup> Hereinafter referred to as “SP-I”.

<sup>5</sup> This also suggests that it is important to continue the (informal) practice of inviting academies to meetings of the Executive Committee whenever these academies can contribute to specific agenda items.

**Decision 2: IAP will continue to act as a platform for interacademy cooperation**  
*In addition to activities directly linked to the core themes IAP will continue to serve as a platform for cooperation and information exchange among science academies.*

## 2. EMPOWERING MEMBER ACADEMIES

### 2.1. Definitions and scope

#### *Advisory capacities*

*Capacity building of young academies* has been a core activity of IAP in the past. However, the term was interpreted broadly – sometimes bordering on capacity building of science, rather than of academies – and this led to a wide variety of activities being brought under the umbrella of “capacity building”. IAP’s capacity building efforts not only referred to activities like the creation of regional networks of academies, but they also included IAP Programs like *Health education of women*, *Science education* and *Water research and management*. To the outside world the titles of these Programs may suggest that IAP is involved in substantive research management efforts similar to what other international science organizations are doing, whereas in actual fact these Programs are essentially intended to stimulate interacademy cooperation and to foster internal activities. Hence, the need for IAP to develop a sharper programmatic profile in the SP-I period.

As the term is quite broad and general, it is necessary to define more precisely what is meant, under SP-I, by the term “empowering member academies”. The challenges identified in chapter II provide guidance here as they indicate what is needed most: to strengthen the capacity of academies to advise government and society on the scientific aspects of societal problems. Accordingly, in the SP-I period IAP will focus all activities within the core theme “Empowering member academies” on the strengthening of the advisory capacities of its member academies, especially of those in developing countries.

The relationship between IAP and IAC is key in this regard. IAC was created by IAP to articulate in-depth advice on major issues, a task that goes beyond the general statements issued by (the members of) IAP. IAC reports are a major source of input for academies to advise their governments, while the support of IAP member academies for IAC reports is crucial in ensuring their implementation.

Also, now that the first IAC reports have been published and used by IAP member academies, IAP could take the initiative to work with IAC to produce a report on the “science of science advice”. Such a report could articulate a shared understanding of what good science advice is, provide insights into how an advisory role of academies is understood and perceived by scientists and decision-makers and identify best practices in developing science advice. Such an initiative would also have the overall effect of

developing common perceptions of what an academy needs to do if it is to provide credible science advice.

**Decision 3: Empowering academies = strengthening their advisory capacities**  
*In the SP-I period the core theme “Empowering member academies” will focus on strengthening the advisory capacities of IAP member academies.*

### *Categories of activities*

There is another aspect that needs a sharper focus and more precise definitions. As was mentioned in chapter I, until now IAP has developed three categories of activities: Statements, Programs and Initiatives. Of these three, the category of Statements was perhaps most clearly defined, but the distinction between Programs and Initiatives has not always been very clear to member academies. In the SP-I period IAP will continue to use the same three categories to organize its activities, but these will be defined as follows.

- An “IAP Statement” is a declaration issued by IAP in accordance with the (new) Statutes and Rules of Procedure in which a majority of members, supporting the Statement, take a public position on a scientific issue or the scientific aspects of a societal issue.
- An “IAP Program” is a set of activities by a group of IAP member academies with pre-defined outcomes that can only be achieved through long term cooperation, typically more than 3 years.
- An “IAP Initiative” is a set of activities by a group of IAP member academies that addresses a more short term issue and that produces, within a period of 1 to 3 years, a report, a statement or another action on that issue.

**Decision 4: Classification in Statements, Programs and Initiatives remains**  
*In the SP-I period IAP will continue to classify its programmatic activities in three categories: Statements, Programs and Initiatives.*

## **2.2. Statements**

Unlike Programs and Initiatives, Statements are very much products of the day as their topics and timing are essentially determined by events and developments in the outside world. Also, they do not require much in terms of financial and human resources, while the procedures for developing and issuing Statements have been set forth in considerable detail in the new IAP Statutes and Rules of Procedure, scheduled for formal approval at the next General Assembly. Accordingly, little needs to be said here on Statements beyond the observation that they will continue to be a most important activity. In the SP-I period IAP will endeavor to issue approximately one or two Statements each year. Also, IAP will strengthen the recent trend of an increase in the number of member academies contributing to the drafting of Statements.

However, there is one aspect of Statements that needs special attention in the SP-I period: follow-up. As they usually deal with topical issues most Statements have a limited shelf life, but even so, in the SP-I period IAP must take action to ensure that Statements remain

visible with relevant decision-makers for as long as the issue in question should be on the agenda of these decision-makers. In this context IAP will also seek to coordinate its actions with other partners, especially ICSU.

**Decision 5: IAP will issue approximately one or two Statements a year**

*In the SP-I period IAP will continue to prepare and issue Statements, in principle no more than two times a year. IAP will also take action to ensure that Statements remain visible in decision-making arenas for as long as they are relevant.*

### 2.3. Programs

At present, IAP is engaged in four Programs: *Capacity building for young academies; Science education; Health education of women; and Water research and management*. In the SP-I period all these Programs will be (further) reviewed. With the exception of the Program on *Capacity building for young academies* – which is at the heart of the core theme “Empowering member academies” – such reviews will also address the question of whether a Program will be: (a) continued as a formal IAP Program; (b) decentralized, that is: placed within one or more regional networks of member academies; or (c) transferred to another organization or institution.

If a Program is decentralized or transferred, IAP may continue to serve as is a platform for informal coordination, while IAP should also take a decision on whether or not it can continue to fund (part of) the activities in question. Purpose of decentralization or transfer of ongoing Programs is to enable IAP to initiate new Programs with well-defined goals and to maintain focus on a limited set of signature Programs. Program review must also assess whether, and to what extent, a Program contributes to the SP-I core theme “Empowering member academies” and, more specifically, to the strengthening of the advisory and collaborative capacities of IAP member academies, especially in developing countries.

**Decision 6: IAP will review ongoing Programs and decentralize when desirable**

*In the SP-I period all ongoing IAP Programs will be reviewed. For three Programs review will also address the question whether they remain an IAP Program, are to be decentralized to a regional network or transferred to another organization.*

#### *Capacity building for young academies*

Clearly, of all ongoing IAP Programs the Program on *Capacity building for young academies* is closest to the SP-I core theme “Empowering member academies”: in fact it is indispensable if this core theme is to have any substance. It is for this reason that in the SP-I period it must remain an activity of IAP itself. While there will continue to be regional components, decentralizing the Program to a regional network or transferring it to another organizations does not appear a viable option.

As was the case in the past, the Program will continue to support not only existing academies, especially in developing countries, but also groups of scientists interested in

setting up an academy in their country or region. More specifically, in the SP-I period the Program will consist of the following activities, all designed to strengthen the advisory capacities of academies.

- IAP will prepare a *Toolkit* to support the creation and upgrading of academies consisting of a practical handbook outlining issues of organization and management that are often addressed in creating or modernizing an academy. This handbook will include a set of model-statutes and/or bylaws. If necessary, IAP will also arrange on-the-spot advise to scientists wishing to set up an academy.
- In view of the positive experiences so far, IAP will expand and enhance its support for *Study trips and Exchange programs* between the leadership and/or staff of (groups) of academies. Such support will be given in particular to study trips and exchange programs that focus on the capacity of academies to advise government and society. South-South and South-North initiatives have priority.
- In the past IAP has promoted the creation of *Regional networks* of academies of science, particularly from developing countries. In the SP-I period IAP will focus on strengthening the networks so created. In consultation with network Presidents or Co-Chairs IAP will support the development of mechanisms<sup>6</sup> to improve collaboration and information exchange. IAP will also support the development of cooperative relations between regional networks and the ICSU Regional Offices.
- As an organization of science academies IAP has no mandate and no intention to evaluate the work of its members. Even so, a member academy may request IAP to assist it with a self-initiated *Review of performance*. Provided IAP refrains from taking any substantive position, IAP may respond to such a request by suggesting independent experts and expertise. A pilot project could test this idea.
- New academies and those in small developing countries have *Special needs* to bring together adequate expertise to provide scientific advice to government or society. For example, these academies could benefit greatly from the help of scientists from the country, but working abroad. In the SP-I period IAP will develop mechanisms to support (established) member academies in meeting the special needs of these new and small academies.

**Decision 7: Capacity building for young academies remains a core IAP Program**

*As it is essential to the core theme “Empowering member academies”, the Program on Capacity building for young academies will continue to be an activity of IAP itself. It will focus on a specific set of activities designed to strengthen the advisory capacities of academies.*

**Science education**

IAP has been involved in issues of science education since the 2000 Tokyo General Conference and Assembly.<sup>7</sup> *Science education* has been a most successful IAP Program as in this Program IAP was able to take full advantage of its unique “selling point”: its

<sup>6</sup> Network Presidents or Co-Chairs could be asked to prepare jointly a proposal for such a mechanism and submit this to the IAP Executive Committee for approval.

<sup>7</sup> Even before that meeting, academies of science issued an important statement on science education in 1991 after a workshop at the Pontifical Academy of Sciences in Rome.

ability to engage the world's science academies. Indeed, IAP has succeeded in getting the issue of science education on the agenda of an increasing number of member academies, making these academies champions of science education reform in their respective countries. IAP acted as a clearing house for sharing expertise, experience and high quality curriculum materials and for tackling the question of evaluation. IAP also assisted in translating, adapting, assessing and improving such materials, especially from the "Hands-on" and the "La main à la pâte" programs of the American and French academies. Accordingly, there is every reason to continue *Science Education*.

However, after all these years it is appropriate to take stock and review the Program to determine whether it must remain an activity of IAP itself or whether it might be preferable to decentralize it to a regional network or networks of science academies. If the Program is to remain with IAP itself, the name of the Program must be changed in order to make clear to the outside world that the focus of the Program is on mobilizing and supporting the advisory capacities of IAP member academies in respect of science education. "Academies for science education" conveys this message.

**Decision 8: *Science education* remains with IAP or shifts to regional networks**

The Program on *Science education* will be continued, either as an IAP Program or as a decentralized Program of regional networks. If it remains an IAP Program, the name of the Program could be changed in *Academies for science education*.

***Health education and water research***

There are at present two more ongoing IAP Programs: *Health education of women* and *Water research and management*. Both Programs are relatively new compared with the Programs on *Capacity building for young academies* and *Science education*. Another difference with the Programs on *Capacity building* and *Science education* is that the Programs on *Health Education* and *Water research* focus on a specific (sub-)area of scientific research, rather than on a more general theme that cuts across disciplines. This suggests that in the SP-I period the Programs on *Health education* and *Water research* must be reviewed to determine how long IAP should continue to be involved beyond the initial period needed to launch the Programs with interested academies. After this initial launching period both Programs could be either kept inside IAP for some more time or be decentralized to a regional network or networks of academies of science. For *Health education* another option would be to share responsibility with the InterAcademy Medical Panel (IAMP) or to transfer it to IAMP.

**Decision 9: Status of *Health education* and *Water research* will be reviewed**

*IAP will review the Programs on Health education of women and Water research to determine how long it should remain involved in these Programs beyond the initial launching period.*

### ***New Programs***

It is of course essential that IAP does not freeze itself in a limited set of activities. For this reason IAP must develop in the SP-I period one or more new Programs. Any such new Program must address the core theme “Empowering member academies” and focus on the strengthening of the advisory capacities of academies, especially in developing countries. Each new Program must have well-defined goals. In competition with other topics yet to be suggested by member academies, the following ideas could be explored.

- Recognizing – as IAP does - the need for science to respond to the needs of society does not diminish in any way the importance of basic research. Yet, this essential fact is often overlooked by decision-makers and the public at large. An IAP Program on basic research could support member academies in advising government and society on the nature and role of basic research and on best practices in the management of basic research, including international cooperation.
- IAP could also set up a Program to enhance the quantity and quality of information on issues of science and society that is being exchanged among member academies. This for example by creating a mechanism to transfer information on topical science and society issues from academies with the capacity to collect and generate such information to academies with no or little capacity in this respect.<sup>8</sup>

In launching new Programs IAP must seek to increase its visibility as an organization, while it should also seek to disseminate any (interim-)results from a Program – new or old – to the widest possible audience. Organizing workshops and conferences with relevant decision-makers – national, regional or global – might be most helpful here.

**Decision 10: IAP will try to launch new Programs and enhance their visibility**

*If resources permit, IAP will launch approximately two new Programs on condition they fit within the core theme “Empowering member academies”. Ideas to be further explored relate to a Programs on basic science, fostering information exchange and modified forms of ongoing Initiatives. The visibility of Programs will be enhanced.*

## **2.4. Initiatives**

### ***Ongoing Initiatives***

At the moment IAP is involved in four Initiatives: (a) Access to scientific information; (b) Biosecurity; (c) GMOs; and (d) Natural disaster mitigation. All Initiatives have a limited timeline and in principle they will come to an end once they have produced a report, a statement or yet another action. Of the four ongoing Initiatives, two (Access to scientific information and Biosecurity) are likely to be completed in the near future, but they may also be continued in modified form. Natural disaster mitigation is relatively new and IAP must decide, in close consultation with ICSU, on how to proceed with it. The GMO Initiative will draft a statement or specific study report before the end of 2006.

<sup>8</sup> One possible focus of such a mechanism could be the actions and experiences in implementing the first IAC report on capacity building “Inventing a better future”.

**Decision 11: IAP reviews the Initiatives Natural disaster mitigation and GMOs**  
*The Initiative on Biosecurity will be completed in the near future, while IAP must decide on the future of the three other ongoing Initiatives, that is: Access to scientific information, Disaster mitigation and GMOs.*

### ***New Initiatives***

Assuming that some ongoing Initiatives will be completed in the near future, IAP must develop two to three new Initiatives for the SP-I period. However, as Initiatives are inherently designed to respond to topical issue of some urgency, it is difficult to plan them in advance and in the abstract. Even so, some tentative ideas for new Initiatives should be explored. Any new Initiatives should be a launched only after careful consideration of the work done by other organizations, especially ICSU.

However, the challenges identified in chapter II may provide guidance here.

- One challenge mentioned in chapter II relates to the proliferation of science organizations. One particular aspect of this issue is the relation between IAP and its own brainchild, the InterAcademy Council. Although both organizations cooperate in the best possible way, experience so far suggests that the potential for synergy between the two organizations has not yet been fully exploited. For this reason IAP and IAC should develop in the SP-I period one or two joint projects on issues of global concern. Ideally, such projects should also involve ICSU. So as to ensure their visibility to a large audience of decision-makers, these projects could focus on issues to be addressed in a high-level intergovernmental conference, such as a G-8 meeting.<sup>9</sup>
- Another challenge identified in chapter II is the need to bring together the natural sciences and the social sciences in the advisory activities of academies. In the SP-I period IAP could therefore take the lead in initiating an advisory project that engages both the natural sciences and the social sciences. This could be a new Initiative, but it seems more effective to re-define an ongoing Initiative – such as Natural disaster mitigation - to include the social sciences. Yet another possibility is for IAP to join a project of another organization that integrates natural and social sciences.<sup>10</sup>

As with Programs, when launching new Initiatives IAP must seek to enhance its visibility as an organization, while it should also widely disseminate any (interim-) results.

**Decision 12: IAP will try to launch new Initiatives and enhance their visibility**  
*IAP will initiate approximately three new Initiatives to replace those that will be completed in the near future. Ideas to be further explored are joint IAP/ IAC(/ICSU) projects and studies involving both the natural and the social sciences*

<sup>9</sup> An important opportunity arises when the IAC will have completed its report on transitions to sustainable energy systems, given the certain need for follow-up

<sup>10</sup> Topics are plentiful, but one possibility is for IAP (and other interested organizations) to commission a study by social scientists on how to improve the effectiveness of the advisory role of science academies.

### 3. STRENGTHENING THE ORGANIZATION

As was noted in chapter II, IAP is also facing challenges in relation to its internal organization. In essence these challenges arise from the fact that the funding now being provided by the Italian government requires IAP to make a transition from the rather loose and informal structure of a pioneering organization to the more highly organized structure of a mature organization. This transition relates both to leadership and staff and to procedures and systems.

#### 3.1. Leadership and staff

As a new Co-Chair needs to be elected already at the 2006 General Assembly, the single most important leadership issue in the SP-I period (2007, 2008 and 2009) is the question of how to fill the vacuum left when the incumbent Executive Director of IAP's host academy – TWAS – retires sometime during that period. The present TWAS Executive Director has most generously and effectively contributed his expertise, time and network to IAP, but it is possible that his successor will not be able to do the same in view of the fact that both TWAS and IAP are enhancing their ambitions and expanding their activities. The implication is that in the SP-I period IAP must define the tasks and responsibilities of a Director to head its Secretariat at TWAS and, on that basis, request TWAS to consider the appointment of a first IAP Director. Before doing so, IAP must of course carefully review the budgetary implications.

Even with the appointment of a Director, the Secretariat of IAP in Trieste may require additional strengthening in terms of size, composition and role. The present IAP Secretariat is both remarkably efficient and extremely small. It has very few fulltime positions, while much of the work is parceled out, on a part time basis, to the staff of TWAS or other organizations in the Trieste area. Even if it is accepted that IAP will always be a small organization in terms of dedicated staff, it seems unlikely that the present arrangements will suffice now that IAP is expanding its activities. As the IAC is facing a similar situation, it has been suggested that it may be to the advantage of both organizations to merge the two Secretariats.<sup>11</sup> At this stage these issues can only be placed on the agenda, but in the SP-I period answers must be developed.

Regardless of how the above issues develop, the IAP Executive Committee plays, and will continue to play, a most crucial role in IAP decision-making. In the past the Executive Committee met two times a year, achieving near 100 percent attendance. In view of the challenges ahead the Executive Committee will continue to meet at least two times a year in the SP-I period.

**Decision 13: IAP will seek to appoint a Director and to strengthen its Secretariat**  
*In the SP-I period IAP will seek to appoint a Director, while it will also take other actions to strengthen the IAP Secretariat at TWAS. In order to fulfill its role as IAP's most crucial decision-making body, the EC will continue to meet twice a year*

<sup>11</sup> At its January 2006 meeting the IAC Board approved the setting up of a joint IAC-IAP working group to explore this option.

### 3.2. Procedures and systems

So far IAP has been a rather informal organization and for an organization in its pioneering phase this is the only way to move forward. However, now that IAP has established itself, the need arises to develop more formal procedures and systems.

#### *Procedures for decision-making*

The new Statutes and Rules of Procedure contain detailed provisions on the tasks, responsibilities and decision-making of the General Assembly and the Executive Committee. Of special importance in this context is that the new Rules of Procedure also contain detailed provisions on the procedures for the issuing of Statements.<sup>12</sup>

For Programs and Initiatives such provisions do not yet exist. However, it is most important that in the SP-I period IAP takes action to enhance transparency in relation to decisions-making on new Programs or Initiatives, basing it on explicit criteria. Such transparency is essential not only for IAP member academies, but also for organizations and institutions that fund IAP. As a minimum, such procedures should cover the following aspects.

- Submission of proposals for new Programs or Initiatives. The following rules could be adopted: (a) proposals can only be introduced by member academies and not by individuals; (b) each proposal must indicate the results to be achieved; the timeline for achieving these results; and the financial, human and other resources required; and (c) proposals must state the level and timing of funding to be provided by IAP, also in relation to the funding obtained or sought from other sources.
- Approval of proposals for Programs and Initiatives. The following rules could be adopted: (a) the Executive Committee will only approve proposals that are in line with the current Strategic Plan; (b) all proposals must be reviewed by independent experts before they are submitted (preferably by email) to the Executive Committee for decision; (c) only proposals that are of benefit to a group of academies will be approved and the results must be transferable to all interested academies; and (d) the Executive Committee only approves a proposal when funding has been arranged for at least a significant first phase.

It is of course important to ensure that rules and procedures as just suggested do not result in bureaucratic delays, making impossible for IAP to act quickly and effectively. Strict time limits must therefore be imposed and kept.

Annex I presents a provisional draft of a Protocol incorporating the above principles. Initially, such a Protocol could be adopted by the Executive Committee as this would make it easy to change the Protocol in the light of experience gained. However, once the Protocol has been tested in actual practice, it should be included in the IAP Rules of Procedure.

---

<sup>12</sup> In fact, three situations are distinguished: (a) Statements on issues of global concern; (b) Statements on urgent issues; and (c) Statements on exceptionally urgent issues. For each situation a different procedure is prescribed in considerable detail. The reason that these provisions were included in the new Rules of Procedure is that Statements, more often than not, deal with controversial issues and that each IAP member academy needs to be sure that its name is attached to a Statement only if it explicitly endorses it.

**Decision 14: IAP will develop improved procedures for programmatic decisions**

*In the SP-I period IAP will develop more explicit and transparent criteria-based procedures of peer review for proposals of new activities, especially new Programs and Initiatives. However, these procedures should not result in unnecessary delays.*

***Evaluation and accountability***

Transparency in relation to decision-making is an important element of accountability. However, accountability involves more: IAP also needs improved mechanisms for monitoring and evaluating its activities to determine whether or not they are on track and will produce the results that were originally promised. Such mechanisms could be constructed on the basis of the following elements.

- Each year the academy or academies in charge of a Program or Initiative must submit a report to the Executive Committee outlining: (a) progress made so far; (2) areas or aspects where the Program or Initiative is on track; (c) areas or aspects where the Program or Initiative deviates from the original plan; and (d) actions taken to remedy such deviations.
- All such reports should be submitted to one more independent experts, not involved in the Program or Initiative, but knowledgeable in the area concerned. These experts review the report and submit their views to the Executive Committee.
- The Executive Committee reviews the report and the comments received from the experts and it approves IAP funding for the next fiscal year only if its satisfied with the progress and performance of the Program or Initiative.

With such improved mechanisms in place IAP will convey to donors and sponsors a message that it holds itself responsible for ensuring that any funds made available to IAP are wisely spent and that the activities they fund will achieve the intended results.

Annex II presents a provisional draft of a Protocol incorporating these principles. Like the Protocol on decision-making, this Protocol could be adopted by the Executive Committee, but ultimately it should be included in the Rules of Procedure as well.

**Decision 15: IAP will develop improved mechanisms to enhance accountability**

*In the SP-I period IAP will develop improved mechanisms to monitor and evaluate the progress of its activities, especially Programs and Initiatives.*

**3.3. Funding**

Last, but not least: funding. As was mentioned before, the financial situation of IAP has improved significantly as a result of legislation adopted by the Italian Parliament that provides IAP with a relatively stable, long term source of income. Undoubtedly, it is this development that allows IAP to now move ahead in a fundamental way. Yet, however beneficial the financial support of the Italian government is to IAP, IAP continues to have every reason to look for additional sources of funding. This not only in view of its agenda for the future, but also as a way of broadening support for IAP. Also, more diversity in

funding sources is essential to protect IAP and its activities against fluctuations and delays that are bound to occur if IAP continues to depend on a single source of income.

Whatever level of funding is available, it is of course of crucial importance that future IAP budgets reflect the choices and priorities set by SP-I. This implies that after the formal adoption of SP-I the IAP Executive Committee must develop a new budget that is in line with SP-I. One of the major challenges facing the Committee is finding the right balance between support for programmatic activities and support for strengthening the Secretariat.

**Decision 16: IAP will seek additional funding and develop a SP-I based budget**  
*In the SP-I period IAP will seek to raise at least Euro 500.000 from donors and sponsors other than the Italian government. After the adoption of SP-I the EC will develop a revised budget*

## IV. CONDITIONS FOR SUCCESS

The plans and ideas set out in the previous chapter will not turn into reality without considerable investment of expertise, time and money. It is therefore appropriate to raise the question of what is needed to ensure success. Is SP-I perhaps too ambitious; what are the risks that must be avoided; and, positively, what must be done to maximize the chance of success?

### 1. UNCERTAINTIES AND RISKS

Presently, IAP is involved in four Programs and four Initiatives. Of all these activities, some are likely to be completed in the near future (Access to scientific information, Biodiversity and GMOs), while others are likely to be decentralized in due course to regional networks or transferred to other organizations. This suggests that in terms of volume there is room to take up new Programs and Initiatives. However, actual funding levels available for new activities will depend on how much extra money is allocated to strengthening the Secretariat and on how much funding IAP continues to allocate to activities that have been decentralized.

There are some other uncertainties and risks.

- IAP and its decision-making bodies have little experience with strategic plans and their implementation. However, IAP's host academy – TWAS – has a great deal of relevant experience, while the new Statutes and Rules of Procedure provide clear guidance on the procedures and responsibilities to approve and implement SP-I.
- A more significant uncertainty is that IAP may not succeed in mobilizing the support of its members academies to the extent that is required for an effective and successful implementation of SP-I. This is indeed a most crucial issue as each and every activity of SP-I requires input from member academies, always in terms of time and expertise, but sometimes in terms of money as well.
- Equally important is the question whether the IAP Secretariat will be able to handle the increased workload that will result from SP-I, especially if and when the incumbent TWAS Executive Director retires.
- Lastly, even with the funds now available to IAP, there is no guarantee that IAP will have sufficient financial resources to undertake all activities that have been discussed in chapter III. Also, being dependent upon a single donor has risks of its own.

**Decision 17: SP-I is not without uncertainties and risks, but none seem fatal**

*There are several uncertainties and risks, the most significant being the ability of IAP to mobilize member academies, the retirement of the TWAS Executive Director and IAP's dependency on a single source of funding.*

### 2. ACTIONS TO BE TAKEN

The above uncertainties and risks appear quite manageable, particularly if IAP – that is: the Executive Committee – takes the following decisions.

- The Executive Committee will monitor and review all ongoing IAP Programs and Initiatives to ensure that they are on track and are likely to achieve the results that were originally planned.
- The Executive Committee will rely on the new procedures discussed in chapter III, paragraph 3.2 (see also Annex I) in making decisions in relation to ongoing or new IAP Programs and Initiatives.
- In approving new Programs and Initiatives the Executive Committee will consider the capacity of the Secretariat to support such new activities and, if necessary, it will act to strengthen the Secretariat.
- Perhaps most important: the Executive Committee will determine as soon as possible that the IAP Secretariat requires a Director and it will request TWAS to consider appointing such a Director as soon as the incumbent TWAS Executive Director retires.
- As soon as possible after the approval of SP-I, the Executive Committee will develop a budget reflecting a balance between the costs of the SP-I programmatic priorities and the costs of strengthening the Secretariat, especially of appointing a special IAP Executive Director.

**Decision 18: Prompt action by the Executive Committee will reduce the risks**

*The Executive Committee can, and must, take a number of concrete actions to minimize the uncertainties and risks facing SP-I. Bringing on board a special Director as soon as the need arises is the most important one.*

### 3. LONG TERM PERSPECTIVE

From a long term perspective the success of the present – and first – IAP strategic plan will also be determined by the follow-up that is given not only to the plans and ideas outlined in the preceding chapters, but also to the process of developing strategic plans. Ideally, IAP should make this process a permanent activity that is used as a basis to report to the IAP General Assembly on the work and achievements of the previous years and to seek approval and support for the work and hopes of the next couple of years. An important condition for long term success is therefore that IAP continues the strategic planning process that has been initiated with SP-I. For that reason it is essential that the ad hoc Strategy Group that supported the development of SP-I remains in function

**Decision 19: IAP has a permanent Strategy Group**

*The ad hoc Strategy Group remains in function with a membership to be determined by the Executive Committee at a later stage.*

## V. FINAL OBSERVATION

This is the first Strategic Plan ever for IAP. As such it marks an important moment in the history of IAP: in the terms used before, it is the result of, and it contributes to, the transition from a pioneering organization to a more stable and mature organization.

This is as it should be.

However, for many persons who gave IAP their expertise, time and energy in the early, pioneering days, the transition to a new and different IAP may also evoke a sense of nostalgia and perhaps even loss. In the past IAP has been more than an idea or a meeting place – for many it also was a circle of friends and friendship. To those who cherish that side of IAP it may appear as if things like “Strategic Plan”, “Statutes”, “Rules of Procedure” and “Protocols” – however useful they are – diminish the sense of informality, shared ideals and indeed friendship that also is IAP.

It does not have to be so.

Yes, the transition from a pioneering organization to a more mature organization is unavoidable if IAP is not to run out of steam. But even so, there is no law saying that strategic plans, statutes, rules of procedure and protocols must destroy informality, shared ideals and friendship. On the contrary: informality, shared ideals and friendship are essentially matters of the heart, while this Strategic Plans is largely a matter of the mind.

May this Strategic Plan indeed change the minds of those working with and for IAP. But may it not change the place of IAP in their hearts.

## **ANNEX I: DECISION ON PROGRAMS AND INITIATIVES - DRAFT PROTOCOL**

1. Proposals for new IAP Programs and Initiatives can only be submitted to the Executive Committee in written form by one or more IAP member academies. If time permits, such member academies must first submit a proposal in outline form to seek informal input from the members of the Executive Committee.
2. Although proposals may be tabled at all times, the IAP Executive Committee will decide on all proposals for new Programs and Initiatives tabled in the preceding period at its meeting in the fall of each year unless there are exceptional circumstances of urgency and timing.
3. The definitive proposal must, as a minimum, provide information on:
  - a. Member academies that will participate in the Program or Initiative;
  - b. The member academy or academies that will lead the Program or Initiative;
  - c. The problem or problems that the Program or Initiative is to address;
  - d. The work done by other organizations on this problem or related problems;
  - e. The result to be achieved and/or the products to be delivered;
  - f. Activities to be carried out and the methodology to be used;
  - g. A schedule for interim-milestones and final completion;
  - h. The human and financial resources that will be required;
  - i. The amount and timing of the financial support that is sought from IAP; and
  - j. The funding obtained or sought from other sources..
4. In anticipation of receiving a definitive proposal the IAP Co-Chairs will identify one or more independent reviewers not associated with the proposal and its sponsoring member academies. The Co-Chairs will submit the definitive proposal to him/her/them for review, requesting him/her/them to assess the proposal, also in the light of the current IAP Strategic Plan.
5. The Executive Committee will not decide on a proposal for a new IAP Program or Initiative without having first received the opinions of the reviewer(s) unless there are exceptional circumstances of urgency and timing.
6. In approving (or disapproving) a proposal on a new IAP Program or Initiative the Executive Committee will give particular attention to the following considerations:
  - a. To what extent contributes the proposal to the implementation of the current Strategic Plan?
  - b. Is there overlap or even duplication with the activities of other international science organizations?
  - c. Is it likely that the intended results or products will indeed be achieved with the methodology to be used and with the resources sought?
  - d. To what extent are the results or products of the Program or Initiative useful or of interest to other IAP member academies?
  - e. Can IAP funds be made available for this particular Program or Initiative, also in the light of other priorities facing IAP?

## **ANNEX II: EVALUATION OF PROGRAMS AND INITIATIVES - DRAFT PROTOCOL**

1. In January of each year the academy or academies in charge of an IAP Program or Initiative will submit a report to the Executive Committee on the progress made in the preceding year.
2. As a minimum such a progress report will cover the following aspects:
  - a. The activities carried out since the last report;
  - b. The funds expended for these activities, especially those provided by IAP;
  - c. Unexpected developments and/or delays;
  - d. Whether or not the original schedule has been maintained; and
  - e. Whether or not the results or products will be achieved as originally planned.
3. The Executive Committee will appoint a standing review and evaluation committee to advise it on the progress reports it receives from member academies in charge of an IAP Program or Initiative.
4. The Executive Committee will discuss all progress reports at its meeting in the spring of each year unless there are exceptional circumstances of urgency and timing.
5. If a Program or Initiative is experiencing difficulties, the Executive Committee can make suggestions to overcome these difficulties. In case of serious difficulties the Executive Committee may decide to engage one or more independent experts to advise the academy or academies in charge of the Program or Initiative. Such advice will always be copied to the Executive Committee.
6. The Executive Committee can decide to terminate a Program or Initiative and/or suspend IAP funding, but it will do so only if it determines that it has become impossible to achieve the original results/products or to achieve results/products of equal value to IAP. Before making such a determination the Executive Committee will seek the advice of at least two independent experts.