REPORT TO COUNCIL ON THE TRANSFORMATION OF THE SAIP

SUBMITTED BY THE TRANSFORMATION COMMITTEE OF THE SAIP

29 April 2002
# Table of Contents

1. Preamble ........................................................................................................................................................................... 2

2. Language Policy and Logo .................................................................................................................................................. 3

3. Conference Matters .............................................................................................................................................................. 4

4. Africa .................................................................................................................................................................................. 4

5. Structure of Council ............................................................................................................................................................ 5

  5.1. Core Council Structure .................................................................................................................................................... 5

  5.2. Portfolio Committees .......................................................................................................................................................... 6

6. Specialist Groups ................................................................................................................................................................. 8

7. Regional Representation ....................................................................................................................................................... 9

8. Referendum ......................................................................................................................................................................... 9

9. Role and Purpose of the SAIP and Strategic Planning .................................................................................................... 9
1. **Preamble**

The Transformation Committee of the SAIP was established in terms of a resolution of Council with the following terms of reference:

1. Council recommends that the committee consist of 6 members, of which three have been nominated by council. The other 3 should be elected at the AGM (if possible) to represent the membership with three members, one of which is a student member.

2. The transformation process should address the following issues related to the SAIP:
   a. Image

   Everyone with a stake in physics should regard the SAIP as a modern organisation, responsive to a changing environment.

   b. Future

   The future of the SAIP should be ensured by making it relevant, inclusive and an interactive organisation.

   c. Equity

   This not only includes being proactive to ensure representation of all interest groups, but the relationship with respect to industry and government should also be addressed.

3. These issues are highly inter-linked, and the following issues should be addressed:
   a. The role and purpose of the SAIP
   b. Language
   c. Representation of the SAIP, both in terms of individuals (professional physicists, students, interested persons) and government and industry
   d. Conference matters
   e. Africa
   f. Council, e.g. should terms in office be limited?
   g. Logo
   h. Relationship with government and industry
   i. Specialist groups roles
   j. Establishment of a fund outside the normal budget for bursaries, special projects, etc.

Even these issues are interdependent and cannot be addressed in isolation from each other.

The Committee membership is as follows:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. N. Chetty</td>
<td>Ms. J. Padayachee</td>
</tr>
<tr>
<td>Prof. J. Malherbe</td>
<td>Dr. P.A. Whitelock</td>
</tr>
<tr>
<td>Dr. A. Matthews</td>
<td>Prof. E. Zingu</td>
</tr>
</tbody>
</table>

Dr Whitlelock chaired the first two meetings and Prof. Zingu chaired the third meeting after Dr Whitelock became President of the SAIP.

The Committee met on the following days:

5 June 2001 in Cape Town
5 July 2001 in Durban (during the 2001 SAIP Annual conference)

27 October 2001 in Cape Town.

The Committee also communicated electronically between meetings.

The following broad issues were debated and recommendations were formulated:

- Language policy and logo
- Council Composition
- Specialist groups
- Regional representation

The terms of reference included certain issues such as “Relationship with government and industry” that were not considered in depth by the Transformation Committee, and consequently no recommendations emanated from the discussions of the Committee. Those issues should be considered as part of, or as a consequence of the review of Physics in South Africa that is being planned.

2. Language Policy and Logo

It is recommended that a referendum be held. The following question (or similar) should be posed to the membership:

Should the language policy of the SAIP remain as is stated in the constitution or should the language of the Institute be English for the following reasons:

- it is the common language of science
- it saves costs by eliminating mandatory duplication
- we wish to attract physicists from elsewhere, particularly elsewhere in Africa
- it has become de facto the working language of the SAIP

The current constitution of the SAIP does not contain any explicit policy clauses in respect of the operating language. The following phrases referring to language are contained in the current constitution of the SAIP:

1. TITLE

1.1. The English title of the Association shall be

“The South African Institute of Physics”

The Afrikaans title of the Association shall be

“Die Suid-Afrikaanse Instituut vir Fisika”

1.2. The Institute shall be a bilingual organisation and in its publications and at its meetings both Afrikaans and English shall be freely used.

4.3 Privileges

4.3.4. Ordinary members, Emeritus members, Retired members and Honorary members may use the letters MSAIP after their name (or Afrikaans LSAIF, or other for other languages as approved by the Council).

Since the logo contains the acronyms “SAIP” and “SAIF”, it could be affected by a change in the language policy and would have to be reviewed in the event that the language policy changes. The logo as such has not been reviewed since such an exercise should best be done by persons with the necessary technical expertise.
3. Conference Matters

The Transformation Committee proposes the formation of a standing committee of Council: Conference Committee. One of the tasks of the Conference Committee should be the facilitation of numerous conferences to be held each year. This could form a possible source of income for the SAIP.

It is suggested that the Annual Conference of the SAIP should become a biennial conference. The Committee is aware of several opinion surveys that have been held to determine the most appropriate time of the year for such a conference, but the Committee proposes that the month of January be considered for the major conference and that other conferences in specialized fields of physics be held in the period between the biennial major conferences. The requirement for an Annual General Meeting of the SAIP will have to be reviewed if a major conference is not held annually.

4. Africa

In respect of countries or regions in Africa where physical societies similar to SAIP operate, the SAIP should establish a working relationship with such bodies. There are several countries in Africa where physicists are not organised in societies or institutes but participate in regional or international networks that are discipline specific such as Space Science, Laser Physics, Materials Science, etc. The South African Institute of Physics, through its specialist groups, could become a node in these networks and contribute to the development of physics on the continent.
5. Structure of Council

In order for Council to be more effective, the Transformation Committee recommends that the composition of Council be changed to the following:

### 5.1. Core Council Structure

<table>
<thead>
<tr>
<th>Current Composition</th>
<th>Proposed composition</th>
<th>Advantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>President of the SAIP</td>
<td>President of the SAIP</td>
<td>Presidency more directly influenced by the membership</td>
</tr>
<tr>
<td>Elected by members of Council from amongst members of Council</td>
<td>Elected by members of the SAIP as President Elect for a term before assuming the position of President automatically.</td>
<td></td>
</tr>
<tr>
<td>Vice President of the SAIP</td>
<td>President Elect of the SAIP</td>
<td>Continuity</td>
</tr>
<tr>
<td>Elected by members of Council from amongst members of Council</td>
<td>Elected by members of the SAIP as President Elect for a term before assuming the position of President automatically during the next term.</td>
<td></td>
</tr>
<tr>
<td>Secretary to the SAIP</td>
<td>Secretary to the SAIP</td>
<td>No change</td>
</tr>
<tr>
<td>Elected by members of the SAIP from amongst SAIP members for the specific portfolio.</td>
<td>Elected by members of the SAIP from amongst SAIP members for the specific portfolio.</td>
<td></td>
</tr>
<tr>
<td>Treasurer to the SAIP</td>
<td>Treasurer to the SAIP</td>
<td>No change</td>
</tr>
<tr>
<td>Elected by members of the SAIP from amongst SAIP members for the specific portfolio.</td>
<td>Elected by members of the SAIP from amongst SAIP members for the specific portfolio.</td>
<td></td>
</tr>
<tr>
<td>Member of Council, elected by outgoing Council</td>
<td>Immediate Past President</td>
<td>Continuity</td>
</tr>
<tr>
<td>6 (including President and Vice President) Members of Council elected by postal ballot by the members of the SAIP. Various portfolios are assigned to or volunteered by members of Council after they have been elected on to Council</td>
<td>4 Members of Council are elected by members of the SAIP into specific portfolios on Council</td>
<td>Expectation of members of SAIP in respect of a particular portfolio will guarantee greater delivery.</td>
</tr>
<tr>
<td>Chairs of the Specialist Groups</td>
<td>See section 6 on Specialist Groups</td>
<td></td>
</tr>
<tr>
<td>Student member</td>
<td>Inclusivity in respect of student members of the SAIP</td>
<td></td>
</tr>
</tbody>
</table>

The committee also recommends the following:

- That Council members be limited to 4 consecutive terms.
- That Council has its own mission statement, vision statement, list of goals, and strategic plan.
• That Council utilises its decision-making powers, and limit referrals to the Annual General Meeting. This could increase the responsiveness of Council.
• That a permanent secretariat be established with salaried personnel.
• That a permanent postal address for the SAIP is created.
• That Council meetings be limited and greater use be made of e-mail and telephone conferencing.

5.2. Portfolio Committees

It is proposed that each member of Council that is responsible for a particular portfolio becomes the Chair of the relevant Portfolio Committee. The Portfolio Committee shall consist of about six members.

The Committee shall meet, interact and communicate when necessary in order to carry out the duties and responsibilities of the particular Portfolio Committee.

The terms of reference, mission, and objectives of each Portfolio Committee shall be determined by Council.

Establishment of Portfolio Committees

<table>
<thead>
<tr>
<th>Method</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
</table>
| Chairs of committees are elected to the specific portfolios on Council. The chairs then invite and persuade members of the SAIP to serve on the Portfolio Committee. | • A team shares the responsibility and workload, instead of an individual.  
• Since it is the responsibility and prerogative of the Committee Chair to recruit people to serve on the Portfolio Committee, those members will hopefully be cooperative.  
• There will always be at least one member of Council on each Portfolio Committee. This will ensure the necessary liaison between Council and the Committee. | • The SAIP is a relatively small community and it might be difficult to find 6 members to serve actively on each of the Portfolio Committees.  
• The costs to communicate and meet, although it is understood that most of the communication will take place via email |
The following portfolios are recommended:

<table>
<thead>
<tr>
<th>Current Portfolios</th>
<th>Proposed Portfolios</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liaison (National bodies)</td>
<td>Government and Industrial Liaison</td>
<td>• Interfaces with DACST, the NRF, DTI, DoE, etc. Promotes physics in industry and helps create a database of industries willing to and interested in employing physicists. Secures industrial sponsorships for physics projects</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Charged with securing funds and sponsorships for the SAIP</td>
</tr>
<tr>
<td>Liaison (International)</td>
<td>International Liaison</td>
<td>• Interfaces with the IUPAP and other International Physical Societies, securing bilateral agreements between sister societies, liaising with physicists in Southern Africa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Establish link with South Africa</td>
</tr>
<tr>
<td>Communication and Website</td>
<td>Publicity and Information</td>
<td>• Maintains an active and current SAIP Web site, produces publicity materials promoting physics to learners, students and the general public in South Africa, surveys the membership on a regular basis, maintains a database of physics alumni</td>
</tr>
<tr>
<td>Marketing</td>
<td></td>
<td>• Tasked with increasing the membership of the SAIP especially physicists from industry and from SADC</td>
</tr>
<tr>
<td>Education</td>
<td>Education</td>
<td>• Gets involved in aspects related to the teaching of physics in South Africa.</td>
</tr>
</tbody>
</table>
6. Specialist Groups

It is proposed that the number of specialist groups be reduced to 4 and that the chairs of each Specialist Group be a member of Council.

The following Specialist Groups are recommended for purposes of representation on Council:

<table>
<thead>
<tr>
<th>Current Specialist Groups</th>
<th>Proposed Specialist Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Physics Interest Group</td>
<td>Applied and Industrial Physics</td>
</tr>
<tr>
<td>Astrophysics</td>
<td>Astrophysics and Space Science</td>
</tr>
<tr>
<td>Plasma and Solar Terrestrial</td>
<td></td>
</tr>
<tr>
<td>Nuclear, Radiation and Particle Physics</td>
<td>High Energy and Nuclear Physics</td>
</tr>
<tr>
<td>Theoretical Physics</td>
<td></td>
</tr>
<tr>
<td>Physics Education</td>
<td>Physics Education</td>
</tr>
<tr>
<td>Solid State and Materials Science</td>
<td>Condensed Matter and Solid State Physics</td>
</tr>
<tr>
<td>Laser Optics and Spectroscopy</td>
<td>Molecular Physics and Optics</td>
</tr>
</tbody>
</table>

Present By-Laws pertaining to the Specialist Groups:

5. SPECIALIST GROUPS

5.1 Council may at its discretion or upon petition by at least 10 members of the Institute create a Specialist group within the Institute charged with the advancement and diffusion of the knowledge of a specific subject or subjects in pure or applied physics by the holding of meetings or otherwise.

5.2 Membership of a Group shall be open to all members of the Institute. Outside interested persons may be admitted as non-voting members on payment of such further fees as the Council shall determine.

5.3 Each Group shall elect a committee. Officers of the committee shall be elected from members of the Institute unless Council otherwise so determines. Ordinary members of the committee may include non-voting outside persons.

5.4 The onus is on the Group to state clearly that they do not represent the Institute in any discussion with any outside body on any matter whatsoever beyond those concerning the arrangements for meetings or the supply of technical information for the benefit of the member of the Group unless they have obtained prior authority from Council.

5.5 A Group shall not commit Council in any way, financially or otherwise, without prior authority from Council.

5.6 Any Group may be dissolved at the discretion of Council.

The operation of the Specialist groups is proposed to change in the following ways:

- The first task of the Specialist Group would be to develop a vision and a mission for the group.
- Regular Newsletter to improve communication between members
7. Regional Representation

Based on the experience in countries such as the Netherlands, regional representation is not considered to be a basis for representation on Council. However, institutions (universities) in the various regions should utilise the existing regional consortium structures (esATI, CHEC, FOTIM, etc.) to interact with each other, should they find it impossible to approach their colleagues in the region for support, exchange of views, information, and other forms of collaboration.

8. Referendum

It is proposed that a referendum be held to canvas the opinion of members of the SAIP in respect of the following:

- Language policy of the SAIP
- Composition of Council
- Specialist groups

9. Role and Purpose of the SAIP and Strategic Planning

It is proposed that the Council implements a planning process where matters such as the mission and vision of the SAIP are reviewed. The results of the various surveys, the report on the future of Physics and the list below of what can be expected of the SAIP, should be used in the planning exercise:

- The voice of physicists in SA
- Maintain a database of physicists, including those in industry
- Keeping physicists informed about events and developments related to physics
- Liasoning with government
- Making input into legislation relating to science, education, universities, technikons
- Advising funding organisations
- Promoting new fields of physics
- Liasoning with international bodies
- Sponsoring attendance at conferences, special projects, etc
- A conduit for information about jobs, consultancies, scholarships (local and abroad)
- Marketing physics to future employers
- Providing a list of available expertise in physics for the industry
- Making input to curriculum development (universities, schools, technikons)
- Involved in the review of physics departments under threat of closure
- Marketing physics to school pupils and students
- Co-ordinating and awarding of bursaries

The proposals contained in this report provide a framework for restructuring the South African Institute of
Physics to enhance the role that it plays in South Africa. The implementation of those proposals that will be accepted by Council and the members of the Institute will require the commitment of everyone associated with physics in South Africa. While we recognise that resources are often the limiting factor for executing a strategy, the commitment of the SAIP to transformation and renewal is a first step in accomplishing change towards improvement of its services to physics in South Africa. Bold and visionary action will be required to achieve the objectives that were envisaged with Council’s commitment to transformation.

MS J PADAYACHEE       PROF EC ZINGU
Secretary          Chair

Monday, 29 April 2002