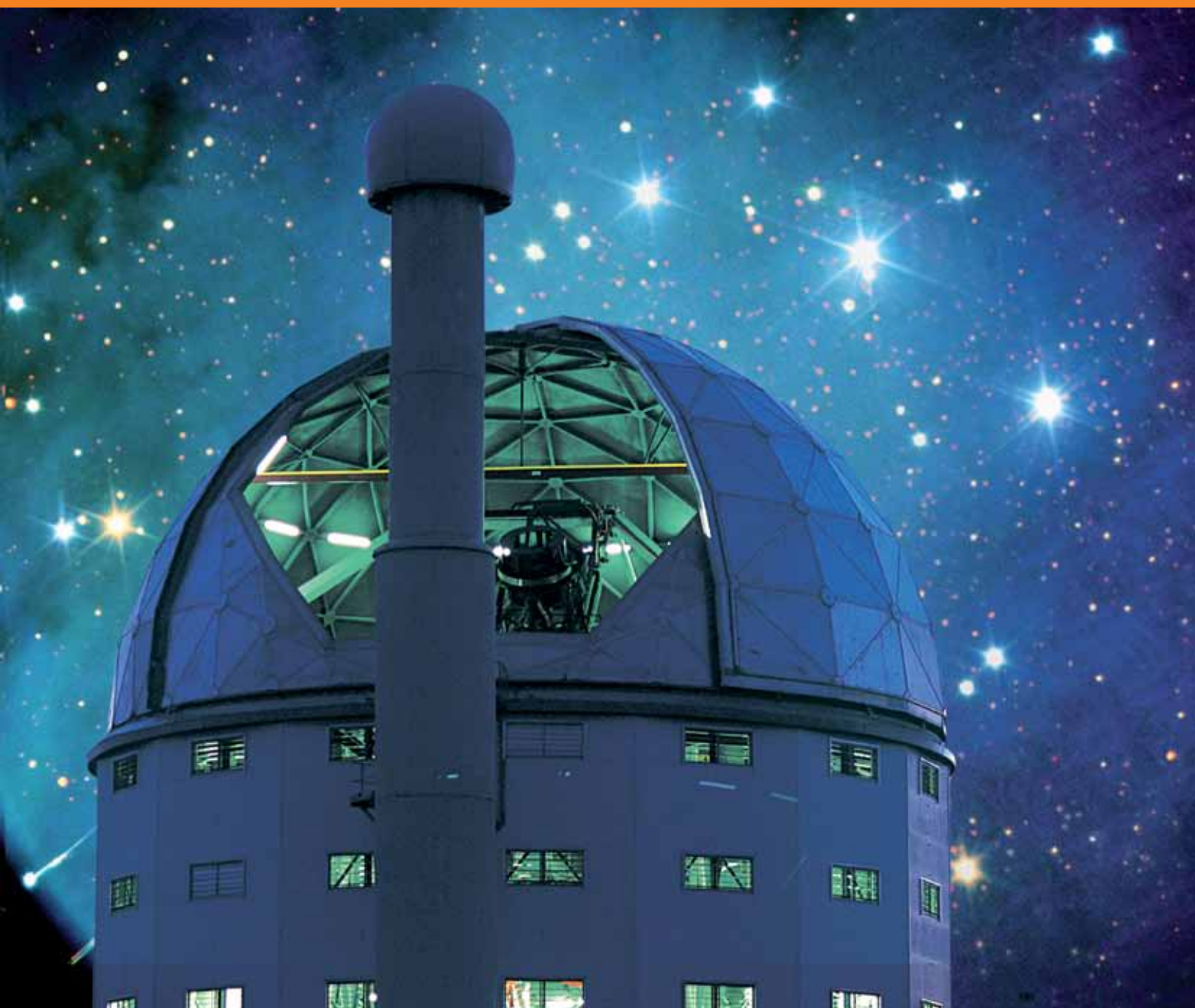


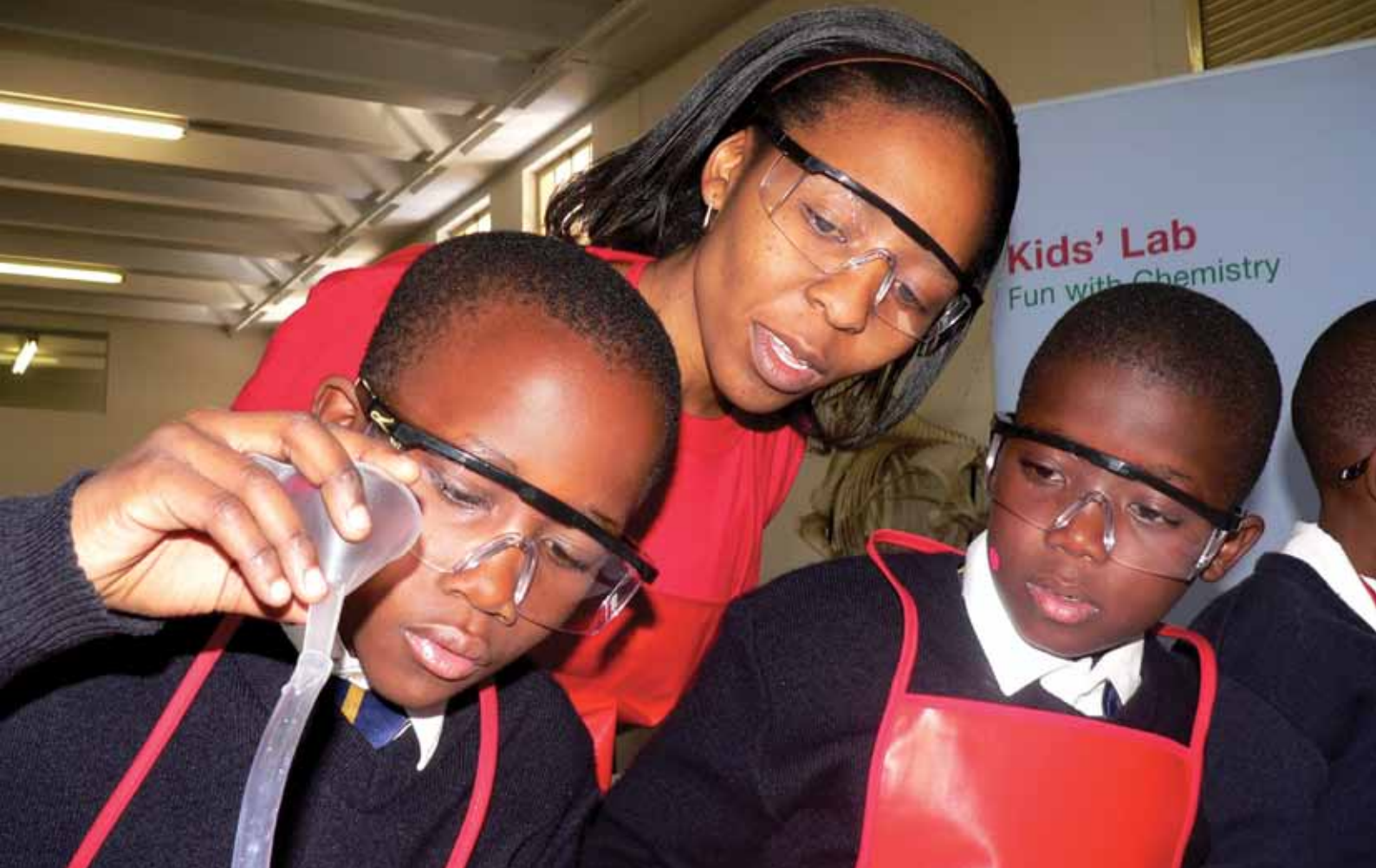
# ANNEXURE I

Quality Assurance Manual for the Promotion of Excellence in a National Network of Science Centres



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## I. OUTLINE OF THE QUALITY ASSURANCE MANUAL FOR A NATIONAL NETWORK OF SCIENCE CENTRES

Appendix A gives a summary of the Quality Assurance Manual for a National Network of Science Centres.

The manual contains the process for the accreditation and continued membership of science centres, describes the various steps in the accreditation and peer-evaluation processes, and contains the protocols and templates for the various steps to be followed when planning and executing site visits.

These include protocols for the selection of panels, the format of preparatory documents (including the standard accreditation application form with supporting documents), a pro-forma site visit programme, generic terms of reference guiding self-evaluation, and site-visit and peer-evaluation reports (to be customised for each site visit).

The processes described in the manual also inform the design specifications of the electronic information management system and contain standard operating procedures for all core work processes (manual and electronic) that support the implementation of the policy and associated procedures. *The Framework for the Promotion of Excellence in a National Network of Science Centres* and its annexures (this manual and the Accreditation Criteria document) are available in hard copy and in digital format, and may be accessed from the websites of the Southern African Association for Science and Technology Centres (SAASTEC), the South African Agency for Science and Technology Advancement (SAASTA) and the Department of Science and Technology (DST).



## 2. STAKEHOLDERS IN THE ACCREDITATION PROCESS

Appendix B shows the pyramid of stakeholders in the accreditation process.

### 2.1 Department of Science and Technology

The DST approved the *National Norms and Standards for a Network of Science Centres in South Africa* in 2005. The DST is the custodian of the *Framework for the Promotion of Excellence in a National Network of Science Centres* and provides the governance structure and resources for its implementation. It will oversee the establishment and operations of the accreditation body for the network of science centres.

### 2.2 Accreditation body

The duly mandated accreditation body is the custodian of the accreditation process, and is responsible for advice to candidate and member science centres with regard to the accreditation process.

The accreditation body will have two roles:

- Through its accreditation process, it will admit science centres to the national network of science centres. A fitness-for-purpose approach will ensure that a centre admitted to the network shares the DST's vision as set out in the four goals articulated in the National Norms and Standards.
- In support of its quality assurance activities, it will facilitate a peer-evaluation process to monitor continuous improvement towards mission-appropriate goals, with fitness for purpose being the key driver.

As the custodian of the process of accreditation and maintenance of membership, the accreditation body will also have the following responsibilities and tasks:

- Liaising with role players on all matters related to accreditation (including national authorities and other relevant accreditation bodies).
- Representing the local science community on all matters related to accreditation and membership of the national network of science centres.
- Providing advice to candidate science centres on the accreditation process.
- Engaging with member science centres on the development, continuous improvement and implementation

of the Quality Assurance Manual and the Accreditation Criteria document.

- Assisting fledgling centres to incorporate appropriate quality management practices into their planning and operational activities, and promote the sharing of good practice. (This is to be done in a capacity-building role rather than as a form of inspection.)
- Providing a records management service on the accreditation status of members and the tracking of the accreditation applications of candidate centres.
- Providing administrative and logistical support with regard to peer-evaluation processes, including site visits.
- Developing and maintaining the database and its user interface.

The accreditation body will establish the accreditation committee and accreditation office for the ongoing management of the accreditation processes.

### 2.3 Accreditation committee

The accreditation committee will consist of a minimum of three people and a maximum of four people. It will include at least one person representing the local community of science centres, at least one third-party member who is not closely associated with the South African science centre community, and at least one representative designated by the DST. Persons may be co-opted by the accreditation committee to assist the committee in its work. The members of the accreditation committee are selected for a fixed term of 36 months, and may be reselected for another term.

The duly mandated accreditation committee makes recommendations on accreditation and maintenance of membership of the National Network of Science Centres to the DST.

If and when approved by the accreditation committee, the accreditation body will submit recommendations for accreditation to the DST for a final decision.



## 2.4 Accreditation office

An appropriately resourced accreditation office will be established and maintained to manage the accreditation processes on behalf of the accreditation body. The accreditation office will be the custodian of the processes of accreditation and maintenance of membership of the network.

The accreditation office will be charged with receiving applications for accreditation from candidate science centres, managing the approved processes in respect of such applications and maintaining accreditation, facilitating the logistics and report writing for peer evaluation visits, and managing the information associated with the processes.

All applications will be processed by the accreditation office, which will make recommendations to the accreditation committee in respect of all applications for accreditation.

The accreditation office will have capacity to –

- engage with science centres on the development, continuous improvement and implementation of the accreditation framework, the accreditation criteria and the quality assurance manual;
- assist with site visits;
- assist fledgling centres with the development of appropriate quality management practices for their planning and operational activities; and
- promote the sharing of good practice.

This is to be conducted in a capacity-building role rather than as a form of inspection.

The accreditation office will also provide administrative assistance for –

- site visit logistics, data management and communicating with and reporting to stakeholders in the agreed format;
- technical expertise for the development and maintenance of the database and the associated graphical user interface.

## 2.5 A proposed national network of science centres

A national network of science centres in the context of this document refers to a local group of science centres to which membership may be gained through a process of accreditation. The members of the network are aligned to, interconnected and supported by the DST. The network

is formally recognised as the officially sanctioned umbrella body representing the interests of DST-aligned science centres in South Africa. Members of the network will be expected to support, facilitate and implement all national policies, strategies and initiatives aimed at achieving the four goals chosen by the DST for science centres, namely, the promotion of science awareness among learners and the general public, contributing to the learning and teaching of mathematics, science and technology, the promotion of science, engineering and technology careers, and contributing to the identification and nurturing learners with talent and potential.

## 2.6 Science centres

The DST defines a science centre as “a permanently established educational facility that offers an informal educational experience in science, technology, engineering and mathematics (STEM) through interactive exhibits and/or displays and/or interactive programmes.”

In order to assist fledgling or newly established science centres in their growth phase, the accreditation process will acknowledge that all science centres that apply to become members of the network will be regarded as such and will therefore be supported by the DST. Members will initially be grouped in different phases of membership according to their own levels of development towards full membership. The network will therefore have the following categories of membership: applicant, candidate, member and foreign member.

An **applicant science centre** is a science centre that has applied to join the national network of science centres. The accreditation office will discuss the eligibility of the applicant science centre with the centre and then arrange a site visit. It is also possible that, owing to the developmental approach, the applicant science centre may be asked to submit itself to management help from the accreditation body during an initial growing phase towards application for membership. The science centre will then remain in the applicant phase on the network database until the required development has been completed (a period not exceeding 18 months). An applicant science centre will still be regarded as part of the network and as such will be able to apply for support towards reaching its goals. A visit by a peer-evaluation panel to the science centre may not be required in this instance.

A **candidate science centre** is a science centre which has submitted a formal application for accreditation with supporting documentation, but has not yet been formally accredited. The accreditation process in this phase will be completed within a period of six months from the date the application is received. A site visit from a peer-evaluation

panel will be called for; but an additional foreign panel member is not always required.

A developmental approach would require that a candidate science centre should be able to demonstrate the following:

- Its mission statement supports one or more of the goals articulated in the National Norms and Standards.
- The mission is appropriate to the specific centre.
- A clearly articulated implementation plan serves to guide the centre to achieve the objectives articulated in its mission statement.

A **member science centre** is a science centre that has been admitted to the network through a process of accreditation for the next five years. To keep its member

status current the member will be required to do annual threshold reporting in years two and three of its membership, as well as reapply for membership towards the end of the five-year accreditation cycle. The member will be notified of the date of the accreditation visit for the next cycle six months before the visit.

#### Membership from outside South Africa

Science centres outside South Africa may apply to be accredited by the accreditation body, but the full cost of the accreditation process will be borne by the applying science centre or its government and not by the DST.

These centres will follow the same processes and phases as the South African applicants.

## 3. THE ACCREDITATION PROCESS

A typical accreditation workflow is set out in Appendix C.

The ideal is that the accreditation process will be managed online, although a member or candidate centre will not be penalised for not having access to the online platform.

### 3.1 Broad outline of the accreditation process

- a. Science centres that wish to apply for accreditation must submit a completed standard application form with supporting documents.
- b. Forms will be available in hard copy, in digital format and online on a website established and maintained for the purpose. Applications will be accepted through all three of these media.
- c. On receipt of an application form, the accreditation office will acknowledge receipt and assign an accreditation reference number to the application and a deadline for concluding the accreditation procedure (this may be done electronically). The application is reported on and recorded in the minutes of the following accreditation committee meeting together with an indication of the scope of and terms of reference for the external evaluation and a list of possible panel members.
- d. The accreditation official will liaise with the candidate science centre and formally initiate the accreditation procedure.
- e. The accreditation body adopts a supportive approach to accreditation and seeks to assist and facilitate the accreditation of new science centres. During the period in which the application is being processed, the accreditation office will if necessary assist the candidate science centre to comply with the criteria for accreditation.
- f. The accreditation procedure will involve an analysis of the application form and supporting documents and a site visit by an evaluation panel convened by the accreditation body.
- g. The accreditation body will develop and run periodic accreditation training courses for science centre staff and, once trained, these individuals will be eligible to serve on peer-evaluation panels.
- h. Self-evaluation of a science centre will be guided by the following accreditation criteria:
  - Alignment of the vision and mission with the goals of the Youth into Science Strategy and other appropriate objectives.
  - Governance structure.
  - Sustainability planning.
  - Systems and procedures for data collection and impact assessment.
  - Total budget of the centre, including income and expenditure.
  - Size of staff (full-time and part-time staff).
  - Physical size of the centre.

- Number and nature of exhibitions, exhibits and displays.
- Scale of centre-based STEM projects, programmes and events, as well as the budget, reach and impact of each.
- Number and nature of visitors hosted in situ, categorised by specific groupings such as school learners, educators, the general public, etc.
- Scale and scope of outreach projects, programmes and events and the number of participants reached.
- Extent of engagement with the provincial education department and local schools.
- Accessibility for disabled visitors.
- Health and safety policies, procedures, systems and monitoring.

On receipt of an application for accreditation, the accreditation body will be required to convene a peer-evaluation panel in line with the guidelines outlined in paragraph 3.3. The panel will be responsible for assessing the application, and physically conducting a peer-evaluation site visit in line with the accreditation criteria. A full report will be drafted on the findings with a recommendation. All criteria will be inspected in detail and all decisions and recommendations will be based on verified evidence only.

The accreditation process for each application for membership will be completed within a period of six months of the date the application is received by the accreditation office (except where an extension is agreed on in writing to allow for the inclusion of an appropriately qualified foreign panel member).

### 3.2 Application

A science centre that wants to become part of the network can apply to the accreditation office on a standard application form. Templates for the supporting documentation to go with the application will also be available in hard copy as well as electronically. On receipt of the application and supporting documentation, the accreditation office will register the application on the system, send a receipt to the science centre and make an initial appointment for discussion of the application.

#### (a) Reason for an accreditation visit

An accreditation visit may be undertaken –

- in response to an application by a new member;
- in response to a request from a science centre;
- in response to a request from the DST;
- if for development reasons it is deemed appropriate.

#### (b) Briefing meeting/visit/talk and confirmation of eligibility

The accreditation office plays a supporting role and has a capacity-building remit, especially with regard to emerging and fledgling centres. The first contact between the accreditation office and the science centre will determine the eligibility of the science centre. The science centre will then be registered as an applicant or candidate centre on the system.

#### (c) Science centre applicant/candidacy status

The applicants on the list are considered for eligibility using a list of criteria that govern the accreditation office's decision when granting applicant or candidacy status.

A centre will be registered as an applicant centre when it is not yet considered ready for the accreditation process. Areas still needing attention will be highlighted and the accreditation office will assist such a centre with development in those areas needing attention before a site visit will be considered. The maximum time available for this phase is 12 months. If, after 12 months, the centre is still not ready for formal accreditation, it will temporarily be taken off the system. The centre may reapply for application after improvements have been effected in specified areas.

A centre will be registered as a candidate centre when accepted for the accreditation process. This phase will be completed within six months. In the case of a foreign panel member being invited to the panel, the time frame can be adjusted to make provision for international travel arrangements.

### 3.3 Scope and terms of reference for the external evaluation process

Appendix D gives a summary of the external evaluation process.

When commencing the process of accreditation with a science centre, the scope and terms of reference for the external evaluation will be discussed between the accreditation office and the science centre, as this will differ for each individual science centre. The science centre will then base the self-evaluation process and the self-evaluation report on the agreed scope and terms of reference.

### 3.4 Selection of peer-evaluation panel

When a science centre is ready for a site visit, the accreditation office will support the selection and appointment of a peer-evaluation panel.

The members of a peer-evaluation panel are selected for each site visit and the protocol for selection and confirmation of the panel is as follows:

- A peer-evaluation panel will consist of a minimum of three and a maximum of four members. It will include at least one member representing the network, at least one third-party member who is not a member of the network, and at least one representative designated by the DST.
- If possible, a panel member from abroad will be selected for each peer-evaluation site visit. The intention is two-fold:
  - To create an opportunity for input by credible peers from outside South Africa with a view to continuous improvement.
  - To familiarise peers from abroad with the operational standards upheld by a national network of science centres.
- A suggested panel member should have no conflict of interest with the science centre or relation to any of their staff.

After the selection and confirmation of panel members, the selected members will be sent an initial invitation by the accreditation office to serve on the panel for a site visit. After confirmation of their participation, the accreditation office will take responsibility for sending the following documents by courier to the selected members of the panel at least four weeks in advance of the visit:

- Invitation confirmation.
- The self-evaluation report of the applicable science centre.
- Supporting documentation to the self-evaluation report.
- Suggested programme for the site visit.

Panel members will also be asked to sign an agreement incorporating Conflict of Interest, Non-disclosure and Confidentiality protocols, before the site visit.

### 3.5 Self-evaluation process

A science centre that has applied for membership of the network and is in the accreditation process will be required to do self-evaluation according to the terms of reference

agreed upon for the external evaluation, as well as the criteria provided, and subsequently complete a self-evaluation report. This report will be sent to the panel members in advance of the visit to familiarise them with the science centre before commencement of the accreditation process. It will also be used during the site visit for verification of statements made in the self-evaluation report.

#### (a) Criteria for self-evaluation

Appendix E gives a summary of the accreditation criteria.

A set of criteria has been developed for the evaluation of science centres applying for membership to the network. The document containing the accreditation criteria is handled separately as Annexure 2 (*Accreditation Criteria for the Promotion of Excellence in a National Network of Science Centres*) to the *Framework for the Promotion of Excellence in a National Network of Science Centres*. This is for ease of use as only the criteria document will need to be supplied to science centres that are in the process of accreditation, and not the full framework document or this manual.

The criteria function as evaluation tools to enable the science centre and the peer-evaluation panel to focus on quality management. The criteria take into account the science centre community and the environment in which its members function, both in South Africa and abroad. The criteria are benchmarked on national and international quality management trends.

The criteria will serve as a guideline for a science centre when doing self-evaluation and compiling their self-evaluation report. The visiting peer-evaluation panel will apply the criteria to the designated audit areas with due consideration of the science centre's mission, goals and level of development. Not all areas or questions posed as examples in the criteria document will be applicable to every science centre. A science centre should use what is applicable, but should also state, giving reasons, why certain aspects have not been dealt with.

Areas in the governance and management of a science centre to be evaluated according to the criteria are the following:

<b>A</b>	Organisational profile.
<b>B1</b>	Governance and management.
<b>B2</b>	Service offering.
<b>B3</b>	People.
<b>B4</b>	Communication.



### (b) Self-evaluation report and supporting documentation

The self-evaluation exercise is aimed at assisting science centres to do self-evaluation through a process of gathering detailed information, analysing the activities of the centre and indicating areas of strength and areas requiring improvement. The outcome of the self-evaluation process serves as the basis for the self-evaluation report. The questions asked in the criteria document should serve as an inducement to plan further development and improvement in the relevant science centre.

The use of the information in the self-evaluation report will enable a science centre to manage its programmes, exhibitions, etc., and to supply potential sponsors and donors with documentary evidence of their activities. Hence, the self-evaluation report serves as a form of capacity building. Supporting documentation will have to be supplied for all statements made in the self-evaluation report. A selection will go with the report to the panel members before the visit, while the remaining documentation must be ordered and ready for perusal during the peer-evaluation panel site visit.

### 3.6 Site visit

The accreditation office, with the help of the science centre, will organise the following logistical arrangements well in advance of the visit:

- Facility preparation.
- Budgeting for the visit (remuneration for panel members included).
- Travel and accommodation for the visitors.
- Catering during the site visit.
- Suggested programme for the visit.
- Preparing the self-evaluation report.
- Gathering and ordering supporting documentation for the statements made in the self-evaluation report.

All expenditure for a site visit will be for the account of the accreditation body and will be in accordance with government guidelines.

The actual site visit will take place over at least one full day, but will be no longer than three days in duration. Panel members will be requested to arrive at the site on the day before the site visit starts. A short briefing meeting will be held to familiarise the members of the peer-evaluation panel with their role and duties during the site visit and the programme will be discussed. A chair for the panel will be selected by the panel members and this person will be responsible for the finalisation of all reports by the panel.

The panel will follow the programme for evaluations and meetings with different stakeholders during the site visit. The panel will triangulate the information supplied in the self-evaluation report against information gathered during the site visit and supporting documentation made available at the site.

The panel will be responsible for assessing the application and conducting a peer-evaluation site visit in line with the accreditation criteria. Decisions and recommendations will be based on verified evidence only.

### 3.7 Accreditation decision

The following steps will be followed in the accreditation decision process:

- Once all investigations have been completed, a full accreditation report with recommendations will be drafted and submitted to the accreditation committee, which will consider the recommendations and make a decision. This will not necessarily be at a meeting, but may be done via email or teleconferencing.
- The accreditation body will then send a formal recommendation to the DST.
- The DST will respond by either accepting or rejecting the recommendation.
- If the DST approves a recommendation that a centre be accredited, it will instruct the accreditation body to accredit the centre. If the DST rejects a recommendation that a centre be accredited (for which written justification must be provided), or approves a recommendation that a centre not be accredited, it will instruct the accreditation body to respond to the candidate science centre either by rejecting the application or by awarding conditional accreditation, setting conditions and providing a support plan to assist the candidate science centre towards full accreditation. The default intention will be to assist the candidate centre to fulfil the requirements for accreditation.
- The accreditation body will proceed to respond to the candidate science centre.

#### (a) The findings of the peer-evaluation panel

The peer-evaluation panel will give their findings and the result of their formal assessment with recommendations to the accreditation committee in the following way:

- An oral report and an executive summary on the last day of the visit.
- A full report within four weeks of the visit, together with a recommendation on the accreditation of the science centre (responsibility of the chair of the panel).

The panel will be required to comment on the overall analysis (strengths, weaknesses, opportunities and threats) of the science centre, keeping in mind the criteria, the self-evaluation report and supporting documentation, while physically assessing the science centre and their facilities.

The reports of the panel will highlight both strengths and weaknesses observed at the specific science centre, as well as in the broader sector. Tendencies can therefore be included in a collective report to the DST in the form of a trend analysis. This information can then be used as a baseline for decision-making and capacity building in the science centre community.

#### **(b) Response of the science centre**

The contact person at the science centre will receive the full peer-evaluation panel report via the accreditation office. The science centre will have four weeks to respond to the factual correctness of the report.

The centre must plan and implement improvements and changes as required and suggested when receiving an interim, conditional or provisional accreditation recommendation. Improvement plans and/or progress reports will be requested by the accreditation office to further eventual compliance.

A science centre is also entitled to request to be reassessed at a later date if they can provide sufficient evidence of improvement since the previous site visit.

#### **(c) Appeal of decision**

An appeals process is available to any science centre which has an application rejected or which is awarded conditional accreditation pending compliance with conditions set for full accreditation. Appeals will be lodged with an appeals panel, which will be convened by the accreditation body. The panel will consist of a minimum of two people and a maximum of three people. It will include at least one network member whose science centre was not involved in the original application, at least one third-party member who is not a member of the network, and at least one representative designated by the DST.

Appeals should be lodged within three months after the final decision of the DST has been communicated to the science centre.

The accreditation body will receive the recommendation from the appeals panel and will then forward the appeal and possible recommendations to the DST for their decision.

### **3.8 Membership status**

Once all investigations have been completed by the peer-evaluation panel, a full accreditation report and recommendation will be drafted and provided to the accreditation committee, which will consider the recommendations and agree on a decision. This will not necessarily be at a meeting, but may be done via digital correspondence or teleconferencing. This decision will be submitted to the DST, which will then decide on membership status as follows:

- Full membership for the next five years.
- Interim membership, implying certain issues have to be resolved within a certain time frame.
- Conditional membership, implying that a concern exists and has to be resolved, or certain aspects do not fully meet criteria and have to be corrected.

The accreditation office will communicate the recommendation of the DST to the science centre. It will also assist science centres that receive conditional membership from the Department with ongoing development.

Immediate risks and serious non-compliance will be identified by the accreditation committee and brought to the attention of the DST.

#### **(a) Improvement plan**

A science centre that received an interim, conditional or provisional accreditation recommendation has to complete an improvement plan within the first six months of the evaluation visit. Conditions set in the communication from the DST have to be met within the given time frame and communicated in the improvement plan.

#### **(b) Progress report**

A science centre that received interim, conditional or provisional accreditation recommendation has to provide regular progress reports on improvements and other changes as requested or prescribed by the accreditation body.

#### **(c) Continued membership**

Continued membership would require the member centre to –

- have a clearly articulated and appropriate strategy for continuous improvement towards realisation of its own mission;
- demonstrate that it is making satisfactory progress towards implementation of its strategy;

- commit itself to annual threshold reporting;
- reapply for accreditation every five years.

**(i) Annual threshold reporting process**

Reaffirmation of continued accreditation will happen in two ways:

- Accreditation is renewable in a five-yearly cycle.
- Threshold reporting by each member of the network of science centres will take place annually on the applicable templates.

Non-compliance with the timely providing of the annual threshold report can result in the accreditation body withholding financial assistance from a science centre for a specified period of time. In the case of total non-compliance, membership of the science centre to the network can be temporarily suspended.

Monitoring and evaluating the performance of individual members and the collective national network of science centres is done according to DST benchmarks by annual threshold reporting. When annual threshold reporting by science centres flows into an annual trends analysis, the accreditation body can identify risks and serious non-compliance that can be pointed out to the DST. Positive and negative trends identified during the accreditation process can be used in the capacity-building process.

It is envisaged that science centres will be notified by the accreditation office six months before the end of a five-year cycle. Science centres that moved from one phase to another before the end of the five-year cycle would be entitled to request reassessment.

**(ii) Withdrawal from the accreditation process or from the network**

Science centres may withdraw from the accredited network under the following conditions, in consultation with the accreditation body and on the recommendation of the accreditation committee:

- Lack of funding.
- Lease not being renewed/being terminated.
- Natural disaster or political unrest.
- Insufficient staff.
- Any other reason regarded as valid by the accreditation body.

The DST may, on the recommendation of the accreditation body, terminate a science centre's accreditation if the centre fails to maintain the norms, standards and criteria contained in the Quality Assurance Manual and the Accreditation Criteria document, or if it fails to meet conditions set for accreditation in a site visit report within the prescribed time.

**(iii) Redress**

The procedures according to which complaints against accredited science centres or the accreditation body should be dealt with are widely available to the general public, including the SAASTEC, SAASTA and DST websites.

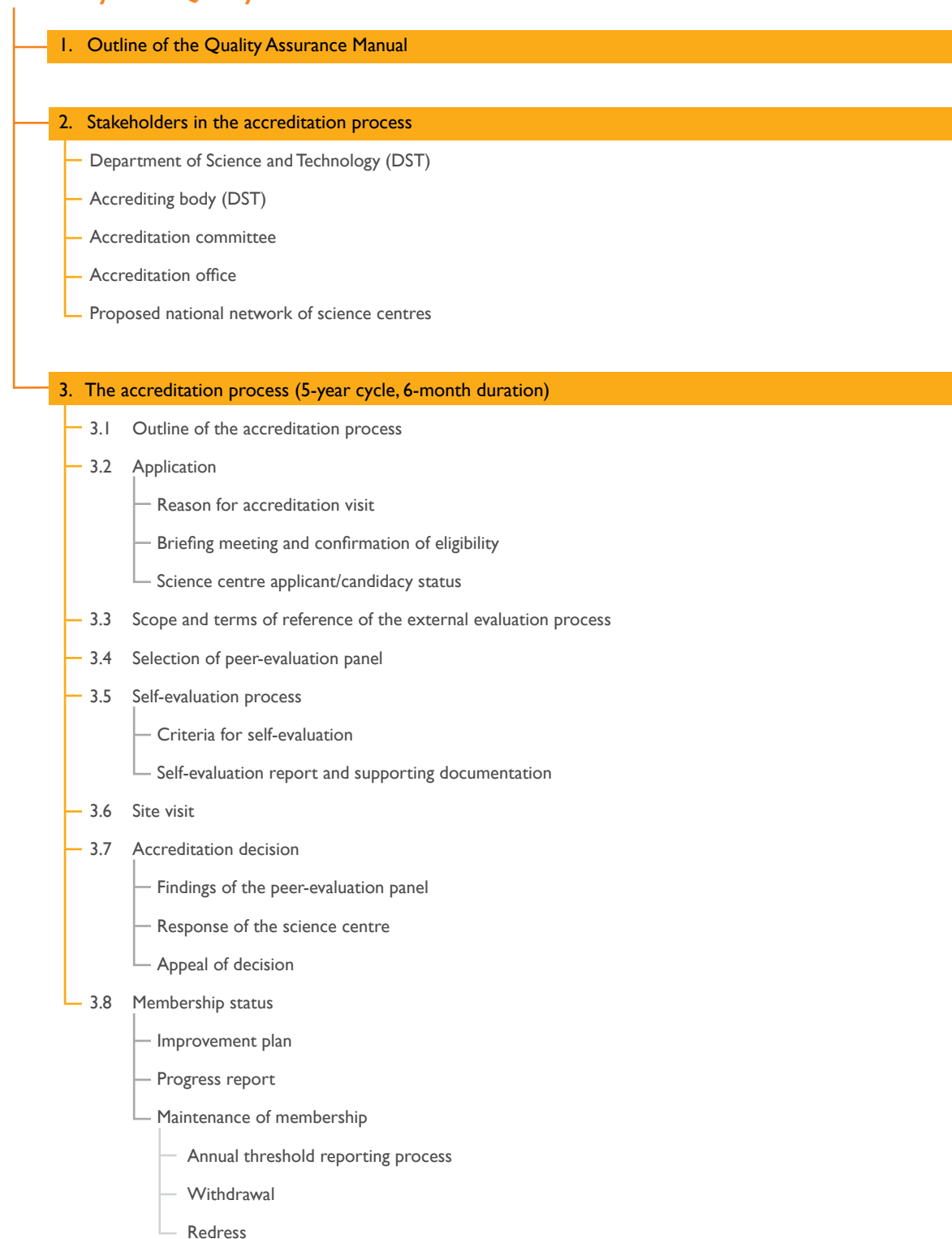
The complaining party should complete the redress template to report the problem to the DST, which will then take further action.

## REFERENCES

The following documents guided and informed the compilation of this document:

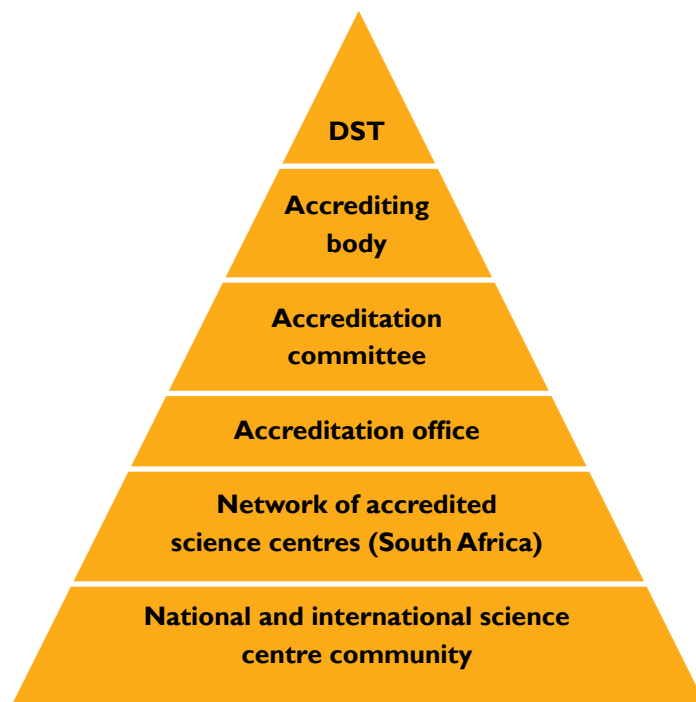
1. Department of Science and Technology: Youth into Science Strategy, 2006.
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4. Department of Science and Technology: *National Norms and Standards for a Network of Science Centres in South Africa, 2005*
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## Summary of the Quality Assurance Manual for a National network of Science Centres

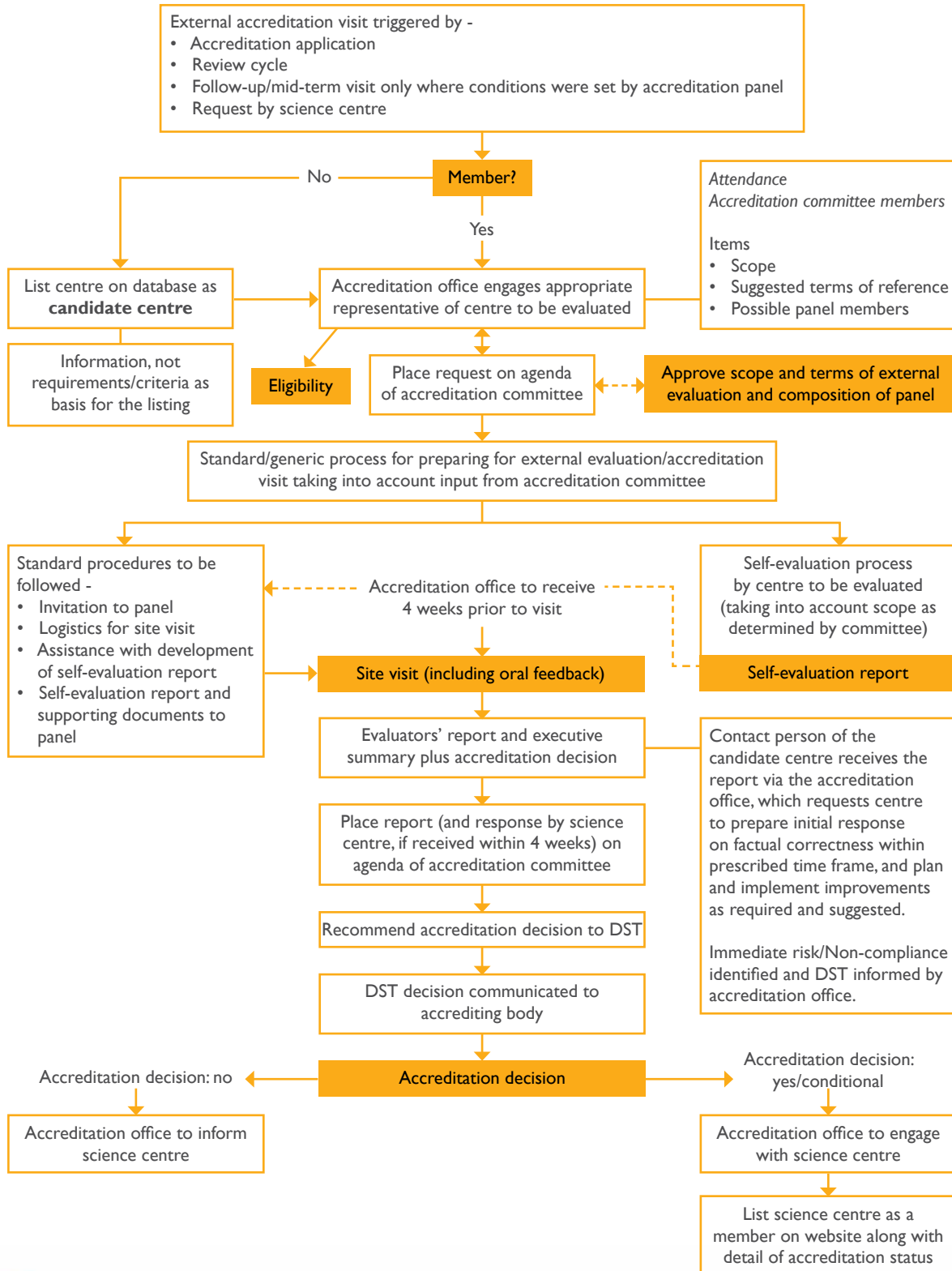




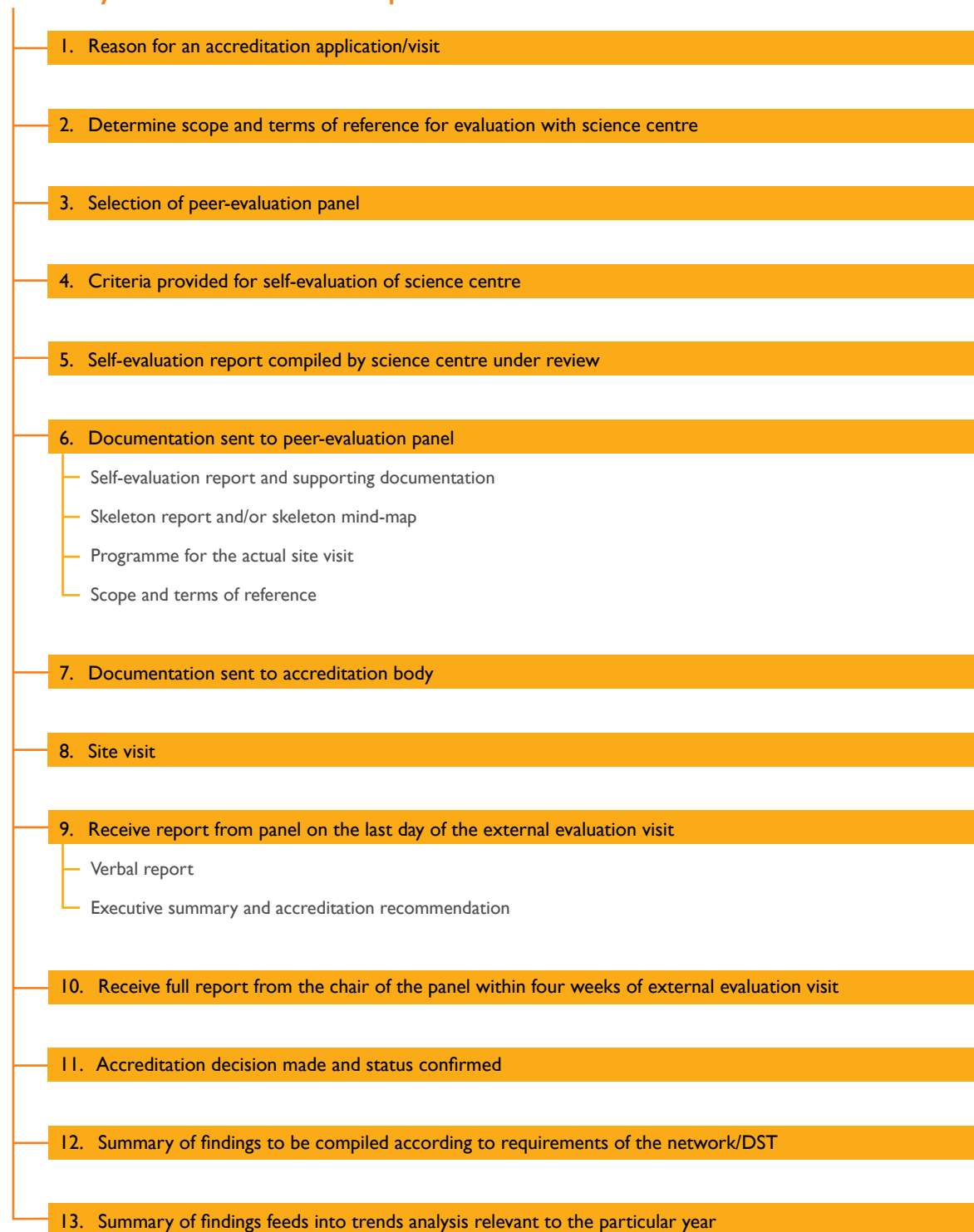
**Pyramid of Stakeholders in the Accreditation process**



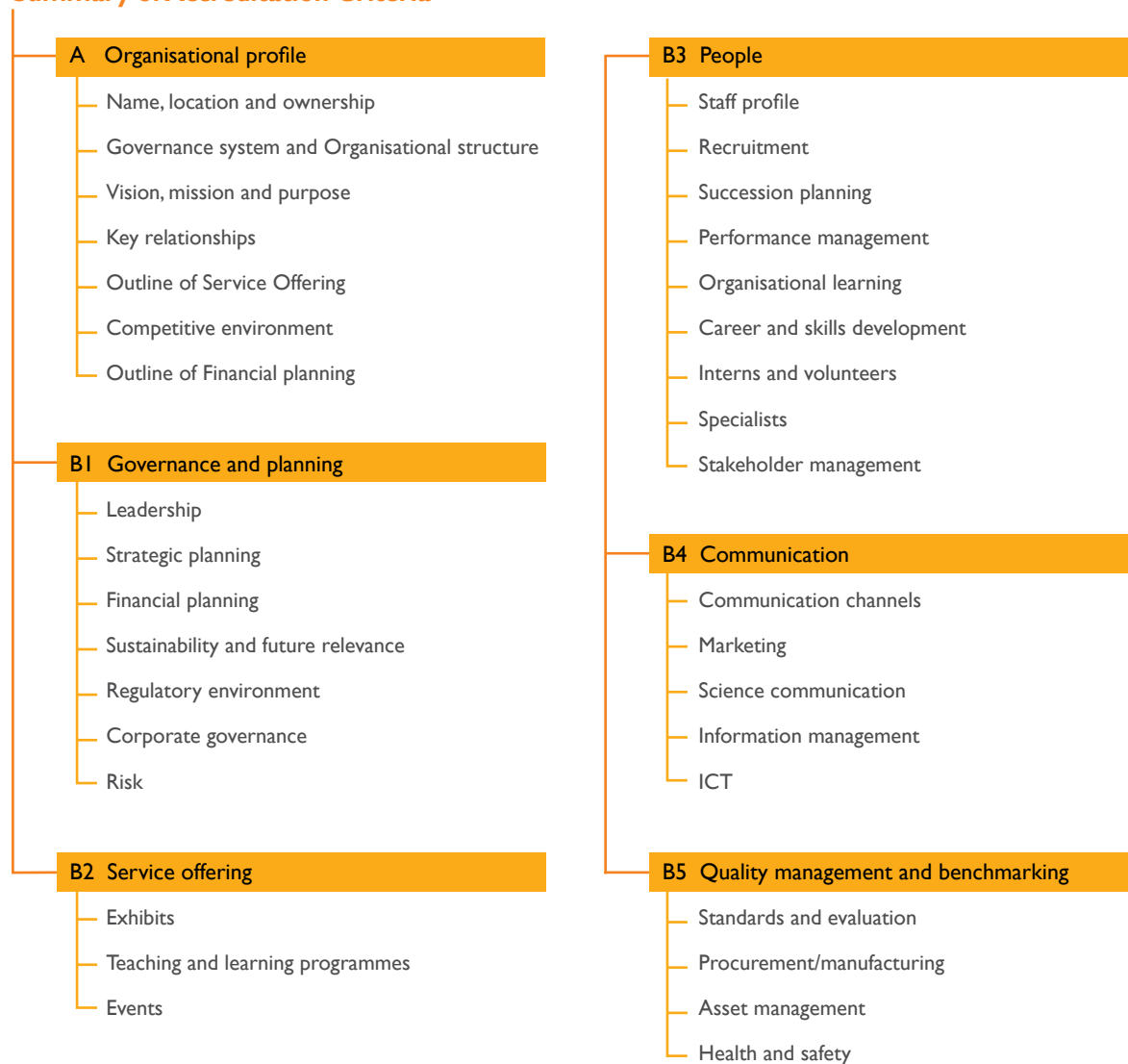
**Admission to network of science centres:  
Typical accreditation workflow**



### Summary of the external evaluation process



## Summary of Accreditation Criteria





### **A National Network of Science Centres**

Examples of templates, documents and checklists for the accreditation process

- 1. Network annual planning session**
  - 1.1 Annual planning session – invitation
  - 1.2 Annual planning session – agenda
  - 1.3 Annual planning session – site visit provisional budget
  
- 2. Application process**
  - 2.1 Application for membership of the network
  - 2.2 Receipt of application
  
- 3. Peer-evaluation panel**
  - 3.1 Composition of panel
  - 3.2 First invitation to panel members
  - 3.3 Final invitation to panel members
  
- 4. Site visit**
  - 4.1 Accreditation visit planning – agenda
  - 4.2 Accreditation visit planning – budget
  
- 5. Accreditation decision process**
  - 5.1 Confirmation of full membership/conditional membership
  - 5.2 Science centre response to conditional accreditation, request for full accreditation

### A National Network of Science Centres

Network planning session: Provisional budget for a site visit at a science centre

[Insert logo]

#### Travel

Return air tickets (national)  
Return air tickets (international)  
Travel agency service fee

#### Shuttle service to and from airport

Per person return

#### Accommodation

Per panel member per night (guesthouse)

#### Honorarium

External panelist per day

#### Corporate material

Versatile briefcase with logo

#### Other

Transfer of guests between guest house and science centre

#### Food and beverages

Dinner (first evening/at guesthouse)  
Luncheons:  
Panel and stakeholders  
Panel only  
Cocktail function  
Dinner at restaurant

#### Administrative services

Printing  
Telephone (mobile phone vouchers)  
Stationery  
Internet access

#### Preparation of the office/venue and facilities

(All expenditure for a site visit will be for the account of the accreditation body and will be in accordance with government guidelines.)

## APPENDIX F2

Date

Dear Members of the Accreditation Committee

[Insert letterhead]

### Peer-evaluation panel: Composition of panel and nomination procedures

The proposed scope for the upcoming external evaluation visit for ... (name of science centre to be evaluated) will be placed on the agenda of the meeting of the accreditation committee on ... ddmmyyyy.

Please prepare a list of potential reviewers for the evaluation of ... (name of science centre) to reach the accreditation office not later than ... ddmmyyyy.

Please note that the proposed panel members should not be contacted at this stage, and any possible conflict of interest that you may be aware of should be declared (including past cooperation with the science centre or members of staff with regard to visits, training, etc.).

A peer-evaluation panel will consist of a minimum of three and a maximum of four members. It will include at least one member representing the national network of science centres, at least one third-party member who is not a member of the network, and at least one representative designated by the Department of Science and Technology.

If possible, a foreign panel member will be selected for the site visit in order to create an opportunity for input by credible peers from outside South Africa with a view to continuous improvement, and to familiarise peers from abroad with the operational standards upheld by South Africa's network of science centres.

The accreditation committee must nominate at least two potential panel members in each of the following categories (where there is more than one distinct area/discipline within the science centre, please ensure a suitable spread of expertise for the areas to be reviewed):

- **Department of Science and Technology:** One representative
- **National Network of Science Centres:** One member representing the Network
- **Stakeholder/Third party:** South African expert from outside the local science centre community – from business, the professions or the public service, as appropriate.
- **Peer from abroad, where applicable:** A director/executive/senior manager from a foreign science centre.
- **Internal evaluators:** To be appointed by the accreditation body

In addition to the requirements listed above, race, gender and regional diversity should be taken into account as far as possible.

The director/manager of the science centre may also decide to nominate other potential reviewers, and will submit a list of proposed panel members and their CVs to the accreditation committee for a final decision.

Once the accreditation committee has made a decision, the accreditation office and science centre will be informed and the necessary letters will be prepared by the accreditation office.

The peer-evaluation panel will be requested to appoint a chair from among its members.

Please contact the accreditation office should you require further information or assistance.

Yours sincerely

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Project coordinator

### **Accreditation visit planning: Agenda for discussion of the accreditation visit of ...**

[Insert logo]

(name of science centre) on (ddmmyyy)

Date:

Time:

Venue:

Invitees: Representative of accreditation office plus invitees as determined in collaboration with science centre director

1. Welcome
2. Finalisation of agenda
3. Generic accreditation process
  - 3.1 Date of visit
  - 3.2 Steering group/Project leader
  - 3.3 Scope of and terms of reference for external evaluation
  - 3.4 The peer-evaluation panel
  - 3.5 Self-evaluation process and self-evaluation report
  - 3.6 Logistical planning for site visit: venue, budget, programme, visitors, staff, etc.
  - 3.7 Panel reports: Oral feedback, executive summary and full report with accreditation recommendation
  - 3.8 Response of the science centre
  - 3.9 Improvement plan
  - 3.10 Progress reports
4. Previous external evaluation: References to
5. General



## APPENDIX G I

### Glossary

Concept/Term	Definition	Source
accrediting body	A duly mandated <i>Accrediting body</i> (“the Body”) makes recommendations on accreditation and maintenance of membership of the Network to the Department of Science and Technology. The Accrediting body is the custodian of the accreditation process, and is as such responsible for advice to candidate and member centres with regard to the accreditation process.	Framework document
accreditation committee	The Accreditation committee makes recommendations on accreditation and maintenance of membership of the network to the Department of Science and Technology	Framework document
accreditation office	The Accreditation office will be the custodian of the processes of accreditation and maintenance of membership to the Network. The office will manage the accreditation processes on behalf of the accrediting body.	Framework document
applicant science centre	An Applicant Science Centre is a science centre which has submitted a formal application for accreditation, but of which the formal accreditation process is held back. Applicant science centres are aligned to and supported by the Department of Science and Technology.	Framework document
candidate science centre	A Candidate Science Centre is a science centre which has submitted a formal application for accreditation, but of which the formal accreditation finding is outstanding or contested by the candidate centre. Candidate science centres are aligned to and supported by the Department of Science and Technology.	Framework document Policy
member science centre	A <i>Member Science Centre</i> is a Science Centre which has been admitted to the network through a process of accreditation, and whose accreditation is current. Member science centres are aligned to and supported by the Department of Science and Technology.	Framework document
network of science centres	A <i>Network of Science Centres</i> (“the Network”) in the context of this Framework refers to a group of science centres to which membership may be gained through a process of accreditation.	Framework document
Quality Assurance Manual	The <i>Quality Assurance Manual</i> describes the various steps in the accreditation and peer evaluation processes, and contains the protocols and templates for the various steps to be followed when planning and executing the site visit. These include protocols for selection of panels, format of preparatory documents (including the standard accreditation application form with supporting documents), a pro forma site visit programme, generic terms of reference guiding the self-evaluation and a site visit and peer evaluation report (to be customised per site visit). The processes described in the Manual also inform the design specification of the electronic information management system and contain standard operating procedures for all core work processes (manual and electronic) that support the implementation of the framework and associated procedures. The Quality Assurance Manual will be available in hard copy, in digital format and online on appropriate websites.	Framework document
science centre	The Department of Science and Technology defines a <i>Science Centre</i> for the purposes of the Framework as follows: “A <i>Science Centre</i> is a permanently established educational facility that offers an informal educational experience in science, technology, engineering and mathematics (STEM) through interactive exhibits and/or displays and/or interactive programmes.”	DST

**List of Acronyms**

<b>Acronym</b>	<b>Name</b>
DBE	Department of Basic Education
DST	Department of Science and Technology
FET	Further Education Band
GET	General Education Band
MST	Mathematics, Science and Technology
NRF	National Research Foundation
NSMSTE	National Strategy for Mathematics, Science and Technology Education
PUSET	Public Understanding of Science, Engineering and Technology
S&T	Science and Technology
SAASTA	South African Agency for Science and Technology Advancement
SET	Science, Engineering and Technology
STEM	Science, Technology, Engineering and Mathematics
YISS	Youth into Science Strategy

