Report No: CR-2005/47

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Guidelines for Formatting Work Proposals for Gautrans Technology Development Projects

July 2005

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1 INTRODUCTION

This document serves as a guideline for service providers who wish to submit work proposals related to the Gautrans Technology Development programme. The document provides detailed guidance in the formatting of work proposals, and defines the type and scope of information provided in the different sections of a work proposal.

The guidelines have been structured in the format of a generic proposal and provide advice, guidance (yellow sections) and examples (blue sections) related to work proposals. The guidelines and examples explain the information that would be needed to allow Gautrans and its reviewers to make a rational decision on the value and benefits of the proposed project in supporting the strategic plan for Accelerated Pavement Testing (APT) as part of the broader Gautrans Technology Development Programme.

2 PRE-SUBMISSION PLANNING

Prior to submission of a proposal it is essential to establish a clear understanding of the needs of the client and ensure that the project proposal is structured to meet those needs. Many projects are delayed at the proposal stage due to insufficient information provided in the proposal and/or the deliverable identified in the proposal not meeting the client and industry needs. Hence the importance of closing the gap between the service provider's understanding of the project and the client's requirements from the project in the pre-proposal submission phase cannot be over-emphasised.

Guidelines

- Organise a planning meeting with the client (and other relevant parties where appropriate) to attain a clear understanding of the needs;
- Prepare a 1-page summary of the project for submission to the client which highlights the following:
  - Subject area
  - Strategic objectives
  - Expected outcomes
  - Brief description of the expected benefits of the outcomes
  - Key personnel to undertake the project
- Ensure the client agrees with the key aspects stated above. Specifically enquire if the client is familiar with key personnel, and whether Curriculum Vitae's would be required as part of the project proposal

Note For larger projects there may be a need for a workshop or further meetings with the client and relevant stakeholders prior to submission of the final proposal.

3 PROPOSAL FRAMEWORK AND GUIDELINES

Following agreement on the broad outline of the project, a 5 – 10 page proposal should be prepared as detailed in the subsequent sections. The proposal should clearly state the following:

- Project title
- Proposal number
- Date of submission and version of the proposal
- Contact details
- Name of organisation submitting the proposal
- Background
- Problem statement

- Study objectives/ scope of project
- Benefits
- Methodology
- Deliverables
- Implementation actions
- Project Plan
    - Time line/Project schedule
    - Cost estimate
    - Project personnel

A template structure for proposal submissions is provided in Appendix A and can be downloaded from the HVS web site at http://www.gautrans-HVS.co.za. The following sections provide guidelines on information that should be included in the various sections of the proposal and presupposes the following general guidelines.

General Guidelines
- Ensure the proposal is consistent and in line with the Client's needs;
- Ensure the proposal is in the correct format;
- Provide sufficient information to motivate the project; and
- Remember, all proposals are competing for scarce resources and will be mainly prioritised on the information provided in terms of relevance to overall strategies, potential benefits, value for money and competence of the personnel.

3.1 PROPOSAL IDENTIFICATION

Each proposal and version of the proposal is unique and needs to be identified accordingly to avoid confusion. Identification of the proposal should be through the following:
- Title
- Project number
- Date
- Version of the proposal
- Organisation branding
- Contact details

An example of a typical layout for proposal identification is shown below.

Example of Proposal Identification

PROJECT PROPOSAL PP/2004/28 Version 1

18 February 2005

Insert the Company logo, branding and/or name

GUIDELINES FOR FORMATTING AND EXECUTING WORK PROPOSALS FOR GAUTRANS TECHNOLOGY DEVELOPMENT PROJECTS

Insert the Company logo, branding and/or name

Contact persons

Name	Affiliation	Telephone	Facsimile	E-mail Address

Guidelines for Proposal Identification

Ensure the project proposal number is clearly marked and unique to the project [**Note**: There is no specific Gautrans proposal numbering system that you should follow].

Ensure that the date and version of the submission are clearly marked;

Each amendment of the proposal submitted to the client and reviewers should be marked as a different version with the same project proposal number;

Ensure the title of the proposal is short, clear and describes the intention of the project and what it hopes to achieve;

Brand the proposal with your company name and/or logo. The name and logo should correspond to the organisation with whom Gautrans will enter into contract to undertake the work outlined in the proposal;

Ensure that the relevant contact person(s) are shown on the proposal.

3.2 PROJECT OUTLINE

The project outline would be covered under the following three sections:

- Background or Introduction;
- Problem Statement;
- Project Objectives.

In these sections the project needs to be put into context and related to a strategic focus area identified in the prevailing strategy document. Where appropriate the project outline should highlight linkages to previous projects in the focus area. The outline should also define the problem to be solved and clearly define the tangible objectives of the project.

Guidelines for Project Outline

Background

This section should provide information that links the project to the broader strategic goals of the Gautrans technology development programme and provide information specific to the focus area it addresses related to the Gautrans APT strategic plan prevailing at the time of submission.

Ensure that previous related studies are clearly identified and contextualised related to the proposal being submitted.

Where appropriate, include references to other similar projects being funded by alternative clients and not part of the Gautrans programme. In these cases, the proposal should clearly indicate the differences in the projects to prevent duplication of effort.

Problem Statement

Ensure that the problem statement ties in to the agreed client need as discussed in the pre-planning meetings.

Ensure the problem statement is relatively short and clearly defined.

Ensure consistency between the problem statement, project objectives and deliverables.

Project Objectives

Ensure consistency between the problem statement, project objectives and deliverables.

Each objective should be clearly defined, tangible, achievable and bulleted separately.

If the project is to be broken into several phases, the objectives of each phase of the project should be clearly identified.

3.3 EXPECTED BENEFITS

In this section, the benefits that the Client will derive from the proposed work should be identified and described in detail. A clear definition of the benefits that will be derived from the proposed work is an essential part of the project proposal, and is used by the Client for the following purposes:

To determine the likely impacts to be derived from the proposed work; and

- To facilitate or aid in the quantification of the realized benefits after the project findings are implemented.

In the evaluation, prioritisation and approval of the project proposal, the information provided in this section will be carefully evaluated to determine the following:

1. Proper definitions: Are the benefits to the Client well defined and clear?
2. Relevancy: Are the benefits congruent with the Client's mission and to the relevant strategic plans?
3. Likelihood of Achieving the Benefits: Are the benefits achievable and realistic? This consideration is coupled to the implementation plan (discussed in the Section 3.6).

It should be noted that not all benefits need to be of a direct economic nature. Several more indirect benefits that are aligned with the Gautrans mission can also be derived from technology development work. Appendix B lists some indirect benefit indicators that should be considered in the benefit definition section.

Guidelines for Clear Definition of Expected Benefits

As a first step to the identification of benefits, the present situation and the situation that will transpire without the benefit of the proposed project should be well understood. This situation should already be described in the background and problem statement sections of the proposal.

Using this information, consideration should now be given to what would change if the proposed project is executed and the findings implemented. It will perhaps help if first, thought is given to the *impacts* on the Client and/or practitioners. Once these impacts have been defined, the benefits that the Client will derive will become clearer.

At this stage, the defined impacts should also be linked to the project deliverables. If this link is not apparent, this should be clarified in the definition of benefits.

Where possible and relevant, the benefits should be defined in a benefit assessment diagram, as shown in Figure 1. This diagram clarifies the context of the benefits and at a later stage can greatly aid in the quantification of actual realized benefits. It should be noted that this diagram is only relevant to projects where the outcomes of the different situations are clearly defined (the preferred situation) and mutually exclusive. Figure 2 provides an example of a benefit assessment diagram for such a situation.

It is important to be as specific as possible when defining the benefits and where possible estimates of benefits (in Rand value) should be provided with supporting calculations and assumptions in an appendix to the proposal. While the cost calculation is not a prerequisite to approval of the project, the more information that is provided to motivate the project at this stage, the better it will be to evaluate and prioritise the value and benefits of the completed project to the client and the broader industry.

Projects for which the outcomes are less tangible and where the benefits overlap or contribute to one another can typically not be reduced to a benefit assessment diagram. In such cases the benefits should simply be well itemized and properly defined.

If the project will contribute significantly to any of the indirect benefit indicators shown in Appendix B, then this should be clearly stated.

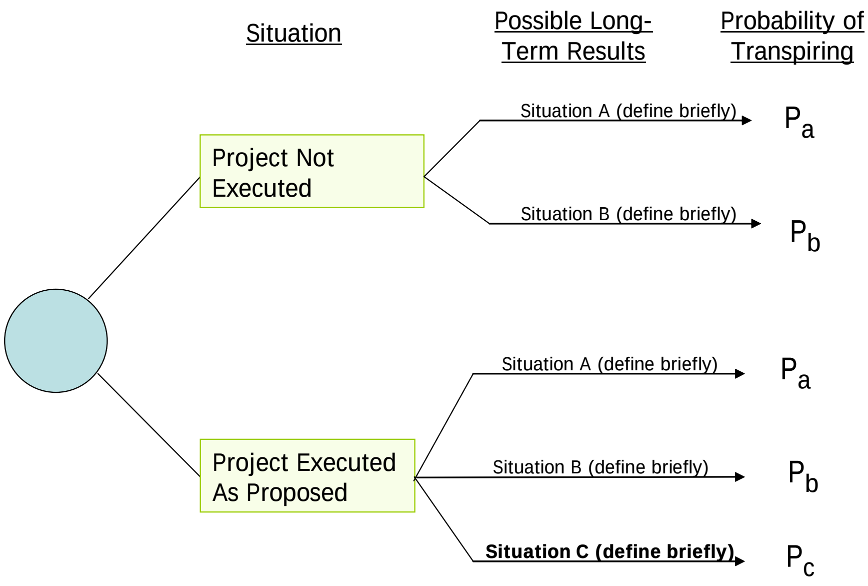

Figure 1: Typical Benefit Assessment Diagram

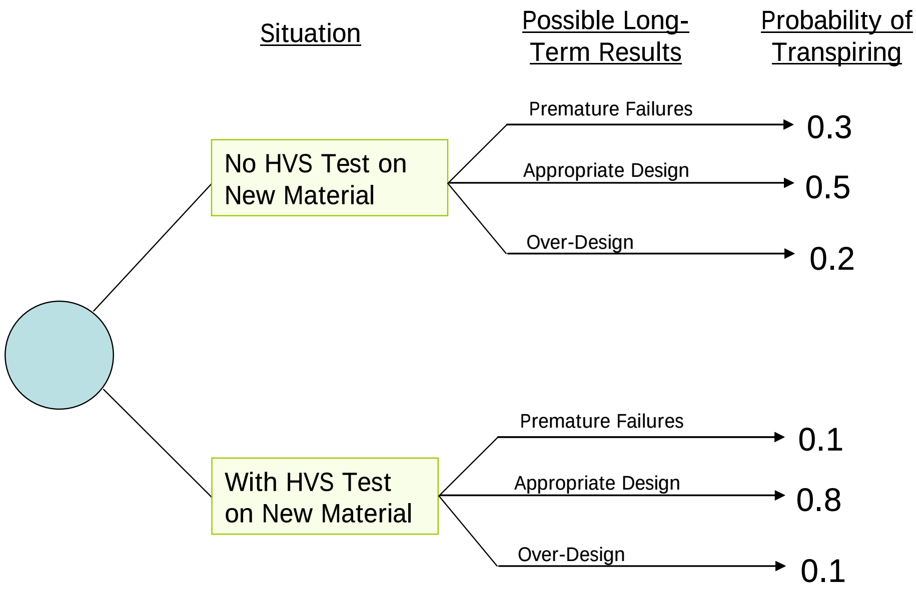

Figure 2: Example of a Completed Benefit Assessment Diagram

Guidelines for <u>Ensuring Relevancy</u> and <u>Likelihood of Achieving</u> Expected Benefits

The relevancy of the project benefits should be shown by linking the benefits to the strategic objectives of the Client. If the proposal forms part of a larger programme, the benefits should be related to the objectives of the programme wherever possible.

The aspects that are critical to ensuring that the proposed benefits can be achieved should be evaluated. These aspects may relate to Client resources or actions (e.g. what the Client should do to realise the benefits) or to project execution (e.g. critical results or findings needed to realise the benefits).

Such aspects should be defined and it should be noted how the project methodology, deliverables and implementation plan will address these aspects.

The example below provides an example of a Benefit Definition statement that pertains to a proposal for a project which would develop new training course material and a curriculum for laboratory technicians. The example assumes that the current situation has been defined in the background and problem statement sections of the proposal. Note that for this example, a benefit assessment diagram was not included since the project outcome will not directly impact on mutually exclusive scenarios.

Example of Benefits to the Client/Road Agency

The evaluation of current deficiencies in the experience and training of laboratory technicians will allow main areas in need of improvement to be identified. The course material and prepared curriculum will then specifically address these deficiencies. Key impacts of this project are thus likely to be:

- Improved understanding of technical and non-technical problems related to laboratory technicians;
- A well-prepared course curriculum (with training notes) and an agency-approved career path development plan that can be implemented by the roads agency or by the private sector.

These impacts will provide the following three main benefits to the Roads Agency:

- Raised level of technical qualifications of agency and private sector personnel which will address human resource development objectives;
- Reduced staff turnover will reduce human resource related cost and raise overall level of experience of laboratory staff;
- Improved quality of laboratory test results will improve quality control plans for construction projects and will reduce the cost of re-work.

These benefits are directly aligned with the Client Mission of "job creation and training of all people of the province". The project resorts under the Long Term Human Resource Improvement Programme (LTHRIP) and specifically addresses Objective 3 of the strategic plan ("Facilitating Training and Education of Technical Staff"). The following aspects are critical to the realization of the above-noted benefits:

- Industry wide marketing of the curriculum and course material;
- Execution of a five year implementation plan within the Roads Agency;
- Impact evaluation plan, follow-up and improvement.

The marketing of the project deliverable is addressed in the implementation plan (see next section of this proposal). The execution of the five year implementation plan is discussed in the project implementation plan, but is regarded as being part of Phase 2 of the LTHRIP programme (to commence in 2007) and therefore does **not** form part of this proposal.

The project team for this project is such that roughly 33 per cent of the principal investigators are from previously disadvantaged groups (the project team is discussed in more detail in Section 8.3 of this proposal.). The project is by nature geared toward technology transfer and thus will contribute significantly toward technology transfer. The findings of this project will comprise a significant element of the MSc. Thesis of Mr. Joseph Mokaba. In addition, Mr. Mokaba plans to present the key findings and experiences at the Helsinki Roads Initiative forum. The project will therefore contribute towards increased International Exposure of South African engineers and technology development work,

The main impacts of the proposed project are briefly discussed and itemized. If these impacts are discussed earlier in the proposal, a reference to the relevant sections can be provided

Benefits are clearly identified and related to the expected impacts

If possible, show the relevancy of the benefits by relating the expected benefits to the road agency mission or to the objectives of the appropriate strategic plan or research programme

Define any aspects that are critical to the realization of the expected benefits.

If any of these aspects are not addressed by this work proposal, then explicitly state this

Clearly define indirect benefits that are expected to arise from this project. Where appropriate, refer directly to the indirect benefit indicators listed in Appendix B

3.4 METHODOLOGY

The methodology section of the proposal should provide details of how the project will be carried out and provide the framework for the project plan.

Guidelines on Methodology

- Ensure that the methodology is subdivided into clearly defined and manageable phases;
- Identify tasks required within each phase to achieve the objectives of the project and generate the likely benefits from the projects;
- Provide a short description of what is expected to be achieved from each task;
- Ensure the phases and tasks are consistent with the deliverables and the project plan in terms of the time line and the cost structure.

3.5 DELIVERABLES

The deliverables or outputs from the project are critical to the success of the project and should be carefully considered in terms of what can be achieved and implemented.

Guidelines for definition of Deliverables

- Ensure that the deliverables are in line with the client needs as agreed at the planning meetings;
- Ensure that the deliverables are clearly defined, tangible and achievable;
- Ensure that the methodology is clearly linked to achieving the deliverables;
- Ensure that the cost estimates and payment schedule are linked to the deliverable;
- Typical deliverables could include the following:
    - A guideline report that enhances best-practice and available for feedback to practitioners;
    - A software programme that improves decision making;
    - Equipment that improves data collection and/or the precision of data collected (e.g. laboratory testing equipment; pavement evaluation equipment; traffic counting equipment);
    - Courses or training material;
    - Seminars, workshops or courses to feedback information to practitioners;

3.6 IMPLEMENTATION OF FINDINGS

In this section, the outline plan for implementing and marketing the project deliverables and findings should be defined. In essence, the implementation plan should explain how, where and when the project findings will be disseminated within the relevant audience or industries. If possible, the implementation plan should list specific forums, conferences, workshops, publications, journals and/or guideline documents (e.g. TRHs, TMHs or other industry guidelines) where the projects findings can be disseminated. Ideally, the project methodology and cost estimate should include tasks which form part of the implementation plan. However, if some aspects of the implementation plan do not form part of the work proposal, this should be clearly highlighted and explained. An example of an implementation outline related to the project example provided as part of Section 3.3 is shown below.

Example of Implementation of Findings

The training course material and curriculum that result from the example project will be implemented as part of Phase 2 of the LTHRIP programme. The implementation of findings will include the following activities:

- Training workshops held within the Roads Agency as part of the pilot implementation programme. These workshops will expose agency personnel to the course material and will also facilitate feedback and improvement;
- Inclusion of the course material in the bi-annual agency wide training session which forms part of Objective 3 of the LTHRIP strategic plan;
- The project report will describe the course context, scope and content, and will be marketed to the relevant academic institutions (mainly Technikons) within SADC through the AsAc business development programme.
- The project method and findings will be summarized in an academic paper which will be submitted for the 2007 Annual Transportation Convention (to be held in Pretoria in June, 2007) as well as for the Roads Initiative Forum (RIF) to be held in Helsinki in September, 2007.

The pilot training workshops form part of the pilot implementation programme and the cost related to this aspect is included in the project cost shown in Section … of this proposal. The project cost estimate also includes an allowance for the formulation of the academic papers to be submitted to the 2007 ATC and RIF events.

Marketing of the project deliverable to academic institutions through the AsAc business development programme will form part of the AsAc activities and will be funded through other sources.

The long term implementation of the project deliverable as part of the bi-annual agency training curriculum will form part of Phase 2 of the LTHRIP programme and the cost associated with this activity is **not** included in this proposal.

Summarize the overall approach to the implementation and list specific methods of implementation

Be as specific as possible in the description of implementation aspects

If certain aspects of the implementation plan are not taken into account in the project cost estimate, these aspects should be highlighted and explained

3.7 PROJECT PLAN

The project plan should provide details related to the methodology in terms of the time to complete the project, the resources to be used to achieve the deliverables and a breakdown of the costs for the various aspects of the project. This section of the proposal should be divided into:

- Time line or Gantt Chart for the project;
- Project costs; and
- Project team/personnel.

Guidelines for the Project Plan

Time line or Gantt Chart

- Ensure the phases and tasks on the Gantt Chart relate to those identified as part of the methodology;
- Ensure that the phases and tasks run in a logical and chronological sequence, with tasks that overlap clearly indicated;
- Where relevant, identify the personnel responsible for each task and phase;
- An example of a typical Gantt Chart is provided in the Template in Appendix A.

Note: For smaller projects with one or two tasks and one deliverable, a date of completion of the project is normally sufficient

Project Costs

- The project costs should be summarised in terms of the various phases of the project and should ideally be linked to the stated deliverables;
- The time and rates (hourly or daily) for personnel working on each phase and task of the project should be clearly stated with sub-totals;
- Professional fees and Reimbursable or Running Costs should be shown separately and summarised separately in the final project cost;
- Value Added Task (VAT) should form part of the total project cost;
- Operational costs for HVS testing and routine laboratory test should be itemised and costed in a separate addendum to the proposal and summarised under the project costs as lump sum costs under the specific phase and task.

Project Team/Personnel

- The key personnel responsible for the management and technical content of the project should be clearly stated with a short description of their respective role and responsibilities. For larger projects a responsibility matrix for specific phases and tasks should be included;
- Where the competence of key personnel is known to the client, the submission of CVs is unnecessary. However, in larger, multi-organisational projects where some of the key personnel are unknown to the client, Curriculum Vitaes (CVs) may be required as a separate addendum to the proposal. This issue should be clarified with the Client during the pre-planning meetings.

3.8 PAYMENT SCHEDULE

The proposal should clearly state the payment schedule and the expected monthly cash flow for projects. Three payment models could be considered for inclusion in the proposal:

A lump sum basis with interim payments against specific deliverable;
A monthly basis against approved monthly progress reports submitted to the monthly HVS management meetings up to the agreed cost for the deliverable;
A time and cost basis against monthly invoices (generally only applicable to HVS operations).

Guidelines on Payment Scheduling

- Ensure that the payment schedule and method of payment is clearly stated and ties in to the project deliverable and the total project costs.
- In general, for projects up to R100 000 and less than 3 month in length, payments could be made on a lump sum basis against specific deliverable.
- For larger projects, an estimated monthly expenditure should be provided for payment against approved progress reports submitted to the monthly management meeting and linked to specific deliverables;
- All projects should provide a monthly cash flow in the payment schedule for management purposes.

3.9 APPROVAL OF THE PROJECT

Approval of the project will be confirmed by the signing of the proposal by the Client and the Service Provider/Contractor and will form the contract around which the project will be managed and evaluated.

Guidelines for Project Approval

- Ensure there is sufficient space for the designated persons to sign the proposal and space for two witnesses to verify the signatures;
- Ensure that the approval statement includes the title of the project and is clearly dated;
- Ensure that all pages of the proposal are initialled by the signatories and the witnesses.

4 IMPLEMENTATION OF THE PROPOSAL

Following the approval of the proposal, the project will be managed in line with the approved project plan. A monthly project status report will be required for submission to the management meetings of the Gautrans Technology Development Programme related to APT.

Guidelines

- Ensure that the monthly status report relates to the project proposal and measures progress against the approved project plan;
- Any delays to the project, changes in project personnel or variations to the approved costs should be reported to the monthly HVS management meetings and where appropriate covered by a written amendment to the proposal that would act as an addendum to the original, approved proposal and contract.
- Where appropriate, the proposal should be included as an Appendix to the final project report.

5 SUMMARY

These guidelines describe the structure and information required for work proposals subjected for consideration as part of the Gautrans Technology Development Programme. The guidelines define actions required as part of the pre-submission phase and describe the format of the work proposal. A discussion is provided of each section of the work proposal. Specific guidelines are provided to assist service providers in the interpretation of the guidelines. Where appropriate, examples with clarifying text are also provided. It is hoped that these guidelines will aid service providers in better understanding the needs of Gautrans with respect to work proposals and prospective projects, while at the same time providing a clear basis from which an actual work proposal can be constructed.

Appendix A

Template for Project Proposals

Project Proposal Number: "[Click here & insert Project Number]"
Version "[Click here & insert Version Number]"
"[Click here & insert Date]"

"[Click here & insert Proposal Title]"

Submitted by:

"[Insert Company Logo]"

"[Insert Company Name]"

Contact Persons:

Name	Organisation	Telephone No.	Facsimile No.	E-mail Address

Submitted to:

Department of Transport and Public Works

Gauteng

Directorate: Design

Private Bag X3

Lynn East, 0039

1 BACKGROUND

2 PROBLEM STATEMENT

3 PROJECT OBJECTIVES

4 EXPECTED BENEFITS

5 METHODOLOGY

6 DELIVERABLES

7 IMPLEMENTATION OF FINDINGS

8 PROJECT PLAN

8.1 TIME LINE OR GANTT CHART

8.2 PROJECT COSTS

8.3 PROJECT TEAM/PERSONNEL

8.4 PAYMENT SCHEDULE

9 APPROVAL OF THE PROJECT

I ………………………………………hereby accept the content of the proposal

"[Click here & insert Proposal Name]"

"[Click here & insert Proposal Number]"

And the conditions of contract on behalf of

Gautrans (CLIENT)

Signed at …………………………on this ……… day of ……………………. 20……

…………………………………………..

As witness:

1) …………………………………………..

2) …………………………………………..

I ……………………………………. hereby undertake on behalf of "[Organisation Name]" (CONTRACTOR) to complete the work set out in the proposal

"[Click here & insert Proposal Name]"

"[Click here & insert Proposal Number]"

under the conditions of contract

Signed at …………………………on this ……… day of ……………………. 20……

…………………………………………..

As witness:

1) …………………………………………..

2) …………………………………………..

Appendix B

Summary of Indirect Benefit Indicators

Table B1: Indicators for Monitoring of Technical Progress

Indicator	Definition	Unit	Required Information during Data Entry
International Exposure	This indicator tracks the international exposure of South African citizens involved in the HVS Programme (Gautrans personnel, SET workers, consultants, steering committee members, etc.). This exposure will typically be achieved through International Alliance meetings, Advisory Board Participation, joint international projects, international secondments and presentations given at international conferences and to visiting international groups.	Man-hours	The nature of each involvement (e.g. HVS Alliance Meeting) should be stated, together with personal and demographic details of the person involved. The total estimated time in which workers were exposed to international influences should be stated. This time should only include active exposure time (e.g. time spent in meetings), and should not include travel time, lunches, etc.
Technical Publications	This indicator tracks publications in technical journals or in conference proceedings.	Number	The title of the publication, the author and details of the publishing journal or conference should be provided.
Guidelines, Methods and Specifications	This indicator tracks any impact of project outcomes on guidelines, laboratory test methods, design methods or specifications. Note: Care should be taken not to “double-count” projects. Thus, only those projects that directly influence guidelines, specifications, etc. should be considered for this indicator.	Number	The details of guidelines, test or design methods or specifications that were impacted on by the project findings should be stated. The manner in which the project outcome contributed to these should also be briefly stated.
New Equipment	This indicator tracks the development of new test equipment or measurement devices, which directly resulted from the project execution and which will henceforth be available for use by practitioners and client bodies, or by R&D organizations other than those involved in the project execution.	Number	Describe new equipment, the benefit to practitioners (e.g. how and where will it be used in routine projects). Define the extent to which the project contributed to the development.
Patents and Enterprise Development	This indicator tracks any patents or new companies that were registered as a direct result of the project execution or outcome.	Number	Specify the name and details of the patent or company involved. Briefly state the manner in which the project contributed to the process or outcome.

Table B2: Indicators for Monitoring of SET Human Capital Development

Indicator	Definition	Unit	Required Information during Data Entry
Transformation Achieved	This indicator tracks the transformation achieved with regards to the demographics of SET workers involved in HVS Technology Development projects.	Percentage	Specify the names of technology development workers involved in the project, with the main responsibilities and demographic details of each. Use this information to calculate and document the overall percentage of workers from previously disadvantaged groups.
Qualifications Achieved	This indicator tracks any qualifications that were achieved, and that were directly influenced or impacted on by the project execution.	Number of Qualifications	Specify the details associated with any qualifications that were achieved and to which the project execution contributed in a significant manner. State the details of the persons and qualifications involved, as well as the educational institutions involved.
Technology Transfer Achieved	This indicator tracks the extent of technology transfer achieved by mechanisms such as workshops, training courses etc.	Number of Practitioners Reached	The details of any workshops or training courses held as part of the project execution or implementation plan should be specified, as well as estimated number of practitioners that attended such activities.
Jobs Created and Sustained	This indicator tracks the number of jobs created or sustained as a result of the project execution or findings.	Number of Jobs	Specify the number of jobs created, how the estimate was determined and the manner in which the project contributed to this.