

THE TETA RESEARCH STRATEGY

OUTCOME OF THE TETA RESEARCH STRATEGY

DEVELOPMENT PROCESS

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I ACRONYMS

CLEAR A.A Center for Learning on Evaluation and Results
(Anglophone Africa)

ETQA Education Training Quality Assurance

DHET Department of Higher Education

NQF National Qualification Fund

SAQA South African Qualification Authority

SWOT Strengths, Weaknesses, Opportunities &
Threats

SSP Sector Skills Plan

TVET Technical and Vocational Education Training

TETA Transport Education Training Authority

II EXECUTIVE SUMMARY

This is an executive summary of the report on the development of the TETA research strategy. The summary gives brief information on the justification, rationale and process used to develop the research strategy for TETA.

The TETA research strategy development was a result of the response to TETA strategic objective of establishing a credible research and knowledge unit to provide evidence based information to strengthen work skills development programs in TETA. The unit was also expected to undertake or supervise research to find solutions to quality and operational problems in the identification and development of skills development training in the transport sector.

The development of the strategy was preceded by the identification of research needs and status in the sector through consultation workshops and interviews of sector wide respondents. This process was followed by strategy development workshop held in the four provincial venues of East London, Cape Town, Durban and Johannesburg.

The workshop involved the participants in the strategic analysis of their industry with the aim of determining research needs using the SWOT analysis method. The outcomes of the SWOT analysis were used to develop the research strategy.

The strategic analysis outcomes indicated that TETA did not have strong research culture and would therefore need to first establish a research unit with all the necessary management systems and tools in order to manage research. Secondly, TETA would need to make some organizational reorganization to support research functions; and finally TETA would need to develop a research agenda arising out of

the research strategy development process. A number of conditions to enable establishment of functional research portfolio were identified and these were included in the recommendations.

1 INTRODUCTION

This is a sectional report on the development of the TETA Research Strategy that was undertaken after a period of preparation of stakeholders to assist in the collection of data from their sectors. The data collection was carried out by the CLEAR AA team through the conducting of interviews of key informants as well as through Focus Group Discussions with various transport sector groups. The information from the interviews and discussions were used in strategy development

workshops to develop a research strategy framework from which the draft research strategy was developed. The TETA Research Unit personnel participated in the workshops.

This report will be submitted to TETA management for approval for implementation of the research strategy. The endorsement of the report will enable the research team to develop a research agenda that will prioritize undertaking of relevant research in TETA. In order to improve the quality of research management, specific research management policies and tools will be developed into a system that will standardize research management in the transport industry in line with local and international practices.

The standardization of research management systems will lead to TETA establishing and using evidence based decision making and planning through the establishment of appropriate monitoring and evaluation systems and promotion of evidence based planning in the organization. The research management systems and the development of the research agenda will inform and guide TETA's research activities. Furthermore, the system will ensure that undertaking of research in TETA will be guided by the identified and relevant research needs in the transport sector; and that the research will always be in the interest of providing information that will contribute to solving of policy and/or operational challenges in the sector. In addition the establishment of credible mechanisms for collection of information on performance of skills training programs will lead to strengthening of decision making and planning for human skills development and capacity to appropriately respond to labour market skills demands.

2 BACKGROUND

TETA is one of the Skills Education Training Authority organizations established by Government of South Africa to provide skills training and capacity development in the transport sector of the country. The SETAs were established by an Act of Parliament with mandate to collect subscriptions from member organization in the sector through an equivalent of a training levy and use of these funds to provide appropriate skills development in local or overseas training institutions. In addition

the TETA is mandated to develop specific skills training programs that can be conducted by accredited service providers.

The occupational programs are required to be registered with the Quality Council for Trade and Occupation Development which in turn have to be approved by the South African Qualifications Authority. TETA also has the responsibility to develop and support TVET colleges and universities training programs for skills development in the sector to ensure that the transport industry keeps with technological and managerial developments to avoid obsolescence of skills and maintaining parity with other countries. Identification of skills shortages in the industry has been the tool used to identify skills, needs and gaps; and used to develop and/or identify appropriate skills training. In addition TETA has programs to assist trainees to find job placements and provide scholarships for those who are from previously disadvantaged backgrounds.

The transport sector in South Africa employs more than 895,0001 workers and is a major contributor to the country's gross domestic product. Currently the industry is undergoing major infrastructural developments to cope with the expanding economy. The transport sector requires skilled trained human resources to maintain current skills requirements and replacement as well as to cater for additional staff requirements for the expanding transport business in the country. In particular, the SETAs are also looking at increasing skills training to the part of the population that were excluded from high level skills training as part of the transformation initiatives.

1 TETA Strategic Plan 2015-18

Under these premises, TETA has so far developed 17 occupational qualification programs tenable at TVET colleges 15 of which have been registered with the South African Qualification Authority. In addition TETA has drawn plans to train 500 skills training program assessors, 250 moderators and 250 learning program, design and

development evaluators and has plans to train TVETs academic staff and assessors, moderators and facilitators in the current Strategic Plan 2015-18. However, these plans do not seem to have concrete implementation plans. There are however some major constraints to the capacity building for skills development training service providers in that the TETA does not have evaluation systems to generate the evidence needed to guide capacity building in skills training facilitation. Other initiatives for skills development include establishment of agreements to support the realignment of current skills training programs at TVET colleges and universities to the skills needs at the operations levels.

Current TETA Sector Skills Plans have been developed using information collected by stakeholders on their organizations' annual work skills plans. Unfortunately, the methods used to collect the information used in the skills needs assessment is not that accurate, and TETA has not been able to accurately estimate the skills needs and gaps in the industry. Better information management capacity and

establishment of a credible system is needed to accurately determine skills needs and gaps in the transport sector.

Skills development programs currently running are specially directed to specific groups, and are offered at various TVET colleges, universities and/or provided by accredited service providers. Several reputable institutions including the Cranfields School of Aviation, Aviation departments at Wits and Stellenbosch universities offer a variety of aviation engineering and management courses and several other institutions and consultancies offer training in other areas under the SAQA accredited training courses in artisanal areas. Although the skills development programs are implemented in a way to increase the numbers of people from previously disadvantaged backgrounds as part of the general transformation strategy, many sectors in the transport industry are still plagued with racial and gender imbalances that resulted from the previous apartheid policies that gave unfair levels of opportunities to whites and discriminated against those of color, in a society that defined different roles for males and females. Although apartheid policies were abolished in 1994, the country is still plagued with remnants of the effect of apartheid. Currently, the transport industry in South Africa still shows disproportionate disparities among the whites and the rest of the other races. According to occupational information, black South Africans² who form 80% of the population make up 64.4% of jobs in the sector, and only 32.4% of senior level positions and less than 2% in senior executive management positions. Females of all races account for 23.9% of the workforce in the industry, but are confined to clerical and low level jobs. There are very few women in technical or artisanal jobs. Majority of black workers in the industry have low or no formal education with only 12.7% having obtained tertiary education and 52% having secondary or less education.

2.1 THE TETA SKILLS DEVELOPMENT PROGRAMS

TETA has a wide range of skills development initiatives to address the various skills training needs of the industry. These programs range from management development to technical / artisanal and general skills development. Over the past years several hundreds of personnel have been trained in one or more of these courses. The Impact of the training of so a significant number of personnel in the industry has not been accessed due to absence of results based evaluation systems and tools; follow –up studies have just been introduced and results from these studies have not yet been realized.

Professional skills assessment exercises have not been conducted to accurately map-out job specific skills needs and gaps. The current practice has been to use informant data from human resources units of member organization to estimate skills

needs in their organization using the Career Junction response rate to job advertisements as proxy indicator for specific skills requirement, and a checklist provided by DHET, that uses responses to advertised jobs as indicator of scarce skills. Determination of skills needs and gaps in TETA has not been accurately estimated due to lack of scientific methods to appropriately determine skills needs and gaps in the sector. For years TETA has not upgraded the skills needs and assessment tool and has depended on results from each organization using the DHET checklist.

2.2 SITUATIONAL ANALYSIS

TETA has established several skills development and capacity building programs directed at building workers' skills through skills developing capacity in the industry. The training is achieved through skills training in tailor made and/or academic training course at TVET colleges or universities. Most of the academic programs do not fully meet the skills development needs of workers as they have not been aligned to the exact skills needs of the industry and have failed to qualify for the vision statement of; "to be at the heart of skills innovation in the transport sector". Our assessment of the appropriateness and relevance of the skills development courses indicates that despite the written intentions to support the realignment of academic based training programs, not much has been attained in review of these courses to make them more relevant to the skills needs of the industry.

TETA does not have the technical capacities to supervise most of the technical proposals made in the Strategic Plan 2015-18. There is also no technical focal point in the organization to effectively coordinate the various technical development issues identified in the Strategic Plan. There are also no mechanisms for proper coordination within the various technical units within TETA. Current mechanisms for

coordination are weak or non-existent. The lack of an effective monitoring and evaluation system in the organization and lack of ability to collect and analyze information for use in decision making and planning for skills development interventions was impacting on the effectiveness of TETA interventions due to lack of feed-back on the performance of these interventions. Furthermore, TETA's capacity to lead innovation in skills development in the transport sector cannot be realized due to inadequate backing from research studies to provide evidence to guide innovation in skills development. The research unit which has just been established has only begun to build research management systems and tools. The development of the research strategy and agenda is one of the processes initiated to provide a structure to the unit. The research unit has very limited personnel capacity and has only the research manager and a program assistant. The unit requires more personnel to carry out the planned activities as well as more clout to extract

cooperation from other sector managers (Chambers) to cooperate in the implementation of research objectives.

The Research Unit is currently faced with a number of developmental problems. In addition to lack of adequate technical personnel, lack of research culture and lack of research management systems; executive management is reported to want to interfere with rational management of research activities by overriding decisions that the research manager gives to service providers to ensure credibility of research activities. In one reported case the COO took over the supervision of a critical project from the research manager because he did not agree with the decision that the research manager had made to request the service provider to improve the study design and implementation methodology. Our assessment of the quality of a number of studies commissioned for implementation indicated that the majority of research studies being conducted were below par and had little direct relevance to stakeholders or skills development. Furthermore, all the studies carried out had documented outcomes that were shared with stakeholders in TETA.

The current capacity of TETA to manage and undertake research studies is significantly limited by the fact that there are no formal research management protocols. The absence of standardized research systems has made it difficult for standardization of research practices in the organization. The absence of formal research tools may have contributed to the failure of TETA to develop basic research capacities in the sector that could have assisted in the determination of research priorities in each subsector. In addition to limited capacity to manage research, the organization's M&E system expected to provide information on the performance of the organization's skills development is not fully developed to collect quality information on programmes and activities that are being carried out. Monitoring functions are separated from research thus creating duplicity in functions of the two units.

3 JUSTIFICATION

Development of a research strategy will thus be used to develop research capacity in TETA by establishing directed approach and identifying resources for undertaking of appropriate research in the transport sector. Establishment of formal research systems and tools will ensure improved accountability and transparency in commissioning and management of Research as well as ensure that stakeholders are involved in determining research areas to address their priorities.

The need to develop a research strategy for the transport sector was initiated by the observation that the sector lacked evidence based information to guide decision

making in the management of skills development training programs and activities in the sector. This realization led to the establishment of a research and knowledge management unit within TETA to guide undertaking of research to provide evidence based information for planning and decision making especially with regard to skills development needs in the sector, and for management development of TETA training programs.

Development of a research strategy has been identified as a priority in the TETA Strategic Plan 2015-2018. Since there are no research management systems in place at the moment. Development of the research strategy was the beginning of the process to establish a full-fledged research portfolio in TETA. The establishment of formal standard research management tools will lead to better commissioning, supervision and management of studies. This will lead to general improvement in the determination of research priorities, and significant strengthening of application of research to provide solutions to operations and developmental problems and challenges in the sector. Establishment of formal research management systems will enable development of transport industry specific policies.

Establishment of the research strategy will significantly lead to the utilization of research to improve and strengthen management of skills development interventions and capacitation of the industry to find solutions to skills shortage challenges in the industry. Current determination of research needs in the sector are determined by the need to respond to political directives and do not therefore serve the needs of the industry. A research strategy will enable TETA to focus on research to identify causes and contributors to skills challenges facing the industry and the determination of solutions to challenges in human skills development. Perhaps even more important is the fact that establishment of formal research management strategy will lead to establishment of results based management systems where appropriate monitoring and evaluation systems will have to be established, and the relevant capacities developed.

4 RATIONALE FOR DEVELOPMENT OF THE RESEARCH STRATEGY

The research strategy was envisaged by the knowledge and Research Manager as a tool that will help to guide in the development of a formal research structure in TETA to effectively manage research and utilization of results in improving efforts towards human resources skills development for the transport industry.

Development of the research strategy had to take the following issues in to consideration:

- . The research strategy has to involve stakeholders in its development
- . The research strategy has to identify current skills development issues impacting on the quality and effectiveness of skills development initiatives
- . The strategy had to identify institutional capacity and resource requirements to implement the strategy.
- . Determine administrative and structural adjustment requirements to enable implementation of the strategy.
- . Current human resource capacity requirements.
- . Research studies will be undertaken with the main objectives of providing knowledge and evidence on issues of relevance to skills development and training in the transport sector.

Based on the above conditions, stakeholders were consulted on what were the common issues that plagued their industries and needed solutions through research studies. Information on common and persistent challenges in their organizations was used as indicators of problems that needed research to provide necessary evidence for determining solutions. We were aware that although research studies had been conducted within TETA, these had not been conducted with the concurrence and participation of stakeholders. The reports have therefore, tended to be utilizable at the TETA institutional level and never shared with TETA stakeholders. The noninvolvement of stakeholders in evaluation of programs tended to focus on performance issues rather than outcomes and impacts on skills development activities. The approach to have a research strategy where stakeholders will be involved in determining research topics and priorities will make research relevant to stakeholders and the results obtained more likely to be used by them.

A research agenda generated by members of the industry is more likely to be supported and results likely to be used by the industry for decision making and planning to improve operations within the industry.

4.1 RESEARCH QUESTIONS AND LIMITATIONS OF THE STUDY

In undertaking the study to determine research needs in the transport industry we designed our approaches to answer questions pertaining to TETA current research priorities, its capacity to carry out research, its ability to determine status of research among the stakeholders, determine capacity for research and the quality of research management systems and tools within the transport industry.

The research questions were developed to enable getting answers we needed to develop a rational research strategy. The questions we posed consisted of the following:

- i. Is research used as a major tool for decision making on skills development in TETA.
- ii. Are there formal research management tools in TETA to manage research?
- iii. Is research being undertaken currently in TETA directed at providing information to respond to operational and skills development challenges in the transport sector?
- iv. Is research being undertaken effectively managed to provide results that have immediate utilizable value to the stakeholders in the transport industry?
- v. What are the critical issues in the skills development in your organization that require information to provide solutions to problems impacting on recognition of skills needs in your organization?
- vi. Does TETA have a data and information repository where research findings can be easily accessed by interested parties?
- vii. Are there policy and operational factors impacting or likely to impact on TETA's capacity to undertake research for betterment of research in the industry?
- viii. Is there any capacity for research in the industry?
- ix. What research capacity in TETA is needed to ensure adequate research support in the transport industry?

4.2 LIMITATIONS OF THE RESEARCH STRATEGY DEVELOPMENT PROCESS

A number of constraints were expected in the collection of data for the strategic analysis and development of the TETA research strategy. Major constraints were in t

getting the right individuals responsible for research or M&E in the individual organizations to participate in the workshops and data collection among organizations where most of them had no research portfolios, and therefore there were no individuals employed as researchers, The second major constraint was the reluctance of organizations sending high level management on an activity they considered as not bringing profit to the organization, and thirdly the reluctance of organizations to share operational information with organizations they considered as competitors. The third major constraint was the inadequate or absence of data on operational constraints from the stakeholder organizations. Finally the wide geographic spread of organizations that made it difficult to get most members to attend the meetings, Although we resorted to telephonic interviews we were unable to reach all those on the respondent list; some of the identified declined to be interviewed while others told us that they were not authorized by their senior management to divulge any information on their organizations to anyone. (E.g. PRASA). The limited budget also played a role in limiting our reach to a significant number of respondents.

Although the effective sample was smaller than expected, it was still significant, and represented organizations and respondents from various chambers. We were not so successful in getting large numbers of participant to the strategy development workshops, mainly due to late confirmation of workshop venues. Given that we found very few organizations involved in research activities in the industry we asked organizations to send staff responsible for human resource development and planning to the workshops. The quality of information we collected from such varied group of respondents was not uniform and some could not be validated.

A significant portion of respondents and participants in the workshops did not have a clear understanding of the role of research in the transport industry and hence their participation did not bring out the information we were looking for. A number of participants were not even aware of the research that TETA was carrying out and therefore could really not give their opinions on research in TETA. In some cases some organizations sent low level staff who did not actively participate in the discussions.

5 IMPLEMENTATION METHODOLOGY

Implementation of the TETA Research Strategy consisted of three stages; the first stage consisted of extensive stakeholders' consultations and data collection on the state of research in the industry. This stage focused on determining the level of knowledge of research in the industry and their willingness to consider research as an important management tool to improve performance and promote innovation. The process also was used to assess existing capacity for research among the individual organizations.

The second part of the study consisted of presentation of the findings of the initial inquiry on research status in the industry and challenging leaders of the industry to identify prospective areas of research to help the industry improve performance and embrace innovation to be competitive on the world stage. The discussions were designed to lead to identification of broad areas for research in the industry leading to development of the research strategy for the industry to be managed by TETA.

The third stage of the study will consist of the development of the research agenda and research management protocols to enable TETA to effectively manage research studies.

A total number of 300 individuals from different sectors of the transport industry were interviewed. The respondents selected for interviews were purposefully selected from a list of stakeholders provided by TETA. The list included technical and administrative leadership in the industry. Due to poor response to requests for interviews all those who indicated willingness to be interviewed were included in the final interview sample. The interviews were conducted by a team of interviewers who were trained to conduct telephonic interviews using a prepared telephonic

questionnaire.

The interviewers first contacted all individuals who were on the list of industrial leaders provided by TETA and invited them to participate in the interviews on research strategy for TETA; those who accepted the invitation were asked to indicate when they would want the interviews to be conducted and appointments times recorded in an interview register. A total of 300 respondents agreed to be interviewed over the phone and 22 opted for face to face interview. Efforts were made to interview sector leaders and the consultant travelled to the provinces for the interviews. A limited number of Focus Group Discussions were also carried out with the Branch of the Taxi Association in KZN. Other scheduled FGDs could not be conducted due to difficulties of organizing members to attend discussions meetings during working time.

Preparation for the Research Strategy Development

In developing the TETA Research Strategy, CLEAR A.A research team undertook a mapping exercise to establish geographical distribution of membership of the TETA. Based on the exercise a decision was made to hold workshops in only four provincial centers where majority of membership organizations were concentrated. The decision to hold workshops in Eastern Cape, Western Cape, Gauteng and Kwa Zulu Natal were based on the fact these were the areas where most of the sub industries in the transport sector were concentrated.

In both the first and second workshops, leaders of the various sub sectors in the industry participated in the sector through consultative workshops. The consultative workshops were aimed at sensitizing the leaders of the industry including skills training service providers to the need to contribute ideas on how research in TETA should be strengthened through their participation in identifying research topics relevant to their knowledge management requirements. They were also tasked with the responsibility of consulting within their sectors to identify issues likely to gain from information and evidence from research studies. Information from the consultative processes which contained suggestions on how research should be managed and which areas in the sector needed to be researched was used to develop the agenda and program for the strategy development workshop.

5.1 THE STRATEGY DEVELOPMENT WORKSHOPS

Following the data collection exercise a one day strategy development workshop was held in each of the four provinces of Eastern (East London) and Western Cape (Cape Town), Gauteng (Johannesburg) and Kwa Zulu Natal (Durban). The workshops were attended by invited participants from among the leaders in the industry, most of whom had previously attended the consultative workshops before. For reasons that will be explained in the constraints section, the attendance to these

workshops was less than the number of participants invited. However, there was robust participation from those who attended the workshop and key issues on management of research in TETA were discussed and suggestions for improvements were advanced.

The workshop proceedings consisted of lecture presentations by the research team on the outcomes of the consultative workshops and consolidation of information on identified research needs in the sector. In addition, the basic fundamentals of strategy development were presented and discussed, and this was used as a platform to guide syndicate group work that followed. The lecture presentations were followed by syndicate group work where participants further deliberated on the findings of the study to determine research priorities in the transport industry and what role TETA could play in operationalizing research activities in the sector.

5.2 PROCEEDINGS OF THE STRATEGY DEVELOPMENT WORKSHOP

The workshop proceedings consisted of lecture presentation on the following subject matters:

- . Presentation and discussions on the outcomes of the sector-wide inquiry on research focus in the transport industry.
- . Discussion on the perceived role of TETA in the management of research in the transport industry
- . Group discussions on the potential for research in advancing innovation and efficiency in skills development in the transport sector
- . Group work of strategic analysis of research in TETA;
- . Development of SWOT (SLOT) analysis matrix for development of the research strategy.

Participants divided into small work groups were instructed to identify and discuss issues in their organizations that would require research to solve. They were also instructed to develop a SWOT analysis matrix for these problems in relationship to their organization.

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6 OUTCOMES OF THE STRATEGIC ANALYSIS OF THE TRANSPORT INDUSTRY

A strategic analysis of sectors in the transport industry was based on the analysis results of the data collected from FDGs and personal telephonic and face to face interviews as well as from direct observations made during the data collection. This was further supplemented by personal observations and experiences from participants in group work. Data from all the sectors of the industry revealed some similarities on challenges for skills development. Common challenges for the eight subsectors were:

- . Lack of formal research capacity and functionality in the organization organograms
- . Weak Monitoring and evaluation systems
- . Lack of formal research management systems, policy and tools
- . Absence of culture of using evidence based information for decision making and planning.
- . Lack of awareness of research activities carried out by TETA.
- . Management environment that is not favorable to quality research
- . Lack of research strategic goals and objectives at both TETA and organization level

In order to clearly determine strategic research goals and objectives in the transport industry the strategic analysis (SWOT/SLOT) was undertaken by participants in the research strategy development workshops. Participants were divided into small groups representing the various subsector industries to identify strengths, limitations (weaknesses), opportunities and threats (risks) of the subsector they were analyzing.

They used the approach of identifying the main mandate and assessment on how the subsector was performing and determined strengths, weakness, opportunities and threats.

The SLOT analysis process was further assisted by the inclusion of information collected from the personal interviews, focus group discussions, literature review and direct observations. The analysis framework used for the strategic analysis considered the following:

- (i) TETA stakeholders' perceptions on the role and capacity of TETA in management of research in the industry;
- (ii) TETA stakeholders perceptions, knowledge about the relevance and use of TETA's past and current research studies;
- (iii) Determination of TETA stakeholders' role and involvement in the commissioning, management and use of research to generate evidence

based information for use in strengthening decision making for human resource skills development:

(iv) Determination of current research capacity within the sector;

(v) Determination of TETA role in management of research for strengthening capacity to establish credible skills development training programs

(v) Determination of perceived potential for research to generate evidence based information for use in planning and decision making in skills development in the industry;

(vi) Determination of requirements for the management of action (operations) research in the transport industry.

6.1 STAKEHOLDERS PERCEPTIONS ON CURRENT TETA ROLE AND CAPACITY BUILDING IN RESEARCH

Most of the participants in the consultative workshops were not aware of TETA's research activities as they were not informed about the research studies that had been or were being undertaken, and could therefore not comment on whether research in TETA ever had contributed to evidence based information and knowledge that could have led to improvement of operations and management of any sector in the industry. The majority of participants who attended the workshops were not even aware that TETA was undertaking research studies as they had never been made aware of any of the research studies commissioned by TETA. This gave indication of lack of communication between TETA and its stakeholders on research activities in the sector. Majority of the organizations represented in the workshops admitted to not having capacity for research and hence had no capacity to comment and participate in research studies in the industry to generate information and knowledge that could be used to assist the industry to improve its operations or

development of innovative strategies to advance the industry human resources skills development.

Evidence to indicate that research was being used to generate information for use in the management skills development in TETA was not adduced from the study.

Research has not been used as a management tool for decision making in the transport industry. Advances in operations and management appear to be based on adoption of lessons learned from similar industries in other parts of the world. This situation is likely to continue as long as most members of the industry do not establish research to develop new and innovative approaches to establishment of skills development training strategies locally. Development of successful capacities in research to service the human skills development will depend on TETA ability to advocate and help establishment of appropriate monitoring and evaluation systems at each organization level in the industry. This will assist in the collection of relevant data at the operations level to accurately identify skills needs and gaps to enable

development of appropriate skills training interventions. In a situation where majority of organizations in the sector, have limited functional monitoring and evaluation systems, establishment of such system will greatly contribute to the building of a data base that will be useful in the determination of skills development strategies.

In discussing with the industry leaders, we found that there was indeed limited capacity to undertake research within the sector and this has impacted negatively on the sector's ability to have access to evidence based information for decision making and planning for skills development training. The transport industry's current practices of identifying skills needs and gaps for the ASSP are not accurate or reliable; the process relies on instruments that are not comprehensive or proven efficacy. We were unable to find evidence on where the instrument used for determining scarce skills has been tested to prove its efficacy in determining scarce skills to guide development of appropriate remedial skills development training interventions.

Another important finding was that a significant majority of respondents indicated that they do not have ready access to information on local research studies in the transport sector as they were not aware any research activities being undertaken. Most of the respondents who had tried to access research studies in the sector found that they had to subscribe to journals or research institutions which required financial resources that their organizations were not prepared to provide. Use of research results did not seem to be a common practice in many organizations in the transport industry. We did not find an organization in the sector with a fully established research unit.

Interrogation of leaders of the industry, led to the finding that current SSPs were not based on accurate evidence from assessment of the work environment, but on uncertain evidence from the Career Junction based instrument which has not been tested to determine its efficacy in identification of scarce skills in the industry. Our

lack of confidence in the current tool used to determine scores skill is based on the instrument's inability to make a distinction between actual lack of specific skills and other conditions likely to affect the choice to apply for a specific advertised position which may not be due to lack of requested skills but may be due other factors. We are aware that choice to apply for a particular job may be influenced by other factors such terms and conditions of service and geographical location of the advertised position. In addition, the tool assumes that all skilled personnel would access the Career Junction Newspaper routinely or have access to internet. The HR managers participating in the skills assessment exercises are in most cases not formally trained to accurately assess skills needs, and many have no opportunity to the services of a research unit to conduct appropriate skills and gaps needs assessment. Furthermore, due to lack of research units in many of the organizations in the transport industry in South Africa, appropriate resources are not availed to conduct proper skills needs assessment.

Although there are many issues that could be solved by information from research in the transport industry in South Africa, current TETA research activities have focused on national level policy issues that could only peripherally benefit the industry. Research activities in the green economy, transformation and involvement of persons with disabilities maybe important research issues in as far as they relate to assessment of how far the country has achieved in terms of the two issues, but these are distant from the everyday challenges of skills development to increase operational efficiency and effectiveness. Issues such as those related to transport safety, and technological developments in the sector would be more attractive for the industry as these have direct relevance to performance of the sector. Other specific examples of priority issues for research were pointed out such as violence in the taxi industry that has a bearing on the training of owners of the taxis, road safety that has relevance to training of taxi drivers etc.

There are a number of high profile challenges faced by some sections of the industry that should have attracted research to determine type of skills training needed to contribute to the solving of performance problems. TETA has not been able to successfully map out scarce skills gaps in the sector due to lack of appropriate research capacity and tools. Our analysis of data collected has indicated that research capacity is needed in conducting of simple skills assessments to help in design of relevant and appropriate skills development training. These include the following:

- 1) Policy environment to determine relevance, appropriateness of current national policies.
- 2) Determination whether current policies and legislative environment adequately supports and enables skills development in the transport sector.
- 3) The determination of the effectiveness of regulatory environment in skills development
- 4) Research capacity at TETA and among the stakeholders.

- 5) Determination of the research management capacity and systems.
- 6) Determination of need to develop effective skills needs and gaps assessment tools to map out capacity gaps in the industry.
- 7) Development of effective systems for monitoring and guidance of skills training programs to match the needs of the industry.

6.2 ASSESSMENT OF THE RESEARCH ENVIRONMENT

Assessment of the operational environment has revealed that although TETA has adopted the integrated human resource development strategy which requires the use of research to provide evidence based information for decision making, the organization has yet to establish the necessary policy and administrative and research management tools. Given that research has not been central to TETA

development strategy until recently, the organization does not have appropriate structures in place to manage research processes adequately.

According to the TETA Strategic Plan 2015-28, Strategic Goal 1, which reads; “To establish a credible sector institutional mechanism for skills planning, create and sustain research capacity on labor markets within TETA.” Although no time frame was given for the achievement of the goal, we made assumptions that this was to be achieved within the strategic plan period (3 years). The process of establishing a credible system to manage research to provide credible information for decision making has been initiated by establishing the Research Unit, which is expected to develop the necessary mechanisms, tools and operational policies.

Currently the Research Unit comprises of the research manager and an administrative assistant. Research is administratively separated from monitoring and evaluation functions despite the fact that the latter provides most of the information that research would need to develop data bases for information and knowledge required for planning and decision making in management of skills development initiatives in TETA. Both the Research and Knowledge Management and Monitoring and Evaluation units have no formalized operational policies, tools and standardized protocols to guide management of data. The absence of formal information repository and data base has made it difficult to consolidate information and data on TETA programs and activities. Currently available on TETA activities consisting of reports (annual, strategic plan and other routine reports) are managed by an information officer in the information and public relations office. Information available on TETA programs and activities consisting of periodic reports; annual reports and strategic plans and research reports on studies undertaken are not stored in a single data base as there is no central information repository.

Research has been included in the new annual reports 2014/15 as a central strategy to generate information that will guide development and /or modification of current

skills development training, learnership bursaries and placement programs. As indicated earlier, TETA has identified the need to consolidate and develop research capacity at the institutional and operational level plans. The plans made, include development of the research strategy and agenda to enhance the role of research in providing evidence based information to managers of subsectors to use in planning and decision making.

Despite the fact that TETA has conducted a number of research studies we were unable to access the research reports except the first tracer, which turned out not to be informative. A review of other studies that were commissioned or about to be commissioned was undertaken and we were dismayed by the poor quality of documents we read. We were, therefore, not expecting to have evidence of utilization of research outcomes as we did not find substantive information that could be useful to answer specific questions in the industry.

As mentioned earlier, we found that the selection and commissioning of research studies was not guided by research agenda based on identified priorities in the sector. The studies were commissioned through the current strategy where external researchers can submit a research proposal for funding to the SETAs and if the proposal has some relevance to themes that have been identified in the national development plan. The commissioning of studies is not guided by any priority criteria and the Board of TETA has the discretion to fund any study even if it is not a priority for the transport sector. This approach to research in the sector seems to have led to inappropriate focusing of research activities and priorities on issues that are not likely to provide evidence to help the transport industry to solve skills and capacity related problems.

We surmised that the lack of formal research management guidelines and tools may have significantly impacted on the quality and execution of research studies in the transport sector. TETA has yet to establish a research Chair, appointed from credible tertiary research institution to independently provide oversight on research activities to guarantee quality in undertaking of studies by appointed service providers.

Finally, several TETA stakeholders indicated that they needed assistance to generate specific information to use in determining skills needs and gaps in their organizations to help them plan for future requirements. TETA has not been able to develop the requisite capacity for labour market analysis to determine current and future skills needs, and this has resulted in the industry using non-scientific means to determine skilled labour requirements. This approach has not helped TETA to make appropriate determination of current and future skills training needs and had made it difficult to make future projections for resources required to comprehensively develop adequate skilled labour force in the transport industry in South Africa. As observed in earlier sections, lack of appropriate tools and formal skills needs assessment instruments to assist stakeholders to accurately determine skilled labour requirements in their sectors, has led to poor mapping of skills needs and gaps in the

industry. The inability to map out priority skills needs and gaps may have led to TETA's failure to help in the review of some of the skills training programs to make them more relevant to the needs of the industry.

Existing skills development training programs were expected to be closely monitored through routine collection of data on administration, facilitation and content of the programs. Such data would then be analyzed to determine the relevance, effectiveness and impact on the skills development. Although we found course evaluation information on some programs; this was not enough to use in determining effectiveness and relevance of the courses to the skills needs of the industry. TETA will require undertaking specific studies to appropriately identify the transport industry's skills needs and gaps.

6.3 SELECTED SECTOR SPECIFIC FINDINGS

Respondents from various sectors were interrogated on what they considered as possible research issues in their sectors. The following results were obtained from the interviews:

6.3.1 AEROSPACE

Aerospace sector comprises of the aviation and other aerospace related industries. Aviation is the largest subsector in the industry and is reported to have between 40-50 thousand workers in all categories. This includes pilots, aircraft engineers and maintenance personnel, air-traffic controllers and ground staff. Training of personnel in the industry is carried out at recognized training schools for pilots and engineers and engineering artisans. A significant number of support staff is trained in a variety of trade's schools recognized by the EQTA and most of them through on the job training.

Opportunities for skills development in the aviation industry is limited by the limited numbers of available training institutions, the high cost of training and limited job opportunities as well as inadequate levels of transformation. As a highly regulated industry this has limited the number of recognized training institutions able to offer appropriate training. Numbers of learners able to register for training is limited given the limited numbers of training schools available. Other limiting factors include the high cost of tuition and the lack of support from TETA bursaries and learnership programs as a result of limited programs on aviation at the EFTs and higher education institutions. For the pilots, obtaining private commercial license does not guarantee a job given the limited job opportunities in a sector that has not sufficiently been transformed.

The numbers of available trained personnel in the country is continuously being eroded by the steady migration to the Middle Eastern Airlines that are offering better employment packages. Furthermore, the closure of military aviation training schools has reduced opportunities for training. Lack of a sector strategy has impacted on TETA's ability to accurately map-out skills development needs and gaps of the sector.

The Aviation sector expressed lack of adequate information support to determine factors that are impacting on the sub-sector's lack of transformation. Current knowledge on the subject suggests several reasons for the poor state of transformation in the industry; one of the main reasons is that aviation in South Africa is small and most privately owned by individuals and companies that do not adequately ascribe to transformation policies. Lack of transformation and the limited

job opportunities have led to black pilots as well as aircraft engineers maintenance support and ground operations looking for jobs outside the country.

TETA's attempt to develop a strategic plan for the aviation sector has not materialized and this has continued to impact on TETA's ability to fully determine and map out skills development need and gaps in the sector.

The SWOT analysis of the sector has indicated the following:

Table 6.3.1 1: SWOT Analysis Table for Aerospace Sector

Strengths

Limitations

- . Quality assured training programs
- . Availability of bursary sponsorship
- . Highly specialized field
- . Regional leadership in quality training

- . Limited training opportunities
- . Lack of adequate transformational response
- . Highly regulated thus limiting opportunities for training

Opportunities

Threats

- . Rapid growth of aviation industry into international and domestic travel business

- . Increasing regional air travel

- . Advance training facilities at regional level.

- . Insufficient transformation in the sector thus not providing opportunities to those previously disadvantaged

- . Skills drain

- . Fall in the financial resources

The results of the SWOT analysis clearly indicate that the sector needs to transform in a number of areas. First of all, the sector needs to establish a register of skills currently available as well as projects for future skills requirements.

6.3.2 FORWARDING AND CLEARING SECTOR

Clearing and forwarding is one of the important main support services in the transport industry. The sector employs about 22,000 workers that are involved in local and international freight management. The sector skills requirements are mainly in freight, courier and shipping management. Skills needs mapping has not been done accurately due to absence of appropriate tools to determine skills needs and gaps.

SWOT Analysis Table 6.3.2.1

Strengths

Weaknesses(Limitations)

- . Established operational procedures
- . High demand for courier service
- .

- . Limited skills of workers
- .

Opportunities

Threats (Risks)

- . World-wide need for rapid and secure delivery of goods and parcels
- . Increasing commercial trade among international and among intra country commerce
- . Improving
- . Dependency on transport networks
- . Poor security of movement of products

- . High cost of transportation
- . Presence of large external competitors such as DHL, UPS and others.

The SWOT analysis indicate that the sector needs to improve its skills development to match competition from external competition

6.3.3 FREIGHT HANDLING

Freight handling sector is concerned with the handling of cargo at ports and harbors. The sector manages the handling of goods at the ports and inland warehouses using loading and unloading equipment that includes cranes, fork-lifts and other loading equipment. Main skills needed by the sector include training of personnel in operating cranes and folk lifts as well as general management of such operations. The sector has been successfully supported by TETA sponsored training programs to train operators of cranes and folk lifts through registered private service providers. Many of the training service providers in this sector have complained about delays in certification of their training programs. In addition they have complained about the quality of moderators assessing the quality of their programs as being not appropriately qualified for the job.

The Strategic analysis of the sector indicated the following main features:

Strengths

Weaknesses

- . Recognized professional and established sector
- . Long history of providing reliable freight management service in the country
- . Well trained staff providing efficient service leading to reduction in cost of freight compared to other similar sectors in the region

- . Lacks a clearly defined human resource development strategy
- . Limited numbers of trade training institutions- current training school in Durban does not have adequate numbers of trainers.
- . Has no capacity for research to provide evidence based information on how freight management can be strengthened.

- . Have modern freight handling capacity through modernized equipment,

Opportunities

Threats

- . Increase in trade among countries
- . Improvements in the freight management equipment
- . Improving economy for increase imports and exports
- . Presence of training institutions in countries that have signed technical cooperative agreement with TETA

- . Economic slowdown reducing the volume of goods transported between countries.
- . Inadequate local training opportunities
- . Competition from neighboring

countries offering similar services to inland countries.

The sector needs to strengthen its human resources development to remain competitive.

6.3.4 TAXI INDUSTRY

The taxi industry provides an important service in providing affordable passenger services to commuters in the country. Although the sector is seen as informal, it is this feature that allows it to provide affordable transport to workers on daily basis. The quality of service provided may vary according to the individual associations but what is common to the industry is the generally poor customer relationship, the poor road discipline of the drivers and the violence related to sharing of routes. Several independent studies have identified the sector problems as related to the lack of regulations or lack of application of regulations related to operations of the taxi industry listed below:

. Lack of comprehensive training programs for owners of the taxis in the management of the sector as a formal business. Currently management practices do not adhere to standard employment practices for drivers. The lack of business management training is known to be contributing to exploitation of the mini bus taxis' which in turn has led to reckless driving to meet up their financial obligations to the taxi owners.

. Driver training for passenger transport is not adhered to; anyone with a driving license can be employed as a taxi driver, compliance to employing drivers with public service licenses is not adhered to.

. There are no mechanisms for passengers to register their grievances.

. Existence of corruption among the traffic police contributed to the taxi drivers' ignorance of traffic rules on the roads.

. Fragmentation of sector into several local taxi associations that has made it difficult to establish a common code of behavior for taxi owners and their drivers.

There has been little research done to provide evidence based information as to why the industry has had such insolent and violent history. Results of such research will enable TETA to develop appropriate training programs and for the DoT and relevant transport regulators to develop appropriate remedial solutions.

The SWOT analysis of the sector carried out indicated the following:

Strengths

Weaknesses

. Ability to provide commuter services to large volumes of people at affordable prices

. Ability to serve commuters in areas where public services may not be available

. Ability to provide additional transport to move large numbers of workers during peak times.

. Inadequate training of drivers to handle passengers

- . Drivers' poor compliance to traffic rules leading to increased road traffic accidents
- . Poorly maintained vehicles contributing to increase traffic accidents
- . Use of drivers not licensed to drive public service vehicles.
- . Poor terms and conditions of employment for drivers

Opportunities

Threats

- . Expanding volumes of commuters
- . Inadequate public transport in expanding towns
- . TETA training courses for drivers
- . SME training courses for taxi owners
- . Recapitalization opportunities to renew vehicles
- . Collaborating with public service transport to form a seamless operational agreement to improve public access to commuter transport

- . Poor handling of passengers
- . Increasing number of road accidents due to flouting of traffic rules by taxi drivers
- . Fragmented management of taxi transport leading to violent competition.
- . Lack of appropriate training for drivers and owners of the business.

The industry needs solutions to the challenges it is currently facing; appropriate research studies are needed to provide evidence based information that can be used to determine solutions to the challenges.

6.3.5 MARITIME SECTOR

This is one of the largest sectors in the transport industry. It is estimated to employ more than 14,000 employees and is reported to account for handling more than 95%³ of the country's trade in exported and imported goods

3 TETA Strategic Plan 2015-2018 5.1,3, p13

4 TETA Strategic Plan 2015-18, 5.1.3 p13

TETA invested heavily in the maritime skills training by supporting local schools of excellence in maritime training as well as establishment of training assistance from more developed institutions outside the country. In addition TETA provides bursaries to students intending to pursue maritime studies in local and overseas educational institutions. Currently TETA has a training assistance with the Antwerp Maritime School with the financial assistance of the Belgium Government. A number of students have attended various maritime courses and have added to the pool of trained practitioners in the country today.

The support to the skills development at the local and external institutions has been useful but not wholly satisfactory. Authorities at the only maritime training schools have expressed dissatisfaction with the level of support towards building local training capacity due to lack of appropriate local expertise to ensure appropriate complement of teaching staff in these institutions. Trainers in the maritime college in Durban expressed the lack of adequate numbers of teaching personnel and had to depend on retired trainers to complement the teaching staff.

The impact of the training programs has not been evaluated until the recent decision to evaluate the South African maritime school in Belgium (Antwerp), in the form of a tracer study.

6.3.5.1 STRATEGIC ANALYSIS OF THE MARITIME SECTOR

A basic strategic analysis of the maritime sector was undertaken to help in determining areas where research will help strengthen the sector, the results of the analysis are recorded in the table below:

Strengths

Weaknesses (Limitations)

- . Main contributor to the economy of the country by moving more than 95%4 of the country's trade
- . Has adequate capacity to handle movement of goods in and out of the country
- . Employs more than 14,000 workers

- . Limited capacity of sector
- . Foreign ownership of ships making the country to have no control of shipping.
- . Skills development capacity in the sector is limited due low local capacity
- . No substantive local research on shipping operations

. Skills development among local workers limited as most ships are foreign owned

Opportunities

Threats (Risks)

- . Increasing volume of trade between South Africa and other overseas countries
- . Growing economies of land locked neighbors requiring services of the industry
- .
- . Foreign ownership of ships
- . Slow economic growth in the region
- .

Base on the strategic analysis findings the sector requires an evaluation of its performance given the fact its role is confined to port management, cargo handling, freight management and coastal control. Research studies are required to determine how the lack of own ships is impacting on maritime training and internships, and what agreements will be needed if significant impacts are found.

6.3.6 THE RAIL TRANSPORT SECTOR (DATA STILL BEING ANALYZED)

The Rail Industry employs about 90,000 workers involved in two main sub sectors of passenger services (PRASA) and goods and freight (TRANSNET). The latter has a current capacity of more than 200 million tons annually. Currently most of the tonnage is in coal and mineral ore transportation for local and foreign markets. Rail industry has significantly lost its traditional advantage to move general freight to the more competitive road freight subsector. The road freight sub sector which is mainly privately owned has become more competitive due to, among other reasons, improved road network within the country and regionally.

The industry has been in decline over the years due to low public investment and lack of adequate public investment and supportive legislation. The industry is facing significant competition from the road freight sector in both goods freight and passenger transport due to lack of reliability resulting from the effects of aging rail infrastructure.

TETA has not weighed in to undertake research to identify skills that would contribute to continued improvement of the management of the sector. Current TETA led skills development trainings for the sector have not been reviewed for their continued relevance to strengthening of the sector. A strategic analysis of the sector revealed the following facts:

Table 6.3.6: Strategic Analysis of the sector indicates the following status:

Strengths

Weaknesses (Limitations)

- . Has national wide infrastructure
- . Has a large latent capacity to expand
- . Offers competitive rates for

. Aging rolling stock and rail

infrastructure

. Vulnerable to cable theft

. Has some management problems

transportation of goods

- . Can transport large volumes of cargo more cost efficiently than road freight.

- . Acquisition of new equipment and recapitalization of infrastructure

- . Problems of reliability

Opportunities

Threats (Risks)

- . New support from government investment in rail infrastructure,

- . Reorganization of management

- . Establishment of supportive legislation and policies for revitalization.

- . Stabilization of electricity supply

- .

- . Rising cost of electricity

- . Narrow gauge of rail lines making it incompatible with regional rail systems

- . Electricity cable theft

. Aging rolling stock and rail
infrastructure.
. Wanton vandalism of passenger
trains

Research is needed to provide evidence based information to develop more innovative skills development training programs to match requirements for management of the new public investment programs. Research activities to generate information and data on performance of the sector will be utilized for continuing improvements of skills development in the sector.

6.3.7 ROAD FREIGHT

Road freight sector is one of the largest sectors in the industry. The Road Freight sector employs more than 70,000 employees consisting of drivers, mechanics and administrative and support personnel. The sector has an estimated freight moving capacity of 640 million tons annually. It is currently the fastest growing sector due to the opening of transport opportunities to service regional countries.

5 TETA Strategic Plan 2015-18, Section 5.1.3 p13

The sector has gained from the rail sector due to its flexibility to serve areas out of reach of the rail industry as well as due to improvements in the state of road network in the country and the region as a whole. The establishment of regional cooperation agreements among regional countries has also contributed to the sector growth given that South African sector has superior resources in the industry.

A strategic analysis process of the sector revealed the following facts:

Table 6.3.7: SWOT Analysis of the Road Freight Sector

Strengths

Weakness (Limitations)

. Well resources

. Production of high levels of carbon

- . Well established road transport companies with large fleets

- . Relatively well trained personnel

- .

emissions due to use of diesel fuel

- . Contributes to congestion of roads leading to increased carbon

emissions

- . Increase driver exposure to sexually transmitted diseases

Opportunities

Threats (Risks)

- . Growing local and regional trade

- . Establishment of regional cooperative trade agreements

- . Improving automotive technology leading to greener fuels.

- . Improving local and regional road networks

- . Economic slowdown leading to

reduction in movement of goods

. Threat of HIV and AIDS as the sector

has the highest risk of spread among

especially among the trans-border

drivers.

. Poor road maintenance

The Road Freight subsector is a critical part of internal and regional trade and likely to continue to thrive in developing regional economy. However the sub sector faces a number of challenges that need to be dealt with on the basis of evidence based information such as awareness creation for HIV and AIDS as well as other transmissible diseases. HIV and AIDS have been identified as posing major threat to the industry as prevalence of HIV/AIDS is the highest among all categories of workers in the transport industry. Long distance driver have the highest risk of exposure to sexually transmitted diseases as a result of high potential for multiple sexual partners along the routes they take. Although TETA is contributing to awareness creation for HIV and AIDS it is not supporting research to determine appropriate training and approaches to minimize the impact of sexually transmitted infections (including HIV/AIDS). TETA needs to provide resources to support such studies as a contribution to improving longevity of skilled workers in the industry.

6.3.8 ROAD PASSENGER

The Road Passenger subsector employs more than 30,000 workers directly and 150,000 workers indirectly. The sector makes more than 816 million passenger trips to various local and regional destinations annually. The Road Passenger sector role

is to provide reliable and safe regional passenger transport to travelers on daily basis. The services provided include daily commuter services for workers and long distance travelers between towns and cities or regional travelers. There are several challenges related to the provision of passenger services, these include road safety and passenger security, and cost containment of operations.

Operations cost containment is a major challenge as it determines sustainability of the business of passenger services. Training in management of the various

operations challenges is therefore a must for the sector. However, development of the training will need to be guided by training needs assessment research. Current training programs may be providing skills training but it needs to be constantly reviewed to keep the training up to date with new developments in the sector.

A limited strategic analysis⁶ of the subsector indicates the following:

⁶ Only a limited number of respondents and even a smaller number of participants from the sector attended the strategy development workshops

Table 6.3.8: Strategic analysis of Road Passenger Sector

Strengths

Weaknesses

- . Provides reliable conveyance of passengers at affordable prices
- . Ability to reach rural areas off the main road networks
- . Able to operate at lower profit margins compared to other modes of passenger transport

.

- . Expensive to maintain
- . Low profit margins
- . High maintenance bills

Opportunities

Threats (Risks)

- . Combining with courier services to move parcels and mail

- . Expansion to mass transport of urban commuters

- . Adoption of green technology to reduce gas emissions through battery and gas and other non-fossil fuels.

- . Low profit margins

- . Poor road networks

- . High maintenance costs

- . Road congestions leading to high operating costs

- . Labor disputes leading to workers strikes

The strategic analysis of the subsector was weak and incomplete as there was limited participation of stakeholders from the sub sector. However, plenary

discussions revealed that there were a number of key challenges in the sector that needed solutions that could be provided through undertaking of research.

6.4 SUMMARY COMMENTS ON FINDINGS OF SUB SECTOR

STRATEGIC ANALYSIS

The summary of the strategic analysis has identified that research has never been a priority activity in the sector. Several organizations that participated in the research

strategy study and workshops did not have research units and did not identify several priority research needs in the transport industry.

The training service providers in the different sections of the industry observed that TETA's support to various training institutions is not well structured to provide quality and standardized framework for accreditation of courses and awards. Appointments of training service providers does not seem to follow strict qualifications and experiential criteria, and several under qualified organizations have been engaged to provide skills training for which they are not qualified to do. Lack of a strong monitoring and evaluation system, has led to the inability to collect data on performance of service providers. Service providers continue to be engaged in training programs without review of the quality of their performance.

There are concerns that were expressed by service providers on TETA's use of inappropriately qualified individuals/organizations to facilitate/moderate skills development programs. There were fears that this has led to lowering of standards in the delivery of skills development training programs in the sector.

7 THE TETA RESEARCH STRATEGY

TETA recognizes the importance of the role of research in creating a platform for generation of evidence based information to guide the development of relevant and appropriate work skills for the transport labor market. The development of the research strategy was thus carried out in the spirit of identifying strategic priorities in skills development and establishment of the necessary organizational mechanisms and capacities, to enable use of research as a principal tool for decision making in skills training and development.

The research strategy was developed from the information gathered in the strengths, weaknesses, opportunities and threats analysis exercise that was conducted in the course of the Research Strategy Development Workshops. The strategic analysis took cognizance of the expressed centrality of research to TETA's strategic direction indicated in its' 2015-18 Strategic Plan for skills development of the transport industry.

Summary of the strategic analysis carried out by the different sub sectors served by TETA is presented in the consolidated table below:

Table 7: Research SLOT Analysis Grid for the Transport Sector

Strengths

Weaknesses (Limitations)

. There is now a research unit established

- . Research studies are being conducted
- . There are adequate financial resources to support research and skills training
- . Research is included as a key development strategy in the TETA Strategic Plan 2015-18,
- . There is a functioning Monitoring and Evaluation systems collecting data on TETA skills development initiatives
- . There is a research policy to guide commissioning and supervision of research assignments.

- . Research capacity is limited
- . Limited culture of research in the institution
- . There are no formal systems for management and commissioning of research
- . There is no agenda to prioritize

research towards problem solving in
the skills development and
advancement,

. Separation of monitoring from

Research and evaluation potentiates
duplicity of roles and responsibilities
of the two units

. The research policy is weak and not
detailed enough to provide clear
guidance on commissioning and
supervision of research. (does not
provide safeguards for delivery of
results)

. Lack of understanding of the role of

research among the leadership of the industry

- . TETA does not solicit research topics from stakeholders.
- . Lack of requisite expertise in specific subsector technical areas.

Opportunities

Threats (Risks)

- . Availability of financial resources to enable support of research opportunities
- . Availability of credible research institutions and individuals in the country
- . Support from the DHET for research
- . Stakeholders willing to utilize research findings to improve their businesses,
- . Strong government support for research to generate evidence for decision making
- . Availability of institutions for specific skills training locally and internationally
- . Potential to learn from lessons

learned in other industries and
countries carrying out research in
human resources development

- . Poor management of research that could lead to wastage of resources
- . Lack of research direction that could lead to undertaking of non-priority research.
- . Lack of research management protocols (systems) with potential to engage.
- . Lack of research culture in the industry.
- . Inability to accurately map out skills needs and gaps resulting in failure to develop appropriate skills training for each subsector resulting in obsolescence of TETA supported skills training programs
- . Lack of adequate numbers of local skills training institutions leading to

dependence on expensive external
education

. Continued oversight of research
projects by non-technical personnel
is likely to lead to poor and non-
credible results

7.1 SUMMARY ANALYSIS OF THE RESEARCH ENVIRONMENT IN TETA

Analysis of the current TETA research strategic position points to the direction where there is a need to build a research capacity to serve as a management tool to provide quality skills development programs. There is limited capacity to manage and provide oversight for research undertaken in the sector, as there is no formal research management system and tools as well as awareness for research.

The development of the strategy was therefore made with cognizance of identified strengths, weakness, opportunities and threats of the current research environment. The principle of consolidating what you are good at, strengthen where there are weaknesses and minimize levels of threats was adopted in developing the research strategy. Determination of strategic options was guided by institutional vision, mission and values framework; whereas trends identified in the SWOT analysis grid strongly suggested the need to strengthen research function within TETA.

In order to define the parameters of the research strategy, we needed to define the vision, mission and values within which the strategy was developed.

The following were proposed and taking cognizance of the main TETA strategic goals and objectives:

7.1.1 VISION STATEMENT

For the Research Unit to be the center of knowledge for development and management of quality TETA's work skills training programs.

7.1.2 MISSION STATEMENT

To guide and provide technical assistance to development and management of TETA's work skills programs through the provision of evidence based information for better decision making and planning.

7.1.3 VALUES

The following value system will be applied in the implementation of the research strategy:

- . Prioritization of research to issues related to finding solutions to management or development of work skills training for the transport sector.
- . Quality assurance of research results
- . Accountability for results
- . Assurance of free access to research results and documents
- . Assured integrity of results
- . Stakeholder representation in decision making on research studies.

7.2 ESTABLISHMENT OF RESEARCH ENABLING ENVIRONMENT

Operationalization of the strategy will be dependent on the following institutional reorganizations:

- 1) The merging of the Monitoring unit with research unit to create the Research Knowledge, Monitoring and Evaluation Section (division)
- 2) Increase capacity of the RKM&E in terms of personnel
- 3) Establish a comprehensive information management system
- 4) Establish a data base and repository for research and knowledge management.
- 5) Develop a prioritized research agenda;
- 6) Develop research guidelines and tools;
- 7) Develop basic research management capacity for planning managers in the industry
- 8) Development of research management training for human resources planners in the industry.
- 9) Institute the necessary organizational structuring of the TETA organogram to provide for an enabling environment for management of technical functions including research in TETA,

7.3 RESEARCH STRATEGY GOAL

The research strategy goal is to establish a fully functional research and knowledge management service to guide the work skills development in the transport sector by the end of 2016.

7.4 RESEARCH STRATEGY OBJECTIVES

The following research objectives have been formulated to lead to the development of research capacity to service the requirements for monitoring and evaluation of skills training and development of innovative programs to advance skills development in the transport sector in South Africa.

The following strategic objectives were formulated:

Strategic Objective 1: To increase the capacity of the current research unit to cater for improved handling of technical research requirements for specific sub subsector in the transport industry. This will strengthen TETA support to identification of skills gaps and needs in each subsector. This may require Chamber managers to have training in research methodologies and management to be able to guide the sector in determining research requirements.

Strategic Objective 2: To establish a research and knowledge information management repository to cater for the needs of the industry, the information repository would provide access to information on developments and advances in skills and capacity building in the transport sector from within and outside the country.

Strategic Objective 3: To develop a prioritized research agenda to ensure undertaking of research that will provide evidence based information for decision making in the determination of industry based skills development and training. Current research activities undertaken by TETA are not immediately directed at providing solutions to operational challenges in the sector.

Strategic Objective 4: To develop research tools and systems for effective management of research. Development of research guidelines and tools will enable the research unit to standardize management of research activities and ensure quality of research results. The research protocols will comprise of the following:

- . Research guidelines for commissioning of research, including the determination of competences and experience of service providers.
- . Guidelines for preparing research proposals and evaluation of proposals
- . Guidelines for management of research implementation and submission of deliverables.
- . Guidelines for authorization of payments for achieved deliverables.
- . Guidelines for standardization of research reports

Strategic Objective 5: To develop a basic tool for accurately determining skills needs and gaps at the organizational level to guide the development of appropriate skills training programs.

Strategic Objective 6: Institute changes in the TETA organogram to reflect the elevated responsibility of the research function over all the Chambers in the organization. The suggested changes in the organization organogram is guided by the realization that TETA's main mission is the development and management of skills development and therefore the organization structure has to take into consideration the pivotal role that a technical department need to guide the process

with critical inputs from the research unit. We envisage the role of the research unit to be responsible for technical oversight and monitoring of quality and relevance of skills development trainings. The elevated level of responsibility will require increased authority to implement structured data collection on skills needs and gaps across all the chambers.

separation of technical and support
services

over all in charge providing authority
to subordinates on both technical
and support services

Providing Policy direction Board

CEO

COO

Finance

ADMIN

CTO

(Research and
Development)

Information

Mgt

M&E

Figure 7.4: Proposed changes in the organogram

7.5 PROPOSED IMPLEMENTATION OF THE RESEARCH STRATEGY

The strategy implementation plan will require management of TETA to rationalize the role of research in the core business of determining skills development opportunities and provision of support to develop required human resources skills in the industry. The Board will need to be consulted on the proposed organizational change to authorize the realignment of roles and responsibilities. After the Board has agreed to and authorized the changes the process of informing staff and stakeholders will be undertaken by way of conducting a series of consultative meetings with staff and separately with leaders of the industry to explain the research strategy and what it entails. A relevantly qualified service provider would have to be engaged to guide the implementation process.

Upon the completion of the information and consultative meetings a small committee shall be commissioned to oversee the implementation of the research strategy. This committee shall be responsible to review the research agenda, research protocols and instruments developed from the research strategy. The implementation process will be expected to be completed within a period of 6 months.

7.6 DISCUSSIONS

The development of a research agenda has led to the recognition that TETA needs to establish credible results based evaluative systems to assist in the collection of evidence required for decision making in the management of the skills development training. Development of such a system will be part of the process to establishing an information management system with an information repository accessible to stakeholders on demand, Establishment of formal research management systems and prioritization of research to issues that affect performance of organizations in the

industry will go a long way in strengthening TETA's role as the leading technical support organization to the skills development in the country. TETA will need to fine tune its role to be that of technical and quality assurance overseer and adviser to skills development to the industry.

In order to operationalize the research strategy, a number of suggestions have been made to the organizational structure. These suggestions are necessary as at the moment the responsibility for technical areas in the TETA mandate are under support services. The focus of the organization should be on the key core business of research and training to ensure quality skills development of workers in the transport industry.

7.7 RECOMMENDATIONS

The recommendations made in this report are informed by the evidence from the strategic analysis of the TETA operant environment and comprise of the following:

- 1) TETA should elevate the level of authority of the research unit to enable it to authoritatively oversee the critical data collection and research in determining skills development needs and gaps, This requires some tweaking of the organogram to separate the roles of technical and support services for better decision making.
- 2) Establish a research agenda base on identified gaps in information on skills needs and gaps in the transport sector. The research agenda should be reviewed on annual basis to ensure it is current with emerging developments.
- 3) Establish credible results based information management system to enable collection and management of data that will provide evidence on skills development training needs to the transport industry.
- 4) Establish standardized research management systems and protocols to ensure credible results from research studies.
- 5) Develop basic skills in research management for all chamber managers to enable them to provide technical assistance to member organizations to determine research issues that would provide evidence for better decision making organizations.
- 6) Carry out a skills needs mapping exercise based on a more accurate tool to enable development of a data base on skills requirements that will be updated on annual basis.

8 ANNEXES

8.2 LIST OF PARTICIPANTS WHO ATTENDED THE WORKSHOPS

8.2 THE STRATEGY DEVELOPMENT WORKSHOP TIME TABLE AND CONTENT

8.3 LIST OF PARTICIPANTS INTERVIEWED

8.4 THE INTERVIEW QUESTIONNAIRE