



**MICTSETA** |

Media, Information And  
Communication Technologies  
Sector Education And Training Authority

SHAPING SKILLS, PIONEERING INDUSTRIES, EMPOWERING FUTURES

# **RESEARCH AGENDA OF THE MEDIA, INFORMATION AND COMMUNICATION TECHNOLOGIES SECTOR EDUCATION AND TRAINING AUTHORITY**

**2023 - 2025**

## **AUTHORISATION OF THE RESEARCH AGENDA**

I, the undersigned, hereby on behalf of the Media, Information and Communication Technologies Sector Education and Training Authority (MICT SETA) approve the contents of the Research Agenda for the 2023/24 period.

### **Approved By:**

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Matome Madibana (Mr)  
Chief Executive Officer

Date: \_\_\_\_\_

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Simphiwe Thobela (Mr)  
Chairperson of the Board

Date: \_\_\_\_\_

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## 1. Introduction and Policy context

The Media, Information and Communication Technologies Sector Education and Training Authority (MICT SETA) is established through the Skills Development Act, (Act 97 of 1998). It facilitates skills development in the Information Technology, Electronics, Advertising, Film and Electronic media and Telecommunications subsectors.

The SETA is responsible for post-school education and training within the Media, Information and Communications Technology sector, and as such coordinates efforts to develop a highly skilled knowledge-based information society. Key legislative frameworks influencing the MICT SETA are the National Skills Development Plan (NSDP), National Development Plan (NDP), New Growth Path (NGP), Industrial Policy Action Plan (IPAP), Medium Term Strategic Framework (MTSF) 2019-2024, White Paper on Post Schooling Education and Training, the National Integrated ICT Policy White Paper, and the Economic Reconstruction and Recovery Plan (ERRP) together with its Skills Strategy. These policies have an overarching theme of promoting skills development to improve employability of the workforce, productivity of enterprises and inclusiveness of economic growth.

The research agenda of the MICT SETA embraces the changing landscape of the country and is geared towards unearthing blockages in the skills pipeline for the sector to inform the strategic direction of the funding system.

The research agenda is grounded on a stakeholder led process. These include national research institutes, fellow SETAs, employers, professional bodies, learners and education and training providers. Employer participation specifically, is critical to the implementation of the SETA's research agenda and research plans. Thus, the MICT SETA's research agenda is premised on the following assumptions:

- Education, training and lifelong learning are fundamental, but by themselves insufficient to help individuals gain decent jobs.
- Training and skills development must form an integral part of broad economic, social and labour market policies to sustain economic and job growth and social development.
- Training and skills development policies should promote equal opportunities for previously disadvantaged groups and help alleviate poverty.

## 2. Purpose of the Research Agenda

The Research Agenda sets out the research needs of MICTSETA for the period from the 1<sup>st</sup> of April 2023 to the 31<sup>st</sup> of March 2024. The purpose of the Research Agenda is to help organise and prioritise research requests, and to improve the quality of the data and information available within the MICTSETA sector. It provides a mechanism for building research capacity, as well as a guide for the allocation of resources for research and the strategic actions that will be undertaken to achieve the stated goals.

This research agenda will help organise and prioritise research that might otherwise be disjointed or not integrated into strategic planning and decision making, and to improve the quality of the data and information used by the SETA. The process for developing and using a research agenda is equally as valuable as the research agenda itself. More importantly, it provides a mechanism for building research capacity throughout the MICT SETA rather than isolated pockets of the organisation.

In general, the MICT SETAs research agenda shall provide the overall direction in the pursuit of research activities in aid of policy, planning and decision making on skills development issues for the MICT sector. Specifically, it aims to achieve the following:

- To support policy and program initiatives to ensure accessible and quality skills development interventions in the sector.
- To strengthen the role of the MICT SETA as an authority in post school education and training through relevant and research-based policies.
- To strive for equilibrium between supply and demand - all training programs will be guided by a job-skill matching paradigm, both in terms of quantity and quality set by the sector, especially in scarce occupations and areas where there is high demand.

### **3. THE CONCEPT OF RESEARCH**

For the purposes of the Research Agenda, the term “research” is taken to mean rigorous and systematic enquiry and analysis. As such, research may be empirical or theoretical, quantitative or qualitative and applied or basic.

### **4. THE NEXUS OF RESEARCH POLICY**

The relationship between research and evidence-based policy decision making is a complex one. It is more of an indirect influence on policy, process and practice. Research provides much-needed insight into the MICT sector, its workings and skills requirements. There is the need for a sustained dialogue between researchers and the users of research, in cultivating a practice of employing research-based evidence in the policy process.

### **5. MICTSETA AND THE RESEARCH COMMUNITY**

The nature of research may vary in complexity and scale. MICTSETA aims to achieve the priorities of its Research themes/topics through the implementation of the following actions:

- 5.1 Commissioned research: Research commissioned through the appointment of research partners, with Terms of Reference specified by MICTSETA, as part of the research theme/topic outlined in this Strategy.
- 5.2 Research Partnerships: Research projects undertaken in partnership with other public entities or government departments aligned with MICTSETA's research priorities.
- 5.3 Postgraduate Research Partnerships: Partnerships with public South African Universities by means of Memoranda of Understanding which outline both research collaboration areas and research grants. Postgraduate students from the identified universities will receive research grants to carry out research in areas pertaining to skills development and training, as well as to broader topics relevant to the MICTSETA sector. MICTSETA research partnerships will focus on proposing and supporting a university-based research programme that will:
  - Refine and, where necessary, develop new methods for collecting sector skills information that can be used on an ongoing basis for improved skills planning.
  - Gather and analyse Sectoral information to establish baselines or updates on current information, using rigorous processes that can then be applied, on an ongoing basis, for improved skills planning.
  - Study particular issues that are currently proving to be bottlenecks in our understanding, and provide practical frameworks, guidelines or ‘maps’, wherever appropriate.
  - Evaluate pilot skills development initiatives to inform further roll-out, adaption or step-changes.
  - Produce practical reports (in addition to academic thesis) in order to inform sector skills development initiatives.
  - Contribute to the strengthening of recognised Centres of Expertise in Human Capital Development within the respective sub-sectors.

## **6. Research themes**

The research agenda identifies five research themes for stronger national development:

### **6.1 Current and future MICT workforce needs**

The foundation for economic growth in the country is an education and training system that meets the growing demand for a skilled workforce. Research in the area of projected occupational demand and labour supply, occupations and industry trends, and skills shortages and gaps will provide benchmark information to build a better understanding of the workforce situation of the different regions of the country and of the key factors involved in delivering interventions. As such, the MICT SETA will dwell more into producing a credible labour market information that accurately identifies occupations in high demand through its Sector Skills Plan (SSP) that will be updated annually. Moreover, there will be topical research that focuses on 4IR or converging technologies, examining international and national trends; the determination of typical business practices and skills opportunities, challenges, and development approaches; and the forecasting of volumes of required skills in the short, medium and long term.

### **6.2 Small, Medium and Micro Enterprises (SMMEs) as drivers of economic growth**

Small, Medium and Micro Enterprises (SMMEs), also referred to as small business, play an important role in an economy. They can be key drivers of economic growth, innovation, and job creation. Thus, the MICT SETA recognises their importance, hence, research on SMMEs as Vehicles for 4IR Development in South Africa becomes important. The SETA will conduct research on SMMEs, entrepreneurship and community-based organisations, particularly in relation to 4IR cross-sectoral partnerships and projects for sustainable growth. The research will assess their involvement in the development, implementation, and support of 4IR products in South Africa, as well as opportunities that exist to contribute to import substitution, export growth, and job creation through 4IR.

### **6.3 Quality assurance of education and training**

Several research opportunities are present around measurement of quality of the processes and the outcomes of education and training and skill development. Research in these areas will raise awareness of the necessary links between policy making innovation efforts and system performance.

### **6.4 Participation in education, training and work**

Developing and harnessing human capital for resource productivity and sustainability is a critical determinant for economic growth and social development. Research in this area will help build an understanding of the practical ways individuals and employers can identify suitable employment and future career prospects, develop new pathways to transition from the education setting into the workplace, and build new opportunities to participate in continuous education and training. In this context, the MICT SETA will research enabling qualifications and learning pathways for 4IR occupations, this will be essential to define learning pathway scenarios, and timeframes, associated with the identified 4IR occupations. Furthermore, the study will look at both public and private colleges. It will further try to understand the current supply system, including its successes and shortcomings, and match that against demand. Likewise, it will also focus on increased and focused skills development for rural and marginalised communities to ensure inclusivity through technology skills development. A project topic in this regard will be for the SETA to conduct a rural skill needs assessment study which will be about an examination of the skills development needs of potential learners in rural and marginalised communities.

## **6.5 Workplace learning**

Workplace learning has become a prominent issue for employers and policy makers concerned with the recognition of formal and informal learning taking place within the organisation structure. Current research in this area focuses on the impact on the employees' occupational positioning and status within the organisation; the way organisations dismantle obstacles to participate in learning; and the opportunity created to encourage engagement in workplace learning to further knowledge, skills, and competencies in the workforce. Research by the SETA will be on increased access to, and delivery on occupationally directed priority programmes that link education and the workplace. This will be supplemented by a tracer or an impact study which will seek to understand whether the programmes achieved their intended purpose, with the intention of distilling lessons learnt that can inform future programmes.

## **7. Research focus areas**

To identify and anticipate future skill needs and potential skill mismatches, the MICT SETA will undertake various sector level research activities. It will produce regular skills supply and demand forecasts and will analyse the potential labour market imbalances. The MICT SETA will also investigate skills and competence needs across the sub-sectors and explore an approach to enterprise surveys on changing skill needs. A comprehensive research programme has been identified and will encompass the following:

### **7.1 Forecasting skill demand and supply**

The MICT SETAs skill supply and demand forecasts provide comprehensive information on future labour market trends. The forecasts act as an early warning mechanism to help to alleviate potential labour market imbalances and support different labour market actors in making informed decisions.

### **7.2 Analysing skills mismatch**

The MICT SETA investigates skills mismatch in the sector and policies that can prevent them. This explores how different labour market and economic trends shape skill needs, how learning contributes to skill supply and to what extent education and training systems, the labour market and other institutions interact to mitigate skill mismatch.

### **7.3 Skills needs in the sub-sectors**

The MICT SETA investigates selected sectors of the economy to identify new and emerging skill needs. This investigates the sub-sectors to identify the latest trends and skill needs. It investigates future skill needs but mainly the emergence of new skill needs which are not (yet) covered by related policies and statistics. This information is necessary for future-oriented policies, defining and validating skills, knowledge and competences and implementing them in curricula, training regulations, and qualification standards as well as using them for vocational guidance.

### **7.4 Monitoring and Evaluation**

The MICT SETA monitors and evaluates the sector skills strategy as it is being implemented, with particular focus on the effect or impact of interventions on beneficiaries.

## **7.5 Impact of Covid-19 on the sector**

The MICT SETA monitors the impact of Covid-19 and its resultant lockdown of the South African economy on the MICT sector. This includes impact on employment patterns, impact on operations, impact on revenue, impact on productivity as well as impact on training implementation in the sector.

## **8. Dissemination of research**

The programme for 2023/24 will be geared towards research projects that will plug into DHET's Sector Skills Plan Framework. It will flash out the following areas:

- Sector Profile
- Key Skills Issues
- Extent of Skills Mismatches
- Sector Partnerships
- Skills Priority Actions

The research outputs from the research agenda, including instruments, design protocols, research and evaluation guidelines and reports will be shared timeously through the repository accessible from the MICT SETA website. Sharing of research will occur in several ways including publications, conferences, seminars, email circulation and workshop presentations. It is important that this research is packaged in fit-for-purpose ways to reach all stakeholders. Additionally, the outputs will be made available to the LMIP repository.

### **8.1 Planned Research Projects**

The research projects planned by MICT SETA align closely to the skills priority actions identified in the SSP. These research projects are described in the table below, with an indication of the link to associated skills priority actions.



No	Division	Research Theme	Name of Study	Purpose of the Study	Main Objectives of Study	Research Mechanism	Valid for the Period	Budget
1.	ETQA	Quality assurance of education and training	Analysis of Qualifications review on development and	Conduct an analysis on qualifications review and development Study to ensure that the development and review of MICTSETA – occupational qualifications promote access to programmes that address industry skills needs on an annual basis.	<ul style="list-style-type: none"> <li>To ascertain the need for MICT SETA to realign historical qualifications into occupational qualifications in high demand.</li> <li>To evaluate the alignment between supply and demand of skills in the labour market, within MICTSETA sub-sectors.</li> <li>To assess the relevance of qualifications and services rendered by MICTSETA, i.e., whether learners will require parts or full qualifications on certain sub-sectors.</li> <li>The assumption is that if the MICTSETA review or develop well-researched scarce and critical list of qualifications, skills development gaps will be bridged for legacy qualifications with an enrolment end date of 30 June 2024.</li> </ul>	Outsource	July 2023 – 31 March 2025	R3 000 000

2.			<b>Best Practise for ETD Practitioners</b>	Provide a comprehensive study on functions of assessors and moderators, shared techniques on how to plan, prepare and conduct assessments and identified benchmarking best practices.	<ul style="list-style-type: none"> <li>• Ensure that there are qualified registered assessors and moderators (including TVETs and CETs) assessing the MICT SETA occupational qualifications in high demand to increase access to such programmes on an annual basis.</li> <li>• Ensure that assessors to develop background knowledge and to have a positive attitude towards assessment as an integral part of the learning process and take cognizance of critical cross-field outcomes</li> <li>• Ensure that moderators accept the role of leader, manager, coach and mentor to assessors and assessment designers.</li> <li>• Therefore, critical to their success, is the need to research and to ensure that their technical skills, knowledge and attitude is of the highest standard.</li> </ul>	Outsource	April 2023 – October 2023	R500 000
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			<b>Skills Development Providers Evaluation</b>	<p>Conduct a study on a systematic assessment of the design, implementation or results of an initiative for the purposes of learning based on set standards.</p>	<ul style="list-style-type: none"> <li>• Ensure that there are qualified registered assessors and moderators (including TVETs and CETs) assessing the MICT SETA occupational qualifications in high demand to increase access to such programmes on an annual basis.</li> <li>• Ensure that assessors to develop background knowledge and to have a positive attitude towards assessment as an integral part of the learning process and take cognizance of critical cross-field outcomes</li> <li>• Ensure that moderators accept the role of leader, manager, coach and mentor to assessors and assessment designers.</li> <li>• Therefore, critical to their success, is the need to research and to ensure that their technical skills, knowledge and attitude is of the highest order.</li> </ul>			
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					<ul style="list-style-type: none"> <li>• Standardise criteria checklist relevant for the scope offered Across the board.</li> <li>• Determine and analyse the capacity and resources available To implement approved learning material.</li> <li>• Develop policies aligned to the implementation thereof</li> </ul>			
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4.			<b>Centres of Specialisation</b>	Develop centre of specializations dedicated to training within MICT SETA priority needs.	<ul style="list-style-type: none"> <li>• The Centres of Specialisation will function as dedicated sites to the delivery of specific occupational qualifications.</li> <li>• The new occupational qualifications comprise three components- theory, practical/simulated training and work experience.</li> <li>• These components will be delivered in an integrated manner with apprentices moving from each site (e.g., workplace) to the other (e.g., classroom) in one learning continuum.</li> <li>• In response to the demand for these trades, creating Centres of Specialisation is imperatives as the mechanism support the implementation of developed occupational qualifications.</li> </ul>	Outsource	April 2024 – March 2025	R1 200 000
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5.	LPD	<p>Participation in education, training and work</p> <p>Workplace learning</p>	Impact Assessment	<ul style="list-style-type: none"> <li>• The impact of learning programmes towards job creation and enterprise development.</li> <li>• The impact of low-level skills training in building capable society.</li> <li>• The impact of intermediate and high-level skills in responding to future skills.</li> <li>• The impact of skills development that respond to SMME development.</li> <li>• The impact of skills development towards transformation.</li> <li>• The impact of skills development training towards ERRP Strategy</li> </ul>	<ul style="list-style-type: none"> <li>• To assess the impact of MICTSETA Learnerships, Bursaries, Internships, Artisans, Skills Programmes and WIL interventions, on Programme beneficiaries, for the period 2020/21 to 2021/22.</li> <li>• To evaluate whether participation in MICTSETA funded programmes have translated into any change in the social and economic status of beneficiaries.</li> <li>• To ascertain the impact of MICTSETA interventions in addressing NSDP outcomes;</li> <li>• To assess the employment status of MICTSETA beneficiaries, including an assessment of the promotion and/or absorption rate of beneficiaries into the labour market;</li> <li>• To determine the completion rate of Learnerships, Bursaries, Internships, Artisans, WIL interventions and Skills Programmes;</li> <li>• To evaluate the alignment between supply and demand of skills in the labour market, within MICT SETA.</li> </ul>			
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					<ul style="list-style-type: none"> <li>• To assess the relevance of qualifications and services rendered by MICTSETA.</li> <li>• To assess the impact of training interventions on employers in the various sub-sectors, within the scope of MICTSETA.</li> <li>• To assess whether MICTSETA interventions have positively impacted the lives of beneficiaries, and what the social impact has been on their families and their social environment</li> </ul>			
6.	M&E	Current and future MICT workforce needs	SP Mid-term Assessment	To assess progress on implementing the institution's SP	<ul style="list-style-type: none"> <li>• Assess the extent to which the Outcomes of the SP are implemented towards achievement of the sector priorities</li> <li>• Analyze and make recommendations about performance, budgeting and planning improvement for the SP's remaining financial years.</li> </ul>	Internal	April 2020 – September 2022	N/A

7.			SP End-term evaluations	To evaluate whether the selected learning programmes implementation has successfully delivered on its intended outcomes and impacts as reflected in the programme's outcomes	<ul style="list-style-type: none"> <li>To evaluate how far selected learning programmes have achieved their intended outcomes and government priorities for the 5-Year MTSF period.</li> <li>Provide evidence-based decision-making to inform baselines for the planning and budgeting processes.</li> <li>Provide evaluation findings recommendations to improve planning for the MICT SETA learning programmes implementation</li> </ul>	Outsource	2019-2024	No determined
8	SSP	Small, Medium and Micro Enterprises (SMMEs) as drivers of economic growth	Small Enterprises as Vehicles for 4IR Development in South Africa	To Assess the current state of involvement of SMMEs in the development, implementation and support of 4IR products in South Africa.	<ul style="list-style-type: none"> <li>The study will investigate opportunities for smaller enterprises to extend their involvement in 4IR development in South Africa, as well as opportunities for smaller and larger organizations to contribute to import substitution, export growth, and job creation through 4IR.</li> </ul>	Internal	February-March 2023	N/A



## **9. RESEARCH FUNDING AND PROCUREMENT**

- 9.1 Research partnerships are critical in meeting MICTSETA's research priorities. The SETA will explore and initiate partnerships with Researchers and the area of research, to meet the research needs of the sector. The SETA will partner with other public entities/government departments/Higher Education Institutions aligned to the SETA's research priorities.
- 9.2 MICTSETA shall establish a Research Reference Group. The purpose of the reference group will be to engage industry experts and Researchers in the sector on research methodology, instruments, and reports as designed and produced by the SETA.
- 9.3 To support the objectives of the Research Policy, a research grant shall be awarded to a specialised unit or faculty of a public university or a University of Technology (UoT), to conduct sector-based research for MICTSETA.
- 9.4 Research funding shall be sourced from the MICTSETA Discretionary Grant.
- 9.5 Research projects shall be funded within minimum and maximum thresholds, subject to budgetary availability.
- 9.6 Funding of research shall be for research projects commissioned by MICTSETA.
- 9.7 MICTSETA shall issue the Terms of Reference (ToRs) for any research required, in terms of the PFMA and supply chain management processes for public entities. These ToRs serve as guidelines, establish the minimum requirements for research projects as well as research costs to be covered by MICTSETA.

## **10. CONCLUSION**

This Research Agenda has been developed with the aim of addressing and supporting the eight NSDP outcomes and the nine NSDP Principles, to set up a credible mechanism for skills planning for the MICT sector. The purpose is both to strengthen the organisation's research capacity and to ensure that MICTSETA serves as the repository of skills development knowledge in the sector. The achievement of these research priorities, through the approaches stated above, will enable MICTSETA to be acknowledged as the credible authority that it rightfully is, in skills planning and development in the sector.

The MICT SETA research agenda is a key component of the drive to enhance the collective capacity of stakeholders to better understand the skills needs of the sector. Access to new research will support the development of policies, planning, and decision-making while the strategic and operational agenda will be strengthened and continually informed by relevant research and enabled through ongoing organisational learning. Together with the partner participants from academia, private business, the community, and other government institutions, the MICT SETA through this process has been able to identify the priorities for research in order to improve skills planning and ultimately enhance its vision of being recognised as the leader in the development of a highly skilled knowledge-based information society.