OVERVIEW – NATIONAL DIGITAL AND FUTURE SKILLS STRATEGY SOUTH AFRICA

Full document: National Digital and Future Skills Strategy South Africa 23 September 2020

What is it about? This strategy sets out a series of initiatives intended to contribute to the capacity of South Africans to meet challenges arising from the increasing deployment and adoption of digital technologies and the impact of these on the world of work, education and broader society.

Vision: A South Africa in which people, economy and society benefit from enhanced levels of digital skills as we move into a digital future, anchored in agility, creativity and problem-solving.

Mission: This strategy addresses the need for mechanisms to foster digital skills development across South Africa, at early childhood development, schooling and post-school education and training levels, recognising that digital skills are necessary for economic growth, social development and cultural enrichment across all sectors of our society and economy, based on strategy elements to be undertaken by government, in conjunction with a range of stakeholders.

Objectives: to provide -

- A roadmap for priority digital skills action points: identification, categorisation and guidelines for collectively building a comprehensive range of digital skills. Government and other stakeholders can design their specific action plans pursuant to this broad strategy.
- A roadmap for stakeholder collaboration: identification of key action points to facilitate stakeholder collaboration.

Structure: There are 8 interconnected strategy elements, each with associated strategic action points (there are a total of 28 action points). The first 4 strategy elements relate to relationships across government-industry-organised labour-communities-universities-training institutions, while the remaining 4 are cross-cutting.

- **Strategy element 1: Digital foundations: Basic and intermediate digital skills**

  It is critical to build digital schools through early childhood development, schooling and post-school education and training. Three key interdependent initiatives are identified:

  - Designing, writing content for and continuously revising curricula to build a wide range of digital skills, constantly adapting to changing knowledge needs;
  - Building capacity to ensure all educators are empowered with digital skills and that these skills remain current;
  - Providing access to the necessary infrastructure that enables digital skills and making sure this is operational, secure and sustainable.

  Strategic action point 1.1*: Undertake a curriculum development initiative for computing, coding and a wide range of digital skills. Curriculum review should give attention to language and mathematics curricula, since these provide foundation knowledge for digital learning.*

  Strategic action point 1.2*: Teacher digital skills advancement and the adjustment of the teacher training curricula to cater for schooling curricula aimed at digital literacy.*

***Strategic action point 1.3**: A major long-term infrastructure funding programme for schools is needed to provide sufficient levels of connectivity to make online access meaningful in educational terms. Public private partnerships will need to be created, and the necessary asset funding partnership regulations will need to be prepared for digital infrastructure. Opportunities for infrastructure funding partnerships can be formulated through Treasury Regulations, the proposed Digital Development Fund and other initiatives such as SIP15.*

- **Strategy element 2: Digital futures and mastery: Building advanced digital skills**

  Strategy elements include tertiary curriculum reform; capacity-building for lecturing staff; promoting research; developing and promoting usage of mobile open online courses to develop digital skills on a widespread basis; and measures to strengthen provincial Collaboration Laboratories, tech hubs and related institutions.

  ***Strategic action point 2.1**: Government innovation funding programmes should incorporate digital innovation skills and capacity building in their frame of reference.*

  ***Strategic action point 2.2**: Government will work with academic and research institutions and industry partners to introduce funding and other support measures for CoLabs, digital tech hubs and incubators to foster digital entrepreneurship. Consideration will be given to matching industry and government funding for digital innovation skills advancement.*

  ***Strategic action point 2.3**: A viable model for the development and rollout of open online courses covering digital skills is essential to ensure scalability and sustainability.*

  ***Strategic action point 2.4**: The DCDT will propose a joint working group to formulate a programme to advance academic staff digital literacy, digital fluency and digital mastery.*

- **Strategy element 3: Skills for Industry 4.0 and the world of work**

  There is a need for focused research into the impact of the digital revolution on the labour market. Programmes are required to reskill those displaced by digital technologies, as well as to provide ongoing upskilling in the workplace, including in government itself.

  ***Strategic action point 3.1**: The sector education and training authorities (SETAs) must incorporate digital skills planning in their sector skills plans, including attention to skills development for low-skilled workers.*

  ***Strategic action point 3.2**: A digital skills audit will be performed every 3 years, covering foundational and advanced digital skills. Government will progressively include digital skills and competencies within pay progression policies.*

  ***Strategic action point 3.3**: Annual SETA surveys should include a focus on current digital skills, future digital skills needs emerging in South African industries, and should explicitly report on the skills gap.*

  ***Strategic action point 3.4**: Government will promote the funding, development and popularisation of online platforms and open online courses for industry-oriented learning and continuing*

profession development (CPD). The DCDT will support a South African programme of the 'Digital Skills for Decent Jobs for Youth' global campaign. The Labour Activation Programme of the Unemployment Insurance Fund (UIF), which is intended to reskill beneficiaries who have lost jobs, must incorporate a digital skills component.

- **Strategy element 4: Creating Society 4.0 and addressing the digital skills divide**

  This element recognises the digital skills divide which exists on the basis of race, gender, geographic location and income.

  Strategic action point 4.1*: Government will encourage social investment in digital skills learning material for communities across the country. The DCDT Cybersecurity Hub will make available a Cybersecurity Awareness Portal, to be supplemented by industry initiatives to improve cybersecurity awareness across all sectors of the economy and society.*

  Strategic action point 4.2*: Broadening the meaning of and mechanisms for universal access including expanded use of the Thusong Service Centres and Public Access Facilities to promote digital skills training programmes, with particular attention to race, gender, disability, geographic, and other equity factors. The ICT Sector Code is to be reviewed to emphasise skills development.*

- **Strategy element 5 (cross-cutting): Building digital skills awareness**

  The success of any digital skills strategy depends on a high-profile campaign of engagement to ensure digital skills development is on the national agenda.

  Strategic action point 5.1*: An ongoing country-wide digital skills and digital wellness campaigns will be organised, including a clearing house function will be established. The iKamva Digital Skills Institute will provide an online portal to showcase the available information.*

  Strategic action point 5.2*: Public engagement and awareness initiatives organised by government and industry or academic partners will include once-off and annual events targeting digital inclusion.*

  Strategic action point 5.3*: Government is to encourage pro-active rather than defensive responses to the digital revolution so as to preserve labour market stability and a strong skills profile.*

- **Strategy element 6 (cross-cutting): Research and monitoring on digital skills**

  A benefits realisation approach is required at national and institutional levels, underpinned by adequate data and practical research to assist in monitoring and reporting on the effectiveness of implementation and the relevance and resilience of the strategy elements.

  Strategic action point 6.1*: The DCDT will establish a digital skills research programme, including an open data information and knowledge management system for labour market and digital skills data. This data will form the basis of industry-wide and government-wide digital skills action plans.*

  Strategic action point 6.2*: Each of the 8 strategy elements must be translated into specific benefits realisation plans with measurable targets and implementation timeframes.*

***Strategic action point 6.3**: The iKamva Digital Skills Institute will promote local and international research networks for the advancement of research on digital skills. DCDT will work to establish digital skills observatory capacity, responsible for aggregating comprehensive data sets that derive from the South African context, assembling and making publicly available statistics and data on digital skills, labour market trends, training opportunities, as well as tracking specific lines of enquiry related to building digital skills, and publishing annual studies for advancing stakeholder knowledge of the digital skills requirements of the country.*

- **Strategy element 7 (cross-cutting): Co-ordination across government, industry, labour and other stakeholder groups**

  Effective mechanisms and structures for co-ordination are critical to the success of the strategy, with particular attention to representative structures for the labour market and skills development.

  ***Strategic action point 7.1**: Effective co-ordination across the complex ecosystem of government departments, with engagement across national, provincial and local government, will be facilitated for the successful achievement of basic, intermediate and advanced digital skills. The Government IT Officers Council (GITOC) and South African Local Government Association (SALGA) must play a leading role.*

  ***Strategic action point 7.2**: A Digital Skills Forum will be established, aimed at drawing on the knowledge and expertise of key stakeholders, structures and interests around digital skills priorities.*

  ***Strategic action point 7.3**: Government will consult with NEDLAC, organised business and organised labour with respect to their particular interests and concerns.*

  ***Strategic action point 7.4**: For ease of communication, the DCDT will liaise with Universities South Africa, with COHORT, with ECSA, with the IITPSA, with ISACA, HPCSA and other relevant industry professional bodies, in its efforts to understand what needs to be co-ordinated, why and how.*

- **Strategy element 8 (cross-cutting): Funding for digital skills**

  How will the strategy be funded?

  ***Strategic action point 8.1**: Government will encourage the SETAs to include sectorally-appropriate digital skills development within training programmes and internships. The SETAs should consider funding for basic digital skills sets.*

  ***Strategic action point 8.2**: The National Skills Fund must incorporate digital skills as an explicit component of its funding orientation. The UIF Labour Activation Fund can similarly include digital reskilling within its frame of reference.*

  ***Strategic action point 8.3**: Subject to Ministerial regulation, monies from the USAF could be used for digital skills development projects under the overall universal access and service ambit, until such time as the new Digital Development Fund (DDF) has been established.*

***Strategic action point 8.4**: Investigate and create a public-private partnership, to establish seed funding for digital tech start-ups located at tech hubs and digital incubators.*

***Strategic action point 8.5**: The DCDT will review the relevant corporate social investment legislation and make recommendations on funding digital skills building.*

What next? This is a final document awaiting implementation.
