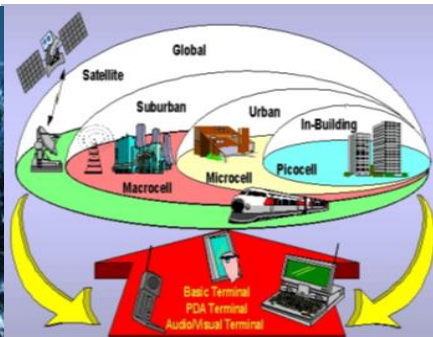


SADC ICT Infrastructure Strategy

Presented to: NEPAD Business Foundation – Networking Forums

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Directorate of Infrastructure



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Digital SADC 2027 [1/3]

- **Infrastructure development in support of regional integration** is the **Second Pillar** of the SADC Regional Indicative Strategic Development Plan (**RISDP**) 2020-30 - SADC's 10 year strategic development plan sets goals, targets, implementation and M&E.
- Infrastructure is one of the 3 pillars in the implementation of the SADC Industrialisation Strategy and Roadmap (2015-2063).
- The RISDP Strategic Objectives of infrastructure are to achieve:
 - Quality, Interconnected, integrated and seamless regional infrastructure and networks;
 - Improved capacity for conceptualising, design construction, maintenance and operation of regional infrastructure and services; and
 - Increased access to affordable infrastructure and services.
- One of the KRAs under Infrastructure is to **Establish Universal Access to Affordable ICTs**.



Digital SADC 2027 [2/3]

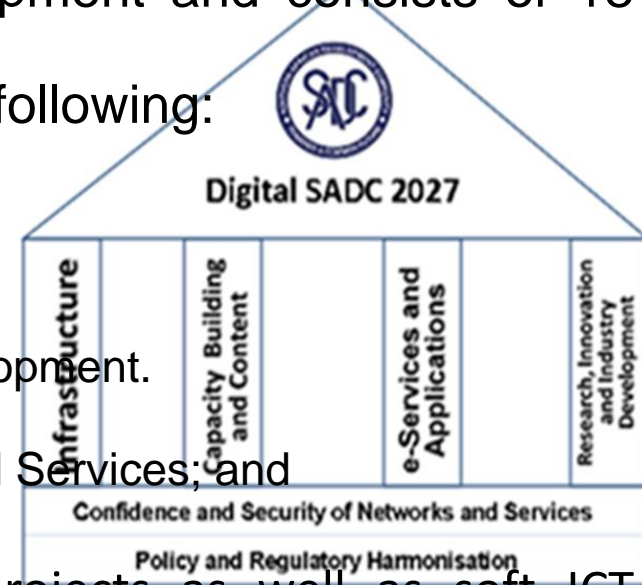
- Regional Infrastructure Development Master Plan (RIDMP) – Blueprint for Infrastructure development to facilitate Regional Integration as guided RISDP and SADC’s Vision 2050.
- RIDMP (6 Chapters) was approved by SADC Summit of August 2012 (15 year plan).
- The “**Digital SADC 2027**” is the ICT Chapter of RIDMP: Regional blueprint for ICT Infrastructure development and consists of 18 Projects.
- The Digital SADC 2027 consists of the following:

Pillars:

- Infrastructure;
- Capacity Building and Content;
- E-Services and Applications; and
- Research, Innovation and Industry Development.

Platforms:

- Confidence and Security of Networks and Services; and
- Policy and Regulatory Harmonisation.



- Constitutes of hard ICT infrastructure projects as well as soft ICT projects relating to policy, regulatory and institutional capacity building.



Digital SADC 2027 [3/3]

- Baseline of ICT Sector in SADC in 2012:
 - Average mobile penetration of **60%**, ranging from 20% to 100%;
 - **6%** of total voice subscribers are fixed line holders, underlining the importance of mobile networks; and
 - Internet User Penetration of **4%** ranging from 1% to 40%.
- Ultimate Targets for the Digital SADC 2027:
 - 20% Internet User Penetration; and
 - 80-90% of households and businesses with Internet access.



SADC ICT Implementing Agencies

- The three (3) key SADC Regional Implementing Agencies (Regional Subsidiary Organisations) are:
 - Communications Regulators' Association of Southern Africa (CRASA): www.crasa.org;
 - Southern Africa Telecommunications Association (SATA): www.sata-sec.net; and
 - Southern Africa Postal Operators Association (SAPOA): www.sapoa.info.



Southern Africa Telecommunications Association



SADC ICT Landscape & Review [1/5]

- Prepared over 70 SADC policy, regulatory framework instruments and pursued a wide range of capacity building initiatives.
- All SADC Member States have each established at least one cross-border link to its neighbour and at least two (2) cross-border terrestrial OFC links for regional and international transit traffic (SRII - SATA).
- All island states have at least 2 submarine cable connections for their International connectivity.
- SADC average Population Coverage by a Mobile Network was **88%**;
- SADC Mobile Penetration: **77.4%** (ranging from 41% to 198%) with 5 Member States with over 100% penetration mobile. Roughly 3 out of 4 people using mobile services.
- SADC average Internet User Penetration increased from 4% in 2012 to **22.9%** (ranging from 5% to 119%) in 2020, while the World average at 51% and Developed Countries was at 87%. Growth rate per year was 2.4%.
- SADC household Internet Access was **27.8%**, less than half of the World average of 72%.



SADC ICT Landscape & Review [2/5]

- The SADC region is in the early stages of 5G trials and deployments in Botswana, Lesotho, Mauritius, Mozambique, Seychelles and South Africa. Licenses have been issued to several Mobile Network Operators (MNOs) in the region.
- Internet Penetration for African Men was at 37% compared to women at 20%. Almost twice more men have Internet access than women. This translates to Internet Gender Parity Score of 0.54. The World's Internet Gender Parity Score was at 0.87, where the target is total parity value of 1. Digital Gender Gap appears to be a concern.
- SADC has around 122 (40% of Africa) operational Data Centres of which 13 are Carrier-Neutral Data Centres of Tier III/IV certification.
- 5 Member States have Advanced IXPs. SADC has a total of 26 IXPs and 57% share of IXPs in Africa. SADC has a total of 18 Advanced IXPs.
- 8 Member States have completed the DTT Migration. Remaining are at an advanced stage in dual illumination.
- All Member States except one are streaming their national Public TV Channel online.
- 11 Member States are pilot broadcasting the SADC TV Channel (Eye on SADC).



SADC ICT Landscape & Review [3/5]

- SADC Harmonised Cybersecurity Legal and Regulatory Framework consisting of three (3) Model Laws were developed in November 2012, namely (presently being reviewed):
 - E-Commerce/E-Transaction Model Law;
 - Data Protection Model Law; and
 - Cybercrime Model Law.
- All Member States have either transposed the SADC e-Commerce/ e-Transaction and Cybercrime Model Laws or have an existing legal framework in place.
- 8 Member States have put into place laws on data protection.
- 5 Member States have appointed an independent Data Protection Authority (DPA).
- 6 Member States have official data privacy bills to be soon enacted.
- 6 Member States have established and operationalised their National Computer Incident Response Teams (CIRTs), with the remaining having committed to have theirs operational by December 2022.



SADC ICT Landscape & Review [4/5]

- While 88% of SADC's population have Mobile Internet coverage, only 1 in every 4 people is using the Internet, resulting in a large uptake gap, which is highest in rural areas and for women;
- Although SADC has a relatively high mobile penetration, a large segment of SADC population is still yet to be connected to the Internet.
- Relevant SADC Region broadband targets to be achieved by 2025 include:
 - Broadband user penetration in each SADC Member State should reach 65%; and
 - 50% of the households in each SADC Member State should be connected to broadband.
- SADC's Internet user base is bound to at least double if not triple by 2025.
- Africa's population is 1B of which SADC is 1/3. We need to connect 140 Million people in the next 4 years. Minimum 10% growth rate per year in Internet User Penetration is required!
- Small SADC Member States such as Mauritius (1.3 Million people) has 3 submarine cable links (SAFE, LION and METISS) while Seychelles (100,000 people) has 2 (SEAS and PEACE) and planning their third on 2-AFRICA. Other coastal and landlocked Member States are also pursuing multiple First Mile links (eg. Namibia: Equiano (Google) and Botswana: cross-border/transit links).



SADC ICT Landscape & Review [5/5]

- Peak Internet traffic profiles experienced by ISPs during the COVID-19 pandemic in 2020 are now the norm and putting more pressure on ICT infrastructure that is currently available. This calls for revamped ICT Infrastructure strategies - high impact ICT projects:

- Build a lot more Data-Centers, preferably Carrier-Neutral Data Centers.
- Expedite 5G Rollout.
- Stimulate aggressive competition on transit links and middle mile and explore cost effective last mile solutions to bring about lower tariffs for ICT services.
- Explore assembly/manufacturing plants of ICT devices and equipment.
- Own and operate a regional GSO communications satellite to ensure access to ICT services in the unserved and rural areas.
- Enhance broadband connectivity coverage along the infrastructure corridors (transport, water, energy).



Stakeholder Engagement

- Compared to other Infrastructure Sectors, ICT is primarily driven by the Private Sector.
- Membership of SATA are also private licensed Operators.
- Events organised by SADC Secretariat and its Implementing Agencies involve the Private Sector (modes: Workshops, Preparatory Meetings, Investment Conference, Ministerial Dialogue etc).
- Higher Private Sector participation and engagement through virtual participation.
- Most ICT projects are implemented at National level, hence Private Sector participation is mostly at that level.
- SADC Secretariat is developing a web-platform for Infrastructure Projects for the ICT, Energy, Transport, Water & Meteorology Sectors that may be accessed by the Public.
- A study has commenced on Stakeholder Mapping under the EGEE-ICT Programme.



EGEE-ICT Programme

- **Enhancing Governance and Enabling Environment** in the ICT Sector (EGEE-ICT) is a 4 year Tripartite Programme supported by EU which began in January 2021 and COMESA is the Lead REC. The overall objective is to **Support the Growth of the ICT Sector and Deepen Regional Integration in the EA-SA-IO Region**: The 3 SOs include:

1. **Strengthening the regional policy and institutional framework for ICT development** (eg **Develop a mechanism for consensus building in policy development among public and private sectors** → Deliverables: **Report of stakeholder mapping study & Strategic framework for stakeholder cooperation**;
2. **Enhance the policy and regulatory environment for competitive and gender sensitive ICT markets**; and
3. **Improve infrastructure connectivity and access to ICT services** (eg. **Policies to promote private sector Investment in ICT infrastructure** → Deliverable: **Policies and regulations to enhance private sector investment in ICT infrastructure**).



Focus Areas for 2022/23

Some of the key strategic interventions stipulated in the Digital SADC 2027 and RISDP for the year 2022/23 include:

- Facilitate dialogue and development of the SADC harmonised Common Positions/Proposals for WRC-23 → SADC Radio Frequency Spectrum Allocation Plan (RFSAP) to unlock adequate future spectrum for harmonised and coordinated deployment of wireless technologies.
- SADC Roadmap for Advanced IXP Transformation.
- Review the 3 SADC Harmonised Cyber Security Model Laws.
- Operationalise the Frameworks for the:
 - Establishment of the SADC Regional CIRT.
 - SADC Shared Satellite System.
- Establish the SADC ICT Observatory and SADC Regional ICT CoE.
- Implement the Phase 3 of SADC Roaming Project (Cost-based Pricing).
- Develop the:
 - SADC Postal Strategy.
 - SADC Model National Emergency Telecommunications Plan (NETP).
 - SADC Digital Transformation Strategy (DTS).



Conclusions

- The Digital SADC 2027 will be updated in 2022 - RIDMP STAP II: 2022 to 2027.
- A study on development on SADC DTS has commenced. This will guide the transformative process of the region into an inclusive digital economy.
- The EGEE-ICT Programme will contribute towards SADC Digital Infrastructure and also provide **Strategic Framework, Policies and Regulation for consensus building in policy development among public and private sectors** and **Promote private sector Investment in ICT infrastructure** (to be completed by end 2022).
- A SADC Web-Platform to list SADC Infrastructure Projects is being developed.
- SADC Secretariat is exploring wider platforms for stakeholder dialogue and engagement.
- Investment in SADC ICT Sector will be a catalyst for Post COVID-19 Recovery of SADC's Economy. Development Partners from the Private Sector are encouraged to come on board.



Thank you for your kind attention



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