1) Title of your session

SMART SOLUTIONS TO CONNECT EVERYONE

2) Name of Organization(s) organizing the session

African Child Projects/ Basic Internet Foundation

3) Relevance with the WSIS Action Lines – please specify the Action Lines C1 to C11

C1. The role of governments and all stakeholders in the promotion of ICTs for development

- Cooperation among stakeholders
- Millennium Declaration
- Mainstreaming ICTs
- Multi Stakeholder Partnership (MSP)
- National e-strategies
- Public/Private Partnerships (PPP)

C2 Information and communication infrastructure: an essential foundation for an inclusive information society

- Access, Accessibility, Affordability, Assistive technologies
- Broadband network infrastructure
- Digital inclusion: Enabling and competitive environment, ICT backbone, ICT connectivity, ICT equipment, ICT services
- Infrastructure: Internet exchange points, Investment, Satellites, Traditional media, Universal access/service

C3 Access to information and knowledge

- Access to public official information
- Access to scientific knowledge
- Digital public libraries and archives
- ICTs for all
- Multi-purpose community public access points
- Open source, proprietary and free software
- Public access to information

Please submit your outcomes in a Word document. This outcome report will be included in the WSIS Forum 2022 Outcome document.
• Public domain information.

C4 Capacity building
• Basic literacy
• Distance learning
• Education/training
• E-literacy
• Gender
• Combating illiteracy
• Life-long learning
• Research and development (R&D)
• Teacher training: Training ICT professionals

C6 Enabling environment
• Consumer protection
• Dispute settlement
• Domain name management
• E-commerce: E-government strategy
• Entrepreneurship
• ICT forums
• Intellectual property
• Internet governance
• Legal, regulatory and policy environment
• Privacy
• Radio frequency spectrum
• Regional root servers
• Secure storage and archival
• Small and medium sized enterprises (SMEs)
• Standardization

C7 ICT applications: benefits in all aspects of life
• E-applications, E-agriculture, E-business, E-commerce, E-employment, E-environment, E-government, E-health, E-publishing, E-science

4) Did your workshop highlight any issues related to COVID-19? If yes, please explain.
Yes, the need for Digital Connectivity is understood in every country. However, there are competing goals between profitability and ensuring inclusivity. While COVID-19 created an opportunity for digital transformation, existing inequalities remained an obstacle and reproduced along the same faulty lines.

Please submit your outcomes in a Word document. This outcome report will be included in the WSIS Forum 2022 Outcome document.
5) Key achievements, announcements, launches, agreements, and commitments
   - Commitment from Vodacom for smart partnerships and experimentation with new business for digital connectivity, supporting the ITU initiative Partners2Connect. Examples are supporting the connectivity of schools in Tanzania, and the new business model by Safaricom in Kenya, providing SIM cards with 5 Mbps for connecting the schools.
   - ITU has launched the second phase of the Digital Transformation Centres (DTCs). The goal is to reach the unconnected people, and provide both basic and advanced digital skills.

6) Main outcomes highlighting the following:

I. Debated Issues
   The main discussions were on a) the costs of internet access, b) meaningful connectivity, c) new paradigms for the Internet, d) the need for providing training in addition to connectivity, in addition to e) the importance of regional competence centres.
   a) The costs of internet access, especially when it comes to the operational (OPEX) costs need to be kept at a local minimum. Connectivity by GIGAconnect in Rwanda resulted in a monthly cost of 225 USD and is not feasible for most schools in Africa, South of Sahara (SSA). Target costs are 20 USD/month and in more advanced economies, 50 USD/month.

   b) Meaningful connectivity, as addressed by A4AI, reaches only a small portion of people in SSA. Typically less than 10% of the population in SSA have meaningful connectivity, and some countries like Rwanda experience less than 1% of people with meaningful connectivity. Thus, both a discussion on “what is meaningful” and “how we change the paradigms” is needed.

   c) New paradigms for the Internet were suggested, including (i) the demand for at least one Internet information spot in each village, (ii) the adoption of the freemium model for access, and (iii) the demand for a distributed Internet.
      (i) Countries like Zimbabwe have successfully established the concept of wireless information spots in each village, where people can both access the Internet and get help in performing digital services. Though, the recurring costs of access are still not resolved.
      (ii) The adoption of the freemium (free & premium) model of roads for the Internet. How can the model “Once roads are built, pedestrians and cyclists can use the roads for free” be transferred to the Internet? Lightweight protocols like AMP allow the introduction of the internet, as an entry point for free access to

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Internet Lite, and premium access to broadband services.

(iii) The demand for a distributed Internet was fostered by the costs of the backbone, which is often a mobile network. Thus, new mechanisms are needed to provide bandwidth-intensive content at the edge of the network, e.g., in wireless information spots.

d) Though provision of equipment and connectivity is the starting point, we will not succeed if we do not perform the knowledge transfer needed in the countries. Training on elementary use of the Internet is essential to show how the Internet can contribute to local value creation. Furthermore, essential knowledge on functionality is needed to provide immediate help in connectivity issues.

e) Last but not least, we need regional competence centres (RCCs) and digital training centres (DTCs). The main focus of the RCCs is to ensure connectivity, while the DTCs focus on basic and advanced digital knowledge.

Key achievements

- Rolling out of digital transformation centres (DTCs) and regional competence centres (RCCs)
- Smart partnerships between government, private sector, civil society and communities. We need both the top-down and bottom-up approach, with top-down awareness building and governmental actions towards connectivity, and bottom-up with communities contributing to training and digital adoption.
- The adoption of novel internet connectivity and digital models and the application of successful frameworks. Examples are the 5 Mbps SIM card by Safaricom for School Connectivity, the whitelisting of educational and health resources as in Tanzania and Ethiopia, or the wireless information spots in Zimbabwe.

Challenges

- Cost of internet remains prohibitive
- Digital inequalities persist, and pervasively reproduce themselves
- Dominant connectivity model by Telcos remains centralized and less distributed

II. Quotes

Sandra Oswald
Manager Vodacom Tanzania Foundation, Vodacom Tanzania

"We believe in the application of mobile technology to address the most pressing issue our community faces, from health service information to education."

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Prof Dr Josef Noll  
Secretary General, Basic Internet Foundation  
"Today’s Internet is not answering the needs of the people at the bottom of the pyramid. We need a paradigm shift for a decentralised Internet contributing to a sustainable future, with (i) one Information Spot in each village, and (ii) the model of the road applied to the Internet. Free access to lightweight information (Internet Lite), and premium access to broadband services."

III. Overall outcomes of the session highlighting
- Lack of meaningful connectivity suggests the need to rethink the current approach, which is necessary but not sufficient to ensure no one is left behind
- New business models addressing the need for operational expenses being as low as 20 USD/month for School Connectivity, and 50 USD/month in advanced economies.
- The paradigm shift for the Internet, including (i) the demand for at least one Internet information spot in each village, (ii) the adoption of the freemium model for access, and (iii) the demand for a distributed Internet. “Connecting the Unconnected is imperative” and dismantling the digital divide is essential to achieve the goals and targets of the SDGs.
- The WSIS Action Lines beyond 2015 must continue to involve community stakeholders addressing bottom-up actions in addition to top-down activities.

7) Main linkages with the Sustainable Development Goals (please specify the SDGs)
SDG4, SDG5, SDG8, SDG9, SDG10, SDG16

8) Emerging Trends related to WSIS Action Lines identified during the meeting
- Infrastructure investments are skewed towards targeting large centralized CAPEX and OPEX projects instead of low localized cost solutions
- Efforts to reduce the digital divide seems to be reproducing existing inequalities along dimensions of income, gender and disability
- Consensus and concerted efforts that connectivity is a driver for SDG goals

9) Suggestions for thematic aspects that might be included in the WSIS Forum 2023
- Affordable and meaningful connectivity
- The paradigm shift for Internet access
- Gender equality and meaningful connectivity
- Exploring innovative and cooperative business models for internet and digital connectivity in developing countries

10) Towards WSIS+20 and WSIS beyond 2025, please share your views on the challenges, achievements, and opportunities in the implementation of the WSIS Action Lines to date.
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There is still a challenge on clear vision in Action Plans and how each would be implemented, thus hindering many stakeholders from knowing where their solutions could clearly fit within WSIS action lines. More clarification should be provided on these, thus enabling workable and sustainable solutions for success.

A good example being:

On action lines 1 and 2, There is still a challenge on clear actions relating to the connectivity of rural areas and facilities such as schools and communities. Most of these are only stated in point form and thus can only be understood by individuals with intensive knowledge in the field. Also, strategic assurance on these implementations is not provided. So many initiations taken by local grassroots stakeholders fail as most challenges that hinder implementation lack platforms or provisions that provide solutions or roadmaps.

Action Line 4 advocates for capacity building in the areas of basic literacy, education learning, e.t.c. Many initiatives have been made towards achieving this by various stakeholders. However, with the arrival of COVID-19, less initiatives have been made toward implementing these action lines in developing countries like Tanzania. With a focus on public schools that carry the majority of students, schools were forced to re-open without implementing many precautions as there were no digital education platforms that could suffice for distance learning or self learning. The case is even more severe as there are no implementation strategies in rural areas with no supportive digital infrastructures, poor or no connectivity and lack of digital literacy, considering that more than half of the population in developing countries reside in rural areas.