### UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)



Submitted by

AFRICA ICT ALLIANCE

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# United Nations Commission on Science and Technology for Development (CSTD) Questionnaire for CSTD's 10-year review of WSIS implementation Responses by the Africa ICT Alliance (AfICTA) 15/09/2013

## 1. To what extent, in your experience, has the "people-centred, inclusive and development-oriented Information Society", envisaged in the opening paragraph of the WSIS Geneva Declaration of Principles, developed in the ten years since WSIS?

In our experience, the "people-centred, inclusive and development-oriented Information Society", envisaged in the opening paragraph of the WSIS Geneva Declaration of Principles, developed in the ten years since WSIS has contributed significantly in improving collaboration among stakeholders. Also, it has improved free flow of information globally due to improved terrestrial and satellite infrastructure.

### 2. How far do you consider the implementation of specific WSIS outcomes to have been achieved?

The concerted efforts to implement the WSIS outcomes have imparted the global economy in no small measure; however, more still needs to be done.

Some of the efforts to implement the WSIS outcomes as stated in the Action Lines have been through the role played by the public governance authorities and all stakeholders in the promotion of ICTs for development: In its role as a stakeholder, AfICTA promoted the WSIS action lines and targets to participating stakeholders from 5 countries at its first Summit on 26-28 June 2013 with the theme "Fulfilling the Promise of Digital Age in Africa" and targets stakeholders from 20 countries at its next Summit holding in Cairo, Egypt from 3-5 November, 2014.

Moreover, with regards to the Information and communication infrastructure in the Action Lines, AfICTA participated in TransformAfrica Summit 2013 in Kigali, Rwanda. This event was organised by the Rwandan government in collaboration with ITU. The event emphasized building ICT (fibre) infrastructure across African states with strong collaboration with the African private sector to enable broadband driven African economies. The conference had the buy-in of many African governments. AfICTA has so far endorsed the TransformAfrica manifesto - <a href="http://www.transformafrica2013.org/IMG/pdf/smart">http://www.transformafrica2013.org/IMG/pdf/smart</a> africa manifesto 2013 - <a href="maintena">english version.pdf</a>. Part of the 2014 Summit is focused on further promotion of the Manifesto. AfICTA also participated in the report validation workshop for the Programme for Infrastructure Development in Africa (PIDA) Priority Action Plan (PAP), organized by Aurecon with funding from AU and African Development Bank. The event took place 4-5 November, 2013 in Nairobi, Kenya.

Furthermore, with regards to Access to relevant information and knowledge in the Action Lines, AfICTA, through its universal resource locator (URL) – <a href="www.aficta.org">www.aficta.org</a> and its weekly e-Newsletter provides access to information and knowledge on the digital age in tandem with its goal number 2 i.e to create awareness and improve African digital literacy by 50% in

collaboration with stakeholders by the year 2020.

Moreover, with regards to Capacity building in the Action Lines,AfICTA as part of its first Summit organised a Domain Name System Security Extension (DNSSEC) workshop for domain name engineers and business owners in collaboration with the Internet Corporation for Assigned Names and Numbers (ICANN) and the Nigerian Internet Registration Association (NIRA). More than 40 DNS experts in the Nigerian DNS industry benefited from the training. In addition, AfICTA also conducted a workshop on global standards on project management and procurement. Nine (9) delegates mainly from state governments participated in this workshop.

Also, with regards to building confidence and security in the use of ICTs as highlighted in the Action Lines, it should be noted that confidence and security go hand-in-hand in the Internet space. A weak security infers low confidence and a high security implies strong confidence in the use of ICTs. Therefore, with DNSSEC workshop mentioned above, AfICTA added to confidence building as the key benefit of the DNSSEC is the prevention of cyber-attacks like DNS cache poisoning which leads to domain name hijacking, website defacing, phishing data theft etc.

Furthermore, with respect to enabling environment as highlighted in the Action Lines, AfICTA made a presentation at the public hearing on the passage of a Cybersecurity Bill by the Nigerian Parliament with the aim of enabling conducive environment for increased e-activities.

With regards to ICT Applications (e-Government & e-Business) as highlighted in the Action Lines, AfICTA through its 1<sup>st</sup> Summit, provided opportunities for governments particularly state governments in Nigeria (notably Ekiti, Ondo, Nasarawa and Edo States) to strengthen their eGovernment and eBusiness policies and strategies. Business entities also benefitted in exposure to DNSSEC processes and to biometric ATM application and systems demonstrated at the event.

Moreover, with regards to cultural diversity and identity, linguistic diversity and local content as highlighted in the Action Lines, it is noteworthy that AfICTA participated in the 2<sup>nd</sup> African IGF organized by UNECA & AU with the support of ISOC and keNIC in Nairobi Kenya on 23-26 September, 2013. The theme of the Forum was "Building Bridges – Enhancing Multistakeholder Cooperation for Growth and Development. AfICTA delegate, Dr Olufuye chaired the panel on Access and Diversity: Internet as an engine for growth and sustainable development. He challenged stakeholders on reaching the over 1000 ethnic groups in Africa with ICT benefits in more than 3000 local languages they speak.

With regards to media as highlighted in the Action Lines, AfICTA uses the new media to enrich the information society. It has a robust presence on the social media eg facebook, twitter #aficta, and the domain space www.aficta.org.

Also, with regards to the International and regional cooperation as highlighted in the Action Lines, AfICTA collaborated with ICANN to organize the DNSSEC workshop in Lagos, Nigeria. It also cooperated with UNECA and AU leading to the success of the 2<sup>nd</sup> African IGF in Nairobi, Kenya. It is important to emphasize the on-going co-operation among the African ICT organization to promote intra-African ICT trade, ICT policy development and sharing of critical

information on good practices. AfICTA plays active role in the International Chamber of Commerce (ICC) Business Action in Support of the Information Society (BASIS). It has collaborative agreement with the Korean Electronics Association, the Consumer Electronics Association, USA and African Information and Technology Exhibitions and Conference (AITEC). AfICTA delegates participated in trade shows, global trade exhibitions and conferences organised by its partners mentioned above to increase global co-operation and knowledge sharing for economic growth. The move was also to create more ICT jobs and engender prosperity in the African economies.

### 3. How has the implementation of WSIS outcomes contributed towards the development of a "people-centred, inclusive and development-oriented Information Society"?

The implementation of WSIS outcomes has contributed towards the development of a people-centred, inclusive and development-oriented information society in the following ways;

- Improved collaboration of stakeholders
- Improved awareness through different events for example a road-show organized by AfICTA in 2013
- Encouragement of innovation and new technologies e.g cloud computing model

## 4. What are the challenges to the implementation of WSIS outcomes? What are the challenges that have inhibited the emergence of a "people-centred, inclusive and development-oriented Information Society"?

The challenges to the implementation of WSIS outcomes are;

- Zero granting opportunity for business stakeholders in the developing and least developed nations (who are mainly SMEs) due to erroneous impression that they would fund themselves. They need to be supported to attain the critical mass from where self-funding will be possible as it is in the developed economies
- Lack of effective collaboration with government entities
- Policy framework not produced through multi-stakeholder approach
- Intra-government rivalries. Agencies of governments particularly in the developing and the least developed nations are found to be in unhealthy rivalries leading to state of zero or delayed collaboration on initiatives that are for common good of the citizens
- Lack of access to the internet especially in the rural areas in the developing and underdeveloped countries
- Unaffordable (high) cost of access to the internet

### 5. How are these challenges being addressed? What approaches have proved to be effective in your experience?

These challenges are being addressed in the following ways, which have proved to be effective in our experience;

- Organising/encouraging new initiatives (eg AfICTA) in support of WSIS targets in the private sector in the developing and the least developed economies.
- Building of a repository of development experts and champions. The database can be used for new global initiatives to accelerate the realization of new development targets.

- Improved capacity building
- Building of infrastructure within the continent in order to have a reduction in the cost of accessing internet resources.
- Soliciting for sponsorship especially for SMEs to participate in the Internet Governance.

## 6. What do you consider the most important emerging trends in technology and other aspects of ICTs which have affected implementation of WSIS outcomes since the Summit? What has been their impact?

We consider cloud computing, IPv6, LTE technology and big data analysis as the most important emerging trends in technology and other aspects of ICTs which have affected implementation of WSIS outcomes since the Summit.

The impact of cloud computing, IPv6, LTE technology and big data analysis has been;

- Increase in throughput
- Increase indata transport efficiency
- Provision of a global ecosystem with inherent mobility
- High-performance mobile computing
- Support of real-time applications
- Reduction in the cost of maintenance
- Reduction in business entry cost as the prices/cost of registering a new business has improved considerably

### 7. What should be the priorities for stakeholders seeking to achieve WSIS outcomes and progress towards the Information Society, taking into account emerging trends?

The priorities for stakeholders seeking to achieve WSIS outcomes and progress towards the Information Society, taking into account emerging trendsshould include;

- Organising/encouraging new initiatives (e.g AfICTA) in support of WSIS targets in the private sector in the developing and the least developed economies.
- Increased awareness for key policymakers including lawmakers (i.e parliament)
- Improved capacity building
- Building of infrastructure within the continent in order to have a reduction in the cost of accessing internet resources.

### 8. What role should information and communications play in the implementation of the post-2015 development agenda?

Information and communications should be considered as an integral part of the implementation of the post-2015 development agenda.

### 9. Please add any other comments that you wish to make on the subject of the review that you believe would be helpful.

Here below are other comments we have;

- Organising/encouraging new initiatives (eg AfICTA) in support of WSIS targets is costly
  for champions in the private sector in the developing and the least developed economies.
  This is because most interest in championing something new with long term benefit is
  usually from the small and Medium Enterprises (SMEs).
- Identifying champions for initiatives is a challenge. It would be good to build a repository of development experts and champions. The database can be used for new global initiatives to accelerate the realization of new development targets.
- Not all business entities are able to commit scarce resources to sustained participation in the WSIS and WSIS related activities e.g. IGF, CSTD Working Groups.
- The success of any such global initiative depends on the political will and vision of national governments particularly in the developing and least developed nations. Therefore, the need for strong national government liaison at the WSIS Secretariat cannot be over-emphasized.
- Improved capacity building will help foster the mission of WSIS especially in developing and least developed nations.
- Building of infrastructure within the continent in order to have a reduction in the cost of accessing internet resources. Construction of intra-African infrastructure should be a priority going forward.
- There should be a wider or an increase in awareness. This can be done through the media
  or through orientation agencies set up in each of the developing and least developed
  nations.
- Collaboration of all stakeholders: When the benefits of collaboration are made known to each stakeholder, then there will be a faster, efficient and easier collaboration among the stakeholders.
- IT infrastructures for example fibre-optics should be planned for before the construction of roads and houses.
- There should be adequate encouragement for home grown development especially in the areas of software development and other IT areas.

### From our experience, the following are our recommendations;

- WSIS 2.0 should be initiated at the end of this WSIS phase to sustain the momentum generated with WSIS 1.0 of 2003-2005.
- A funding mechanism should be established at the commencement of such initiatives to support effective participation of indigent stakeholders whether government, private sector, or civil society in the developing and least developed economies
- For similar initiatives in the future, very strong secretariat structure should be in place for important follow-up and process support.
- Agencies of Government should be encouraged to participate and work together in order to aid the initiatives that are for common good of the citizens.
- Rural areas especially in the developing and least developed economies should be put into consideration regarding capacity building as a national priority.

#### Contribution of AfICTA (Africa ICT Alliance) to the WSIS 10-Year Review

by Dr Jimson Olufuye, Chair AfICTA 15.09.2014

#### **Executive Summary**

AfICTA – Africa Information and Communication Technologies Alliance, is a private sector-led organization of ICT Industry associations, companies and individual professionals established in May 2012 and registered in Nigeria on 30 December, 2013. AfICTA members include ICT associations, companies and professionals in 13 African countries namely; Nigeria, South Africa, Egypt, Kenya, the Gambia, Rwanda, Namibia, Tunisia, Ethiopia, Somalia, Burundi, Sudan and Niger republic.

AfICTA formation in 2012 is a derivative of progress recorded in the World Summit on Information Society (WSIS) target realization in its member countries in the area of Action Lines C1, C2, C3, C4, C5, C6, C7 (e-Government & e-Business), C8, C9 & C11. The realization of WSIS targets constitutes its vision, mission and goals. Please see <a href="http://aficta.org/index.php/home/visionmission">http://aficta.org/index.php/home/visionmission</a>.

AfICTA within the period under review organized its first Summit in Lagos, Nigeria (26-28 June, 2013) bringing representatives from 5 African countries plus the USA. It also participated in workshops, seminars, parliamentary public hearing, fora and capacity building programmes in Nigeria, Kenya, Egypt and Ethiopia underscoring its commitment to the WSIS Action Lines (AL) and targets realization in the African region. Specifically, AfICTA evolved and supported initiatives in collaboration with other organisations to impact on Action Lines (ALs) C1, C2, C3, C4, C5, C6, C7 (e-Government & e-Business), C8, C9 & C11.

AfICTA is prepared for its second summit holding in Cairo, Egypt (3-5 November, 2014).

#### The AL Interventions

1. C1 - The role of public governance authorities and all stakeholders in the promotion of ICTs for development: In its role as a stakeholder, AfICTA promoted the WSIS action lines and targets to participating stakeholders from 5 countries at its first Summit on 26-28 June 2013 with the theme "Fulfilling the Promise of Digital Age in Africa". It also extended the reach to global audience through the publication of WSIS materials on its website (www.aficta.org). The aim was to publish what needed to be done to meet the WSIS 2015 targets thereby promoting ICTs for development. Over 100 top level delegates across

- Nigeria, Africa and USA participated in the Summit. Please visit <a href="http://aficta.org/index.php/aficta-summit-2013">http://aficta.org/index.php/aficta-summit-2013</a> for more details on the Summit.
- 2. C2 Information and communication infrastructure: AfICTA participated TransformAfrica Summit 2013 in Kigali, Rwanda organised by the Rwandan government in collaboration with ITU. The event emphasized building ICT (fibre) infrastructure across African states with strong collaboration with the African private sector to enable broadband driven African economies. The conference had the buy-in of many African government. **AfICTA** far endorsed TransformAfrica manifesto has SO the http://www.transformafrica2013.org/IMG/pdf/smart\_africa\_manifesto\_2013\_english\_version.pdf. Part of the 2014 Summit is focused on further promotion of the Manifesto. AfICTA also participated in the report validation workshop for the Programme for Infrastructure Development in Africa (PIDA) Priority Action Plan (PAP), organized by Aurecon with funding from AU and African Development Bank. The event took place 4-5 November, 2013 in Nairobi, Kenya.
- 3. C3 Access to relevant information and knowledge. Through its universal resource locator (URL) <a href="www.aficta.org">www.aficta.org</a> and its weekly e-Newsletter, AfICTA provides access to information and knowledge on the digital age in tandem with its goal number 2 i.e to create awareness and improve African digital literacy by 50% in collaboration with stakeholders by the year 2020.
- 4. C4 Capacity building: AfICTA as part of its first Summit organised a Domain Name System Security Extension (DNSSEC) workshop for domain name engineers and business owners in collaboration with the Internet Corporation for Assigned Names and Numbers (ICANN) and the Nigerian Internet Registration Association (NIRA). More than 40 DNS experts in the Nigerian DNS industry benefited from the training. In addition, AfICTA also conducted a workshop on global standards on project management and procurement. 9 delegates mainly from state governments participated in this workshop.
- 5. C5 Building confidence and security in the use of ICTs: Confidence and security go hand-in-hand and in the Internet space. A weak security infers low confidence and a high security implies strong confidence in the use of ICTs. Therefore, with DNSSEC workshop mentioned above, AfICTA added to confidence building as the key benefit of the DNSSEC is the prevention of cyber-attacks like DNS cache poisoning which leads to domain name hijacking, website defacing, phishing data theft etc.
- 6. C6 Enabling environment. AfICTA made a presentation at the public hearing on the passage of a Cybersecurity Bill by the Nigerian Parliament. This is with the aim of enabling conducive environment for increased e-activities.

- 7. C7 ICT Applications (e-Government & e-Business): Through its 1<sup>st</sup> Summit, AfICTA provided opportunities for governments particularly state governments in Nigeria (notably Ekiti, Ondo, Nasarawa and Edo States) to strengthen their eGovernment and eBusiness policies and strategies. Business entities also benefitted in exposure to DNSSEC processes and to biometric ATM application and systems demonstrated at the event.
- 8. C8 Cultural diversity and identity, linguistic diversity and local content: AfICTA participated in the 2<sup>nd</sup> African IGF organized by UNECA & AU with the support of ISOC and keNIC in Nairobi Kenya on 23-26 September, 2013. The theme of the Forum was "Building Bridges Enhancing Multi-stakeholder Cooperation for Growth and Development. AfICTA delegate, Dr Olufuye chaired the panel on Access and Diversity: Internet as an engine for growth and sustainable development. He challenged stakeholders on reaching the over 1000 ethnic groups in Africa with ICT benefits in more than 3000 local languages they speak.
- 9. C9 Media: AfICTA uses the new media to enrich the information society. It has a robust presence on the social media eg facebook, twitter #aficta, and the domain space www.aficta.org.
- 10. C11 International and regional cooperation: AfICTA collaborated with ICANN to organize the DNSSEC workshop in Lagos, Nigeria. It also cooperated with UNECA and AU leading to the success of the 2<sup>nd</sup> African IGF in Nairobi, Kenya. It is important to emphasize the ongoing co-operation among the African ICT organization to promote intra-African ICT trade, ICT policy development and sharing of critical information on good practices. AfICTA plays active role in the International Chamber of Commerce (ICC) Business Action in Support of the Information Society (BASIS). It has collaborative agreement with the Korean Electronics Association, the Consumer Electronics Association, USA and African Information and Technology Exhibitions and Conference (AITEC). AfICTA delegates participated in trade shows, global trade exhibitions and conferences organised by its partners mentioned above to increase global co-operation and knowledge sharing for economic growth. The move was also to create more ICT jobs and engender prosperity in the African economies.

#### **Lessons Learned**

1. Organising new initiatives (eg AfICTA) in support of WSIS targets is costly for champions in the private sector in the developing and the least developed economies. This is because most interest in championing something new with long term benefit is usually from the small and Medium Enterprises (SMEs).

- 2. Identifying champions for initiatives is a challenge. It would be good to build a repository of development experts and champions. The database can be used for new global initiatives to accelerate the realization of new development targets.
- 3. Not all business entities are able to commit scarce resources to sustained participation in the WSIS and WSIS related activities e.g. IGF, CSTD Working Groups.
- 4. The success of any such global initiative depends on the political will and vision of national governments particularly in the developing and least developed nations. Therefore, the need for strong national government liaison at the WSIS Secretariat cannot be over-emphasized.
- 5. Improved capacity building will help foster the mission of WSIS especially in developing and least developed nations.
- 6. Building of infrastructure within the continent in order to have a reduction in the cost of accessing internet resources.
- 7. Soliciting for sponsorship especially for the civil society to participate in the Internet Governance.
- 8. IT/Computer Illiteracy should be eradicated as this is a stumbling block because there is high level of illiteracy (low level of literacy) in developing and least developed nations.
- 9. There should be a wider or an increase in awareness. This can be done through the media or through orientation agencies set up in each of the developing and least developed nations.
- 10. Collaboration of all stakeholders: When the benefits of collaboration are made known to each stakeholder, then there will be a faster, efficient and easier collaboration among the stakeholders.
- 11. IT infrastructures for example fibre-optics should be planned for before the construction of roads and houses.
- 12. There should be adequate encouragement for home grown development especially in the areas of software development and other IT areas.

#### **Obstacles encountered**

- 1. Zero granting opportunity for business stakeholders in the developing and least developed nations (who are mainly SMEs) due to erroneous impression that they would fund themselves. They need to be supported to attain the critical mass from where self-funding will be possible as it is in the developed economies.
- 2. Lack of effective collaboration with government entities
- 3. Intra-government rivalries. Agencies of governments particularly in the developing

and the least developed nations are found to be in unhealthy rivalries leading to state of zero or delayed collaboration on initiatives that are for common good of the citizens

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#### Recommendations

- 1. WSIS 2.0 should be initiated at the end of this WSIS phase to sustain the momentum generated with WSIS 1.0 of 2003-2005.
- 2. A funding mechanism should be established at the commencement of such initiatives to support effective participation of indigent stakeholders whether government, private sector, or civil society in the developing and least developed economies
- 3. For similar initiatives in the future, very strong secretariat structure should be in place for important follow-up and process support.
- 4. Agencies of Government should be encouraged to participate and work together in order to aid the initiatives that are for common good of the citizens.
- 5. Rural areas especially in the developing and least developed economies should be put into consideration regarding the eradication of IT/Computer Illiteracy.

#### **Conclusion**

It is important to note that the above report is not exhautive of the activities of AfICTA to promote the WSIS themes and targets realization in Africa and across the global ICT ecosystem.