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Seoul Searching: Africa's Role in the 2012 Nuclear Security Summit

Amelia Broodryk¹

Issue 8 of 'Africa's Policy Imperatives' focuses on the potential role that Africa can play in the 2012 Nuclear Security Summit. It is an edited and enhanced version of a food for thought paper presented at a diplomatic luncheon hosted by the British High Commission in Pretoria.

Previous editions provided general overviews (and updates) of Africa's participation in international efforts to strengthen disarmament and non-proliferation through a number of conventions, protocols and agreements, including the Comprehensive Nuclear Test Ban Treaty (CTBT), its adherence in Africa and the potential benefits that Africa can derive from the work of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO); recent developments in the implementation of the Treaty of Pelindaba; and, on ways to enhance the role of the OPCW in building Africa's capacity to prevent the misuse of toxic chemicals.

This *Issue* has been compiled as a result of research undertaken since 2007 by the Norwegian and British-funded ISS' "Africa's Development and the Threat of Weapons of Mass Destruction Project". This project aims to identify and strengthen Africa's role in these international efforts in the context of the continent's developmental imperatives.

Introduction

In April 2010, 47 world leaders met in Washington, D.C. at the Nuclear Security Summit to discuss concrete measures to prevent nuclear terrorism and secure vulnerable nuclear materials. The results of the summit were a communiqué and a work plan consisting of 'voluntary' steps to ensure the safe 'storage, use, transportation and disposal of nuclear materials' and to prevent 'non-state actors from obtaining the information required to use such materials for malicious purposes'.² The work plan incorporates many key national and international nuclear security initiatives that states must implement, including the International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT), the Convention on the Physical Protection of Nuclear Material (CPPNM), and the United Nations Security Council Resolution (UNSCR) 1540.³

The 2010 Nuclear Security Summit succeeded in placing the issues of nuclear terrorism and nuclear material security firmly on the international agenda. In addition to the joint work plan, individual states made specific commitments to improving national nuclear security.⁴ However, the summit communiqué was non-binding and reflected states' impressions that although nuclear security is important globally, nuclear security within their own states is not a real problem.⁵ A major shortcoming of the summit was the absence of a common nuclear terrorism threat assessment. The lack of agreement on the status of threats to nuclear security resulted in countries taking individual positions, rather than a collective view on the issue.⁶

Recent nuclear security developments in Africa

Of the 47 countries invited to participate in the 2010 summit, only five were from Africa namely, Algeria, Egypt, Morocco, Nigeria and South Africa. Participating countries were chosen according to their geographic, economic, and political diversity, as well as their influence over nuclear security in general. It seems unlikely that the number of countries participating in the 2012 summit will increase given that the aim of the summit is to reach substantive outcomes.⁷ This philosophy also extends to the scope of the summit, which will remain on nuclear security, but may bring in related concerns, such as the Fukushima disaster.

Two key issues that will be discussed at the 2012 summit in Seoul are progress on the 2010 Nuclear Security Summit work plan and the status of individual country commitments to achieving nuclear security. A number of analyses, predominantly conducted by non-governmental organisations such as the Stanley Foundation and the Arms Control Association, argue that although progress has been made in some areas, such as removal of nuclear materials in eight countries, the challenge of securing nuclear materials is a long-term process – in all likelihood, more than the four-year goal set by President Obama in April 2009.⁸ Notably, discussions on progress of the 2010 work plan make scant reference to events in Africa, signifying either that very little is happening on the continent or, more likely, that African states are not seen as major threats to nuclear security. However, the long-term security implications of the current political unrest in Egypt, Libya and Tunisia are yet to be gauged.

Interestingly, no African state made national commitments at the 2010 summit, however, in December 2010, South Africa delivered the first shipment of Molybdenum 99 (Mo-99) to the United States made from lower enriched uranium (LEU) fuel and targets contributing substantially to the non-proliferation of sensitive nuclear materials.⁹ In addition, a number of key initiatives have taken place on the African continent since April 2010.

Most recently, on 15 June 2011, Ghana ratified the Comprehensive Test Ban Treaty (CTBT), which is one of the international instruments highlighted as important for ensuring nuclear security in the 2010 Nuclear Security Summit Work Plan. Zambia and Cameroon became the 30th and 31st countries to deposit their instruments of ratification with the African Union for the Treaty of Pelindaba (Africa's

Nuclear Weapon Free Zone Treaty) in August and September 2010 respectively.¹⁰

The Treaty of Pelindaba represents an important step towards strengthening the global non-proliferation regime, as it seeks to ensure that nuclear weapons are not developed, produced, tested, or otherwise acquired or stationed anywhere on the African continent or its associated islands.¹¹ Importantly, the treaty contains specific provisions for ensuring the physical security of nuclear materials. Under Article 10, states parties are legally obliged to maintain the 'highest standards of security and effective physical protection' of nuclear materials, facilities and equipment. Each party also undertakes to apply measures of physical protection equivalent to those provided for in the CPPNM and IAEA security guidelines.¹² Thus, the Treaty of Pelindaba is a key mechanism to ensure that the issue of nuclear security is addressed on the African continent.

Since the entry into force of the Treaty of Pelindaba in July 2009, the African Union has convened two meetings – the First Conference of States, which took place in November 2010 and the First Ordinary Session of the African Commission on Nuclear Energy (AFCONE) in May 2011.¹³ The establishment and operationalisation of AFCONE, the treaty's implementation body, is currently underway. The 12 commissioners of AFCONE have been elected for a three-year term and are from the following countries: Algeria, Burkina Faso, Cameroon, Ethiopia, Kenya, Libya, Mali, Mauritius, Senegal, South Africa, Togo and Tunisia.¹⁴

Another significant African initiative is the Forum of Nuclear Regulatory Bodies in Africa (FNRBA). The FNRBA was launched in December 2009 and was formed in response to the increasing use of radioactive material in peaceful nuclear applications such as health, agriculture and energy.¹⁵ Thirty-three African countries are currently part of the Forum.¹⁶ According to IAEA Deputy Director General Tomihiko Taniguchi, the launching of the FNRBA 'is a very positive step in strengthening nuclear safety and security in Africa'.¹⁷ The FNRBA provides a mechanism for the exchange of regulatory experiences and practices among nuclear regulatory bodies in Africa, and importantly, aims to provide for the enhancement, strengthening and harmonisation of the radiation protection, nuclear safety and security regulatory infrastructure and framework among the members of FNRBA. The work of the

FNRBA complements the work of the IAEA's Nuclear Security Programme in Africa.¹⁸

From July 2010 to March 2011, the Institute for Security Studies, with the support from the British High Commission in South Africa, undertook a project on implementing actions to protect against nuclear terrorism in Africa. The project explored the present status of nuclear security in Africa by conducting a research study and hosting an experts' workshop in February 2011 on securing Africa's nuclear resources. Workshop participants included officials from the following bodies:

- The African Union (AU);
- The Africa Regional Cooperative Agreement for Research, Development and Training related to Nuclear Science and Technology (AFRA);
- The Forum of Nuclear Regulatory Bodies in Africa (FNRBA);
- African national nuclear regulators, power plants, atomic energy commissions and radiation protection authorities; and,
- South African government departments.¹⁹

The results of the workshop included a comprehensive report on nuclear security in Africa, as well as an African 'Action Plan' on securing Africa's nuclear resources. African experts who participated in the workshop were tasked with developing the action plan, which consists of recommendations for actions on international, regional/sub-regional, and national levels. Importantly, participants committed themselves to working together towards achieving better nuclear security on the continent.²⁰

The workshop also resulted in a number of recommendations that have particular significance for the 2012 Nuclear Security Summit. The most relevant are mentioned below:

- To push for greater participation of African states, including the African Union, in the 2012 nuclear security summit to be held in Seoul, South Korea.
- To support the full implementation of the African Nuclear-Weapon-Free Zone Treaty (Treaty of Pelindaba) and the African Commission on Nuclear Energy (AFCONE).
- To encourage the African Commission on Nuclear Energy to liaise closely with both AFRA and the FNRBA so as to both avoid duplication of efforts and to prevent gaps.

- To make better use of continental experts from AFRA, the FNRBA and AFCONE in order to promote nuclear security within the context of the need for sustainable socio-economic development on the continent.
- To adopt, as soon as possible, where they do not exist, the necessary legislative and other measures to establish as a criminal offence under national law, the illicit possession of, trafficking in, and use of nuclear and other related materials.²¹

Recommendations

Although an increase of African states as participants in the 2012 summit is probably unlikely, participation that is more substantial is certainly possible. The 2012 Nuclear Security Summit in Seoul provides states with another opportunity to build real consensus around an issue that affects all countries in the world. It is especially important for all African states to engage constructively on the issue of nuclear security if the continent intends to further develop its peaceful nuclear programmes without endangering its citizens. A number of recommendations can be made in this regard:

1. The African Union should consider hosting a regional meeting looking at how the 2010 nuclear security work plan is being implemented in Africa in order to support the African position in 2012.
2. African states must continue to interact through existing forums such as the FNRBA, AFRA and AFCONE on matters related to nuclear security.
3. African states attending the 2012 summit should engage with non-participating African states in order to 'strengthen consensus toward action'.²² These interactions should also be extended to non-governmental organisations and the nuclear industry, given their respective expertise in the area of nuclear security.
4. If possible, African participants of the 2012 summit should put forward national commitments as a confidence building measure.
5. Those African states that have not yet done so should conclude comprehensive safeguards agreements with the IAEA as well as conclude additional protocols to their safeguards agreements on the basis of the Model Additional Protocol approved by the Board of Governors of the IAEA on 15 May 1997.
6. All African states must accede to, and comply with, relevant international legal instruments on terrorism and international organised crime,

including the International Convention for the Suppression of Acts of Nuclear Terrorism, the International Convention for the Suppression of Terrorist Bombings and the International Convention for the Suppression of the Financing of Terrorism.

7. All African states must ratify and comply with existing international nuclear security conventions, such as the Convention on the Physical Protection of Nuclear Material and its 2005 Amendment.²³

Access by unauthorised persons or organisations to vulnerable nuclear material will remain one of the most challenging threats to global security if the international community does not develop appropriate security measures. The African continent is already leading by example through initiatives such as the Treaty of Pelindaba, and this spirit of co-operation can certainly benefit and shape the international nuclear security agenda. African states must 'search their souls' and decide for themselves the role they wish to play in the international nuclear security arena.

African Status: Ratifications and Submission of 1540 Reports (as at 1 August 2011)

African State	CWC	1540 Reports	Nuclear Non-Proliferation Treaty	Treaty of Pelindaba	CTBT	BTWC
Algeria	X	X	X	X	X	X
Angola		X	X			
Benin	X	X	X	X	X	X
Botswana	X		X	X	X	X
Burkina Faso	X	X	X	X	X	X
Burundi	X		X	X	X	
Cameroon	X	X	X	X	X	
Cape Verde	X		X		X	X
Central African Republic	X		X		X	
Chad	X		X			
Comoros	X		X			
Congo (Republic of)	X		X			X
Côte d'Ivoire	X	X	X	X	X	
Djibouti	X	X	X		X	
Democratic Republic of Congo (DRC)	X	X	X		X	X
Egypt		X	X			
Equatorial Guinea	X		X	X		X
Eritrea	X	X	X		X	
Ethiopia	X		X	X	X	X
Gabon	X	X	X	X	X	X
Gambia	X		X	X		X
Ghana	X	X	X		X	X
Guinea	X		X	X		
Guinea-Bissau	X		X			X
Kenya	X	X	X	X	X	X
Lesotho	X		X	X	X	X
Liberia	X		X		X	
Libya	X	X	X	X	X	X
Madagascar	X	X	X	X	X	X
Malawi	X		X	X	X	
Mali	X		X	X	X	X
Mauritania	X		X	X	X	
Mauritius	X	X	X	X		X
Morocco	X	X	X		X	X
Mozambique	X		X	X	X	X
Namibia	X	X	X		X	
Niger	X	X	X		X	X
Nigeria	X	X	X	X	X	X
Rwanda	X		X	X	X	X
São Tomé and Príncipe	X		X			X
Senegal	X	X	X	X	X	X
Seychelles	X	X	X		X	X

African State	CWC	1540 Reports	Nuclear Non-Proliferation Treaty	Treaty of Pelindaba	CTBT	BTWC
Sierra Leone	X	X	X		X	X
Somalia			X			
South Africa	X	X	X	X	X	X
Sudan	X	X	X	X	X	X
Swaziland	X		X	X		X
Tanzania (United Republic of)	X	X	X	X	X	
Togo	X		X	X	X	X
Tunisia	X	X	X	X	X	X
Uganda	X	X	X		X	X
Zambia	X		X	X	X	X
Zimbabwe	X		X	X		X

¹ The author's opinions expressed in this edition of 'Africa's Policy Imperatives' do not necessarily reflect those of the Institute for Security Studies, its Council, its Trustees or any funder or sponsor of the ISS.

² The White House Office of the Press Secretary, 'Work Plan of the Washington Nuclear Security Summit', 13 April 2010.

³ Amelia Broodryk and Noël Stott, 'Securing Africa's Nuclear Resources', Institute for Security Studies, March 2011.

⁴ William Tobey, 'Planning for Success at the 2012 Seoul Nuclear Security Summit', Policy Analysis Brief, The Stanley Foundation, June 2011.

⁵ William Tobey, 'Planning for Success at the 2012 Seoul Nuclear Security Summit', Policy Analysis Brief, The Stanley Foundation, June 2011.

⁶ William Tobey, 'Planning for Success at the 2012 Seoul Nuclear Security Summit', Policy Analysis Brief, The Stanley Foundation, June 2011.

⁷ Veronica Tessler, Jennifer Smyser & Corey Hinderstein, 'The Road to Korea 2012: Nuclear Security Summits and Global Efforts to Prevent Nuclear Terrorism', Policy Dialogue Brief, The Stanley Foundation, October 2010.

⁸ Robert Golan-Vilella, Michelle Marchesano & Sarah Williams, 'The 2010 Nuclear Security Summit: A Status Update', Arms Control Association, April 2011.

⁹ 'First LEU-Produced Molybdenum-99 Approved for Patient Use Arrives in U.S.', NNSA, December 6, 2010, <http://nnsa.energy.gov/mediaroom/pressreleases/leumoly120610>.

¹⁰ For a full status list of the Treaty of Pelindaba please visit http://www.au.int/en/sites/default/files/991pelindaba_Treaty.pdf

¹¹ Noël Stott, 'The Treaty of Pelindaba: Towards Full Implementation of the African Nuclear-Weapon-Free Zone Treaty', Institute for Security Studies, March 2011.

¹² Noël Stott, 'The Treaty of Pelindaba: Towards Full Implementation of the African Nuclear-Weapon-Free Zone Treaty', Institute for Security Studies, March 2011.

¹³ See the WMD Project website for more details of the meetings, <http://wmdafricafiles.blogspot.com>

¹⁴ African Union, 'Press Release: The African Union Commission working towards the early operationalization of the African Commission on Nuclear Energy (AFCONe).

¹⁵ 'Africa Takes Nuclear Safety Stage', IAEA Staff Report, 17 December 2009.

¹⁶ See <http://www.fnrba.org> for complete list.

¹⁷ 'Africa Takes Nuclear Safety Stage', IAEA Staff Report, 17 December 2009.

¹⁸ 'Africa Takes Nuclear Safety Stage', IAEA Staff Report, 17 December 2009.

¹⁹ Amelia Broodryk and Noël Stott, 'Securing Africa's Nuclear Resources', Institute for Security Studies, March 2011.

²⁰ Amelia Broodryk and Noël Stott, 'Securing Africa's Nuclear Resources', Institute for Security Studies, March 2011.

²¹ Amelia Broodryk and Noël Stott, 'Securing Africa's Nuclear Resources', Institute for Security Studies, March 2011.

²² Veronica Tessler, Jennifer Smyser & Corey Hinderstein, 'The Road to Korea 2012: Nuclear Security Summits and Global Efforts to Prevent Nuclear Terrorism', Policy Dialogue Brief, The Stanley Foundation, October 2010.

²³ Amelia Broodryk and Noël Stott, 'Securing Africa's Nuclear Resources', Institute for Security Studies, March 2011.