



SOUTH AFRICAN
MARITIME SAFETY
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Title: South Africa's Approach to Addressing Underwater Radiated Noise

Session 4 - Challenges and Pathways: Focus on Developing Countries

Presented by: Mr. Malibongwe Ndlozi, Project Lead, SAMSA

Venue: World Maritime University, Sweden , Malmo

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South Africa's Maritime Profile

• Overview:

- South Africa is strategically located at the southern tip of the African continent, serving as a critical maritime hub for international shipping routes, particularly the **Cape of Good Hope** route.
- **Traffic Zones:**
 - **Major Ports:** Durban, Cape Town, Port Elizabeth, and Ngqura
 - **Anchorage Areas:** Cape Town, Durban, Richards Bay
 - **Fairways & Shipping Lanes:** Heavily trafficked, especially by international trade vessels
 - **Marine Protected Areas (MPAs):** 42 MPAs along the coastline, including sensitive ecosystems such as Algoa Bay and iSimangaliso Wetland Park
 - **Particularly Sensitive Sea Areas (PSSAs):** South Africa's adjacent waters are designated PSSAs under the International Maritime Organization (IMO), requiring heightened protection measures.
- **Shipping Traffic Composition:**
 - Heavy bulk carriers, container ships, and tankers dominate the traffic, with growing numbers of cruise ships and fishing vessels.



Regulatory Framework in South Africa

- **Current Legislation:**

- The **National Environmental Management: Protected Areas Act** governs the protection of MPAs.
- **National Environmental Management Act (NEMA)** oversees broader environmental protections, including marine ecosystems impacted by noise pollution.
- **Ocean and Coastal Management Strategy:** Focus on reducing noise pollution and regulating maritime activities around sensitive ecosystems.
- **Underwater Radiated Noise** is not mentioned anywhere in our Policies.

- **Planned or Draft Legislation:**

- The ongoing development of the **Marine Spatial Planning Act**, integrating measures for URN reduction.
- Discussions underway to introduce specific **URN regulations** into the South African maritime code, in line with international standards.



South Africa's Initiatives Noise Pollution

- **Ongoing Initiatives:**

- There is no specific initiative currently underway aimed at addressing the URN in South Africa.
- South Africa, like many countries, promotes the Just-in-Time Arrival Program to reduce idle times for vessels, thereby reducing overall noise levels as promoted by the IMO.

- **Proposed Future Plans:**

- **Comprehensive Studies:** Proposed nationwide URN monitoring project, integrating data from multiple ports and coastal regions.
- **Vessel Risk Mitigation Programs:** Launch of the "**Green Ports**" initiative, focusing on reducing the environmental footprint of vessels, including URN.
- **Hydrophone Deployment:** South Africa, in collaboration with international partners, has deployed hydrophones along key shipping routes to monitor noise pollution levels, especially around MPAs.



Capacity Challenges and Pathways

- **Challenges:**

- **Limited Technical Infrastructure:** While hydrophones have been deployed in certain areas, South Africa lacks comprehensive coverage for URN monitoring.
- **Funding Limitations:** A significant barrier to expanding monitoring and mitigation programs is the lack of dedicated financial resources.
- **Technical Skills Shortage:** Limited availability of trained personnel in the fields of URN assessment and mitigation technology.
- **Climate Change Impact:** Changing sea conditions, driven by climate change, further complicate efforts to measure and reduce URN impacts on marine ecosystems.

- **Pathways Forward:**

- **Capacity-Building and Training:** International partnerships to assist in training local scientists and engineers in advanced URN monitoring and mitigation techniques.
- **Collaboration with Twinning Partners:** Working closely with Madagascar and Georgia to share knowledge and best practices in URN management, pooling resources for joint research initiatives
- South Africa will continue to avail itself to opportunities



International Collaboration and Support

- **Importance of Partnerships:**

- Collaboration with international bodies like the **IMO**, **WMU**, and national research institutions is critical for developing countries like South Africa to address URN.
- **Twinning Program:** South Africa's partnership with Madagascar and Georgia focuses on exchanging technical expertise and exploring joint funding opportunities.

- **Support Needed:**

- **Technical Training:** Building local capacity for advanced URN monitoring through international workshops and training programs.
- **Access to Technologies:** Facilitating access to noise-reduction technologies for vessels, such as quieter propeller systems and hull designs.
- **Policy Guidance:** Support from international agencies to help South Africa develop a comprehensive regulatory framework for URN.
- **Financial Resources:** Essential for scaling up pilot studies and expanding hydrophone networks across the country's maritime zones.



Conclusion

- South Africa is committed to addressing URN, but significant challenges remain, particularly around infrastructure, funding, and skills development. Through partnerships and capacity-building efforts, we believe we can strengthen our ability to monitor and mitigate URN, protecting our marine ecosystems and fulfilling our obligations under international maritime frameworks.
- Lastly, the GloiNoise Partnership Project presents SA with the opportunity to create the required awareness to begin the process of developing or amend National Policies to cover URN.



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Thank You!

Contact Information:

Mr. Malibongwe Ndlozi

Project Led, SAMSA

Email: mndlozi@samsa.org.za

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