

A Speech Delivered by the DG/CEO NiMet, Professor Charles Anosike, at the Regional Ferry Safety Conference, 25 – 26 June 2025, Continental Hotel Lagos.

Weather Forecast for Safe Navigation

Distinguished guests, esteemed colleagues, ladies and gentlemen

It is with great pleasure that I address you today at this crucial workshop, dedicated to exploring the vital role of meteorology in ensuring the safety and efficiency of ferry operations in Nigeria. Our Nation's coastline and waterways are not merely a geographical feature but a dynamic economic and social pathway, with ferry operations serving an indispensable lifeline for countless communities. The ability to navigate these waters safely and reliably is paramount, and this imperative brings us together on this special occasion.

The coastal environment is, by its very nature, unpredictable. Rapidly changing weather patterns manifesting as strong winds, heavy rainfall, and reduced visibility pose significant hazards to ferry operations. These conditions can lead to costly disruptions, damage to valuable vessels, and, tragically, the loss of precious lives. Weather and climate information are crucial for safe and efficient ferry operations. Ferry operators rely on forecasts and historical data to assess risks related to weather, including wind, waves, and precipitation, and to make informed decisions about safety protocols and potential route adjustments. Ferry operators face the challenge of adapting to climate change against this backdrop of increasing climate extremes and rising sea levels.

Maritime regulation must ensure that ferries and ports adopt more sustainable practices, including integration of weather early warning alerts into ferry operations. Timely and accurate early warning is indispensable and serves as a guide toward strategic operational planning, empowering ferry operators to efficiently plan routes and strategically deploy crew members to minimize the impact of adverse weather events and enhance safety. Secondly, real-time weather updates enable ferry operators to conduct thorough pre-departure assessments and make climate informed decisions on safety and viability of each trip. Understanding current and predicted weather patterns significantly enhances the strategic planning and execution of search and rescue operations.

Nevertheless, we must acknowledge the hurdles that hamper adoption and the optimal utilization of meteorological data for ferry operations, such as:

- i. **Compliance** – Maritime regulators must ensure adherence to international maritime regulations which often require vessels to adhere to specific weather-related guidelines to ensure safety and environmental protection and accurate weather forecasts help ferry operators comply with these regulations.
- ii. **Access to weather information**- Ensuring that all operators, particularly our smaller, independent operators, have equitable and affordable access to high-quality meteorological data.
- iii. **Investment in preparedness** – Sustained investment in the necessary infrastructure for comprehensive weather monitoring, efficient data dissemination, and accessible onboard systems.
- iv. **Capacity building** – Empowering ferry operators and crews with the essential skills to effectively interpret and apply meteorological information in their daily decision-making.
- v. **Stakeholder Engagement** – Stakeholder engagement and weather forecasting are crucial for ferry operators, as they ensure safe and efficient operations, build community trust and mitigate risks.

In this regard, NiMet has been partnering with relevant stakeholders in the maritime industry through the provision of daily marine weather forecasts and data towards ensuring the safety of life at sea. Realizing that meteorological services are better provided in collaboration with the users, NiMet, in year 2022, hosted a needs assessment workshop for stakeholders, including the Nigerian Maritime Administration and Safety Agency (NIMASA), the Nigerian Ports Authority (NPA), the Nigerian Inland Waterways Authority (NIWA), the Nigerian Navy, Marine Police, Fishing Communities, Ferry Operators, etc. This exemplified the collaborative spirit critical for the safety of operations of the various stakeholders. Furthermore, NiMet and NIMASA have signed a Memorandum of Understanding, same with NIWA, and most recently MOWCA while discussions are at advanced stages to also sign MoUs with other stakeholders. The objective of the collaborative activities between NiMet and the relevant Agencies in the maritime industry is to enhance the capacity of the Parties with a view to the provision of relevant meteorological data and tools that will enhance the sustainable development of the marine environment and delivery

of products and services to floating equipment and shippers for safety of navigation, maritime security, marine environment protection, and other maritime activities.

To overcome the challenges of optimal utilization of meteorological data and significantly elevate the safety and efficiency of ferry operations in Nigeria, the following measures can be taken:

- i. **Expanding Observation Network** – More investment is needed to expand observation and monitoring infrastructure of over 853-kilometer Nigeria’s coastline to support Nigeria Meteorological Agency ongoing efforts to establish more marine stations and maintain existing network of 8 Marine weather stations across the country.
- ii. **Implementing Targeted Training Programs** - Comprehensive training programs for ferry operators and crew are essential, focusing on the practical interpretation and application of meteorological data for safe navigation and operational planning.
- iii. **Promoting Robust Regulatory Frameworks** - We must establish clear guidelines and regulations that mandate the integration of meteorological data into all ferry operations, thereby ensuring a consistent and high standard of safety across our coastal regions.
- iv. **Fostering Public Awareness** - We must work together to continuously educate the public, especially our coastal communities, on the importance of weather information and essential safety precautions related to ferry travel.
- v. **Cost Recovery and Sustainability** – Supporting Nigerian Meteorological Agency cost recovery mechanism can help ensure the long-term sustainability of meteorological services, including maintenance and upgrading of observation infrastructure, improving marine forecasting capabilities, and developing new services to address climate change challenge.

In conclusion, I want to emphasize that weather forecasts are crucial for ferry operations and is an essential tool, helping them prioritize safety, optimize operations, reduce costs, and ensure compliance with regulations. Maritime regulators, Nigerian meteorological agency, and other practitioners within the industry must work together to ensure the safety and efficiency of maritime operations through the provision and use of vital meteorological and oceanographic information, tailored towards specific operational needs for the overall safety of navigation. We must build on WMO and IMO collaboration under the Safety of Life at Sea (SOLAS) Convention to reduce the

vulnerability of the maritime community in the event of hazardous or extreme maritime weather. Over 2000 industrial establishments including majority of the country's oil exploration/exploitation facilities are located in the low-lying coastal areas. Maritime trade plays a key role in Nigeria's economic development which accounts for about 95% of vehicular means of Nigeria's international trade. Weather forecasts for safe navigation are fundamental to the economic prosperity of Nigeria's coastal dwellers and by proactively addressing our existing challenges and diligently implementing these recommendations, we can make significant progress, enhance the well-being and efficiency of ferry operations towards achieving sustainable economic development in Nigeria. NiMet is well-positioned to provide impact-based marine forecasts and other Meteorological products & Services to ensure safety of ferry operations.

Thank you.