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Tanzanian Utility Regulator Spearheads Stakeholder Agreement to Strengthen Natural Gas Pipeline Safety



August 2021 – With support from the United States Agency for International Development (USAID), Power Africa, and the National Association of Regulatory Utility Commissioners (NARUC), the Energy and Water Utilities Regulatory Authority (EWURA) of Tanzania is at the forefront of an effort to guarantee worker and public safety and protect vital underground infrastructure.

In October 2020, following NARUC regulatory support on pipeline safety, EWURA drafted and facilitated the signing of a Memorandum of Understanding (MoU) for *Protection of Underground Infrastructure in the Shared Wayleave* with natural gas industry stakeholders, including utility companies and wayleave owners. Through this achievement, EWURA took a significant step towards diminishing risks that threaten the public health and safety of citizens in nearby communities and the environment. Additionally, this agreement reflects Tanzania’s momentum to establish a transparent regulatory framework for its natural gas market, which is key to boosting energy security through energy resource diversification and signaling to the private sector that the market is viable and presents opportunities for investment.

Wayleaves and their Role in Tanzania’s Natural Gas Industry

In accordance with Tanzania’s Petroleum General Regulations 2020, EWURA is responsible for maintaining the safety of underground infrastructures within designated corridors for utility and transportation infrastructure (e.g., oil and gas pipelines, railroads, electricity/telecommunications lines, etc.). This extends to collaborating with the owners and users of shared wayleaves to prevent damage that can occur during maintenance, repairs, and construction.

The standard definition of a wayleave is a contractual agreement between a landowner or occupier and a third party to access the land in exchange for compensation.ⁱ Typically, utility companies use them to install and maintain equipment such as cables or pipes. In the case of Tanzania, shared wayleaves are public land allocated to state companies or agencies for railway business and the construction or expansion of roads. Gas, electricity, telecommunications, and transportation utilities all install infrastructure through shared wayleaves owned by various municipalities and government construction agencies, which can result in dangerous consequences due to high degrees of activity.

For example, EWURA has cited numerous accidental pipeline puncture incidents caused by third-party activities in the city of Dar es Salaam. Moreover, utility companies and local residents often initiate construction in these infrastructure corridors without notice. In the absence of effective coordination between the owners and users of shared wayleaves, construction and excavation projects can pose serious safety concerns to the public and damage natural gas infrastructure.

NARUC has provided capacity building support to EWURA in carrying out risk mitigation measures dealing with third party activities within the natural gas network wayleaves. In particular, NARUC regulatory experts shared best practices espoused by the U.S.-based Common Ground Alliance

(CGA), a natural gas stakeholder association dedicated to saving lives and preventing damage to North American underground infrastructure by promoting effective damage prevention practices.ⁱⁱ

Drafting the MoU and Establishing a Joint Technical Committee

When drafting the MoU, EWURA included language that is directly attributed to the CGA with regard to preventing damage to underground infrastructure, supporting research and development, conducting public awareness, and sharing responsibility among all stakeholders involved.

Subsequently, EWURA led the way in establishing a Joint Technical Committee (JTC) and binding guidelines consistent with the MoU, with the objective of minimizing or eliminating third party damages in shared infrastructure corridors. This way, EWURA is able to support streamlined dispute resolution and monitor members' compliance with rules, regulations, the prepared guidelines, and agreed practices. EWURA convened the JTC in February 2021 to initiate the process of drafting the guidelines and reconvened again in May 2021 to consolidate and incorporate member feedback. As of late May 2021, the second draft of the guidelines has been circulated to all JTC members for review.

“EWURA would like to thank NARUC and USAID for holding a workshop on pipeline safety, which provided insight on the seriousness of third-party damages to underground infrastructure. It also helped establish a common understanding of this issue, which made it possible to develop the MoU and form a Joint Technical Committee to oversee worker safety and maintain protection of underground infrastructures in shared wayleaves.

Thanks to this peer-to-peer workshop, important stakeholders were able to meet and identify common goals aimed at improving safety conditions for all. Furthermore, the MOU will be adhered to by all parties, allowing for compliance to established rules and regulations and enabling EWURA to resolve disputes.”

- Eng. Tobias Pancras Rwelamila, Natural Gas Distribution Manager, EWURA

Creating an Enabling Environment for Investment through Transparent Regulation

By signing the MoU and establishing the JTC, EWURA has taken steps to increase investor confidence in the safety and integrity of natural gas infrastructure in Tanzania. This is crucial, as acquiring sufficient financing is a major obstacle when it comes to completing energy and infrastructure projects in sub-Saharan Africa. In the case of Tanzania, an estimated \$46.2bn is needed in power investment by 2040 to upgrade the transmission grid, develop new generation capacity, and meet long-term energy demand.ⁱⁱⁱ

This funding will be instrumental to unlocking the potential of Tanzania's gas-to-power market, a key component of the Government of Tanzania's (GoT) Power Sector Master Plan (PSMP). By encouraging development of vast offshore natural gas reserves for use as a power source, the PSMP aims to further diversify Tanzania's energy mix to ensure energy security, energy affordability, and socio-economic development.

In the past decade, Tanzania has seen a steady decline in poverty as well as notable economic growth. The country's poverty rate decreased by eight percentage points between 2007 and 2018 (34.4% to 26.4%), while gross national income (GNI) per capita increased from \$1,020 in 2018 to \$1,080 in 2019.^{iv} However, despite these positive trends, the total number of poor people has increased to 14 million, up from 13 million in 2007.^v

Furthermore, access to modern energy services is low, with an estimated electricity connection of 24% nationally and 11% in rural areas.^{vi} Given Tanzania's ambitious goal of achieving universal access to electricity by 2030, establishing regulatory policies and reforms that support the growth and monetization of the natural gas sector will play a critical role in inspiring investor confidence and facilitating broader economic growth through expanded access to reliable electricity.

With this in mind, EWURA's leadership in preparing the MoU for *Protection of Underground Infrastructure in the Shared Wayleave* goes a long way in ensuring the safe expansion of Tanzania's natural gas infrastructure. By establishing a robust, transparent regulatory framework for protecting utility infrastructure along these corridors, the JTC and its corresponding guidelines will help to strengthen the enabling environment for new investment in the natural gas market and enable further progress toward Tanzania's development goals.

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ⁱ "Wayleaves." Lewis Silkin. <https://www.lewissilkin.com/-/media/files/main/insights/cmi/a-little-bit-of-law--wayleave-august-2016.pdf?la=zh-hk&hash=B6FA291D1EC02E5C9C7266697B9DBC88CD542509> ⁱⁱ "Common Ground Alliance." <https://commongroundalliance.com/>

ⁱⁱⁱ "Tanzania develops its natural gas potential and generation capacity." Oxford Business Group. <https://oxfordbusinessgroup.com/overview/gearing-country-developing-its-natural-gas-potential-and-investing-boosting-generation-capacity>

^{iv} "Tanzania's Path to Poverty Reduction and Pro-Poor Growth." World Bank. <https://www.worldbank.org/en/country/tanzania/publication/tanzanias-path-to-poverty-reduction-and-pro-poor-growth>

^v Idem.

^{vi} "Renewable Energy in Africa: Tanzania Country Profile." African Development Bank. 2015. https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Renewable_Energy_in_Africa_-_Tanzania.pdf