



Report of the WATRA  
Working Group on  
Infrastructure  
Development (2023–2025)

*APRIL 2026*

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# 1 Introduction

The WATRA Working Group on Infrastructure Development (WG2) was inaugurated on 19<sup>th</sup> December 2023. Its activities were aligned with the strategic priorities outlined in the WATRA Strategic Plan 2022–2025.

The leadership of WG2 for the two-year period was as follows:

## Co-Chairs:

- Dr. Joseph Emeshili  
Head, Spectrum Planning, Nigerian Communications Commission (NCC), Nigeria
- Mr. Ndiaye Diouf  
Head of Department, International Relations, Autorité de Régulation des Télécommunications et des Postes (ARTP), Senegal

## Rapporteurs:

- Mr. Kwame Baafour Osei Akoto  
Senior Manager, Engineering, National Communications Authority (NCA), Ghana
- Mr. Konate Zana Gaston  
Autorité de Régulation des Télécommunications/TIC de Côte d'Ivoire (ARTCI)

## 1.1 Members

The list of members is attached.

## 1.2 Meetings of WG2

WG2 held four (4) physical meetings in addition to several virtual engagements:

- Banjul, The Gambia: 10 – 13 June 2024



- Conakry, Guinea: 19 – 22 November 2024
- Accra, Ghana: 21 – 24 June 2025
- Ouagadougou, Burkina Faso: 30 March – 2 April 2026

Additionally, the Ad hoc Technical Working Group on Non-Geostationary Satellite Orbit (NGSO) Services held a meeting in Bamako, Mali, from 26–27 June 2024.



## 2 Key Output of WG2

### 2.1 5G Deployment Guidelines

5G is a technology with capabilities to deliver significantly higher speeds, ultra-low latency, and the capacity to support massive device connectivity. Its deployment requires substantial investment in spectrum, fibre backhaul, and dense network infrastructure, supported by enabling regulatory frameworks and regional spectrum harmonisation.

Recognising its importance for digital transformation and economic growth, WG2 developed 5G Deployment Guidelines to support Member States in formulating policies and regulatory frameworks for 5G rollout.

### 2.2 NGSO Framework

Following Resolution AGM21/CR/24/R06, an Ad hoc Technical Working Group was established to address operational issues relating to NGSO services.

The Group was mandated to:

- Examine NGSO operations in Member States;
- Provide recommendations for optimal utilisation;
- Advise the Conference of Regulators and Executive Committee.

A WATRA NGSO Framework was subsequently developed, drawing on early implementation experiences across Member States.

### 2.3 Sub Marine Cable Resilience

Following major submarine cable disruptions on 14 March 2024 affecting 12 African countries (including 10 WATRA Member States), WG2 prioritised submarine cable resilience.

The following recommendations were developed:

- Conduct national stakeholder engagements to strengthen resilience and identify backup infrastructure;



- Facilitate interconnection of landing stations through cross-border terrestrial fibre;
- Promote establishment of regional Internet Exchange Points (IXPs);
- Build capacity across the submarine cable value chain;
- Encourage non-prohibitive pricing for cross-border fibre interconnection;
- Strengthen multi-stakeholder collaboration through WATRA Secretariat-led platforms.

## 2.4 Preparations for 2027 World Radiocommunications Conference (WRC-27)

WG2 deliberated on Agenda Items for the 2027 World Radiocommunication Conference (WRC-27), scheduled for Shanghai, China. The major outcomes of the discussion were as follows:

- a. Member states are encouraged to actively participate in and contribute to ITU-R Study Groups and regional preparatory processes.
- b. Capacity building on WRC-27 Agenda Items should be prioritised.
- c. WG2 may consider maintaining a standing agenda on the major ITU Conferences (WRC, WTSA, WTDC) at each meeting.

## 2.5 Infrastructure Financing

WG2 recognised the critical role of financing in infrastructure deployment and the need for harmonised regulatory frameworks to attract investment.

Key recommendations include:

- a. Harmonise policies and regulatory frameworks to improve investment attractiveness;
- b. Identify and mobilise diverse financing sources;
- c. Integrate capacity building and human resource development into financing strategies.



## 2.6 Outstanding Work Items

Due to time constraints, WG2 was unable to complete work on the following initiatives:

- Unified Reporting Framework for Terrestrial Infrastructure (Fibre & Towers)
- Harmonised Quality of Service (QoS) Regulations

These have been deferred to the 2026–2028 working period for detailed consideration.

## 2.7 Capacity Building

WG2 organised several capacity-building sessions during its meetings, including:

- a. Satellite communications regulation and monitoring (LiviaSoft)
- b. NGSO systems and connectivity (Amazon Kuiper)
- c. Infrastructure GIS for digital transformation (GE Vernova)
- d. 5G deployment and economic value (GSMA)
- e. Submarine cable industry and ICT mapping (ITU)
- f. Submarine cable resilience (Nokia)
- g. Knowledge management and sustainable capacity building (LiviaSoft)

### 3 Recommendations and Way Forward

The Working Group recommends that:

- a. Work on outstanding initiatives be prioritised during the 2026–2028 working period;
- b. Member States nominate qualified personnel with relevant technical expertise and ensure active participation of the nominated representatives in the activities of WG2;
- c. Member States actively promote and ensure the meaningful and sustained participation of women in the Working Group, including through deliberate nomination, capacity development, and leadership opportunities, in line with regional and international commitments on gender inclusion in the ICT sector.
- d. Member states propose items for discussion and study for the next working cycle.
- e. Adequate resources and support be mobilised to facilitate the effective implementation of WG2 activities.
- f. The WATRA Secretariat regularly update and maintain an accurate register of Working Group members to enhance coordination and communication;
- g. The WATRA Secretariat provide a standardised template for submission of Working Group reports to ensure consistency;
- h.



## 4 Conclusion

WG2 has made significant progress in advancing key strategic initiatives aligned with WATRA’s objectives. Continued collaboration, capacity building, and commitment from Member States will be essential to sustain momentum and address emerging challenges in infrastructure development across the region.

