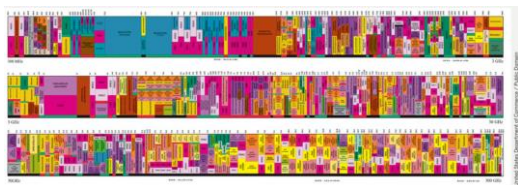




Collecting information on the backhaul links

PRIDA action 1.4

PRIDA activities are classified broadly under these pillars



**Spectrum
allocation and
harmonisation**



**Spectrum
licensing &
pricing**



**Cross-border
frequency
coordination**



**Internet of
things**

Spectrum allocation and harmonisation

- **Output 1: Spectrum allocation based on international best practices is improved:**
- **Action 1.1:** Analysis of the current legislative and regulatory framework and the usage of spectrum as of today as well as in the foreseeable future.
- **Action 1.2:** Developing guidelines on radio frequency regulation based in ITU Radio Regulations, ITU-R recommendations, Reports and handbooks, regional harmonisation frameworks, case studies, country experiences and regional consultations.
- **Action 1.3:** Developing guidelines for national radio frequency spectrum coordination including refarming methods.



- **Action 1.4:** Collect information on the availability of the backhaul links (incl. fibre)

Based on the Guidelines above propose

- **Action 1.5:** Improvements of national radio spectrum regulations
- **Action 1.6:** Harmonised refarming plans for the usage of frequency bands identified for wireless broadband
- **Action 1.7:** roadmap and priorities for wireless broadband deployment in Africa
- **Action 1.8:** Providing technical assistance for national spectrum agencies/entities to transpose these roadmaps.

PRIDA- action 1.4



International Telecommunication Union
REGIONAL OFFICE FOR AFRICA

Ref.: ROA/ADD/AR/or/L012/20

Addis Ababa, 19 October 2020

To: All African Regulatory
Authorities

Subject: Request for Information - Terrestrial Fibre Optic Transmission Networks and
Broadband Transmission Capacity Indicators

Dear Sir/Madam,

I wish to update you on the progress made in the ITU Interactive Transmission Map project and to request for information of missing links to ensure accuracy and relevance of the Map. Please find below an overview of the current ITU Interactive Transmission Map with the URL.

ITU Interactive Transmission Map



<https://www.itu.int/en/ITU-D/Technology/Pages/InteractiveTransmissionMaps.aspx>

ITU Interactive Transmission Map project

Since the first regional Request for Information (RFI), circulation and publication in 2013, ITU has now added to the Map 520 network operators in 186 countries worldwide. The Broadband Capacity Indicators, which are calculated annually from the Map's underlying database, show that there were 15.2 million route kilometers of operational terrestrial fiber optic networks in December 2019, compared to 8.6 million route kilometers in 2015.

Nevertheless, there is information from at least 174 network operators that are unaccounted for and which we are not able to collect.

Additional Regional Request for Information for Africa

To support the further development of the Map for Africa, I am seeking for your kind support and assistance to:

International Telecommunication Union • Regional Office for Africa • P.O.Box 60005 • Addis Ababa, Ethiopia
Tel: +251 11 551 4977 • Fax: +251 11 551 7299 • E-mail: itu-addis@itu.int • www.itu.int/itu-d

Information requested:

Fibre optic and microwave transmission networks.

Scope:

- Long-haul national and regional terrestrial transmission networks
- Excluding access network information (last mile) or confidential data.

Format:

Any format (Maps, diagrams, tables, text descriptions, GIS format)

Request for information sent out to all African focal points on **Oct. 19, 2020**

So, what are the benefits of collecting this information

- The data collected will feed into the ITU interactive transmission map which supports several projects in Africa and beyond.
- Infrastructure mapping is becoming very common and mandated by several countries:
 - Facilitate infrastructure sharing
 - Encourage joint investment
 - Avoid duplication
- Telecom operators publish such information voluntarily for commercial reasons.
- Transmission networks supports the provision of international connectivity services (especially for landlocked countries- 16 countries in Africa).

Efforts to facilitate data collection

- An external expert was recruited to support on the data collection process.
- An information session on the ITU broadband transmission maps was organised by PRIDA project management team in coordination with TNS division to raise awareness about these maps and to encourage more submissions.
 - 38 participants from 22 countries attended.
- Direct follow up with member states by the external expert and PRIDA project management team.
- The external expert conducted a desk research on public resources.

Only 24 countries provided information by end March 2021

Countries that provided information	Countries that acknowledged the request and promised to provide information	Countries that did not respond to the request
1. Burundi	1. Angola	1. Algeria
2. Burkina Faso	2. Botswana	2. Benin
3. Central African Republic	3. Gambia	3. Cabo Verde
4. Cameroun	4. Kenya	4. Democratic Republic of Congo
5. Comoros	5. Mozambique	5. Djibouti
6. Congo	6. Nigeria	6. Egypt
7. Cote d'Ivoire	7. Rwanda	7. Equatorial Guinea
8. Eswatini	8. Senegal	8. Eritrea
9. Gabon	9. Tunisia	9. Ethiopia
10. Ghana	10. Zambia	10. Libya
11. Guinea		11. Madagascar
12. Guinea Bissau		12. Malawi
13. Lesotho		13. Morocco
14. Liberia		14. Sao Tome and Principe
15. Mali		15. Seychelles
16. Mauritania		16. Sierra Leone
17. Mauritius		17. South Africa
18. Niger		18. Tchad
19. Namibia		19. Uganda
20. Somalia		20. Zimbabwe
21. Sudan		
22. South Sudan		
23. Tanzania		
24. Togo		

Outcomes and conclusions

- 24 countries provided their information which will be analysed by TNS and will feed into the ITU broadband transmission map.
 - Guinea has provided information for the first time
- The information about three countries are still missing in the ITU maps (Eritrea, Sao Tome and Principe and Seychelles)- never provided such information.
- The information on national transmission infrastructure does not seem to be readily available with the national regulators- the process of data collection was relatively slow and took almost 6 months.
- Some member states may have confidentially concerns about providing such data.
- The desk research conducted by the external expert did not provide any additional information to what the ITU currently has.

Thank you!