



Telecommunication  
Development Bureau (BDT)

## National Broadband Mapping Systems in UGANDA– 23,24,25 September 2025 / Kampala

The agenda is subject to change.

| DAY 1 - Policy Dialogue & Strategic Orientation |  |
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| 8:30 – 9:00                                     | REGISTRATION AND WELCOME COFFEE  |
| 9:00 – 10:40                                    | <p>Opening Ceremony</p> <p>Master of Ceremonies: <b>DCA – PR –(HPIR, / JT)</b></p> <ul style="list-style-type: none"> <li>• <b>Executive Director</b>, Uganda Communications Commission (UCC)</li> <li>• <b>High-Level Representative</b>, EU Delegation Uganda, European Union</li> <li>• <b>Dr Cosmas Zavazava</b>, Director, ITU Telecommunication Development</li> <li>• <b>Minister of ICT&amp;NG</b>, Government of Uganda</li> </ul> <p><b>Key Note: Dr Emmanuel Manasseh</b>, Regional Director for Africa, ITU</p>  |
| 10:30 – 10:45                                   | Official Group photo   |
| 10:45 - 11:15                                   | Coffee Break   |
| 11:15 – 12:15                                   | <p><b>SESSION 1a: Africa-BB-Maps in Uganda: Objectives, Technical Framework, Timeline</b></p> <p><b>Moderation: Mr. Dana Jon Kamason</b>, Project Manager, Africa-BB-Maps, ITU</p> <ul style="list-style-type: none"> <li>- <i>Release the Africa-BB-Maps video</i></li> <li>- <i>Elaborate the Africa-BB-Maps project (outcome report and maturity matrix and deployment strategy for Uganda)</i></li> </ul> <p>(20 minutes each)</p> <p>Q&amp;A and Discussion <i>of 15 Mins</i></p> <ul style="list-style-type: none"> <li>• <b>Mr. Elind Sulmina</b>, Project Officer, Africa-BB-Maps, ITU</li> </ul> <p><i>Presentation of the ITU Policy analysis work</i></p>   |
| 11:30- 12:00                                    | <p><b>SESSION 1b: UCC Perspective – Setting the National Context for Broadband Mapping – Presentation .10 Minutes</b></p> <p><b>Session Objective:</b></p> <p><i>To establish a shared understanding of Uganda’s institutional progress, technical maturity, and coordination needs in implementing a national broadband mapping system, and to outline UCC’s current efforts, ambitions, and the role of stakeholders in this national endeavour.</i></p> <ul style="list-style-type: none"> <li>• <i>What UCC has done so far in the field of GIS &amp; mapping,</i></li> <li>• <i>what it can do, what it would like to achieve by the end of the project;</i></li> <li>• <i>What are UCC challenges and how it wants to collaborate with the stakeholders to tackle these together.</i></li> </ul> <p>Q&amp;A and Discussion <i>of 10 Mins</i></p> |

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| 12:00 – 1:00pm | <p><b>SESSION 1b: Effective Coordination for Broadband – Cross-Sector Synergies, Data Sharing &amp; Protection</b></p> <p><b>Moderator: Mr. Arnold Mujuni, UCC</b></p> <p><b>Session Objective:</b></p> <p><i>To explore how cross-sector collaboration can unlock smarter, more inclusive broadband infrastructure development by aligning planning efforts, sharing strategic data, and coordinating on infrastructure protection—laying the groundwork for a sustainable national broadband mapping system.</i></p> <p><b>Session descriptor :</b></p> <p><i>As broadband infrastructure becomes increasingly central to national development, its planning and deployment must not occur in isolation. This session brings together key public sector actors to examine how infrastructure collaboration, policy coordination, and data interoperability can be improved to support effective broadband rollout and digital inclusion.</i></p> <p><i>Panelists will briefly introduce their organisations, describe the types of data or infrastructure they oversee, and reflect on how their mandates intersect with broadband planning. The discussion will focus on where coordination can be strengthened, what data-sharing mechanisms might be viable, and how the project’s vision resonates—or doesn’t—with their operational realities.</i></p> <p><i>Through this dialogue, we will explore practical opportunities for collaboration—such as integrating broadband planning into road and power projects, co-sharing duct infrastructure, aligning mapping efforts, and ensuring secure and actionable data exchange across agencies.</i></p> <ul style="list-style-type: none"> <li>• <b>ISPAU</b> – Industry aspects</li> <li>• <b>NITA - U</b> – National Backbone Infrastructure and data Protection</li> <li>• <b>UBOS</b> – National Statistics</li> <li>• <b>Ministry of Lands- Department of Surveys and Mapping</b> – Administrative boundaries</li> <li>• <b>ERA</b> – Energy</li> </ul> <p>Q&amp;A and Discussion of <b>30 Mins</b></p> |
| 12:30 – 14:00  | <b>LUNCH BREAK</b>   |
| 14:00 – 15:00  | <p><b>Session 2: Ecosystem Readiness for Broadband Mapping – Perspectives from Policy, Infrastructure &amp; Consumers</b></p> <p><b>Moderator: Mr. Dana Jon Kamason</b>, Project Manager, Africa-BB-Maps, ITU</p> <p><b>Session objective :</b></p> <p><i>To take stock of Uganda’s institutional, technical, and operational readiness to implement a national broadband mapping system—by hearing from regulators, infrastructure owners, service providers, and consumers on how the project aligns with their mandates, operational realities, and the wider goals of improving ICT access, affordability, and reliability.</i></p> <p><b>Session descriptor</b></p> <p><i>Broadband mapping is more than a technical exercise—it’s a strategic lever to improve how broadband is planned, delivered, regulated, and experienced. To fully unlock its value, a country</i></p>   |

*must have the institutional alignment, stakeholder coordination, and operational capacity to transform mapping insights into meaningful outcomes: wider service reach, better quality of service, reduced costs, and greater digital inclusion.*

*This session brings together a cross-section of public and private actors to reflect on Uganda's readiness to implement and benefit from a national broadband mapping system. Panelists will highlight their current roles in the broadband ecosystem, discuss how they envision contributing to the project, and share their perspectives on how mapping can drive improvements in affordability, infrastructure coordination, service planning, and consumer outcomes.*

**Public sector (not all of them would attend; but if so 10 minutes each)**

- **UCC** – To give oversight on the current telecommunications licensing framework, and other regulatory interventions, infrastructure sharing
- **Representative of PIPs** – operational aspects of broadband infrastructure (opportunities and Challenges)  
**Representative of PSPs**- operational aspects of broadband services (opportunities and Challenges)
- **Consumers** – Consumer experience with the status quo

Q&A and Discussion **of 10 Mins**

**15:00 – 15:30**

**Session 3: International Partnerships for Digital Inclusion — Aligning Global Commitments with National Broadband Mapping**

**Moderator: Ms. Susan Nakanwagi**

**Session Objective:**

*To showcase how international development partners are contributing to Uganda's digital transformation and how the Africa-BB-Maps project can serve as a tool to strengthen, align, and scale these efforts. The session aims to explore how broadband mapping can help overcome persistent bottlenecks in connectivity planning, investment targeting, and policy execution.*

**Session descriptor**

*Bridging the digital divide is a shared responsibility—and Uganda has benefited from long-standing support from international partners working to expand access to ICTs, digital skills, and inclusive connectivity. From infrastructure investment and community empowerment to education technology and data for development, each of the partners represented in this session plays a critical role.*

*This session invites international stakeholders to share how their current or planned work aligns with national digital inclusion goals, the challenges they encounter (especially around data access, targeting, or coordination), and how they view the Africa-BB-Maps project as a strategic enabler for smarter, more inclusive digital development.*

*The session will also surface ways in which global development frameworks—like the EU Global Gateway, UNICEF's Learning Passport, ITU's Giga and Digital Development Programmes, and others—can be harmonised with national data systems and broadband rollout strategies.*

(10 minutes each)

Ongoing and projected future partnerships on efforts to bridge the digital divide

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|                 | <ul style="list-style-type: none"> <li>• UNICEF</li> <li>• ITU</li> <li>• World Vision</li> <li>• D-UCUSAF</li> </ul> <p>Q&amp;A and Discussion <i>of 10 Mins</i></p> |
| 15:30-16:30     |   |
| 16:30 – 17:00   | Coffee Break  |
| 17:30 – 19:30pm | Cocktail hosted by UCC at Speke Resort Munyonyo   |

| DAY 2 - Technical Systems & Data Readiness |   |
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| 8:30 – 9:00                                | Welcome Coffee  |
| 9:00 – 9:15                                | Recap of Day 1 and Objectives of Day 2 <ul style="list-style-type: none"> <li>• Rapporteur UCC</li> </ul>   |
| 9:15 – 9:45                                | Opening remarks: Strategic Technical Priorities for Broadband Infrastructure Mapping <ul style="list-style-type: none"> <li>• Mr. Alfred Bogere, DECI</li> </ul>  |
| 9:45-11:15                                 | <b>SESSION 4: Case Studies from ITU: What Lessons Apply?</b><br><b>Moderator: Mr. Elind Sulmina</b> , Project Officer , Africa-BB-Maps, ITU<br><i>(20 minutes each)</i> <ul style="list-style-type: none"> <li>• <b>Expert 1</b>, ITU Speaker Mr Aldo Milan, Broadband Mapping System Expert (Italy, Italian Communication Authority AGCOM)</li> <li>• Q&amp;A and Discussion <i>of 30 Mins</i></li> </ul>  |
| 11:15 - 11:30                              | Coffee Break  |
| 11:30 – 13:00                              | <b>Session 5: Technical Deep Dive – Architecting a Trusted and Actionable Broadband Mapping System</b><br><br><b>Setting the stage &amp; Moderation:</b><br><b>Mr. Dana Jon Kamason</b> , Project Manager, Africa-BB-Maps, ITU<br><b>Session Objectives</b><br><br><i>To explore the technical underpinnings of Uganda’s future broadband mapping system by showcasing international best practices in architecture, data validation, and open standards. This session will examine how different data sources—including crowdsourced metrics and operator-reported data—can be integrated to produce a reliable, policy-relevant, and user-friendly broadband map.</i><br><br><i>The session will also highlight how technical frameworks such as open-source platforms, QoS benchmarks, and international standards can strengthen system transparency, regulatory enforcement, and cross-institutional collaboration.</i><br><br><b>Session Descriptor</b> |

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|               | <p><i>Behind every impactful broadband map is a robust and thoughtful technical system—capable of pulling together data from many sources, validating it for accuracy, and packaging it in a way that informs policy, empowers the public, and supports investment decisions.</i></p> <p><i>This session brings together technical experts from UCC, ITU, Ookla, and the operator community to examine the building blocks of such a system: standards, architecture, tools, and data integration workflows. Panelists will present practical insights on crowdsourced vs. operator data, open data frameworks, quality-of-service benchmarking, and real-world challenges in infrastructure mapping.</i></p> <p><i>The session is also a chance to compare Uganda’s approach with international examples—while identifying gaps and opportunities in our own technical design process.</i></p> <ul style="list-style-type: none"> <li>• 15 minutes for presentation</li> <li>• 30 minutes Q&amp;A and open discussion (joint)</li> </ul> <ul style="list-style-type: none"> <li>• <b>Ms. Rebecca Mukite</b>, UCC (National Standards, QoS)</li> <li>• <b>Representative</b>, ITU<br/>(Open-source systems, Open Data and Frameworks)</li> <li>• <b>Ookla</b>, (crowdsourcing; Statistics &amp; Validation)</li> <li>• <b>MTN</b>, operator perspective</li> </ul> <p>Q&amp;A and Discussion of 30 Mins</p> |
| 13:00 - 14:00 | LUNCH BREAK   |
| 14:00 – 15:00 | <p><b>SESSION 6: Policy Deep-dive: Presentation of Upcoming Policy Analysis Work</b></p> <p><b>Setting the stage and Moderator:</b></p> <ul style="list-style-type: none"> <li>• <b>Mr. Elind Sulmina</b>, Project Officer, ITU Africa-BB-Maps</li> <li>• <b>Mr. Andrew Otim</b>, UCC<br/>Uganda policy landscape for broadband mapping: policy needs, rules, legislative challenges<br/>High-level overview of the upcoming policy analysis work following the ITU methodology and EU experience</li> </ul> <p>Q&amp;A and Discussion of 30 Mins</p>   |
| 15:00 – 16.45 | <p><b>SESSION 7&amp;8: Co-Creation Dialogue on Architecture, Data Sources &amp; Technical Constraints &amp; Group Discussions on the Policy and Regulatory Work</b></p> <p>90minutes - 45 mins standing coffee - cocreation what are the technical perspective &amp; bottle necks</p> <p><b>Moderator: Mr. Dana Jon Kamason</b>, Project Manager, Africa-BB-Maps, ITU</p> <ul style="list-style-type: none"> <li>• This session aims to produce documentation that will be an outcome document on the technical part.</li> <li>• What data can be collected</li> <li>• How to collect data</li> </ul> <p>Focus Areas:</p> <p>Group 1: Systems Architecture &amp; Deployment Models</p>  |

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|                      | <ul style="list-style-type: none"> <li>• <i>Focus: GIS infrastructure design, hosting model (on-prem/cloud/hybrid), enterprise architecture, and scalability approaches; Discussions on the importance of aligning with integrated geospatial infrastructure to ensure secure, interoperable, and shareable data from amongst small teams within UCC to other national institutions.</i></li> </ul> <p>Group 2: Open-Source Technologies &amp; Open Data</p> <ul style="list-style-type: none"> <li>• <i>Open-Source GIS tools, open-source readiness, promotion of open-source principles and practices, myths and actual truths of open source</i></li> </ul> <p>Group 3: Data standardization &amp; Collection Mechanisms</p> <ul style="list-style-type: none"> <li>• <i>Harmonized data schemas, metadata standards, collection protocols, operator reporting formats;</i></li> <li>• <i>datasets fibre routes, tower location, wireless broadband and all relevant related entities) and exploring how these can be collected or updated through GIS techniques, APIs, field data collection and crowdsourcing;</i></li> <li>• <i>Participants will also help define standardized data collection templates and submission schemas (especially for the fibre infrastructure maps) to ensure consistency, quality, and comparability of inputs across stakeholders.</i></li> <li>• <i>Outcomes will contribute directly to the system's architecture and technical roadmap, supporting a robust, collaborative, and future-ready broadband data ecosystem.</i></li> </ul> <p>Group 4 Statistics, Validation, Quality Control &amp; Assurance</p> <ul style="list-style-type: none"> <li>• <i>Crowdsource, use of operators' data for validation, onsite field-testing, quality control protocols, Annual/quarterly publications and public portal/mobile application,</i></li> </ul> |
| <b>16:45 – 17:15</b> | <b>Coffee Break</b>   |

| <b>DAY 3 - Stakeholder Coordination &amp; Roadmap Development</b> |   |
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| <b>8:30 – 9:00</b>  | <b>Welcome Coffee</b>   |
| <b>9:00 – 9:15</b>  | <b>Recap of Day 2 and Objectives of Day 3</b> <ul style="list-style-type: none"> <li>• <b>Rapporteur UCC</b></li> <li>• <b>Mr. Dana Jon Kamason</b>, Project Manager, ITU Africa-BB-Maps</li> </ul>   |
| <b>9:15 – 10:15</b>   | <p><b>SESSION 7: Group Discussions on the Policy and Regulatory Work</b></p> <p><b>Moderator: Mr. Elind Sulmina</b>, Project Officer, ITU Africa-BB-Maps</p> <p><i>Uganda policy landscape for bb mapping: policy needs, rules, legislative challenges</i></p> <ul style="list-style-type: none"> <li>• Group 1: Public Sector</li> <li>• Group 2: Private Sector</li> <li>• Group 3: International Sector</li> </ul> <p>Group discussion question: What are the policies, legal or institutional challenges your</p> |

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|               | <p>institution faces in sharing broadband infrastructure &amp; service data?</p> <p>Each group should focus on</p> <ul style="list-style-type: none"> <li>• Internal, legal or policy barriers;</li> <li>• Coordination challenges between data providers</li> <li>• Data ownership and confidentiality</li> <li>• Institutional limitations</li> <li>• National &amp; Regional harmonization</li> </ul> <p>Practical suggestions, what model has worked in theirs and other countries;</p> <ul style="list-style-type: none"> <li>• This interactive session will bring participants together in working groups to propose broadband policy analysis and practical recommendations for addressing regulatory and policy bottlenecks.</li> <li>• Guided by facilitators and real-time prompts displayed on screen, each group will reflect on specific questions and key focus areas designed to capture insights on issues such as Internal, legal or policy barriers; Coordination challenges between data providers and regulators or policy makers, Data ownership and confidentiality, Institutional limitations, National &amp; Regional harmonization licensing, and coordination across government tiers.</li> <li>• The session will run as a standing coffee-format discussion for 45 minutes to prepare, followed by a 45-minute for recommendations and moderated Q&amp;As to refine proposals.</li> <li>• The outputs will directly inform the national outcome document and the policy implementation roadmap for the Broadband Mapping System.</li> </ul> |
| 10:15 – 10:30 | <b>Coffee break</b>  |
| 10:30 – 11:30 | <p><b>SESSION 9: Finalization of the Stakeholder Mapping – Roles &amp; Responsibilities</b></p> <p><b>Moderator: Mr. Dana Jon Kamason</b>, Project Manager, Africa-BB-Maps, ITU</p> <ul style="list-style-type: none"> <li>• <b>Fiona Kamikazi, UCC</b></li> </ul> <p>Agree, endorse and establish roles and responsibilities in a way that:</p> <ul style="list-style-type: none"> <li>• UCC as the primary custodian and operational lead for the national broadband mapping system</li> <li>• Operators as data contributors and understand their role of sharing infrastructure and coverage data</li> <li>• Public institutions</li> <li>• Government strengthen the mandate of UCC</li> </ul> <p>Presentation on:</p> <p>Establish and present <u>roles</u> and responsibilities</p>   |

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|                      | <ol style="list-style-type: none"> <li>1. Primary custodian (Technical custodian for geospatial integration) and operational lead – UCC <ol style="list-style-type: none"> <li>a. Resp: maintain the system post-delivery, enforce data reporting obligations from operators (supported by policy);</li> <li>b. resp to coordinate with other stakeholders for data sharing</li> <li>c. Resp to make (partially) available publicly validated broadband mapping data</li> <li>d. Resp to allocate budget for recurring maintenance and operational costs post-handover</li> </ol> </li> <li>2. Policy and regulation oversight &amp; support to UCC – MoICT&amp;NG</li> <li>3. Data Contributors – Licensees and Public Sector</li> <li>4. Statistical integration – UBOS</li> </ol> <p><i>Q&amp;A and Discussion of 30 Mins</i></p> |
| <b>11:30 - 12:30</b> | <p><b>SESSION 10: National Roadmap – Final Timeline, Training Program &amp; Next Steps</b></p> <p><b>Moderator: Mr. Dana Jon Kamason</b>, Project Manager, ITU Africa-BB-Maps</p> <ul style="list-style-type: none"> <li>- <b>Mr. Dana Jon Kamason</b>, Project Manager, ITU Africa-BB-Maps</li> </ul> <p><b>Mr. Elind Sulmina</b>, Project Officer, ITU Africa-BB-Maps</p>  |
| <b>12:30- 12:45</b>  | <p><b>Closing Ceremony</b></p> <p><b>Master of Ceremony: Ibrahim Bbossa</b></p> <ul style="list-style-type: none"> <li>• <b>Dr Emmanuel Manasseh</b>, Regional Director for Africa, ITU</li> <li>• <b>Mr. James Beronda</b>, UCC</li> </ul>  |
| <b>12:45 – 13:45</b> | <b>Lunch</b>   |