# **Appendix: User Experience Questionnaire**

## **Section A: General Information**

1. What is your age group?

- Under 18  
 - 18–25  
 - 26–35  
 - 36–45  
 - 46 and above

2. What is your primary mobile network provider?

- MTN  
 - Orange  
 - Nexttel  
 - CamTel  
 - Other: \_\_\_\_\_\_\_\_\_\_

3. Which type of mobile phone do you use?

- Android  
 - iOS  
 - Other: \_\_\_\_\_\_\_\_\_\_

## **Section B: Network Usage**

4. What do you use mobile data for most? (Select all that apply)

- Browsing  
 - Video Streaming  
 - Social Media  
 - Online Gaming  
 - Voice/Video Calls  
 - Downloads/Uploads

5. How often do you experience poor network service?

- Rarely  
 - Sometimes  
 - Often  
 - Always

## **Section C: Quality of Experience (QoE)**

6. Rate your satisfaction with your mobile internet speed:

- Very Satisfied  
 - Satisfied  
 - Neutral  
 - Dissatisfied  
 - Very Dissatisfied

7. How reliable is your network during voice calls?

- Very Reliable  
 - Reliable  
 - Neutral  
 - Unreliable  
 - Very Unreliable

8. How quickly does your network respond when loading pages or apps?

- Very Fast  
 - Fast  
 - Average  
 - Slow  
 - Very Slow

9. Have you experienced dropped calls or interrupted internet recently?

- Yes, frequently  
 - Occasionally  
 - Rarely  
 - Never

## **Section D: Feedback on Monitoring App**

10. Would you be willing to install an app that monitors your network quality in the background?

- Yes  
 - No  
 - Maybe

11. What features would you expect from such an app? (Select all that apply)

- Real-time speed test  
 - Network quality alerts  
 - Manual feedback option  
 - Battery-friendly operation  
 - Data privacy options

12. How often would you be comfortable providing feedback manually through the app?

- Every hour  
 - A few times a day  
 - Once a day  
 - Once a week  
 - Only when I face issues

13. Do you have any concerns about privacy or data collection from such an app?

- [Open text response]

14. Any suggestions or features you’d like to see in this app?

- [Open text response]

# **Appendix: Stakeholder Interview Questions**

## **Interview Questions for Mobile Network Operators**

1. What methods do you currently use to assess user experience on your network?

2. Do you collect any real-time user feedback? If so, how is it done?

3. What are your biggest challenges in monitoring network quality?

4. What metrics do you prioritize in QoS/QoE monitoring (e.g., signal strength, latency, jitter)?

5. Would you be interested in integrating third-party tools like a mobile app to gather user data?

6. How often would you prefer to receive performance reports?

7. How do you ensure compliance with user privacy and data protection when handling user data?

## **Interview Questions for Telecommunication Regulatory Authorities**

1. What standards or regulations exist for monitoring mobile network quality in Cameroon?

2. How is user experience currently assessed at a national level?

3. Are mobile operators required to report QoE metrics? If yes, which ones?

4. Would an app that collects user-centric performance data support regulatory activities?

5. What privacy and legal concerns should developers consider when collecting user data?

6. Are there preferred data formats or structures required for submitting performance insights to your agency?

# Survey Answers From MTN OFFICE IN UB

1. There are commercials workers who are known as market developers (MD) who go and map different areas gathering info on total population and network issues and report back to the office.

They Antenna’s are also used to solve network issues. They said in buea, they have about 21 antennas to solve network issues.

1. Yes: WhatsApp number called MTN ZIGI or call using the number 8403. In-case of any issues, when contacting MTN ZIGI, it will direct you to the nearest MTN Office where the issues can be solve.
2. -Reporting on the real time. Numbe of subscribers e.g 2 millions subscribers. Market developers. Can’t control the entire subscribers at the same time.
3. Signal strength: Signal not good, MTN is down. So they prioritize network. If there’s no network.

- payment of bills , normal calls,etc won’t be possible, so internet conection is the priority.

1. The question could be only be answered by top management which is based in Douala. So partners can’t talk.

- Security: They said they are not okay with 3rd party apps bcs they are sure with security in terms of user data.

1. Always. They have open small branded stores to always welcome customers experience.
2. Information are not given to 3rd parties.