
Public Consultation

Deployment of Private 5G Networks in the UAE

Commencement Date: 19 June 2024

Response Date: 31 July 2024

The comments which are contained in any response to this consultation should be clearly identified with respect to the specific question in this consultation to which such comments refer. Any comments which are of a general nature and not in response to a particular question should be clearly identified as such.

Responses to this consultation should be made in writing and provided electronically in MS Word format and Adobe PDF format, on or before the response date stated on the front cover of this document. Responses must be accompanied by the full contacts details (contact name, e-mail address and phone and fax numbers) of the respondent to:

spectrumconsultation@tdra.gov.ae;

Executive Director Spectrum Affairs
Telecommunications and Digital Government Regulatory Authority (TDRA)
P.O. Box 26662
Abu Dhabi, UAE

Respondents are advised that it will be the general intention of TDRA to publish in full the responses received to this consultation. Additionally, TDRA may, at its discretion generate and publish a “Summary of Responses” document at the conclusion of this consultation. Accordingly, the Summary of Responses may include references to and citations (in whole or in part) of comments which have been received. TDRA recognizes that certain responses may include commercially sensitive and confidential information which the respondent may not wish to be published. In the event that a response contains confidential information, it shall be the responsibility of the respondent to clearly mark any information which is considered to be of a confidential nature.

In any event the respondent shall be required to submit two versions of its response to TDRA as follows:

- A full copy of its response in MS Word format with any confidential information clearly marked. TDRA will not publish the Word document and will only use it for internal purposes.
- A publishable copy of its response in Adobe PDF format. TDRA will publish the PDF version in its entirety. Thus, the respondent should take care to redact any commercially sensitive and confidential information in the PDF version of its response.

By participating in this consultation and by providing a PDF version of its response the respondent expressly authorizes TDRA to publish the submitted PDF version of its response in full.

It should be noted that none of the ideas expressed or comments made in this consultation document will necessarily result in formal decisions by TDRA and nothing contained herein shall limit or otherwise restrict TDRA's powers to regulate the telecommunications sector at any time.

If any Person or entity seeks to clarify or discuss any part of this consultation can request for a meeting in writing again to the above E-mail and then TDRA will set the meetings in the period from **16-18 July 2024** so that formal comments can still be received by **15:00 noon on 31 July 2024**.

Consultation Schedule

Milestone	Due Date	Notes
Closing Date for Initial Responses	31 July 2024	All responses to this consultation should be properly received by no later than <u>15:00 noon</u> on the closing date. Responses are to be submitted in electronic format as set out in this consultation document.
Latest date for requests for extension to the due date for Initial Responses.	19 July 2024	<p>Stakeholders wishing to secure an extension to the Closing Date for Initial Responses may apply in writing to TDRA for such an extension. The request should set out the rationale for the request.</p> <p>Requests for extension should be submitted by e-mail to the e-mail address shown above.</p> <p>TDRA will not consider any requests for extension which TDRA receives after <u>15:00 noon</u> on the date stated here.</p> <p>TDRA will consider requests to extend the Closing Date for Initial Responses and will take into account such factors as: The number of such requests received; the rationale for such requests; and the effect on the overall time-scale of the particular project in question. In the event that TDRA extends the Closing Date for Initial Responses, TDRA will publish the revised closing date on its website.</p>

Contents

1.	Introduction to the public consultation	5
2.	Purpose.....	6
3.	Matters for discussion	8
4.	General comments	10

1. Introduction to the public consultation

In accordance with its vision “An innovative digital system to enhance the quality of life and the competitiveness of the country”, TDRA continues to align its spectrum management activities with the market needs and future trends on a pro-active basis.

This consultation document aims to gather comprehensive insights and feedback from key stakeholders regarding the potential deployment of private 5G networks in the UAE. The primary objective is to ensure that the deployment strategy is well-informed and addresses various aspects of implementing private 5G networks. By engaging stakeholders from diverse sectors, including mobile operators, verticals, government, and academia, the study seeks to determine the feasibility and advisability of such deployments. Based on the collected insights and analysis, the study will conclude with recommendations and options.

The Telecommunications and Digital Government Regulatory Authority (TDRA) now invites stakeholders to provide input and views, including comments, additions, or suggestions regarding the aspects of this consultation. It is important to note that all text in this consultation document should be read and interpreted as informative text, not as recording decisions of the TDRA.

Additionally, TDRA is committed to ensuring the provision of radiocommunication services throughout the country to meet the needs of users. Therefore, TDRA considers it crucial to take into account the views of those with a legitimate interest in the outcomes of TDRA’s activities, especially concerning the deployment of private 5G networks.

2. Purpose

This consultation document aims to gather stakeholder feedback on deploying private 5G networks in the UAE, focusing on several key areas:

1. Understanding Stakeholder Perspectives:
 - Identify stakeholder needs, concerns, and expectations.
 - Capture diverse viewpoints for a balanced deployment strategy.
2. Identifying Potential Challenges:
 - Highlight regulatory, technical, and operational challenges.
 - Develop strategies to mitigate these challenges for smooth implementation.
3. Incorporating Valuable Input:
 - Integrate stakeholder feedback into the study results.
4. Enhancing Regulatory and Compliance Understanding:
 - Gather insights on current regulatory frameworks and identify areas for improvement.
5. Evaluating Economic Viability:
 - Assess the cost-benefit aspects to determine economic feasibility.
 - Explore business models and revenue streams for sustainable deployment.
6. Exploring Use Cases and Business Opportunities:
 - Identify promising use cases and business opportunities.
 - Understand how private 5G networks can drive innovation, efficiency, and growth in the UAE.
7. Ensuring Quality of Service (QoS):
 - Determine key QoS metrics and standards.
 - Develop mechanisms to measure and ensure consistent QoS delivery.
8. Addressing Security and Privacy Concerns:
 - Highlight potential security and data privacy issues.
 - Develop strategies to protect network integrity and user data.

The consultation aims to develop a strategic approach for deploying private 5G networks in the UAE, with feedback shaping the final study results to meet stakeholder needs and align with national digital transformation and economic development goals.

Summary

- To gather detailed insights on existing deployments, technologies, best practices, and regulatory frameworks.
- To evaluate potential use cases and business opportunities for private 5G networks.
- To assess the economic viability and cost-benefit aspects of deploying private 5G networks.
- To identify key risks and mitigation strategies.
- To obtain feedback on the overall Study, objectives, and scope.

3. Matters for discussion

Section 1 Existing Deployments and Technologies	1a. What are the key factors that have influenced the deployment of private 5G networks in other Countries/regions?
	1b. Can you provide examples of successful private 5G network deployments and the technologies used?
	1c. What best practices (regulatory model) should be considered for deploying private 5G networks in the UAE?
	1d. How do these private 5G deployments ensure high Quality of Service (QoS) and what metrics are used to measure it?
	1e. What are the challenges of utilizing the existing non-private (commercial) 5G networks?

Section 2 Regulatory Frameworks and Compliance	2a. What are the main regulatory challenges associated with deploying private 5G networks in the UAE?
	2b. How can the current telecommunications regulatory framework be improved to facilitate private 5G network deployment?
	2c. Are there any specific compliance requirements that must be addressed to facilitate the deployment of private 5G networks?
	2d. How will you distinguish and segregate between the different private networks? What is the mechanism used?
	2e. Is a Public Land Mobile Network ID (PLMNID) necessary for private 5G networks in the UAE, and how should it be managed?
	2f. How will such PLMNID be utilized? What is the expected demand on such resources? Provide your recommended reuse mechanism of such resources if applicable
	2g. What measures should be implemented to ensure data security and privacy in private 5G networks?
	2h. What are the preferred frequency bands for deploying private 5G networks in the UAE, and what is the expected bandwidth (BW) for these networks?

Section 3 Use Cases and Business Opportunities	3a. What are the most promising use cases for private 5G networks in the UAE?
	3b. How can private 5G networks drive business innovation and growth in the UAE?
	3c. Which industries or sectors would benefit the most from private 5G networks, and how?

Section 4 Economic Viability and Cost-Benefit Analysis	4a. What are the anticipated infrastructure costs for deploying private 5G networks?
	4b. What are the expected operational costs and ongoing expenses?
	4c. What regulatory and compliance costs should be considered?
	4d. What are the potential revenue streams and business models for private 5G networks?
	4e. What technical challenges might impact the economic viability of private 5G networks?
	4f. How should security and data privacy concerns be addressed?

Section 5 Feedback and Recommendations	5a. What are your overall impressions of the proposed deployment of private 5G networks in the UAE?
	5b. Do you have any additional recommendations or suggestions to enhance the study?

Submission Instructions: Please submit your responses to the above questions by 31 July 2024. Your feedback is invaluable to us and will play a critical role in shaping the deployment strategy for private 5G networks in the UAE.

4. General comments

Further to the specific matters discussed, and questions asked above, please identify any additional issues, which you feel are relevant for consideration in this consultation. Please provide specific support and/or explanation of your viewpoints as well as recommendations regarding how such issues might be resolved.