**Public Consultation**

**UAE 5G Strategy**

**Commencement Date: 27 August 2019**

**Response Date: 15 September 2019**

**Version 1.0**

**Preface and Notes to Potential Respondents**

In keeping with its values of transparency and sector engagement, the TRA wishes to review and study the impact of regulatory instruments issued by it to keep abreast of developments to better involve all stakeholders. The TRA strives to meet the needs of the sector and seeks the views and feedback from the sector. The purpose of this document is to invite input and comments from stakeholders regarding the TRA’s intention to prepare and issue the “UAE 5G Strategy” by 4th Quarter of 2019.

Stakeholders who wish to respond to this consultation should do so in writing to the TRA on or before the response date stated on the front cover of this document. 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@tra.gov.ae**;

Executive Director Spectrum Affairs

Telecommunications Regulatory Authority

P.O. Box 26662

Abu Dhabi, UAE

Respondents are advised that it will be the general intention of the TRA to publish in full the responses received to this consultation. Additionally, the TRA 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. The TRA 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 the TRA as follows:

* A full copy of its response in MS Word format with any confidential information clearly marked. The TRA will not publish the Word document and will only use it for internal purposes.
* A publishable copy of its response in Adobe PDF format. The TRA 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 the TRA 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 the TRA and nothing contained herein shall limit or otherwise restrict the TRA’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 document, questions can be sent to the above E-mail and then TRA will reply at the earliest so that formal comments can still be received by **15.00 noon on 15 September 2019.**

**Consultation Schedule**

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| **Milestone** | **Due Date** | **Notes** |
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| Closing Date for Initial Responses  |

 | 15 September 2019 |

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| All responses to this consultation should be properly received by no later than 15.00 noon on the closing date. Responses are to be submitted in electronic format as set out in this consultation document.  |

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| Latest date for requests for extension to the due date for Initial Responses.  |

 | 08 September 2019 |

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| Stakeholders wishing to secure an extension to the Closing Date for Initial Responses may apply in writing to the TRA for such an extension. The request should set out the rationale for the request. Requests for extension should be submitted by e-mail to the e-mail address shown above. The TRA will not consider any requests for extension which the TRA receives after 15.00 noon on the date stated here. The TRA 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 the TRA extends the Closing Date for Initial Responses, the TRA will publish the revised closing date on its website.  |

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1. **Introduction of the public consultation**
	1. The UAE has successfully launched IMT-2020 (5G) also known as the “***Fifth Generation of Mobile Cellular Services***” earlier in 2019. Upon the successful conclusion of WRC-15, the UAE launched an initiative to be among the leading countries to launch IMT-2020 (5G) before the Expo-2020 (Hosted by the UAE). The TRA established an Executive Committee and three working committees[[1]](#footnote-1) for Spectrum, Verticals and Network to prepare and facilitate a UAE 5G Roadmap. A number of meetings were held during 2016-2019 to make 5G a reality.
	2. The TRA is now preparing its first **UAE 5G Strategy** for the 2020 – 2025 timeframe with a view to update it in due course. The 5G strategy is an overall framework for an intelligent, flexible and reliable ICT platform which integrates future services, content and data across smart cities and to deliver innovative services everywhere, that improve the Quality of Experience (QoE).
	3. The UAE 5G Strategy is aligned to the UAE Vision 2021[[2]](#footnote-2) on making the UAE among the best countries in the world. As part of its 5G strategy, the TRA identifies the relevant themes and timescale for supporting continued deployment of 5G networks. This will also help industry plan for investment in continued network roll out with an assured spectrum release plan so that use cases can support the expected demand.
	4. This consultation has been prepared for relevant stakeholders within the United Arab Emirates. The main themes of the future 5G strategy are set out in this document and TRA now invites stakeholders’ views including comments, additions or suggestions with regard to the main themes herein.

* 1. Stakeholders are invited to provide as much detail as possible in their responses to the TRA’s 5G strategic themes.
1. **Alignment of the UAE 5G Strategy**

The UAE 5G Strategy is based on the UAE Future Foresight [[3]](#footnote-3). There are many strategic ICT related initiatives that have been launched within the UAE that will benefit from the roll out of 5G. These initiatives include the following:

* National Plan to Support Mobile Government Initiative [[4]](#footnote-4)
* National Innovation Strategy [[5]](#footnote-5)
* National Cyber Security Strategy of the UAE [[6]](#footnote-6)
* UAE Strategy for Artificial Intelligence [[7]](#footnote-7)
* UAE Strategy for the Fourth Industrial Revolution [[8]](#footnote-8)

It is the vision of the UAE to provide a common platform for digital connectivity for government services addressing the needs of citizens, creating efficiencies in business and enterprise operations and ensuring 5G networks are secure and meet requirements from a national cyber security perspective.

Therefore, the TRA wishes to ensure that its 5G strategy will be supportive of the current ICT strategies listed above to the fullest extent possible.

Questions: Do stakeholders

1. Agree or disagree with the impact and timescales indicated and provide reasons for their view?
2. Have another view or suggestions for other initiatives that TRA should take into account?
3. **Impact of 5G on the UAE economy**

As a technology leader in the region, the UAE will realise both economic and social benefits (productivity, efficiencies and jobs) from the continued evolution of 5G contributing significantly to its happiness index and expansion of innovation across enterprise, research and academia. Furthermore, the 5G strategy cuts across a number of existing ICT strategies as mentioned above within the UAE bringing further benefits to government, enterprise and citizens.

In order for the UAE to position itself as one of the world’s leading innovating countries the TRA would like to be able to further understand and quantify the impact of 5G on the UAE economy over a five-year period from 2020 – 2025.

Questions: Do stakeholders

1. Agree or disagree with the impact and timescales indicated and provide reasons for their view?
2. Have another view or suggestions for other initiatives that TRA should take into account?
3. **Main themes to support future roll out of 5G in UAE**

The following are the main pillars of TRA’s strategy to support the roll out of 5G in the UAE over the next five years from 2020 - 2025:

* Timely release of spectrum;
* Building a 5G ecosystem;
* Supporting technology and standards;
* 5G innovation sandbox;
* UAE lab; and
* Digital empowerment.

## Timely release of spectrum for 5G in the UAE

The TRA will develop a plan for the release of spectrum over the course of the five-year strategy from 2020 to 2025. This will provide the required market certainty of spectrum access for the future securing the benefits of 5G. It is the TRA’s aspiration to set out its plans for the release of spectrum once there is certainty and agreement at international level for the relevant frequency bands.

## Building the 5G ecosystem in UAE

The TRA is of the opinion that it will be important to establish a 5G ecosystem in the UAE that will support the wide range of strategic initiatives, wide scale connectivity of a range of different uses and provide choice and a competitive market for government services, private enterprise, citizens and consumers.

## Technology and standards evolution

It is the aspiration of the TRA for the latest 5G equipment to be commercially available on the market supporting a broad range of technical features that can meet the wide-ranging requirements of the different use cases across, including for example;

* enhanced Mobile Broadband providing gigabit speeds to users;
* Ultra-Reliable Low Latency Communications; and
* Massive Machine Type Communications for IoT and Industry 4.0.

## 5G innovation sandbox

The 5G innovation sandbox aligns with the National Innovation Strategy in the UAE for the creation of innovation incubators. Thus, the TRA recognized that there would be challenges to be addressed and commercial operators could not take on the risk or full investment to tackle these challenges. Therefore, to help shape regulations the innovation sandbox was set up enabling UAE government entities, ICT companies, start up, investors and the telecommunications operators to work together and strengthen the leadership in the 5G domain.

* 1. **UAE Lab**

The UAE lab will provide the necessary facilities to test and launch products and services related to 5G.

The TRA would like to encourage the industry to utilise the lab facilities to further advance 5G to realise the benefits and technical performance features with a view to release the latest specifications.

* 1. **Digital empowerment**

The TRA foresees 5G providing the common platform needed to enable and deliver a wide range digital and ICT related services. In turn, 5G will provide digital empowerment for citizens, enterprises, government and consumers readily access a wide range of services on both fixed and mobile devices.

Questions: Do stakeholders

1. Agree or disagree with the themes and timescales indicated and provide reasons for their view?
2. Have another view or suggestions for other initiatives that TRA should take into account?
1. [www.tra.gov.ae/en/uae-5g.aspx](http://www.tra.gov.ae/en/uae-5g.aspx) [↑](#footnote-ref-1)
2. [www.vision2021.ae/en/uae-vision](http://www.vision2021.ae/en/uae-vision) [↑](#footnote-ref-2)
3. [www.mocaf.gov.ae/en/area-of-focus/future-foresight](http://www.mocaf.gov.ae/en/area-of-focus/future-foresight) [↑](#footnote-ref-3)
4. [www.tra.gov.ae/assets/z6fD1H6M.pdf.aspx](http://www.tra.gov.ae/assets/z6fD1H6M.pdf.aspx%20%20)  [↑](#footnote-ref-4)
5. <https://government.ae/en/about-the-uae/strategies-initiatives-and-awards/federal-governments-strategies-and-plans/national-innovation-strategy> [↑](#footnote-ref-5)
6. <https://government.ae/en/about-the-uae/strategies-initiatives-and-awards/federal-governments-strategies-and-plans/national-cybersecurity-strategy-2019> [↑](#footnote-ref-6)
7. <https://government.ae/en/about-the-uae/strategies-initiatives-and-awards/federal-governments-strategies-and-plans/uae-strategy-for-artificial-intelligence> [↑](#footnote-ref-7)
8. <https://government.ae/en/about-the-uae/strategies-initiatives-and-awards/federal-governments-strategies-and-plans/the-uae-strategy-for-the-fourth-industrial-revolution> [↑](#footnote-ref-8)