



هيئة الاتصالات والفضاء والتقنية  
Communications, Space &  
Technology Commission

**Supplementary English Translation of the  
AWARD OF A 450 MHZ RADIO LICENSE  
FOR A SPECIALIZED RADIO NETWORK  
INFORMATION MEMORANDUM AND  
AWARD RULES**

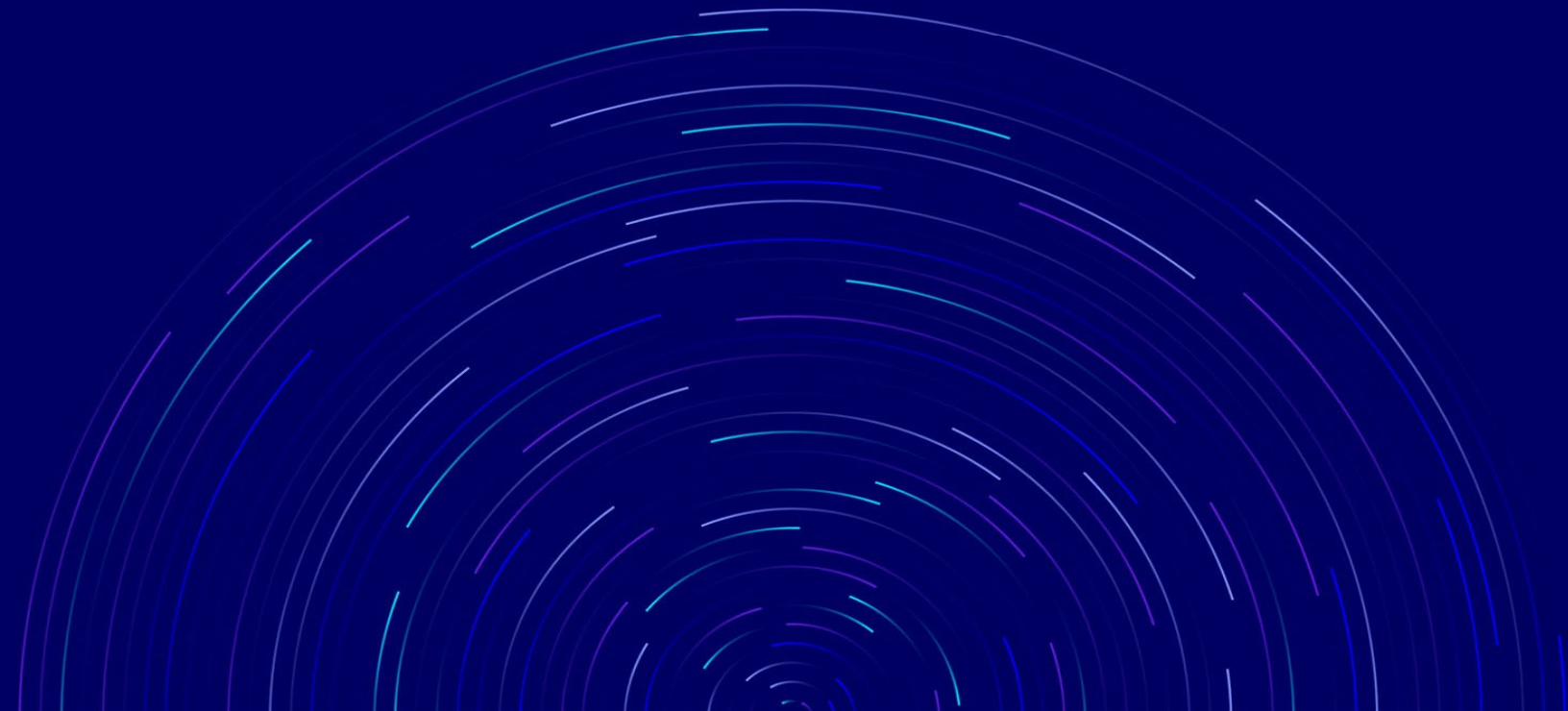
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# Table of Contents

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<b>1.</b>	<b>INTRODUCTION .....</b>	<b>5</b>
<b>2.</b>	<b>CST'S OBJECTIVES FOR THE AWARD .....</b>	<b>6</b>
<b>3.</b>	<b>SPECTRUM TO BE AWARDED .....</b>	<b>7</b>
<b>4.</b>	<b>OVERVIEW OF THE AWARD PROCESS.....</b>	<b>14</b>
<b>5.</b>	<b>APPLICATION DOCUMENT .....</b>	<b>16</b>
<b>6.</b>	<b>APPLICATION STAGE .....</b>	<b>32</b>
<b>7.</b>	<b>QUALIFICATION STAGE .....</b>	<b>34</b>
<b>8.</b>	<b>ALLOCATION STAGE .....</b>	<b>35</b>
<b>9.</b>	<b>GRANT STAGE .....</b>	<b>43</b>
<b>10.</b>	<b>TIMETABLE.....</b>	<b>44</b>
<b>ANNEX 1:</b>	<b>RADIO LICENSE.....</b>	<b>45</b>
<b>ANNEX 2:</b>	<b>DECLARATION.....</b>	<b>50</b>



### Version Control Table

Version	Issuing Date	Changes
1.0	10/04/2023	<ul style="list-style-type: none"> <li>• First version of the supplementary English translation of the official Arabic version.</li> </ul>
1.1	11/04/2023	<ul style="list-style-type: none"> <li>• Corrected the number of licensees to be 150 in 3.17</li> <li>• Corrected a typo on the signal level requirement to be above the threshold (<u>by</u>) 13 dB [instead of (<u>of</u>)]. This is in Table 4, 5.16 and 5.36.</li> <li>• Corrected the formula in 8.7 to reflect the text in 8.7 (b).</li> </ul>
1.2	21/06/2023	<p>Updates on the following sections:</p> <ul style="list-style-type: none"> <li>• 5.13: Clarifications the reliability requirement in 5.13</li> <li>• 5.24: Restriction of HCIS requirements to entities that are under its jurisdiction.</li> <li>• 5.32: Updates on the price caps inputs to include dedicated caps for HCIS entities.</li> <li>• Addition of Table 8 and updates to the numbering</li> <li>• 8.4: Updates the input table for Score (A)</li> <li>• 8.5: Updates to the Score (A) formula to include the price caps for HCIS entities.</li> <li>• Update Table 14 for the timeline</li> </ul>

## **IMPORTANT NOTICE**

Terms and expressions used in this Important Notice are as defined in this Information Memorandum.

This Information Memorandum has been prepared by the Communications, Space and Technology Commission (CST) in connection with the proposed grant of a 450 MHz Radio License for a Specialized Radio Network by means of a competitive beauty contest, pursuant to the Telecom Act of Saudi Arabia and CST's Spectrum Outlook, published July 2021. This Information Memorandum is for informational purposes only. It is made available on the express understanding that it will be used for the sole purpose of assisting an interested party in deciding whether it wishes to participate in the award process.

This Information Memorandum is not intended to form any part of the basis of any investment decision or other evaluation of any decision to participate in the award process and should not be considered as a recommendation by CST or CST's advisers to participate in the award process. Each interested party must make its own independent assessment of the potential value of a 450 MHz Radio License for a Specialized Radio Network after making such investigation as it may deem necessary. All information contained in this Information Memorandum may be updated or amended at any time.

While the information contained in this Information Memorandum is accurate as at the date indicated on page 1, neither CST nor any of CST's advisers nor any of their respective directors, partners, officers or employees make any representation or warranty (express or implied) nor has nor will have any responsibility or liability in relation to the accuracy or completeness of the information contained in this Information Memorandum or any other written or oral information made available to any interested party or its advisers. Any responsibility or liability in respect of any such information or any inaccuracy in this Information Memorandum or omission from this Information Memorandum is expressly disclaimed. This Information Memorandum does not constitute an offer or invitation to participate in the award process.

Interested parties should make their own investigation and decisions, including consulting with their own professional advisers on the financial, legal, award practice and other matters, concerning any potential participation in the award process or any grant of a 450 MHz Radio License for a Specialized Radio Network.

# 1. INTRODUCTION

- 1.1 The Communications, Space and Technology Commission (CST) is the authority in charge of regulating and promoting the communications and information technology industries in the Kingdom of Saudi Arabia (KSA). Pursuant to the Telecom Act and CST's Spectrum Outlook, published July 2021, CST will offer to grant a 450 MHz Radio License for a Specialized Radio Network ("the License"), allocated according to the process described in this Information Memorandum ("award process"). The License will grant a 2x5 MHz spectrum block to operate a 450 MHz network. This Information Memorandum contains important information that interested persons should read and understand for the purpose of participating in the award process.
- 1.2 To ensure that the spectrum is allocated to the user that can offer the greatest benefit to all stakeholders, CST is welcoming applicants from any entity incorporated in the Kingdom of Saudi Arabia (KSA) as well as potential joint ventures. Applicants (or members of a joint venture) do not need to hold a Facilities-based Unified Telecommunications Service License to apply.
- 1.3 CST has worked on adopting regulations of the Provision of Specialized Wireless Telecommunication Networks Services, with the aim of enabling any entity registered in the Kingdom of Saudi Arabia to participate in the qualifying stage, and the applicant is not required to obtain the unified license with infrastructure.
- 1.4 This Information Memorandum is provided for parties interested in participating in the award and contains:
  - a) a description of the spectrum to be awarded;
  - b) information relevant to this award regarding future spectrum releases;
  - c) a description of the award process, including Application Stage, Qualification Stage, Allocation Stage and Grant Stage; and
  - d) a timetable for the award process.

## **2. CST'S OBJECTIVES FOR THE AWARD**

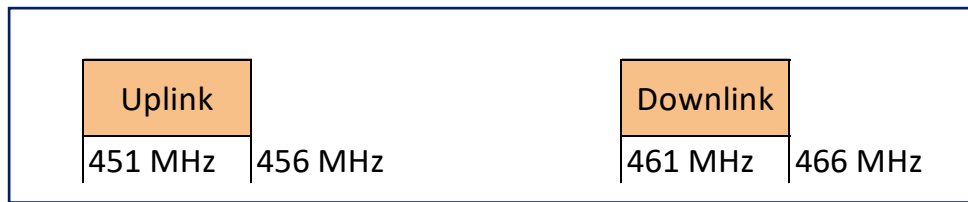
- 2.1 CST's objective for the award is to facilitate the digital transformation of industrial users in the KSA and enable these users to take advantage of advanced industrial internet of things applications in addition to mission-critical communications. Ultimately, CST seeks the establishment of a nationwide, highly resilient, and secure specialized network for applications of industry 4.0, energy, utility, and other critical infrastructures.
- 2.2 The key objectives for this award are to:
- a) Allocate a 450 MHz Radio License for the deployment of a nationwide network to provide these services;
  - b) Enable the deployment of national shared business radio networks which will deliver improved technology and services to a wide range of users;
  - c) Reduce or remove the congestion currently experienced in the 400 MHz band through the use of more efficient shared systems;
  - d) Ensure that the needs of all users are met, from important national users such as oil and mining entities through to smaller local users; and
  - e) Ensure that the price charged for services is reasonable.
- 2.3 Equally important are a number of concerns that CST hopes to see addressed:
- a) Adequate and acceptable provision of coverage and service to key large user groups including oil companies, manufacturing companies and other national scale organizations who have previously deployed their own networks;
  - b) Adequate provisioning of service to smaller groups of users who may individually only provide a tiny fraction of the revenue of larger users; and
  - c) Provision of service for both large and small users with reasonable costs that will not hinder their digital transformation.

### 3. SPECTRUM TO BE AWARDED

#### Available frequencies

3.1 A total of 2x5 MHz of spectrum in the 450 MHz band will be assigned in this award. The spectrum will be allocated in a single block (“the Spectrum Block”). The frequency position of this block is summarized in Figure 1 and Table 1.

FIGURE 1: FREQUENCY POSITION OF THE SPECTRUM BLOCK



3.2 The Spectrum Block will be awarded in a beauty contest, according to scoring criteria in this document.

TABLE 1: AVAILABLE SPECTRUM BLOCKS IN THE AWARD

Band	MHz per Block	Frequency position
450 MHz band	2x5 MHz	451 – 456 MHz / 461 – 466 MHz

#### License terms and conditions

3.3 The Radio License issued as a result of this award will form part of the service provisioning license(s) held by a given operator.

3.4 Non-fulfilment of commitments can lead to both monetary penalties or license revocation. For further details please review Paragraph (3.24).

#### The process for resolving cases of radio interference

3.5 Licensees may report cases of interference affecting their licensed radiocommunications services through an online application on the CST website. Licensees are required to register a login account to activate this service.

3.6 The Radio Monitoring division of CST will investigate cases of radio interference reported by licensees. If bona fide interference source(s) are identified, CST will endeavor to resolve the interference in a timely manner, within the framework of the KSA’s laws and the ITU Radio Regulations.

**Duration and start date of the licenses**

3.7 The duration of the Radio License will be 20 years, commencing once the license is granted.

3.8 Prospective applicants should note that CST may decide to reassign this spectrum through a future competitive award process following the expiry of this Radio License. The Radio License does not come with an automatic right of renewal when it expires. CST will decide on the appropriate assignment mechanism closer to the time of expiry.

**License Fee**

3.9 The Radio License allocated in this award is subject to an Annual License Fee of SAR 9,000,000. The Annual License Fee is payable to CST each year on or before 1 January, starting 1 January 2024.

**Current status of the 451 – 456 / 461 – 466 MHz block**

3.10 The Spectrum Block is allocated for LAND MOBILE on a primary basis according to the national frequency plan (NFP) in conformity with the Radio Regulations (RR) issued by the International Telecommunications Union (ITU) as shown in Table 2.

TABLE 2: ITU RADIO REGULATION FREQUENCY TABLE ALLOCATION FOR THE SPECTRUM BLOCK

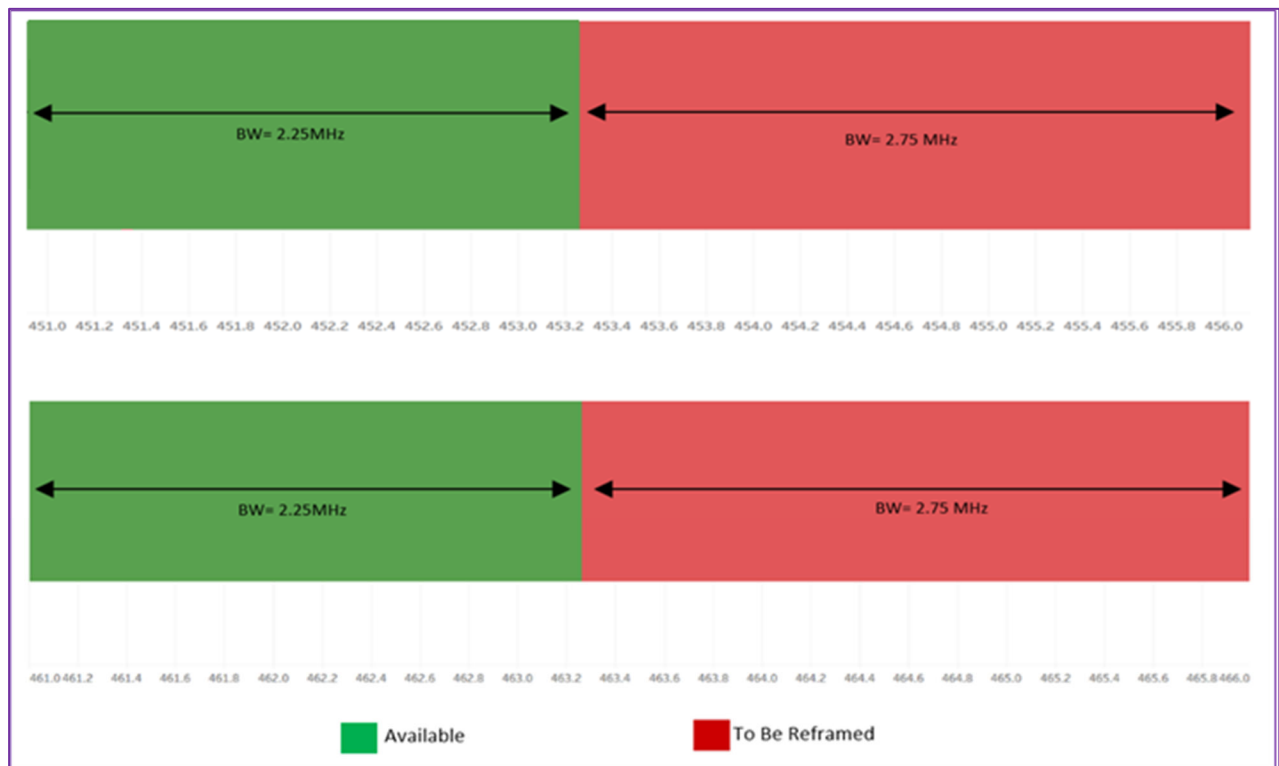
Allocation to services		
Region 1	Region 2	Region 3
450-455	FIXED MOBILE 5.286AA 5.209 5.271 5.286 5.286A 5.286B 5.286C 5.286D 5.286E	
455-456 FIXED MOBILE 5.286AA	455-456 FIXED MOBILE 5.286AA MOBILE-SATELLITE (Earth-to-space) 5.209 5.286A 5.286B 5.286C	455-456 FIXED MOBILE 5.286AA



5.209 5.271 5.286A 5.286B 5.286C 5.286E		5.209 5.271 5.286A 5.286B 5.286C 5.286E
<b>456-459</b>	FIXED MOBILE 5.286AA 5.271 5.287 5.288	
<b>459-460</b> FIXED MOBILE 5.286AA  5.209 5.271 5.286A 5.286B 5.286C 5.286E	<b>459-460</b> FIXED MOBILE 5.286AA MOBILE-SATELLITE (Earth-to-space) 5.209 5.286A 5.286B 5.286C	<b>459-460</b> FIXED MOBILE 5.286AA  5.209 5.271 5.286A 5.286B 5.286C 5.286E
<b>460-470</b>	FIXED MOBILE 5.286AA Meteorological-satellite (space-to-Earth) 5.287 5.288 5.289 5.290	

- 3.11 There are more than 500 frequency assignments in the wider 450 – 457 and 460 – 467 MHz range. The 450 MHz Band is used across the KSA with use being particularly concentrated in 5 regions (Madinah, Makkah, Jizan, Riyadh and the Eastern region).
- 3.12 Figure 2 provides a nationwide overview of the current use in this band. There is a contiguous 2x1.89 MHz channel that is available today.

**FIGURE 2: NATIONAL OVERVIEW OF CURRENT USERS IN 451 – 456 / 461 – 466 MHz**



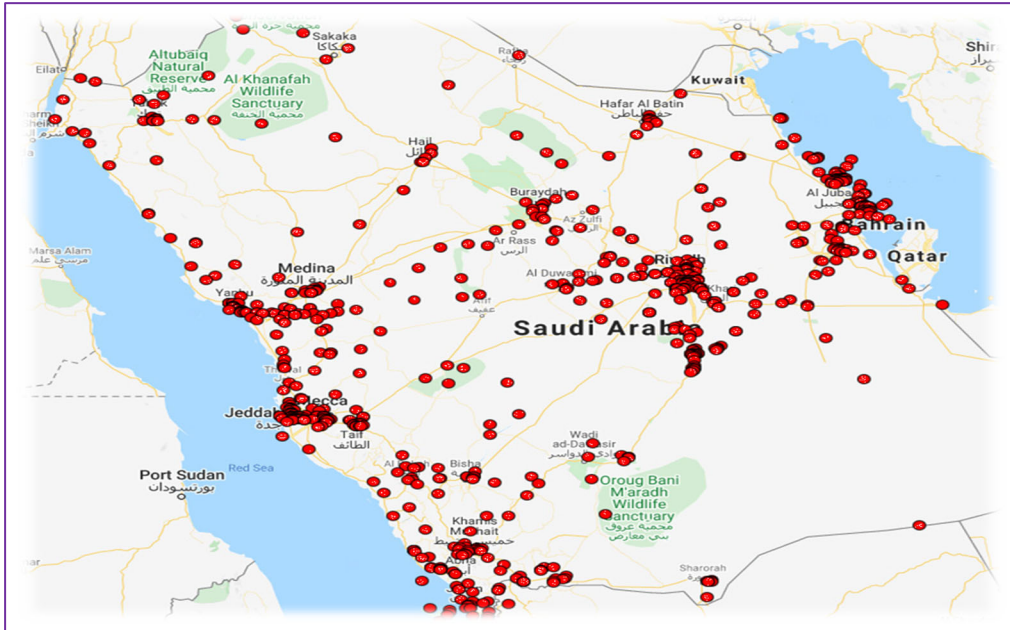
## **Migration plan for the 450 MHz Spectrum Block**

- 3.13 CST will expedite clearance of the 451 – 456 / 461 – 466 MHz block subject to offering a smooth transition for the existing users in this frequency range (“Existing Users of the Spectrum Block”). To ensure that the network provider can deploy its network within its Committed Coverage Area, CST guarantees to achieve the following minimum clearance targets within this area:
- a) Contiguous block of 2x2.25 MHz available by license starts date.
  - b) Contiguous block of at least 2x3 MHz cleared by 1 January 2025;
  - c) Entire 2x5 MHz block cleared by 1 January 2026;
- 3.14 The scheduled dates in Paragraph in (3-13) constitute the initial plan by CST to ensure the full bandwidth is available in the Kingdom wide. However, delay may occur in refarming the full band available in some administrative areas, CST shall coordinate with the licensee later.

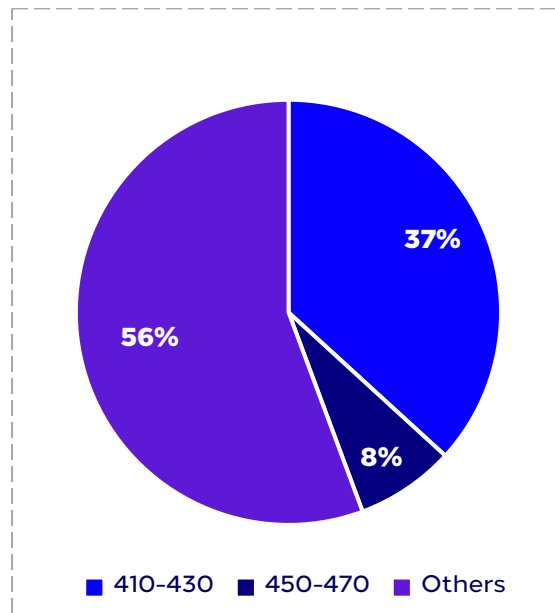
## **Existing private network users in the target users in the broader VHF and UHF bands**

- 3.15 It is CST’s intention to allocate the 450 MHz Radio License to a network provider who can provide services that are attractive to the existing private network users in the broader VHF and UHF bands (“Existing Private Network Users”). CST hopes and anticipates that this will lead in many cases to a gradual migration of these users from their own systems to the 450 MHz network. It is CST’s intention to refarm the 410 MHz band or amend the existing licenses in the future. To help applicants in formulating their application documents for the 450 MHz Radio License, CST provides here some summary information on the Existing Private Network Users.
- 3.16 CST would study 410 MHz allocation and its award in similar way to this awarding process according to existence users transition.
- 3.17 There are currently more than 150 licensees and 200,000 end users from different verticals. Figure 3 below summarizes the (approximate) location of different users, while Figure 4 shows the frequency band allocations among VHF and UHF band users. Lastly, Figure 5 details the distribution of existing private network user types.

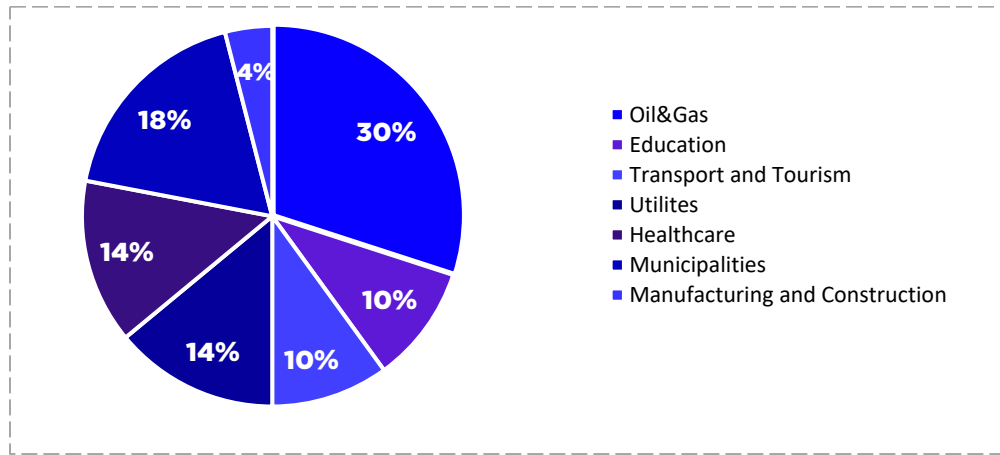
**FIGURE 3: LOCATION OF EXISTING PRIVATE NETWORK USERS**



**FIGURE 4: FREQUENCY BAND LOCATION AMONG VHF AND UHF BAND USERS**

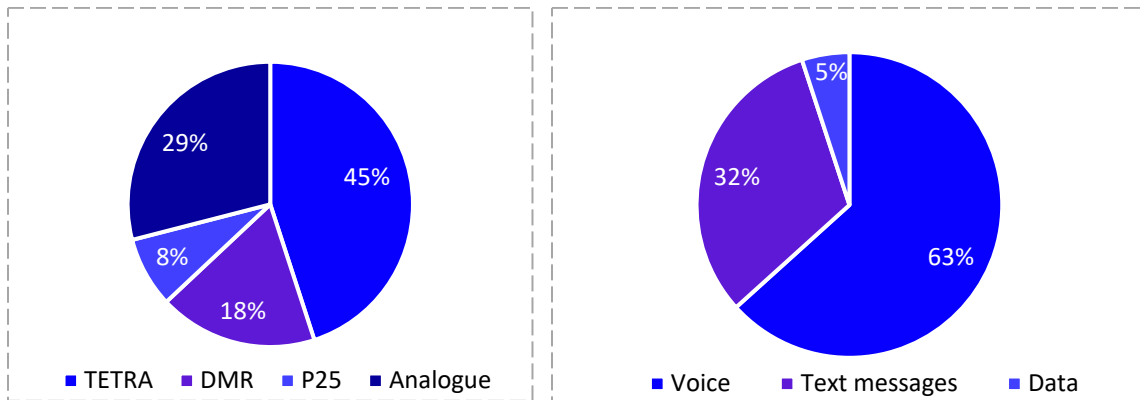


**FIGURE 5: TYPES OF EXISTING PRIVATE NETWORK USERS**



3.18 Most existing private network users focus on voice applications, but some also use text messages and data, as shown in Figure 6.

**FIGURE 6: SHARE OF APPLICATIONS AND SERVICES AMONG EXISTING PRIVATE NETWORK USERS**



3.19 CST will provide a list of the users to whom is intended to participate in the award upon their request, and they can request that before the deadline for receiving applications

3.20 The network provider could approach all Existing Private Network Users to initiate commercial negotiations (for more details see Paragraph 5.19). The Service Obligation further requires the network provider to enter into commercial negotiations with any party that wishes to use its services.

3.21 At the beginning of each October (i.e., by 1 October, starting in 2024), the network provider will indicate to CST as part of its annual reporting requirements (see Paragraph 3.23) where it plans to deploy its network.

## **Annual reporting requirement**

- 3.22 The Minimum Requirements as well as any Further Commitments (See Section 0) will form part of the Radio License of the winning applicant.
- 3.23 The network provider will be required to submit an Annual Report to CST by 31 October of each license year, starting on 31 October 2023. The Annual Report will set out the roll-out and deployments planned for the following year and, if any areas are outside the Committed Coverage Area, whether the rollout will impact the licenses of any Existing Users of the Spectrum Block. The Annual Report should further demonstrate that the associated frequencies are being used to provide commercial services in the awarded spectrum that are being actively marketed and purchased by customers in the KSA.
- 3.24 To this end, the network provider is required to provide the following information as part of the Annual Report:
- a) The coverage achieved so far;
  - b) Information on the number and types of customers;
  - c) Information on the different types of services and applications provided.

## **Non-compliance with the license conditions (including the Minimum Requirements and Further Commitments)**

- 3.25 CST will assess whether the network provider is honoring the Minimum Requirements as well as its Further Commitments. CST will issue a warning and request for more information if it believes that they are not fully complied with. CST may issue a notification to rectify any non-compliance within 6 to 12 months and to provide quarterly update reports. CST will set the timeframe for rectification based on the severity of the issue. If the network provider fails to comply with the requirements within the timeframe specified by CST, CST reserves the right to take appropriate action, including revoking the license in case of repeated or particularly serious infractions or financial penalties. In the case of the latter, these will, in, not exceed the annual license fee.

## **4. OVERVIEW OF THE AWARD PROCESS**

- 4.1 The award process consists of four stages, as set out in Figure 7:
- a) Application Stage.
  - b) Qualification Stage.
  - c) Allocation Stage.
  - d) Grant Stage.
- 4.2 As part of its application, each applicant will need to submit a number of documents specifying different aspects of the planned network operation. In the Qualification Stage, CST will review all submitted documents and determine whether the applicant can adequately achieve the minimum requirements. If it does, the application is qualified to be evaluated further in the Allocation Stage. In the Allocation Stage, CST will score each application according to a number of criteria that go beyond the minimum requirements. The qualified applicant that receives the highest score in the Allocation Stage will be allocated the Radio License in the Grant Stage. The required Application Document is set out in Section 0. The rules and procedures for each stage are described in the remaining Sections c), 0, 0 and 9.
- 4.3 In this section, we provide some general information common to the entire process.

### **Deposit requirements**

- 4.4 As set out in Paragraph 6.2, each applicant must submit a deposit in the form of a bank guarantee for SAR 4,500,000 valid until 30 December 2023. The purpose of the deposit is to provide an appropriate incentive for applicants not to default on their applications and not to engage in inappropriate behavior (as defined in Paragraphs 4.5 and 4.6).

### **Applicant conduct before and during the award**

- 4.5 All applicants are required not to engage in conduct that would be detrimental to CST's ability to run an effective award process.
- 4.6 In particular, it is the responsibility of the applicants themselves to ensure that:
- a) they are not associated with any other applicant;

- b) they do not share confidential information in relation to the award, including but not limited to information regarding their own applicant and business plan with any other applicant.
- c) no person with access to the applicant’s confidential information has access to another applicant’s confidential information.
- d) The engagement in any action that could be deemed collusive or may otherwise be detrimental to CST’s ability to run an effective award process.

4.7 If CST receives evidence that an applicant has engaged in inappropriate behavior, as described in Paragraph 4.6, CST may at its sole discretion take one or more of the following steps:

- a) exclude that applicant from the award process; and/or
- b) execute the applicant’s bank guarantee and keep the proceeds.

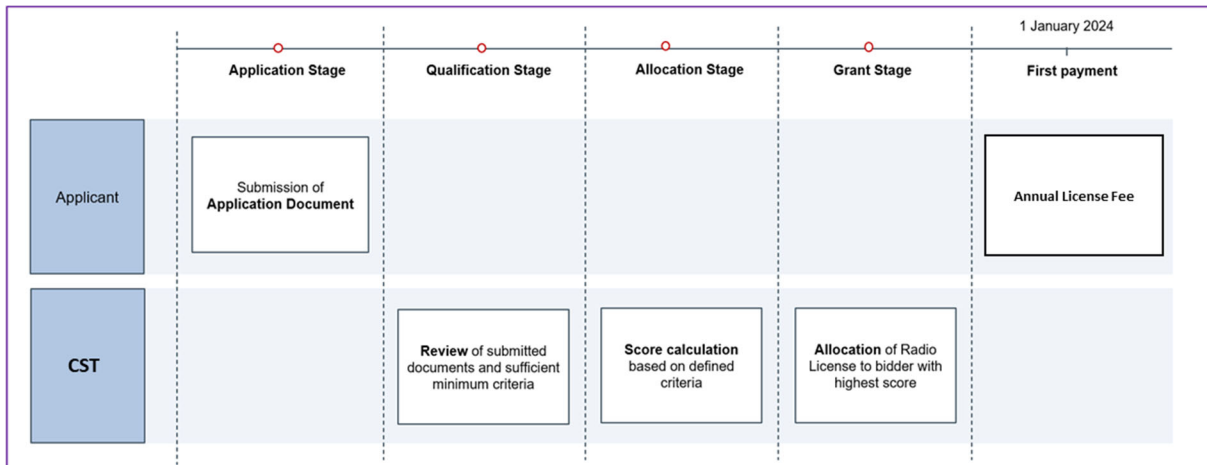
CST may also take additional legal and regulatory actions outside the award process, such as but not limited to excluding the applicant from participation in future spectrum awards.

### Exceptional circumstances

4.8 In the case of exceptional circumstances during the award process, CST has the discretion to:

- a) cancel the award process;
- b) suspend the award process until further notice; and/or
- c) pause the award process.

**FIGURE 7: OVERVIEW OF THE AWARD PROCESS**



## 5. APPLICATION DOCUMENT

5.1 Applicants will be asked to submit an Application Document that provides details on the applicant's envisioned network operation. The Application Document should include the following sections:

- A. **Background information.** This section should provide background information on the applicant with regards to its ownership structure and expertise.
- B. **Frequency usage.** Submission of a plan detailing what type of network the applicant envisions. It should specify the network architecture, what radio technologies will be applied, what usage types it plans to provide for and whether the network will be operated on a stand-alone basis, with interconnections with existing networks or on a hybrid basis. The plan shall also describe how Operations and Maintenance will be organized and what performance and availability levels will be committed to the end users in Service Level Agreements.
- C. **Roll-out plan.** The applicant should lay out the timeline for the realization of the 450 MHz network as described under Section B. This should specify the network launch date and how the network coverage evolves over the years. The Roll-out plan shall also explain to what extent existing structures will be re-used.
- D. **Business plan.** Submission of a ten-year business plan including a market and marketing analysis, an investment and financing plan, information on project management and an assessment of the planning up to the forecast expansion in line with demand. The business plan should also include proof of sufficient financial means for the investments necessary to support the Roll-out plan as well as any further investment commitments.
- E. **Commitment to minimum requirements.** A clear statement that the applicant will commit to the minimum requirements. The applicant should then set out in this section how it will achieve the commitments with appropriate references to Sections A – D above.
- F. **Further commitments.** A description of other commitments the applicant is willing to make over and above the minimum requirements. The applicant should then set out in this section how it will achieve these further commitments with appropriate



references to Sections A – D above. The further commitments will be used to score the application in the Allocation Stage.

5.2 The following sub-sections clarify Sections B, C, E and F.

## B. Frequency usage

5.3 Submit a comprehensive plan for the type of network according to the applicant's perception. The plan must specify the structure of the network and the technologies used to operate it, and its operating mechanism, whether it is one independent network (Stand-Alone) or several independent networks (Stand-Alone) that are not connected to public networks. The plan should also describe the operations, maintenance, performance levels, and availability that will be adhered to end users in Service Level Agreements (SLAs).

5.4 The frequency usage is limited to the 451 – 456 / 461 – 466 MHz band.

5.5 For Out-of-Block Emissions (OOBE) of base stations the limits set out in Table 3 are to be applied.

**TABLE 3: BASE STATION OUT-OF-BLOCK EMISSION LIMITS**

Delta F <sub>c</sub> (MHz) from center frequency (463.5 MHz)	Out-of-band emissions (transmitter output power)	Measurement bandwidth
2.5 to 7.5	-7 dBm -7/5* (Delta F <sub>c</sub> – 2.5) dB	100 kHz
7.5 to 9.95	-14 dBm	100 kHz

*Note: for the maximum mean out-of-block e.i.r.p. the antenna gain and cable losses of the land mobile system have to be considered.*

5.6 For User Equipment (UE's) a Maximum mean in-block power of 23 dBm is to be applied.

5.7 The applicant should specify in its submission what type of technology it plans to deploy and what type of connectivity products (voice, data) it is planning to offer.

5.8 The applicant should also specify whether the constructed network would be a stand-alone network or whether it plans to offer interconnection with other networks. In the case of the latter, the applicant should detail which of the planned services require interconnection.

- 5.9 This section should further detail how the applicant plans to Operate and Maintain the network and the levels of performance and availability that it will commit to in its Service Level Agreements with its customers.
- 5.10 While the Radio License is allocated on a technology neutral basis, applicants acknowledge the following to optimize technology transformation and spectrum utilization:
- a) The awardee shall notify CST of the technology (or technologies) that will be used in the assigned frequency (or frequencies). If the awardee would like to change the technology (or technologies), it is required to submit a change notification to CST.
  - b) If the awardee wishes to change the technology (or technologies), CST has the right to order the awardee to take actions to mitigate any adverse impacts and bear any associated costs.
  - c) CST reserves the right to require the awardee to change the technology (or technologies) in order to maximize the efficient use of spectrum.

### **C. Roll-out plan**

- 5.11 The applicant must submit a timetable on his roll-out-plan for the 450 MHz network, which should indicate the launching date of the network as well as how coverage will be rolled out. The plan should also clarify to what extent current infrastructure will be re-utilized for the purpose of the 450 MHz network.
- 5.12 The Roll-out plan shall set out the following for the first five years of the license duration:
- a) A timetable for the implementation of the Core Network location or locations;
  - b) A timetable for the development of the Backbone;
  - c) Numbers of Radio Sites to be built and integrated in each year;
  - d) The areas in which the applicant intends to build out in each year; and
  - e) Coverage development per year, in km<sup>2</sup>, and also illustrated with maps for the minimum requirement stage. The applicant may submit the maps in the form of Shapefiles as part of its application. Coverage maps must be built based on the minimum signal level threshold that guarantees providing the required services.

## **E. Minimum Requirements**

5.13 The applicant should describe in detail how it will achieve the minimum requirements summarized in the following table and set out in detail in the following sub-sections.

**TABLE 4: MINIMUM REQUIREMENTS**

Minimum Requirement	Description
<b>Coverage Obligation</b>	The network provider will need to provide area-wide coverage or coverage on demand in the areas set out below. The minimum requirement is to provide an outdoor signal strength at or above the threshold level by 13dB by 31 October 2025.
<b>Service Obligation</b>	The network provider is required to make an offer and, if necessary, enter into commercial negotiations with any potential user in the KSA.
<b>Reliability</b>	The network provider will need to fulfil minimum redundancy requirements, ensure at least 4 hours power resilience – in case of a power source failure - for the end-to-end services and offer end-to-end network availability of at least 99,9% in the committed coverage area. Ensuring how the 4 hours power resilience in case of a power failure is achieved can be detailed by the applicant
<b>Security and safety</b>	The network provider will need to develop a security architecture that meets the necessary security standards, protects the network against intrusion and guarantees the integrity and reliability of all data. The network provider shall also describe an ISMS to be implemented
<b>Usability</b>	The network provider will be required to run the network as a Public Access Mobile Radio (PAMR) network. The network will not only be accessible to the network owner, but other users as well.
<b>Financial capacity</b>	The investments necessary for the Roll-out plan need to be achievable given the financial capabilities and the business plan of the applicant.

5.14 An explicit acknowledgment of the applicant's commitment to the minimum requirements for obtaining the license must be included, and an explanation of how he fulfilled the obligations mentioned in Paragraph (5.13).

**Coverage obligation**

5.15 The network provider will need to achieve the following coverage requirements:

- a) Tier 1: 44 industrial and economic cities. Starting from 1 January 2024, the network provider is required to provide any of the standard connection types set out in Paragraph 5.31 within 6 months of concluding a contract with a user. Further, in any area with an Area-wide Coverage requirement as set out in Table 5, the network provider will further need to achieve area-wide coverage by 31 October 2025.
- b) Tier 2: Any other areas. Starting on 1 January 2025, when requested by a user, the 450 MHz network will need to provide any of the standard connection types set out in Paragraph 5.31 within 12 months of concluding a contract with a user.

**TABLE 5: TIER-1 COVERAGE AREAS**

Tier 1 Area with Area-wide Coverage requirement	Tier-1 Areas without Area-wide Coverage requirement
<ul style="list-style-type: none"> <li>• Riyadh</li> <li>• Jubail</li> <li>• Jeddah</li> <li>• Yanbu</li> <li>• Dammam</li> <li>• Khamis Mushait</li> <li>• Jazan</li> <li>• Rabigh</li> <li>• Medina</li> <li>• Mecca</li> <li>• Riyadh First Industrial City</li> <li>• Riyadh Second Industrial City</li> <li>• Riyadh Third Industrial City</li> <li>• Jeddah First Industrial City</li> <li>• Jeddah Second Industrial City</li> <li>• Jeddah Third Industrial City</li> <li>• Rabigh Industrial City</li> <li>• Dammam 1st. Industrial City</li> <li>• Dammam 2nd. Industrial City</li> <li>• Dammam 3rd. Industrial City</li> <li>• Ha'il Industrial City</li> <li>• Al-Madina Al-Munawwara Industrial City</li> <li>• Makkah Al-Mukarrama Industrial City</li> <li>• Jazan Industrial City</li> <li>• King Abdullah Economic City</li> <li>• Jazan Economic City</li> </ul>	<ul style="list-style-type: none"> <li>• Prince Abdulaziz Bin Mousaed Economic City</li> <li>• Knowledge Economic City</li> <li>• Sudair City for Industry and Businesses</li> <li>• Qassim 1st. Industrial City</li> <li>• Qassim 2nd. Industrial City</li> <li>• Al-Ahsa 1st. Industrial City</li> <li>• Kharj Industrial City</li> <li>• Tabuk Industrial City</li> <li>• Al-Baha Industrial City</li> <li>• Assir Industrial City</li> <li>• Najran Industrial City</li> <li>• Ar'ar Industrial City</li> <li>• Hafr Al-Batin Industrial City</li> <li>• Shaqraa Industrial City</li> <li>• Al-Zulfi Industrial City</li> <li>• Dhurma Industrial city</li> <li>• Wa'ad Al-Shamal Industrial City</li> <li>• Taif Industrial City</li> </ul>

- 5.16 In any area or on any site in which coverage is provided either on demand or as part of the Area-wide Coverage requirement, the network provider will be required to achieve full outdoor coverage at or above the threshold level by 13dB. The threshold level was selected to ensure indoor coverage in standard settings. If further indoor coverage is requested, this would be subject to commercial terms between the network and the user and the price caps the network provider agreed to as part of its Further Commitments. The network is required to provide a commercial offer for this additional indoor coverage. If the two parties fail to reach an agreement, they can request CST to review the quote provided by the 450 MHz Radio License holder and, if necessary, arbitrate between them. CST may pass on any cost of the arbitration to the two parties.
- 5.17 The applicant should state the base technology it will deploy to meet the coverage obligations and provide the basic services set out in Paragraph 5.31. This will not restrict the deployment of alternative technologies either within or outside of the coverage area as long as the coverage obligation is met with the base technology. If the license holder wishes to change the base technology in the future, it will need to submit an updated deployment plan for its new base technology to CST for approval.
- 5.18 The applicant should include the proposed acceptance criteria for the outdoor coverage including all technical details i.e., received signal strength threshold and technical tools to be used, etc.

## **Service obligation**

- 5.19 The network provider is required to make an offer and, if necessary, enter into commercial negotiation with any potential user in the KSA that requests a service, subject to the following conditions:
- a) The network provider will need to offer at least the standard connection types as set out in Paragraph 5.31 at prices that do not exceed the price caps it committed to as part of its Further Commitments.
  - b) If the potential user wishes to acquire other services, the price caps for the standard connections do not apply and the provision of services will be subject to commercial negotiation between the relevant entities. In this case, the commercial quote of the

network provider needs to provide a sufficiently detailed cost breakdown to allow the potential user to understand the cost drivers behind any price premium over its standard rates quoted by the network provider. The price quote should consider any existing infrastructure of the potential user and leverage it to the greatest extent possible to minimize duplication of infrastructure. If the price quote includes indoor coverage, any network elements subject to a price cap as per the Further Commitments will need to be offered as prices that do not exceed the price caps the network provider committed to.

- c) Any offer should be prepared in a timely fashion.
- d) If the two parties fail to reach an agreement, they can request CST to review the quote provided by the 450 MHz Radio License holder and, if necessary, arbitrate between them. CST may pass on any cost of the arbitration to the two parties.

5.20 The spectrum might be subleased, Any such agreement will be subject to CST's policy on Spectrum Trading regulations or any related regulations that are stated by CST . If the two parties fail to reach an agreement, they can request CST to review the quote provided by the 450 MHz Radio License holder and, if necessary, arbitrate between them. CST may pass on any cost of the arbitration to the two parties.

5.21 To help promote the new network, CST requires the 450 MHz Radio License holder to reach out to all Existing Private Network Users with an offer to enter commercial negotiations by 1 January 2024.

## **Reliability**

5.22 The network operator shall guarantee in Service Level Agreements with its customers an end-to-end network availability of 99.9% to all its users. This means that between any two points in the defined coverage area, the performance levels of each of the contracted connectivity products is met for at least 99.9% of the time. This percentage includes public power outages up to 4 hours and may exclude planned outages for services.

5.23 Applicants should detail their proposed network architecture to demonstrate how the network availability will be met. The network architecture should clearly show where redundancy is applied and where Single Points of Failure remain.



## **Security**

- 5.24 The applicant should set out how it will meet and comply with the technical and operational standards required by the national security entities (National Cybersecurity Authority, High Commission for Industrial Security for the entities under its jurisdiction and Presidency of State Security).
- 5.25 The applicant will provide a security architecture that shows how the network will be effectively protected against intrusion and how the integrity and reliability of all data is secured.
- 5.26 The applicant will also describe how the security will be managed by an Information Security Management System (ISMS) and how such an ISMS will be implemented within 3 years after the license starts.

## **Usability**

- 5.27 The business plan must, amongst other topics, clearly describe how the network will be run as a Public Access Mobile Radio network (PAMR), meaning that the network will not only be accessible to the network owner(s) but for multiple users. Notwithstanding this requirement, the license owner may limit the group of users to certain sectors or well described categories, as far as this is necessary to meet the goals of the Business Plan. Such a limitation should be clearly described in the Business Plan.
- 5.28 Communication products and related services will be offered on a non-discriminatory basis and will be described in a Product and Service Catalogue (PSC) that includes pricing. An excerpt of such a PSC must be delivered on application.

## **Financial capacity**

- 5.29 The investments necessary for the Roll-out plan need to be achievable given the financial capabilities and the business plan of the applicant. The applicant should provide annual reports or proof of financing it has already secured to substantiate its investment claims.

## F. Further commitments

5.30 In this section, the applicant should set out its further commitments. The applicant will have to address each of the criteria in Table 6 and cannot leave them unaddressed. Any application that does not address all of these criteria will be rejected.

**TABLE 6: FURTHER COMMITMENTS**

<b>Further commitment</b>	<b>Description</b>
<b>Maximum fees for standardized connection types</b>	The network provider is required to offer four standardized connection types per connection within the Committed Coverage Area at prices per connection that do not exceed the maximum fees it commits to in its application.
<b>Indoor coverage</b>	The network provider is required to offer caps for indoor base stations and indoor repeaters.
<b>Investment in network infrastructure</b>	Number of base stations <sup>1</sup> deployed after 5 years.
<b>Quality of Consortium Members and Users</b>	This scoring criteria will consider any positive engagement with users, as well as commitments from consortium members for a Joint Venture.

### **Price caps for standardized connection types**

5.31 The license holder shall provide services at reasonable prices that ensure the digital transformation of the KSA is not hindered. To this end, CST requires the network provider to offer four standardized connection types within its Tier-1 and Tier-2 areas:

- a) Voice I: a push-to-talk service with no mobility (i.e. no handovers) and a minimum monthly allowance of 60 minutes per connection;
- b) Voice II: a group calling on-net service with mobility and a minimum monthly allowance of 120 minutes per connection;
- c) Data I: a basic IoT service accommodating bit rates of at least 200 kbit/s and a minimum monthly allowance of 50 MB;
- d) Data II: a moderate data transfer service accommodating bit rates of at least 1 Mbit/s and a minimum monthly allowance of 500 MB.

5.32 For each of these four services, the applicant will need to provide a maximum initial fee and a maximum annual subscription fee per connection (i.e., price cap) that it is willing to commit to (excluding any devices) in Tier-1 and Tier-2 areas, respectively. The applicant must also provide price caps for Tier-1 and Tier-2 areas for customers that are under the jurisdiction of HCIS. Prices should be quoted using the template set out in Table 7 and Table 8: Template For Standardized Connection Types for Entities under HCIS Jurisdiction.

**TABLE 7: TEMPLATE FOR STANDARDIZED CONNECTION TYPES**

Connection Type	Tier-1		Tier-2	
	Initial fee per connection	Annual fee per connection	Initial fee per connection	Annual fee per connection
Voice I				
Voice II				
Data I				
Data II				

**TABLE 8: TEMPLATE FOR STANDARDIZED CONNECTION TYPES FOR ENTITIES UNDER HCIS  
JURISDICTION**

Connection Type	Tier-1 (Customers under HCIS Jurisdiction)		Tier-2 (Customers under HCIS Jurisdiction)	
	Initial fee per connection	Annual fee per connection	Initial fee per connection	Annual fee per connection
Voice I				
Voice II				
Data I				
Data II				

5.33 The offer should not put any further restrictions on the location of the use (indoor or outdoor) or the maximum usage other than the ones set out in Paragraph 5.31 which ensure fair use.

5.34 If the applicant is successful, it will be required to offer these services at prices that do not exceed the maximum fees set out in its application (adjusted for inflation as reported by the Saudi Central Bank<sup>2</sup>). It is also required to advertise these services and their maximum fees on its website. The services will have to be provided at the minimum standard set out in the Minimum Requirements and Further Commitments made by the successful applicant.

5.35 The maximum fees will be reviewed by CST after three years to allow for reasonable adaptations given any external factors or change in circumstances. These changes can be both to increase the maximum fee if service provision is provably unprofitable at current rates, as well as to lower the maximum fee if they are provably unattractive to interested parties and significantly above the actual cost of provision. Any adaptation will

be reasonable and with the ultimate aim of securing long-lasting sustainable network provision.

## Indoor Coverage

5.36 The network provider is required to provide an outdoor signal strength 13 dB above the threshold level at all locations. This will ensure indoor coverage in standard settings. Provision of indoor coverage beyond this requirement is subject to commercial negotiations. The applicant is required to offer price caps for the following indoor equipment as part of its application:

- a) An indoor base station; and
- b) An Indoor repeater.

**TABLE 9: TEMPLATE FOR INDOOR COVERAGE**

Equipment	Maximum price per unit
Indoor base station	
Indoor repeater	

## Investment in network infrastructure

5.37 As part of its 10-year business plan, the applicant should set out how much it will commit to minimally invest in the network infrastructure over the first 5 years of the Radio License. The applicant should clearly set out and explain how much capital expenditure it is going to minimally commit to invest into its network infrastructure and be linked to the roll-out plan. For each of the first five years, the applicant should set out its minimum investment commitment.

5.38 The applicant should then present its Investment Commitment as a net present value of the total capital expenditure over the first 5 years using a discount rate of 8.59%. If the applicant is successful, it will be required to minimally invest this amount over the first 5 years in equivalent net present value terms (using a discount rate of 8.59%). This means that the network provider will not necessarily have to invest the exact annual figures it

presents in its business plan as long as the net present value of its total capital expenditure from 1 January 2024 to 1 January 2025 is at least equal to the Investment Commitment.

5.39 In line with the expenditures outlined above, the applicant should clearly set out and explain how many base stations it is going to minimally commit to deploy within 5 years of the license start and should link this figure to the roll-out plan and the coverage maps provided. This will be the figure considered when scoring applicants for their investment commitments.

### **Quality of Consortium Members and Users**

5.40 This score will be constructed analyzing both the quality of the consortium members, as well as the engagement with users.

5.41 CST believes that a Joint Venture which includes current (and prospective) users in the 410 and 450 MHz bands will be best positioned to serve the market with services that are tailored to the needs of specific users.

5.42 In the case of a Joint Venture, the applicant should include signed letters by each consortium member clearly stating their intent. The document should include that entity's expected connections and their role in the industry. The applicant should further specify the following three indicators used to score the quality of the consortium member.

- a) Size of consortium member as measured by the number of connections
- b) Expertise of the consortium member based on years in the Saudi PMR market and relevant experience in- / outside the KSA
- c) Equity share of the consortium member

5.43 The applicant also needs to confirm that the entities in the Joint Venture are not affiliated. The applicant should provide details on the ownership structure of each member of the Joint Venture to demonstrate this.

5.44 The second aspect of this Further Commitments score considers the potential / future users of the applicant's network. The score for the user engagement will be based on the

level of interaction with industry players who are not consortium members, as well as the user's quality.

5.45 In order to verify the engagement, any interaction should be accounted for with as much evidence and clarity as possible. This should be provided in the form of signed declarations by the users indicating the extent of their interest. The score will be based on the following three criteria:

- a) Size of user as measured by number of connections;
- b) Expertise of the user based on years in the Saudi PMR market and related expertise inside/outside the KSA.
- c) Number of users engaged.

## **6. APPLICATION STAGE**

- 6.1 In the Application Stage, eligible applicants submit their application document, signed declaration form and bank guarantee. The application document needs to be in the form specified in Section 0 and include all required information as set out in this Section. A template for the declaration is provided in Annex 2. CST will review all applications for errors, omissions, or ambiguities.

### **Application process**

- 6.2 Facilities-based Unified Telecommunications Service License (USL) holders are eligible to apply for the 450 MHz Radio License for specialized networks, and are considered the main eligible applicants for this Radio License.
- 6.3 In the interest of meeting all the requirements of different industries in this specialized network, and to allow more potential service providers to apply for the license, CST is also open to considering applications from any other entity incorporated in the Kingdom of Saudi Arabia as well as potential joint ventures to apply for the 450 MHz Radio License even if they do not hold a USL license. If successful, such an applicant would need to apply for a Service License under the Regulations of the Provision of Specialized Wireless Telecommunication Networks Services. It should be noted that all conditions for providing telecom service will be applied. These conditions include, but are not limited to, annual royalty fees, fees associated with the use of numbering resources, localizations obligations and network technical requirements.
- 6.4 CST has the right to issue the final approval for applicant eligibility.
- 6.5 An eligible applicant interested in acquiring the 450 MHz Radio License for specialized networks must submit to CST:
- a) Its signed declaration (a copy of which is in Annex 2) signed by the applicant's authorized representative;
  - b) a bank guarantee for the Guaranteed Amount of SAR 4,500,000 valid until 30 December 2023.



6.6 The submission must reach CST by the Application Date, which, unless otherwise announced by CST, is 05:00 PM on 09 July 2023. A single completed application should be printed on single-sided A4 paper and placed inside a sealed envelope. The envelope should be:

a) Marked as follows:

APPLICATION TO PARTICIPATE IN THE AWARD OF THE 450 MHZ RADIO LICENSE  
FOR SPECIALIZED NETWORKS

b) Hand delivered to:

Communications and Information Technology Commission

Procurement Department, 6th Floor

Al Imam Saud Ibn Abdul Aziz Rd. and Prince Turki Ibn Abdul Aziz Al Awwal Rd.  
Intersection

P.O. Box 75606, Riyadh 11588

Tel. +966-11-461-8000

6.7 CST will review each application to determine if the applicant:

a) has provided the required information; and

b) has made any mistakes or provided unclear information in completing the documents.

## **7. QUALIFICATION STAGE**

- 7.1 In the Qualification Stage, the CST completes the review of applications to determine which applications qualify for further consideration in the Allocation Stage.
- 7.2 CST will review each signed declaration, application document (including amended application documents if applicable) and bank guarantee, together with any other documents that CST may deem relevant to the process, to determine if the eligible applicant:
- a) has provided all required information in the correct format;
  - b) has submitted a bank guarantee not less than the Guaranteed Amount valid until 30 December 2023;
  - c) meets the minimum criteria to participate in the award process; and
  - d) CST is satisfied that based on the information provided in the application document, the applicant will be able to meet the Minimum Requirements set out in Section 0 as well as any Further Commitments made by the applicant in its application document.
- 7.3 If an eligible applicant fulfils all four criteria in Paragraph 7.2, it will be designated as a qualified applicant and its application will be considered further in the Allocation Stage.
- 7.4 If an eligible applicant fails to fulfil one or more of the criteria in Paragraph 7.2, its application will be rejected, and it will not be qualified. Its application will not be considered in the Allocation Stage. CST will inform rejected applicants of its decision in writing. Rejected applicants who do not become qualified applicants will have their bank guarantees returned.

## **8. ALLOCATION STAGE**

8.1 The purpose of the Allocation Stage is to score each qualified application based on further commitments made in the submitted documents. The application receiving the highest overall score will be declared the winning application.

### **Scoring criteria and determination of points for each criterion**

8.2 Each bid will be scored based on four criteria, as set out in Section 6E. The four criteria are:

- a) **Score A:** Maximum fees for standardized connection types
- b) **Score B:** Indoor coverage
- c) **Score C:** Investment in network infrastructure
- d) **Score D:** Quality of Consortium Members and Users

8.3 The following sub-sections provide detail on the calculation of each score and the final aggregation to an Overall Score.

### **Score A: Maximum fees for standardized connection types**

8.4 Score A is based on a price index for the standardized connection types. For each qualified application, CST will compare the prices quoted against the cheapest prices offered by all qualified applicants and then aggregate the results to an overall score. The following table summarizes the input variables for Score A.

**TABLE 10: INPUT VARIABLES FOR SCORE A (APPLICANT I)**

Connection Type	Tier-1		Tier-2	
	Initial fee per connection	Annual fee per connection	Initial fee per connection	Annual fee per connection
<b>Voice I</b>	$V1_{T1}I_i$	$V1_{T1}A_i$	$V1_{T2}I_i$	$V1_{T2}A_i$
<b>Voice II</b>	$V2_{T1}I_i$	$V2_{T1}A_i$	$V2_{T2}I_i$	$V2_{T2}A_i$
<b>Data I</b>	$D1_{T1}I_i$	$D1_{T1}A_i$	$D1_{T2}I_i$	$D1_{T2}A_i$
<b>Data II</b>	$D2_{T1}I_i$	$D2_{T1}A_i$	$D2_{T2}I_i$	$D2_{T2}A_i$
Connection Type	Tier-1 (Customers under HCIS Jurisdiction)		Tier-2 (Customers under HCIS Jurisdiction)	
	Initial fee per connection	Annual fee per connection	Initial fee per connection	Annual fee per connection
<b>Voice I</b>	$H_{V1_{T1}I_i}$	$H_{V1_{T1}A_i}$	$H_{V1_{T2}I_i}$	$H_{V1_{T2}A_i}$
<b>Voice II</b>	$H_{V2_{T1}I_i}$	$H_{V2_{T1}A_i}$	$H_{V2_{T2}I_i}$	$H_{V2_{T2}A_i}$
<b>Data I</b>	$H_{D1_{T1}I_i}$	$H_{D1_{T1}A_i}$	$H_{D1_{T2}I_i}$	$H_{D1_{T2}A_i}$
<b>Data II</b>	$H_{D2_{T1}I_i}$	$H_{D2_{T1}A_i}$	$H_{D2_{T2}I_i}$	$H_{D2_{T2}A_i}$

8.5 In its evaluation, CST will first develop a general price score for Tier 1 and Tier 2, and another price score for customers under HCIS jurisdiction in Tier 1 and Tier 2. CST will then aggregate them to an overall score for qualified applicant  $i$  as set out in the formulae below:

a) For the general price score:

- i. For each service, the cheapest price basket of 1x initial fee and 4x annual fee among all qualified applicants is compared to the price basket of applicant  $i$
- ii. The results for all connection types are then aggregated to the score for the relevant tier. Each connection type receives the same weight of  $\frac{1}{4}$ .
- iii. The scores for the two tiers are then aggregated to a single “General Price Score” for the applicant where Tier 1 receives a weight of 70% and Tier 2 receives a weight of 30%.

b) For the HCIS price score:

- i. For each service, the cheapest price basket of 1x initial fee and 4x annual fee among all qualified applicants is compared to the price basket of applicant *i*
  - ii. The results for all connection types are then aggregated to the score for the relevant tier. Each connection type receives the same weight of  $\frac{1}{4}$ .
  - iii. The scores for the two tiers are then aggregated to a single “HCIS Price Score” for the applicant where Tier 1 receives a weight of 70% and Tier 2 receives a weight of 30%.
- c) For the overall Score (A), CST will combine the general price score and the HCIS price score using a 2:3 ratio as follows:

$$\text{Score A} = 40\%(\text{General Price Score}) + 60\%(\text{HCIS Price Score})$$

$$\begin{aligned} & \text{General Price Score} \\ &= 70\%(\text{General Price Score in Tier 1}) \\ &+ 30\%(\text{General Price Score in Tier 2}) \end{aligned}$$

$$\begin{aligned} \text{General Price Score in Tier 1} = & \frac{1}{4} \cdot \frac{\min\{V1\_T1\_I + 4 \cdot V1\_T1\_A\}}{V1\_T1\_I_i + 4 \cdot V1\_T1\_A_i} \\ & + \frac{1}{4} \cdot \frac{\min\{V2\_T1\_I + 4 \cdot V2\_T1\_A\}}{V2\_T1\_I_i + 4 \cdot V2\_T1\_A_i} \\ & + \frac{1}{4} \cdot \frac{\min\{D1\_T1\_I + 4 \cdot D1\_T1\_A\}}{D1\_T1\_I_i + 4 \cdot D1\_T1\_A_i} \\ & + \frac{1}{4} \cdot \frac{\min\{D2\_T1\_I + 4 \cdot D2\_T1\_A\}}{D2\_T1\_I_i + 4 \cdot D2\_T1\_A_i} \end{aligned}$$

$$\begin{aligned} \text{General Price Score in Tier 2} = & \frac{1}{4} \cdot \frac{\min\{V1\_T2\_I + 4 \cdot V1\_T2\_A\}}{V1\_T2\_I_i + 4 \cdot V1\_T2\_A_i} \\ & + \frac{1}{4} \cdot \frac{\min\{V2\_T2\_I + 4 \cdot V2\_T2\_A\}}{V2\_T2\_I_i + 4 \cdot V2\_T2\_A_i} \\ & + \frac{1}{4} \cdot \frac{\min\{D1\_T2\_I + 4 \cdot D1\_T2\_A\}}{D1\_T2\_I_i + 4 \cdot D1\_T2\_A_i} \\ & + \frac{1}{4} \cdot \frac{\min\{D2\_T2\_I + 4 \cdot D2\_T2\_A\}}{D2\_T2\_I_i + 4 \cdot D2\_T2\_A_i} \end{aligned}$$

where

$\min(\cdot)$  is the minimum among all applicants

$$\begin{aligned}
 & \text{HCIS\_Price Score} \\
 & = 70\%(\text{HCIS Price Score in Tier 1}) \\
 & + 30\%(\text{HCIS Price Score in Tier 2})
 \end{aligned}$$

$$\begin{aligned}
 \text{HCIS Price Score in Tier 1} = & \frac{1}{4} \cdot \frac{\min\{H_{V1\_T1\_I} + 4 \cdot H_{V1\_T1\_A}\}}{H_{V1\_T1\_I_i} + 4 \cdot H_{V1\_T1\_A_i}} \\
 & + \frac{1}{4} \cdot \frac{\min\{H_{V2\_T1\_I} + 4 \cdot H_{V2\_T1\_A}\}}{H_{V2\_T1\_I_i} + 4 \cdot H_{V2\_T1\_A_i}} \\
 & + \frac{1}{4} \cdot \frac{\min\{H_{D1\_T1\_I} + 4 \cdot H_{D1\_T1\_A}\}}{H_{D1\_T1\_I_i} + 4 \cdot H_{D1\_T1\_A_i}} \\
 & + \frac{1}{4} \cdot \frac{\min\{H_{D2\_T1\_I} + 4 \cdot H_{D2\_T1\_A}\}}{H_{D2\_T1\_I_i} + 4 \cdot H_{D2\_T1\_A_i}}
 \end{aligned}$$

$$\begin{aligned}
 \text{HCIS Price Score in Tier 2} = & \frac{1}{4} \cdot \frac{\min\{H_{V1\_T2\_I} + 4 \cdot H_{V1\_T2\_A}\}}{H_{V1\_T2\_I_i} + 4 \cdot H_{V1\_T2\_A_i}} \\
 & + \frac{1}{4} \cdot \frac{\min\{H_{V2\_T2\_I} + 4 \cdot H_{V2\_T2\_A}\}}{H_{V2\_T2\_I_i} + 4 \cdot H_{V2\_T2\_A_i}} \\
 & + \frac{1}{4} \cdot \frac{\min\{H_{D1\_T2\_I} + 4 \cdot H_{D1\_T2\_A}\}}{H_{D1\_T2\_I_i} + 4 \cdot H_{D1\_T2\_A_i}} \\
 & + \frac{1}{4} \cdot \frac{\min\{H_{D2\_T2\_I} + 4 \cdot H_{D2\_T2\_A}\}}{H_{D2\_T2\_I_i} + 4 \cdot H_{D2\_T2\_A_i}}
 \end{aligned}$$

where

$\min(\cdot)$  is the minimum among all applicants

## Score B: Indoor coverage

- 8.6 Score B is based on a price index for the two types of equipment that the qualified applicant was asked to provide a maximum price cap for. For each qualified application, CST will compare the prices quoted against the cheapest prices offered by all qualified applicants and then aggregate the results to an overall score. The following table summarizes the input variables for Score B.

**TABLE 11: TEMPLATE FOR INDOOR COVERAGE**

Equipment	Maximum price per unit
Indoor base station	$B_i$
Indoor repeater	$R_i$

8.7 In its evaluation, CST will first develop an individual price score for each equipment type and then aggregate them to an overall score for qualified applicant  $i$  as set out in the formulae below:

- For each equipment type, the cheapest price among all qualified applicants is compared to the price offered by of applicant  $i$
- The results for all equipment types are then aggregated to an overall score where the result for the indoor repeaters enters with a weight of 33% and the result for the indoor base stations with a weight of 67%.

$$\text{Score } B = 33\%(\text{Score Repeater}) + 67\%(\text{Score Base Station})$$

$$\text{Score Repeater} = \frac{\min\{R\}}{R_i}$$

$$\text{Score Base Station} = \frac{\min\{B\}}{B_i}$$

where  
 $\min(\cdot)$  is the minimum among all applicants

### Score C: Investment in network infrastructure

8.8 CST determines Score C for each qualified application as the ratio of the Investment Commitment in the relevant qualified application and the maximum Investment Commitment among all qualified applications:

$$\text{Score } C = \frac{\text{Number of base stations in application } i}{\max \{\text{Number of base stations among qual. applications}\}}$$



## Score D: Quality of Consortium Members and Users

8.9 CST determines Score D for a qualified application based on a two-phased approach. The applicant will first be placed within a Main Scoring Block, which determines the rough point allocation.

**TABLE 12: MAIN SCORING BLOCK**

<b>% Points</b>	<b>Level of user and member participation</b>
0	No evidence of interaction with users and no user consortium members
10% - 30%	Limited engagement with users and / or a single consortium member who is a small user
40% - 70%	More substantial engagement and / or multiple or larger consortium members that are users
80% - 100%	Extensive engagement with users and multiple consortium members that are users

8.10 In a second stage, all required inputs (see section 5.40) regarding user and consortium members will be analyzed with regards to more detailed criteria. These will decide the finer distinction between applications and the exact point allocation for Score D.

## Aggregation to an Overall Score

8.11 The four criteria are aggregated to an Overall Score using the weights set out in Table 13.

**TABLE 13: SCORING CRITERIA WEIGHTS**

Further commitments	Weight
Score A: Price caps for a basket of standardized connection types	45%
Score B: Indoor coverage	10%
Score C: Investment in network structure	35%
Score D: Quality of Consortium Members and Users	10%

## Determination of Winning Applicant & Resolving Tie breaks

8.12 The qualified application with the highest Overall Score will be declared the Winning Application.

8.13 In the unlikely event that multiple qualified applications ties, the choice of winning applicant falls to CST.

## Non-compliance with the license conditions (including the Minimum Requirements and Further Commitments)

8.14 CST will assess whether the network provider is honoring the Minimum Requirements as well as its Further Commitments. CST will issue a warning and request for more information if it believes that they are not fully complied with. CST may issue a notification to rectify any non-compliance within a reasonable timeframe and to provide quarterly update reports. If the network provider fails to comply with the requirements within the timeframe specified by CST, CST reserves the right to impose a financial penalty. The penalty amount will be proportionate to the infraction and, in any case, will not exceed the annual license fee of SAR 9m.

8.15 In case of repeated or particularly serious infractions, CST reserves the right to revoke the license.

## **9. GRANT STAGE**

9.1 In the Grant Stage, CST will issue a new Radio License based on the outcome of the Allocation Stage.

### **Announcement of award outcome**

9.2 Following the conclusion of the Allocation Stage, the CST will publish the results of the award, including:

- a) the identity of the winning applicant;
- b) the spectrum assigned to the winning applicant; and
- c) the Annual License Fee.

9.3 CST will issue a formal notification to each applicant of the results of the award process.

### **Release of bank guarantees**

9.4 The bank guarantee(s) submitted during the application stage (less any penalties if applicable) shall be released to the applicants as follows:

- a) to unsuccessful applicants: after the conclusion of the Allocation Stage;
- b) to the winning applicant: after the grant of the license.

### **Grant of licenses**

9.5 The winning applicant shall be issued the 450 MHz Radio License on or before 31 December 2023.

## 10. TIMETABLE

- 10.1 The timetable in Table 14 is indicative only of the expected timing of certain key milestones and events prior to, during and after the award process.
- 10.2 Please note that CST may at any time change any of the times or dates and/or shorten or extend the time periods set out in this Information Memorandum upon giving at least twenty-four (24) hours' notices, save in emergency situations where such changes may be made without notice.

**TABLE 14: INDICATIVE TIMETABLE FOR KEY MILESTONES AND EVENTS**

<b>Milestones / Events</b>	<b>Date / Time</b>
Publication of Final Information Memorandum	10 April 2023
Application Deadline	17 August 2023
Announcement of Allocation Stage results	31 October 2023

# ANNEX 1: RADIO LICENSE

License Number: \_\_\_\_\_

## DRAFT Radio License for Facilities-Based Unified Telecommunications Services Licensees

Issued to:

Company/Establishment: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Box: \_\_\_\_\_

Postcode: \_\_\_\_\_

The Communications and Information Technology Commission (CST) acting in pursuance of Article 12 of the Telecom Act and Articles 17, 79-82 of Telecommunications Act Bylaws, hereby issues this Radio License to

----- (Licensee's name) -----

(Licensee's Commercial Registration Number) to use frequency spectrum, subject to provisions of Telecom Act and its Bylaws pertaining to use of radio frequency spectrum, CST Statutes, the conditions of this License and its Annexes.

**The Governor**

**CST**

## Table of Contents

<b>General Conditions</b>	<b>- 3 -</b>
Article 1: Definitions	- 3 -
Article 2: Licensed and Assigned Frequency Spectrum	- 3 -
Article 3: Use of licensed frequency spectrum	- 3 -
Article 4: Technology Migration	- 4 -
Article 5: Term and Renewal	- 4 -
Article 6: License Territory	- 4 -
Article 7: Amendment of License	- 4 -
Article 8: Fees Payable by Licensee	- 4 -
Article 9: Interpretation	- 4 -
<b>Special Conditions</b>	<b>- 5 -</b>
Article 1: Definition and Use of the Licensed Frequency Spectrum	- 5 -
Article 2: Assigned Frequency Spectrum	- 5 -
Article 3: Term and Renewal	- 5 -

# **Radio License for Facilities-Based Unified Telecommunications Services Licensees (RL)**

## **General Conditions**

### **Article 1: Definitions**

1. The terms and expressions defined in the Telecommunications Act, the Ordinance and the Bylaw shall have the same meanings when used in this Radio License.
2. “Licensed Frequency Spectrum” means the frequency spectrum assigned to the Licensee as listed in Annexes of this Radio License.

### **Article 2: Use of Licensed Frequency Spectrum**

1. The Licensee may use Licensed Frequency Spectrum for the sole purposes specified for each Licensed Frequency Spectrum assignment as shown in Annex 1.
2. The Licensee’s use of the Licensed Frequency Spectrum shall be subject to any applicable provisions of the Telecommunications Act, the Bylaws, statutes and CST decisions and must also be consistent with:
  - 2.1 The National Frequency Spectrum Plan and
  - 2.2 The Frequency Spectrum Management Policies and Procedures.
3. Any Licensed Frequency Spectrum assignment in Annexes of this Radio License may be amended, revoked, and any associated obligations may be amended at any time during the term of the relevant assignment or where the CST believes such action will improve spectrum efficiency in the KSA or for other reasons including international spectrum coordination.
4. Revocation/amendment will only occur after the CST has consulted with the Licensee and has provided the Licensee with justification for the required changes. The notice period for such change shall be determined by the Commission taking note of the prevailing circumstances.

### **Article 3: Technology Migration and Spectrum Use Efficiency**

1. The Licensee shall inform the Commission of the radio communications technology (radio standard) deployed in the licensed frequency spectrum and any intention to materially change that technology.

2. In case Licensee intends to change the radio communications technology, the Commission may require the Licensee to undertake actions to mitigate any adverse effects arising out of any such change, and any resulting costs shall be borne by the Licensee.
3. The Commission may require the Licensee to migrate the radio communication technology or the technical conditions of its usage (e.g., channel plan, type of emissions, etc.) for the reason of ensuring most efficient use of Licensed Frequency Spectrum assignment, and any resulting costs shall be borne by the Licensee unless alternative arrangements are explicitly specified by the Commission.

#### **Article 4: License Term**

This Radio License shall remain valid for as long as the Licensee holds a valid [Facilities Based Unified License]. Individual Licensed Frequency Spectrum assignments shall remain valid for the duration specified in relevant Annex.

#### **Article 5: Geographic Coverage**

The Licensee may use the Licensed Frequency Spectrum subject to geographic coverage rights and obligations as specified for each Licensed Frequency Spectrum assignment in relevant Annex.

#### **Article 6: Amendment of License**

This Radio License is subject to amendment in accordance with Commission statutes.

#### **Article 7: Spectrum Use Fees Payable by Licensee**

1. The Licensee shall pay to the Commission the fees for using Licensed Frequency Spectrum assignments as specified in relevant Annex of this Radio License. These spectrum usage fees may be amended from time to time.
2. The Commission shall determine and inform the Licensee of the method of issuance of invoices and payment with which the Licensee shall comply.
3. Payment shall be due immediately upon issuance of the invoice and shall be paid within one month of the invoice issuance date.



## Licensed Frequency Spectrum

*[The following details shall be completed separately for each Licensed Frequency Spectrum assignment for the Licensed Unified service provider*

*Additional separate annexes will be used for additional/service specific assignments]*

**CST Frequency Spectrum Assignment Reference: *[Number]* \_\_\_\_\_**

Assigned Channels	Radio Frequency Use Parameters	Geographic Coverage	Licensed Service	Obligations and Conditions	Expiry Date of Frequency Assignment	Annual Spectrum Use Fees

*[The above information should be completed separately for each individual assignment]*

# ANNEX 2: DECLARATION

An applicant must complete, in full, this form and submit it to CST by 9 July 2023 (the “Application Date”) for consideration. Any additional documentation required to be supplied by the applicant must be appended to this declaration.

## THE APPLICANT

**Name of applicant:**

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**Address of applicant:**

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## AUTHORIZED REPRESENTATIVE

Each applicant must provide contact information for an authorized representative that will be the main point of contact for CST. All materials associated with the award, including confidential information will be sent to the authorized representative. The authorized representative has authority to bind the applicant for all purposes in the award.

### Authorized representative

**Name of authorized representative**

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**Position of authorized representative**

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**Telephone of authorized representative**

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**E-mail of authorized representative**

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The applicant hereby acknowledges that all communication given by CST shall be sent by e-mail to the e-mail address of the authorized representative provided above. All communication shall be deemed received by the applicant at the time of transmission. The authorized representative must remain contactable at all times.

### **ALTERNATIVE REPRESENTATIVES**

In addition to the authorized representative, an applicant may, but is not required to, name up to three (3) alternate representatives.

#### **Alternate representative 1**

**Name of alternate representative 1** \_\_\_\_\_

**Position of alternate representative 1** \_\_\_\_\_

**Telephone of alternate representative 1** \_\_\_\_\_

**E-mail of alternate representative 1** \_\_\_\_\_

#### **Alternate representative 2**

**Name of alternate representative 2** \_\_\_\_\_

**Position of alternate representative 2** \_\_\_\_\_

**Telephone of alternate representative 2** \_\_\_\_\_

**E-mail of alternate representative 2** \_\_\_\_\_

#### **Alternate representative 3**

**Name of alternate representative 3** \_\_\_\_\_

**Position of alternate representative 3** \_\_\_\_\_

**Telephone of alternate representative 3** \_\_\_\_\_

**E-mail of alternate representative 3** \_\_\_\_\_

The alternate representatives will be contacted, in order of their listing, in the case that the authorized representative, for whatever reason, is not immediately contactable. However, they will not be deemed to have the authority to bind the applicant for all purposes in the award.

**APPLICANT DECLARATION**

We, the undersigned, being the authorized representative(s) of \_\_\_\_\_ (the “applicant”) hereby declare that all information provided in, or in support of, the application is to the best of the knowledge and belief of the applicant true, accurate, and complete. We hereby warrant to the Communications and Information Technology Commission of Saudi Arabia (the “CST”) that:

- 1) The undersigned have read and understood the terms of the license to be granted under the Award of the 450 MHz Radio License for Specialized Networks Information Memorandum (the “Information Memorandum”) and the Telecom Act issued under the Council of Ministers resolution No. 74 dated 5/3/1422H (the “Act”).
- 2) The undersigned have read and understood the rules and procedures for the award as set out in the Information Memorandum.
- 3) The applicant has the legal authority to participate in the award process and meets the conditions set out in Paragraph 6.2 of the Information Memorandum.
- 4) The applicant is not associated with any other applicant or has any ownership or financial interest in another applicant in the award process.
- 5) The applicant has and will ensure that the applicant discloses confidential information only to the extent it is necessary and expressly permitted by the Information Memorandum to members within the applicant’s own bidding group.
- 6) The applicant warrants not to engage in any action that could be deemed collusion or is otherwise detrimental to CST’s ability to run an effective award process.

Signature of authorized representative  
for and on behalf of the applicant: \_\_\_\_\_

Name of authorized representative: \_\_\_\_\_

Date: \_\_\_\_\_

**Any additional documentation required to be supplied by the applicant must be appended to this declaration.**



هيئة الاتصالات والفضاء والتقنية  
Communications, Space &  
Technology Commission