



هيئة الاتصالات والفضاء والتقنية
Communications, Space &
Technology Commission

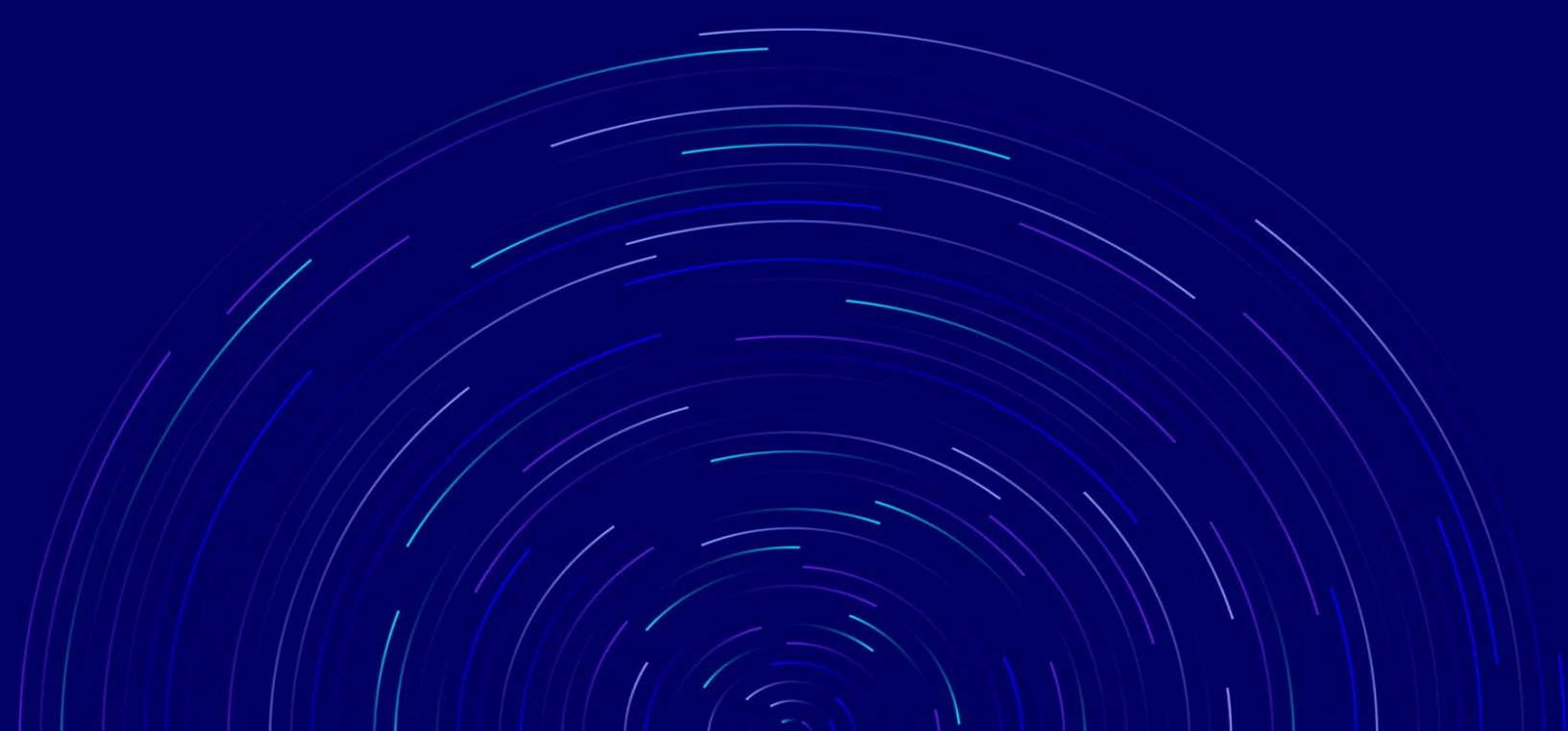
**Frequent Asked Questions (FAQs) for the
AWARD OF A 450 MHZ RADIO LICENSE
FOR A SPECIALIZED RADIO NETWORK
INFORMATION MEMORANDUM AND
AWARD RULES**

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Version Control Table

Version	Issuing Date	Changes
1.0	17/05/2023	<ul style="list-style-type: none">• First version of the Frequent Asked Questions (FAQs) for the Information Memorandum and the award rules document.
1.1	30/05/2023	<ul style="list-style-type: none">• Added more FAQ from (27) to (29)

1. INTRODUCTION

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. The Information Memorandum contains important information that interested persons should read and understand for the purpose of participating in the award process.

With reference to the publication of the "Information Memorandum for Award of A 450 MHz Radio License for A Specialized Radio Network", CST has received several inquiries regarding the Information Memorandum and the award rules document. In order to achieve transparency in the awarding processes, CST has published Frequent Asked Questions (FAQs) for the Information Memorandum and the award rules document, the table of question would be updated periodically based on the received inquiries.

2. Frequent Asked Questions (FAQs) Table

No	Question	Reference	Response
1	Do all applicants have to be local Saudi companies at the time of application? Are applicants permitted to tie up with international players? If so, do these international players have to have a local Saudi incorporated at time of the application or could this be conditional to award?	1.2	<ul style="list-style-type: none"> A joint venture can include one or more international companies without a local subsidiary as long as an eligible local entity leads the consortium (See Section 6.2 and 6.3). The 450 MHz network will need to be operated by a local entity holding the necessary service license.
2	Would it be possible to consider applying an automatic renewal for the 450 MHz spectrum license after the end of its duration given that the network provider will incur significant investments, and that an automatic renewal clause would incentivize the network provider to invest further in the network?	3.8	<ul style="list-style-type: none"> While CST appreciates that significant investment will be necessary to deploy the 450 MHz network, it is at this stage not in a position to make a decision on automatic renewal. CST will however make a decision on renewal well in advance of the license expiration date to allow all stakeholders to act in accordance with its outcome. CST will take all factors into account when deciding on the appropriate assignment mechanism at the end of the initial 20-year license term, including the existing use and its importance to the local economy
3	Would CST consider the first few years payment to be apportioned to the spectrum being made	3.9 & 3.13	<ul style="list-style-type: none"> CST has set the license fee at a low level – especially considering it is very valuable UHF spectrum – in order to encourage deployment and take into account the process of making the spectrum available. Therefore, CST does not intend to apportion the license fee.

	available? Will a partial annual fee be applied during the migration period? (proportional to the spectrum that has been cleared)		<ul style="list-style-type: none"> • CST has committed to clearing the spectrum in the 2x5 MHz block in steps with full clearance by 1 January 2026 (See Section 3.13). • CST has taken the clearance schedule into account when setting the annual fees for the entire license duration, by setting the annual fee conservatively.
4	<ul style="list-style-type: none"> • The IM mentions that delay may occur in refarming the full bandwidth in some administrative areas, can CST provides additional information about the administrative areas mentioned? • In case of delay, would there be any compensation mechanism (on the license fee)? 	3.14	<ul style="list-style-type: none"> • CST is working with the existing licensees (which have Kingdom-Wide assignments) on the schedule of evacuation. This may occur earlier in some administrative areas compared to others. • CST has taken into consideration potential unexpected delays in clearing some of the spectrum when the license fee was set at its current low level. Therefore, CST does not intend to adjust the license fee further in case of such delays.
5	With respect to the 450 MHz spectrum, what spectrum will be available in each location? And by what time?	3.14	<ul style="list-style-type: none"> • CST has clarified the availability in sections 3.12 & 3.13. The dates mentioned in these sections refer to Kingdom-wide availability, noting that some spectrum may be made available earlier in some locations.
6	<ul style="list-style-type: none"> • With respect to the 410 MHz refarming statement in paragraphs 3.15 and 3.16, we understand the refarming of the 450 MHz to a 3GPP based technology 	3.15 & 3.16	<ul style="list-style-type: none"> • As set out in Section 3.20, it is CST's intention to achieve clearance in the 410 MHz band through an industry-led process. The 450 MHz network operator should contact all existing licensees to initiate commercial negotiations and onboarding onto the new network. • CST will make its refarming strategy in the 410 MHz band contingent on the outcome of this industry-led process. It is CST's intention to ultimately refarm the 410 MHz band.

	<p>will allow the new network to serve both exiting 450 MHz and 410 MHz band users?</p> <ul style="list-style-type: none"> • Can CST elaborate what is the plan with respect to migrating the 410 MHz users and planned usage of the 410 MHz band and network, as opposed to waiting for the 410 MHz refarming? 		
7	<p>Can CST share the list of users across different locations?</p>	3.17	<ul style="list-style-type: none"> • Any entity interested in applying for the 450 MHz Spectrum License can request a copy of this list from CST via Spectrum.Strategy@citc.gov.sa
8	<ul style="list-style-type: none"> • Can CST share the details of the current 160 licenses (200k users), who have been highlighted for migration (incl. number of end users by licensee)? • In figure 4, can CST clarify what are the other frequency bands highlighted in violet color (56%)? 	3.17	<ul style="list-style-type: none"> • Any entity interested in applying for the 450 MHz Spectrum License can request a copy of this list from CST via Spectrum.Strategy@citc.gov.sa • In figure 4, the other bands contain frequencies in the 300 MHz bands and the VHF bands.
9	<p>Can the use case requirement of current private network users be shared by CST? Could CST provide details on data-related services needs currently (5% of</p>	3.18	<ul style="list-style-type: none"> • CST's review of the current use of the band highlighted that it is currently predominantly used for voice and text with only limited data transmission. CST believes that a broadband offering on the new 450 MHz network will ultimately lead to the proliferation of more broadband use.

	total based on IM Figure 6)		
10	450 MHz is intended to rollout a Business Critical communications network. Given that this is a critical communications network, does CST have any intent for this to be designated as a mandatory and exclusive network? If so, could you please share such plans; and if not, please share with us the CST plan to ensure that this is the sole legally designated/ mandated such network ?	3.15 & 3.18	<ul style="list-style-type: none"> • CST will oversee and support the migration of existing PMR licensees to the new 450 MHz network. Furthermore, CST will coordinate new PMR requests it receives with the 450 MHz network operator to accommodate their needs.
11	Can CST please clarify and elaborate on paragraph 4.6.a, which states that “it is the responsibility of the applicants themselves to ensure that they are not associated with any other applicant”?	4.6.a	<ul style="list-style-type: none"> • Applicants will need to confirm as part of their application that they are not associated with any other applicant. • In the case of joint ventures, this means that any member of the joint venture (or its subsidiaries / entities that it controls) cannot submit an application on its own or be part of another applicant’s joint venture
12	Paragraph 5.12 requires the service provider to submit a rollout plan during the first 5 years of the license duration, with annual details of different network elements. Paragraph 5.13, Table 4, “Coverage Obligation” requires the	5.12 & 5.13	<ul style="list-style-type: none"> • The roll-out plan should cover the first 5 years of deployment as mentioned in Section 5.12. The roll-out plan should set out how the coverage obligation (Section 5.15) will be met.

	<p>service provider to achieve minimum requirements for the signal strength by October 31 2025 (less than 2 years after the start of the license duration). Can CST please clarify which of the abovementioned timeframes is expected for the network rollout and for achieving the minimum requirements?</p>		
13	<ul style="list-style-type: none"> • Paragraph 5.13, Table 4, “Reliability” requires that the service provider ensures at least 8 hours power resilience for the end-to-end services. Would CST have a consideration to reduce this requirement to 4 hours as the current requirements may have implications on the investment requirements and on the end prices? • Can CST clarify whether the power resilience would be defined according to specific considerations (e.g. area, site types, or all sites)? 	5.13	<ul style="list-style-type: none"> • CST is aware that the 8 hours end-to-end power resilience requirement leads to additional investments. Nevertheless, the requirement is considered essential for critical communication networks, whereas the additional investments are relatively moderate given the frequency band involved. • The power resilience requirement pertains to the entire network, including all sites, all core network components, all transmission links (backhaul, backbone) and all other components that are needed to ensure the critical services remain available during major power outages. • The requirement does not necessarily pertain to non-critical services. In case of major power outages, such services may be switched off in order to reduce power consumption and assure the 8 hours availability for critical services.

14	<ul style="list-style-type: none"> • Would it be possible for CST to define the required coverage and signal strength and the minimum required throughput for data services (e.g. 256 kbps, 512 kbps)? (requirement across different areas)? This would reduce the future cost incurred by the network provider, will ensure consistency in the network designs of the applicants, will give visibility and clarity when it comes to network planning, and preserve the rights of the network provider in the future? • Can CST please confirm that 13 dbm is the required indoor penetration loss? 	5.13	<ul style="list-style-type: none"> • CST deliberately avoids to specify minimum signal strength requirements, since these depend on technology and configuration choices that are to be decided by the applicant themselves. • The required bitrates are specified in paragraph 5.31 of the Information Memorandum. • CST requires the outdoor signal level to be everywhere at least 13 dB above threshold level, where 13 dB is the assumed average indoor penetration loss. Please note that this 13 dB is an average only that is defined for the purposes of the coverage requirement. The 450 MHz network will be required to achieve this signal strength in the coverage area to satisfy the coverage requirement. It will not guarantee good indoor coverage in all settings. Any indoor coverage that is provided beyond this requirement is subject to commercial negotiations based on the indoor coverage price components included in the application (see Sections 5.36, 8.6 and 8.7 of the Information Memorandum). It is the applicant's responsibility to plan for a network that provides good indoor coverage wherever requested on that basis.
15	<ul style="list-style-type: none"> • Can CST further clarify what is Tier 1 Area with Area-wide Coverage Requirement" and 	5.15 & Table 5	<ul style="list-style-type: none"> • Tier 1 cities need to have Area-Wide coverage at the specified date. Meaning that coverage should be available across the area at any location, which aims to make the service quickly available to all potential users.

	<p>“Tier-2 Areas without Area-wide Coverage requirement meant by”?</p>		<ul style="list-style-type: none"> Users in Tier 2 cities needs to be served adequately as specified within a certain period of time. City-wide coverage is not mandatory in these cities, but potential users should have the service ready at the set period of time
16	<p>Is there a consideration from CST to allow revision of prices on a yearly basis to mitigate market risks faced by the network operator? In this case, the price cap during the first year could be considered in score A evaluation</p>	5.19 a	<ul style="list-style-type: none"> Section 5.34 clarifies that the price caps will automatically be adjusted for inflation. Section 5.35 further sets out that CST will review the price caps after three years to allow for reasonable adaptations given any external factors or change in circumstances.
17	<p>Is there a consideration from CST to allow revision of the price cap for indoor solution on a regular basis (every 6 or 9 months)? In this case, the price cap during the first year could be considered in score B evaluation</p>	5.19 b	<ul style="list-style-type: none"> Section 5.36 sets out the price caps for indoor solutions. Section 5.34 (inflation adjustment) and 5.35 (adaptions after three years) apply to the maximum prices quoted here.
18	<p>NCA (National Cybersecurity Authority) and HCIS (High Commission for Industrial Security) and Presidency of State Security</p> <ul style="list-style-type: none"> Can CST specify which NCA standards does the network provider need to comply with? Can CST clarify if there are any specific NCA telecom standards that the network 	5.24, 5.25, 5.26	<ul style="list-style-type: none"> All NCA standards are applicable to this network. HCIS standard for private networks needs to be applied to the users under HCIS supervision on this new network

	<p>provider needs to comply with and what type of evidences are required to show their compliance?</p> <ul style="list-style-type: none"> • HCIS standard is available for private network, can CST clarify how this would translate for public networks and if there are any specific guidelines to consider? • Can CST share any security SLAs that will be expected? (protection against intrusion, reliability, data security, etc.) 		
19	<p>The IM requires the applicant to 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”</p> <p>A certain company has an established information security management system (ISMS) in compliance with ISO 27001 Standard that is already certified. Can CST clarify the requirements pertaining to the ISMS?</p>	5.24, 5.25, 5.26	<ul style="list-style-type: none"> • The ISMS must be compliant with ISO 27001 and apply to the 450 MHz network. In case such an ISMS is already in place for other parts of the organization of the applicant, it is sufficient to summarize the ISMS and explain how this system will be extended to the new network and services.
20	<p>Would it be possible for CST to define predefined type of building size (sqm) and estimated number of antenna per building? We believe this would maximize transparency among applicants in the Indoor coverage scoring</p>	5.30	<ul style="list-style-type: none"> • The maximum prices for indoor coverage (Section 5.36) are for equipment only and should be quoted on a per-unit basis. • If an interested party requests the 450 MHz network provider to provide a quote for an indoor solution at a specific location, the quote can be customized to that location as long as the maximum

	criteria by allowing bidders to provide an adequate affordable price for a specific building type and avoid cost discrepancy due to missing target configuration.		prices for the needed equipment do not exceed the maximum per-unit prices quoted in the application.
21	Can CST confirm that the speeds mentioned in paragraph 5.31 (Data 1 and Data 2 services) refer to download speed?	5.31	<ul style="list-style-type: none"> The data rates mentioned in paragraph 5.31 refer to both the Downlink and the Uplink.
22	<ul style="list-style-type: none"> Is there a consideration by CST where the prices of the services would be contingent to the investment incurred? (i.e. can there be multiple options for the service prices based on different investments scenarios) 	8.4	<ul style="list-style-type: none"> No, applicants should only include a single price for each criterion and provide them in the table format requested in the IM.
23	The weights of the repeater score and base station score are flipped in the English and Arabic versions. Can CST clarify which component has a score of 67% vs 33%?	8.2	<ul style="list-style-type: none"> In case of any discrepancy, the Arabic version is the prevalent version as CST has provided the English document as a supplementary translation. Having said that, the text in 8.7 (b) is correct but the formula underneath it needs to be corrected. The Indoor Base Station has a weight of 67% while the Indoor Repeater has a weight of 33%
24	In the scoring details, CST is equating investment in network infrastructure to number of base stations – does that mean that no bidder can propose for any brownfield reuse, and all base stations must be mandatorily built afresh?	8.3	<ul style="list-style-type: none"> By number of base stations, CST is referring to the number of sites where the 450 MHz band is deployed. This can be on both existing and new sites.

25	<ul style="list-style-type: none"> Is there an expected format of the signed declaration? Could CST please share if so, or specify what such declaration needs to include? Can CST clarify the weightage split between the three indicators in section 5.6 a, b, c pertaining to the consortium score? Can CST clarify if the presence of a consortium member with a Unified telecommunication s Service License is favorable and if it contributes to improving the consortium score? Can CST clarify if the equity share of consortium members should depend on the relative number of connections of each member? 	5.8	<ul style="list-style-type: none"> Section 5.8 is on interconnection and does not mention a signed declaration. The declaration that applicants need to sign as part of their application is included in Annex 2 of the IM. Second point: Again, it is unclear which Section this point is referring to. Please clarify. Third point: The mere presence of a USL holder in the consortium does not in and of itself improve the score of a consortium. Fourth point: It is up to the consortium members to determine how to split equity in a joint venture provided that the entity applying for the license meets the eligibility criteria set out in Sections 6.2 and 6.3.
26	Can CST please share the weightage split between the consortium score and user interaction score that make up score D?	8.9	<ul style="list-style-type: none"> The % points allocated in Table 11 are based on engagement with users (evidenced through commitment letters) and/or the number of consortium members. For 10% - 30% and 40% - 70%, user interaction and consortium members are equal weighted, E.g. to achieve a score of 10% - 30%, the applicant would need to demonstrate either 'limited engagement with users' OR have a consortium member who is a 'small user'. In order to get a score of 80 - 100%, the applicant would need to demonstrate both, extensive engagement with users and multiple consortium members that are large users.
27	Can CST please provide coverage areas polygons for both Tier-I and Tier-II areas?	8.4	<ul style="list-style-type: none"> The locations of the industrial cities can be accessed through "MODON" webpage: https://modon.gov.sa/ar/Cities/IndustrialCities/Pages/default.aspx For detailed information on the cities and their borders, please contact "MODON" through the following Liaison: mraqibah@modon.gov.sa

28	<p>Is there a consideration for CST to introduce mandates for all the business critical communication service users to migrate to 450 MHz?</p>		<ul style="list-style-type: none"> • CST will support the migration of the existing PMR licensees to the new network while ensuring their critical operations are ongoing.
29	<p>Can CST please clarify if the total minimum throughput Downlink (DL) + Uplink (UL) is 1 Mbps or 1Mbps for each traffic side, i.e., DL=1Mbps and UL=1Mbps. Considering the target connection type, services and the limited total bandwidth (5MHz), stc recommends to limit the minimum requirement to Downlink throughput only (1Mbps) with best effort for the uplink knowing that requesting 1Mbps as a minimum throughput for the uplink will require a high number of sites with limited business upside?</p>		<ul style="list-style-type: none"> • CST understands that while an Uplink data rate of 1 Mbit/s is ambitious, it is important for the evolution of these services that users have access to such data rates if required. CST would like to clarify that the speed requirement is for outdoor use only. Services that require this speed may be marketed at a premium price. For this reason, CST has requested applicants to submit two price caps for data services: one for a minimal data service (200 kbit/s) and one for a more premium service (1 Mbit/s).