



هيئة الاتصالات وتقنية المعلومات
Communications & Information
Technology Commission

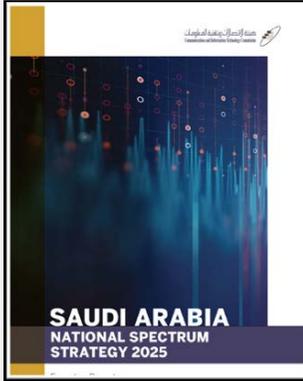
Enabling Innovative Use of Spectrum

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DSA 2021 Global Summit

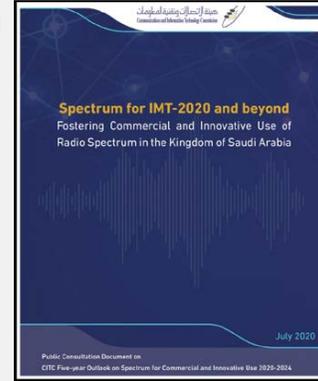
9 June 2021

INPUTS



Saudi Arabia National Spectrum Strategy 2025

This document provides guidance on high-level strategic considerations Spectrum Outlook implements these to the greatest extent possible



CITC Spectrum consultation

66 responses from:

- Academics
- Government agencies
- Mobile operators
- Verticals
- Satellite operators
- Industry associations
- International technology companies
- International consultants

OUTPUTS



Consultation Report

In-depth summary of consultation responses and CITC's analysis, providing rationale for CITC's decisions

Values:

- Transparency
- Predictability
- Evidence-Based, Data-Driven Policy Decisions

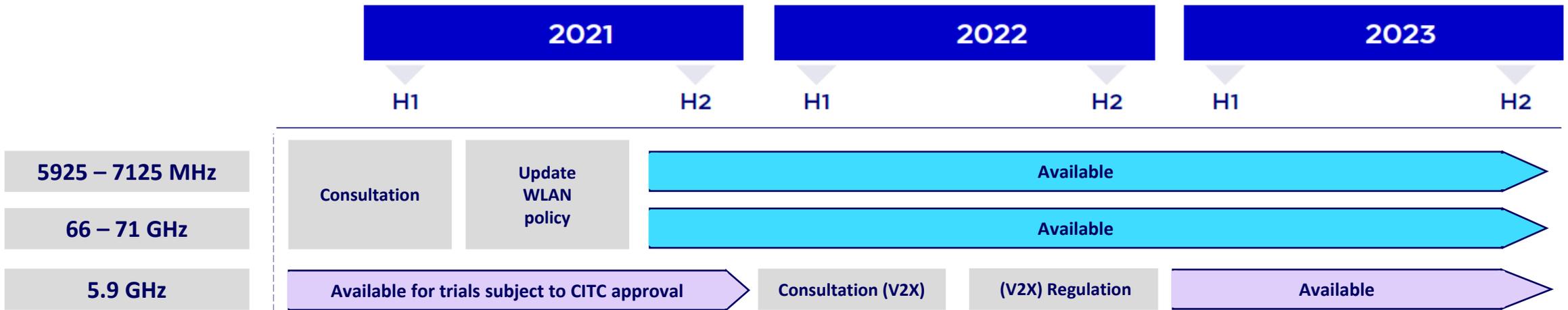


Spectrum Outlook for Commercial and Innovative Use

Plan for spectrum releases between 2021 and 2023, to enable technologies of the future like 5G, broadband satellite and new generation of WiFi to have fair access to spectrum, and adopt innovative spectrum management regimes

Newly Available Spectrum





Release entire 6 GHz band on a license-exempt basis in 2021

- Saudi Arabia will be able to tap into a growing ecosystem
- We may allow higher power outdoors, but users will have to register their use

66-71 GHz

- License-exempt use by technologies such as Terragraph

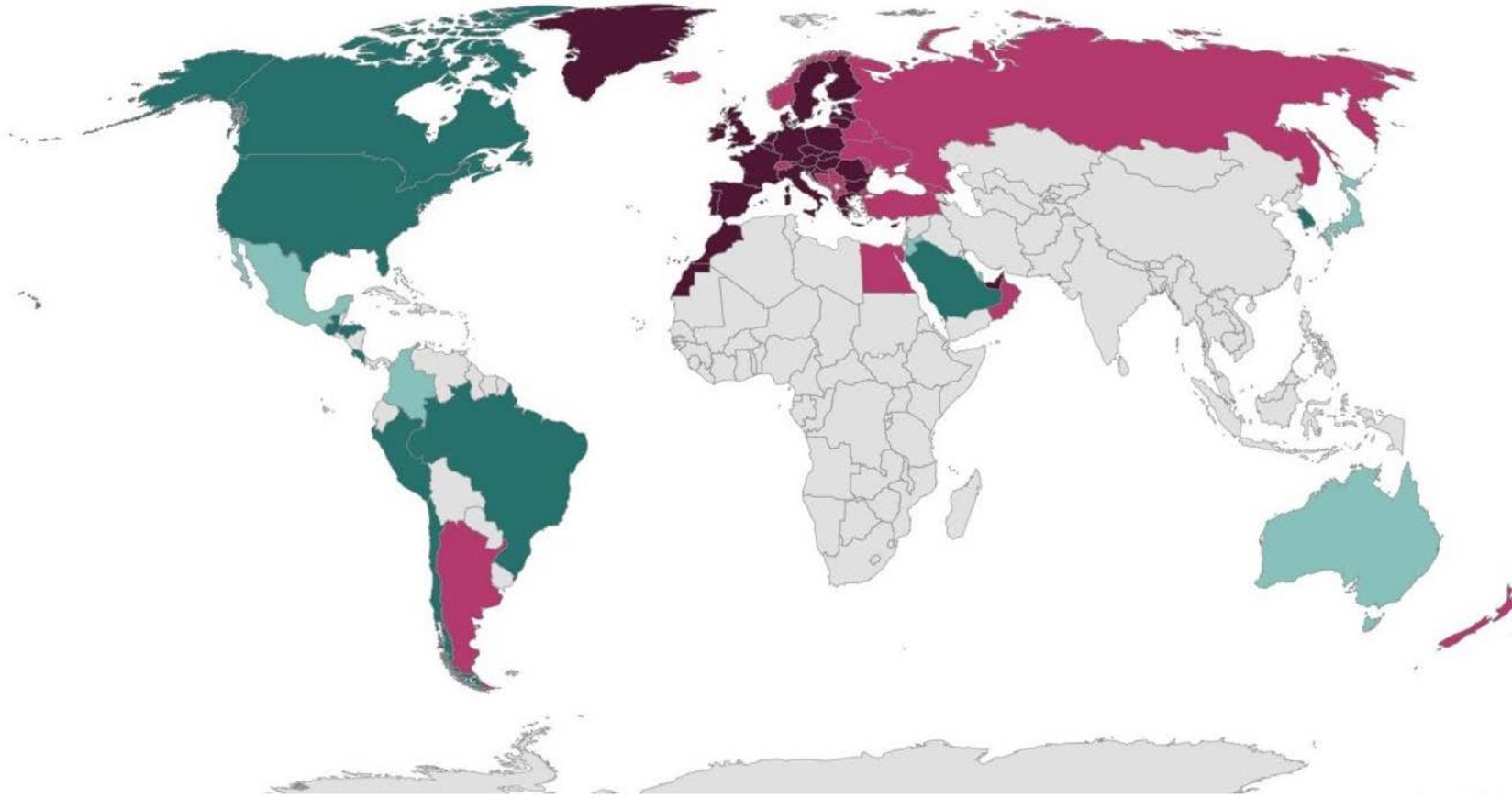
5.9 GHz

- Consult on unlicensed use in early 2022
- Ecosystem expected to develop rapidly

A recent study, conducted by Cisco, pointed that more than 60% of the total mobile data will be offloaded through WiFi¹

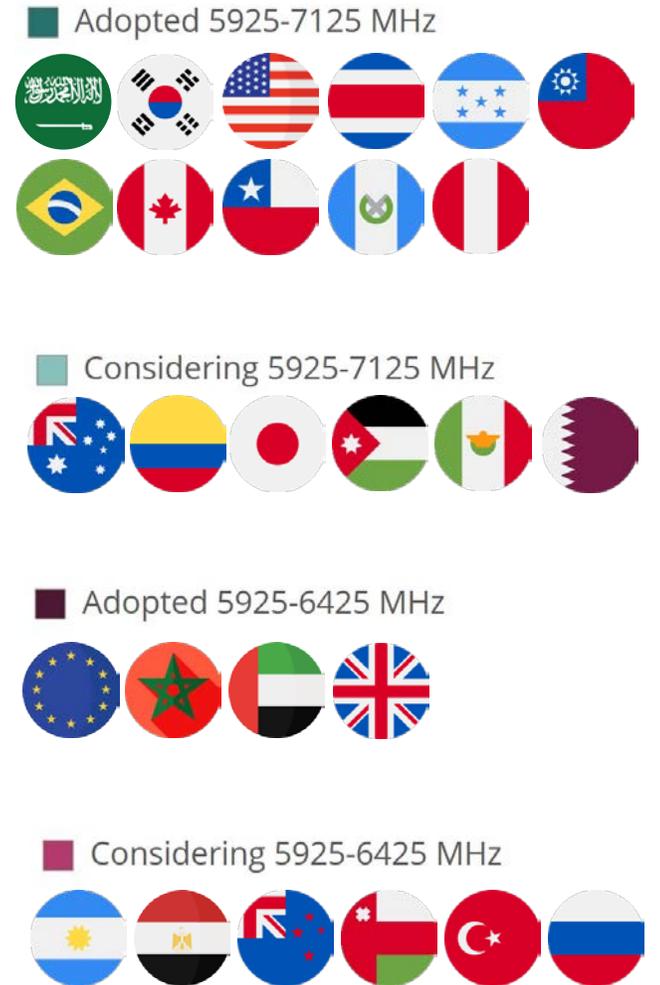
Co-existence through technologies that listen before talk is the way for the wireless future

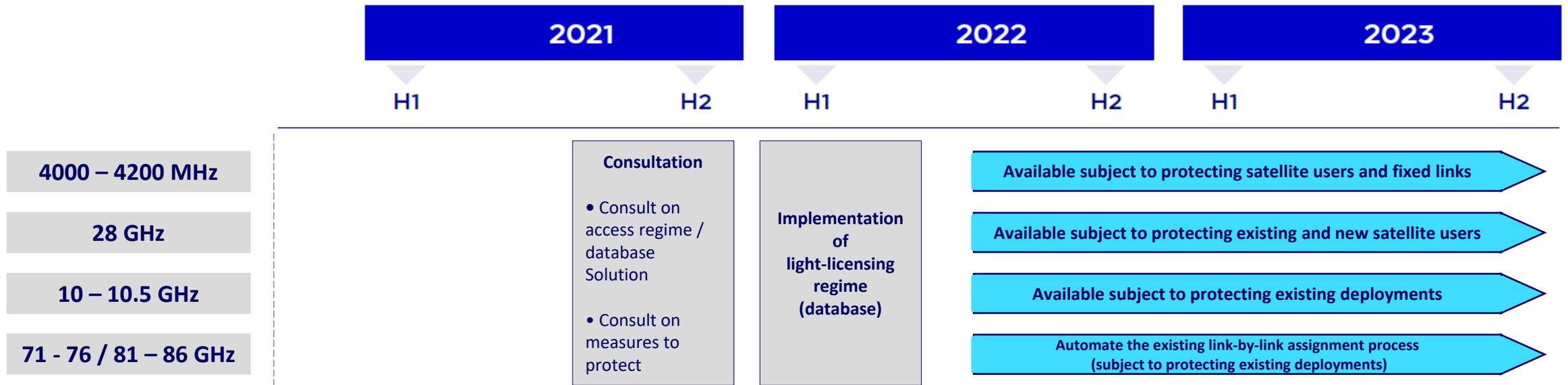
Gaining WiFi Leadership, while Maintaining 5G Leadership



Source: Countries Enabling Wi-Fi 6E, WiFi alliance

Balancing between IMT and WiFi, a total of almost 900 MHz spectrum, is exclusively reserved for IMT in the mid-band. That amount of spectrum is more than sufficient For IMT in the mid-Band.





Automated databases and Spectrum Access Systems for White Spaces

Trusted databases contain real-time information about local spectrum and the frequencies that are available for shared access. Users can dynamically access the database and choose frequencies that avoid harmful interference.

Commercial/ Government spectrum sharing scenarios

Sharing between dissimilar users can achieve great efficiency gains in spectrum utilization, without the need for lengthy spectrum clearance processes.

1900 – 1920 MHz
2010 – 2025 MHz

Test licence

1

Test & Trial license schemes address two separate target groups

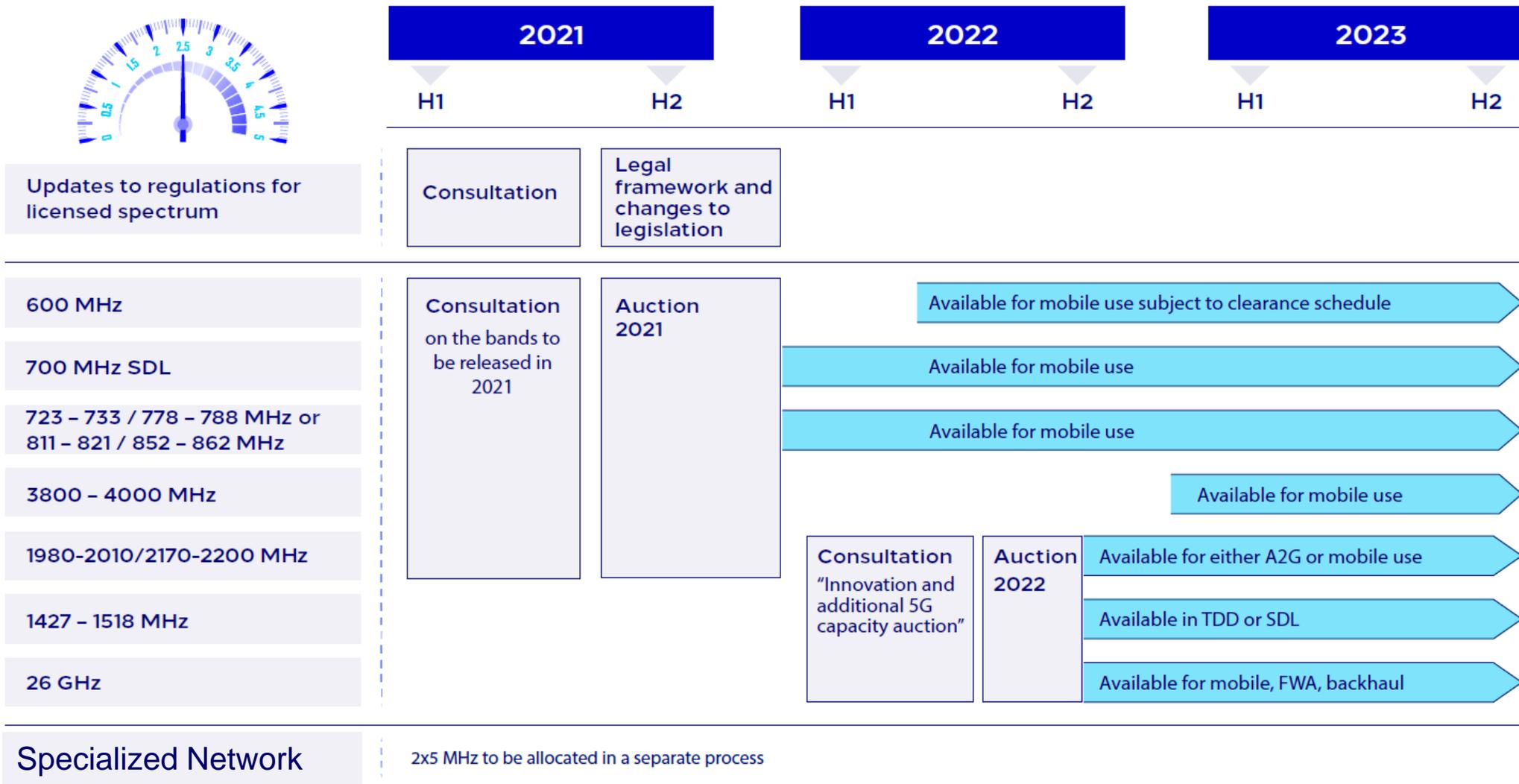
2

Trial licence

- Research & develop potential wireless innovations and analyse their performance in a real world wireless environment
- Assess the technical characteristics of perspective commercially available solutions and assess their suitability for local conditions

- Test actual market demand for a novel solution or service offering, and assess market take up before committing to an expensive full scale deployment
- Benefit from immediate first mover advantage, as the system is already 'soft launched' when big investment decisions are made

Roadmap for Licensed Spectrum



Spectrum Auction to Enable Disruptive Players and Innovative Technologies

Consulting about Spectrum Auction to be held in Q4 -2021 and include 450, 600, 700, 2100 and 3800 MHz bands

CITC is seeking input from national and international parties who may wish to acquire spectrum, enter the market or provide services

<https://www.citc.gov.sa/en/new/publicConsultation/Pages/144205.aspx>



Closing Date
for Responses

8 July 2021

CITC is exploring holistic design the auction to allow fair chance to all technology providers, both terrestrial and non-terrestrial networks (NTN) to have access to spectrum, and ensure Saudi Arabia's digital transformation will make good use of many wireless technologies and allow digitization for Industrial Sector.

