



هيئة الاتصالات والفضاء والتقنية
Communications, Space &
Technology Commission

Regulation to Enable Innovation:

Indoor Connectivity

%75



Indoor Communication Usage

The use of communication services inside buildings represents 75% of total usage.

X3



Data Consumption Rate

The per-capita data consumption rate in the Kingdom exceeds the global average by three times.

%98



Internet Penetration in the Kingdom

The Kingdom's internet penetration rate is 98%, compared to the global average of 66%.

Telecommunication services are a key enabler of the **digital economy** in many vital sectors.



Education



Healthcare



Gaming

Vision 2030 Projects

1

Multiple giga projects that needs a future proof telecom services



Global Events

2

Global events that requires state-of-the-art connectivity



Urban and Population Growth

3

Rapid growth in real estate development that requires regulations that ensures readiness of telecom services



+200 K per year



+100 per year

1



Infrastructure readiness

- Early stages

2



Clear roles & responsibilities

- Improved provider response

3



Unified technical requirements

- Standardized specs

International Practices

1

Several countries require in-building telecommunications readiness as a condition for property operation



2

Requiring buildings to be telecom-infrastructure-ready for the delivery of communication services



Local Practices

1

Electricity Service Provision Guide

Clarifies the roles and responsibilities between the service requester and the service provider, and outlines the requirements necessary for establishing and delivering electrical service to developments and facilities.



2

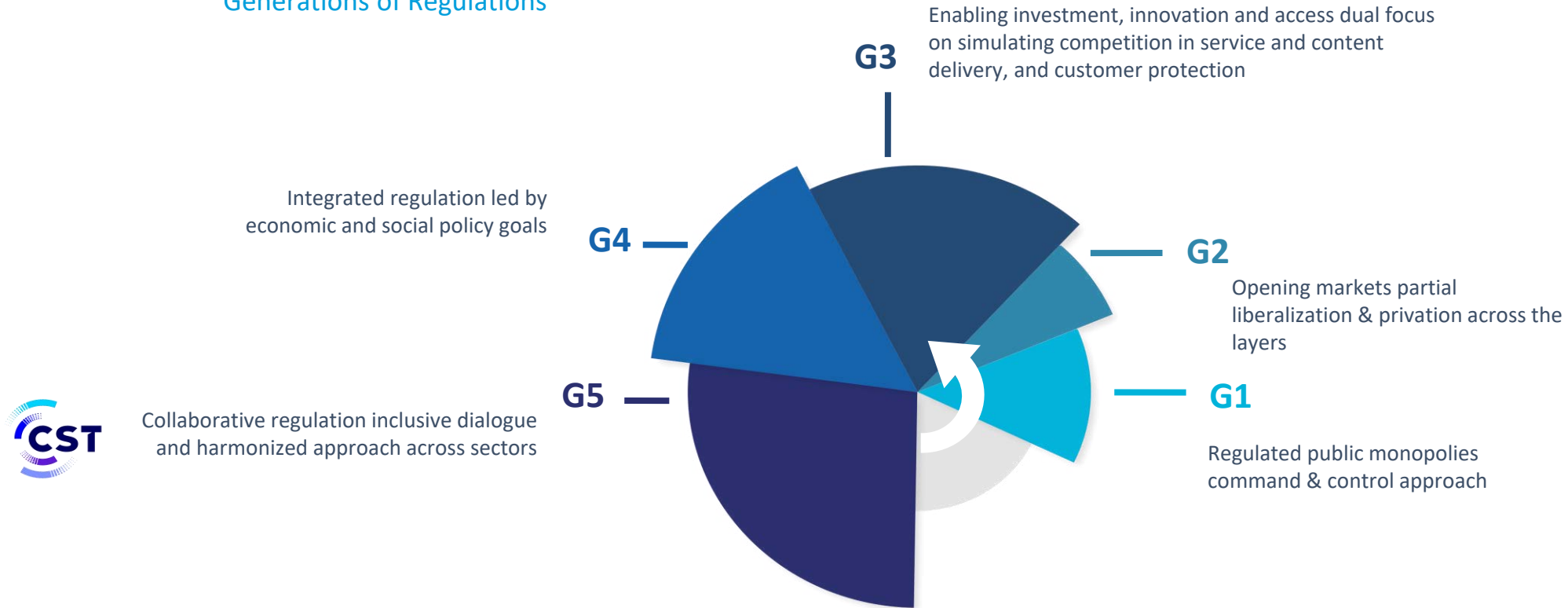
Water and Wastewater Service Provision Guide

Includes the requirements for connecting water and wastewater services to developments and facilities, defines meter locations, and specifies the requirements for service delivery.



National infrastructure policies and regulations need to be integrated

Generations of Regulations



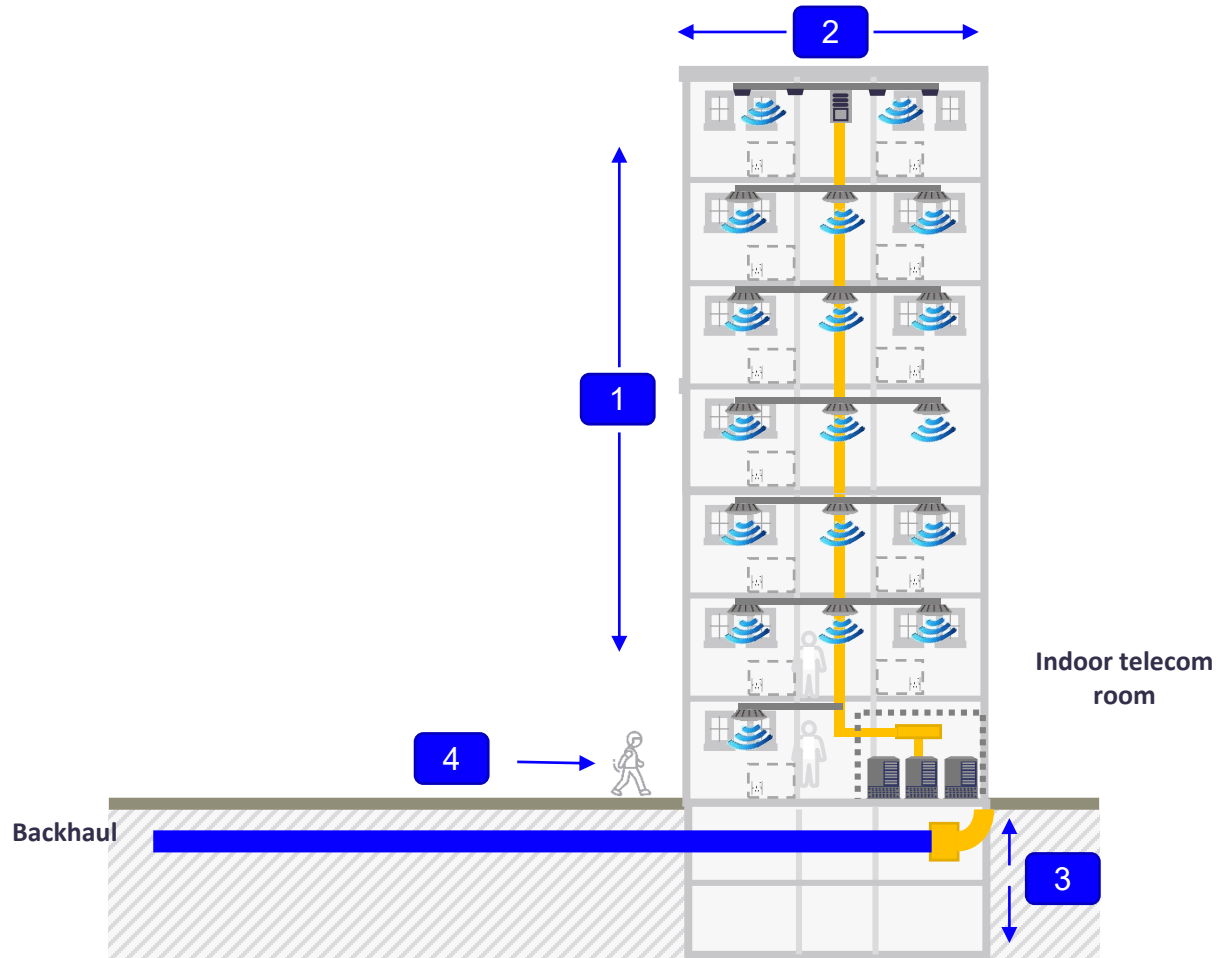
Regulations were issued outlining the mandatory requirements that property owners must follow to establish and provide telecommunication services in the real estate



Regulatory framework key elements

1		Defining telecommunication services requirements based on the real estate type	
3		Requiring the establishment of the necessary technical infrastructure for providing telecommunication services	
5		Standardized service level agreement (SLA) between property owners and service providers	
7		Regulating the commercial relationship between the property owner and service providers	
2		Defining the roles and responsibilities between the property owner and the service provider	
4		Setting technical standards to ensure proper infrastructure implementation	
6		Ensuring the right of access for all service providers	
8		Mandating infrastructure sharing and preventing duplicate investments	

Criteria of buildings which require IBS:



- 1** Buildings which are (7) stories or more
- 2** Floor areas of any floor in the building is (3000) squared meters or more
- 3** Buildings which include two or more underground floors
- 4** Buildings which are designed to accommodate (1000) or more persons at the same time



The regulation includes technical standards which aims to enable building owners/developers to design and implement digital infrastructure according to a unified national reference guideline that is aligned with the Saudi Building Code and international best practices.

Telecommunications Pathways

Installing cable pathways and preparing the required spaces to achieve the following:

Ensuring building readiness for smart-building applications (monitoring, remote control, digital content, etc.)Enabling the provision of high-quality telecommunications services inside the building




Indoor Coverage Solutions

Preparing the required conduits and spaces to enable indoor coverage solutions to achieve the following

- Accommodating high data and communication traffic within the building
- Improving the quality of telecommunications services inside the building





1



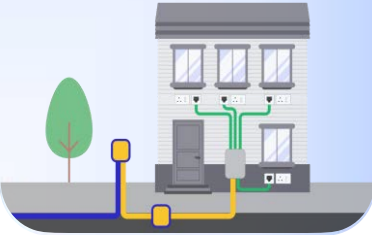
Regulation


The Saudi Building Code






Scope






Authority




الهيئة السعودية للمواصفات والمقاييس والجودة
Saudi Standards, Metrology and Quality Org.



كود البناء السعودي
Saudi Building Code


اللجنة الوطنية لكود البناء السعودي
Saudi Building Code National Committee


2



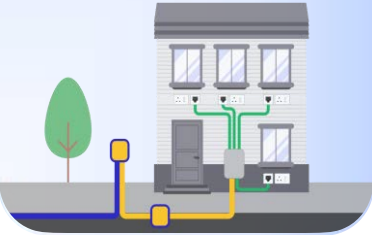
Regulation


Building Permit






Scope



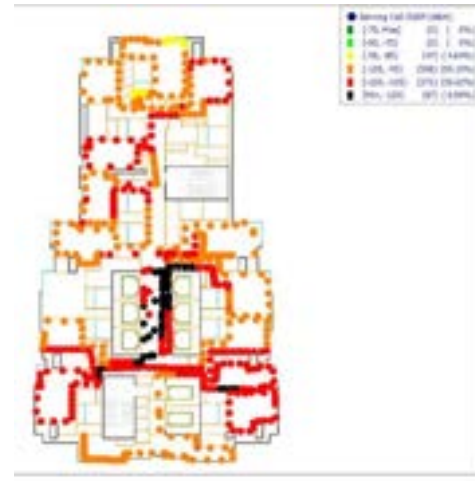


Authority



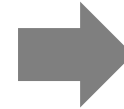
وزارة البلديات والإسكان
Ministry of Municipalities and Housing

Field measurements were conducted in several assets to evaluate the impact of indoor coverage availability



Before implementing indoor coverage solutions:

Poor coverage quality and limited service reach inside rooms



After implementing indoor coverage solutions:

Significant improvement in coverage quality and service reach across all floors

Quality of service

Poor Excellent



Expected Economic & Social Impact of Implementing the Regulations

Economic impact



Reducing the additional operational costs on the telecom sector



80+ million annually



Increasing the value of commercial properties (communications-ready buildings)



%3.1 increase (varies depending on building type)



Reducing the cost of establishing and upgrading telecom services



%30 in buildings & facilities

Social impact



Reducing complaints related to service quality



%20 Complaints related to poor service quality inside facilities



Improving overall telecom service quality



x6 in buildings & facilities



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Thank you

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