

WHY AND HOW WE CREATED A

# REGULATORY SANDBOX

هيئة تنظيم الاتصالات  
TELECOMMUNICATIONS REGULATORY AUTHORITY  
مملكة البحرين - Kingdom of Bahrain

The  
Concept

Premise

Current  
Situation

The  
Solution

Conclusion

# REGULATORY SANDBOX





# Proven to drive innovation in the financial industry



- Term first used by the Financial Conduct Authority (FCA) in the UK in 2015
- A staple initiative in forward looking financial regulators
- Operating in over 60 jurisdictions including Bahrain\* in the financial sector
- Main Purpose for running Regulatory Sandboxes
  - To keep up with markets
  - Better understand disruptive services and emerging innovations in the financial industry
- Other motives include the need to drive competition and attract more innovators to local markets

# Regulatory Sandboxes in Telecommunications

1

The Korean Ministry of Science and Communications Commission were the first jurisdiction to implement a sandbox for projects leveraged on emerging tech, however the regulatory mechanism was not implemented specifically to exempt regulatory framework for telecoms. Q4 2018

2

The National Broadcasting and Telecommunications Commission (the “NBTC”), Thailand established a sandbox regime to facilitate technology testing for businesses and in preparation for the adoption of 5G technologies in Thailand. 14 August 2019

3

CRC, Columbia lead the world's first Regulatory Sandbox for emerging tech, inclusive of regulatory exemption via temp licences and permits.  
17 - Jan - 2020

4

Brazil readies telecom regulatory sandbox based on Colombian model.  
29-Jan 2021

5

The Telecommunication Regulatory Authority (TRA), Oman announces the floating of a public consultation on “Regulatory Sandbox”  
7 Feb 2021.

**Every strategic  
Document compels  
us to undertake  
initiatives directed  
towards innovation**

2030  
Vision

NTP5

TRA's  
FOCUSED  
Strategy

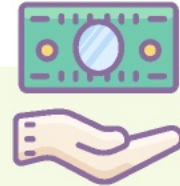
# 2030 Vision

## Aspirations for:

### Economy

Robust Economic growth that benefits the people

- Opening up Bahrain's markets ever more fully to expose our companies to process innovations and best practices
- Continue to attract foreign investment, which drives process innovation and knowledge transfer



### Government

An efficient and effective government

- Building strong strategic, forward-looking as well as operational implementation-focused capabilities in all govt institutions
- Public sector becomes more productive and is accountable for delivering better quality services via leaner organizations and operations



### Society

A just and thriving society

- A safe and secure environment
- Bahraini nationals and residents enjoy a sustainable and attractive living environment



2030  
البحرين  
BAHRAIN

# NTP5

## Key Policies for the Telecommunications Sector

### VI. Legal & Regulatory Framework

The Authority should complete its review of the **service licensing framework** and template licences, and suggest to Government, for consideration and approval any required amendments necessary to **ensure that this framework** and any template licences are **fit for purpose in light of sector developments**.

### VII. Developing the Digital Economy and the Telecom & ICT Ecosystem

- To maximise the opportunities offered by the growing digital economy, the Government wishes to ensure that the Kingdom **has the right business and regulatory environment to encourage investment in ICT related innovation and research and development (R&D)**;
- Gov't should **develop a national strategy, for Digital Transformation and Artificial Intelligence**
- In order to ensure that the Kingdom remains attractive to ICT stakeholders wishing to invest, it needs to **continue to ensure that its regulatory framework continues to reflect the evolving landscape**



# FOCUSED Strategy Framework

- F** **Foster Competition** Initiatives and **effective regulation that foster the continued growth and development** of the telecommunication sector by way of effective and fair competition.
- O** **Optimized Technologies** Initiatives that encourage the **adoption, deployment, and optimization of the latest technologies** that support the growth of the market and deliver higher quality of services to consumers.
- C** **Consumer Empowerment** Initiatives that provide knowledge and tools to **empower the consumers and enrich their experience** of the telecommunications services and to allow them to make well-informed decisions.
- U** **Ubiquitous Broadband** Initiatives undertaken to ensure that **broadband services of high quality and competitive prices** are available to all local stakeholders.
- S** **Security & Cyber Safety** Initiatives that **support a safe and secure** telecommunications infrastructure to deliver highly reliable Electronic Communication Services.
- E** **Efficient Regulator** Initiatives that **adapt, enhance, and update the framework, processes and tools** used by the Authority in the implementation of its duties.
- D** **Dynamic & Effective Regulatory Framework** Initiatives undertaken to **adapt regulations over time, with the aim of continuously reviewing, updating, and improving the telecommunication regulatory framework, and maintaining proportionate focus where necessary.**

# Benefits of a Regulatory Sandbox



Address regulatory barriers to beneficial innovation including legal uncertainty or restraint



better understanding and insight of new tech, product, service or business model



Change perception from regulatory obstacle/burden to collaborative and forward-leaning modern regulator



better equipped to handle new trend in tech and therefore a quicker time to market



Further tie in to the Government's direction to promote innovation.

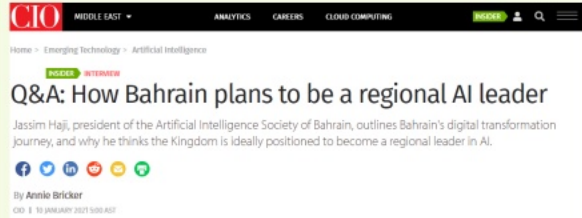
"TRA was not perceived as a visible player in innovation and future technologies let alone a champion of it"

Evidence

Reasoning

# We are not in the conversation

10 January 2021 - Interview with Dr. Jassim Haji -  
President of Bahrain Artificial Intelligence Society



"Much of Bahrain's success in digital transformation is the result of robust government-supported initiatives. In line with the government's overarching Digital Strategy 2022, central authorities such as the **Information and eGovernment Authority, Tamkeen (a public authority engaged in modernizing the labour market), the Central Bank of Bahrain, and the Economic Development Board** have all launched initiatives with the aim of bolstering local development of artificial intelligence technologies, robotics, and biotechnology."

"Applications include smart roads and traffic management, as well as smart airports, buildings, schools, and hospitals."



هيئة تنظيم الاتصالات  
TELECOMMUNICATIONS REGULATORY AUTHORITY  
Kingdom of Bahrain - مملكة البحرين





**Tech & Innovation players did not have the regulator on its radar**

"TRA is not perceived as a visible player in innovation and future technologies let alone a champion of it"

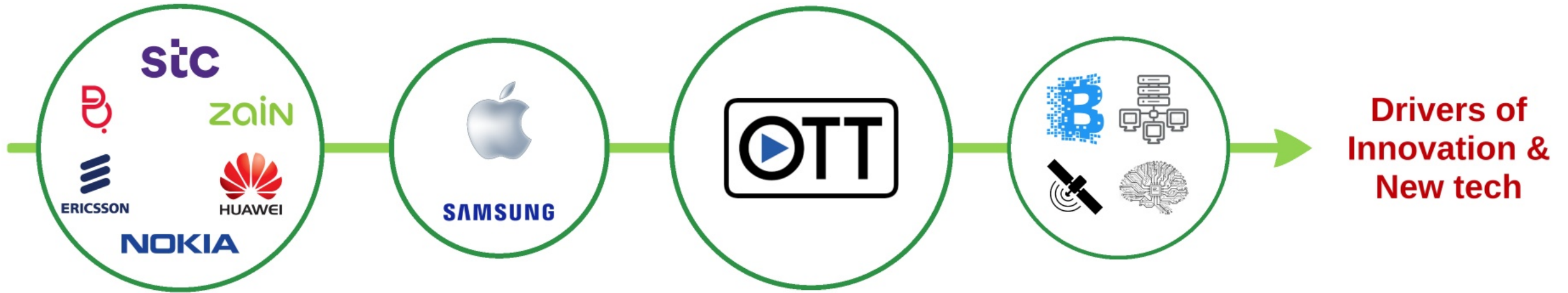
However...



**What we do very well, is listen...  
to innovators**



# Innovation Timeline





# Weaknesses / Strengths

## Weakness

No visible presence

Regulatory burden/obstacle

Obsolete regulatory regime

Lack of knowledge

## Strength

Champion of innovation

Collaborative player & enabler

Modern and fit for purpose  
regulatory framework

capacity building and  
Increased knowledge.

# The Regulatory Sandbox

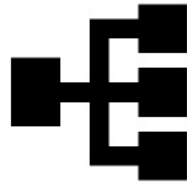
Design  
Elements

Strategic  
Partnerships

# Regulatory Sandbox Design Elements



## Eligibility



## Governance



## Timing



## Test Restrictions



## Exit

### Description

Defines who can participate and ensure level playing field across all market participants

Defines the Internal operating structure, roles, responsibilities and key operational processes

Duration of admission window  
Duration of test

Limits to the scope, scale, and/or conduct of sandbox to minimize potential harm

Individual test outcomes including graduation, terminated test, etc  
Program level KPIs  
Incorporation of insights and lessons learned into the broader regulatory agenda

### Details

- Open to incumbents only
- Open to newcomers only
- Open to non-telecom service providers (eg tech and regtech)

- Specialized sandbox unit
- Hub-and-spoke: a central point of contact coordinating sandbox inquiries with other units of the regulator

- Periodic admission (cohort-based)
- Permanent admission window (on-tap)
- Testing periods rang from (3 to 12 months)

- Number of clients
- Number of transactions
- Volume of transactions
- Geographical limits
- Consumer protection safeguards

- KPIs in terms of absolute output (no. of graduated firms)
- KPIs in terms of a regulatory change promoted

# Strategic Partnership Network

TRA

Public

Private

MTT

EDB

TAMKEEN

Telecom  
Based

Non-  
Telecom  
Based

# Conclusion

Section 55. d under key policy VII for "Developing the Digital Economy and the Telecommunications and ICT Ecosystem"

*The Government should **promote and support** facilities for research and **pre-commercial testing of technology, including 5G or Narrow Band ("NB") IoT technologies**. The Government should identify the **relevant initiatives to encourage innovation** in telecommunications and ICT and the digital economy, including the possibility of establishing an fund for this purpose, as well as **support public and private institutions undertaking R&D to encourage and facilitate R&D focused on telecommunications and ICT and the digital economy**, with a view to ensuring funding for research is appropriately prioritised on these areas.*

# The ultimate goal is to...

**Accelerate innovation, by lowering regulatory barriers to beneficial innovation and generate practical insights into appropriate regulatory and supervisory framework for promoting innovation and mitigating risks.**

**Add the sandbox as another specialized tool to other licensing approaches to enable evidence-based, outcome-oriented regulation and modernize our regulatory framework**

**Promote competition by the facilitation of licensing new entities and the approval of new services and stimulate growth in a digital economy**

# Thank You

