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المؤتمر الدولي الثاني والعشرون لإدارة الأصول والمرافق والصيانة The 22<sup>nd</sup> International Asset, Facility & Maintenance Management Conference

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# Transforming Telecom Passive Infrastructure OPERATIONS

Unified Platform for Enhanced Operations

26-28 January 2025

The Ritz-Carlton Jeddah, Kingdom of Saudi Arabia

An Intiative By Organized by



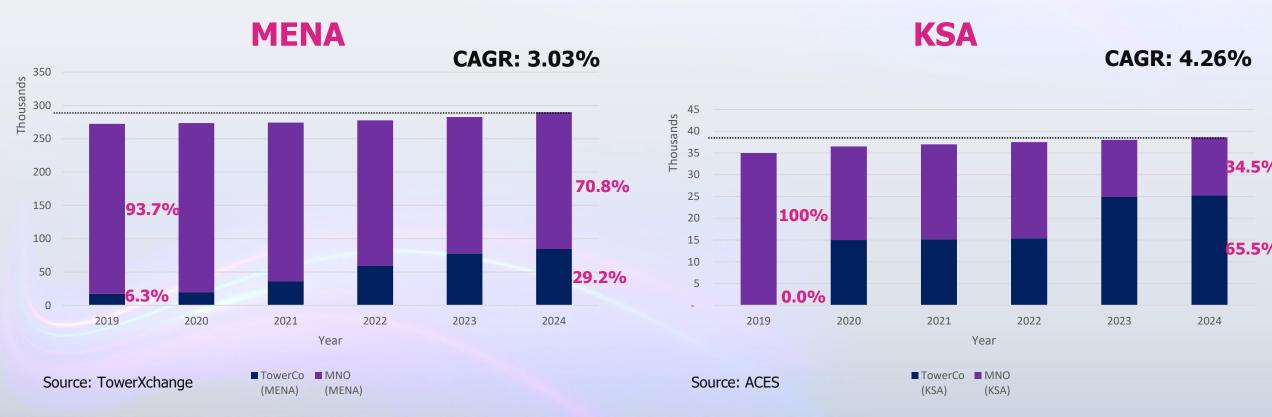
# Passive Infrastructure Operations for Mobile Network Operators (MNO)

- Fragmented Passive Infrastructure Management
   Not a core business for MNO.
- Significant Impact of Passive Failures on telecom network availability
   Local and international fact.





# YoY evolution of towers and towers ownership



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#### **KSA MNOs and TowerCos assets** footprint



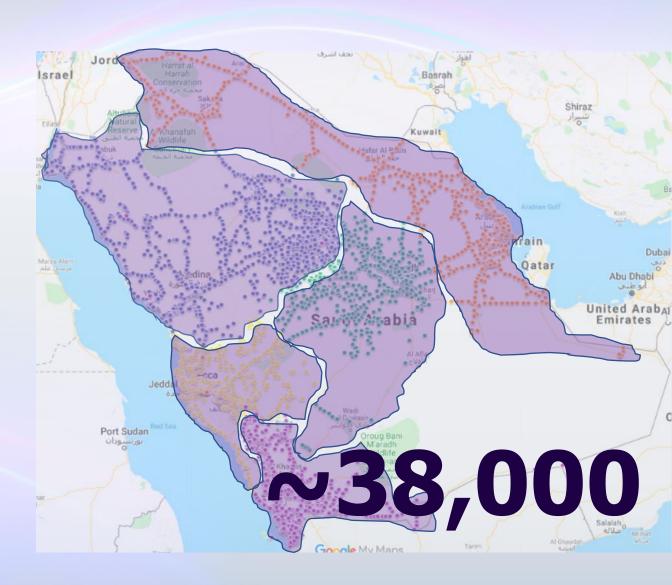








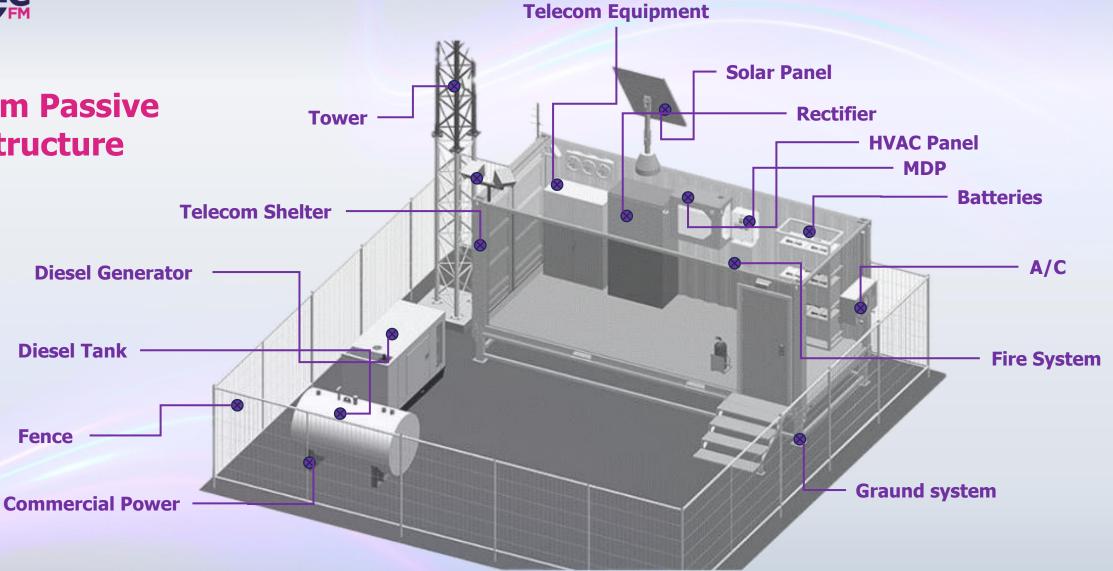




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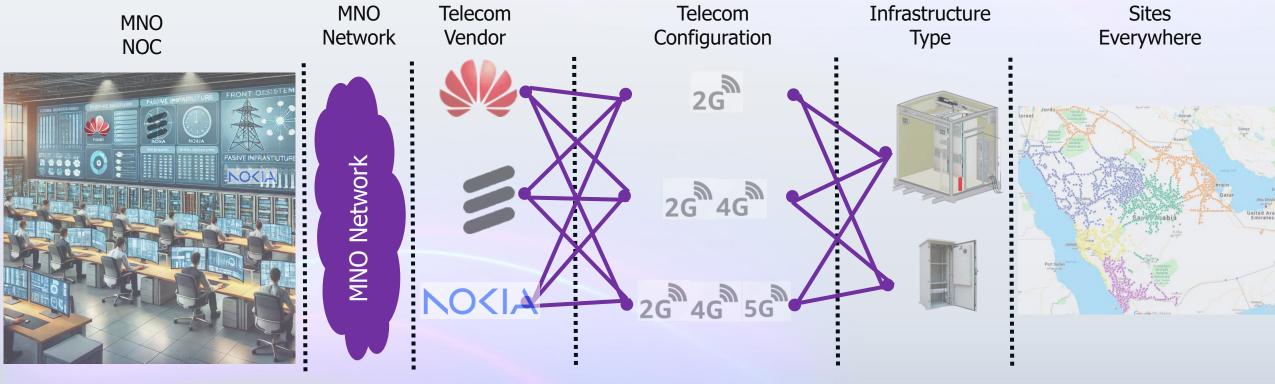
#### **Telecom Passive Infrastructure**



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# **Telecom Passive Infrastructure Monitoring (NOC)**



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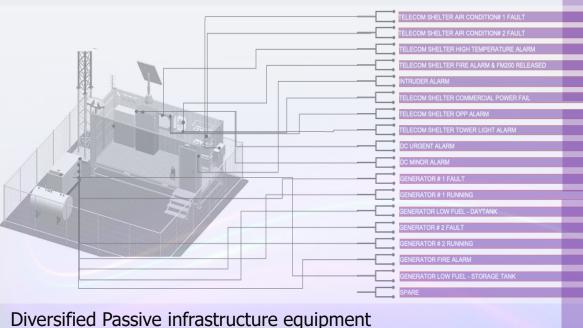
- Single-domain, Singel vendor analysis
- Single-domain RCA
- Handling Policy delivered to the root fault domain for each vendor

- Ticket storm handling
- · Ticket assigned to Alarm
- Ticket delay manual correlation

**Alarm Monitoring** 

**Ticketing** 

**Understanding the Passive Infrastructure-Problem Statement** 



Passive Equipment With limited Remote Monitoring Capabilities

Alarm Noise Fault 1 reduction Aggregation Fault 2 Alarm HUAWEI Fault N Alarm Noise Aggregation Fault 1 Alarm Fault 2 **NOKIA** Fault N Alarm Noise reduction Fault 1 Alarm Fault 2 Fault N

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Source: ACES, TM Forum



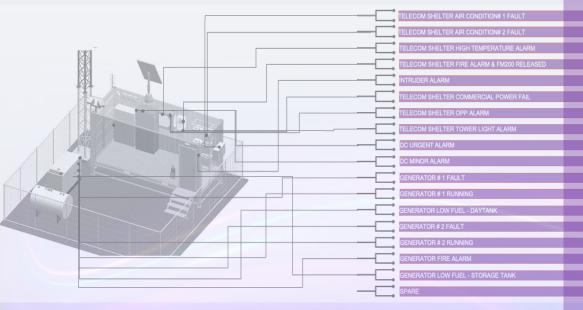
- · Multi-domain, multi vendor analysis
- Multi-domain RCA
- Handling Policy delivered to the root fault domain

- Ticket storm handling
- Ticket correlation/recall
- Ticket delay analysis

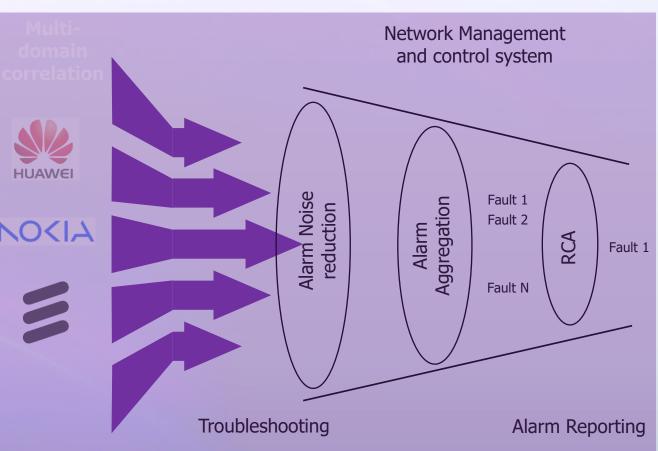
#### Alarm Monitoring

Ticketing

# **Understanding the Passive Infrastructure- Solution Overview**



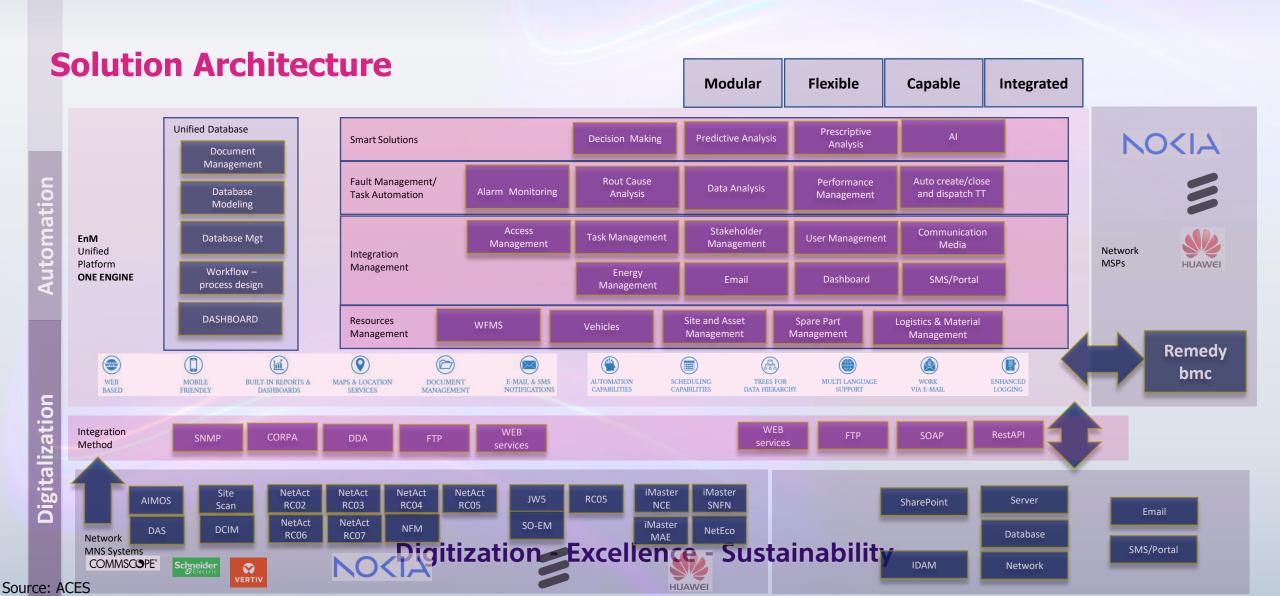
Diversified Passive infrastructure equipment
Passive Equipment With limited Remote Monitoring Capabilities



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Source: ACES, TM Forum







#### **Digitization & Automation to improve operations efficiency**

#### **Reduce Demand**

### **Robotic Operations**

### Field Operations Consolidations

## Multi OEM scope Optimization

### **Operational Excellence**

- Expedite
   connecting to
   more relaiable
   energy sources
- Optimizing resources capacity

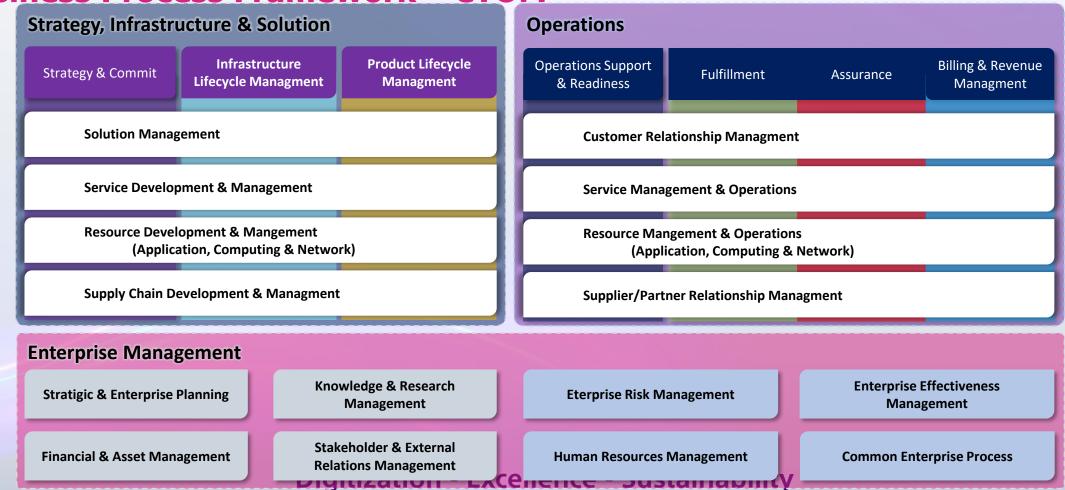
- Maximizing the digitization and automation of field operation, truble ticketing, reporting, alarms correlations and customer experience.
- Consolidated field operations
- Multi skilled field operations.

- Adopt E2E network monitoring
- System integration and activities unifications and automations.
- Harmonize and optimize the SLA cross the nation
- Build the right services assurance architecture, dashboards, KPIs, and report the right info to the right level of management.

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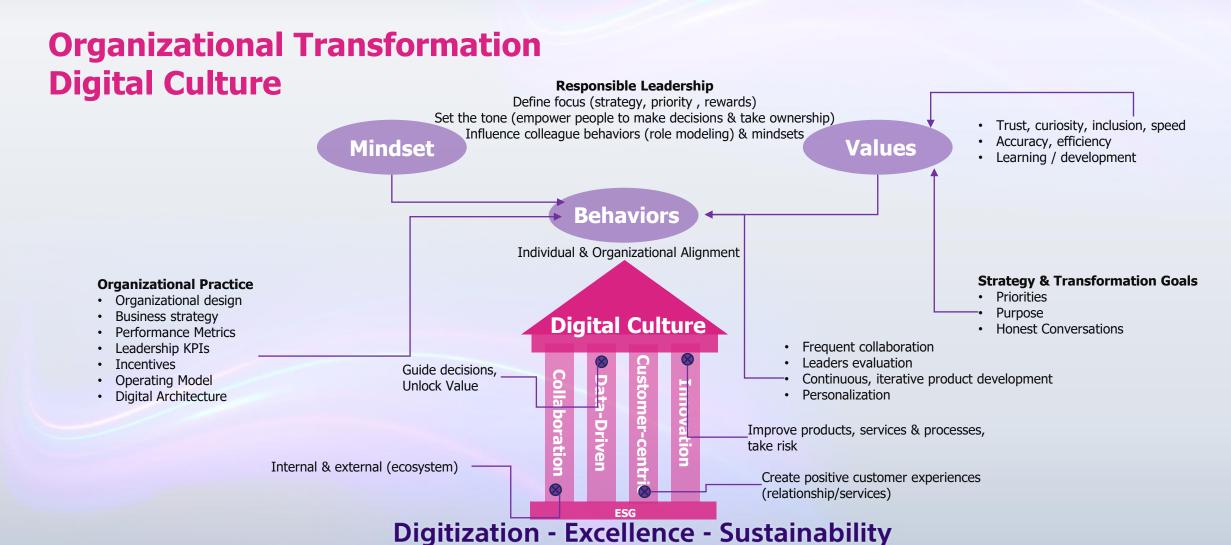


#### **Business Process Framework – eTOM**



Source: TM Forum





Source: TM Forum



#### **Sustainability Toolkit** By CST

- **Unified System's Contribution** to Sustainability Goals
- **Alignment with CIRCLES Pillars**
- **Broader Sustainability Impacts, Saudi Vision 2030**



What is sustainab

**Environmental Protection** 

How do ICT contribute to sustainability?

**Economic Prosperity** 



**Sustainability** 

**Social** 





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## **THANK YOU!**

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