



Ministry of Digital Technologies of
the Republic of Uzbekistan

Monitoring the Quality of Telecommunication Services in Uzbekistan





Digital Uzbekistan 2030: Goals and Prospective Strategies for 2030

Social Facilities

Achieved 100% coverage of all **educational institutions, kindergartens, healthcare institutions, police stations, local community administrations** with broadband internet in **2022**



Households

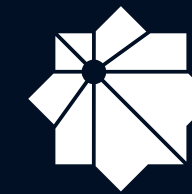
100% coverage of broadband internet for residential areas and households

Populated Areas

100% coverage of all populated areas with broadband mobile networks

E-Government Services

Offer 90% of e-gov services through the Unified Portal of Interactive Public Services



Alignment with the UN Sustainable Development Goals

9.1 Develop sustainable, reliable, and resilient infrastructure to support economic growth and well-being, ensuring affordable and equitable access for all.

9.a Support infrastructure development in developing countries by providing enhanced financial, technological, and technical assistance, to landlocked developing countries, and small island states.

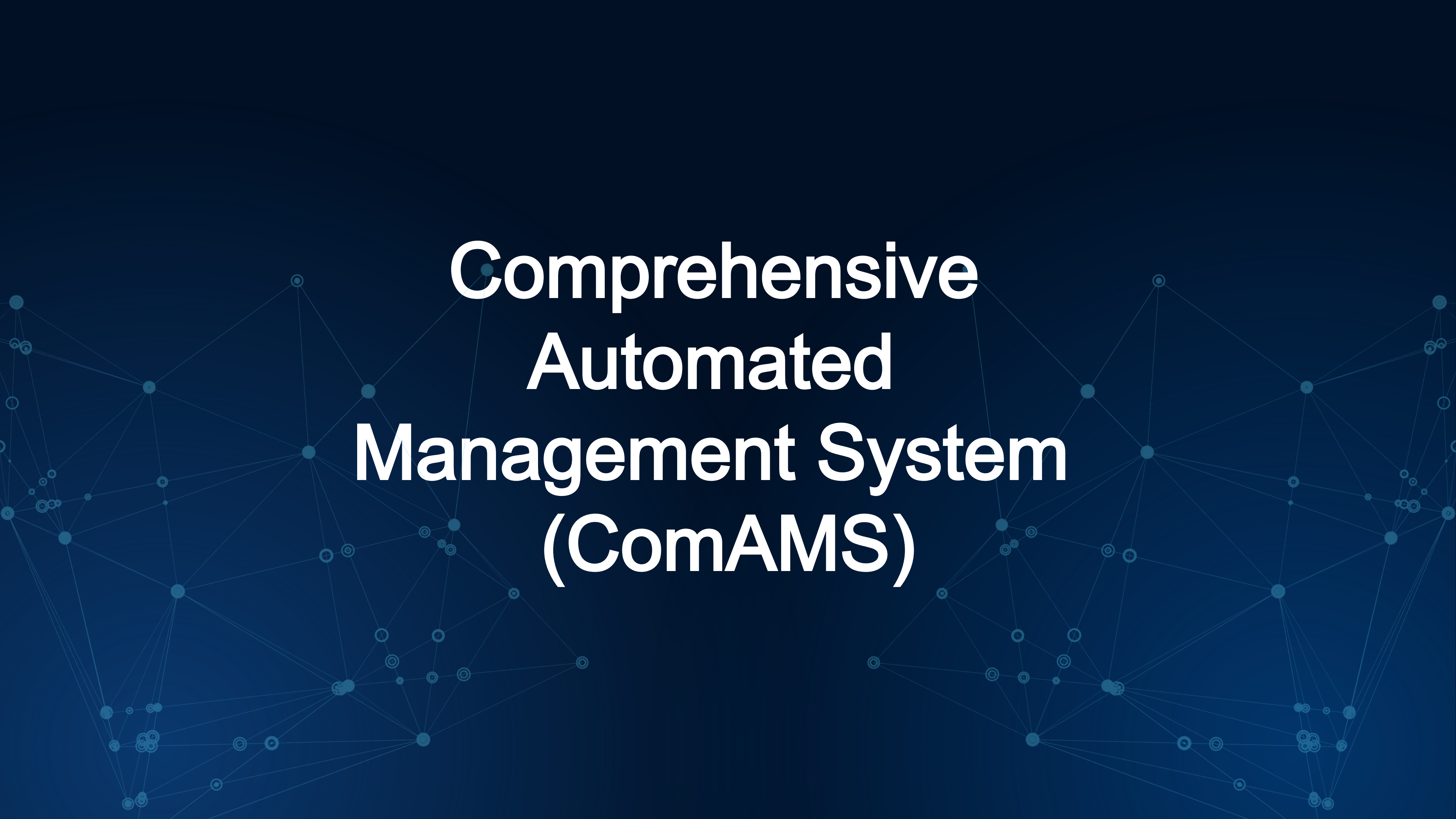


A New Approach to Monitoring Service Quality

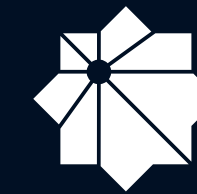
Quality of Service
Monitoring Project

Following ITU's
recommendations

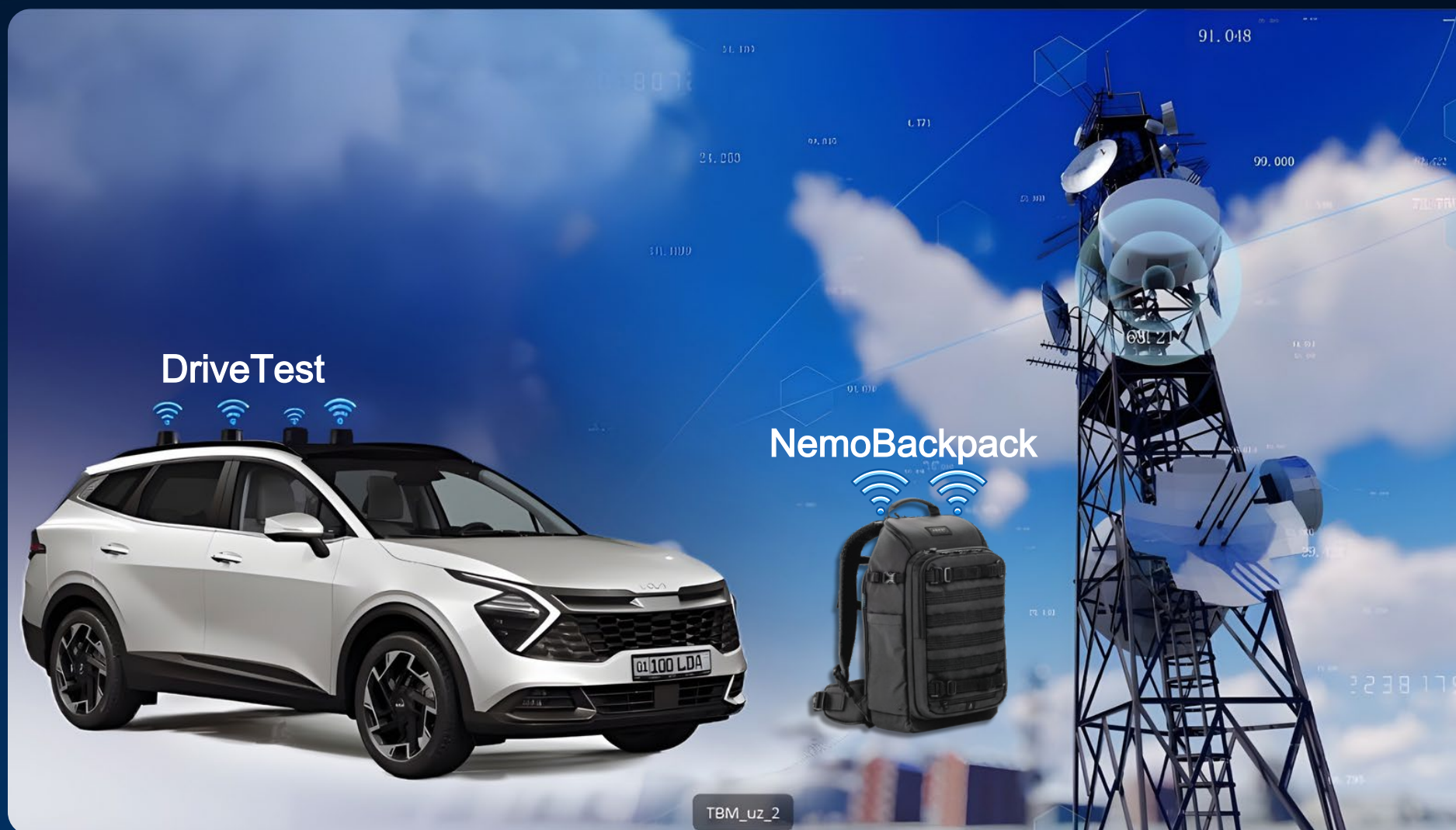
Self-Analysis using
objective data

The background features a complex, abstract network diagram. It consists of numerous small, light-blue circular nodes connected by thin, light-blue lines. These nodes and lines are distributed across the entire frame, creating a sense of interconnectedness and data flow. The overall aesthetic is technical and modern, typical of a digital or network-themed presentation.

Comprehensive Automated Management System (ComAMS)



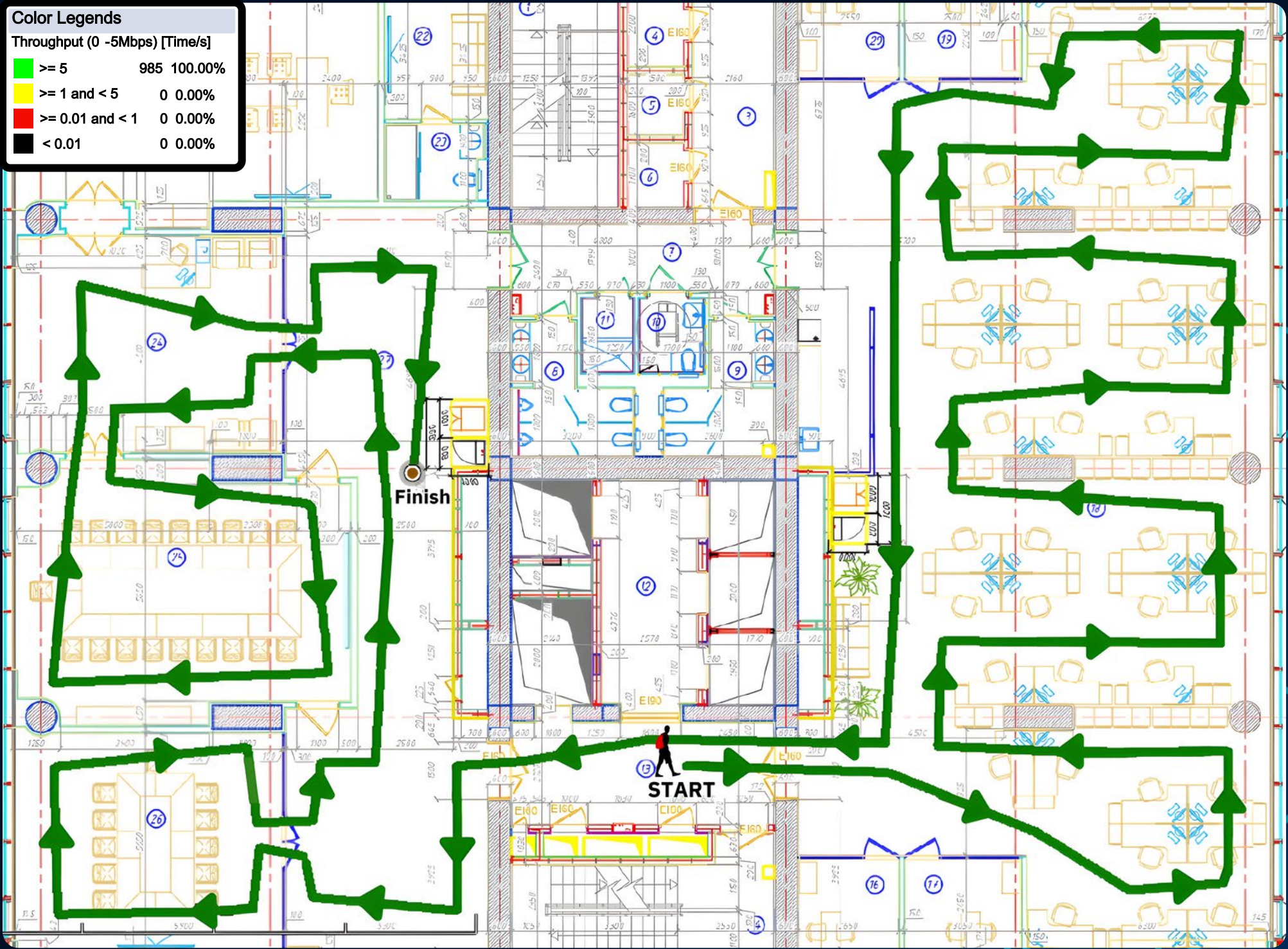
Methods of Measuring Service Quality - DriveTest



- For traveling across the republic using vehicles (**DriveTest**) equipped with special telephone devices and PCTEL OP 451 scanners, operating in the 450 MHz – 6 GHz range. GPS Navilock NL-8012U antenna devices.
- Measurement work in hard-to-reach areas (such as buildings, markets, mountainous regions, etc.) is carried out using the **NemoBackpack** device, which is equipped similarly to DriveTest.



Measurement with NemoBackpack



Mobile Data

Measurement on DriveTest – Samarkand City

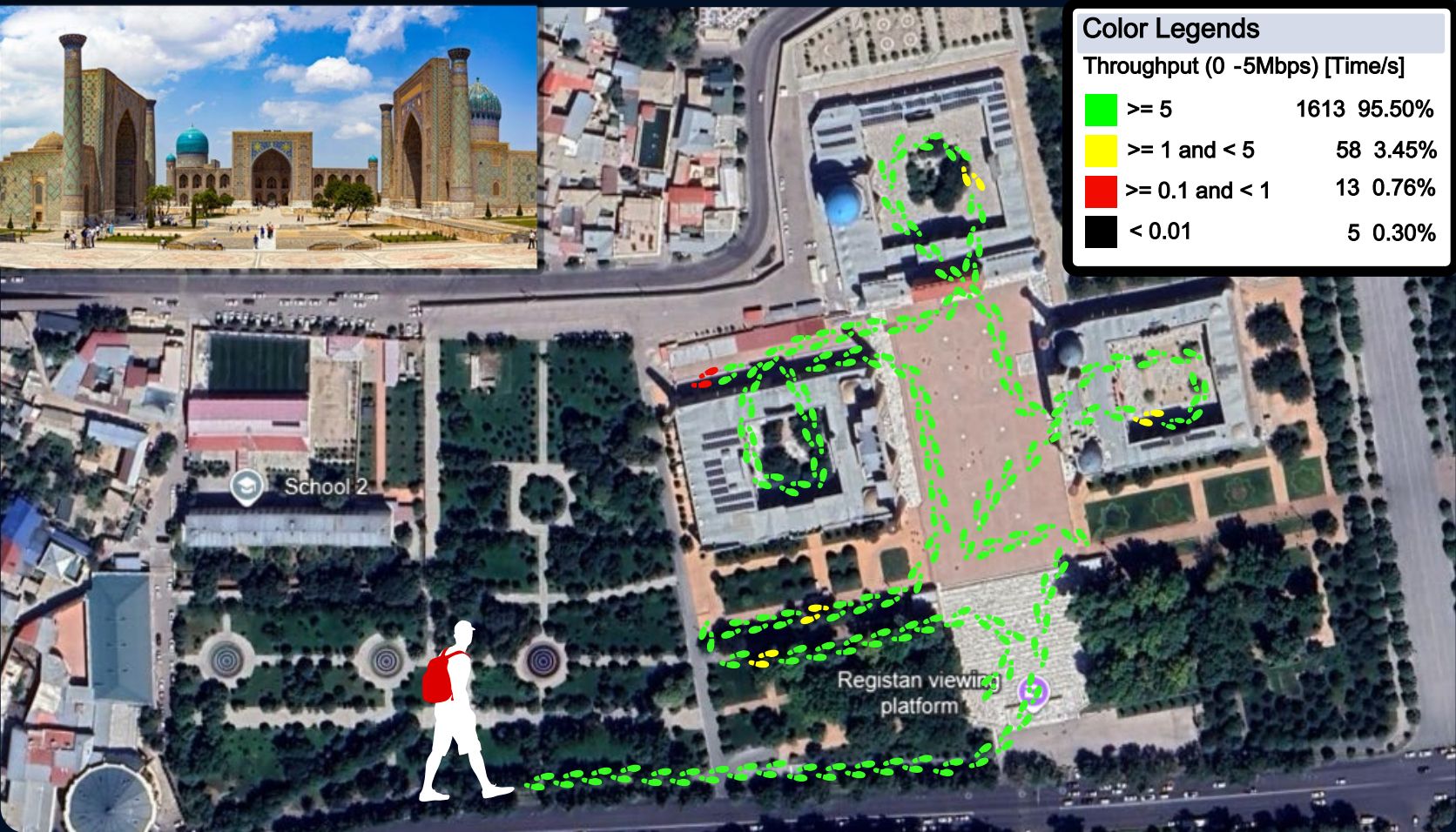


Mobile Data

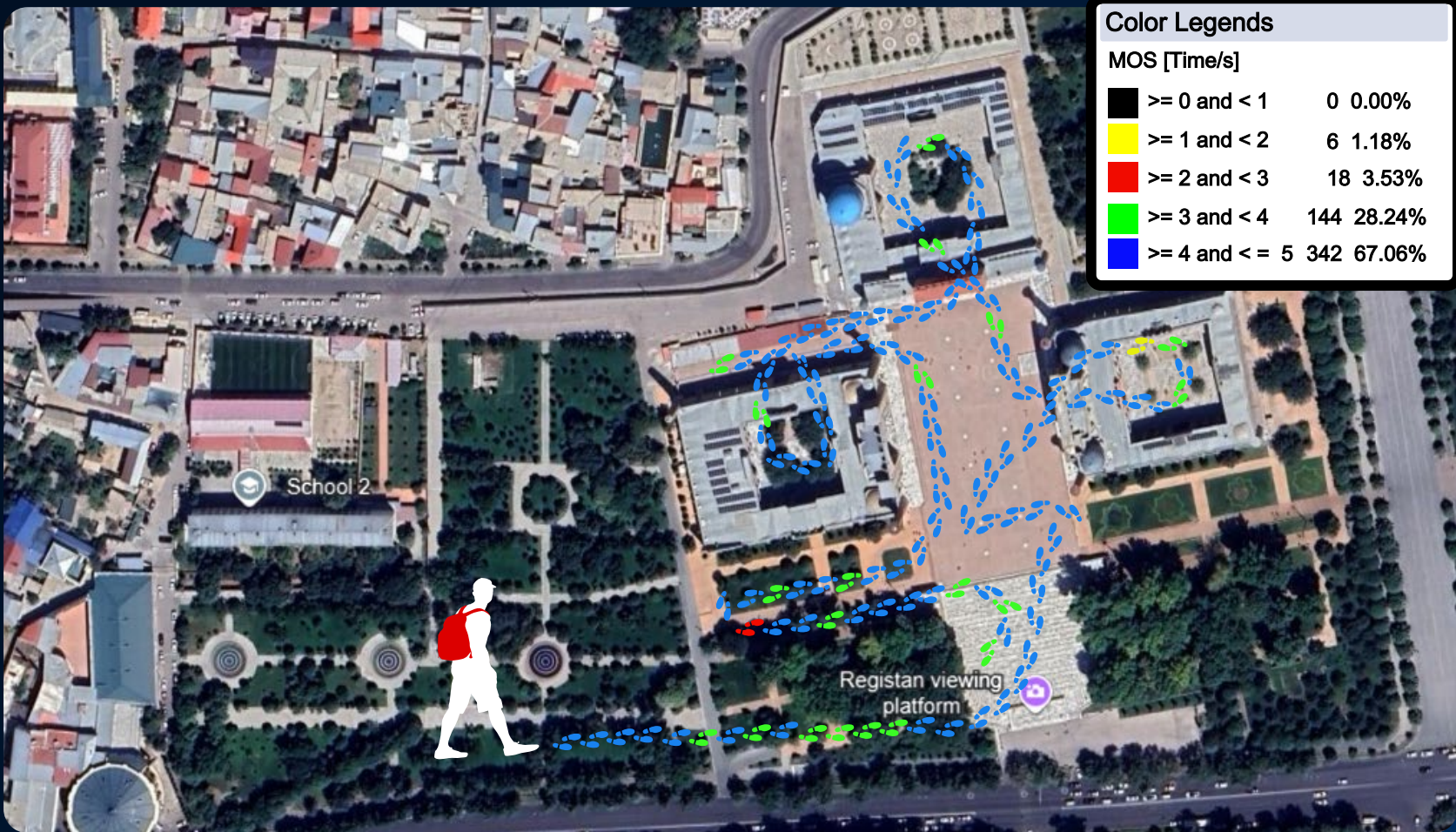


Mobile Voice

Measurement with NemoBackpack - Registan Square



Mobile Data



Mobile Voice

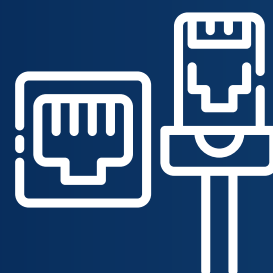


Speedtest Intelligence[®]



MNO

Viewing data for specific
mobile operators



ISP

Viewing data for specific
internet service providers



Region

Viewing data by region, city
country



**Connection
Evaluation**

Viewing data by download
speed, upload speed,
latency, and jitter metrics



Consumer QoETM



Video Streaming

Performance of video streaming on end-user devices



Web Browsing

Performance of web page loading times for global websites



Realtime Readiness

Network readiness for global real-time applications



Quality of Service (QoS)

Network performance in terms of bandwidth and latency



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**Thank You for
Your Attention**

