

ESMAP Knowledge Exchange & Study Tour on Grid Digitalization and Cybersecurity in Italy

May 20 - 27

 Italy

Azerishiq at a Glance

Azerishiq OJSC

Azerbaijan's national electricity Distribution System Operator



Key role

Reliable, efficient and customer-oriented electricity distribution across Azerbaijan, while enabling smart grids, renewable integration and e-mobility.



AZARISHIQ
OPEN JOINT STOCK COMPANY

Quick facts



2015

Established as
independent
national DSO



3M+

Consumers
served



12,000+

Employees
nationwide



About 1M

Smart meters
deployed

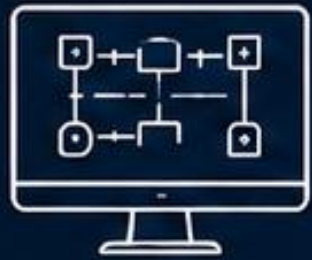
From conventional distribution to a smarter, more flexible and digital grid.

Digital Grid Transformation Journey

Building real-time visibility, automation and data-driven operations



1



SCADA Expansion

>60% MV network coverage
Real-time monitoring &
remote control

2



Smart Metering / AMI

About 1M smart meters
Load analysis, billing
accuracy & loss detection

3



Digital Substations

Fuzuli Digital Substation as a model
Fiber-optic based protection
and control

4



GIS, Drones & 3D Mapping

Faster inspections and
asset visibility
Predictive maintenance
foundation



*Azerishiq is moving from manual field operations
toward an integrated, data-driven smart grid.*

A New Energy Era for Distribution

Growth of Renewables and E-Mobility is reshaping our grid

Azerishiq is preparing today for the energy systems of tomorrow.



2,500+ MW

Renewable capacity
connected to the
distribution network

(Oct 2025)



33,000+

EVs on the road
with fast growing
charging infrastructure

(2025)



10%+

Annual growth in
electricity demand

(2023–2025)



11,000+ km

Distribution lines
across the country

(MV & LV)



**Our
Focus:**



Ensure reliability
and power quality



Enable higher renewable
integration



Support e-mobility
and sustainable growth

SLIDE 4

Key Grid Modernization Challenges

What must be strengthened to host EVs, distributed renewables and digital operations



1



Fragmented Data

SCADA, GIS, AMR and planning data not yet fully unified

2



Limited LV Visibility

more monitoring needed at low-voltage and remote areas

3



Voltage & Reliability

growing demand and longer feeders create operational constraints

4



EV + DPV Impact

hosting capacity and time-series studies required

5



Cybersecurity Readiness

protection of digital grid assets and secure data exchange

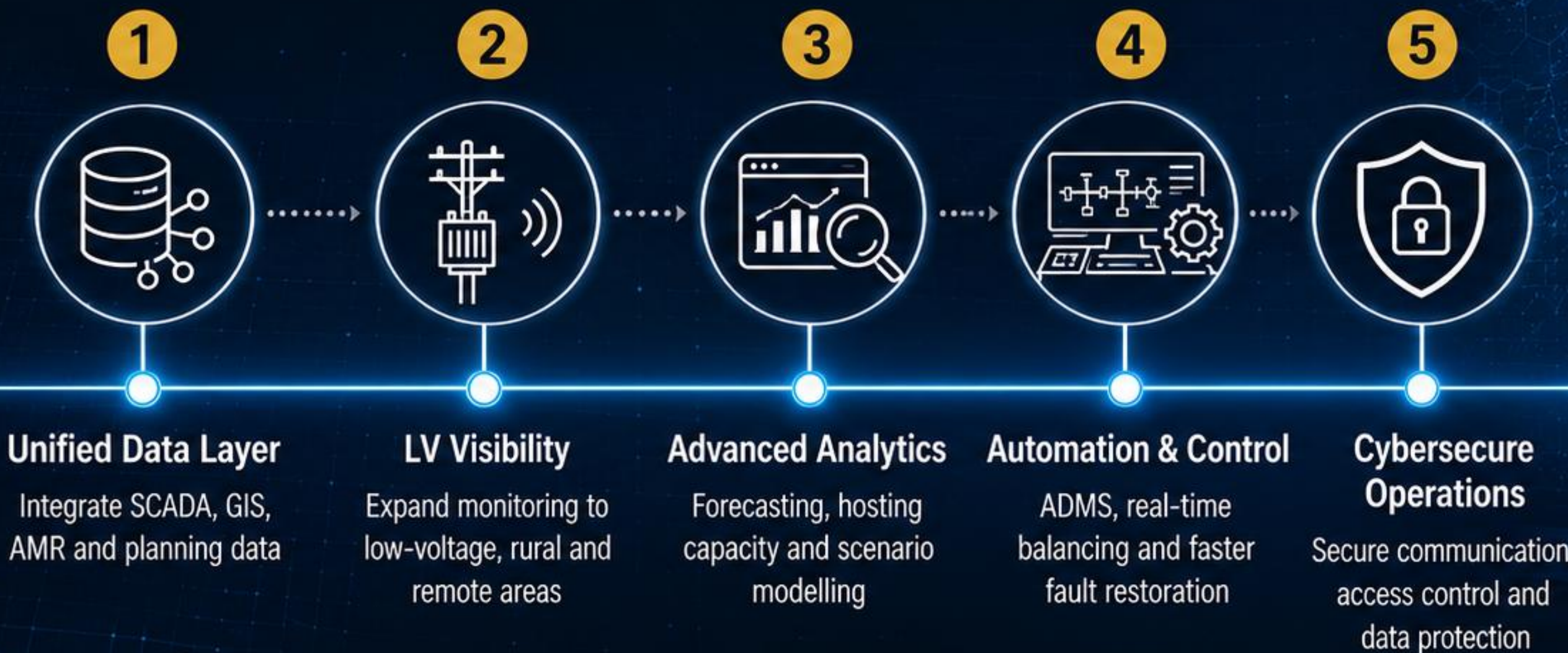


Modernization is not only infrastructure — it is data, control, security and planning working together.



Modernization Roadmap: From Gaps to Actions

A practical path toward real-time, resilient and flexible distribution operations



>>> Next step: turn existing digital assets into an integrated smart-grid operating model.

Thank You

Q&A Session

Thank you for your attention.
We welcome your questions and discussion.



Azerishiq's digital transformation journey continues.