THE TELECOM SECTOR'S CONTRIBUTION TO SECURITY AND RESILIENCE IN EUROPE

STUDY BY COPENHAGEN ECONOMICS FOR CONNECT EUROPE

Copenhagen Economics **CE**

Telecom networks provide critical infrastructure. This study explores security and resilience in European telecom networks - a topic of increasing importance to society and end-users - based on desk research and interviews with operators and vendors.

SECURE AND RESILIENT TELECOM NETWORKS BENEFIT END-USERS AND SOCIETY

- SEAMLESS ACCESS TO DOWNSTREAM SERVICES
- PROTECTION OF PERSONAL AND SENSITIVE INFORMATION
- ENABLING CRITICAL SECTORS
- SUPPORT ECONOMIC GROWTH AND WIDER SOCIETAL BENEFITS

DELIVERING SECURE AND RESILIENT NETWORKS REQUIRES NAVIGATING A COMPLEX RISK LANDSCAPE

- SYSTEM FAILURES
- THIRD-PARTY FAILURES
- HUMAN ERRORS
- MALICIOUS ACTIONS
- NATURAL PHENOMENA

HOW DO TELECOM OPERATORS ENSURE SECURE AND RESILIENT NETWORKS?

"**SECURITY IS IN OUR DNA**. IT CANNOT BE IMPLEMENTED AS AN AFTERTHOUGHT - BUT MUST BE INTEGRATED IN ALL SYSTEMS AND PROCESSES FROM THE START."

- Security expert at a major European telecom operator.

TELECOM OPERATORS ENGAGE IN A COMPREHENSIVE SET OF SECURITY AND RESILIENCE MEASURES

SECURITY

Measures to avoid and prevent attacks, breaches, or other forms of interruptions

- Personnel training
- Physical protection
- Threat detection
- Vulnerability assessment
- Access management
- Secure hardware and software

RESILIENCE

Measures that avoid or minimise any impact for end-user when an incident occurs

- Business continuity
- Disaster recovery
- Incident management
- Continuous learning

POLICY OPPORTUNITIES TO SUPPORT CONTINUED SECURITY AND RESILIENCE

- **SUPPORT INVESTMENT IN SECURITY AND RESILIENCE**
- **STREAMLINE REGULATION**
- **ADDRESS SKILL SHORTAGES**