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Connect Europe

AST Project – Infographics & Policy Guidelines Package

Connecting Insights, Practice, and Policy for a Fair Twin Transition

Introduction

The **AST Project (Accelerating Sustainability in Telecoms)** explores how Europe's telecom sector can act as both a driver and an enabler of the **Twin Transition** — the simultaneous digital and green transformation shaping the continent's economy, industry, and society.

As networks evolve into intelligent, automated, and low-carbon infrastructures, the very structure of work, production, and social relations within telecoms is being redefined. The sector sits at the **intersection of the European Green Deal** and the **Digital Decade 2030 Policy Programme**, making it a cornerstone of Europe's pursuit of climate neutrality, technological sovereignty, and social inclusion.

This transformation brings unprecedented opportunities for innovation, efficiency, and competitiveness. Yet it also raises profound questions about **skills, equity, governance, and environmental accountability**. The way Europe manages this transition will determine whether technological progress leads to shared prosperity — or deepens inequalities between workers, companies, and regions.

Within this context, **social partners** play a decisive role. Through structured dialogue and collective bargaining, they ensure that innovation remains **human-centred, ethical, and sustainable**. Dialogue is not a mere consultation mechanism; it is a **form of democratic governance** — a means to embed responsibility, inclusion, and collaboration into the foundations of corporate and industrial transformation.

The **Policy Guidelines and Recommendations Report**, developed jointly by Connect Europe and UNI Europa ICTS within the AST framework, translates the outcomes of the project's roundtables and stakeholder conference into **practical guidance for implementation**. It provides a roadmap for embedding sustainability, digital ethics, and social fairness into the DNA of the telecom sector.

These Guidelines focus on **four key areas of negotiation** identified and validated by the social partners:

1. **Skills, Employability, and Lifelong Learning**
2. **Sustainable Work Organisation and Responsible Use of Technology**
3. **Environmental Sustainability and Green Transition at the Workplace**
4. **Social Dialogue, Equity, and Governance of the Twin Transition**

Together, these pillars form an integrated approach to managing change — one that combines technological excellence with social inclusion and ecological responsibility. They reflect a shared commitment by **Connect Europe** and **UNI Europa ICTS** to continue working together beyond the AST project, ensuring that the principles established here evolve into concrete, measurable, and lasting improvements for Europe's digital and green future.

How to Use this Package

This package combines the **10 AST infographics** with the **Policy Guidelines and Recommendations Report**, offering a visual and strategic overview of how the Twin Transition can be implemented in practice.

Each infographic summarises a key dimension of the AST dialogue — from upskilling and responsible automation to sustainable governance and policy alignment — while the Policy Guidelines provide the analytical and operational depth to transform insights into real actions.

Together, they form a cohesive resource for policymakers, companies, trade unions, and researchers seeking to understand how digital innovation and sustainability can be pursued simultaneously and inclusively.

Infographic Title	**Linked Policy Guidelines Section**
1. The Twin Transition in Telecoms	Introduction – Context and Purpose
2. Skills for a Sustainable Future	Policy Area 1 – *Skills, Employability, and Lifelong Learning*
3. Responsible Automation and AI	Policy Area 2 – *Sustainable Work Organisation and Responsible Use of Technology*
4. Telecoms as Enablers of the Green Deal	Policy Area 3 – *Environmental Sustainability and Green Transition at the Workplace*
5. Social Dialogue for Fair Digitalisation	Policy Area 4 – *Social Dialogue, Equity, and Governance of the Twin Transition*

Infographic Title	Linked Policy Guidelines Section
6. Case Studies: A1 Group, TIM, Orange, Altice	Annex – Best Practices from AST Roundtables
7. Fairness and Inclusion in Innovation	Policy Guidelines Section – Cross-cutting Principles
8. Towards Measurable Sustainability	Recommendations for EU and National Policymakers
9. From Dialogue to Action	From Project to Practice – Outcomes of the Stakeholder Conference
10. The Future: Sustainable Skills for Digital Sovereignty	Next Steps – AST Follow-up Initiative

Infographic Summaries and Policy Links

1. The Twin Transition in Telecoms

This infographic introduces the AST project's central vision: that the digital and green transformations are two sides of the same coin. Telecom networks are becoming not just smarter but cleaner — simultaneously reducing emissions and enabling other industries to decarbonise through connectivity, cloud solutions, and data-driven innovation.
The **Policy Guidelines** underline that the Twin Transition is not only technological but structural, demanding new governance models, inclusive workforce strategies, and transparent sustainability metrics.

Social partners are therefore essential to ensuring that the shift is just and participatory — transforming innovation into a shared European achievement rather than a source of divide.

Linked Policy Section: *Introduction – Context and Purpose*

2. Skills for a Sustainable Future

A workforce ready for the Twin Transition must combine technical excellence with ethical, digital, and environmental literacy.

The **Policy Guidelines (Section 1)** call for the creation of lifelong learning ecosystems where reskilling and upskilling are embedded into collective agreements.

Training rights, diversity targets, and joint funding mechanisms — co-financed through EU programmes such as *ESF+* and *Digital Europe* — ensure that no worker is left behind.

Examples from TIM, A1 Group, and Orange show that company-level academies and learning partnerships can make reskilling a permanent component of competitiveness and fairness.

Linked Policy Section: *Skills, Employability, and Lifelong Learning*

3. Responsible Automation and AI

AI and automation are reshaping the telecom industry, from predictive maintenance to customer service.

The **Policy Guidelines (Section 2)** stress the need for transparency, accountability, and human oversight in algorithmic systems.

Collective bargaining must define clear boundaries for AI use, guarantee worker consultation, and create ethical frameworks for data governance.
By embedding these principles into workplace agreements, companies can ensure that digitalisation enhances — rather than diminishes — job quality, trust, and safety.

Linked Policy Section: *Sustainable Work Organisation and Responsible Use of Technology*

4. Telecoms as Enablers of the Green Deal

Telecoms are central to the success of the European Green Deal.
They power the digital tools that make energy grids, transport systems, and industries more sustainable — while also decarbonising their own networks.

The **Policy Guidelines (Section 3)** propose embedding environmental objectives directly into collective bargaining: measurable targets, sustainability committees, and transparent reporting on energy use and carbon impact.

When every employee contributes to sustainability goals, environmental performance becomes not just a technical task but a shared cultural value.

Linked Policy Section: *Environmental Sustainability and Green Transition at the Workplace*

5. Social Dialogue for Fair Digitalisation

The AST project demonstrated that structured dialogue is the foundation of fair transformation.

The **Policy Guidelines (Section 4)** highlight that social dialogue must evolve from consultation to co-governance, ensuring that decisions on technology, employment, and sustainability are shared between employers and workers.
By institutionalising joint committees and permanent EU-level working groups, social partners can turn dialogue into a strategic asset — a living mechanism that guarantees predictability, trust, and inclusion.

Linked Policy Section: *Social Dialogue, Equity, and Governance of the Twin Transition*

6. Case Studies: A1 Group, TIM, Orange, Altice

This infographic summarises real examples presented during the AST Roundtables, illustrating how theory becomes practice:

- **A1 Group (Austria):** integrated ethical governance in its *Fair AI* programme.
- **TIM (Italy):** established an internal *AI Academy* for engineers and technicians.
- **Orange (France):** linked environmental KPIs to employee performance reviews.
- **Altice Portugal:** applied IoT to agriculture and smart cities for sustainable resource use.
  The **Policy Guidelines** recommend replicating and scaling these experiences across Europe through the AST Sustainability Toolkit and dedicated peer-learning clusters.

Linked Policy Section: *Annex – Best Practices from AST Roundtables*

7. Fairness and Inclusion in Innovation

Innovation is only sustainable if it is fair.

The **Policy Guidelines** affirm that diversity and equal opportunity must be woven into every aspect of the Twin Transition.

Collective bargaining can enshrine gender balance targets, digital inclusion programmes for underrepresented groups, and transparent career progression systems.

Inclusive innovation enhances creativity and legitimacy — ensuring that the telecom workforce reflects the diversity of the society it serves.

Linked Policy Section: *Cross-cutting Principles – Inclusion and Responsibility*

8. Towards Measurable Sustainability

To turn ambition into action, sustainability must be measurable. The **Recommendations for EU and National Policymakers** call for harmonised standards and metrics linking digital performance with environmental and social outcomes.
This includes integrating sustainability in procurement rules, tax incentives for green networks, and alignment with EU reporting frameworks like *CSRD* and *ESRS*. By measuring impact transparently, the telecom sector can lead by example in accountability and evidence-based policymaking.

Linked Policy Section: *Recommendations for EU and National Policymakers*

9. From Dialogue to Action

The **AST Stakeholder Conference (June 2025)** marked the project's transition from reflection to implementation.

Participants agreed on three shared priorities: scaling good practices, mainstreaming the AST Toolkit, and launching *Sustainable Skills for Digital Sovereignty*.

The **Policy Guidelines** outline how these initiatives can be embedded into company operations, EU funding frameworks, and future social dialogue structures.

This marks a turning point — dialogue has become a practical tool for transformation, bridging the gap between policy design and real-world outcomes.

Linked Policy Section: *From Project to Practice – Outcomes of the Stakeholder Conference*

10. The Future: Sustainable Skills for Digital Sovereignty

Looking ahead, the Twin Transition must evolve into a sustained process of cooperation and learning.

The **Next Steps** proposed by Connect Europe and UNI Europa ICTS aim to create a new programme — *Sustainable Skills for Digital Sovereignty* — focusing on cross-sector training, ethical innovation, and long-term capacity building.

By turning AST's findings into an ongoing partnership between companies, unions, and EU institutions, the telecom sector will continue to lead Europe's green and digital transformation in a way that is fair, measurable, and human-centred.

Linked Policy Section: *Next Steps – AST Follow-up Initiative*

Infographics were developed by **Visionary Analytics** on behalf of **Connect Europe** and **UNI Europa ICTS**, with the support of the **European Commission (DG EMPL)**. This publication brings together the key findings and visual outputs of the *Accelerating Sustainability in Telecoms (AST)* project, translating research and dialogue into a clear, accessible, and policy-oriented format.

The content draws on the analytical work conducted throughout the project, the insights generated during the AST Roundtables, and the conclusions of the Final Stakeholder Conference. It reflects the shared commitment of social partners to promote a fair, inclusive, and forward-looking Twin Transition across Europe's telecom sector — ensuring that innovation and sustainability progress hand in hand.

Research, design, and visualisation were led by **Visionary Analytics**, in close collaboration with the **Connect Europe policy team**. Content coordination was overseen by **Fabiana Victoria Iovino** (Connect Europe) and **Birte Dedden** (UNI Europa ICTS).

AST Project: Infographics and Policy Guidelines Package – Connecting Insights, Practice, and Policy for a Fair Twin Transition.

Prepared for **Connect Europe** and **UNI Europa ICTS**, with the support of the **European Commission (DG EMPL)**.

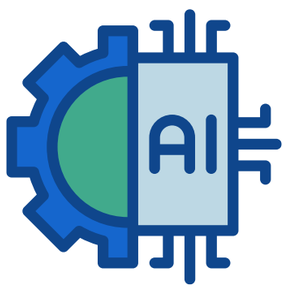
Link: https://connecteurope.org/projects/AST

ARTIFICIAL INTELLIGENCE (AI)

DEFINITION

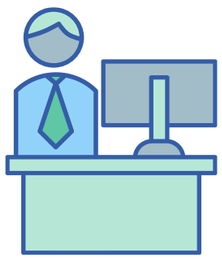
THE **ABILITY** OF A **MACHINE** TO DISPLAY **HUMAN-LIKE CAPABILITIES** SUCH AS REASONING, LEARNING, PLANNING & CREATIVITY

4 AI USE CASES



AI FOR NETWORK ROLL-OUT AND OPERATION

AI FOR PRODUCTS & SERVICES



BACK-OFFICE AI

FRONT-OFFICE AI

TELECOMS & AI

AI TRANSFORMS TELCOS BY OPTIMIZING NETWORK OPERATIONS, ENHANCING CUSTOMER SERVICE, AND DRIVING INNOVATION THROUGH ADVANCED DATA ANALYSIS AND AUTOMATED PROCESSES

SUSTAINABILITY THROUGH AI

ENERGY AND RESOURCE OPTIMIZATION (incl. emissions reduction)

STREAMLINED OPERATIONS

ENABLING OF SUSTAINABLE SOLUTIONS

ECONOMIC & SOCIAL IMPACTS

AUTOMATION-REDUCED HEALTH AND SAFETY HAZARDS

STREAMLINED ADMINISTRATIVE PROCESSES

TRANSFORMATION OF SKILL PROFILES

INTERNET OF THINGS (IoT)

DEFINITION

PHYSICAL OBJECTS EMBEDDED WITH SENSORS AND ACTUATORS **THAT COMMUNICATE THROUGH WIRED OR WIRELESS NETWORKS**
(E.G. SMART HOME SYSTEM)

IOT: IMMENSE MARKET

2.1 BILLION
CELLULAR SUBSCRIBERS IN 2021

4.3 BILLION
PROJECTED SUBSCRIBERS BY 2026

100%
EXPECTED GROWTH IN ONLY 5 YEARS

TELECOMS & IoT

IoT INVOLVES PHYSICAL OBJECTS EMBEDDED WITH **SENSORS AND ACTUATORS** THAT COMMUNICATE THROUGH WIRED OR WIRELESS NETWORKS. **TELECOMS ENABLE IoT AND CAN LEVERAGE IT** TO MANAGE MULTIPLE NETWORK DEVICES EFFECTIVELY.

SUSTAINABILITY THROUGH IOT

ENABLING OF SUSTAINABLE SOLUTIONS

COST REDUCTION

OPTIMISED/ REDUCED ENERGY CONSUMPTION

ECONOMIC & SOCIAL IMPACTS

TRANSFORMATION OF SKILL PROFILES

ENHANCED OPERATIONAL EFFICIENCY

HEALTH AND SAFETY IMPROVEMENTS

5G NETWORKS

DEFINITION

FIFTH-GENERATION MOBILE NETWORK, OR 5G, IS THE LATEST ITERATION OF CELLULAR TECHNOLOGY.

IT IS CONSIDERED A **PIVOTAL TECHNOLOGY FOR INNOVATION AND DIGITAL TRANSFORMATION** BY THE EUROPEAN COMMISSION

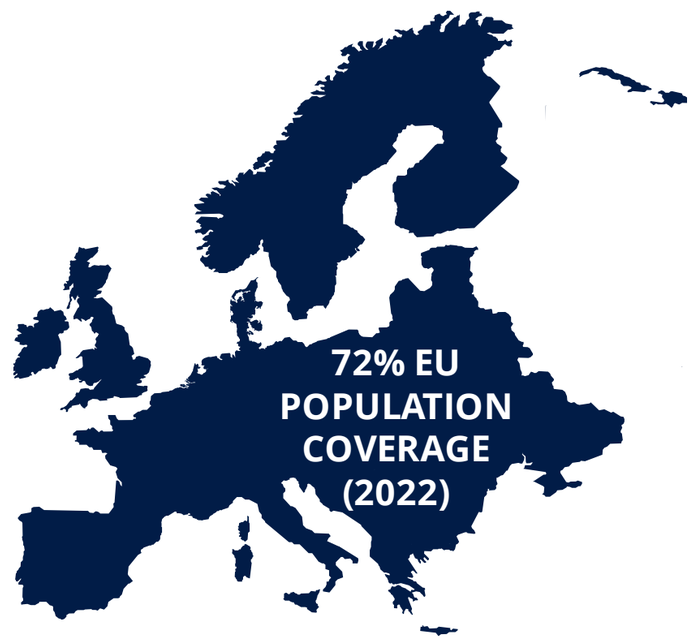
5G VS 4G

LOWER LATENCY

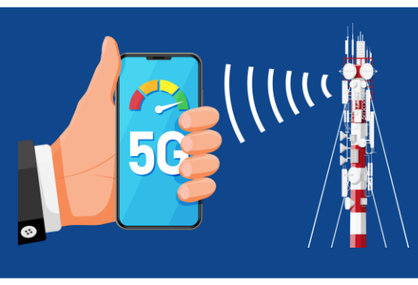
SIGNIFICANTLY FASTER

ENHANCED CONNECTIVITY

UP TO 100x MORE DEVICES SUPPORTED



TELECOMS & 5G



5G TECHNOLOGY OFFERS ENHANCED BANDWIDTH AND CONNECTIVITY TO **ENABLE INNOVATIONS** SUCH AS **SMART CITIES**, **TELEHEALTH**, **AUTONOMOUS VEHICLES,** AMONG OTHERS.

SUSTAINABILITY THROUGH 5G

ENABLING OF SUSTAINABLE TECHNOLOGIES

TRANSITION TO A CONNECTED SUSTAINABLE SOCIETY

REDUCED ENERGY CONSUMPTION
compared to its predecessors

ECONOMIC & SOCIAL IMPACTS

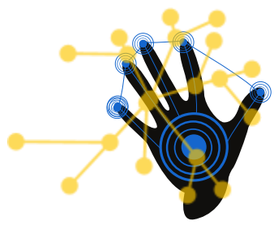
UPSKILLING OF TELECOM WORKERS

ORGANISATIONAL MONITORING POSSIBILITIES

IMPROVED CONNECTIVITY FOR REMOTE WORK

EXTENDED REALITY (XR)

DEFINITION

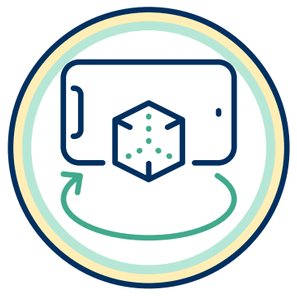


EXTENDED REALITY REFERS TO **VIRTUAL REALITY**, **AUGMENTED REALITY**, **MIXED REALITY**, AS WELL OR ANY OTHER POTENTIAL DIGITAL REALITY ON THE **REALITY-VIRTUALITY CONTINUUM**.

THEY **BLEND DIGITAL CONTENT WITH THE REAL WORLD**, CREATING IMMERSIVE EXPERIENCES.

REALITY-VIRTUALITY CONTINUUM

REAL ENVIRONMENT

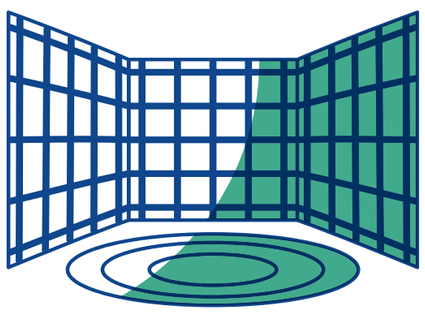


AUGMENTED REALITY

AUGMENTED VIRTUALITY

VIRTUAL REALITY

TELECOMS & EXTENDED REALITY



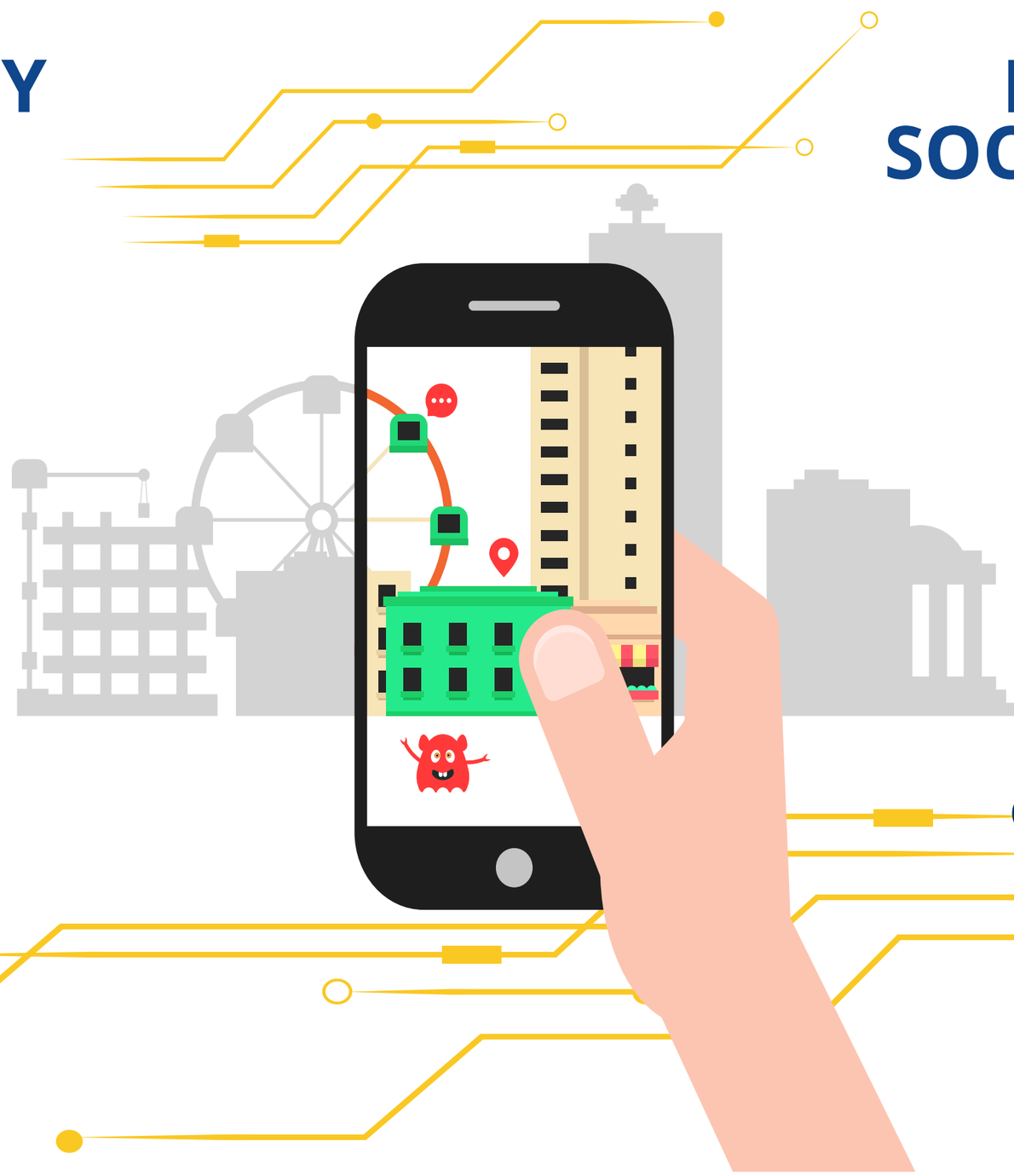
EXTENDED REALITY TECHNOLOGIES ENABLE TELCOS TO D**ELIVER IMMERSIVE EXPERIENCES, STREAMLINE OPERATIONS, AND INNOVATE IN NETWORK DESIGN AND CUSTOMER SERVICE**, THEREBY DRIVING DIGITAL TRANSFORMATION.

SUSTAINABILITY THROUGH XR

REDUCED CARBON FOOTPRINT

EFFICIENT DATA CENTRE MANAGEMENT

REMOTE CUSTOMER SERVICE APPLICATIONS



ECONOMIC & SOCIAL IMPACTS

IMPROVED SITUATIONAL TRAINING FOR EMPLOYEES

INCREASED OCCUPATIONAL SAFETY

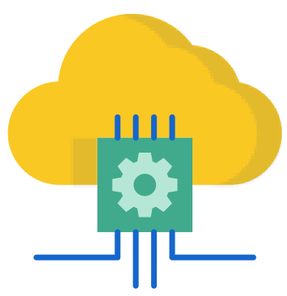
OPPORTUNITIES FOR REMOTE WORK

CLOUD COMPUTING

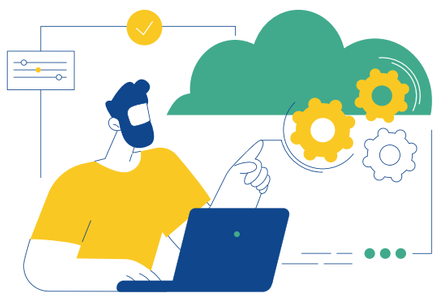
DEFINITION

A TECHNOLOGY THAT **PROVIDES INTERNET-BASED ACCESS TO STORAGE, PROCESSING, AND APPLICATIONS**, OFFERING A COST-EFFECTIVE, SCALABLE WAY TO USE COMPUTING RESOURCES WITHOUT OWNING HARDWARE OR SOFTWARE.

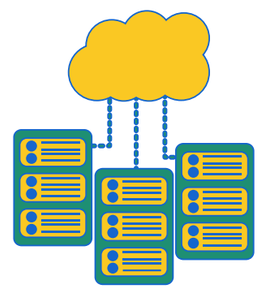
CLOUD COMPUTING: APPLICATIONS



CLOUD-BASED NETWORK FUNCTIONS



CLOUD-BASED CUSTOMER RELATIONS



CLOUD-BASED DATA ANALYTICS

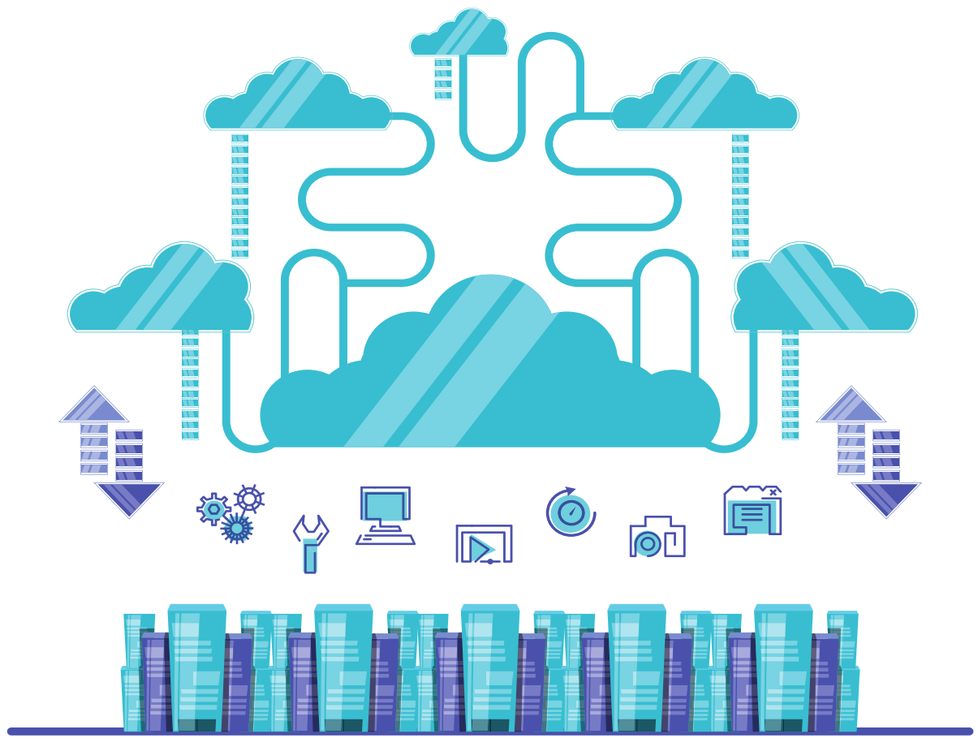
CLOUD-BASED SECURITY

TELECOMS & CLOUD COMPUTING

CLOUD COMPUTING REVOLUTIONISES TELECOMS BY **ENHANCING NETWORK FUNCTIONALITY, CUSTOMER RELATIONS, DATA ANALYTICS, AND SECURITY**, OFFERING SCALABILITY, COST EFFICIENCY, AND INNOVATIVE SERVICE DELIVERY.

SUSTAINABILITY THROUGH CLOUD

- HELPS ACHIEVE DECARBONIZATION GOALS
- 'GREEN CLOUD' ENERGY EFFICIENCY
- DATA CENTRES OPTIMIZATION



ECONOMIC & SOCIAL IMPACTS

- TRANSFORMATION OF SKILL PROFILES
- AUTOMATION OF ROUTINE TASKS
- OPPORTUNITIES FOR REMOTE WORK

QUANTUM TECHNOLOGY

DEFINITION

QUANTUM TECHNOLOGY HARNESSES THE PRINCIPLES OF **QUANTUM MECHANICS TO CREATE POWERFUL TOOLS SUCH AS COMPUTERS AND LASERS**, CAPABLE OF PROCESSING COMPLEX TASKS MORE EFFICIENTLY THAN TRADITIONAL TECHNOLOGIES

QUANTUM TECH: APPLICATIONS

- INTEGRATION WITH EXISTING INFRASTRUCTURE
- NETWORK & INFRASTRUCTURE SECURITY
- DATA SECURITY & ENCRYPTION SERVICES
- QUANTUM KEY DISTRIBUTION

TELECOMS & QUANTUM TECHNOLOGY

QUANTUM TECHNOLOGY OFFERS GREAT POTENTIAL FOR TELCOS, **ENHANCING NETWORK EFFICIENCY, ENABLING ADVANCED DATA ANALYSIS AND AI SOLUTIONS, AND SIGNIFICANTLY IMPROVING CYBERSECURITY** THROUGH QUANTUM ENCRYPTION METHODS.

SUSTAINABILITY THROUGH QUANTUM

- ULTRA-FAST DATA TRANSMISSION
- NETWORK ENERGY OPTIMISATION
- REDUCED INFRASTRUCTURE NEEDS

ECONOMIC & SOCIAL IMPACTS

- TRANSFORMATION OF SKILL PROFILES
- QUANTUM ENGINEERING SKILLS REQUIRED
- NEED FOR ENHANCED WORKPLACE CYBERSECURITY

BLOCKCHAIN

DEFINITION

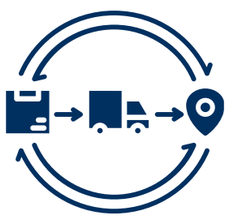
BLOCKCHAIN IS A DISTRIBUTED **LEDGER TECHNOLOGY THAT SECURELY RECORDS AND VERIFIES TRANSACTIONS** ACROSS A NETWORK OF COMPUTERS.

BLOCKCHAIN: APPLICATIONS

FRAUD DETECTION

SMART CONTRACTS

5G NETWORK ENHANCEMENT



SUPPLY CHAIN TRANSPARENCY

TELECOMS & BLOCKCHAIN

BLOCKCHAIN OFFERS TRANSFORMATIVE APPLICATIONS FOR TELECOMS, **ENHANCING DATA SECURITY, FRAUD PREVENTION, AND THE EFFICIENCY OF IOT CONNECTIVITY** THROUGH ITS DECENTRALIZED AND TAMPER-PROOF LEDGER SYSTEM

SUSTAINABILITY THROUGH BLOCKCHAIN

INCREASED SUPPLY CHAIN EFFICIENCY

BLOCKCHAIN-BASED PROXIMITY ENERGY GRIDS

INCREASED TRANSPARENCY OF CARBON CREDITS

ECONOMIC & SOCIAL IMPACTS

TRANSFORMATION OF SKILL PROFILES

SIMPLIFIED COMPANY PROCEDURES

ENHANCED DATA SECURITY & PRIVACY

BIG DATA & ANALYTICS

DEFINITION

BIG DATA IS A LARGE COLLECTION OF INFORMATION FROM DIFFERENT SOURCES THAT IS OFTEN COLLECTED IN REAL TIME. **ANALYTICS** INVOLVES ANALYSING THIS DATA TO DISCOVER PATTERNS AND GAIN INSIGHTS FOR DECISION-MAKING.

BIG DATA & ANALYTICS: APPLICATIONS

- FRAUD DETECTION
- PERSONALIZED CUSTOMER EXPERIENCE
- NETWORK OPTIMISATION
- DATA-DRIVEN DECISIONMAKING

TELECOMS & BIG DATA

BIG DATA AND ANALYTICS EMPOWER TELCOS TO **ENHANCE CUSTOMER EXPERIENCES, OPTIMIZE NETWORK PERFORMANCE, AND MAKE DATA-DRIVEN DECISIONS** FOR IMPROVED SERVICE AND OPERATIONAL EFFICIENCY.

SUSTAINABILITY THROUGH BIG DATA

- RESOURCE AND ENERGY OPTIMISATION
- IMPROVED MACHINES AND INFRASTRUCTURE
- SUSTAINABLE INFRASTRUCTURE PLANNING

ECONOMIC & SOCIAL IMPACTS

- REQUIREMENT FOR DATA ANALYSIS SKILLS
- INCREASED REMOTE WORK PRACTICES
- NEED TO ENSURE PRIVACY & ETHICS

EDGE COMPUTING

DEFINITION

EDGE COMPUTING IS A METHOD WHERE **DATA PROCESSING AND ANALYSIS HAPPEN NEAR THE LOCATION WHERE DATA IS GENERATED**, INSTEAD OF IN CENTRALIZED DATA CENTERS OR CLOUDS

EDGE COMPUTING: APPLICATIONS

- ENHANCED SECURITY
- EASIER UPGRADES
- NETWORK FLEXIBILITY
- IMPROVED EFFICIENCY

TELECOMS & EDGE COMPUTING

EDGE COMPUTING ENABLES TELCOS TO PROCESS DATA CLOSER TO THE SOURCE, SIGNIFICANTLY **REDUCING LATENCY, ENHANCING NETWORK EFFICIENCY, AND SUPPORTING THE DEVELOPMENT OF ADVANCED SERVICES** LIKE IoT, AR, AND VR.

SUSTAINABILITY THROUGH EDGE COMPUTING

- INCREASED ENERGY EFFICIENCY
- DATA CENTRE CONSOLIDATION
- RETROFITTING POSSIBILITIES

ECONOMIC & SOCIAL IMPACTS

- TRANSFORMATION OF SKILL REQUIREMENTS
- PATHWAY TO DIGITAL INFRASTRUCTURE
- NETWORKING & CONNECTIVITY SUPPORT

xRAN

DEFINITION

xRAN IS A **MODERN APPROACH TO RADIO ACCESS NETWORKS**, EMPLOYING ADVANCED CONFIGURATIONS AND OPEN, SOFTWARE-CENTRIC SOLUTIONS **TO ENHANCE FLEXIBILITY & EFFICIENCY** IN TELECOMMUNICATIONS NETWORKS

xRAN: APPLICATIONS

- ENHANCED SECURITY
- EASIER UPGRADES
- NETWORK FLEXIBILITY
- IMPROVED EFFICIENCY

TELECOMS & xRAN

xRAN MODERNIZES TELECOMMUNICATIONS BY PROV**IDING MORE FLEXIBLE, COST-EFFICIENT, AND EASILY UPGRADABLE NETWORK INFRASTRUCTURE**, SIGNIFICANTLY ENHANCING THE ABILITY OF TELCOS TO MEET EVOLVING DEMANDS AND TECHNOLOGICAL STANDARDS.

SUSTAINABILITY THROUGH XRAN

- RESOURCE OPTIMISATION THROUGH RIC (RAN INTELLIGENT CONTROLLERS)
- ENERGY EFFICIENCY THROUGH MIMO
- INNOVATIVE ECOSYTEMS – TELEMETRY

ECONOMIC & SOCIAL IMPACTS

- TRANSFORMATION OF SKILL REQUIREMENTS
- REDUCED OWNERSHIP COSTS
- REQUIRED FOCUS ON CYBERSECURITY

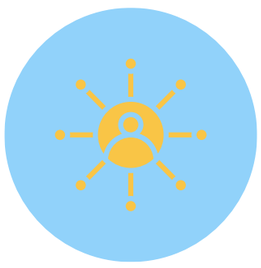
OPTIC FIBRE & GPON

DEFINITION

OPTIC FIBRE USES SPECIAL CABLES MADE OF GLASS OR PLASTIC TO **SEND DATA USING LIGHT SIGNALS. IT AIMS TO SUBSTITUTE METAL CABLES** BECAUSE IT CAN HANDLE MORE DATA, MAKES TRANSMISSION SIGNIFICANTLY FASTER, KEEPS SIGNALS SAFE, AND IS 'FUTURE-PROOF'.

OPTIC FIBRE: APPLICATIONS

HIGH-SPEED INTERNET PROVISION



VERY HIGH-CAPACITY NETWORKS (VHCN)

EFFICIENT DATA DELIVERY THROUGH GPON

LAST-MILE CONNECTIVITY

TELECOMS & OPTIC FIBRE

OPTIC FIBRE PLAYS A PIVOTAL ROLE FOR TELCOS BY ENABLING THEM **TO PROVIDE HIGH-SPEED INTERNET CONNECTIVITY AND DEVELOP ADVANCED NETWORK INFRASTRUCTURES** TO MEET THE GROWING DEMAND FOR DIGITAL SERVICES.

SUSTAINABILITY THROUGH OPTIC FIBRE

- CARBON FOOTPRINT REDUCTION COMPARED TO PREDECESSORS
- ENABLING SUSTAINABLE TECHNOLOGIES
- INCREASED EFFICIENCY AND DURABILITY

ECONOMIC & SOCIAL IMPACTS

- DIGITAL INCLUSION
- REMOTE ACCESS EMPOWERMENT
- RURAL AND REGIONAL DEVELOPMENT