

Explore a future of limitless connectivity

Imagine Possible: Ericsson's Purpose & Vision

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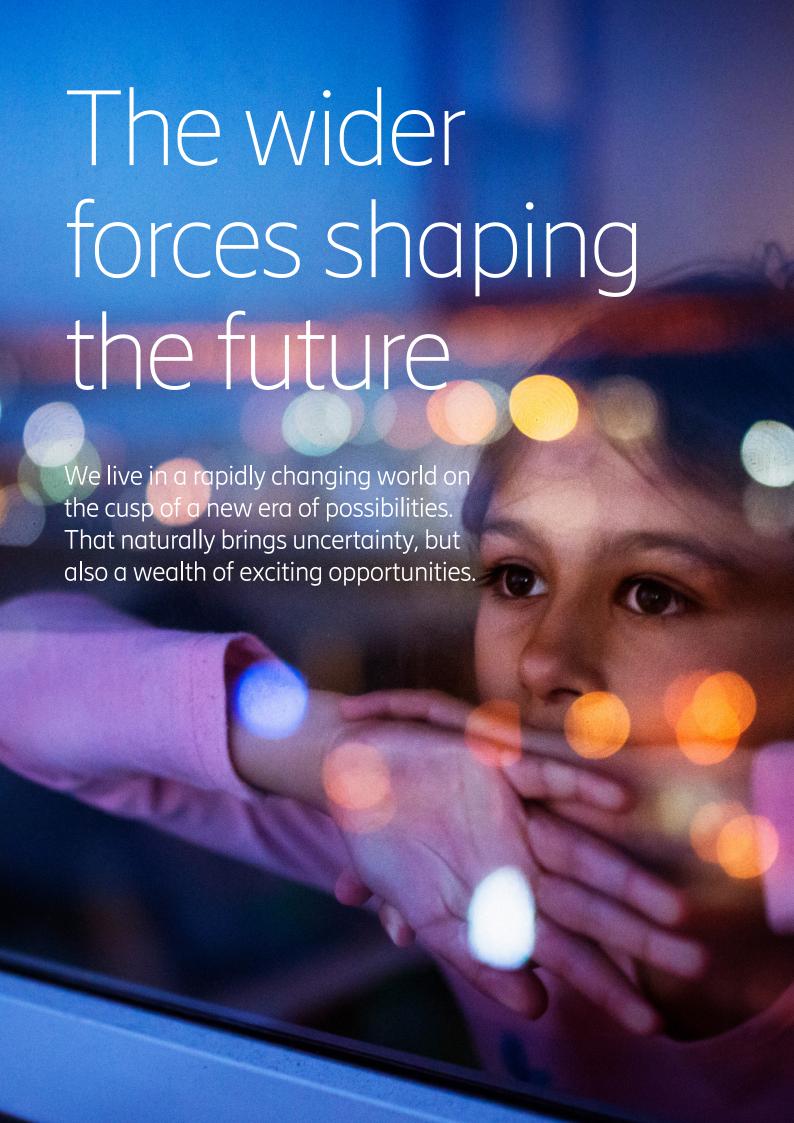
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# Innovation as motivation

As an industry & society we must work together to ensure a sustainable and connected future, because what we do today sets the foundation for what's possible tomorrow.

In this document we set out Ericsson's purpose & vision: what they mean, why they matter and what is needed to realize them.

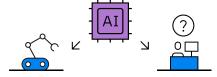
We explore the increasing relevance of mobile connectivity as we move through the next decade, alongside the landscape that must be navigated to realize its full potential.



Over the next decade, several forces will shape our world and how we live and work. Here we consider some of the most important socio-economic, political, and technological factors as we set our vision for 2030. Our vision is always growing and changing, and in many cases, it will be the interplay of these forces that will deliver the greatest impacts.

# Forces shaping society and geopolitics







# Climate crisis moves from 'A Challenge' to 'The Challenge'

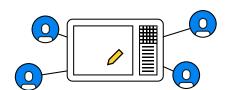
The urgency of climate change will dominate the next decade. Its impact across the world is already clear — from shifting weather patterns that threaten food production, to rising sea levels risking widescale flooding, to mass migration and population change — impacts that will be irreversible without drastic action today.

# Socio-economic volatility

Growing and ageing populations, and job disruption due to artificial intelligence (AI) and automation, will lead to increased competition and new forms of employment in the global job market. Shifting wealth from west to east, and the increasing adoption of cryptocurrencies will start to change the global financial landscape, while persistent economic uncertainty could threaten digital infrastructure investment.

# Global fragmentation, not globalization

Recent years have seen a retreat from the global community in favor of national interests. This trend sees countries seeking greater 'digital sovereignty' or creating 'splinternets' of national internets and digital trading environments. It could start to challenge the approach to the global standards that have shaped mobile connectivity in the past, and possibly require a new model for global network collaboration.



# The lasting impact of the pandemic

The upheaval and adjustment to Covid-19 has accelerated at least two major trends. Firstly, the rapid development and rollout of vaccines has helped reset our expectations around the pace of innovation. This, combined with the need for economic rebuilding, could bring an unprecedented era of innovation across all sectors of society. Secondly, an increased comfort with online collaboration and communication tools – using technology to shrink distance and simulate physical presence. While this won't eliminate the need for human contact, millions of people are now comfortable replacing physical events with virtual ones, opening new possibilities for how and where we celebrate, connect, and work.



# A re-definition of trust

The last decade has witnessed change in who and what we trust. The explosion of cyber-crime and non-transparent gathering and usage of personal data has heightened concerns about our interactions with the digital world. The proliferation of 'fake news' and discrediting of traditional journalism has shaken trust in conventional sources, while we've seen an increase in the trust we place in brands and corporations. As we enter a decade that will intertwine our lives more closely with technology, we must understand the shifting nature of trust and how it is earned.

# Forces shaping technology



### Connectivity in everything

Hundreds of millions of people already lead deeply connected lives – we use our smartphones to pay for things, our wearables to track our health, or our voice activated devices to help us around the home. In the next decade, many more people will enjoy these benefits. We will see the arrival of trillions of sensors, powered by harvesting energy from the network and incorporating bio-degradable electronics. This will enable connectivity in every part of the human world - from our cars to our clothes or our building materials – and open a new frontier of 'machine to nature' applications, where sensors can help us better understand and interact with the natural world.



# Artificial gets real

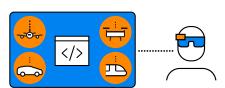
Our purpose and vision

AI will become central to our world in 2030. It will drive breakthrough innovation to improve lives and sustain our planet, and become a primary source of competitive advantage for countries and businesses. We will start to see AI used across many aspects of life – from driverless vehicles to medicine, agile manufacturing, synthetic entertainment and media. There will be a world of connected, intelligent machines interacting and learning amongst themselves, while remaining accountable to human intent and ethics.

# What do these forces mean for our industry?

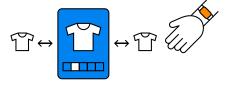
The forces we describe here will bring a range of impacts. Some will create opportunity – such as increased demand for pervasive connectivity; some will bring challenges – such as continuing economic uncertainty; threats to global standards & the guestion of consumer trust in the digital world; and others will bring great focus — such as the unified global effort that will be needed to address the climate crisis.

At Ericsson, we believe in the power of technology for good. As the world changes rapidly, we will enable technologies and innovations that will both open new possibilities for our customers, and also be applied to help resolve some of the world's greatest challenges.



# The mirror world

'Digital twins', virtual replicas of the environment around us, are already used in the automation of industry, helping with predictive maintenance in smart factories, for example. With the continued evolution of digital & spatial mapping technologies, we expect to see the creation of a complete 'mirror world' to our own. This will offer a multitude of applications, from entertainment and 'digital overlays' to the real world via smart glasses, to scenario planning for urban development and climate action, to programming autonomous vehicles and delivery drones to ensure safe and super accurate operation.



# Beyond the smartphone

The arrival of increasingly sophisticated wearable technologies will create ever more seamless interactions between the physical and virtual world. For example, contact lenses that can display augmented reality content, or earbuds that can translate for you in real-time. We also expect the continued evolution of wearable technologies that can realistically emulate a spectrum of senses – including touch, smell and sound. By the end of the decade, we may also see the arrival of the first 'biointerfaces' – technologies that will integrate more directly with our bodies - bringing with them new forms of communication and other possibilities for digital inclusion.



# Our purpose

Our purpose is our enduring reason to exist. It guides what we do and why we do it. It captures the specific role we at Ericsson play, and how we benefit others.

# To create connections that make the unimaginable possible

# 'Creating connections'

Is central to what we do: we build the networks that first connected people and next will be able to connect everything. But creating connections also means more — it refers to our increasingly proactive role as an orchestrator of eco-systems — whether that's bringing together the organizations and ideas that have created the standards our world is built on; providing the innovation environments that have kindled and proven many of the technologies that we take for granted today; or working as a driver of global partnerships that scale the reach and impact of technology for good.

# 'Making the unimaginable possible'

Recognizes that the networks we build become a platform to innovate and bring to life possibilities that people had never considered before. The connectivity provided by 4G enabled the explosion of the app economy and the creation of new enterprises that are now household names. This generation of companies has delivered major benefits across society. Now we are imagining the possibilities that networks of limitless connectivity could offer for people, businesses, and our wider world.

### Follow our story



How Ericsson are a leading contributor to 3GPP Standards
Explore more



How Ericsson foster innovation in our D15 labs
Explore more



How Ericsson, as a standby member of the UN World Food Programme, has for over 20 years played a key role in restoring connectivity in humanitarian relief efforts

Explore more



# **Our vision**

Our vision describes the world we believe it is possible to create — a place where technology innovation is a positive and exciting force for good.

# A world where limitless connectivity improves lives, redefines business and pioneers a sustainable future

# Improving lives

We know that connectivity improves lives every day. From the small things many of us now take for granted, like being able to use our smartphone to navigate our way across town, or play games on the go. To things that might once have seemed unimaginable, like doctors being able to make an accurate diagnosis remotely; or managing banking and payments through our phones, bringing financial services to communities without traditional banking infrastructure.

But improving lives in the future can mean so much more. Limitless connectivity will deliver a revolution in human wellness — a world where access to healthcare is democratized and trusted wearables will prevent illness; it will enable a world where anyone can learn anything — where schools are not only connected, but offer experiential learning in virtual environments; and it will create a world where we even augment human abilities — enriching how we see and experience the world around us. Our vision for improving lives is for everyone — whoever and where-ever they are.

### Follow our story



How Ericsson are working with UNICEF to map school connectivity globally by 2023 Explore more





Our purpose and vision

### Redefining business

The incredible rise of disruptive organizations powered by 4G is only the beginning. Our vision is that limitless connectivity will empower enterprises to become completely agile – to respond in real-time to new opportunities and changing customer preferences;

to create fully connected, constantly optimizing value chains; and ultimately to enable the production systems of the future – smarter, asset light and simplified operations where production happens closer to the consumer - collapsing not only cost, but also the emissions related to logistics & shipping.



# Pioneering a sustainable future

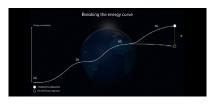
Our vision is that limitless connectivity, and the progress it will enable, is a positive force for a sustainable world. Improved mobile connectivity opens new possibilities to help address some of the critical challenges our world is facing — such as unleashing the potential of green energy or providing access to new and sustainable food sources. It can also help address perhaps our biggest challenge: the climate crisis.

At Ericsson, we have committed to becoming carbon neutral in our own operations by 2030. We're also developing the network technology that performs better for the environment, 'breaking the energy curve' by delivering more data with no increase in energy consumption. But this is just the beginning. Research supports that ICT solutions can enable reduced carbon emissions in a variety of industries by 15% by 2030. Our role is to empower that change – to use limitless connectivity as an innovation multiplier in resolving the climate crisis.

# Follow our story



How Ericsson's 5G factory has been recognized as an industry 4.0 frontrunner by WEF Explore more



How Ericsson will break the energy curve of new network technology Explore more



How digitalization can help reduce GHG emissions across industries by at least 15% by 2030

Explore more

Together, our purpose and vision set out the power of mobile connectivity to deliver positive change, and the focused role that Ericsson will play in shaping that change to create a better world.



Below are a few glimpses into the hyper-connected world our vision will help create. The precise role that connectivity plays in these stories will vary — from providing global breadth of coverage at near limitless capacity and vastly increased speed, to scenarios that will require new levels of security assurance and increased processing power — available from anywhere in the network:



# Imagine... a world where anyone can learn anything from anywhere

Imagine if quality education wasn't dependent on physical proximity, but instead every child or adult had access to a personalized, virtual learning environment that could complement a classroom education.

Mobile networks will play a major role in connecting every learning establishment and learner. They will also enable completely new ways of learning. Imagine a virtual classroom where you can learn alonaside anvone in the world — where students and teachers are translated in real-time to learn together as a global community. Imagine being able to use 'mirror' or virtual worlds to travel anywhere on the earth or even back to key moments in time to experience – touch, feel and interact with – history as it happened. Now imagine those same tools being applied to professional learning – subjects and disciplines that once required access to specialist tools and training centers could be made available to anyone, anywhere, allowing learners of all ages to continually grow existing skills and develop new ones – without traditional barriers to access.

It would truly create a world where anyone could learn anything from anywhere — an equitable world of lifelong learning.



# Imagine... product creation, customization and modelling in a mirror world

Imagine a whole new model for product development and manufacturing.

Already today we can create a 'digital twin', an accurate digital product replica.

But imagine if that replica could replace

CAD drawings, prototypes, and models of any complex product to form a connected, virtualized system of product design and realization. Take the case of a car - design engineers could collaborate on design and performance testing, in real-time, from different locations, aided by augmented reality (AR) and AI.

That 'digital twin' car could then be digitally connected to a smart manufacturing plant that could build it, adjusting as it went to ensure accuracy and efficiency, or personalizing for customers on demand. It could also be used after sale — helping engineers understand what problems to look for and how to repair it based on digital simulations and AI. That information could then be fed back instantly to the design and manufacturing process, and updates could be provided for all existing models.

It would mean huge efficiencies for businesses, reduced risk & time to market and opportunities across the value chain.



# Imagine... experiencing every dimension of entertainment

Imagine if there were no limits to how we experience sporting moments. Today when we watch events, we can look up details online or share reactions on social media. But limitless connectivity could take watching a game to whole new level. Imagine being in the stadium, watching the action in person, but with additional information layered onto your real-world view. With mixed reality that blends the virtual and real worlds through devices like contact lenses, we could see key stats, the likelihood of a player scoring a penalty, or anything we want to know, in front of our eyes. It could point out friends in the stadium, and we could instantly share snippets of game reaction with them.

Next, imagine a game we couldn't attend. With 'mixed reality' and the 'internet of senses', we could experience the game just as if we're in the crowd — the sound, feel and smell of being part of the excitement, and all the angles of the live action — all from our sofas. Finally, imagine a full sensory experience, where we can feel the speed of the game as the players feel it, the force of kicking the ball, or become a virtual player where we fully experience what it's like on the pitch.

It could transform how we experience the thrill of any sporting event — or any event at all.



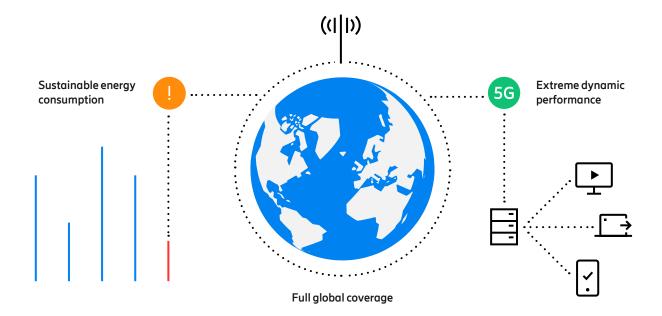
# The attributes required to deliver limitless connectivity

The **mobile networks** we build in the future will need to have certain core attributes to allow them to become the platform for innovation we envisage.

# Extensive and dynamic

Networks will need to offer full global coverage for wireless communications. They'll need to be capable of managing extreme and dynamic performance in terms of data rates, latency, and the capacity to handle trillions of embedded devices,

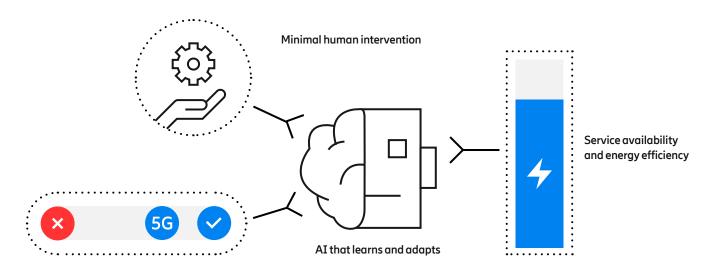
from tiny sensors to devices enabling multisensory immersive communication. They'll need to do this without increasing — and even while reducing — energy consumption in the network.



# Highly intelligent

To be deployed at the required scale, global networks will need to be operated with minimal human intervention, using centralized and decentralized AI to ensure appropriate service availability and energy efficiency. The network will need to become 'cognitive' — capable of learning and

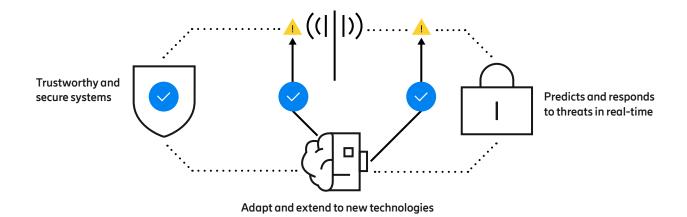
adapting, making decisions, and solving problems itself. The AI in the network will need to be 'intent-driven', working towards a specific outcome set by humans, with decision-making that is explainable and free of bias, to make sure we can trust and understand the decisions made.



# Resilient and trustworthy

With increased dependence on mobile networks will come increased pressure for systems to be trustworthy and secure. The technical abilities required – reliability, availability, resilience, security, and privacy – are inherent in networks today.

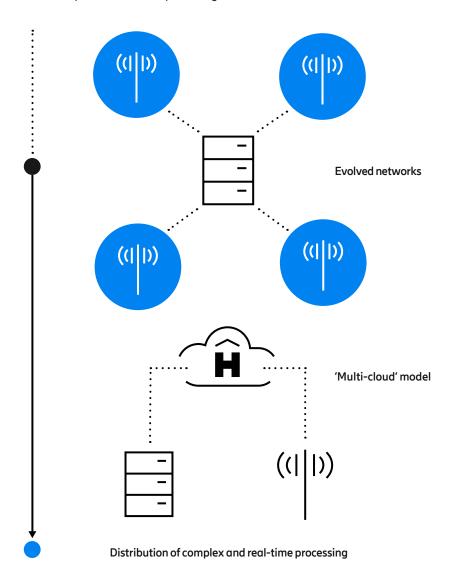
But they will need to be extended with new technologies and capabilities, such as using 'digital twins' to model risks in the network, and using AI to predict and respond to threats in real-time.



# Capable of processing anywhere

To support the incredible array of applications we envisage in future, mobile networks will need to evolve — from classical architectures where processing happens in centralized servers, to a model where complex and real-time processing is

distributed and tightly integrated throughout the network. This approach will require a 'multi-cloud' model and will continually embrace new processing innovation in areas such as quantum computing.



# The nature of the future eco-system

The ecosystem of providers and partners across the industry will change to ensure the level of innovation and progress needed. The ecosystem will grow, as an increasing web of partners will need to come together to access and innovate on the network. We will collaborate with new partners such as start-ups with new ideas, whole industries that can be transformed through connectivity, international organizations which inspire and support new ideas, and national governments and regulators who stimulate and regulate responsible development. But as it expands and collaborates in new ways, this ecosystem will still need to be governed by a common set of principles and standards. The network needs to always work in the same way, wherever you are. Operational predictability & service scalability will remain as important in 2030 as they are today.

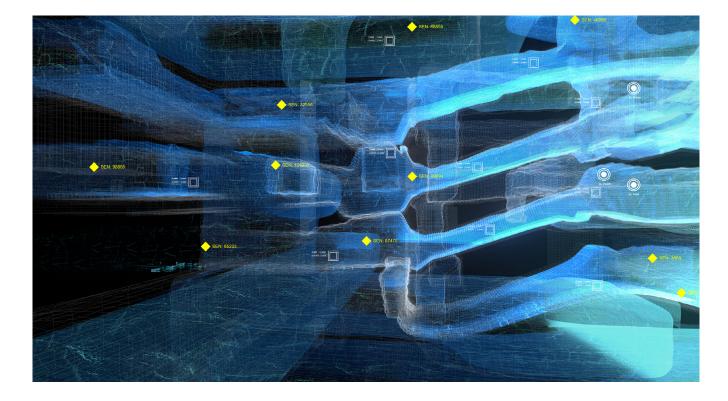
# The role of Ericsson

Ericsson in 2030 will continue to break new ground in the provision of mobile solutions and services. Over the next decade, we envisage taking an ever more proactive role to stimulate industry development for the benefit of our customers and society. Two important roles that we will play are: Creator & innovator — we will create the networks we need for the future. We will use our position as a technology leader to continue to develop and build energy efficient networks that are extensive and

dynamic, highly intelligent, resilient and trustworthy, and capable of processing anywhere, so that they can meet the needs of the next decade and beyond.

Second, we will continue to shape the industry for the benefit of everyone, by taking an increasingly active role as an orchestrator of ecosystems. This means continuing to define the open standards that enable mobile innovation to thrive; bringing together partners across ecosystems to collaborate, innovate & kindle

new ideas; evolve the ways in which we can expose network functions and capabilities in order to allow innovation to scale without friction; and form partnerships with other vendors and critical technology players such as hyper-scalers and cloud providers to ensure we fully explore and realize the full possibilities of limitless connectivity.



# The future is a place for purpose & vision

Ours are clear, and we invite partners, customers and consumers to join us in creating connections that make the unimaginable possible, and realizing a world where limitless connectivity improves lives, redefines business and pioneers a sustainable future.

Join us on the journey

#ImaginePossible

Ericsson enables communications service providers to capture the full value of connectivity. The company's portfolio spans Networks, Digital Services, Managed Services, and Emerging Business and is designed to help our customers go digital, increase efficiency and find new revenue streams. Ericsson's investments in innovation have delivered the benefits of telephony and mobile broadband to billions of people around the world. The Ericsson stock is listed on Nasdaq Stockholm and on Nasdaq New York.

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