

160th Founding of International Telecommunications Union

Our thanks to all the technology professionals who shared their views in celebration of the 160th anniversary of the International Telecommunications Union (17th of May). We were overwhelmed by the interest and volume of responses. For readability, we have included a wider selection of responses below.

Which global connectivity milestone do you think matters most over the past 160 years, and why?

The most important global connectivity milestone over the past 160 years is the successful laying of the first transatlantic telegraph cable in 1866, because it fundamentally reshaped how the world communicates and still underpins today's digital infrastructure. By shrinking transatlantic message delivery from weeks to minutes, it marked the true beginning of real-time global communication and set the foundation for everything that followed. Despite the prominence of newer technologies like satellite networks, about 95% of international data still travels through undersea cables, carrying an estimated \$10 trillion in daily trade, which highlights how enduring this infrastructure is.

Yet, recent suspected sabotage incidents in regions like the Baltic Sea and near Taiwan, along with initiatives such as NATO's Baltic Sentry mission launched in 2025, reveal how vulnerable these cables remain. More than a century and a half later, the coordination challenges that led to the creation of the International Telecommunication Union persist, and the lack of a unified international framework to protect undersea cables underscores just how critical this original milestone continues to be.

Kashif Nazir, Senior Technical Architect at Cloudhouse

If you strip away the noise, and focus on what truly shifted the trajectory of human progress, it's the invention of the telephone: the moment we moved from delayed, fragmented communication to the instant transfer of human voice across distance. That single leap collapsed time, accelerated decision-making, deepened relationships, and enabled business, diplomacy, and innovation to operate at a pace previously unimaginable. Letters informed, the telegraph signalled, but the telephone connected directly, emotionally, and immediately. It turned the world from a series of isolated pockets into a responsive, living network, and every advancement since, from mobile to

digital data, stands on that fundamental breakthrough: the ability to speak, be heard, and act in real time, no matter where you are.

Kevin Gaskell, Chair of ITS

Not a cable, not a satellite, not even the internet itself, but interoperability through standards. Even in my own comparatively short 30 years in the industry, I've lived fragmentation first-hand: TCP/IP alongside IPX/SPX, DEC LAT and Banyan VINES, Token Ring and Ethernet in the same estate. It all worked, right up until you needed it to work together. Every gateway and translation layer was an operational tax: more complexity, more brittleness, more 2am failures that nobody had budgeted for. The ITU's early push for cross-border consistency was the first serious attempt to solve that at scale, and the eventual global convergence on IP made it real. Neither was glamorous, neither introduced anything new to marvel at, but both were essential. And for anyone working in Operational Technology, the challenge is far from resolved. Infrastructure makes connection possible. Standards make it usable at scale. That distinction matters more than most people realise, and we've spent 160 years proving it.

Rik Ferguson, VP of Security Intelligence at Forescout

When I think of a connectivity milestone, my mind immediately goes to the 1970's and the Voyager 1 Spacecraft. Currently, the spacecraft is the furthest man-made object in space, at around 15 billion miles away from Earth, and getting farther away every passing minute. Yet, we are still able to send and receive signals, albeit 22 hours or so later, but we can. And we're doing it all with a radio device made way back in 1977. To me, that's pretty profound. Pretty amazing. What an incredible feat that is still paying off to this day.

Alex Dukhovny, Executive Vice President at IntraTEM

The internet would be the obvious answer, but I'd also mention the significance of the institutional agreement that made it possible, the establishment of shared standards and governance frameworks that allowed disparate national networks to interconnect in the first place.

We tend to celebrate technologies but undervalue decisions, which are really the moments that matter. Without the decisions taken to establish shared standards, the internet today would be a collection of incompatible national intranets.

The connectivity challenges of the next decade, whether that's AI governance, payments infrastructure, or data portability, will be solved, or not solved, by the quality of institutional decision-making, and the willingness to subordinate short-term national interest to long-term collective benefit.

Antony Jenkins, Founder, Chair and CEO of 10x Banking

Are current global institutions equipped to handle the pace of technological change?

No organization, no matter how established, is going to figure out the pace of technological change alone. That's true even for the tools that have been around for decades. Application-to-Person (A2P) messaging is a good example. It still needs regular upkeep and, sometimes, a full rebuild of how messages are delivered to keep pace with how businesses and consumers communicate. When you layer in more intelligent messaging channels and new authentication demands, that challenge multiplies. The reality is that the institutions and frameworks governing global connectivity were built for a different time. They're still useful, but they weren't built to move at the speed the market demands. No single company, regardless of size, can close that gap by itself. Innovation is happening across so many different business and technological fronts at once that the only way to access the best ideas is through the right partnerships. What will truly drive progress is organizations with different strengths, like carriers, enterprises, and technology platforms, working together. That's where the real acceleration happens, and that's how you define what a truly connected world will look like.

Nathan Robbins, VP of G2M, Strategy and Alliances at Syniverse

No, not yet. The biggest concern I see is the rate at which AI is advancing. The fact that these tools are widely available, combined with a volatile geopolitical environment, means technological change is exposing global institutions to more risk than ever before, and making risk harder to keep up with. The pace of threat from financial crime in particular is outrunning the institutions designed to govern it.

The way financial institutions screen risky individuals and organisations needs to get much smarter. There needs to be a big shift to continuous, dynamic screening, instead of relying on manual searching, to fight the rise of financial crime and its impact on businesses and the wider global economy.

Matt Mills, CEO of Ripjar

Which emerging technology most urgently needs international coordination?

As artificial intelligence becomes embedded deeper into core infrastructure, the risk is no longer limited to flawed outputs—it's systemic failure, especially when AI interacts with networks and data without coordinated standards, security controls, and clear oversight. The next phase of telecommunications must pair universal access with stronger physical security, AI-aware defense, tighter vendor controls, faster incident response, and deeper coordination across providers, municipalities, law enforcement, and cybersecurity agencies—because we built a connected world, and now we have a responsibility to protect it with the same urgency we used to create it.

Leigh White, CEPA, Founder and CTO of Myriad Advisor Solutions

Artificial intelligence is the emerging technology that most urgently requires international coordination, not because it is theoretical, but because it is already pervasive.

AI systems are developed in one place and deployed globally, affecting economies, public services, security, and information ecosystems across borders. Their impact scales instantly, and their dual-use nature means the same technology can deliver major benefits or significant harm, depending on how it is used. Without shared rules, competitive pressure risks pushing states and companies to deploy powerful systems faster than they can be safely governed. International coordination is therefore not about slowing innovation, but about establishing common guardrails on safety, transparency, accountability, and unacceptable uses, to ensure AI strengthens trust and stability rather than undermining them.

International coordination does not mean halting innovation. On the contrary, it is about creating shared guardrails that allow innovation to scale responsibly. Without coordination, the world risks a patchwork of incompatible rules, strict in some regions, permissive in others, undermining both effectiveness and trust. AI represents a defining test for global institutions. The question is no longer whether AI will be governed, but whether it will be governed collectively or reactively, after harm has already occurred.

Daniela Giannini, Lead Security Engineer at Black Duck.

AI, easily. The other emerging tech on people's lists (climate tech, biotech, quantum) all need coordination eventually. AI needs it now because of the pace of its progression. Most emerging tech moves at the pace of physical infrastructure or peer reviewed papers. AI capabilities ship in weeks and propagate in days. By the time any international body finishes a working group on AI safety, the model class they were studying is generations out of date. The closest playbook for this is probably nuclear non-proliferation, not telecoms standards. The hard part is that AI doesn't need uranium or a physical supply chain to spread. The real control points are compute and talent, and most governments don't own either of them.

Mit Patel, Founder and CEO at Assurix

Data centers are currently sitting at the intersection of AI innovation, energy consumption, national security, and digital sovereignty without shared frameworks across regions or governments. Trillions of dollars are pouring into the project development of this physical infrastructure given its potential for economic growth. Without international coordination of standards for capital structuring, power procurement, and security requirements, we could see a wave of underperforming and distressed data center assets emerge in the portfolios of global institutions, governments, private equity funds, and credit lenders.

Patrick Reyes - Partner, NU Advisory Partners

Quantum computing is the one that most urgently needs international coordination. Because of “harvest now, decrypt later” attacks, today’s encrypted traffic is already a future liability. Once Q-Day hits, that risk becomes a catastrophic breakdown in trust across the borderless internet. AI can wait for policy, but quantum can’t wait for encryption. The world needs immediate adoption of PQC standards, with shared migration timelines and interoperability now, or global communications will get stuck in a patchwork of weak links.

Adam Iyermenko, Founder & CTO, ZeroTier

AI is the emerging technology that most urgently requires international coordination because trust cannot stop at borders. As autonomous systems become embedded across global communications, critical infrastructure, and cloud ecosystems, AI will require enforceable governance and policy oversight to ensure sensitive data and digital identities remain secure, verifiable, and resilient. Without globally aligned standards for trust and accountability, the risks will scale as quickly as the technology itself.

David Sequino, CEO & Co-Founder of OmniTrust

Ultimate beneficial owner (UBO) verification needs international coordination most urgently. The technology to verify who really owns and controls a business against live, registry sources already exists, but a unified framework for access to reliable data does not. We are regressing when it comes to ownership transparency, and right now, the geopolitical environment is only making that harder. Every day, criminals are using shell companies and fraudulent registrations to access financial systems precisely because the gaps between different jurisdictions give them room to operate. The goal should be a unified, global standard for UBO data access that is verifiable, real-time, and legally robust.

Steve Lamb, CEO of Kyckr

I think Network APIs are one of those silent technologies that can really help us protect consumers from fraud. They change how we verify digital identity. And the demand is there, but it's currently stuck because the industry lacks international coordination. This demand sits with hyperscalers that manage a massive volume of transactions. But they would only consider switching from traditional solutions like OTP to Network APIs if these solutions cover at least 75% of all their global transactions.

But scaling APIs globally remains a high-hanging fruit for the ecosystem. MNOs need to spend a lot of money to build these APIs that can be aggregated to create global solutions. But they want to make sure they can get returns. If one API cannot be used for multiple cases or across markets, its margins remain low.

This is because internationally, we haven't agreed on a standard API. Fraud isn't a 'one size fits all' story. In Brazil, everyone is chasing SIM swap to protect WhatsApp, but that use case means nothing in the US, where WhatsApp is not that popular. Regulation is also fragmented, so an API that is compliant in India might not be in Belgium.

Aggregators like Proximus Global are helping bridge this by making it easier for hyperscalers to purchase scalable solutions. But a global scale can only be achieved with true standardisation, where developers can use the same API in India as they do in Europe

Ievgen Martsin, Vice President, Network API Proximus Global

Is the world moving toward a more unified internet - or a more fragmented one?

The internet is becoming more fragmented, not less but not in the way people expected. It is not just about firewalls or national borders, it is about control over data, infrastructure, and enforcement. Governments and organizations increasingly want visibility and policy enforcement within their own environments, driven by privacy, compliance, and resilience concerns. Even as AI accelerates innovation and connectivity, it also amplifies these concerns, raising new questions around where data is processed, who controls it, and how it is governed.

What is emerging is a more “locally governed” global internet where connectivity still spans the world, but trust, inspection, and control are pushed closer to where users and applications actually operate. The architectures that succeed will be the ones that can operate globally without requiring centralized control, adapting to fragmentation without breaking connectivity.

Asha Kular, VP Marketing with Zenarmor

What does “successful global connectivity” look like in 2035?

Successful global connectivity in 2035 will be measured less by whether people are connected, and more by the quality, intelligence and reliability of those connections. For years, connectivity has been defined by coverage and speed. But as AI becomes embedded into customer engagement, operations and decision-making, the network itself becomes part of the experience. A poor network user experience no longer just frustrates employees internally; it directly impacts customer outcomes, productivity and trust.

We are already seeing this shift emerge through AI-driven networking, where automation, predictive analytics and real-time optimisation are reducing latency, improving resilience and enabling more seamless digital interactions across global

organisations. By 2035, successful connectivity will mean intelligent, self-optimising networks that can proactively adapt in real time, predict issues before they impact users, and securely support increasingly AI-driven environments.

Ultimately, successful global connectivity in 2035 will not simply be about keeping people online. It will be about enabling frictionless, intelligent and trusted experiences at scale. The organisations that succeed will be those that treat connectivity not as infrastructure in the background, but as a strategic enabler of both employee experience and customer experience.

James Clark, Network Specialist at Connect

The year 2035 is only nine years away. In the next decade, at the current speed of technological progress, a new generation of communications technology will appear, be enhanced, and reinvented to bring interactive interpersonal communications in multiple languages and multiple forms of expression within one interaction to the daily reality.

It is plausible to imagine global connectivity achieving a level of uninterrupted movement of any form of data to support people interacting with each other in voice, in text, in sign language, in music notes interchangeably, while understanding each other within one conversation in real time.

Evolution of AI capabilities integrated with high-speed digital communications delivered over global connectivity will make it possible to transform one form of expression into another in the same dialog. Successful global connectivity will realize consistently reliable means of reaching and communicating with anyone anywhere in one's native form of expression while enabling person(s) at the other end to understand it and communicate in their native form of expression in real time.

Henry Zelikovsky, Founder and CEO, Softlab360

Successful global connectivity in 2035 will be driven by hybrid, integrated unified communications that provide organisations with the flexibility to connect and collaborate in ways that best meet their operational needs. This will rely on adaptable deployment models spanning public and private cloud, edge computing, and on-premises environments.

Businesses will increasingly seek to modernise their communications infrastructure without compromising security, resilience, or operational control, while ensuring seamless integration into workflows and business applications.

I believe the future of connectivity will be inherently interoperable and flexible by design, enabling organisations to adopt innovations such as AI-powered capabilities in their terms, while supporting increasingly distributed workforces and mission-critical operations.

We can also expect truly seamless roaming across communication modalities. While the concept itself is not new, users will increasingly demand a consistent, uninterrupted

experience as they move between locations, devices and collaboration environments, ensuring reliable communication at the point of activity, in every situation.

Ultimately, the objective is not to establish a one-size-fits-all communications model, but to enable seamless, secure, and adaptive collaboration tailored to the specific needs of every user and environment.

Mark Duff, VP at Mitel