ITU Secertary-General's interview with the Brazilian Satellite Communications Association (ABRASAT) – July 2024

1. Tell us about the Early Warnings for All initiative – what is ITU's role and how can Member States contribute?

Ms. Doreen Bogdan-Martin - ITU leads the Communication and Dissemination pillar of the Early Warnings for All initiative, which aims to protect everyone on Earth with a multi-hazard early warning system.

At its core, our role involves leveraging last-mile connectivity to make sure safety alerts and warnings reach everyone in time to take action, especially those communities most at risk.

And it's increasingly important given the increasingly severe disasters we're seeing around the world – from extreme heat in India and Asia to drought in southern Africa to the devastating floods in southern Brazil.

Our Common Alerting Protocol enables us to scale the dissemination of warnings through multiple communication channels, including satellite direct broadcast.

Satellites are key in the detection, monitoring, analysis and forecasting of hazards.

Recognizing this, the Global Satellite Operators Association recently pledged to support the Early Warnings for All Initiative through the Parnter2Connect Digital Coalition, along with a series of other connectivity-related pledges.

There are many avenues through which ITU Members can contribute to Early Warnings for All.

Financial support is critical. Multi-year funding agreements, in particular, offer the stability and flexibility we need to carry out our mission effectively through strategic forward planning, and help us respond to Member States' requests for support.

Commitment and leadership from governments in need of better early warning systems is also key, especially in terms of coordinating national stakeholders to ensure that we can deliver results efficiently and effectively on the ground. I encourage ITU Member States to endorse Early Warnings for All and advocate for donor support.

We also welcome in-kind support in the form of expertise, technology, and infrastructure, which are the building blocks of effective early warning systems. By sharing best practices and technical know-how—especially in areas like cell-broadcasting and the CAP, countries with advanced mobile early warning systems can help others build more resilient systems.

Third, we need to get the global mobile and satellite industries on board. Their extensive networks are vital to disseminate warnings as quickly and widely as possible, reaching even the most remote populations.

The private sector more broadly can enhance our efforts by helping us pinpoint at-risk communities and understand how to best reach them via digital communication channels. Our collaboration with partners like Microsoft on disaster connectivity maps is a step in the right direction, but we need more partners to contribute anonymized data, enabling us to visualize connectivity levels and identify risks more accurately.

I would encourage anyone working on AI and early warning systems to join our AI sub-group for Early Warnings for All. Together, we can explore how artificial intelligence can address gaps in the early warning system value chain and make sure everyone on Earth is protected.

2. Give us an update on the Partner2Connect Digital Coalition. Are any pledges related to satellite connectivity?

Ms. Bogdan-Martin - The Partner2Connect Digital Coalition is a game-changing opportunity to take a holistic approach, catalyze new partnerships, and mobilize the resources needed to connect the remaining third of humanity that is still offline.

P2C is opening new avenues for stakeholders who understand that collaboration is the only way to tackle a challenge of this scale and magnitude – and the satellite industry is certainly among our collaborators!

So far, we have received 37 pledges mentioning the specific use of satellite technologies from 23 entities in 16 countries, worth a total of nearly USD 1 billion.

We recently celebrated the total number of P2C pledges reaching a major milestone of USD 50.96 billion, over half the USD 100 billion goal we've set for 2026.

I am calling on all players and partners in the satellite industry and beyond to join P2C so we can achieve our goal of meaningfully connecting those 2.6 billion people who find themselves on the wrong side of the digital divide.

3. How is ITU leveraging advances in AI towards its strategic goal of universal connectivity?

Ms. Bogdan-Martin - The main way we do this is through AI for Good – one of the biggest multi-stakeholder AI platforms in the world, aimed at identifying practical applications of artificial intelligence to advance the Sustainable Development Goals (SDGs).

Last month we held our AI for Good Global Summit, which brought together thousands of AI innovators and stakeholders from all over the world to explore governance solutions that can help minimize the risks of AI, as well as at AI-based solutions that can tackle major societal challenges including the digital divide.

Through our standardization sector, ITU-T, we also bring partners from government, industry, academia and the technical community together to standardize AI-powered solutions for optimizing telecommunications networks. For example, our Focus Group on Machine Learning for Future Networks including 5G (FG-ML5G) is exploring how machine learning can be used to manage traffic more efficiently, predict maintenance

needs, and enhance quality of service, which is crucial for expanding reliable connectivity to underserved areas.

ITU also promotes the use of AI to develop accessible technologies for people with disabilities. Solutions like speech recognition, real-time translation, and assistive devices can leverage AI to help ensure that all individuals, regardless of their physical abilities, can access and benefit from digital technologies like the Internet. We saw an unforgettable example of this in real time at the AI for Good Global Summit, where Luis, a young man from Portugal who was diagnosed with ALS and lost the ability to speak, was able to address the crowd thanks to AI which preserved his voice.

These are just a few examples of how AI is bringing us closer to our strategic goal of universal connectivity, from boosting network coverage to improved accessibility.

4. In November 2023, the Radiocommunication Assembly (RA-23) adopted a new resolution on space sustainability. Why was this resolution so important and what is ITU's role in space sustainability?

Ms. Bogdan-Martin - Our shared space ecosystem is undergoing a profound transformation, with private and public sectors undertaking a variety of activities from space-based connectivity to scientific research, including Earth observation, to resource extraction and even tourism.

This transformation towards a space-dependent era is partly driven by the fact that space has never been more accessible in terms of costs. This is reflected in the increasing number of regulatory filings for satellites systems operating in low-earth orbit, for example.

With this promising future emerging now, it's time to come together and focus our efforts on the responsible and sustainable use of space resources, which include radio spectrum and orbital resources.

And that's exactly where ITU comes in.

The entire space ecosystem is underpinned by ITU standards and regulations.

We're responsible for coordinating radio frequency spectrum on Earth and in space, and we help coordinate positions in the geostationary orbit.

Because these resources are limited, and facing continuously growing demand with the advent of new technologies and evolving satellite communications, their long-term sustainability requires careful coordination and management, not only for the space industry but for the increasingly space-dependent global economy to function.

That's why ITU is hosting our first-ever Space Sustainability Forum 2024 this September in Geneva.

We're gathering leaders and experts from governments, industry, satellite operators, space agencies, UN agencies and civil society to discuss ways to ensure space remains accessible and sustainable today and in the future. I hope ABRASAT will join us!

5. You have been very vocal in boosting the participation of women and girls in the tech sector, namely through

initiatives like Girls in ICT Day which was launched in 2011. Can you give us an overview of the evolution of Girls in ICT – how far it has come, and where it's going?

Ms. Bogdan-Martin - It's hard to believe it's been over a decade since ITU established International Girls in ICT Day to inspire young women to pursue careers in science, technology, engineering, and mathematics (STEM).

Now a global movement of over 11,400 girls and counting, Girls in ICT has become a vital platform for highlighting the barriers still facing women in the tech world, especially in emerging fields such as artificial intelligence, quantum computing, and the metaverse.

Although women are a major part of the global workforce, we are still underrepresented in tech roles, holding less than a third of these jobs and making up only 30% of STEM students.

This gap extends to the top, where just 1 in 8 women hold C-suite STEM positions.

Mentorship and networking are vital in reversing this trend, as they help build confidence and leadership skills.

In fact, leadership was the theme of Girls in ICT Day 2024. For me, leadership in STEM is more than holding a job title or position of power; it's about harnessing ideas and innovation to spark transformative change.

Organizations and companies also have a major role in tackling unconscious bias through more inclusive policies and training, and by creating environments that support diversity at all levels.

Initiatives like Girls in ICT Day are so important in raising that awareness.

It also gives us the opportunity to recognize the many contributions of women to technology and celebrate them on a global scale.

As for the future, I always say every day should be Girls in ICT Day – because our common future depends on the digital inclusion of women and girls!