

# APT-INSIGHT OF THE TOP

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Clinical Professor Dr. Sarana Boonbaichaiyapruck



**“INCLUSIVE CONNECTIVITY IS A  
BIG WORD”**

SEPTEMBER 11, 2023

During the APT Symposium on Inclusive Connectivity which was held on 11-12 September 2023 at W Bangkok Hotel, Bangkok, Thailand, we had the privilege of interviewing with Clinical Professor Dr. Sarana Boonbaichaiyapruck, Chairman of The National Broadcasting and Telecommunications Commission (NBTC).

He provided valuable insights in the initiatives and strategies that The NBTC is employing to promote inclusive connectivity in Thailand.

**Q1: Can you explain The NBTC's current initiatives and strategies for promoting inclusive connectivity in Thailand?**

Inclusive connectivity is a big word. It means a lot of things. Anyway, we have several initiatives aimed at promoting inclusive connectivity in Thailand. Firstly, the Universal Service Obligation (USO), which has been in place since 2010. When we began laying the infrastructure for telecommunication, we focused on providing a 5G fiber optic network to remote villages, which were referred to as Zone C and C plus. At that time, Business operators did not see these areas as commercially viable, so they were not interested in investing in these areas. However, my predecessor decided to establish a fund to build up the network and provide internet access to these areas

mainly schools, marketplaces, and small hospitals. This project was successful and we managed to allocate 2.5% of the operators' revenue to the fund, allowing us to build infrastructure in areas where businesses did not want to invest. Now, these areas have become commercially viable and have moved up from Zone C and C plus to C and B. We have built a new structure called USO NET, which has high-speed internet and computer terminals to help people connect with e-government, do business, or gain knowledge. In established school buildings, we have computer rooms called USO Wrap. We have also installed Wi-Fi access points, which can be accessed using a 13-digit national ID. We have been successful in connecting the unconnected with this initiative and have collaborated with the Department of Digital and Economic Development, we have Net Pracharat. Together, we are working towards providing inclusive connectivity to all 47,000 villages.

My predecessor laid the foundation, but we still have a long way to go. With our infrastructure in place, we can provide various services such as education, healthcare, and agriculture.



Our technical numbers show that we can offer download and upload speeds of 100 per 100 on our platform. We hope to provide inclusive connectivity to all, including the elderly and disabled who may be at a disadvantage. We even distributed SIM cards during the pandemic so that students could attend classes online. The USO project aims to provide connectivity to those in need, especially during critical times like the pandemic.

**Q2: What challenges or obstacles has The NBTC encountered in its efforts to promote inclusive connectivity?**

Digital literacy is one of the most challenging things. It's possible that simply implementing infrastructure may not be sufficient. We may need to provide training and education to individuals, not necessarily everyone, to improve their digital literacy. It's important to teach them the necessary skills to succeed in a digital world.

After gaining a basic understanding of how the digital world works, individuals can advance their skills and easily adapt to various tasks such as banking, telemedicine, and creating digital content. By providing structure and training on device usage and digital skills, individuals can develop the necessary techniques and routines to succeed in a digital environment. It is important to remember that not everyone is familiar with these skills and may need additional support to become proficient. That's the main challenge in terms of inclusive connectivity. People at ITU use the term "to connect the unconnected".



***“DIGITAL LITERACY IS ONE OF THE MOST CHALLENGING THINGS”***

Whether you want to be connected or not, they want to connect with you.

In addition, our main job is spectrum management, which involves deciding which wavelength or frequency is being utilized to its full capacity. You may have heard of digital TV, which we allocate from 470MHz to almost 700MHz. We started with 36 channels but some decided they couldn't make enough profit, resulting in the shrinking of the broadcasting industry.



In terms of telecommunication, we have allocated a range of spectrum from 700 to 26GHz. For 4G LTE, coverage must be provided in more than 90% of the country. For 5G, we aim to achieve full capacity in up to 70% of the country, with the EEC being the first area to start 5G deployment. Although 5G is not being used to its full potential, it has the potential for advanced communications and IoT. For most people in cities, video streaming and gaming are the main uses for 4G LTE, which is good enough. Overall, the frequency allocation has been adequate.

Currently, we are conducting a trial in the sandbox field at both 3500 MHz and 28GHz frequencies, with a focus on studying the environment. However, it remains uncertain whether this trial will lead to any business opportunities, as we have yet to fully utilize the options we have already explored.

**Q3: Can you tell us about any international collaborations The NBTC is involved in to enhance the telecommunications sector?**

Our organization is a part of the United Nations' arm of telecommunication, the International Telecommunication Union (ITU). We were recently elected to serve as one of the 48 Council members in Region E. In July, we attended a council meeting in Geneva, where we would have ITU's new direction under a new Secretary General and Director. During a breakout session, we collaborated to determine the best ways to promote international cooperation. As part of our work with the ITU, we are proud to be involved in the "Girls in ICT" project, which aims to increase the representation of women in the field of telecommunication. Additionally, we are collaborating with the Asia-Pacific Telecommunity (APT), which plays a key role in the ICT industry in the Asia-Pacific region. Certain organizations have certain formality and have specific responsibilities. It appears that we have attended and collaborated with the APT in many meetings focused on development, standardization, and radio communications.

Additionally, there is the ASEAN Telecommunication Regulators' Council, which appears that The NBTC is heavily involved in international matters. As per the law, The NBTC represents Thailand for these organizations.

**Lastly, any suggestions on how APT can enhance its performance and services?**

Keep up the good work! Your meetings always have a great turnout, with people attending from all over the world. Everywhere I go, the venue is full and everything is well-organized and on time.



++ [Editor's Note] That was such a nice interview with Clinical Professor Dr. Sarana. Apart from his valuable insights, he is apparently kind and gentle. With his informality and generosity, these made this interview smooth and impressive. Thank you The NBTC's team for the kind arrangement and all photos.