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Connecting the unconnected is often described as an unprofitable exercise. My view is quite different. The Information Society cannot be truly global, a true digital reflection of humanity's knowledge, without connecting all the world's people. Our profit motive? Preventing social loss and inequality.

Broadband has the potential to bring rural communities within reach of education, healthcare, financial services and new opportunities to do business and improve their quality of life. But advanced countries also have a great deal to learn from distant cultures, which have preserved values, traditions and knowledge now forgotten by many modern societies.

Connecting the unconnected is not a transfer of knowledge and opportunity from developed to developing countries; it is a reciprocal exchange of knowledge, one that benefits us all.

Cost-effective implementation takes priority

ITU's international standards reflect the state of the art in information and communication technology (ICT). Most ITU standards aim to provide common platforms for growth and innovation in emerging fields of ICT. Adapting mature technologies to new applications is a path less travelled in technical standardization, but there is no doubt that this approach could yield standards of great value to sustainable development.

This is the approach we took in the development of a new ITU standard to bring broadband to rural communities, Recommendation ITU-T L.1700 "Requirements and

framework for low-cost sustainable telecommunications infrastructure for rural communications in developing countries". The standard builds on established technologies to identify the founding principles for low-cost, sustainable broadband backhaul infrastructure, with a special focus on rural communications in developing countries.

As a framework standard, L.1700 is largely technology-neutral. Technology-specific best practices are provided by supplement texts such as ITU-T L Supplement 22, which specifies the design of a low-cost, terabit-capable optical cable that can be deployed on the ground's surface with minimal expense and environmental impact.

Never too old to learn something new

The design of the optical cable specified in L Supplement 22 builds on lightweight submarine-cable technology, technology with its first deployments targeted towards lakes and wetlands and other submarine environments less hostile than our oceans. L Supplement 22 has adapted this design to terrestrial deployment, taking an established technology and giving it new life in a new application environment.

The unique feature of L.1700 and its corresponding supplements is the focus on ease of deployment.

Cost-effective, practical implementation is the standard's top priority. Reliability is the second most important attribute. This reverses the common approach to fibre-optic cable design – reliability is usually the first prize, but with L.1700, affordable implementation comes first.

Local communities will have the ability to secure these on-surface lines, using everyday tools to partially bury the lines, settle them on ground underwater, suspend them aerially, or relocate the lines as necessary.

As a United Nations specialized agency, ITU standardization has an unmatched development dimension. We see this in action in ITU-T L.1700.

L.1700 was developed by ITU-T Study Group 5, the standardization expert group responsible for 'ICTs, the environment and climate change'. Learn more about the group's work here.

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