

"I am calling on all players and partners to join Partner2Connect and work together so we can achieve our goal of meaningfully connecting those 2.7 billion people who are still offline."

> Doreen Bogdan-Martin, Secretary-General, ITU

ApplianSys Partner2Connect Pledges

As part of the ITU's Partner2Connect (P2C) Digital Coalition, ApplianSys is proud to announce its pledges to help Educators and Technologists in hard-to-connect and underserved areas to both understand and adopt connectivity best practice that bring the most transformational benefits of digital learning to communities sooner, equitably, and more sustainably.

Premise

The methodology for planning and specifying connectivity to schools has evolved only a little in 20 years. The existing pathway, relying almost exclusively on the continuous build-out of bandwidth capacity, may have served some nations well to an extent. But for Future Visioning 2030, and for lower bandwidth and hard-to-connect regions, we need a new Meaningful Connectivity paradigm, because bandwidth is neither equitably available nor uniformly priced.

Best practice from around the world shows that internet links in learning environments can be used far more efficiently – regardless of bandwidth capacity.

As a result, schools can be provided with the Meaningful Connectivity that they need, sooner, more equitably, and at lower cost.

Our Pledges

The ultimate objective of our pledge-making is to provide strategic, tactical and technological support to national education leaders and policymakers in the ongoing development, establishment, and implementation of connectivity-efficient strategies, policies and practices. We intend our pledges to equip respective stakeholders with the insights and tools needed to help LDC groups transform education through digital learning equitably and more sustainably.

Working closely with the ITU and P2C we will work to accelerate the provision of the Meaningful Connectivity schools need in LDC groups by:

1. Supporting the international education & connectivity communities to evolve collective understanding of learning environment internet traffic characteristics, Effective Access and Connectivity Efficiency Strategies

2. *Providing access, for <u>Schools & Ministries of Education</u>, to data, insights, and training, including assessment and evaluation methodology for fixing The Connectivity Problem for Schools, and helping to mobilise funding*

3. Developing & providing technology solutions & services for <u>schools and learning environments</u> that directly support fully inclusive, sustainable Effective Access to the most transformational e-Learning

4. Assisting <u>education content and education application creators</u> to secure equitable and sustainable access for under-served communities, supporting the use by schools of Connectivity Efficiency Strategies.

5. Assisting <u>ISPs and RENs</u> to accelerate equitable, sustainable access to the Meaningful Connectivity that schools need, by supporting the use of Connectivity Efficiency Strategies.

We pledge to support all organisations involved in supporting teaching & learning from all sectors. We particularly encourage participation from public, private and NGO bodies working with public sector Basic and TVET education.

While these are **global pledges**, participation is welcome from **all countries in LDC, LLDC, & SIDS groups** including: Angola, Benin, Botswana, Cabo Verde, Comoros, Djibouti, Gambia, Guinea, Liberia, Madagascar, Malawi, Mauritania, Maldives, Mauritius, Mozambique, Niger, Rwanda, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Tanzania, Uganda, Zambia, Zimbabwe, Bhutan, Cambodia, Fiji, Kazakhstan, Marshall Islands, Micronesia, Nauru, Nepal, Palau, Papua New Guinea, Singapore, Solomon Islands, Tuvalu, Uzbekistan, Vanuatu, Azerbaijan, Antigua and Barbuda, Bahamas, Barbados, Belize, Bolivia, Cuba, Dominican Republic, Grenada, Guyana, Jamaica, Paraguay, St Kitts and Nevis, St Lucia, St Vincent & Grenadines, Trinidad and Tobago.

Participation is also encouraged for all other countries, including: Cameroon, Ghana, Ivory Coast, Kenya, Namibia, Nigeria, South Africa, Tunisia, Brunei, India, Indonesia, Malaysia, Philippines, Sri Lanka, Thailand, Vietnam, Albania, Bulgaria, Georgia, Greece, Romania, Turkey, Algeria, Egypt, Morocco, Jordan, Oman, United Arab Emirates, Argentina, Brazil, Chile, Colombia, Costa Rica, Ecuador, Mexico, Nicaragua, Panama, Peru, Uruguay.



Pledge 1: ADVOCACY: Evolving 'Meaningful Connectivity' in support of SDG4

We pledge: to help international education & connectivity groups evolve a collective understanding of Meaningful Connectivity in the learning environment that enables new connectivity efficiencies to accelerate digital transformation of education for LDC groups and low-bandwidth communities everywhere.

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By bringing together international education & connectivity groups to review current practice in light of evidence-based data and insights accumulated from schools worldwide over 20 years, we aim to raise awareness of how an expanded understanding of Meaningful Connectivity will help shape more cost-effective, sustainable and inclusive connectivity strategies.

We commit to:

- sharing knowledge, expertise, insight, and best practice from e-Learning connectivity projects in all regions of the world
- promoting the development of Effective Access and Efficient Connectivity Strategy methodologies
- contributing to the development of a new paradigm for schools' connectivity that corresponds with the reality of hard-to-connect and underserved communities and nations

We commit, before the end 2024, to consult with

• 100 education, digital infrastructure, and funding leaders in 50 organisations,

to include:

- <u>Communications policy advisors</u> who set the frameworks for schools' and colleges' connectivity: to define actionable recommendations aimed at extending the capability of existing infrastructure and accelerating the provision of sustainable equitable access in hard-to-connect and low bandwidth areas.
- <u>Education digital transformation policy advisors</u>: towards raising educational transformation ambition in line with evolving connectivity paradigms.
- <u>Development Finance Institutions and Universal Service Funds</u>: to consider the impact of a new paradigm on connectivity mapping, planning, and funding policy, towards reducing the cost and maximising the educational return on investment, impact and reach of connectivity projects for Ministries of Education.

Through this pledge, we will urge <u>stakeholders in the global Education ecosystem</u> to pull together to better serve low-bandwidth nations.

Pledge 2: PROGRAMMATIC: Global data share / best practice – the evolution of Schools Connectivity, efficiency strategies, evaluation, funding

We pledge: to help <u>education policymakers and delivery agencies</u>, for national, regional, and <u>local schools' systems</u>, to accelerate digital transformation by fixing the Connectivity Problem for Schools and helping to mobilise connectivity funding.

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By providing access to evidence-based data and insights, together with evaluation and implementation methodologies, we aim to help build capacity for the strategies and methodologies needed to take advantage of network efficiency technologies in connectivity and pedagogy plans.

We commit to:

- provide high-level support for <u>policymakers</u> in considering the impact of effective connectivity thinking on Education Policy
- equip <u>pedagogy leaders</u> to incorporate and capitalise on new connectivity thinking
- make available to <u>technology leaders</u>, evaluative methodology for connectivity, including for rapid evaluation events that help mobilise funding.

We commit, before the end of 2025, to make these resources available to

• 100 international, national, state/provincial, local education authorities, organisations, associations,

to include Policymakers, Technologists and Educators.

Through this pledge, we will work with said <u>stakeholders in education systems everywhere</u> to help them build capacity for effective access strategies that will enable more schools to be connected and already connected schools to do far more with less, at significantly reduced cost, ultimately raising educators' ambition to seek the most transformational e-Learning sooner.

Pledge 3: PROGRAMMATIC: Connectivity Efficiency solutions for schools, eval methodology, mobilise funding

We pledge: to engineer and produce network technology solutions that directly support equitable & sustainable access to the most transformational e-Learning in <u>learning environments</u> <u>everywhere</u>.

ApplianSys has worked constantly since 2001 to develop and refine content optimisation solutions to augment the costly investments nations need to make to provide internet connectivity bandwidth.

Expertise developed over many years has enabled us to work with schools around the world, providing specialist dedicated technology. That technology enables schools to achieve the sufficient connectivity needed to support e-learning initiatives in locations where, typically, bandwidth capacity alone would have been insufficient.

By continuing to design and build solutions that respond to the technical challenge of everevolving web and online content technology, we aim to provide products and services that directly meet the changing needs of learning environments everywhere.

We commit to:

- providing effective products and solutions that enable sufficient connectivity for the intended use of information technologies in Education, with continued focus towards the <u>hardest-to-connect communities</u>.
- working with <u>delivery agencies</u> to design and implement sustainable and fit-for-purpose support services, including in-country knowledge transfer and technology capacity-building.
- providing low total cost solutions that deliver highest return on investment, helping support the mobilisation of funding.

We commit, before the end of 2025, to introduce ApplianSys schools' connectivity solutions to:

• 250 national, state/provincial, local education authorities

to include:

 technology education, solutions training, rapid evaluation-&-evidence events, help to mobilise funding

Through this pledge, we will support schools' systems everywhere to deploy low-cost networktechnology solutions that optimise internet bandwidth, helping reduce the cost of connectivity, helping stakeholders mobilise funding, enabling connectivity rollout to underserved locations faster, and transforming Effective Access.

Pledge 4: ADVOCACY: Collaboration with education content/software creators – extending reach to low-bandwidth areas

We pledge: to assist <u>education content and education software creators</u> in supporting schools' use of Connectivity Efficiency Strategies to secure equitable and sustainable access in underserved communities.

Content that is highly interactive and media-rich has proven to provide the most engaging and rewarding learning experience. But, originally developed for well-connected learning environments, that content has grown rapidly to overwhelm average school internet capacities. This means the most transformative learning content is excluded from learning environments with lower bandwidth and hard-to-connect regions.

If the design and provision of content and software were to incorporate 'inclusive' delivery mechanisms, it would open up new markets, and ensure every school would benefit regardless of bandwidth capacity.

By working together with educators and their respective content and software providers to interpret evidence-based data and insights accumulated from learning environments around the world, we aim to help providers understand and better serve those learning environments which must deliver any e-learning program on narrow or limited bandwidth capacities.

We commit to:

- share internet-optimisation knowledge and data insight with stakeholders to foster best practice and help inform design.
- make available accessibility assessment methodologies, and modelling, lab and fieldtesting facilities to support any required design evolution.

We commit, before the end of 2025, to provide the necessary collaboration to inform and advise:

• 100 organisations looking to create, procure, or manage, education content and software applications

to include education content and education software application managers, vendors, and designers.

Through this pledge, we aim to help invested parties optimise their learning content and platform solutions. Helping maximise how they interact and best operate with network efficiency strategies and technologies will:

- increase the adoption of content in new markets and otherwise unreachable regions.
- expand the learning impact of ICTs and digital resources.
- help secure equitable access to the most transformative capabilities.

Through this pledge, we intend to work with <u>all digital learning stakeholders</u> towards the development, establishment, and implementation of new international standards for connectivity efficiency that will directly support equitable and sustainable access for <u>underserved</u> <u>communities including all LDC groups</u>.

Pledge 5: ADVOCACY: Collaboration with ISPS, RENs, supporting connectivity efficiency strategies in Education

We pledge to assist ISPs (Internet Service Providers) and RENs (Research and Education Networks) to accelerate equitable, sustainable access to the Meaningful Connectivity that schools need, by supporting the use of Connectivity Efficiency Strategies.

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By working together with educators and their respective internet providers and/or RENs to interpret evidence-based data and insights accumulated from learning environments around the world, we aim to help providers understand and better serve those learning environments which must deliver their e-learning programs on narrow or limited bandwidth capacities.

We commit to:

- sharing global teaching & learning traffic data insights to help providers take into account the special characteristics that define schools' traffic as different to any other.
- fostering awareness and understanding of how learning environments can use the internet more efficiently, and the role that service providers have in supporting that effort.

We commit, before the end of 2025, to provide the necessary data and insights to inform and advise:

• 100 organisations including ministries, education authorities, and their respective ISPs and/or RENS

Through this pledge, we will work with national representatives and their respective service providers to:

- help them interpret meaningful connectivity needs and support new paradigms for school connectivity.
- define actionable recommendations that maximise the most efficient use of bandwidth capacity so e-learning can be delivered on much lower capacities.
- help REN organisations to leverage connectivity efficiencies in strategies and policies.

Through this pledge we aim to inform and enhance respective provider responsibilities as advisers to national education policymakers, helping deliver e-learning on much lower bandwidth capacities, in turn helping education authorities to adopt bolder e-learning ambitions sooner. In supporting Ministries of Education to follow efficiency strategies, providers will connect many more learning environments in LDC groups sooner, extending their reach, enabling a more connected, digitally skilled workforce sooner.

