

1. Contact Details

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2. Name of initiative

Regional ICT Advisory Council

3. Background and Rationale

You may consider: What is the issue being addressed by this initiative? What are the causes of this issue? Are there relevant studies that have been carried out to support this issue? Are there links to national, regional or international goals/policies?

Please limit your response to no more than 750 words.

Background

Globally, ICT is fast becoming more visible as an enabler for sustainable development in diverse sectors. The use of ICT has pervaded society to such an extent where there is an increasing reliance on ICT to enhance efficiency and productivity.

A 2009 World Bank Study observed that for developing countries every 10% increase in broadband penetration leads to up to 1.38% increase in GDP¹. At the same time, the illicit use of ICT affects individuals, communities, organisations, civil society, private and the public sectors and undercuts economic growth. These are important considerations in terms of advancing sustainable development in the Pacific.

ICT has both benefits and disadvantages which is why having a robust framework for engagement is necessary. It is also important to identify clear pathways for engagement and a critical part of this process is to map out what stakeholders are doing in terms of their development agenda.

Post 2015 Development Agenda

The region is invited to take into account commitments made by Leaders at the UN SIDS Conference, UN General Assembly 2nd Committee Meeting and proposed post 2015 Sustainable Development Goals (SDGs)². The Small Islands Developing States Accelerated Modalities of

¹ Wei Qiang CZ and Rossotto CM (2009) Economic Impacts of Broadband. In World Bank 2009 *Information and Communications for Development 2009: Extending Reach and Increasing Impact*. Available at <http://allafrica.com/sustainable/resources/view/00011823.pdf>.

² Open Working Group Proposal for Sustainable Development Goals (SDGs) <http://sustainabledevelopment.un.org/focussdgs.html>

Action better known as the Samoa Pathway³ saw leaders emphasising the linkages between sustaining high levels of economic growth and job creation due to the lack of ICT networks, limited human and institutional capacity amongst other things.

The Samoa Pathway called on leaders of SIDS to do the following with respect to ICT:

- *Increase Public and Private Investment in ICT Infrastructure;*
- *Enhance and Create Enabling Environment for building and maintaining ICT infrastructure;*
- *Utilise ICT for Education;*
- *Job Creation including youth employment;*
- *Develop National and Regional ICT Platforms and Information Dissemination Hubs; and*
- *Access to appropriate, reliable, affordable, modern and environmentally sound Technologies*

The Initiative Being Submitted: Regional ICT Advisory Council

Present trends analysis within the region shows that development is sporadic, even in the following areas identified by the Leaders. In essence, this is due to a general lack of regional cohesion. Noting that countries and territories are sovereign and diverse stakeholders have different roles in rolling out infrastructure, and creating employment, there is need for a Pacific wide stock take on where we are at and to be visionary in terms of where we see ourselves as a region at least several decades from now. There are aspects of ICT development that fall outside individual country and territory capability which can be managed regionally through this initiative

The Regional ICT Advisory Council and Pacific ICT Cooperative

There is need for a regional machinery within the Pacific to facilitate the following:

- common approaches;
- standards;
- resources; and
- infrastructures

This regional machinery in ICT would create a systematic platform to accelerate ICT development initiatives and work alongside countries to create synergy in development, scaling and multi-purposing of technical resources. The concept is not novel as the Caribbean has an organization called the Caribbean Telecommunications Union that plays a similar role within the Caribbean region.

The work of the Advisory Council is to be governed by clear vision and to prioritise the following areas:

- ICT for Development (ICT4D) which includes ICT for Education, ICT for Health, ICT for Commerce, ICT for Agriculture; E Government etc;
- Cyber Security;
- ICT for Disaster Management; and
- Critical Information Infrastructure which includes but is not limited to global submarine

³ SIDS Accelerated Modalities of Action (S.A.M.O.A Pathway) <http://www.sids2014.org/index.php?menu=1537> accessed 16th December, 2014

cables deployment, satellite, domain names, IP addresses, Internet Exchange Points (IXPs) etc.

The Advisory Council will oversee the Pacific ICT Cooperative (COPIC).

4. Description

Please provide a brief overview of this initiative. Try to address the following: Does this initiative contribute to a positive change to the region? What makes this initiative of importance to the Pacific region as a whole? Who would implement this initiative? Who are the main beneficiaries? Are regulatory or legislative changes required at the national level to implement this initiative? How would the initiative be funded? Has this initiative been carried out previously? What are the key risks in implementing this initiative? Are there any complementary projects and programmes currently active? What is the proposal timeframe for this initiative? How would the initiative be sustained over the proposed timeframe?

Please limit your response to no more than 750 words.

The Regional Advisory Council shall be established through the formation of a Pacific ICT Cooperative (COPIC).

This proposed initiative has two components:

- Establishing COPIC as a conduit through which a commonality around ICT initiatives, issues, risks, solutions, and approaches can be developed and realized for Pacific countries and territories that are interested in and willing to explore the balance between autonomous control and shared value-additions. This would involve developing a common language framework, understandings, communications, protocols around engagement, and mechanisms to harness common decisions at different times and scales by individual countries.

A cooperative such as COPIC would allow best practices, standards and shared technical interfaces to be built into national systems that would facilitate international interaction to leverage scale, scope and multi-purposing of resources. Such a cooperative not only will bolster national capabilities in times of need through cooperation and even conditional cooption, it will also generate capabilities regionally via models of scaled cooperation. By introducing mechanisms to harness commonalities in systems, additional capabilities for the region will be generated through economies of scale.

Technical resources, including qualified human resources are limited and scarce in the Pacific. This often limits ICT initiatives at local levels. As a hypothetical example, small island nations of the Pacific would be hard pressed to sustain individual High Performance Computing facilities and run them with qualified technical people, say for the purposes of advanced weather forecasting and climate change simulations. However, they could collaborate with other nations using the COPIC framework around utilization of national bandwidth, especially if they are getting marine fiber connectivity, national data and/or local expertise to contribute towards and benefit from a common initiative with components located elsewhere. A cooperative such as COPIC would make it easier for such regional initiatives to germinate and grow by providing common frameworks around which regional development can be scaled on the basis of individual country contributions.

Given that COPIC is a cooperative, individual countries and international agencies would contribute differently and even at different times towards common goals within initiatives to reap benefits of the collective. It is an environment whereby each initiative, project or

even a discussion has available to it pathways that lead to symbiotic gains. Since a cooperative operates on the basis of finding commonalities, COPIC would only provide frameworks that could be exploited to the advantage of the cooperative differently and at different times by participating countries, institutions and agencies.

There is leadership at the highest country and agency levels to enable the cooperative to exist at the multi-state and multi-player tiers, while translating into local roots within specific projects in each country. So, while the leaders of countries may use legislative or policy action to direct country initiatives into the COPIC framework, it would really be the project or agency leaders that actuate the technical cooperation around declared common interests in a particular area. The leadership at implementation levels may rotate to motivate cooperation around those common interests within projects.

Establishing and sustaining a cooperative such as COPIC will require some investment. There are multiple non-exclusive ways such a cooperative can be established and sustained, since the beneficiaries are many. Donor and development agencies, and countries themselves will be recipients of the benefits arising from the cooperative. Just as the cooperative would provide conduits for multinational and international initiatives to plug in to derive benefits from economies of scale and multi-purposing, similarly so would the planning and funding bodies in terms of cooperation. Sustainability of the framework itself can be supported via many different models that may or may not need to include dependence on individual technical initiatives.

- The second part of this proposal is to actually establish a proof of concept project. This can be around many topics of interest to countries in the region. Take for example Secondary Education in STEM and Teacher Training:
 - Using universities to build lesson plans for STEM subjects for use in specific grade levels and training teachers in use of certain pedagogical and technical tools to take advantage of those lesson plans;
 - Establishing regional repositories or knowledge hubs to disseminate such contents for free;
 - Building standards for connecting schools to National Research and Education Networks (NRENs);
 - Building standards, protocols and sample agreements for the NRENs to connect with Regional Research and Education Networks (RRENs) to utilize non-commercial internet connectivity for the benefit of the schools; and
 - Having a pool of international experts who can address technical issues.

Other examples could include Disaster Response Management, Weather and Climate Change studies, High Performance Computing, and Security – to name a few.

5. Alignment to Regional Vision, Values and Objectives

Briefly describe how your initiative supports the vision, values and objectives set out in the Framework for Pacific Regionalism. These can be found in the Framework for Pacific Regionalism document or in the submissions guideline document.

Please limit your response to no more than 500 words

There are many benefits, both direct and indirect, in establishing a regional cooperative around ICTs. As explained earlier, a cooperative such as the proposed COPIC accepts fractional contributions from participant state and non-state contributors and delivers comprehensive benefits to the members. It is versatile enough to deal with diverse technical needs and challenges, and economies of scale. Thus, leveraging limited local expertise into scaled regional capabilities. Consider the following irrespective of the specific topic around which ICTs are being used by the cooperative:

- The cooperative builds on technical expertise for the region, leveraging the diversity of projects, diversity of sources of expertise and retention of knowledge in the form of knowledge hubs;
- The experience and knowledge gained while collaborating on any one project involving a set of any number of country participants is actually retained as a collective and available to others and at other times for national and local capacity and capability building;
- Sustainable economic development is built around the premise of reutilizing, multi-purposing, continual development, and harnessing economies of scale for as many resources as possible. Knowledge generation, assimilation, and utilization are inherent to sustainable economic development. This includes ICTs. A cooperative such as the proposed COPIC makes possible in a practical way to support sustainable economic development of the countries and the region around many different topics and areas involving knowledge economies
- The cooperative assimilates knowledge, expertise and best practices from multiple sources, projects, interactions and experts continually as it operates. It then makes available this wealth of knowledge to participating countries for capacity and capability development, generating efficiencies in projects and initiatives, harnessing economies of scale and reducing vulnerabilities by utilizing available current and historical knowledge;
- Competition is an essential part of development and growth. Knowledge and other force multipliers, such as leveraging and multi-purposing of resources, and cooperation provide distinct advantages in a competitive environment. An ICT cooperative enables these force multipliers at little to no cost, thus enhancing the competitive capabilities that contribute to the development and growth of the country resources and citizens;
- Knowledge, whether it is for economic development, security or cultural preservation depends upon assimilation and accessibility at the right time by the right people to be effective. Individual projects can encourage and leverage varying degrees of participation by even non-players by providing a common environment of a cooperative;
- Best practices, standards and expert knowledge can assist in embedding aspects of security, social prudence, equality through accessibility, diversity, and the Pacific consciousness in technical projects where such topics are not even on the radar screen. Common knowledge and cooperation can help with developing a healthy respect and sensitivity in both ICT technical personnel and ICT users for social engineering, exploitation and other threats to vulnerable communities, such as children and students using the internet. If it takes a village, the cooperative provides a village; and
- With a framework in place, regional cooperation can be extended to any number of initiatives, including cultural preservation, in support of the regional vision and values of the Pacific

6. Additional Information

Please provide or attach additional information in support of this initiative

Please limit your response to no more than 5 pages

Establishment of an ICT cooperative such as the one proposed here in the form of COPIC is not only an exercise in philosophically coming together for the common good, but also providing the ways and means to realize that common good across diverse technical initiatives, projects and plans, as well as countries. It gains knowledge of ICT design and practices from individuals, projects, institutions and even nations and makes it available to participants to utilize in other forms and instances. It builds capacities and capabilities. It builds upon collective and singular securities.

Whether it is the development of a Regional Research and Education Network (RREN) that facilitates traffic flow between National Research and Education Networks (NRENs) or Regional Knowledge Hubs to store and disseminate information between researchers and teachers of the region, a cooperative such as COPIC provides a framework and a conduit for national initiatives to connect around regional initiatives and interests for common good and benefit. It provides a foundation around which countries can build common ICT infrastructures, initiatives and practices. It does not infringe upon the autonomy of action around projects, initiatives or country priorities and prerogatives, rather it facilitates discovery of benefits through cooperation, leveraging and economies of scale. Small island nations that are especially limited in their own ICT resources benefit from the collective in the form of available knowledge, regional initiatives and leveraging and scaling of resources.

A good example of how such a cooperative can operate is the School Connectivity project at The University of the South Pacific. USP engaged the leaders of the Republic of Marshall Islands and the Kingdom of Tonga to facilitate discussions and even executive decisions around making available spare fiber connectivity at non-commercial rates more favorable to schools and educational institutions. In both countries USP worked closely with the Government, commercial entities, and schools to connect some schools to a RREN via USPNet and AARNet. Now USP is looking at developing teacher training content that can be delivered via this expanded bandwidth to teachers in these two countries. USP has in its Strategic Plan 2013-2018 the development of a RREN and a Regional Knowledge Hub as priorities that will benefit the region. So, in this instance, it is easy to see how development of content, content sharing mechanisms (in the form of a Knowledge Hub) and ICT transport (in the form of an RREN (PIRREN)) help leverage multi-purposing of resources and assets for common good for the peoples of the region. It would not have happened without a clear vision of cooperation and without the indulgence of the leaders of these countries in establishing clear directives and priorities for others to follow in facilitating this cooperation and development. This is a great investment in the future of these nations, as it will build upon fundamentals of producing better students and better professionals of tomorrow who will contributors to the sustainable development efforts of these nations. This is an example we can sustainably emulate at a regional level in the form of the proposed COPIC. This is also not something that can be bought from a vendor.