



C@ribNET



CKLN

Caribbean Knowledge
and Learning Network

NRENs in the Caribbean

Presented by Colleen Wint-Smith
Communications & International
Relations Manager, CKLN

Presented at the
ALICE 2 Meeting
November 2012



The Caribbean Knowledge and Learning Network, CKLN

The CKLN, is an inter-governmental agency of CARICOM with responsibility for development and management of high capacity, broadband fibre optic network, C@ribNET, connecting CARICOM member states.

Strategic Objective

To enhance global competitiveness of the Region by *upgrading* and *diversifying* the *skills and knowledge* of human resources in the region through greater *regional collaboration* and *connectivity*.



Our Story

2004

- CKLN Established
- EU Financing Euro 2M

2008

- CKLN II Begins
- EU Financing Euro 10M

2012

- C@ribNET Live
- Institutions Connected

2013

- Portals Launched
- Network Services

2014

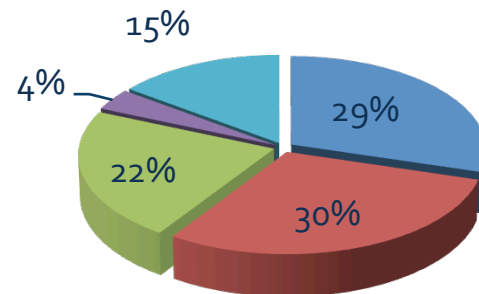
- CKLN₃



Solid Investment

Distribution of Funds

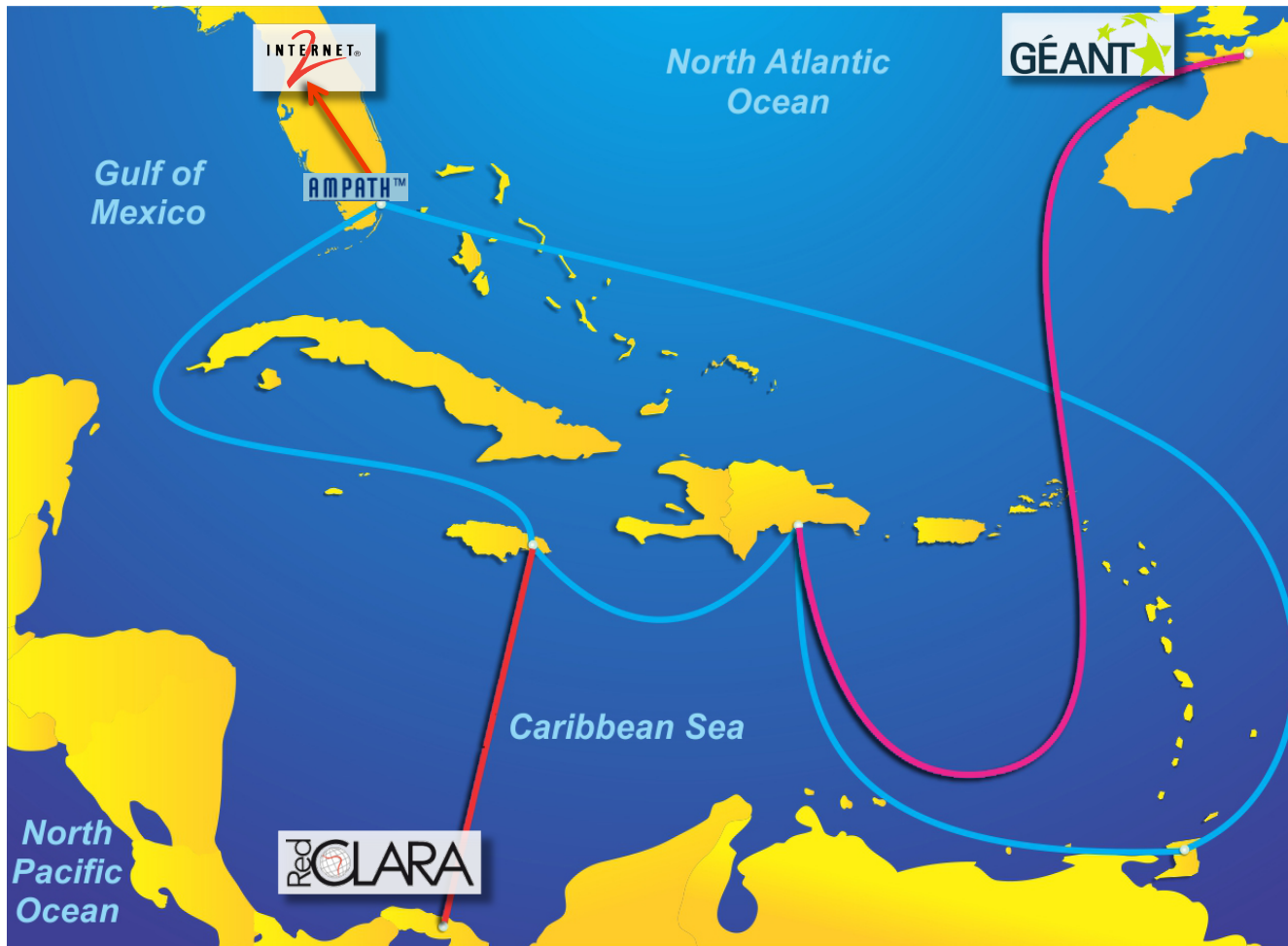
Development Partner	Amount (USD)
European Union	
ACP Connect (EU)	
World Bank	
IDB	
OAS	
CARICOM Member States	



- Institutional Strengthening
- Hardware and Infrastructure
- Highspeed Connectivity
- NREN Development



And the Global Topology



BACKBONE

MIAMI

JAMAICA

DOMINICAN REPUBLIC

TRINIDAD & TOBAGO

INTERNATIONAL LINKS

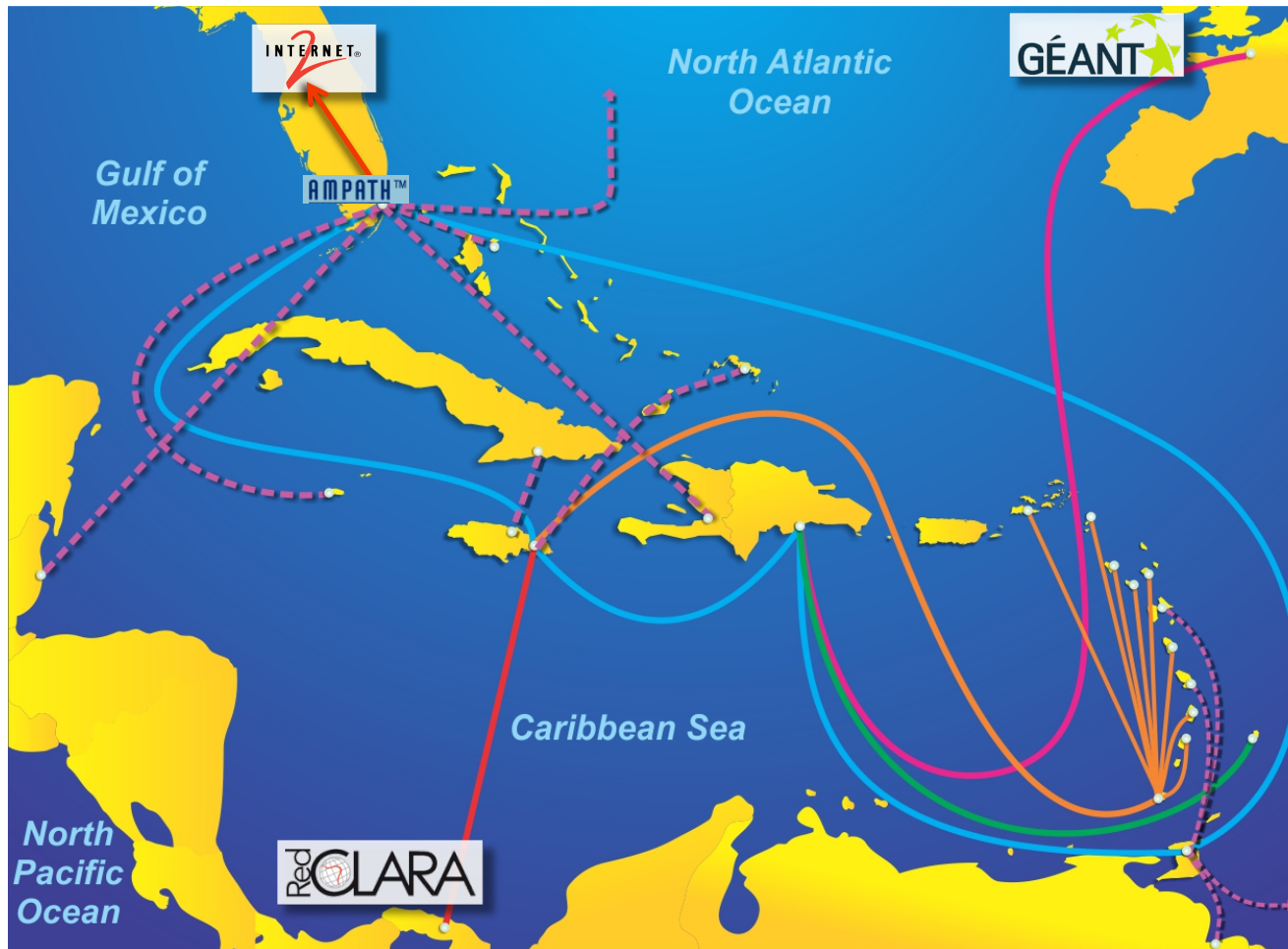
C@ribNET connects the Dominican Republic to Geant (Paris) - STM 1

Jamaica to RedCLARA (Panama) - DS3 (45MBps)





And the Global Topology



CARIBBEAN LINKS

MIAMI
JAMAICA
DOMINICAN REPUBLIC
TRINIDAD & TOBAGO
ANGUILLA
ANTIGUA
BRITISH VIRGIN ISLANDS
DOMINICA
GRENADA
MONTSERAT
ST KITTS & NEVIS
ST LUCIA
ST VINCENT
BARBADOS
BAHAMAS
BELIZE
HAITI
SURINAME
CUBA
FRENCH DOMS.
GUYANA
BERMUDA
CAYMAN ISLANDS

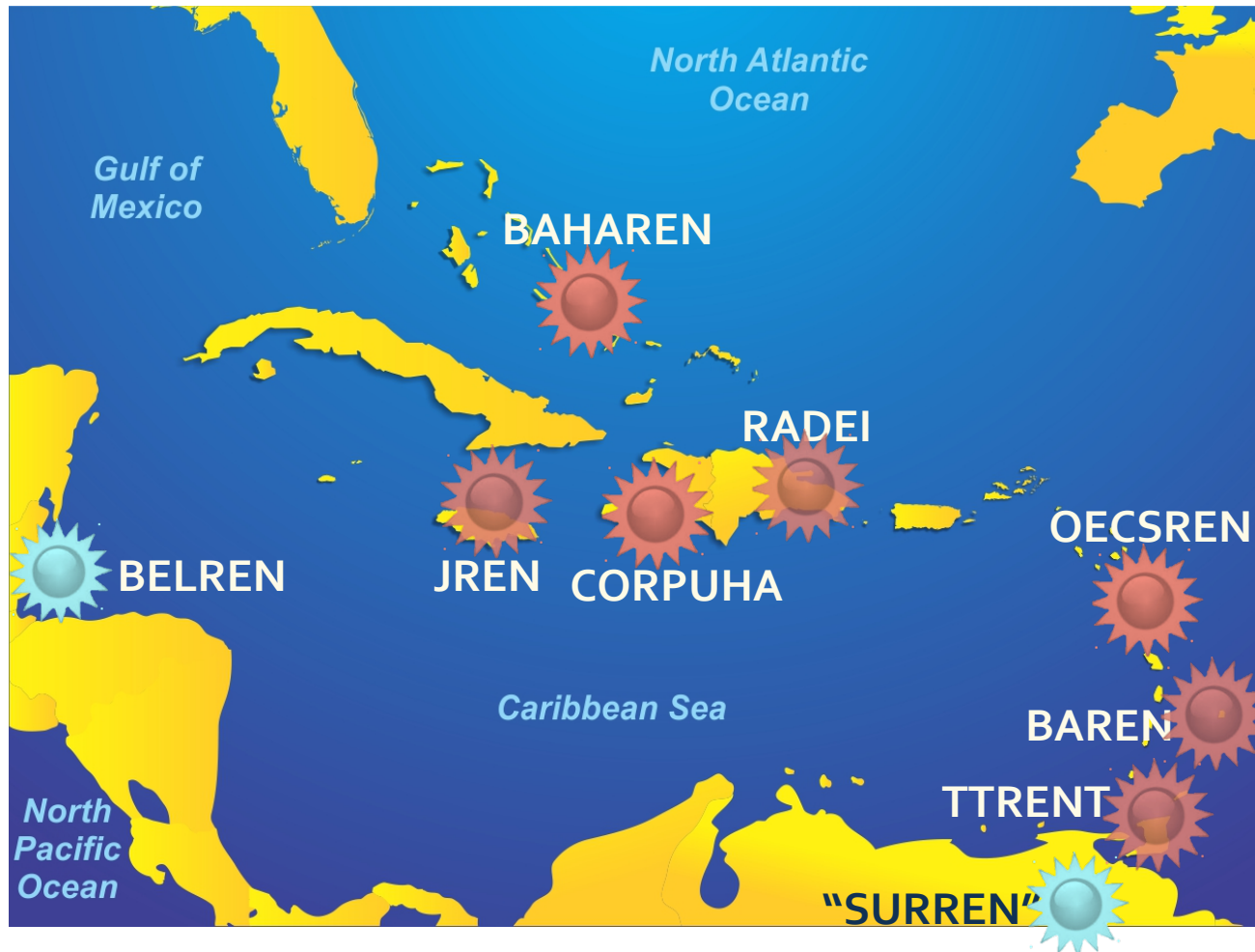


The Development of NRENs in the Caribbean

- + CKLN received funds for C@ribNET infrastructure (European Union) 2006-12
- + Conducted situation analysis and other workshops on distance and online education in various countries (2008-9)
- + Needed to develop communities of interest in countries to **use** the network
- + Got funds to develop a BLUEPRINT of best practices for NREN development – (IADB), tailored these to countries in region 2010-11
- + Began meetings with Ministers of Education and stakeholders 2011-12
- + Further funds from EU to continue working with NRENs in-formation to facilitate development - towards launch and legal status 2012-14
- + NREN focus areas – (1) Technical (2) Applications and Services (3) Governance (4) Communications and PR.
- + CKLN hosted Assembly of Caribbean NRENs in May 2012
- + NREN membership currently consists primarily tertiary learning institutions



Who and where are the Caribbean NRENs?



Caribbean NRENs

- + Jamaica REN
- + RADEI - Dominican Advanced Network for Education & Investigation, Dominican Rep.
- + Trinidad & Tobago Research and Education Network Trust
- + Barbados REN
- + Bahamas REN
- + Organisation of Eastern Caribbean States REN
- + CORPUHA -The Haitian Conference of Rectors and Presidents of Universities , Haiti
- + Belize REN
- + Suriname REN



Higher Education in the Caribbean ¹

- + The first university to be established in Americas was the University of Santo Domingo in 1538
- + 1830, Codrington in Barbados, the first college was established in the Anglophone Caribbean.
- + This was followed by MICO in Jamaica in 1836
- + Small theological and teachers colleges established in 19th century
- + First University, University of the West Indies, (UWI) 1948...has doubled its enrollment in last decade
- + Increase in the number of colleges in the 1960s



1. Source: "Caribbean Tertiary Education: the Challenges of the Online Modality" - Prof. Errol Miller, 2011



Higher Education in the Caribbean

- + Major expansion of University Education beginning in the 1990s including several public and private University Colleges. These include:
 - + the University of Technology (Utech), 1995,
 - + North Caribbean University (NCU) 1999,
 - + the University of Belize (UB), 2000,
 - + the University of Trinidad and Tobago (UTT) 2006,
 - + University of the Southern Caribbean, 2006,
 - + the College of the Bahamas,
 - + University College of the Caribbean and the
 - + Mico University College.

- + Within the last 20 years the “offshore” Universities emerged (e.g. Ross University School of Medicine in Dominica, St. George’s University in Grenada etc..)



Research in the Caribbean

- + The **University of the West Indies (UWI)** is the leading **research university in the region**
- + 4 campuses, with a student population of approx. 48,000
- + In 2010, a total of 116 research degrees were awarded university-wide, representing 6.9% out of a total of 1,680 higher degrees awarded
- + There are other (often private or regional) research Institutions e.g.
 - + Scientific Research Council (Jamaica)
 - + Family Development and Children's Research Centre (T&T)
 - + Caribbean Agricultural Research and Development Institute, CARDI, (T&T)
 - + Caribbean Health Research Council (T&T)
 - + Caribbean Research and Management of Biodiversity, CARAMBI (Curacao)
 - + Caribbean Child Development Centre (Jamaica)
 - + Sugar Industry Research Institute (SIRI)



Research in the Caribbean

- + Research and advances in Health
 - + Sickle Cell Disease
 - + Risk Behaviour and Depression
 - + Diabetes
 - + Prostate Cancer
 - + Cardiac surgery simulator
- + Research and advances in Agriculture
 - + Dr. T. P. Lecky and Jamaican cattle breeds
 - + Commodity crop research and advances
 - + Cocoa; Coffee; Citrus; Sugarcane; Coconut
- + Research in climate change, marine ecology, Disaster Risk Reduction



Issues Facing Tertiary Institutions in the Caribbean

- + Institutions don't have the **critical mass** required to offer all the programmes needed to satisfy the skills and knowledge required by Caribbean
- + Apart from UWI, most colleges and universities are **relatively small, offering a narrow range of programmes** mostly at the Certificate, Diploma, Associate Degree and Bachelor degree levels
- + There are only a few institutions offering **programmes** in the areas of critical need, especially in the sciences and technology
- + Institutions have challenges with the number of **qualified lecturers**, especially in maths, science subjects
- + Universities and colleges cannot individually afford **the cost of infrastructure and resources** required to deliver courses adequately to students
- + **Individualism** of universities persists



Issues Facing Tertiary Institutions in the Caribbean

- + Most of the migrants from the Caribbean are generally in the most productive **age group 20-45** and generally have a high level of education.
 - + Haitians **63%**,
 - + Dominicans **53%** and
 - + Jamaicans **48%**
- + In Jamaica, roughly **80%** of the potential number of tertiary graduates has left the country.
- + Strong Diaspora of professors and researchers
- + Multi-linguistic and Multicultural region (French, Spanish, Dutch plus indigenous people)
- + Need to improve the capacity to work in networks



Source: www.worldbank.org



What are the Caribbean NRENs doing?

Caribbean NRENs are:

- + **Getting organised** – They have support of their respective Ministries of Education, and/or Technology/ICT
- + Addressing **governance issues**, membership, fees, funding and human resources, MOU's with institutions – administration of NREN – inclusion of private institutions, sustainability issues etc.
- + Finalising **technical issues** with local institutions, establishing protocols etc.
- + Seeking **applications** & services that will benefit, excite and inspire other institutions to join (especially research)
- + Addressing **advocacy & public relations** issues – needing to “hit the road” with talks, presentations to institutions, university departments, etc. demonstrate the benefits of the NREN and C@ribNET to other government agencies & stakeholders

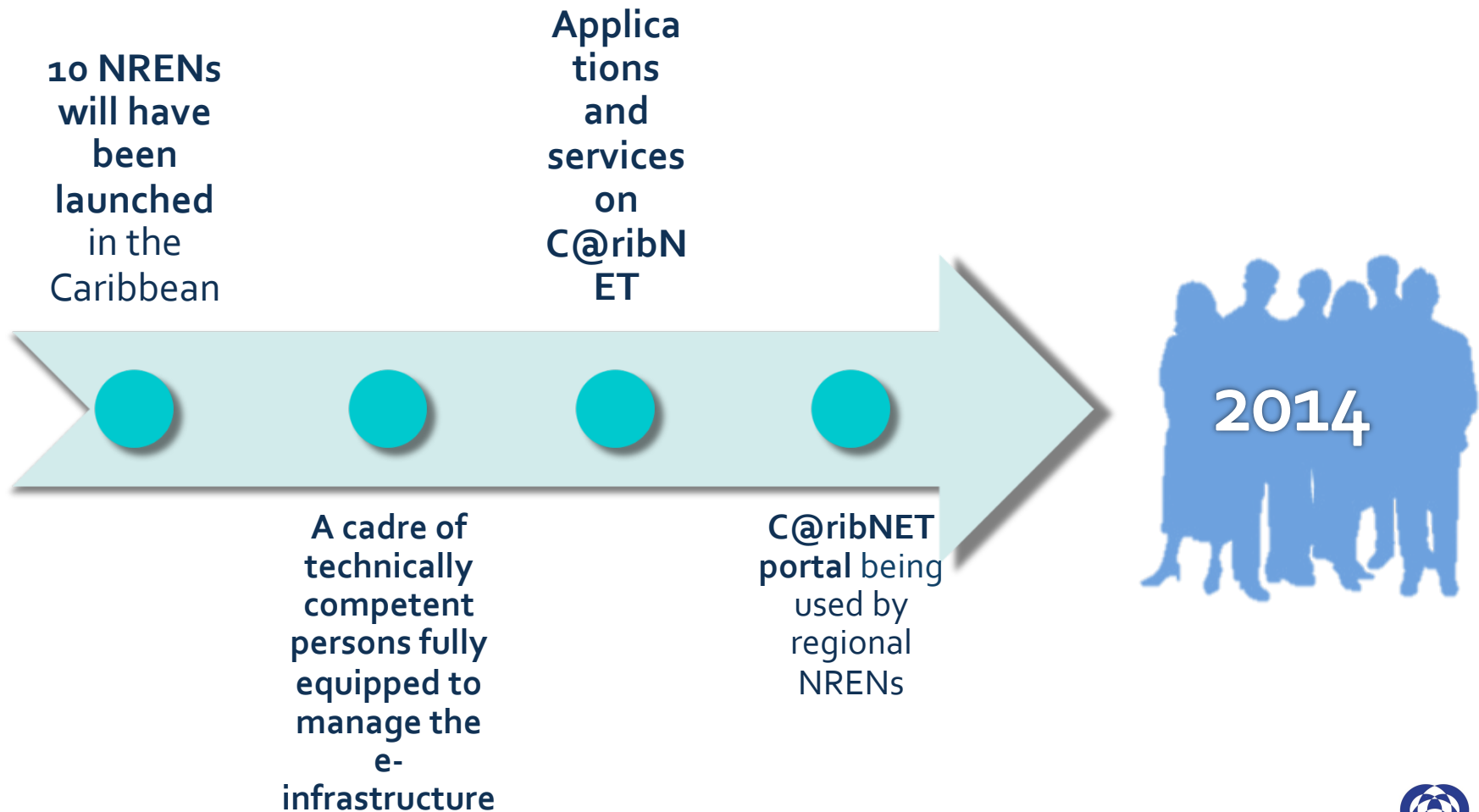


What do they want to do?

- + Chairpersons starting to dialogue with other NRENs in region and with Ubuntunet Alliance
- + Looking for opportunities for collaboration, to partner on applications, content, research – in the region and internationally – on issues relevant to Caribbean
- + Needing to participate in events (local, regional, international)
- + Looking for opportunities to share and learn from other NRENs (study visits)
- + Continue Technical training – support from NSRC, MAGPI
- + Gèant, JANET, Internet 2 - discussions on teaching & learning



What Caribbean NRENs should look like in 6-12 months



Collaboration with



- + Full support to CKLN in establishing C@ribNET
- + RNP providing engineering support
- + Demonstrations and sharing of NREN development, research
- + CUDI providing NOC services
- + e-health demonstrations
- + Sharing portal
- + Ongoing support and guidance in PR and advocacy



Our Work Ahead

- Continued capacity development and technical training for NRENS
- Technical training for campus network
- Identification of critical applications and services and related communities of interest
- Provision of NOC services for network monitoring and Network Engineering Services
- Developing a sustainability financing strategy for the net five years
- Managing the thought and change management process throughout the region

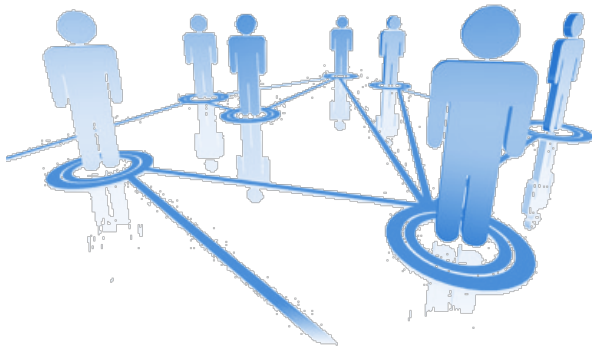


Our Work Ahead

- Building Communities (Assembly of NRENS) and working to get more interest in e.g., digital libraries, health and CARICOM agencies
- Collaborating with other networks e.g. RedCLARA , Geant, Ubuntunet
- Collaborative development and sharing
- Resource mobilisation & Sustainability!!!



Contact Us



Caribbean Knowledge and Learning Network

Mutual Trans Nemwil Office Complex

The Villa, St. George's, Grenada, West Indies

P.O. Box 1431

Tel: 473-439-6396

Website: www.ckln.org



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