Connect the Unconnected with solution BIRD* in a Phased Manner

*Broadband Infrastructure for Rural-Area Digitalization

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Global Plan Inc.

Dr. Haruo Okamura

-Worked at NTT Labs., NEC, Corning Inc.(USA)
Established Global Plan Inc.

-Expert of Fibre Optic systems and Standards
ITU-T SG15 ex. v-chair (2001-2004), TSAG ex. v-chair(2005-2012)
IEC SC86C chair (Fibre Optic Systems/Active devices) (2016-present)

-Developer of Solution BIRD* and Corresponding Standards

"BIRD" is the Affordable All-Terrain Optical Cable Connectivity
→ Meeting ITU-T Recommendations L.1700, L.110 and L.163
(Dr. Okamura was the Editor)

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VVM_0103

PRO

Dr Haruo Okamura, Vice-Chairman of the Telecommunication Standardization Advisory Group

Uploaded on September 11, 2009

Taken on November 20, 2005

Optical Cable Solution BIRD＊

*Broadband Infrastructure for Rural-Area Digitalization

Project BIRD

A WSIS 2022 Champion

Under Information and Communication Infrasytucture

WSIS2022 Champion

WSIS 2022 Output p.129/288

Project BIRD (Broadband Infrastructure for Rural Area Digitalization)

Global Plan Inc. — Japan

ITU-T Recommendations

Affordable and Reliable DIY Fibre Connectivity


ITU-T

TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU

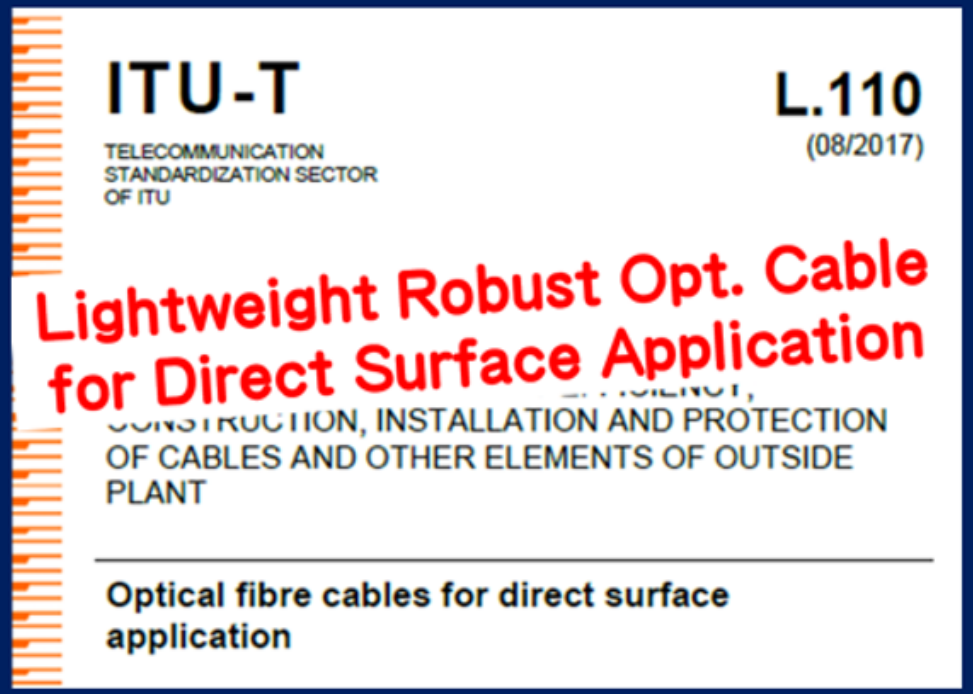
L.1700

(06/2016)

Affordability-First Concept for Closing Digital Divide

CONSTRUCTION, INSTALLATION AND PROTECTION OF CABLES AND OTHER ELEMENTS OF OUTSIDE PLANT

Requirements and framework for low-cost sustainable telecommunications infrastructure for rural communications in developing countries


ITU-T

TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU

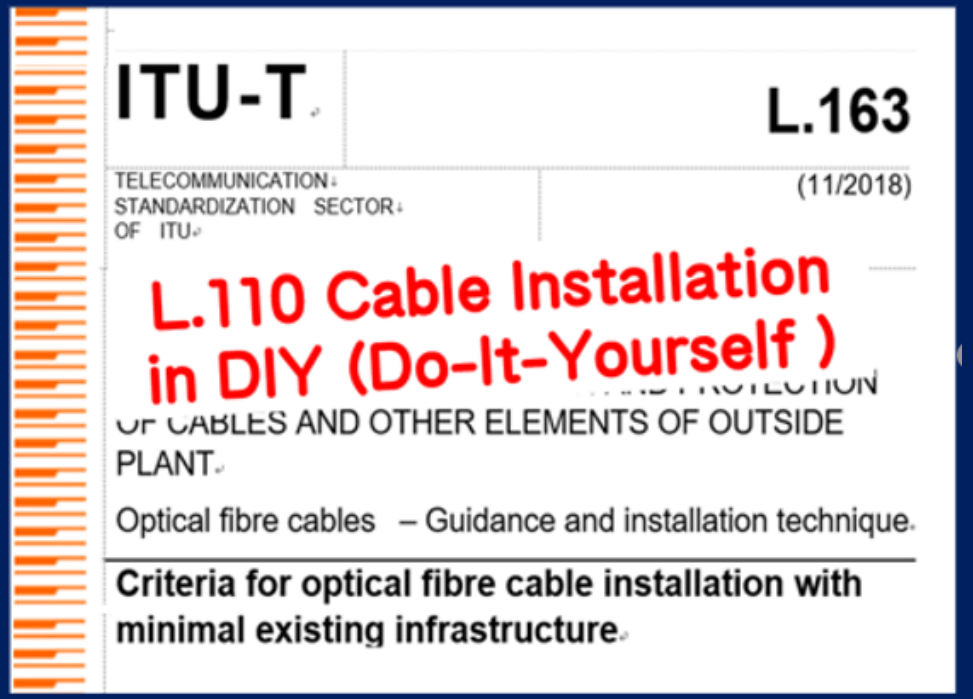
L.110

(08/2017)

Lightweight Robust Opt. Cable for Direct Surface Application

OF CABLES AND OTHER ELEMENTS OF OUTSIDE PLANT

Optical fibre cables for direct surface application


ITU-T

L.163

TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU

(11/2018)

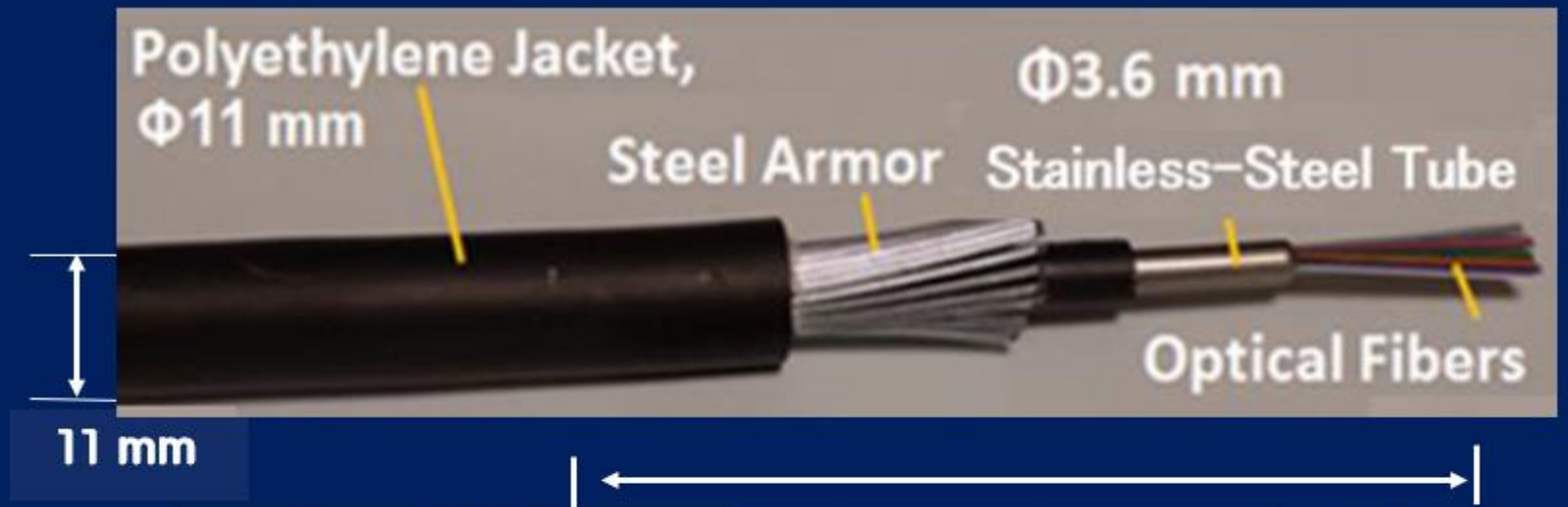
L.110 Cable Installation in DIY (Do-It-Yourself)

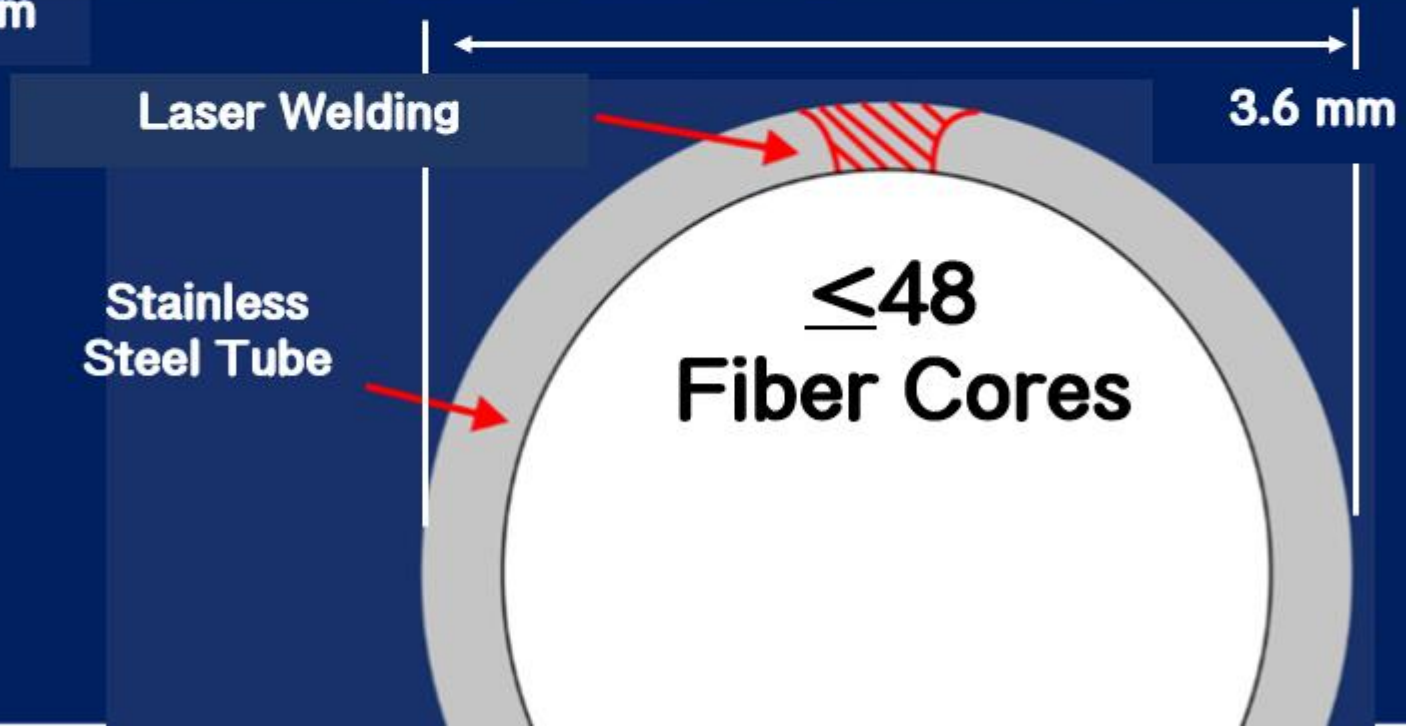
OF CABLES AND OTHER ELEMENTS OF OUTSIDE PLANT

Optical fibre cables – Guidance and installation technique

Criteria for optical fibre cable installation with minimal existing infrastructure

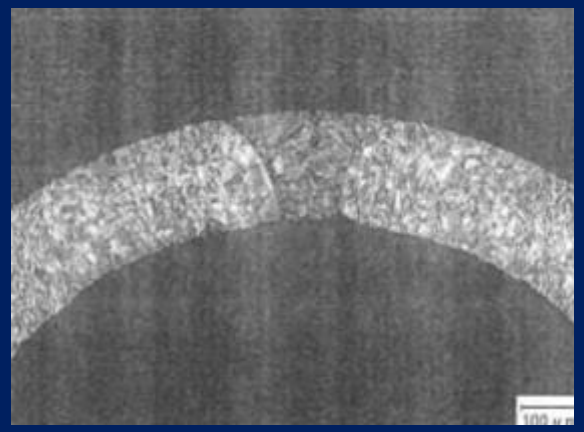
All-Terrain Optical Cable, for BIRD



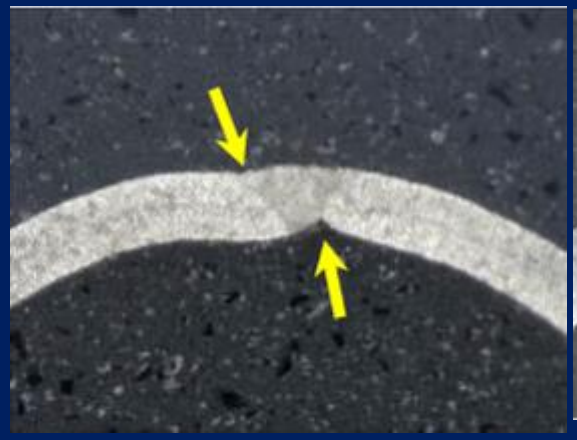


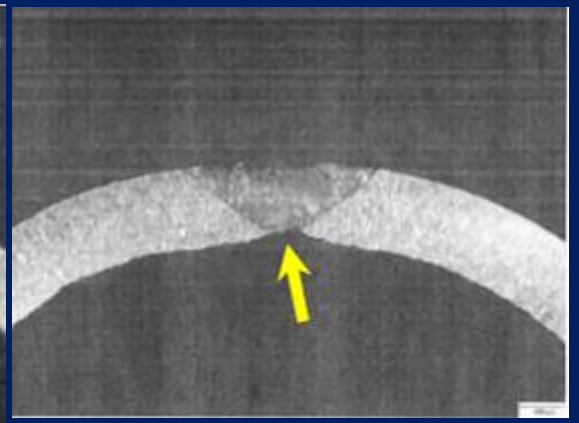
ITU-T
Recommendations
L.1700
L.110
L.163

Japanese Cable Quality



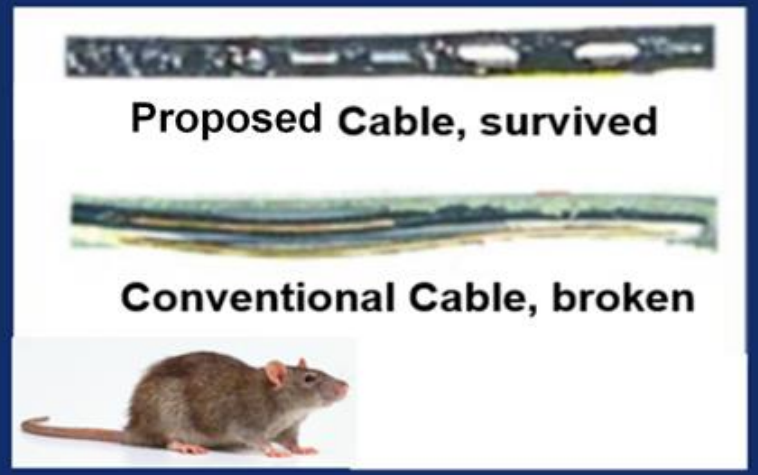
Non-Japanese





L.110 BIRD Cable Durability

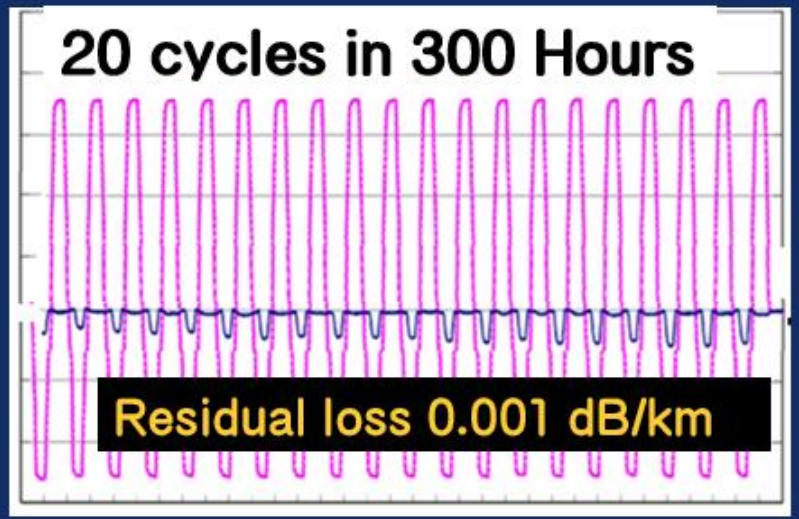
Rodent Proof Test



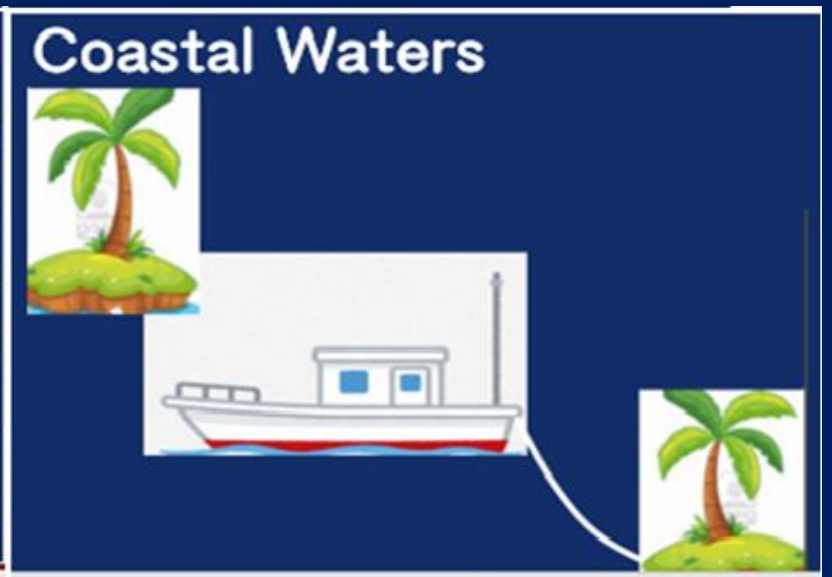
After 1180℃,15 min Loss <0.05 dB

Crush Resistance (2 tons/10 cm)

Heat Cycle -50 ℃ to +70 ℃



Easy, Affordable DIY Installation of BIRD



L.110 BIRD Cable installation in Himalayas, 2019

BIRD Cable 20km in Mongolia Terelj National park

Sept. 20, 2022

BIRD Cable to the base camp of Mt. Everest

Mt. Everest Base Camp Area, March 2023 @ 5300 m

Mt. Everest B.C., March 2023

Discussed laying the BIRD Cable on the White Nile River Bed

August 8, 2023
@
NTA , Juba
South Sudan

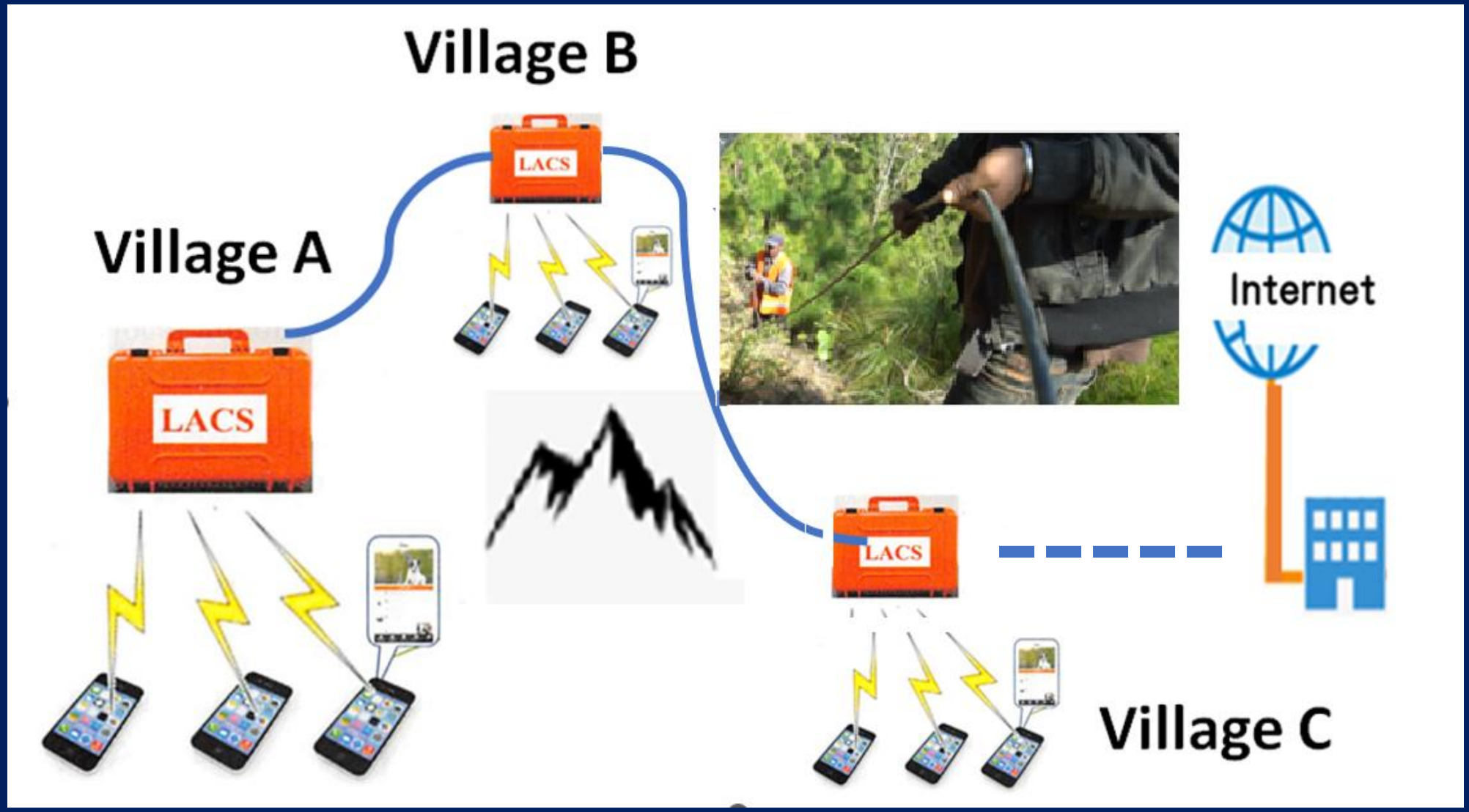
South Sudan, NCA D.G.

EACO Executive Secretary

President, Global Plan Inc.

Phased Approach; Intra-Net to Inter-Net

Today →Tomorrow → Future to connect the unconnected



What is “Phased Approach” with LACs

(1) Create a small Wi-Fi community with a LACS

LACS shares local contents; educational, medical,,,,,

(2) Interconnect mutiple LACSs with optical cables to generate a wide Wi-Fi intra-net community

(3) Connect one of the LACSs to the Internet

(4) A Large Inter-net-Capable Wi-Fi Community emerges

New ITU standard can help bring broadband to rural communities

November 21, 2016 · by itu4u · in Uncategorized · Leave a comment

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.

ITU NEWS

WSIS FORUM、2019

Summary

(1)The top priority for ITU is Connect the Unconnected

(2)LACSs with ITU-compatible solution BIRD affordably, reliably and swiftly brings broadband Wi-Fi HotSpots phasewise across difficult terrain in DIY

(3)CAPEX of BIRD Cable laying, e.g., ＜10,000 US$/km
(Cable Cost ： FOB Japan, Labor Cost : Varies)

(4)The Criteria for BIRD cable and its deployment comply with ITU-T Recommendations L.1700, L.110 and L.163