



**Identifying Innovative
Infrastructure Sharing Strategies to
Promote Affordable Access for All to Lay
the Foundation for Tomorrow's Global
Information Society**

***PRIORITIZING A NATIONAL HIGH
CAPACITY BACKBONE NETWORK***

DR. Basuki Yusuf Iskandar
Director General of Posts and Telecommunications



INTRODUCTION

- Indonesia, so as many developing countries that experience a lot of challenges facing among others
 - The surging demand of telecommunication/ICT services, and
 - Lack of ample network coverage as well as capacity
- Hence, there is a need to look for timely breakthrough measures and policies for meeting these opportunities
 - To speed up efforts and meeting the challenge
- Indonesia intends to share her experience in overcoming the challenges and we also would like to obtain inputs from other countries, particularly from the developing world
- We believe that policies and regulations should be developed to suit the country's national needs, and not duplicated from other countries, particularly when they have distinct developments and environments

CHALLENGE FOR DEVELOPING COUNTRIES



MAJOR CHALLENGES

- Surging demand for Telecommunication/ICT Infrastructure
 - Strong growth in mobile telephony,
 - Increased use of basic mobile data services,
 - Increased demand of Advanced Data Communications.
- Inadequate National Network Coverage
 - extending the reach of telecommunications services to rural, frontiers, and remote areas, particularly those that are not economically feasible;
- Inadequate Network Capacity in Big Cities
 - Relatively slow growth of fixed-line services and strong growth in fixed wireless access telephony instead
 - Slow growth of internet and bandwidth constraints
- Developing next-generation broadband networks:
 - high-speed communications backbone infrastructure as an enabling technology infrastructure for many other sectors.



URGENT REQUIREMENTS

- A high capacity national backbone network to connect all provinces and capital districts are required to obtain a wide and even national coverage
 - Indonesia is developing the high capacity Palapa Ring backbone to connect more than 400 Districts to be shared by all telecommunications operators
 - The construction commences with the eastern part which has no high capacity access at all
- The national backbone is a very powerful means for:
 - Providing national broadband access to all local/regional networks
 - Guaranteeing better competition for new entrants particularly in remote areas
 - Guaranteeing much more affordable long distance rates
 - As the basic requirement for coping with the transition and implementation of NGN

CHALLENGES ON POLICY AND REGULATION



MAJOR POLICY AND REGULATORY CHALLENGES

- A new regulation has to be created to support the establishment of the Palapa Ring backbone
 - Existing fiber optic networks (for Indonesia: in the western part of the archipelago) have to be taken into account in order to create a harmonious though competitive environment
 - How existing operators and new entrants could cooperate in developing the national backbone, while they maintain the competition among themselves
 - It has to regulate the general criteria for interconnection and competition, and in the case of Indonesia it would support the Ministerial Regulation no.8 of 2006, which changes dramatically the previously interconnection revenue-sharing to cost-based and facilitating open and fair interconnection practices, eliminating anti-competitive behavior by incumbents
- The spirit of cooperation should be more prevalent compared to competition in building up the national backbone, for the benefit of all stakeholders
 - For the eastern part of the Palapa Ring a consortium of six (6) operators/investors has been formed to construct it and expected to be operational in 2009



GOVERNMENT'S ROLE AND POLICY

- As Palapa Ring concept creator in developing a nation-wide high capacity backbone network
- As facilitator of the establishment of a consortium for the eastern part of the Palapa Ring
- Guarantee the *competition safeguard* in the consortium business model
- As facilitator to avoid deadlock in negotiations
- As facilitator in communicating with the other institutions and local governments
- Ensure the necessary regulatory framework for supporting the finalization of the whole Palapa Ring project



FUTURE DEVELOPMENT OF LOCAL and RURAL ACCESS

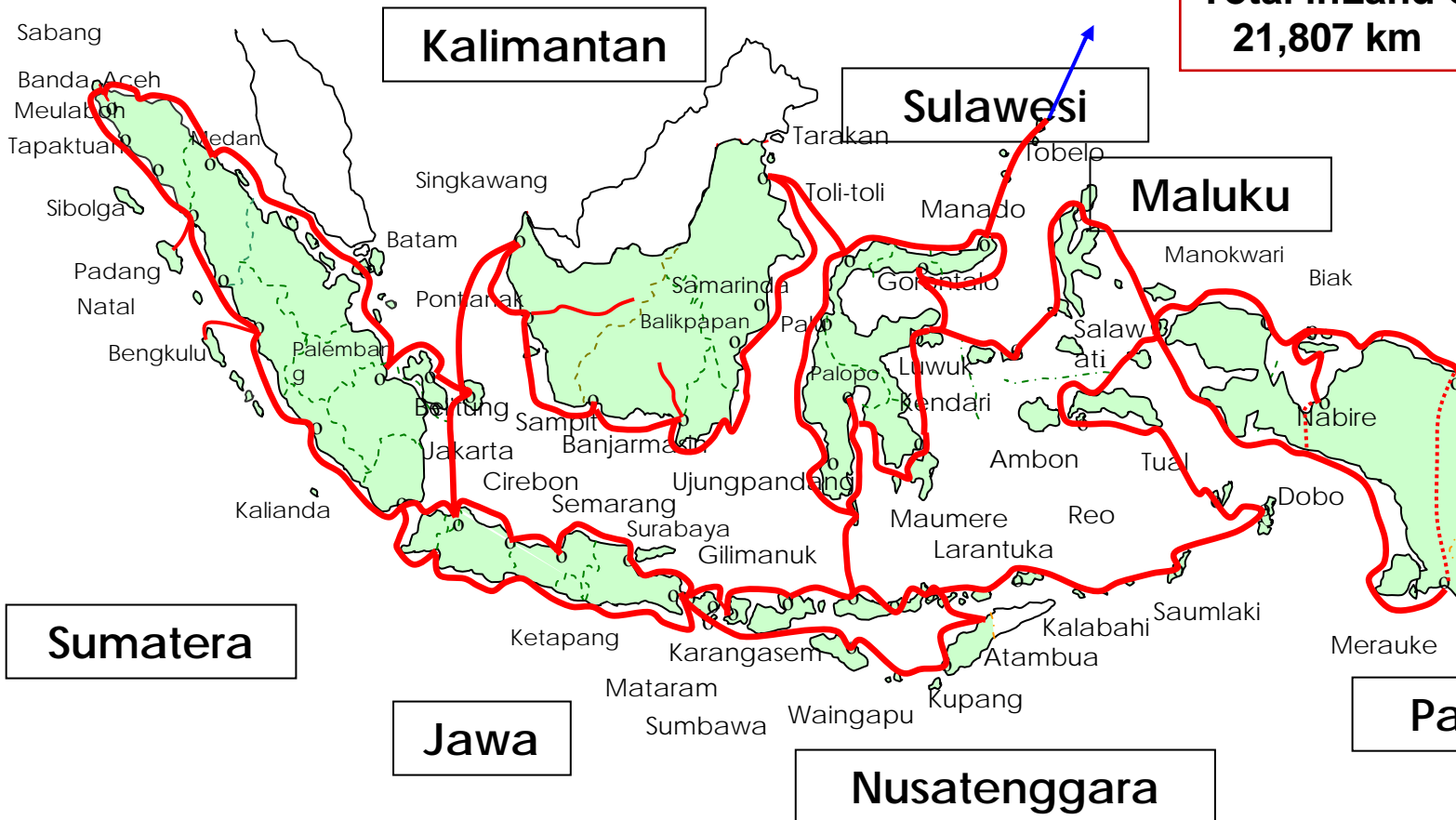
- Present condition
 - Broadband Access Point not well distributed
 - Unattractive high lease rate for Broadband Access
 - Limited competition on Local Access (PSTN)
- Future objectives
 - The national backbone guarantees well-distributed Broadband Access throughout the country
 - Much lower rates of broadband access service, which in turn would provide business opportunities and growth
 - For Indonesia, the Palapa Ring national backbone would support the future USO objectives, particularly in providing broadband access to the outstretched 70,000 villages, as the Districts would become new high capacity points of presence (POP) as well as Centres enabling easy access to the nearest sub-Districts and Villages
 - Much more affordable broadband access because of the abundance of the long distance backbone capacity

AN EYEBIRD'S VIEW OF THE PALAPA RING PROJECT

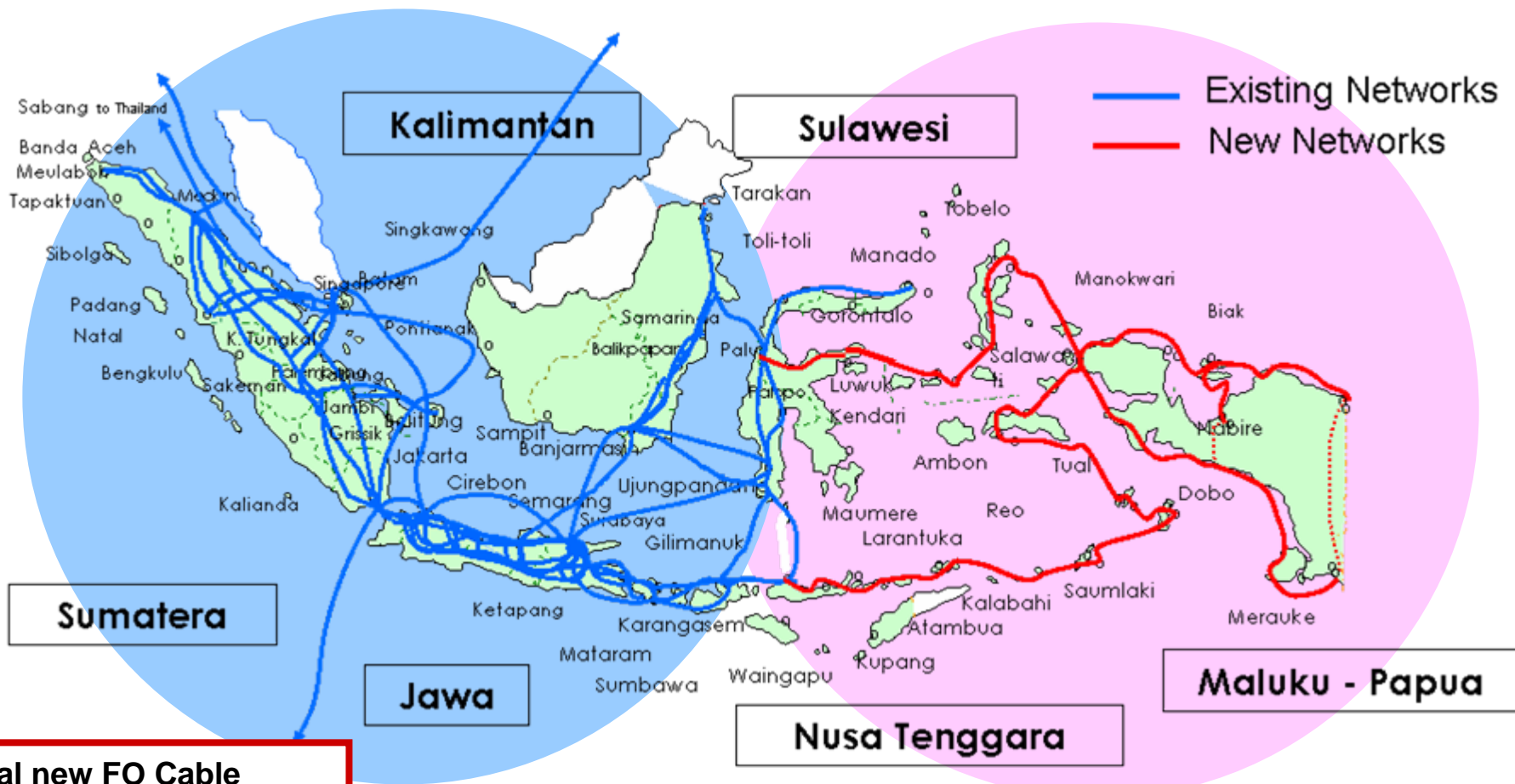
Palapa Ring Project (Original Concept)

33 provinces, 440 cities/districts, 1+7 Rings

**Total SubMarine Cable
35,280 km
Total inLand Cable
21,807 km**



Palapa Ring Stage 1 (Eastern Ring)





Thank You for your attention

We Look Forward for Your Inputs

basuki@postel.go.id

www.postel.go.id

www.brti.or.id