The Experience of Regional Interconnection

Projects from China

Telecom Planning & Research Institute of Ministry of Industry and Information Technology of China

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Contents

Origins of Greater Mekong Subregional Information Superhighway (GMS IS)

BACKGROUND

- Proposed by Ministry of Industry and Information Technology of China on 2004, aiming at promote communication and collaboration among countries in the sub region.

DEFINITION

- Commercial broadband platform, that could provide basic voice, data and internet access to facilitate applications such as distance education, telemedicine, e-government and e-commerce.

ATTITUDES

- Well received among governments, signed the MoU of the Information superhighway of the Greater Mekong Sub region on 2004.
- Participated operating enterprises signed the MoU of the network planning and construction of Information superhighway of the Greater Mekong Sub region on July, 2005.
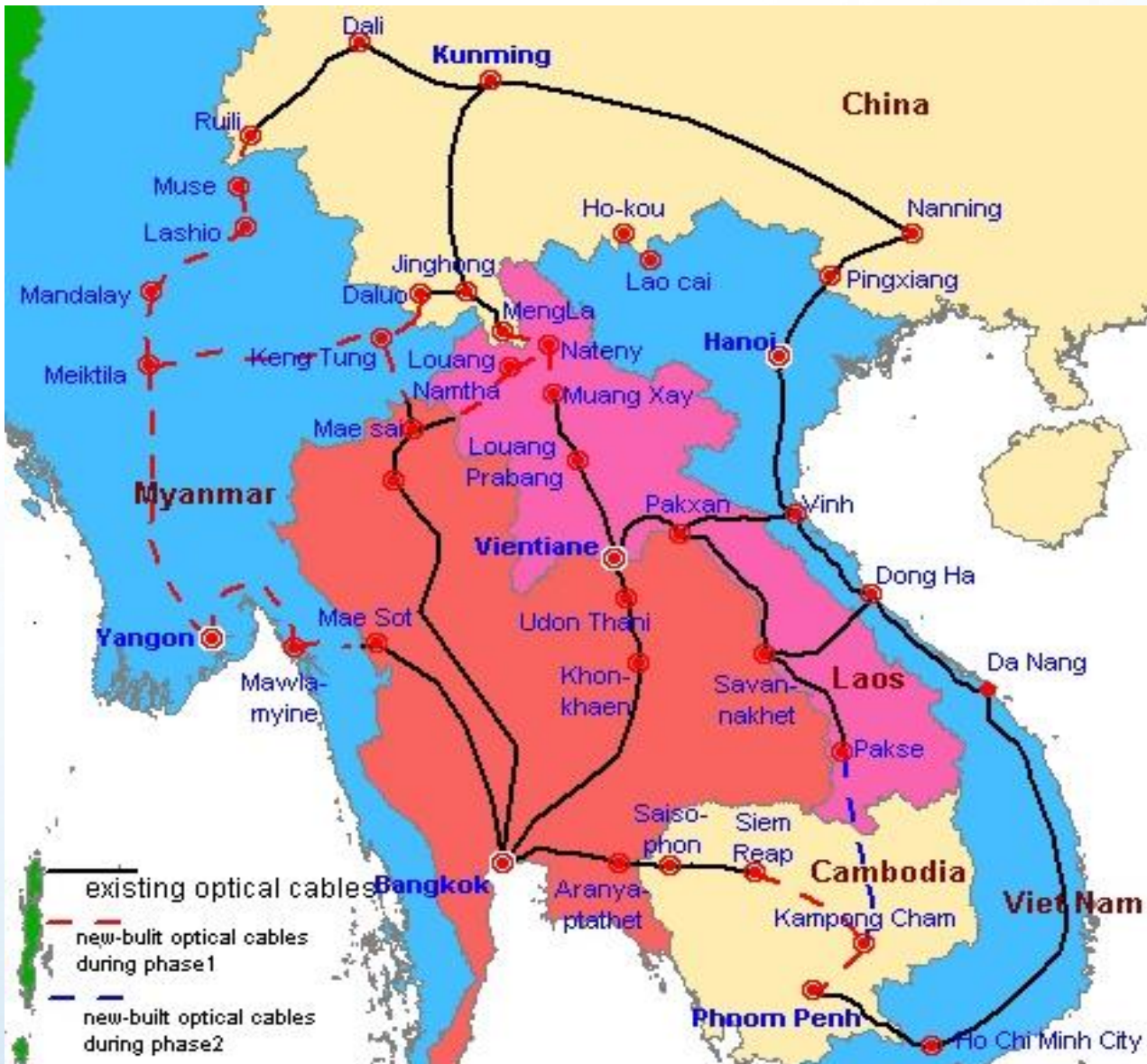
Briefings of GMS IS

GOAL

- **Fiber-based backbone transmission network**, with large capacity and high reliability within three to five years

- **High-speed Internet platform,** to provide government, businesses and individuals with a variety of high-quality telecommunication services such as voice, data and Internet.

- **Promote economic, trade, cultural and information exchanges** within the region, drive growth of other industries and narrow the digital divide between GMS and developed countries in the field of telecommunication.
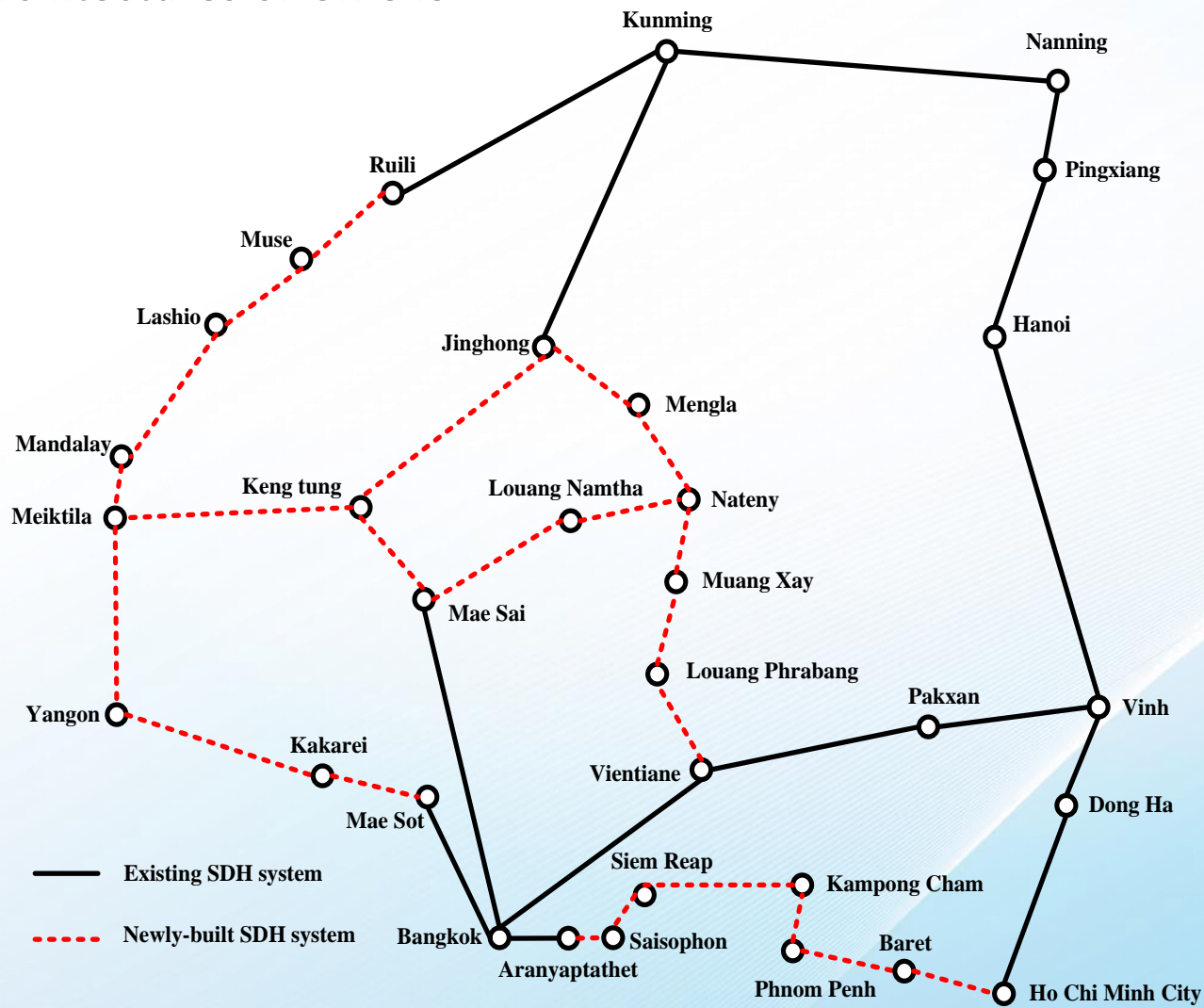
Briefings of GMS IS

PHASES

- **Phase One：** Building a backbone transmission network and a high-speed Internet.
  - ✓ Building a backbone transmission network dominated by **point-to-point architecture** covering six countries.
  - ✓ Building a **high-speed Internet** connecting important nodes of the six countries and rolling out subregional Internet services.

- **Phase Two：** Improving the backbone transmission network and the high-speed Internet to implement the GMS information superhighway.
  - ✓ Improving the backbone transmission network by building a new layer **with three SDH rings** and by adding some SDH transmission systems into the original point-to-point structure.
  - ✓ Improving the Internet by **expanding port capacities** according to service demands, and gradually rolling out various telecommunication services.

Principles of GMS IS

- The network shall be effectively **interconnected with domestic networks** of each country so that the GMS backbone network can fully play its linking role.
- The GMS backbone network shall be able to **meet the growing demands by guaranteeing a future-proof size and scalability**.
- Measures shall be taken to **guarantee survivability and reliability of** the GMS backbone network.
- The **existing network resources shall be used as much as possible** in building the GMS backbone network in order to reduce construction cost.
- The network shall be built in phases and steps.

Architectures of GMS IS

point-to-point architecture

(1) E1 Circuit

CAT-MPT	Completed
CAT-TC	Completed
ETL-CT	Completed
ETL-VNPT	Completed
ETL-TC	Completed
TC-VNPT	Completed
MPT-CT	Completed
MPT-VNPT	Completed

(2)STM-1 Circuit

CAT-ETL	Completed
CT-VNPT	Completed
ETL-CT	Completed
ETL-VNPT	Completed
TC-VNPT	Completed

Achievements of GMS IS

Strengthened the Physical Connection and Promoted the Economic and Trade Development of GMS countries

Double physical routes enhanced the connectivity of communications networks among six countries and improved the cross-border communications conditions among countries in the GMS significantly.

Met the demand for communications, helped the development of economic trade among countries through the application of various trade informatization means on the GMS IS.

Increased Benefits of Enterprises and Facilitated Relevant Cooperation

Great response in the world and real benefits for operators participating in the project from these countries.

Reduced the cross-border connection fees to a large extent.

Human resource training, rural communications demonstration projects, some later- added cross-border connection programs and some cross-border business has been enhanced.

Overcame the bottleneck of the development and laid foundations for the development

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