Brief Introduction of

International Cooperation of Telecom Infrastructure

Construction of China

**China Academy of Telecommunication Research
of Ministry of Industry and Information Technology of China**

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International Cooperation of Telecom infrastructure Construction of China

- Bilateral physical links established

- Phase I completed, peer-to-peer architecture among 6 countries

Shanghai Cooperation Organization Information Superhighway

Greater Mekong Sub region Information Superhighway

China-ASEAN Information Superhighway

The BRICS countries Submarine Cable

- Promoting multilateral cooperation to improve interconnectivity

- Initiated by South Africa, following the progress

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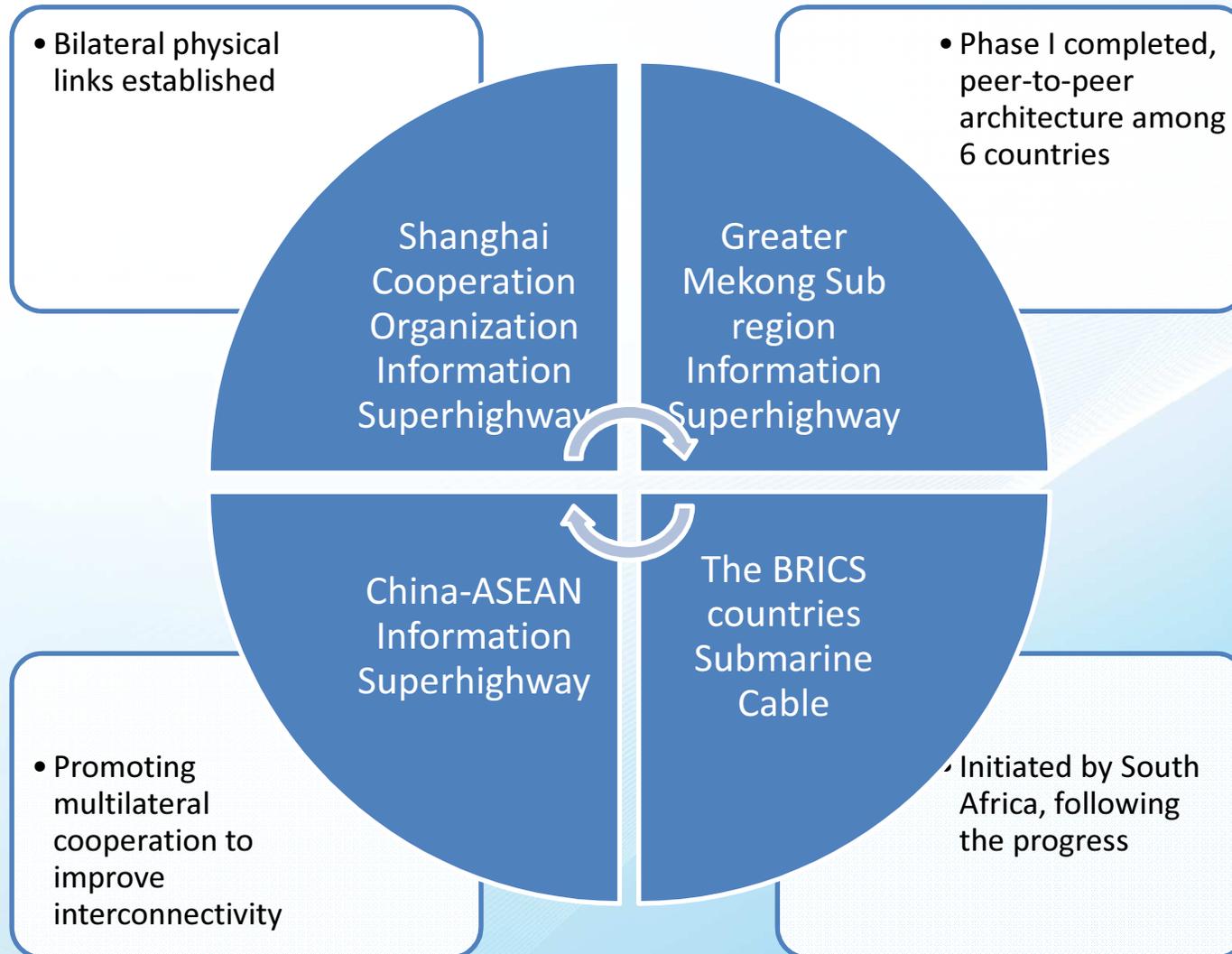
Origins of Greater Mekong Subregional Information Superhighway (GMS IS)

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 <Memorandum of Understanding of the Information superhighway of the Greater Mekong Sub region> on 2004, steering group and implementation group were set up.
- Participated operating enterprises signed the <Memorandum of Understanding 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, lead along growth of other industries and narrow the digital divide between GMS and developed countries in the field of telecommunication.

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
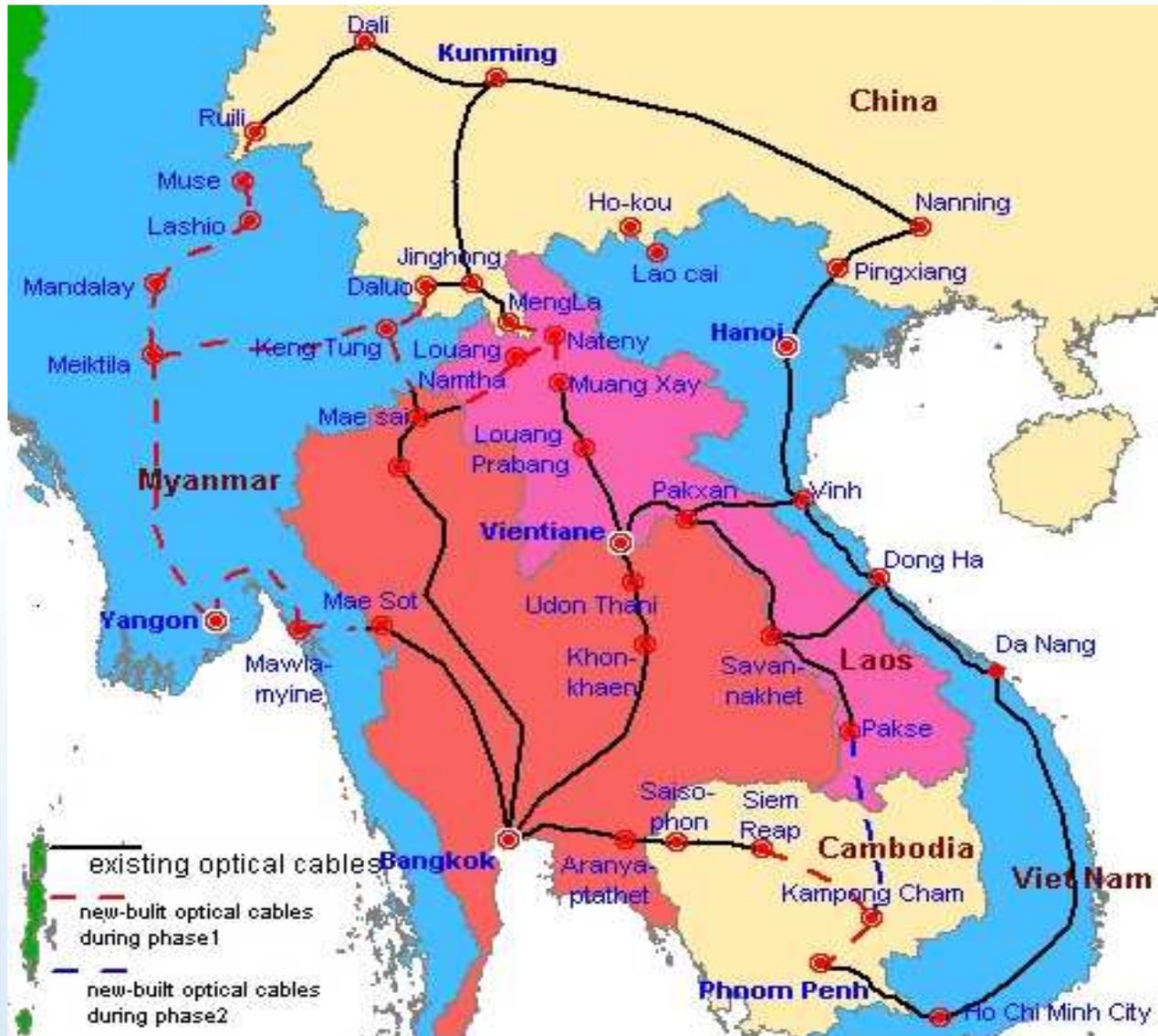
- The network shall be effectively interconnected with domestic networks of each country so that the GMS backbone network can fully play its linking role.

- 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.

-to-point architecture
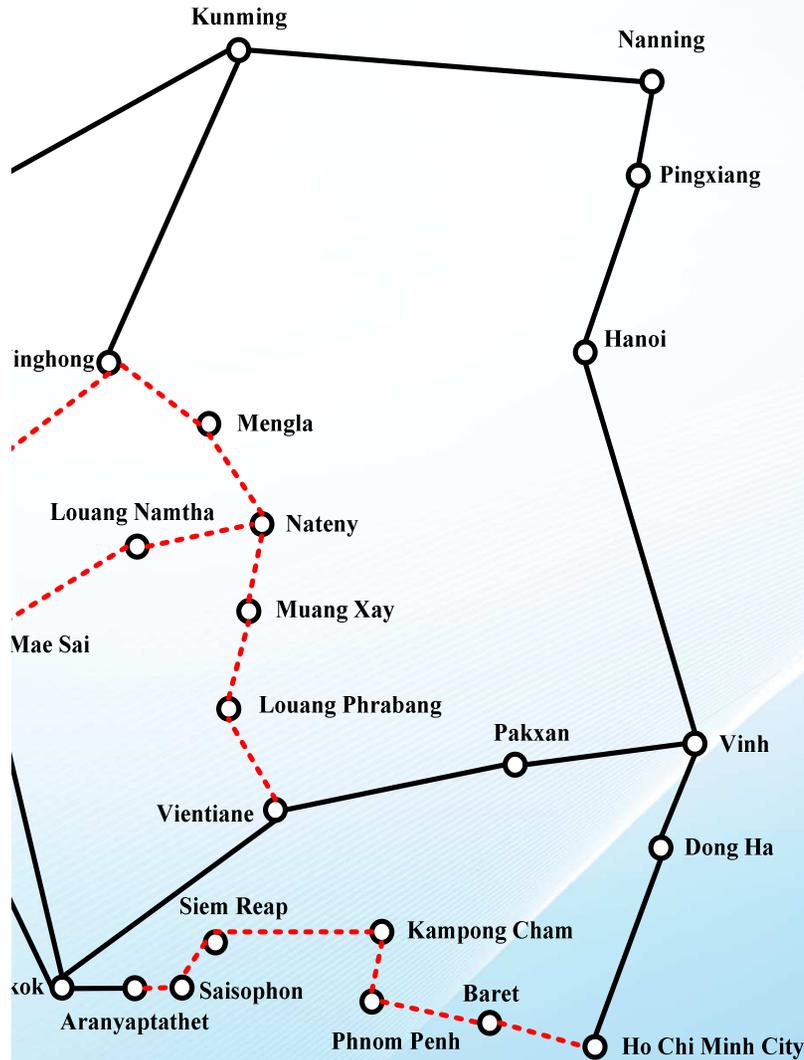
(1) E1 Circuit

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