



# Academic Network Construction In China

A Brief Introduction of  
CERNET, SHERNET and SJTUnet

Networking & Information Center  
Shanghai Jiao Tong University

上海交通大学网络信息中心

# Overview

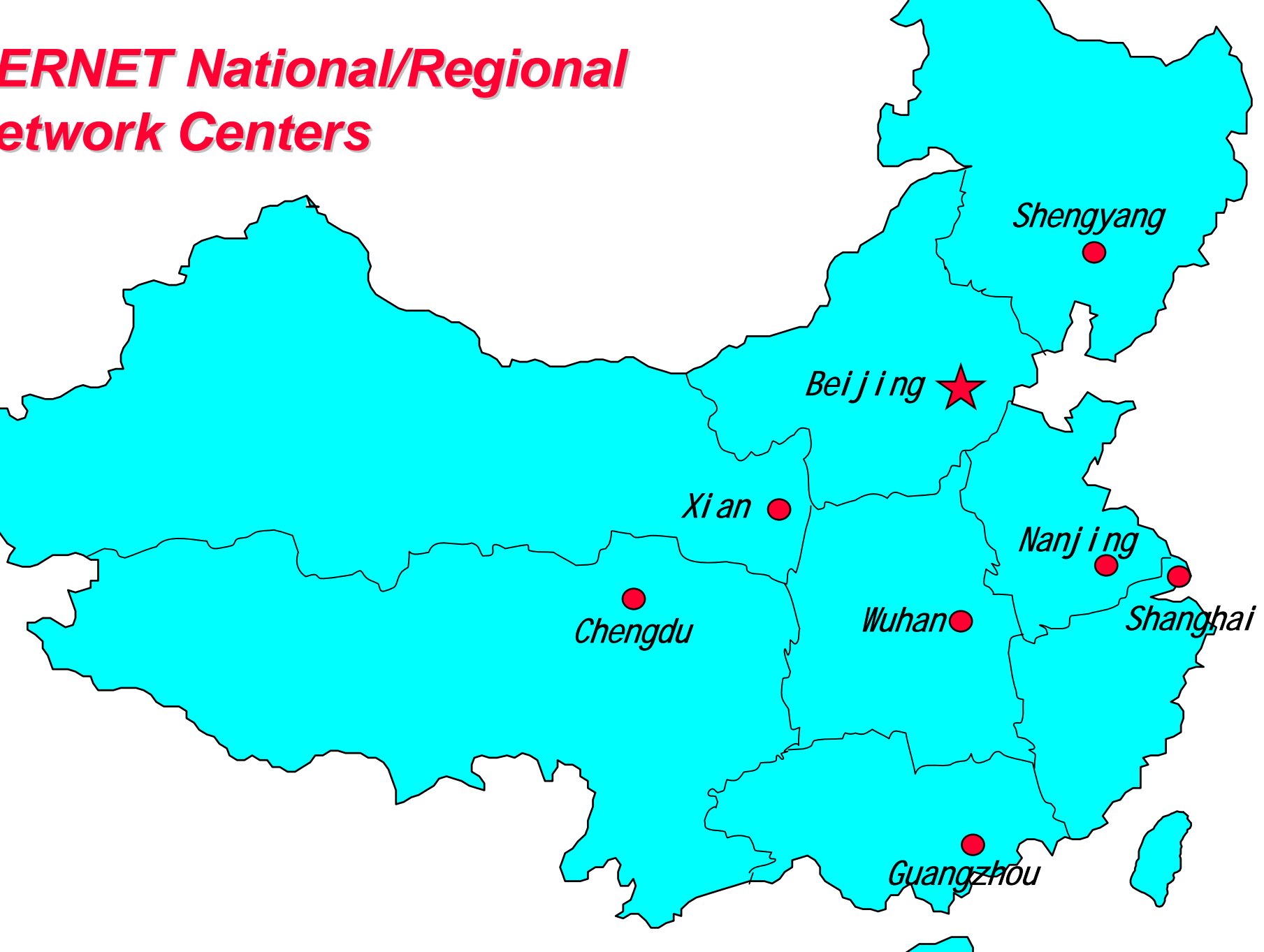
CERNET is the first nationwide computer network in China

The goal of constructing CERNRT is to gradually connect all the universities, institutes, primary and secondary schools , as well as other education and research entities in China

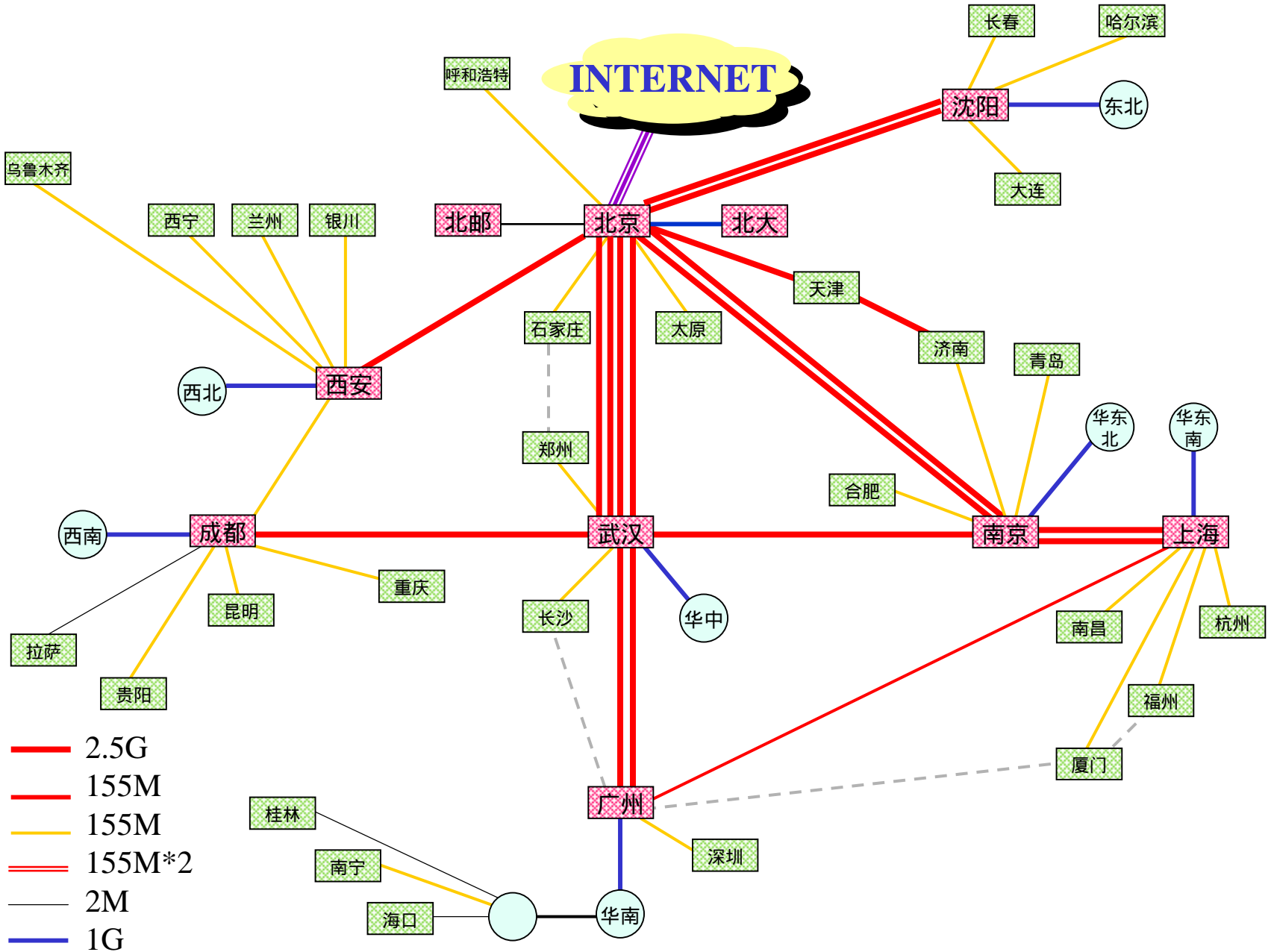
It is funded and directly managed by the China Ministry of Education

CERENT is designed, constructed, operated and managed by 10 leading universities including Tsinghua University, Peking University, Shanghai Jiao Tong University, etc.

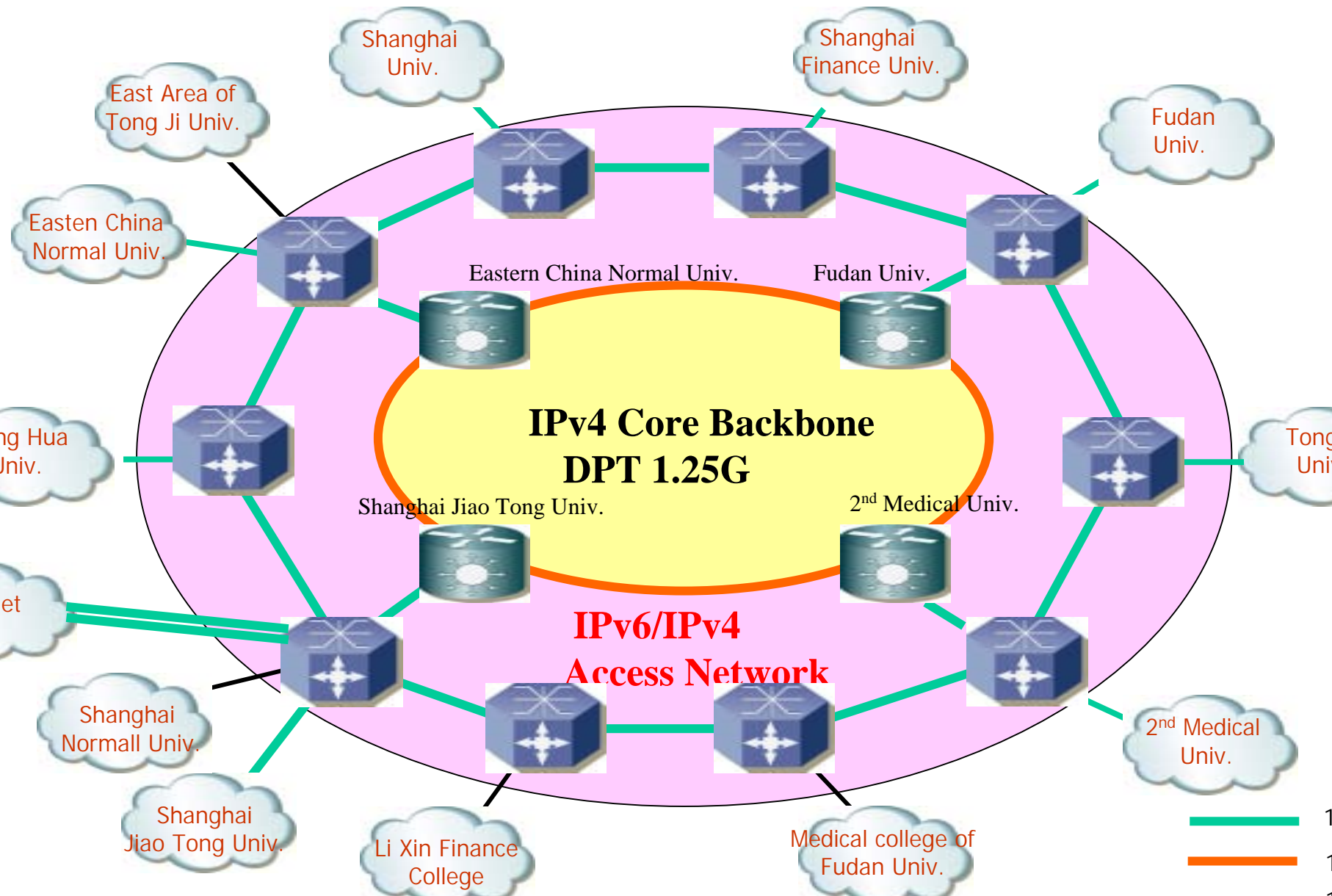
# ***ERNET National/Regional network Centers***



# CERNET Backbone



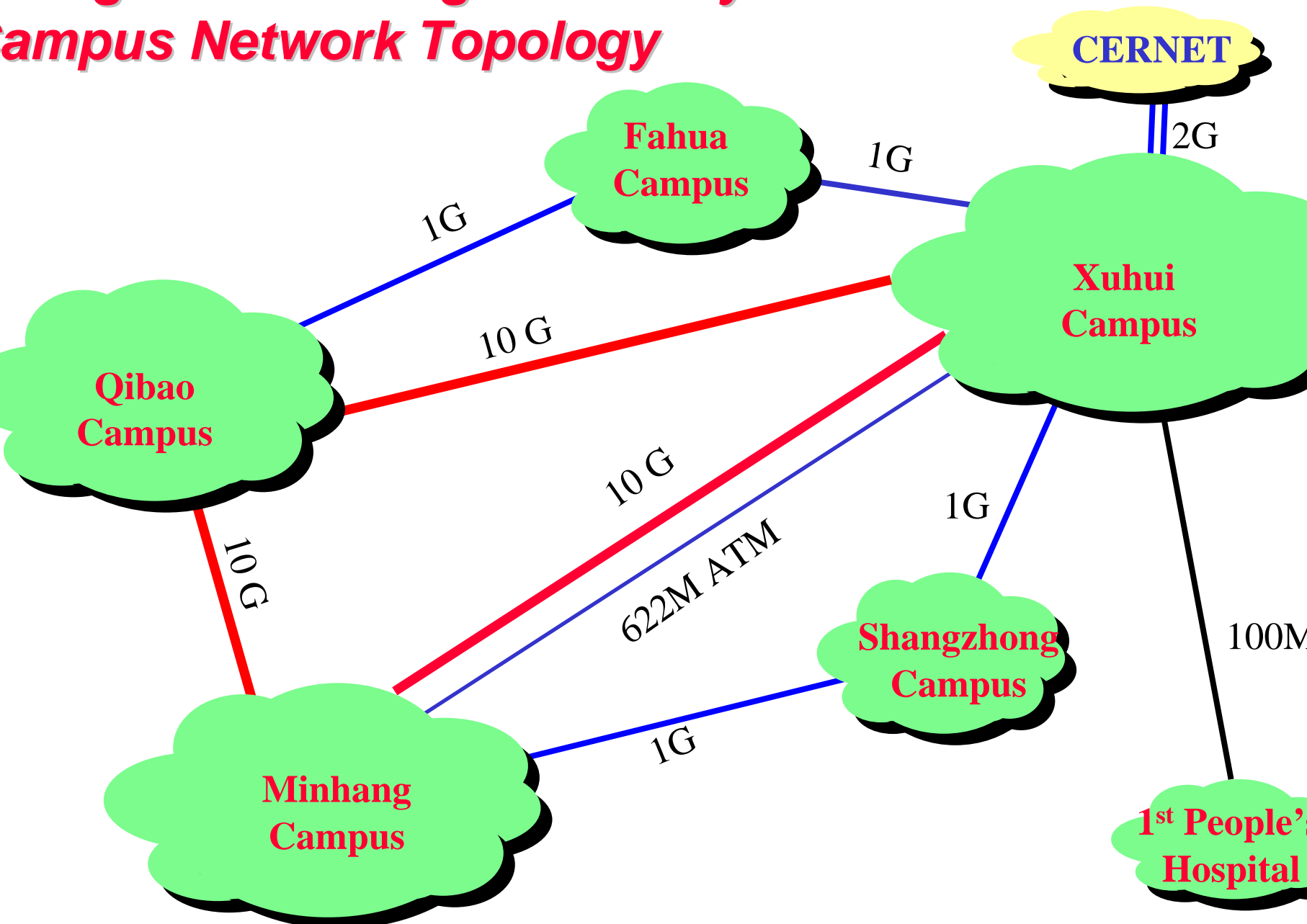
# Shanghai Education and Research Network IPv6/IPv4 Backb



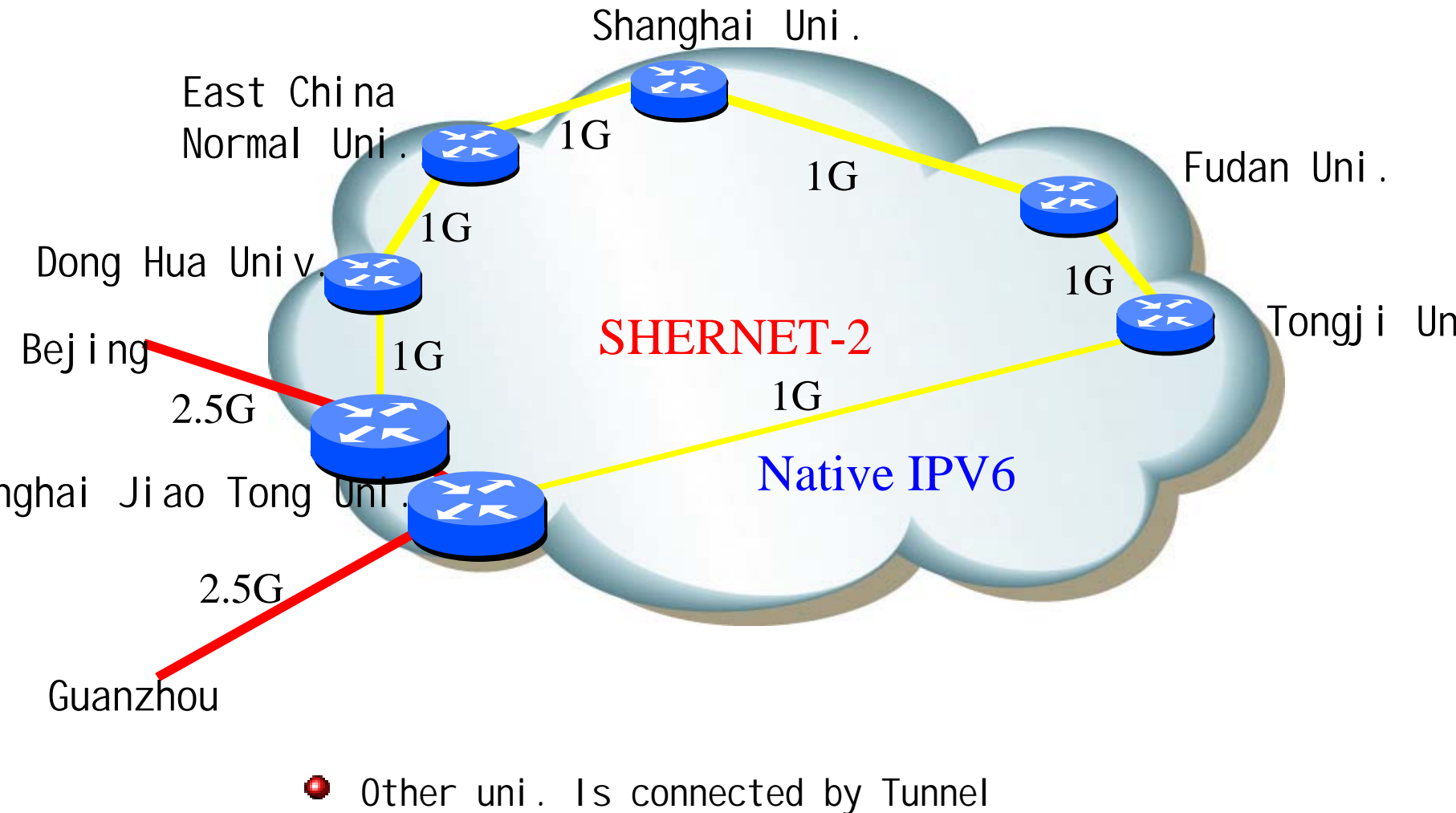
# SJTU Capmus Network Evolution

- Experimental Campus Network (Oct. 1994)
  - 5 Ethernet LAN segments connected by 2 Bridge-Routers based on PC
  - Used for showing what a network can do
- ATM Campus Network (Main Campus Only, Oct. 1995)
  - The first ATM campus network in China
  - 2 × IBM 8260 ATM Switches, 14 × IBM 8281 ATM/Ethernet LAN Bridges
  - 100 Mbps trunk data rate
  - Connected 15 Buildings in Xuhui campus
- ATM Campus Network Upgrade (All Campuses, Dec. 1998 - Dec. 2000)
  - 2 × IBM 8265 ATM Switches, 55 × IBM 8277 ATM/FE Switches
  - 22 × Cisco 2924 Switches and 250 × Cisco 1924 Switches
  - Connected 72 buildings of 5 campuses
  - 622 + 155 Mbps trunk rate between Xuhui and Minhang campus, 155 Mbps between Xuhui and other 3 campuses
  - IBM Netview network management system

# Shanghai Jiao Tong University Campus Network Topology



# SHERNet Native IPv6 backbone





# New Generation SHERNet

