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Internet Interconnection Architecture of China

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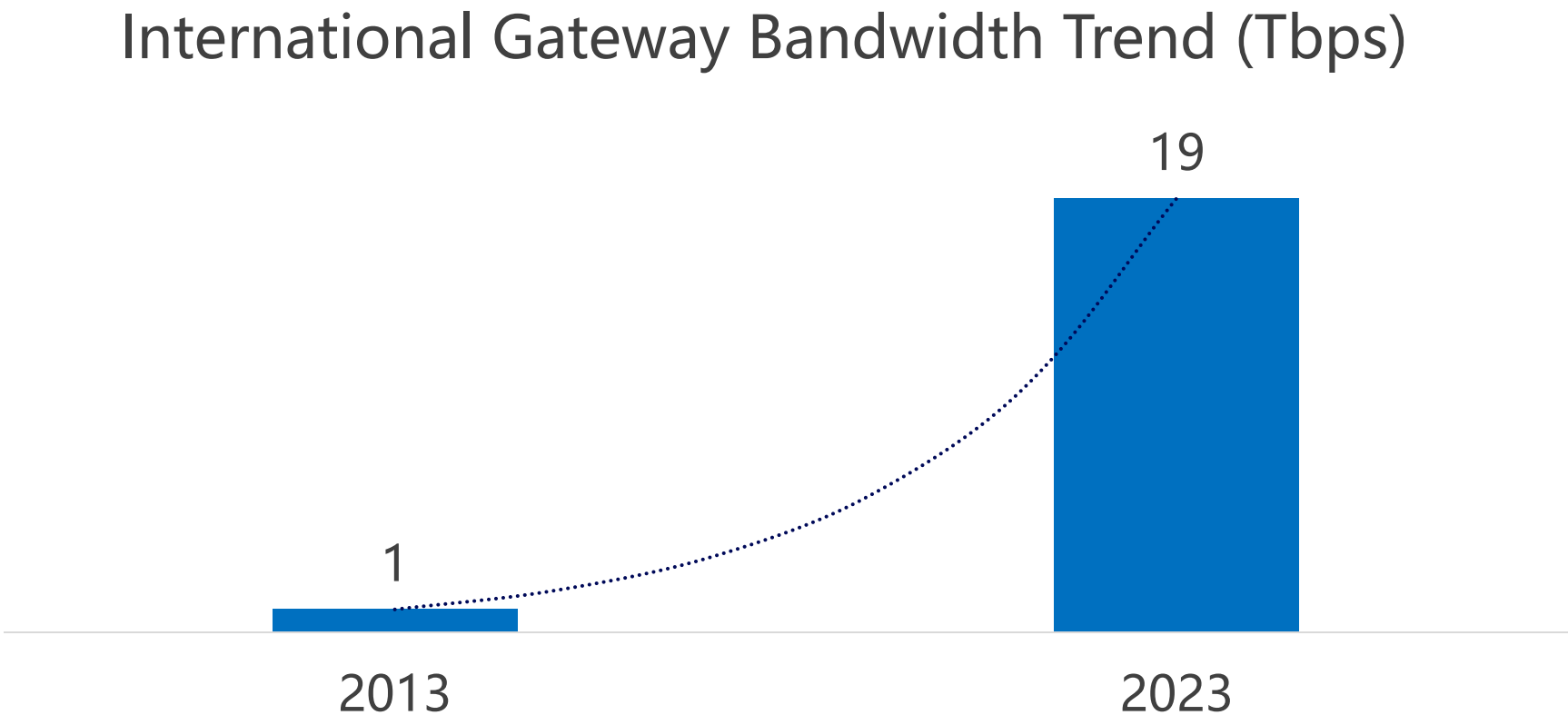
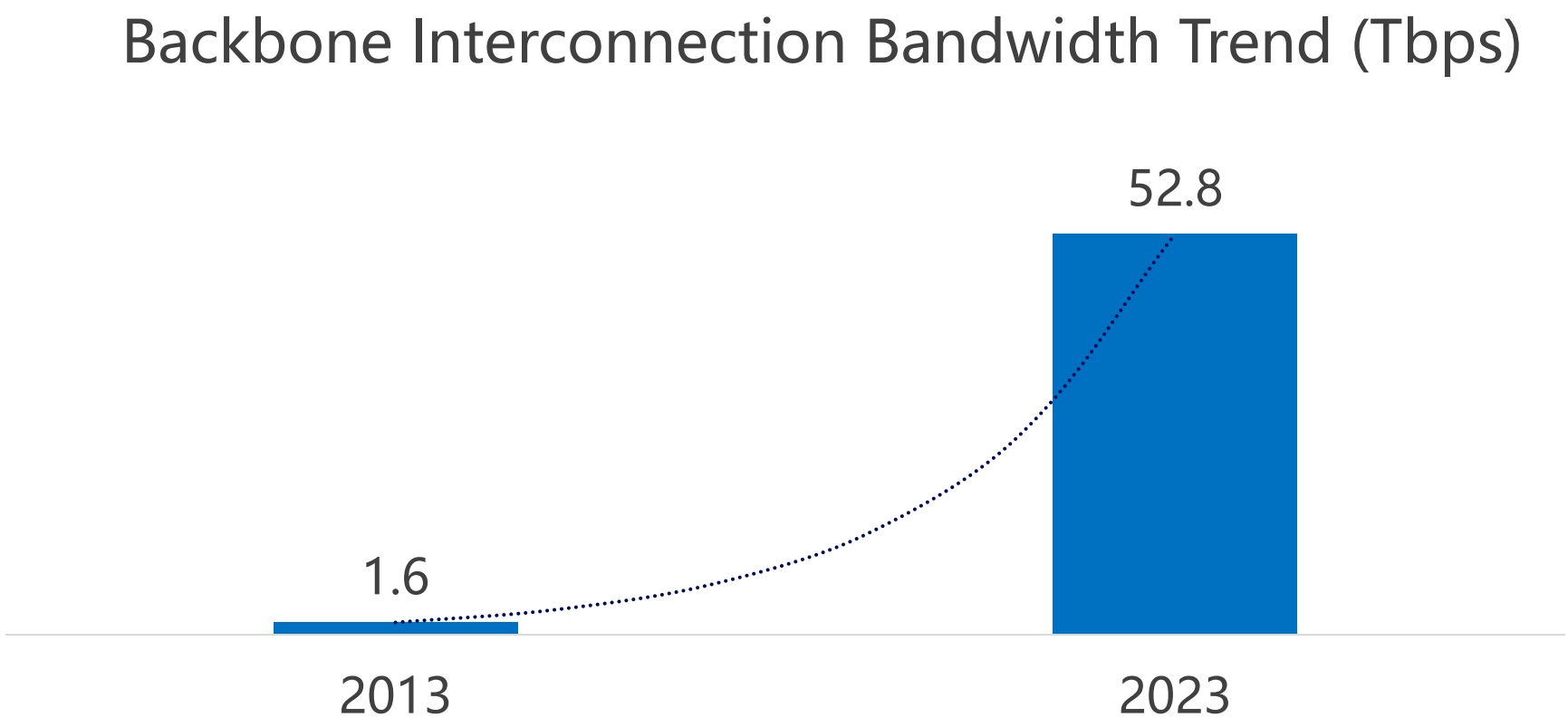
Internet Interconnection Architecture of China

International layer: International Gateways	directing traffic between China and other countries
Backbone layer: National Direct Interconnection Points	directing traffic between the three major telecom operators, including China Telecom, China Mobile, and China Unicom
Regional layer: Internet Exchange Points	exchanging traffic between Internet service providers (ISPs), content delivery networks (CDNs), cloud service providers, etc

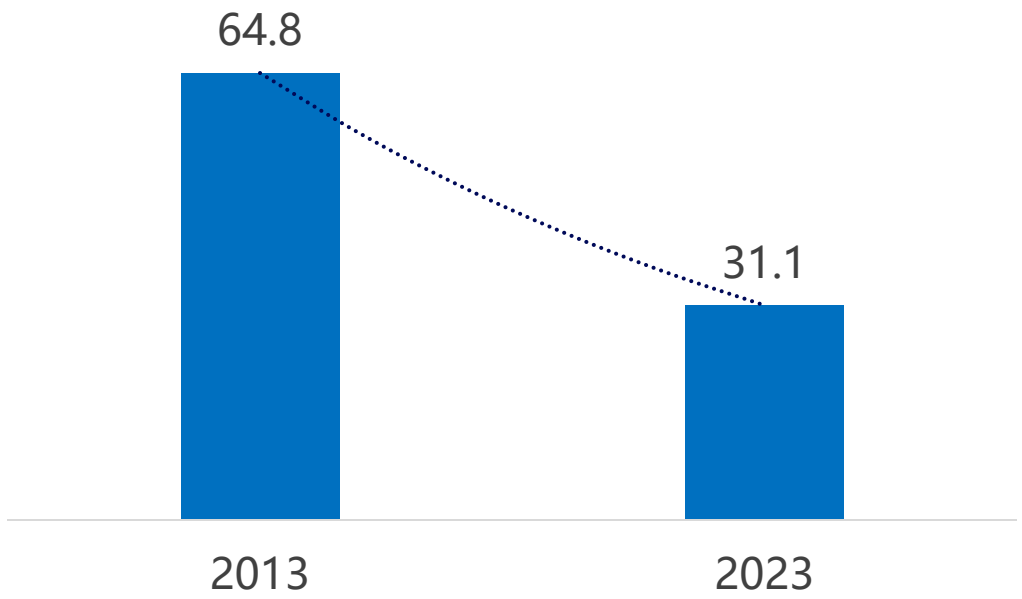
International Gateways

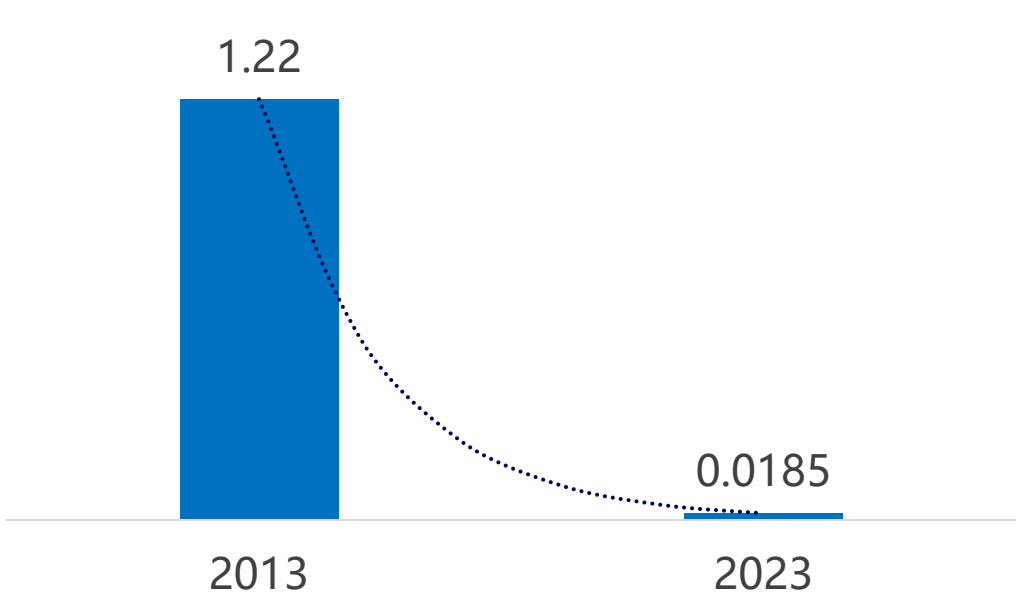


National Direct Interconnection Points



National Direct Interconnection Points





Internet Exchange Points

Since 2019, Hangzhou, Shenzhen, Zhongwei and Shanghai have set up Internet exchange Points

Internet Exchange Points

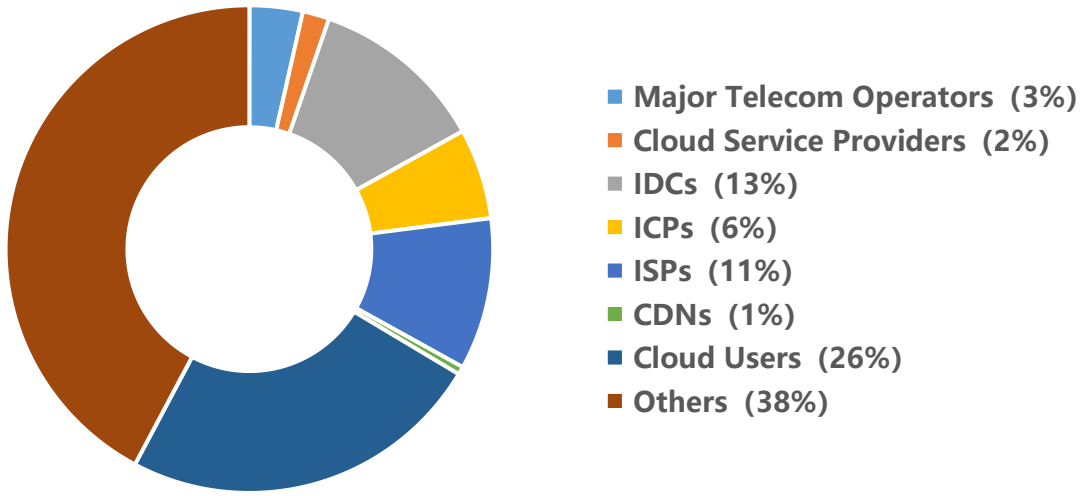
The IXPs have connected total of 566 enterprises, with access bandwidth exceeding 48.5Tbps

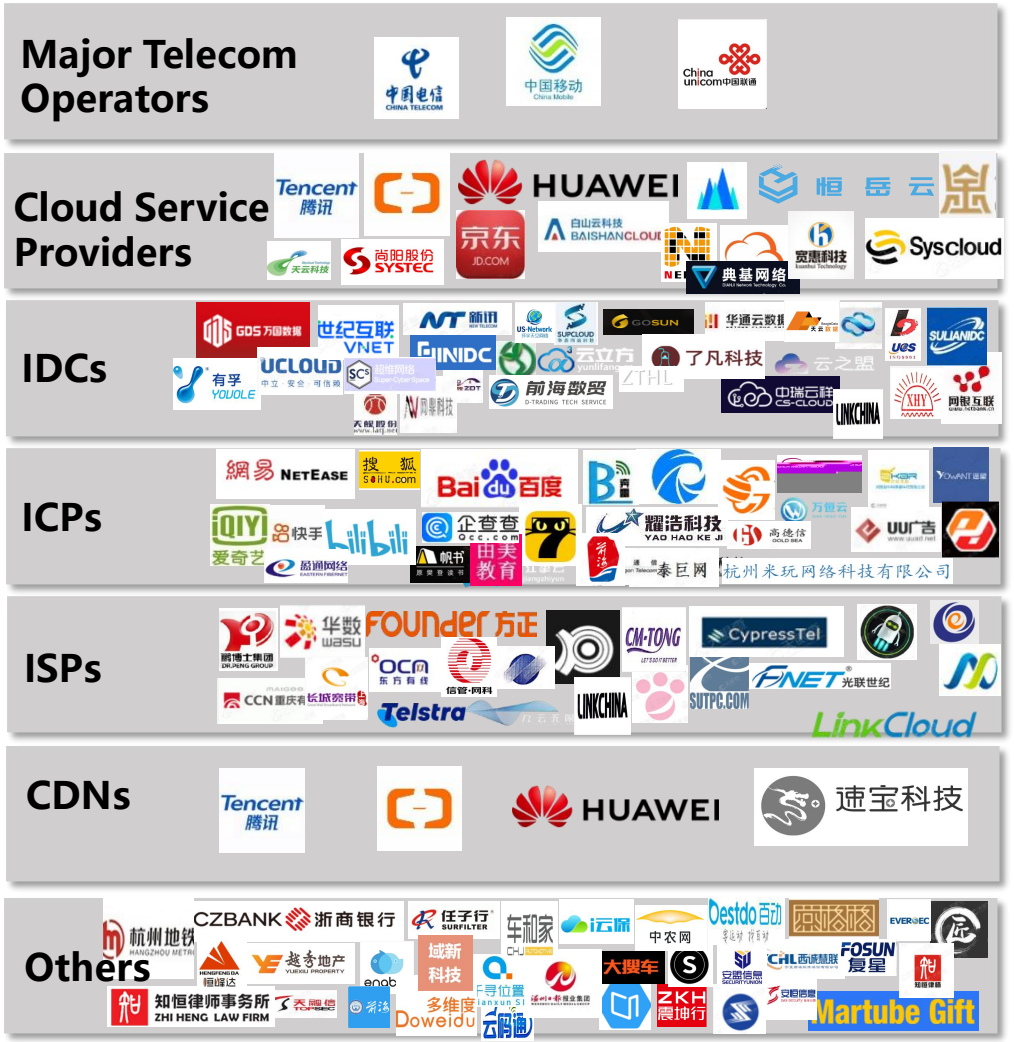
	Enterprises	Bandwidth	Peak Traffic
IX.CN 浙江交换	261	36.5Tbps	8Tbps
国家（深圳·前海）新型互联网交换中心 CHINA (QIANHAI) INTERNET EXCHANGE	254	8.9Tbps	1.5Tbps
国家（中卫）新型互联网交换中心 NATIONAL(ZHONGWEI) NEW-TYPE INTERNET EXCHANGE POINT	21	1.1Tbps	791Gbps
SHIXP 国家（上海）新型互联网交换中心	52	2.0Tbps	423Gbps

Internet Exchange Points

Internet Exchange Points' Ecosystem

Proportion of various enterprises in IXPs





Internet Exchange Points

Multi Cloud Access

Covering the Main Services

- Single Public Cloud (Tencent, Alibaba, Huawei)
- Multiple Public Cloud
- Hybrid Cloud

User Scale

- Hangzhou, Shenzhen, and Shanghai have all launched cloud access service platforms
- Hangzhou: About 150 users

Technological Innovation

- Hangzhou independently developed an SDX controller, enabling the control and management of the network devices and services using software applications

Internet Exchange Points

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More Service Scenarios

- Anti-DDoS Service
- Computing Resources Scheduling and Transaction
- Application Store
- .....

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