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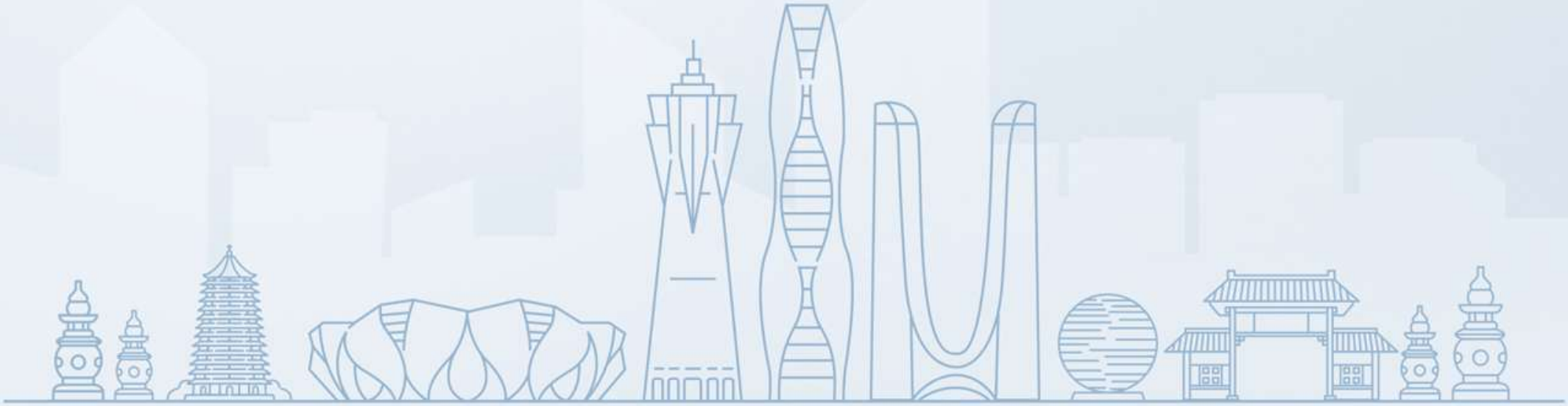
INTERNET EXCHANGE

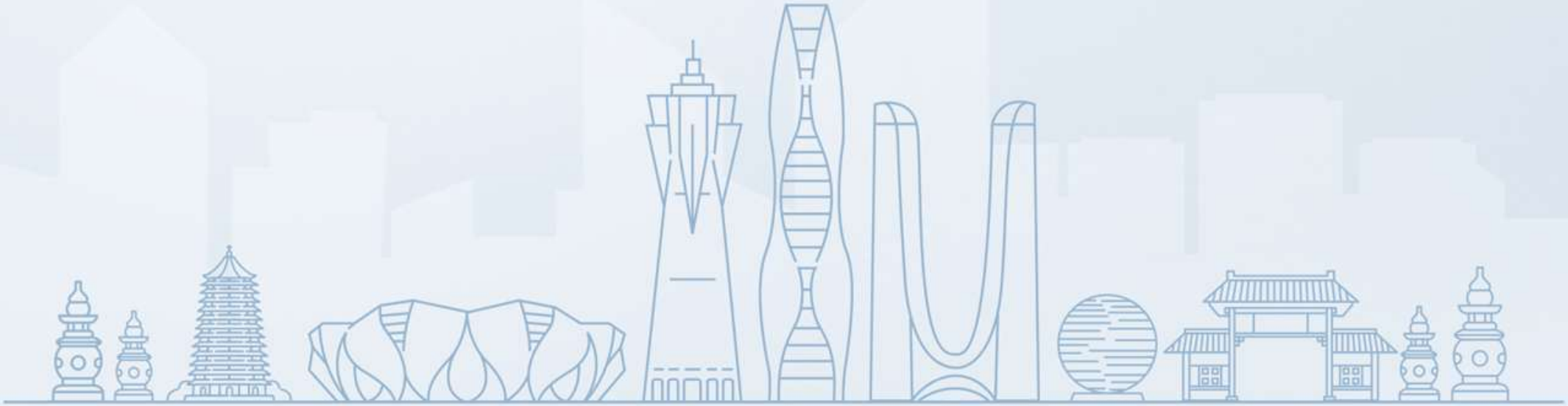
From Policy to Practice: Introduce to China’s Newly Issued Government Document for IXP and NNIX's Roadmap

Yisha Liu, Feb 8, 2026



PART 1

China’s Newly Issued Government Document for IXP



Newly Issued Government Document

On December 30, 2025, to further optimize the layout and promote the development of IXPs in China, MIIT issued the **Guidelines on Accelerating the Innovative Development of National IXPs**.

Contents

II. Building a Network System for IXPs

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(1) Coordinate and Optimize the Overall Layout

Establish IXPs in key regions with strong demand and infrastructure to ensure balanced national coverage. Enhance synergy with national computing hubs to enable efficient cross-regional data flow.

(2) Expand Business Coverage

Extend the reach of IXPs from local areas to nearby cities and provinces, building them into regional traffic hubs. Explore inter-provincial connections and establish coordination mechanisms for integrated national operations.

(3) Strengthen Facility Coordination and Synergy

Coordinate planning between IXPs and national internet backbone points to create a complementary, efficient network structure that supports localized interconnection and smooth traffic management.

III. Deepening Application Innovation in IXPs

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(4) Broaden Traffic Exchange Scenarios

Encourage enterprises to achieve efficient interconnection through IXPs and provide multi-carrier access options. Promote integration with international infrastructure to ensure secure and smooth cross-border network connectivity.

(5) Promote Integrated Development of Computing, Networks, Data, and AI

Drive the connection of various computing power centers to IXPs to optimize data transmission. Support the establishment of computing power scheduling and trading platforms to lower operational costs for businesses.

(6) Enhance Industry Empowerment

Provide enterprises with convenient cloud access and multi-cloud interconnection services. Support the integration of 5G private networks, industrial internet, satellite connectivity, and low-latency scenarios to enhance industry-specific service capabilities.

(7) Advance Technology Research, Development, and Deployment

Promote the deployment of advanced technologies such as AI, high-speed optical transmission, and IPv6+ in IXPs. Encourage industry-academia-research collaboration to drive independent innovation and the standardization of technological achievements.

IV. Improving the Regulatory Framework for IXPs

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(8) Strengthen Operational Quality Assurance

Enforce safety policies and conduct regular inspections to identify and mitigate potential hazards. Improve emergency response plans and enhance preparedness to ensure reliable service continuity.

(9) Improve Security Protection Capabilities

Establish and maintain robust cybersecurity and data security frameworks in line with industry standards. Conduct periodic security reviews and strengthen monitoring to promptly detect and report significant threats.

(10) Refine Compliant Interconnection Management

Develop clear regulatory measures for network interconnection, specifying operational and compliance requirements. Address non-compliant interconnection practices and guide data traffic through legitimate pathways to sustain an orderly market.

(11) Strengthen Business Supervision and Management

Enhance supervision by local authorities through improved regulatory frameworks and operational monitoring mechanisms. Deploy dedicated monitoring systems for IXPs to enable proactive risk warning, in-process handling, and post-event analysis, ensuring stable and secure services.

V. Strengthening Implementation Efforts

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(12) Increase Policy Supports

Incorporate IXPs into national and regional development plans. Encourage local support through funding, site allocation, and subsidies for access fees to ensure sustainable operations.

(13) Foster Win-Win Cooperation Among Enterprises

Encourage 3T providers to invest in bandwidth and resources, offer reasonable rates for SMEs, and improve fee structures. Facilitate cooperation among internet companies, cloud services, and research networks to build an open interconnection ecosystem.

(14) Deepen Industry Exchange and Collaboration

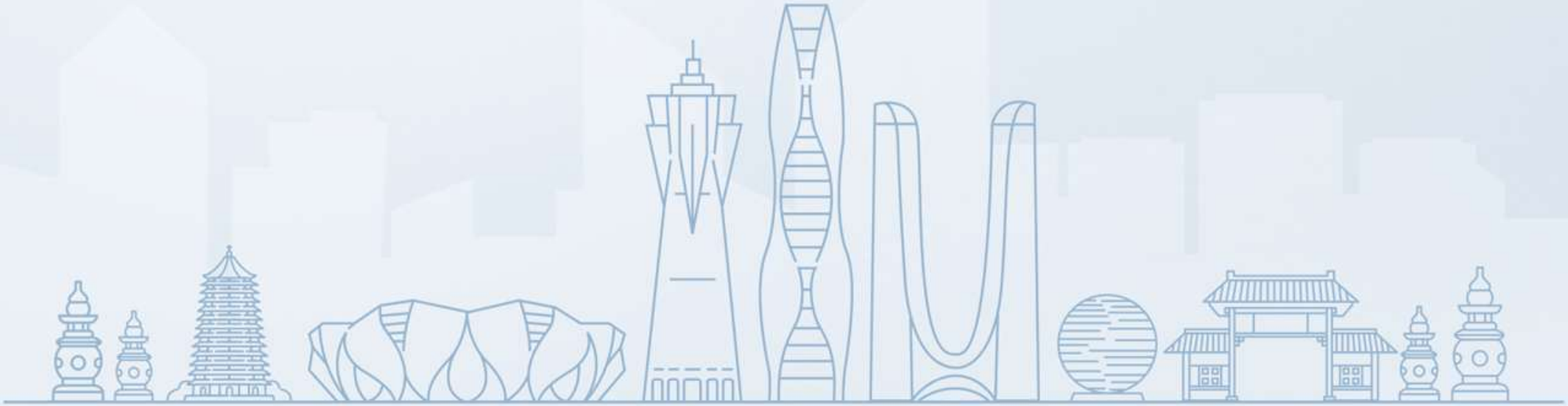
Share best practices and case studies across regions to promote replicable models. Support industry associations in driving branding, standards development, talent training, and international cooperation.

(15) Promote International Exchange and Cooperation

Explore compliant interconnection with global IXPs and assess feasibility of setting up overseas nodes. Encourage participation in international organizations, promote standards alignment, and facilitate exchange in policy, technology, and expertise.

PART 2

NNIX's Roadmap



Future Core Plans of NNIX

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Based on the latest guideline, industry trends, and NNIX's achievements over the past five years, we will outline our plans for 7 goals.

01 Build a Resilient Network with 1+2+X Architecture

02 Enhance Routing Security through RPKI Deployment

03 Drive IPv6 Adoption and Industry Upgrade

04 Support Cross-Border Business for SMEs

05 Expand AI Global Services for Local Empowerment

06 Evolve into Next-Gen IXPs

07 Create a National Innovation Ecosystem

Actions 1: Build a Resilient Network with 1+2+X Architecture

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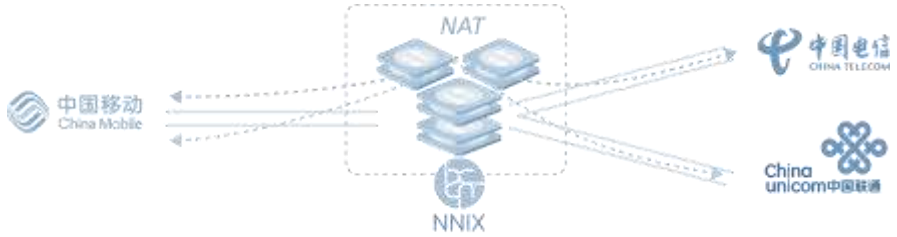
Current Progress

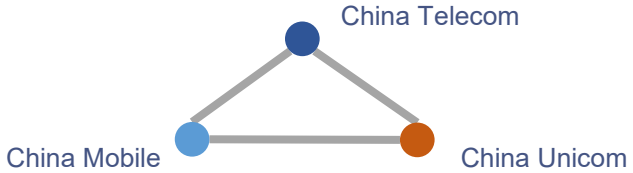
Till now, NNIX's network points located in five major cities in other province and all cities in Zhejiang, all the IDC are famous, having top ICPs, ISPs, CDNs and Cloud regions.

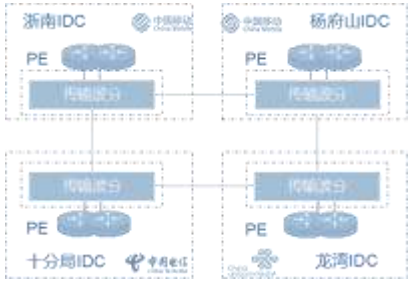
Future Plan

Optimizing network architecture and aims to develop a **"1+2+X" interconnection architecture.**

1 means NNIX(HZ) support interconnection between 3 Major ISPs
2 means two backbone connect *points in Zhejiang province*
X means several multi-carrier nodes in different cities







Actions 2: Enhance Routing Security through RPKI Deployment

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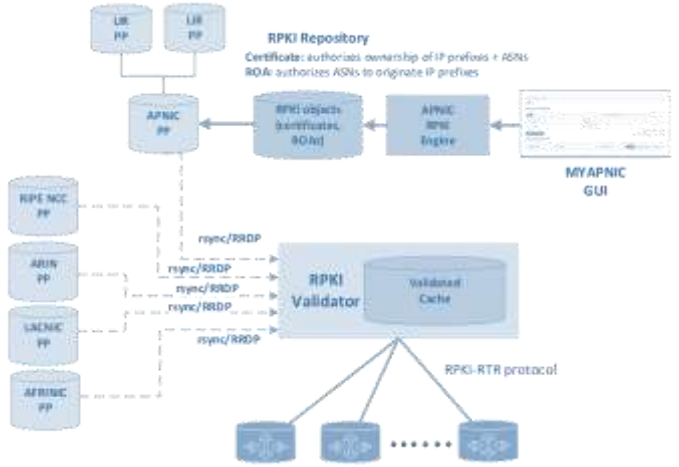
Current Progress

NNIX, in collaboration with CNNIC, has established **a national top-level domain name resolution node** and is providing services to connected enterprises.

Future Plan

- To joint CNNIC and APNIC to promote the implementation of RPKI routing security technology in China.
- Build **national RPKI relying party node** and **RIR RPKI TAL anchor point**.
- Enhancing the security of China's internet foundational resources.



Actions 3: Drive IPv6 Adoption and Industry Upgrade

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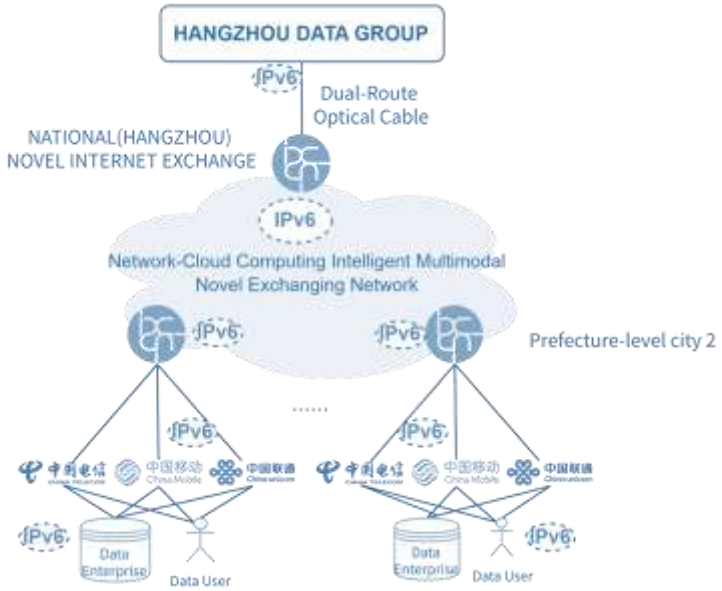
Current Progress

Actively participate in IPv6 industry organizations both in China and around the world, leveraging extensive interconnection ecosystem and network coverage.

Future Plan

- Promoting the implementation of IPv6 technology **through the development of the Data Network**.
- Deepen collaboration with organizations such as APNIC and CNNIC to jointly conduct IPv6 tech- training and industry promotion.



Actions 4: Support Cross-Border Business for SMEs

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Current Progress

- Gained some practical experience through its involvement in Hangzhou Data Network globally.

Future Plan

- Explore the establishment of a secure and trusted hub for cross-border data flow in the next step.
- Aim to achieve **"interconnection at the city, provincial, national, and cross-border levels“.**
- Satisify the overseas expansion needs of small and medium-sized enterprises(SMEs) in Zhejiang province.

Actions 5: Expand AI Global Services for Local Empowerment

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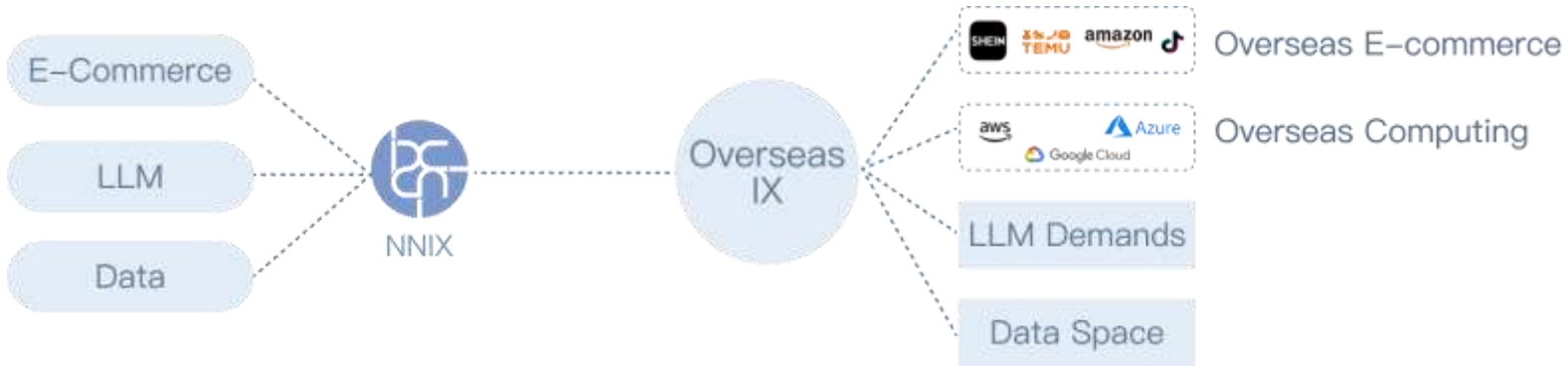
Current Progress

With China's AI and computing index now ranking in the global top 2 and the rising influence of models like DeepSeek, NNIX offers a strategic network solution—**featuring a flat, directly-connected, and secure Layer-2 architecture**—to effectively support the international service demands of this growing sector.

Future Plan

- Build overseas nodes (e.g., Hong Kong, Japan)
- Create global channel and service platform for AI deployment
- Offering **one-stop solutions for connectivity, deployment, and computing support**.



Actions 6: Evolve into Next-Gen IXPs

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Current Progress

In its evolution into a next-generation IXP, NNIX has achieved multiple advancements across four 4 dimensions: integrating computing resources, enabling AI collaboration, facilitating data interconnection, and pioneering space-air connectivity.

Future Plan

- Expand data center connectivity to boost computing power integration.
- Build a robust computing scheduling platform, advance AI agent interconnectivity for smarter services.
- Accelerate the development of China Data Network.
- Explore integrated apps in satellite communications and the low-altitude economy.

Actions 7: Create a National Innovation Ecosystem

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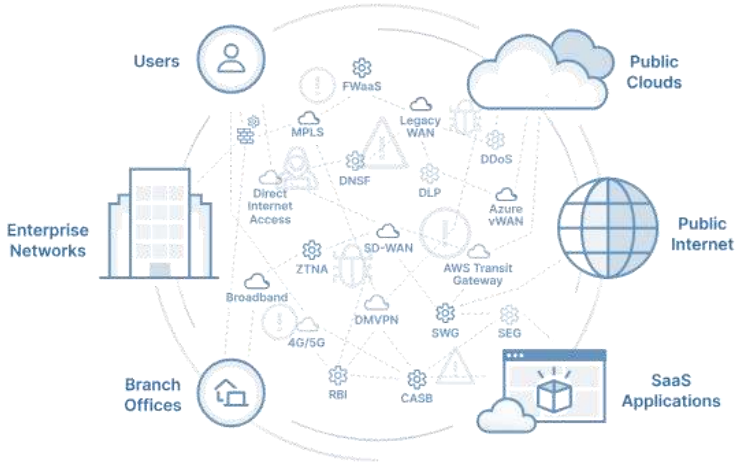
Current Progress

NNIX has researched key technologies like integrated computing-network scheduling, advanced IPv6/RPKI adoption, and ecosystem development. Its recognition includes approval as selection for national IPv6 innovation pilots, and leadership of major R&D projects—including a national initiative on heterogeneous computing task orchestration.

Future Plan

- Leverage provincial lab and network to build a national innovation testbed.
- Through cross-sector collaboration, advance **R&D in next-generation DNS, BGP security, IPv6+, AI+, and CD-WAN technologies**.
- Deploying them via IXPs to build advanced, secure digital infrastructure.



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Thank you for your attention.