



VNPT approach in Smart City Development

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Da Nang City, 23/11/2018

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OVERVIEW

VNPT is a leading telecommunications & information technologies corporation in Vietnam. We have been standing behind our country's top-ten globally ICT growth rate



- **35,000** employees
- **30,000,000** mobile subscribers
- **10,000,000** landline subscribers
- **4,000,000** high-speed Internet subscribers
- Full coverage in **63/63 provinces**
- **\$6 billion** revenue in 2017
- Products & services portfolio includes: E-governments, Hospital Information Managements, Enterprise Solutions, IT Platforms, telecom services, etc.

VNPT at a glance

A trusted partner of the Government in the digital transformation of our government operations and services

60% of hospitals & healthcare facilities running on **VNPT's Hospital Information System**

55 strategic ICT cooperation agreements signed with LOCAL GOV, out of 63 provinces

VNPT Education Suite serving 5 millions students & 10,000 schools nationwide

Targeting areas

VNPT is a leader in e-government solutions and strategically targeting to be a world class digital services provider

Digital Government

Consolidate our role as a leading partner of the Vietnamese government in digital government initiatives

Digital Transformation

Expand our digital ecosystems across various industries to facilitate the digital transformation of businesses and the overall economy.

Smart Cities

Leverage our competitive edge as a front-runner in smart city initiatives to increase market share and secure market control

Industry 4.0

Focus R&D investments on emerging technologies such as AI, IoT, blockchain and create market-ready solutions for healthcare, education, agriculture, environment management, etc.

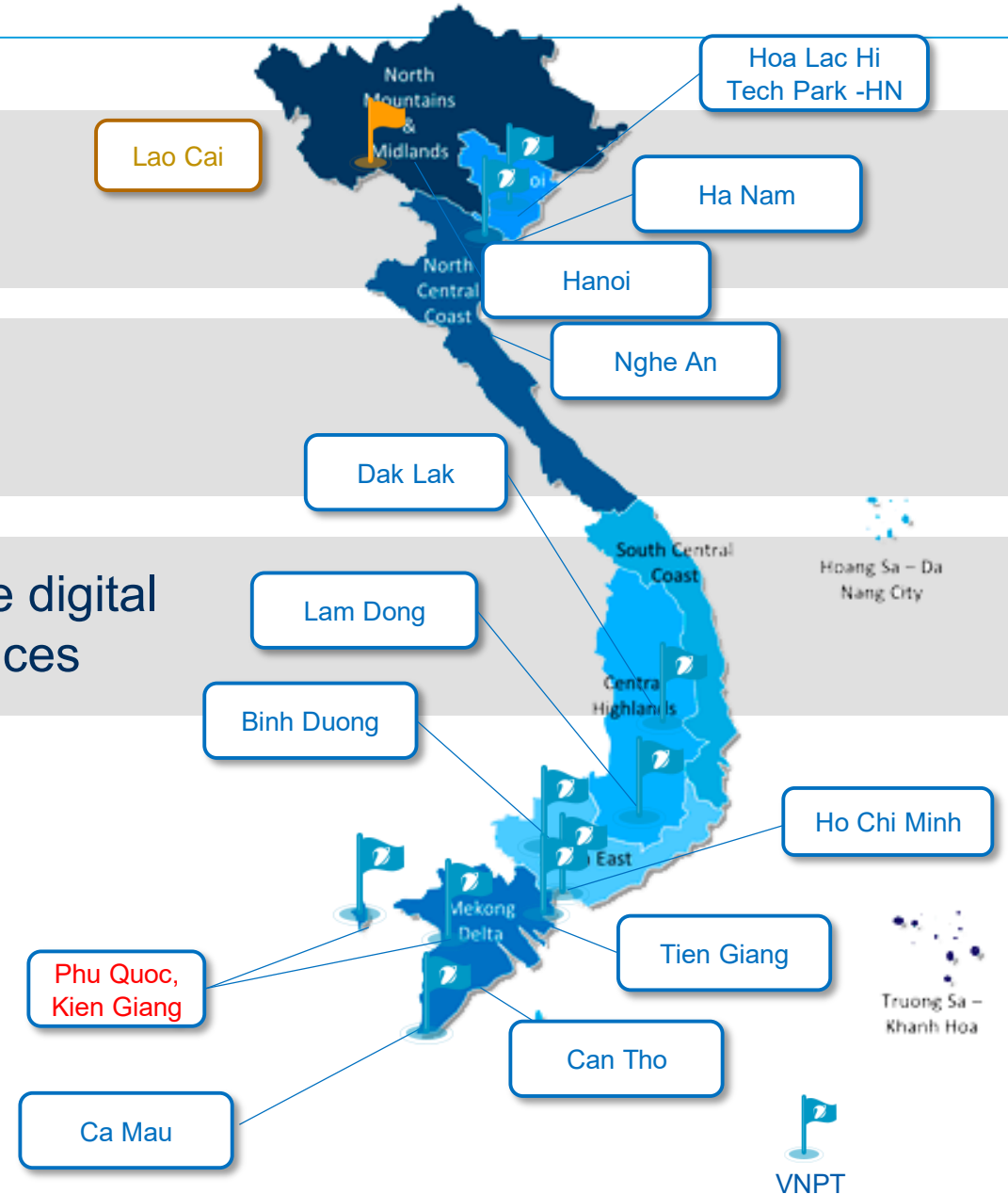
VNPT – a pioneer in Vietnam Smart City initiatives

MOU with VNPT for Smart City initiatives:
More than 20 provinces/cities and going on...

55 provinces/cities
Signed strategic ICT coop. agreements with VNPT

A trusted partner of the Vietnamese Government in the digital transformation of our government operations and services

We are working with cities including HCMC, Hanoi, Phu Quoc, Dalat, Lao Cai – Sapa to bring Smart solutions to the Government and citizens



Why Smart City in Vietnam?

Vietnam cities are facing a number of challenges which require innovative solutions

- 1** High growth rate leads to significant increase of citizen demands (public services, healthcare, education, environment, public safety services, etc.)
- 2** Lack of practical skills and knowledge in terms of technology, to tap opportunities and deal with challenges from the fourth industrial revolution
- 3** City planning is not keeping up with the pace of development: some were planned more than 100 years ago, some just started from the ground

Why Smart City in Vietnam?

The decision making process is being more complex, it needs more proactive and better forecasts rather than traditional – passive ways

	Traditional way	Modern way
Information	Silos, single dimensional, not enough for prediction	more information, multidimensional and deep view of data
Scope	Short-term forecast, low accuracy	Long-term forecast, high-accuracy
Speed	Difficult to find the optimized solution in a short time	The optimized solution is found on minimum time
Goal	Respond and handle the problem once it occurred	Bad situations can be prevented before they happen

Why Smart City in Vietnam?

Smart City initiatives would be effective solutions to current challenges faced by Vietnam's urbans

“A smart city uses information and communications technology (ICT) to enhance its livability, workability and sustainability”

Smart Cities Council

“A smart sustainable city is an innovative city that uses information and communication technologies (ICTs) and other means to improve quality of life, efficiency of urban operation and services, and competitiveness, while ensuring that it meets the needs of present and future generations with respect to economic, social and environmental aspects”

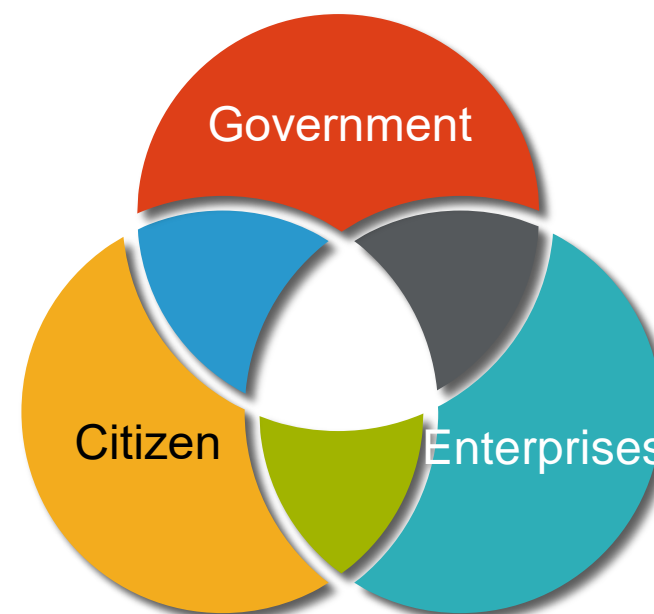
ITU Telecommunication Standardization Sector

Why Smart City in Vietnam?

Smart City initiatives bring significant benefits to three most important subjects of a city: Citizens, Enterprises, and the Government



- 1 Improve economic efficiency in urban development
- 2 Creating a better, safer living environment
- 3 The citizen are served better
- 4 The citizen can participate in managing of city and government's operations
- 5 The sustainable development of the city



VNPT APPROACH & SOLUTIONS

Key smart city areas in Vietnam

Understanding the needs for Smart City in Vietnam, VNPT is focusing on the most needed areas of the cities





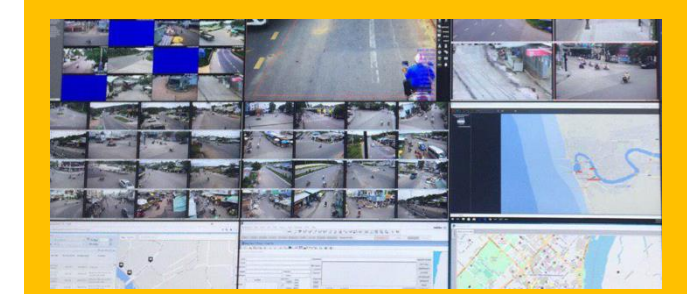
Digital Government

- Smart City Operation Center
- MyCity application: land information, online public services, emergency, complaints...
- City Dashboard
- Open Data



Smart Tourism

- Tourism portal and mobile app
- Virtual assistant for tourist
- Digital museums
- Public WiFi
- Tourism business intelligence and analytics



Safe City

- Video and physical security management system
- Emergency response operation center
- Traffic enforcement system



Smart Agriculture

- IoT in agriculture
- Agricultural products market information solution
- Forest fire prediction system
- Flood management system
- Production, diseases forecast



Smart Education

- e-learning platform
- School management system
- Smart classroom (smart devices, e-books, digital libraries, e-learning, smart student cards)
- Employment forecast system



Smart Healthcare

- Hospital information system
- Electronic health record, Smart card for patients
- Monitoring and forecasting diseases spread
- IoT devices for health



Environment

- Monitoring system for: water treatment, waste water, air pollution, noise...
- ICTs apply in Waste management system



Urban Planning

- Geospatial Information System (GIS)
- Physical infrastructure management
- Land planning and management information system
- 3D simulation
- Smart street lighting



Smart Transportation

- Traffic management operation center: monitoring camera, traffic flow, control field systems
- Smart Parking
- Payment platform for public transport

VNPT's principles for smart city development

1 Citizen-centric: place the citizens (as end users) at the central of innovative services

2 Develop and frequently update the technologies, ensure the interoperability, neutrality

3 Ensure the security and privacy, especially in the critical fields

4 Follow to the development orientation of the Government, adapt to the specific conditions of the cities/provinces

5 Identify the quick wins projects but also prior the long-term projects in smart city development

6 Encourage stakeholders to collaborate, share experiences, secure human resources in order to develop and operate the smart cities

7 Establish open platforms, open data and open community in order to increase citizens and enterprises participants

How we are working with Vietnam cities in Smart City initiatives

1 Consultancy

- Current infrastructure assessment
- Validate the vision, goal, expectation, challenges of city in smart city journey
- Build the roadmaps for business areas based on the experience and best practices
- Determine the priorities and innovative services for implementation
- Submit the proposal to the municipal government for reviews and approvals

2 Implementation

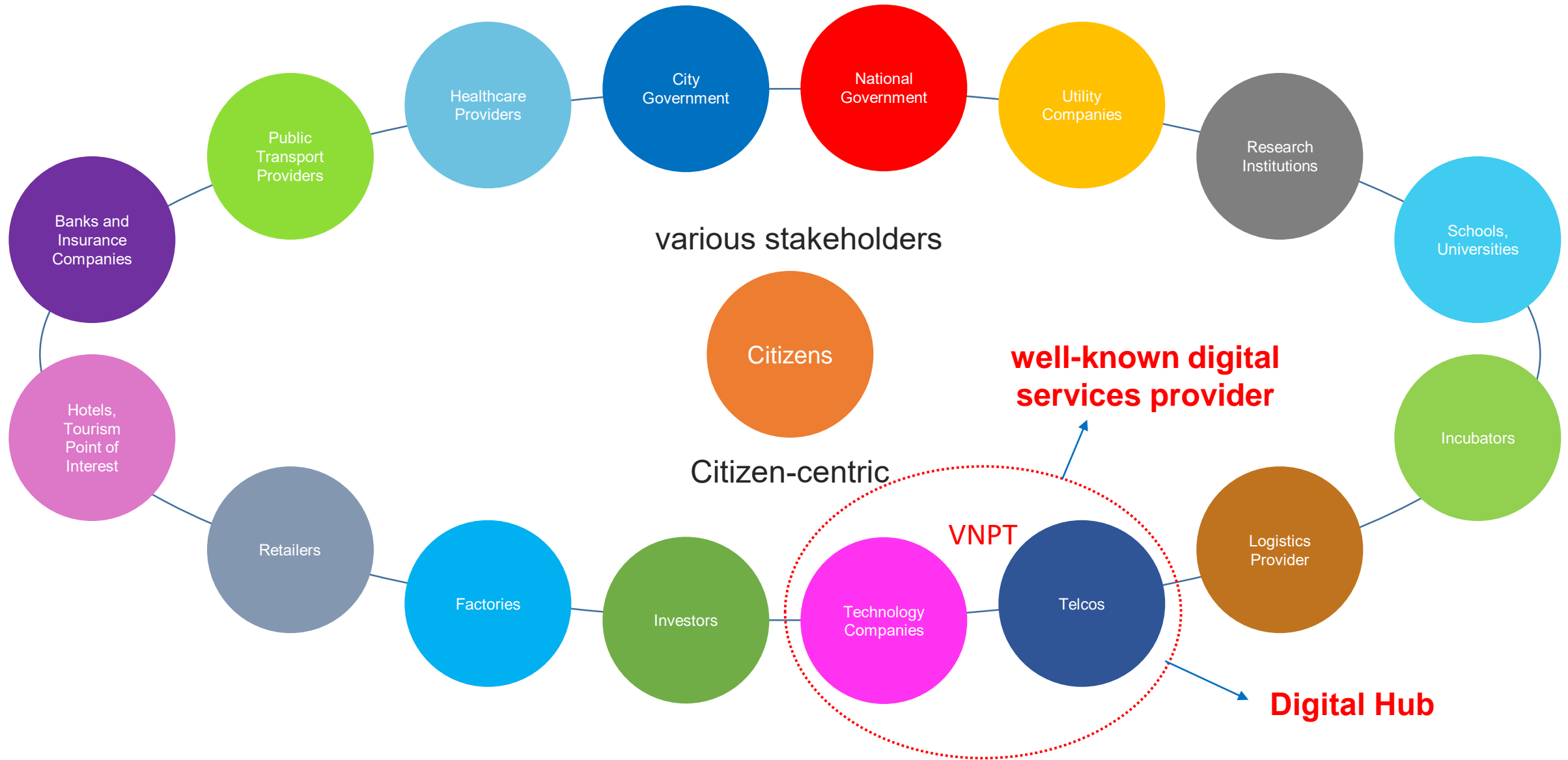
- ICT infrastructure for smart city services
- Integrated database and interoperated platforms, open data platform, integrated operation center for the city
- Decide the prior services to be developed (Digital government, agriculture, health, education, etc.)

3 Expanding & Improving

- Review and update the master plan and roadmaps
- Implement other projects in the smart city roadmap
- Continuously optimize and expand the scope

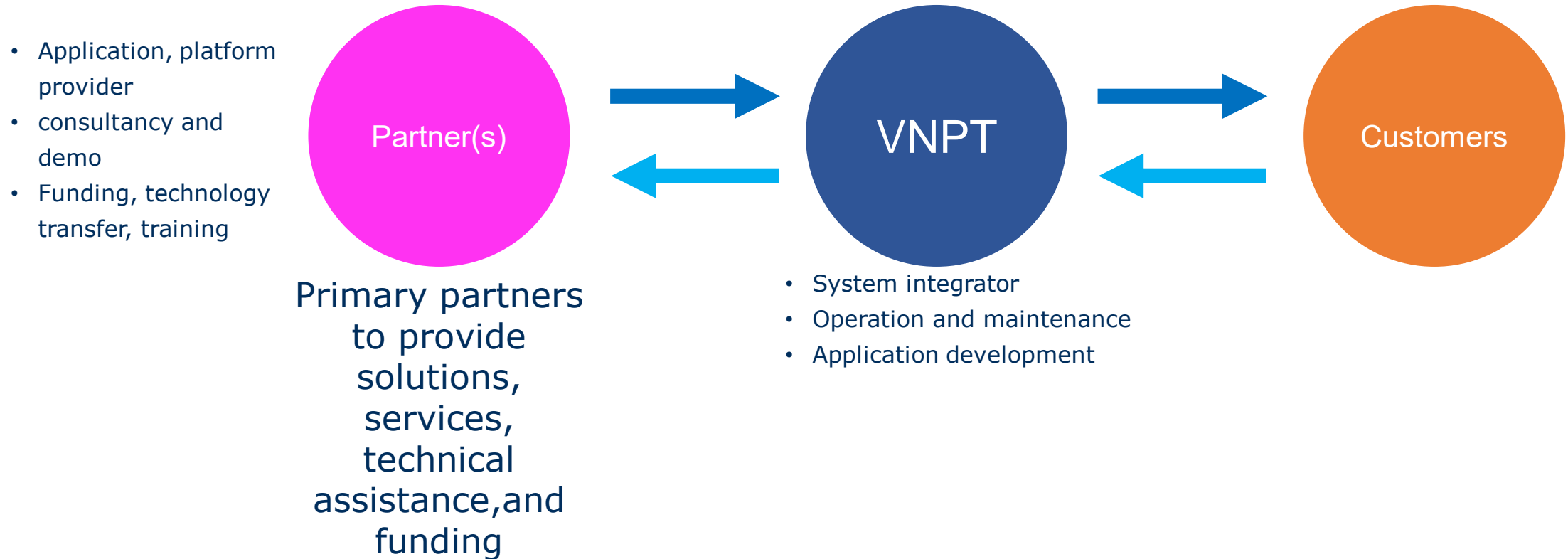
INTERNATIONAL PARTNERSHIP

Who involves?



Cooperation with international partners

VNPT welcomes international organizations and technology companies to build up partnerships in Smart city development



Q & A

Thank you for your attention!

