

Practical Exploration of the Belt and Road Initiative: A Postprint Investigation of Jiangsu, Zhejiang, and Guangdong

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Abstract

Based on field investigations in 10 cities across Jiangsu, Zhejiang, and Guangdong provinces, this article systematically introduces the principal endeavors undertaken by local governments and enterprises in Belt and Road construction during the decade since the Initiative's proposal. These endeavors include prioritizing the development of transportation corridors with Belt and Road participating countries (hereinafter referred to as "participating countries"), vigorously expanding the China-Europe Railway Express, steadily advancing the construction of overseas economic and trade cooperation zones, actively promoting trade and investment development, and strengthening sci-tech innovation cooperation along with educational and cultural exchanges. The article also identifies the main challenges currently confronting Belt and Road construction and outlines future work priorities. Practice demonstrates that Belt and Road construction objectively reflects the practical development needs at the local level, possesses historical inevitability, and enjoys an optimistic and promising prospect. Concurrently, we must adopt practical and feasible measures—such as improving organizational and coordination mechanisms, constructing major open development corridors between China and participating countries, and perfecting international financing mechanisms—to promote the sustainable development of Belt and Road construction.

Full Text

Abstract

Based on field surveys conducted in 10 cities across Jiangsu, Zhejiang, and Guangdong provinces, this article systematically examines the major initiatives undertaken by local governments and enterprises during the first decade of the

Belt and Road Initiative. These efforts include developing transportation corridors connecting China with partner countries, vigorously expanding the China-Europe Railway Express, advancing the construction of overseas economic and trade cooperation zones, promoting trade and investment growth, and strengthening scientific innovation cooperation along with educational and cultural exchanges. The article also identifies key challenges in current Belt and Road development and outlines priorities for future work. Practice demonstrates that Belt and Road construction objectively reflects the real development needs of local regions, possesses historical inevitability, and holds promising prospects. Simultaneously, we must adopt practical measures—such as improving organizational coordination mechanisms, constructing major open development corridors between China and partner countries, and refining international financing mechanisms—to ensure the sustainable development of Belt and Road construction.

Keywords: Belt and Road Initiative, practical exploration, Jiangsu Province, Zhejiang Province, Guangdong Province, global transportation network, China-Europe Railway Express, strategic planning, macro coordination

1.1 Prioritizing Port Construction to Build a Globally Connected Belt and Road Transportation Corridor

Geographically, Jiangsu, Zhejiang, and Guangdong are all coastal provinces that serve as key areas for 21st Century Maritime Silk Road construction. Consequently, all three provinces have prioritized port development in their infrastructure agendas.

1.1.1 Jiangsu Province

Jiangsu is a major port province in China, with 10 ports along its Yangtze River and coastal areas, plus 13 inland river ports. To build a better transportation interconnectivity network with partner countries, Jiangsu has focused on developing 10 major riverine and coastal ports with capacity exceeding 100 million tons each: Lianyungang, Nanjing, Suzhou, Zhenjiang, Yangzhou, Wuxi (Jiangyin), Nantong, Taizhou, Changzhou, and Yancheng. By the end of 2022, Jiangsu had opened 75 international container shipping routes, with total port capacity reaching over 2.3 billion tons.

Nanjing: As the provincial capital, Nanjing has newly opened the “Nanjing-Taicang-Haiphong-Ho Chi Minh City” container foreign trade route and established near-sea routes directly to Japan and South Korea. Additionally, to create a Belt and Road node transportation hub, Nanjing is accelerating construction of a national-level airport economy demonstration zone and advancing high-speed rail hub development.

1.1.2 Zhejiang Province

Ningbo: The focus of Zhejiang’s port construction is transforming Ningbo-Zhoushan Port into an international shipping center. By December 2021, it had become the world’s third super-container port with 30 million TEU capacity, following Shanghai and Singapore, with 120 cumulative container shipping routes and national leadership in maritime transport capacity and rail-sea intermodal volume. To enhance Ningbo-Zhoushan Port’s radiating capacity, Zhejiang has extended the port through construction of the Yiwu International Inland Port, East China International Intermodal Port, and the Yiwu-Ningbo-Zhoushan Corridor, achieving integrated land-sea development. In 2022, the Yiwu-Ningbo-Zhoushan Corridor handled 2.72 trillion RMB in import-export trade through “China-Europe Railway Express + rail-sea + maritime” multi-modal transport, accounting for 58.11% of the province’s total, demonstrating the effectiveness of extending Ningbo-Zhoushan Port.

Wenzhou: Simultaneously, Zhejiang is vigorously upgrading Wenzhou Port’s capacity, focusing on building shipping channels to Southeast Asia. This enhances Zhejiang’s trade capacity with Southeast Asia while accelerating Wenzhou’s development into the “third pole” of Zhejiang’s economy.

Hangzhou: From the perspective of airport construction, Hangzhou successfully established a national airport economy demonstration zone in 2017. After several years of development, an “Air Silk Road” centered on Xiaoshan International Airport has basically taken shape, forming an international route network covering five continents.

1.1.3 Guangdong Province

1.1.3.1 Advancing Port Construction and Transformation

As a major coastal province with natural port advantages, Guangdong has 21 ports (14 coastal), including five with capacity exceeding 100 million tons: Guangzhou, Shenzhen, Zhuhai, Zhanjiang, and Dongguan. To meet 21st Century Maritime Silk Road construction needs, Guangdong had opened 496 international container shipping routes by end-2022, with Shenzhen accounting for 294 routes and Guangzhou for 157, connecting over 300 ports in more than 100 countries and regions. Guangdong has established 89 sister-port relationships internationally, including 50 with Belt and Road countries. According to the 2022 Xinhua-Baltic International Shipping Center Development Index, Guangzhou Port rose to 13th place while Shenzhen Port reached 17th.

(1) Accelerating Digital Transformation: In recent years, Guangdong’s ports have accelerated digital transformation by leveraging 5G communications, artificial intelligence, IoT, Beidou navigation, blockchain, and autonomous driving technologies to enhance port intelligence. This enables interconnected data sharing among ports, shipping, customs clearance, and trade while promoting green, low-carbon development. Shenzhen’s Mawan Smart Port

and Guangzhou's Nansha Phase IV automated terminal serve as excellent models. After digital transformation, Mawan Smart Port reduced on-site staff by 80%, increased comprehensive operational efficiency by 30%, decreased safety hazards by 50%, and cut carbon emissions by 90%.

(2) Promoting Transport Mode Transformation: Guangdong's ports vigorously promote multimodal transport development, creating models such as "ASEAN-Guangdong-Europe road-rail-river-sea intermodal transport" and "Guangdong Yantian Port Asia-Pacific-Pan-Pearl River Delta-Europe international container multimodal transport." To enhance international shipping service functions, ports are also promoting deep integration of port-industry-city development and creating port-adjacent economic zones.

(3) Representative Ports: - Guangzhou Port: Over 1,000 years ago, Guangzhou was a major starting point of the Maritime Silk Road. Since the Belt and Road Initiative was proposed, Guangzhou Port Group's container routes increased from 150 in 2015 to 263 by end-2022, with foreign trade container routes growing from 67 to 157, including 131 to partner countries. Nansha Port Area has developed rapidly, opening 185 shipping routes (151 foreign trade routes). In 2022, Guangzhou Port Group handled 559 million tons of cargo and 23.38 million TEU, establishing itself as an international container hub port, particularly as a core hub for Africa, Southeast Asia, and the Mediterranean. Guangzhou Port emphasizes cooperation with international port operators, including a joint venture with Singapore's PSA International for the GCT terminal (handling 3.3937 million TEU) and with Denmark's Maersk for Nansha Phase II (connecting over 400 ports in 100+ countries, handling 51.6756 million TEU).

- **Shenzhen Port:** Despite being relatively new, Shenzhen Port has developed rapidly, exceeding 30 million TEU and ranking 4th globally.
- **Zhanjiang Port:** As a pivot port for Belt and Road construction, Zhanjiang is being developed into a large-scale logistics distribution center for minerals, petroleum, coal, grain, timber, steel, fertilizers, and sulfur, as well as a regional international logistics center.
- **Xuwen Port:** Xuwen Port is striving to become an important port promoting Belt and Road development in the Beibu Gulf economic circle.

1.1.3.2 Advancing International Aviation Hub and High-Speed Rail Construction

Beyond ports, Guangdong is vigorously developing international aviation hubs. Guangzhou Baiyun Airport is expanding its third-phase infrastructure to increase international routes and cargo services. Before the pandemic, Shenzhen Airport connected to 60 international passenger cities (30+ in Belt and Road countries) with nearly 6 million international passengers, and cargo services reached 11 cities in 9 Belt and Road countries. Shenzhen Airport will further expand its international network and cargo capacity. For high-speed rail, Guangdong will focus on building lines to ASEAN countries in coming years to

enhance personnel and cargo connectivity.

1.2 Promoting High-Quality Development of China-Europe Railway Express

The China-Europe Railway Express has become the most brilliant calling card of Belt and Road construction. Through this rail network, Chinese regions have strengthened economic and trade cooperation with Belt and Road countries to varying degrees, playing a crucial role in stabilizing industrial and supply chains.

1.2.1 Jiangsu Province

Jiangsu's "Jiangsu Number" China-Europe Railway Express operates 23 routes covering over 20 cities in 17 European countries, nearly 50 cities in 5 Central Asian countries, and 6 cities in 4 Southeast Asian countries. In 2022, Jiangsu operated 1,973 trains to Central Asia, ASEAN, Laos, Russia, and Mongolia—continuing growth from 1,800 trains in 2021 and 1,395 in 2020, with a 2023 target of 2,000 trains. The annual import-export value reached 28.18 billion RMB, up 10.3% year-on-year. Lianyungang has operated 3,872 trains since 2017 (728 in 2022, up 17.7%), while Nanjing operated 311 trains in 2022 (up 32.79%).

To promote high-quality development, Jiangsu has implemented four measures: (1) **Provincial coordination** through establishing a specialized international transport company in August 2020 to integrate resources from Nanjing, Xuzhou, Suzhou, Lianyungang, and Nantong, significantly improving efficiency; (2) **Optimized route integration** creating specialized lines with different city functions—Nanjing focuses on Russia and China-Laos routes, Suzhou on Europe, Lianyungang on Asia (Southeast Asia, Central Asia, Mongolia, Japan, Korea), Nantong on ASEAN (especially Vietnam), and Xuzhou as a hub center; (3) **Demand-oriented new routes** such as Suzhou-Finland, Lianyungang-Russia, and Nanjing-Netherlands; (4) **Customized special trains** including enterprise-specific trains (e.g., Nanjing's "LG Special Train" with 16 trains in 2022, XCMG's "Machinery Special Train" with 42 trains worth \$97.26 million, saving XCMG 65 million RMB in logistics costs), cross-border e-commerce trains (Suzhou serving 20+ e-commerce companies with 428 TEU), postal express trains, and specialized vehicle trains.

These measures have directly promoted Jiangsu's new development pattern: (1) The railway express facilitates trade development and industrial growth—China Forestry Group's wood imports via CR Express led to investment in the Xuzhou China Forestry Inland Port Industrial Park for wood trade, processing, and distribution; (2) It expands new trade formats, such as using live-streaming sales for imported goods that often sell out quickly.

1.2.2 Zhejiang Province

Yiwu's small commodity market is world-famous for its variety and volume. Traditionally, these goods were exported via Ningbo or Shanghai ports, or by truck to Xinjiang border crossings for Russia and Central Asia. The situation improved after the “Yixin’ou” (Yiwu-Xinjiang-Europe) China-Europe Railway Express launched on November 18, 2014, using rail transport through Yiwu platform (Europe-focused) and Jindong platform (Russia/Central Asia-focused) to reach Spain, Russia, Belarus, Vietnam, Laos, Turkey, Latvia, Czech Republic, Belgium, UK, France, and Central Asian countries, while importing milk powder, grain, and non-ferrous metals. By end-2022, Yixin’ou operated 22 routes (18 to Europe/Russia, 2 to Central Asia, 2 others), with 6,724 cumulative trains carrying 552,000 TEU, including 2,269 trains in 2022 alone, reaching 160+ cities in 51 countries/regions.

To promote local economic development, Zhejiang’s Yixin’ou has introduced characteristic operation models: (1) **“Yixin’ou + Enterprise Number”** model with special trains for Geely Automobile, cross-border e-commerce, photovoltaics, and cold chain, directly connecting Geely’s Ningbo plant with its Belarus plant, reducing transport time from 55 days by sea to 18 days; (2) **Local special trains** such as “Yongkang Number” and “Wuyi Number”; (3) **Transit business** including transit trains like Central Asia-Japan/Korea, Central Asia-Malaysia, Vietnam-Kazakhstan, and South Korea-Kazakhstan.

Yixin’ou’s cargo originates 73% from Zhejiang itself, with the remainder from Jiangsu, Shanghai, and Anhui, significantly boosting Zhejiang’s export trade. To build an East China regional assembly center, Jinhua City is investing 13 billion RMB to create the East China International Intermodal Port, which will increase annual departures to 7,000 trains (triple the current volume). Zhejiang is also strengthening overseas operation centers and adding new routes, such as Jinhua to Central/Eastern Europe and Jinhua to ASEAN in 2023.

1.2.3 Guangdong Province

Compared with Jiangsu and Zhejiang, Guangdong operated fewer trains—only 967 in 2022 (up 122.3%), carrying 86,774 TEU (up 102.9%) with export value of \$3.17 billion (up 62.73%). Guangdong’s CR Express operates across 8 platforms (4 in Guangzhou, 2 in Dongguan, 1 each in Shenzhen and Jiangmen), connecting Europe, Central Asia, and ASEAN countries (Vietnam and Laos), serving 8,178 enterprises across 30+ Belt and Road countries. Given the Greater Bay Area’s strategic importance, Guangdong needs new approaches such as building a Greater Bay Area CR Express assembly center to better integrate resources and optimize layout.

1.3 Advancing Belt and Road Industrial Park Construction

Industrial park construction represents another brilliant aspect of Belt and Road development, with all three provinces attaching great importance to this work.

1.3.1 Jiangsu Province

Over the past decade, Jiangsu has built 7 overseas parks in 6 countries, including 3 national-level parks: Cambodia’s Sihanoukville Special Economic Zone (“Sihanoukville Zone”), Ethiopia’s Eastern Industrial Zone, and China-UAE Production Capacity Cooperation Demonstration Zone; plus 4 provincial-level parks in Indonesia and Brazil. These 7 parks cover 1,220 square kilometers with total investment of \$3.68 billion, hosting 344 enterprises generating \$7.49 billion in output value, paying \$220 million in taxes to host countries, and creating 51,000 local jobs. The Sihanoukville Zone performs best: 175 enterprises/institutions with \$1.89 billion in cumulative investment, \$5.06 billion in output value, and \$2.493 billion in 2022 import-export value (4.8% of Cambodia’s total trade), providing 30,000 local jobs.

Jiangsu is accelerating cultivation of more provincial-level international cooperation zones, having recognized 18 such parks including Lianyungang’s three zones: China-Kazakhstan Logistics Base (operational since 2014 with 1.686 million TEU in transit volume), Shanghai Cooperation Organization Logistics Park, and East-West Demonstration Zone. Lianyungang’s “Khoros-East Gate” dry port project with Kazakhstan has handled 1.13 million TEU, with plans for a third China-Kazakhstan transit transport line.

1.3.2 Zhejiang Province

Zhejiang has invested in 18 overseas economic and trade cooperation zones—the most nationwide—including 4 national-level zones (Thailand’s Rayong Industrial Park, Vietnam’s Longjiang Industrial Park, Russia’s Ussuriysk Economic and Trade Cooperation Zone, Uzbekistan’s Pengsheng Industrial Park) and 14 provincial-level zones across Serbia, Indonesia, North America, Uzbekistan, Cambodia, US, Vietnam, Benin, Brunei, Czech Republic, and Dubai. In 2021 (excluding two parks), the 16 zones saw cumulative investment of \$17.712 billion by development companies, with 640 resident enterprises investing \$13.364 billion, primarily in processing/manufacturing, resource development, R&D, agricultural production/processing, and trade/logistics. By end-2021, these enterprises paid \$500 million in local taxes and employed 58,500 local workers.

Thailand’s Rayong Industrial Park, Zhejiang’s earliest overseas park (started 2005), accelerated after the 2013 Belt and Road Initiative. By end-2022, it hosted 182 enterprises across over 10 square kilometers, driving \$4.5+ billion in Chinese investment to Thailand and creating 45,000+ local jobs.

1.3.3 Guangdong Province

Guangdong has established 7 provincial-level overseas economic and trade cooperation zones: Guangken Thaihua Natural Rubber Processing Industrial Park (Thailand), China-Vietnam (Shenzhen-Haiphong) Economic and Trade Cooperation Zone, Nigeria Guangdong Economic and Trade Cooperation Zone, Sigma

Industrial Park (Nigeria), Uganda-China (Guangdong) International Production Capacity Cooperation Industrial Park, Huajian Ethiopia Light Industrial City, and TCL Poland Economic and Trade Cooperation Zone. By end-2022, these 7 zones had cumulative investment of \$2.07 billion, generating \$9.38 billion in output value, hosting 158 enterprises, driving \$2.38 billion in trade, and paying \$220 million in local taxes.

The China-Vietnam Economic and Trade Cooperation Zone in Haiphong, operated by Shenzhen Investment Holdings, covers 3,105 mu with 37 Chinese enterprises (mainly electronics and machinery assembly), generating \$2.35 billion in cumulative output and 15,000 local jobs.

1.4 Promoting Belt and Road International Production Capacity Cooperation

Zhejiang currently relies on two country-specific platforms: Ningbo Central and Eastern Europe Economic and Trade Cooperation Zone, and Jinhua China-Africa Economic and Trade Cultural Exchange Cooperation Demonstration Zone. Cooperation is still in early stages without major substantive results. Zhejiang also leverages overseas Chinese communities to advance the China (Wenzhou) Overseas Chinese Comprehensive Development Pilot Zone and Zhejiang (Qingtian) Overseas Chinese Economic and Cultural Cooperation Demonstration Zone.

At the enterprise level, Zhejiang Yiwu Small Commodity City's Dubai China Small Commodity City (co-developed with DP World) serves nearly 1 billion consumers in Middle Eastern, North African, and European countries. Zhejiang Hongshi Group has successfully invested in large cement projects in Indonesia, Laos, Nepal, Myanmar, and other Belt and Road countries. The surveyed Zhejiang Chint Solar Technology, specializing in clean energy solutions, has actively participated in Belt and Road construction by building ground photovoltaic power stations and conducting PV-related business in Thailand, Vietnam, Bulgaria, Singapore, Egypt, Malaysia, South Korea, Cambodia, South Africa, and Algeria.

1.5 Steady Development of Belt and Road Trade Cooperation

Jiangsu: As a major foreign trade province, Jiangsu's total import-export volume reached 5.45 trillion RMB in 2022 (2nd nationally), with 1.49 trillion RMB (27.3%) with Belt and Road countries. Nanjing's trade with Belt and Road countries totaled 184.95 billion RMB, with contracted project turnover of \$1.44 billion.

Zhejiang: Over the Belt and Road's first decade, Zhejiang's trade with partner countries grew from 627.17 billion to 1,725.93 billion RMB (11.9% annual growth), reaching 35% of the province's total trade in 2022 (above the 33% na-

tional average). Hangzhou's trade with Belt and Road countries reached 168.8 billion RMB in 2022 (up 12.9%), while Jinhua's reached 247.1 billion RMB (14.3% of provincial total, ranking 2nd).

Guangdong: Guangdong's trade with Belt and Road countries grew from 1.1 trillion RMB in 2013 to 2.3 trillion in 2022 (8.2% annual growth), with cumulative trade of 15.8 trillion RMB over the decade (990 billion exports, 590 billion imports).

1.6 Actively Promoting Two-Way Investment Under Belt and Road

Jiangsu: Jiangsu is a major destination for foreign investment, with \$30.5 billion in actual foreign capital utilization in 2022 (1st nationally). Belt and Road countries established 281 new enterprises in Jiangsu with \$3.36 billion in actual investment (up 128.4% year-on-year), though this represents only 11% of Jiangsu's total foreign capital. Jiangsu's outbound investment to Belt and Road countries expanded from 38 countries in 2014 to 56, and from 37 industries to 73. In 2000, Jiangsu added 262 new investment projects in Belt and Road countries with \$2.18 billion in actual investment (up 61.5%).

Guangdong: Over the Belt and Road's first decade, Guangdong's actual investment in partner countries grew from \$380 million in 2013 to \$420 million in 2022 (1.1% annual growth), with cumulative investment of \$4.84 billion through 1,468 enterprises. Belt and Road countries' investment in Guangdong grew from 4.74 billion RMB in 2013 to 6.57 billion in 2022 (3.7% annual growth), with 9,659 projects and cumulative actual investment of 54.03 billion RMB over the decade.

1.7 Strengthening Belt and Road Scientific and Technological Innovation Cooperation

Some partner countries have high scientific and technological levels (e.g., South Korea, Singapore, Russia, Austria, Italy, Luxembourg, Portugal, New Zealand, Chile), making them important cooperation targets.

Jiangsu: For over a decade, Jiangsu has had science and industry R&D cooperation programs with Singapore, Austria, and Czech Republic, supporting bilateral enterprises in biomedicine, electronics, energy, and environment. It launched the China-Central and Eastern Europe Technology Transfer Center and established joint laboratories in crop molecular biology, cultural heritage protection, and smart disaster prevention with partner countries. Some Jiangsu universities (Nanjing Agricultural University, Soochow University, Southeast University) have established overseas collaborative innovation centers in 24 partner countries including Italy, Singapore, and Russia. Jiangsu has also established 42 provincial-level international science and technology cooperation platforms and 4 national-level Belt and Road joint laboratories.

Guangdong: During the survey, the author visited Guangzhou Sino-Singapore Knowledge City, where China and Singapore established the China-Singapore National Joint Research Institute focusing on life sciences, new materials, AI, new energy, pollution control, green buildings, and smart cities.

1.8 Developing Key Belt and Road Cities

Jiangsu: Jiangsu has clear positioning: building Nanjing as a Belt and Road science and innovation center, Xuzhou as an inland transit hub port open to both east and west, Nantong's Tongzhou Bay as a new sea outlet, Suzhou as a comprehensive industrial innovation center, and Yangzhou as a world canal capital, world gastronomy capital, and East Asian cultural capital.

Zhejiang: Zhejiang is working to establish Hangzhou, Ningbo, Jinhua, Yiwu, and Jiaying as key Belt and Road cities.

1.9 Strengthening Belt and Road Cultural Exchanges

Cultural exchange covers broad areas, with all three provinces leveraging their unique advantages.

Jiangsu: Capitalizing on its many universities, Jiangsu has expanded international student recruitment from partner countries. Since 2015, 103 universities have enrolled 265,000 foreign students from 82 countries, with 213,000 (80.4%) from Belt and Road countries. The proportion of degree students has risen to 75%. Additionally, 35 Jiangsu universities (28 vocational colleges, 7 undergraduate institutions) operate 69 overseas education programs in partner countries, offering 80 majors and training approximately 110,000 local talents. Jiangsu has established 352 sister province/state and city relationships with 64 countries (most nationally) and hosts signature forums like the World Canal Cities Forum and Belt and Road International Friendship Cities Exchange Week.

Zhejiang: Zhejiang focuses on hosting world-class events and expos, including the 2016 G20 Hangzhou Summit, 2023 Asian Games and Asian Para Games, Global Digital Trade Expo, China-Central and Eastern Europe Countries Expo, World Internet Conference Wuzhen Summit, and various other forums. Zhejiang has also established 29 overseas "Silk Road Colleges" and 3 national-level "Luban Workshops" for vocational education.

Guangdong: With over 30 million overseas Chinese in 160 countries/regions (mainly in Southeast Asia), Guangdong hosts the "Overseas Chinese Greater Bay Area Conference" to pool strengths for Belt and Road construction. Guangdong ranks 2nd nationally with 204 sister-city relationships, actively using this platform for cultural exchanges. Notable forums include the "Congdu International Forum," a brand for people-to-people diplomacy.

1.10 Providing Comprehensive Belt and Road Services

Jiangsu: Jiangsu has implemented five practical services: (1) Personal insurance for overseas personnel through the “Jiangsu Overseas Investment and Economic Cooperation Personnel Life Accident and Safety Insurance” program, with 80% premium subsidized by provincial finance, covering over 120,000 personnel over the decade; (2) Enterprise insurance through the “Jiangsu Enterprise Going Global Unified Insurance Platform” with China Export & Credit Insurance Corporation, covering 1,069 projects with \$29.77 billion in coverage from December 2015 to end-2022; (3) A “Full Journey Companion” comprehensive service platform providing policy consultation, business support, training, and risk prevention; (4) Technology service platforms like the China-Central and Eastern Europe Technology Transfer Center and Belt and Road Innovation Cooperation and Technology Transfer Alliance; (5) Enhanced security protection through comprehensive overseas security mechanisms and systematic contingency plans.

Zhejiang: Zhejiang leverages the Belt and Road Comprehensive Service Alliance and Belt and Road Lawyers Alliance Hangzhou Center to provide professional services for enterprises and individuals.

2 How to Implement Belt and Road Construction?

During the survey, the author examined local government behaviors, roles, and effects in Belt and Road implementation, along with some enterprises. The focus was on how local governments plan, organize, manage, and advance Belt and Road construction. From the perspectives of Jiangsu, Zhejiang, and Guangdong provincial and municipal governments, three provinces demonstrate high consistency in implementation, generally following four steps:

- (1) **Clarify Positioning:** Define each province/city’s status, role, and function in Belt and Road construction, particularly by studying and understanding President Xi Jinping’s strategic assessments and positioning for different regions, then implementing necessary policies. For example, in December 2014, President Xi noted that “Jiangsu is at the intersection of the Silk Road Economic Belt and the 21st Century Maritime Silk Road,” requiring active participation. This clear “intersection” strategic positioning guided Nanjing to propose four functional roles: transportation hub connecting Belt and Road nodes, innovation hub gathering scientific resources, industrial landmark for trade cooperation, and exchange leader for people-to-people connectivity.
- (2) **Formulate Master Plans:** After clarifying strategic positioning, party committees and governments issue Belt and Road construction guidance and organize master plan development. Jiangsu issued the “Opinions on High-Quality Construction of Belt and Road Intersection” in December 2018, with relevant content in its 14th Five-Year Plan. Nanjing formulated implementation opinions and development plans accordingly. Zhejiang is-

sued the “Action Plan for Building a Belt and Road Hub.” Beyond master plans, functional departments develop detailed, operational implementation plans.

- (3) **Systematic Implementation:** Based on positioning and plans, local governments construct complete work promotion systems with assessment indicators. Zhejiang’s system comprises four components: (1) “1+X” leadership mechanism with a provincial leading group and 20+ thematic teams; (2) “1+X” planning system with one master action plan and multiple sectoral plans; (3) “1+X” policy system with one overarching opinion and various sectoral policies; (4) “1+X” platform system with the China (Zhejiang) Pilot Free Trade Zone as “1” and other platforms like Ningbo Belt and Road Comprehensive Pilot Zone as “X.”
- (4) **Publicity Work:** Provinces actively promote Belt and Road construction through field surveys, forums, training, and risk mitigation. Jiangsu and Zhejiang have established Belt and Road portals, while Guangdong maintains a special column on its Development and Reform Commission website.

3 Main Difficulties and Problems in Belt and Road Construction

Through field surveys, the author identified eight common challenges:

- (1) **Weakened foreign trade demand** leading to shrinking shipping demand. Changing international conditions have reduced coastal provinces’ foreign trade demand, decreasing container throughput and shipping routes. This particularly affects ports heavily dependent on foreign trade, such as Shenzhen Port where foreign trade containers exceed 90% of volume and overseas routes have decreased significantly in 2023.
- (2) **Increasingly common industrial and supply chain relocation.** In recent years, industrial relocation has become widespread, especially in Jiangsu, Zhejiang, and Guangdong. Jiangsu has seen many electronics, electrical, and textile/garment enterprises relocate (both foreign and domestic). Guangdong’s manufacturing also faces relocation challenges, driven by supply chain needs, cost considerations, or market changes.
- (3) **Complex international situation reducing scientific cooperation projects.** US technological suppression has indirectly caused some technologically advanced partner countries to suspend long-standing science and technology cooperation projects with Chinese provinces. The survey encountered such reductions in collaborative projects.
- (4) **China-Europe Railway Express still faces supply shortages.** Despite rapid growth, CR Express capacity remains insufficient relative to demand. Survey results indicate allocated train quotas are too small for Jiangsu’s export capacity, with considerable room for route optimization.

Guangdong faces even greater shortages with fewer allocated trains than Jiangsu. Zhejiang, despite having the most allocated trains among the three provinces, also reports insufficient “Yixin’ou” quotas. All three provinces are manufacturing powerhouses with strong production capacity, diverse high-quality products, and competitive pricing, creating substantial international demand. Therefore, increasing CR Express supply capacity and improving operational mechanisms require further efforts from central departments, local governments, and enterprises.

- (5) **Some enterprises lack enthusiasm for investing in Belt and Road markets.** While local governments and some enterprises show high enthusiasm, many enterprises remain cautious about international markets, particularly Belt and Road countries, due to concerns about international uncertainty and political, legal, and economic risks. However, with intense domestic competition (“involution”) in some industries, exploring Belt and Road markets represents a better alternative, creating significant space for services providing market analysis, security, and overseas insurance.
- (6) **Gaps in aligning with high international standards.** China still has gaps in aligning with high international standards for investment, trade, and talent, including issues like information network openness, cross-border data flow, high-end talent recruitment, and free movement of goods and capital.
- (7) **Urgent need to strengthen overseas interests protection.** Overseas interests protection is a new but increasingly important issue as Belt and Road construction expands. Current protection capabilities remain insufficient, leaving Chinese enterprises facing relatively high overseas investment risks.
- (8) **Insufficient international communication capacity for Belt and Road.** China’s Belt and Road international communication capacity is inadequate, preventing authentic Belt and Road stories from being effectively disseminated. This leads to misunderstandings and allows some countries and individuals to smear and maliciously attack the initiative without effective rebuttal, creating negative international impacts.

4 How to Achieve New Accomplishments in Belt and Road Construction?

Based on survey findings, three provinces will focus on six priorities:

- (1) **Integrate Belt and Road construction with the new development pattern.** This represents a shared new strategy. Jiangsu will strengthen connections between the Silk Road Economic Belt’s New Eurasian Land Bridge Economic Corridor and local development through rail-sea and road-rail-water intermodal transport; leverage Yangtze River advantages

to connect the Yangtze River Economic Belt with the 21st Century Maritime Silk Road; and integrate domestic development zones with overseas industrial parks to advance coordinated domestic-international industrial development.

- (2) **Further promote high-quality CR Express development.** Three key issues require attention: (1) Strengthen CR Express assembly center construction—coastal regions like Jiangsu, Zhejiang, and Guangdong have strong manufacturing and trade foundations but lack assembly centers, unlike central/western regions. Cities like Lianyungang, Xuzhou, Jinhua, Yiwu, and Dongguan have strong potential; (2) Increase train quotas—provinces' objective economic development demands more allocated trains requiring national coordination; (3) Improve operational mechanisms, including subsidy regulation and effective supervision of price competition.
- (3) **Encourage and support Belt and Road park construction.** Provinces hope for more approved overseas economic and trade cooperation zone projects, while supporting existing zones to upgrade quality and achieve high-quality development.
- (4) **Pay greater attention to cross-border e-commerce development.** Promote higher-level cross-border e-commerce development to boost trade with partner countries, while strengthening overseas warehouse construction.
- (5) **Strengthen scientific and technological cooperation.** Vigorously promote transfer and application of practical technologies to partner countries, using technology to support poverty reduction, carbon reduction, and development of green economy, digital economy, new energy, modern agriculture, and health.
- (6) **Increase educational operations in partner countries.** Cultivate more young talents who understand, befriend, and love China to provide high-quality local talent support for infrastructure projects, overseas parks, production capacity cooperation, scientific collaboration, and cultural exchanges.

5 Reflections and Recommendations

The field survey of Belt and Road construction in Jiangsu, Zhejiang, and Guangdong yielded two basic judgments and five specific recommendations.

5.1 Two Basic Judgments

First judgment: Belt and Road construction represents objective real-world demand in China's current development stage—an irreversible trend. This conclusion is based on three facts: (1) Strong objective demand across local development domains. With annual production growth in electronics, garments, toys, mobile phones, auto parts, machinery, photovoltaics, and new energy

vehicles, transporting these products is a major challenge. Traditional port transport faces insufficient capacity and long shipping times, creating objective demand for cross-border rail transport. (2) Localities, enterprises, and parks have benefited from Belt and Road construction over the past decade. All surveyed locations and companies have gained tangible benefits, with star cities like Taicang, Lianyungang, and Yiwu, and enterprises like Huawei, Chint, Letu, and Zoz, achieving substantial gains. (3) All parties show high enthusiasm for Belt and Road construction. Government leaders, departments, enterprises, and entrepreneurs demonstrate consistent understanding, positive attitudes, and decisive action. These facts confirm Belt and Road construction's objective inevitability and promising future, with current problems being solvable developmental issues.

Second judgment: Central decision-making departments need to study how to delegate and authorize power to localities while strengthening macro-level coordination. The government plays a crucial guiding role, particularly the central government, while markets have dominant significance and enterprises hold principal positions. Good coordination among the three promotes high-quality Belt and Road construction. Survey findings show strong regional market development forces creating robust demand, but current national guidance policies don't fully match. Using CR Express as an example, despite strong demand from all three provinces, national quotas remain insufficient, and provinces' requests for assembly centers require institutional improvements. Therefore, central departments should adjust policies based on market and enterprise needs, delegating more authority for open development to allow localities to experiment boldly. This applies not only to free trade zones but also to Belt and Road construction, with central macro decision-makers better coordinating policies, resources, and implementation mechanisms.

5.2 Five Specific Recommendations

- (1) **Establish a CR Express coordination mechanism.** As the flagship Belt and Road project, CR Express requires a central-level coordination mechanism for macro-level issues like quota allocation, assembly center construction, private enterprise participation (e.g., Yiwu Tianmeng Company's successful private operation), and "train + park" development models. This mechanism should provide clear policies and guidance.
- (2) **Identify priority Belt and Road countries** based on strategic needs and market principles, drawing on decade-long experience. Encourage key regions and enterprises to build offshore centers in these countries for deep industrial chain integration, creating Belt and Road economic corridors and international economic circulation.
- (3) **Emphasize deep cooperation with developed partner countries.** Among Belt and Road countries, 35 are developed nations with leading economic and technological levels. China should prioritize high-tech co-

operation by establishing R&D and innovation centers in these countries to lead Belt and Road high-quality development through technological advancement.

- (4) **Create new Belt and Road financing mechanisms.** On the foundation of decade-long experience, establish a Belt and Road stock exchange in an appropriate city (requiring separate study). This exchange would specialize in Belt and Road listings under international rules, attracting quality partner country enterprises to Chinese capital markets. This would meet Belt and Road financing needs through direct investment while providing new investment opportunities and promoting China's capital market internationalization.
- (5) **Establish Belt and Road innovation and entrepreneurship demonstration zones.** As a long-term, future-oriented undertaking, creating demonstration zones based on 10 years of experience is beneficial. Following the Guangzhou Nansha Comprehensive Cooperation Plan for Guangdong-Hong Kong-Macao, establish a Belt and Road innovation and entrepreneurship demonstration zone in Nansha to attract scientists and entrepreneurs, especially young talent from key partner countries. This would provide sustainable new momentum for Belt and Road construction.

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Note: Figure translations are in progress. See original paper for figures.

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