I. Introduction and Context

Country Context

1. China’s economy grew at an average of ten percent per year for the three decades prior to 2012 by following a strategy of heavy infrastructure investment, export, and resource-intensive manufacturing. While this strategy has helped to lift more than 700 million people out of poverty, it has also resulted in income inequalities (personal and regional), high levels of pollution, severe urban congestion, and high levels of greenhouse gas (GHG) emissions. Against this background, since 2012 China has started to gradually shift to domestic consumption and service-based industries in an effort to rebalance the economy for sustainable growth while also addressing social and environmental issues.

2. By 2015, China’s economic growth slowed to 6.9%, the lowest in 25 years, with 58 percent of the growth coming from domestic consumption. The service sector now accounts for 51 percent of the economy (up from 44 percent in 2011), and has overtaken manufacturing as the major driver of growth and helped absorb job losses from manufacturing.

3. The rebalancing of the Chinese economy has a spatial component. Industrial production and new economic sectors are shifting or being established in new economic zones. The Yangtze River Economic Belt (YREB) has been identified as one of the key economic corridors in China to
promote the industrial development of inland regions by expanding or relocating industries from the
traditional manufacturing hubs in the east, such as the lower reaches of the Yangtze River Delta, to
the middle and upper reaches of the Yangtze River. The YREB covers nine provinces and two
municipalities (Shanghai, Jiangsu, Zhejiang, Anhui, Jiangxi, Hubei, Hunan, Chongqing, Sichuan,
Yunnan, and Guizhou) with a total area of 2.05 million square kilometers. It accounts for more than
40 percent of China's GDP.

4. The emergence of new manufacturing zones far from the major consumption centers and
major ports for exports has led to an increased emphasis on freight movements. The efficiency of
freight movements will become critical in ensuring the consumption-based economic growth model
delivers, and freights are moved along the long distance using sustainable transport modes in order
to reduce the environmental impact of freight transportation on air pollution and GHG emissions.
Yet, for long distance freight transport, the more cost effective and environmental friendly IWT and
rail modes have been underutilized due to lack of mode connectivity and uniformity in standards.

5. At the core of the YREB strategy is the intensive utilization of the Yangtze River as a
freight transportation corridor. About 60 percent of the total freight volume on China's inland
waterway travels along the Yangtze River, which saw cargo traffic rise to 2.18 billion tons in 2015,
up 45 percent from 2010. In 2014, the State Council issued "Guidelines on Yangtze River Golden
Waterway and Economic Belt Promotion" and "Yangtze River Economic Belt Comprehensive
Three-dimensional Transport Corridor Plan (2014 - 2020)". A transportation plan, released as an
appendix to these Guidelines, calls for an integrated transport system that connects roads, railways,
and air routes by 2020.

6. Hubei Province, where the Project is located, is situated in central China along the middle
reaches of the Yangtze River. It is at the crossroads of the east-west Yangtze River inland waterway
transport (IWT) corridor that connects the western regions with the Yangtze River Delta in the east
and the south-north expressway and railway corridor that connects the northcentral regions with the
Pearl River Delta in the south. Wuhan, the capital city of Hubei, is located on the Yangtze River,
and is the economic center in the central region and a national transport hub located on the Yangtze
River.

7. Yichang, the Project city, is a prefecture level city located upstream from Wuhan on the
Yangtze River. It is home to the Three Gorges Dam. Yichang has been a major distribution center,
transit node, and trading post in the central western region. Considered a gateway to the west,
Yichang is where topography transitions from the vast fertile plain in the east to the mountain ridges
in the west. It is a point where, before expressways and high speed railways became available in
recent years, the only viable access to the resource rich Sichuan Basin and points to the west is the
Yangtze River that traverses through the mountain ridges. Recognizing its strategic location, the
State Council designated Yichang as one of six regional transport hub for strategic development in
2014.

8. Yichang's economy is ranked second to Wuhan in Hubei province and is dominated by
secondary industries (Figure 1: Yichang GDP by Industry ). It has been a major producer of tea and
tangerine, phosphate ore and associated agriculture and industrial products, construction materials,
and chemical and pharmaceutical products. As a second tier city and a traditional industrial base,
Yichang has only started recently developing its service sector and high value-added industries.
Since 2013, Yichang municipal government has focused on developing six high value-added
industries, namely fine chemical, bio-pharmaceutical, high tech equipment manufacturing, new materials, culture tourism, and modern logistics services, mostly upgrades of its flagship industries. In support of the economic transition, Yichang's long-term
plan centers on developing tourism, industrial and commercial clusters along the Yangtze River to fully leverage accessibility to IWT and the connectivity to the railway and expressway systems.

**Sectoral and Institutional Context**

9. Logistics costs at 18 percentage of GDP are high in China compared to eight percent of the US due to China’s high GDP contribution from primary and secondary industries that require more logistics and the inefficient logistics supply chains in which goods are moved and stored multiple times before reaching end customers. In Yichang’s transition to become a high value-added industrial base, both in developing competitive local new industries and attracting established businesses from the coastal regions, its ability to deliver efficient logistics services will be an important determining factor. For the new industries such as fine chemical, bio-pharmaceutical, high tech equipment manufacturing, and new materials, a majority of raw materials are sourced from within the region, for example acetone from Henan Province and steel from within Hubei Province, while a majority of the finished products are shipped to the coastal and western regions.

10. Existing logistics infrastructure is basic in Yichang. Survey of 20 local manufacturing businesses indicates that while a large share of businesses own warehouses (85 percent), trucks (40 percent), and loading and unloading equipment (45 percent), the level of automation and information management is low. Although 30 percent of businesses own information management systems, only five percent own information management equipment such as barcode scanners. Manual work is prevalent in managing and handling goods.

11. There is increasing demand for value-added logistics services beyond trucking and warehousing in Yichang. More than half of the manufacturing businesses surveyed outsource logistics services. There is a strong demand for automated warehouses (35 percent), inventory management (55 percent), information sharing (50 percent), processing (40 percent), and urban distribution and long distance transport (50 percent).

12. A strategic growth area for Yichang’s logistics service sector is container related value-added service. The existing ports in Yichang lack adequate warehouses for containers. Shipping companies have to rent warehouses that are generally located further away from the port area. Tracking locations of containers within the port generally entails a bike ride by staff to manually look for the containers and record the locations. Additionally, pick-and-pack, labeling, weighing, cleaning and other container related services are generally unavailable. In 2014, of the 130,000 TEUs that passed through Yichang Port, 23 percent were exports, for which custom clearance were completed in Wuhan or Shanghai, further increasing shipping costs and time.

13. Yichang’s logistics service sector is in the early stage of development that requires strong government support. Survey of 16 shipping companies and six 3PLs and 4PLs that operate in Yichang indicates that existing logistics services are simple with a large number of logistics service providers offer single services, for example transport (39 percent) and warehouse (17 percent). Integrated logistics service or supply chain management accounts for only six percent. There is a strong demand for government investment in land and infrastructure, policy incentives and favorable tax codes that supports the development of sophisticated logistics services including integrated logistics hubs and modern logistics information system.

14. Multimodal freight transport is underutilized in Yichang. Freight transport in Yichang is dominated by road transport, an increasingly expensive mode due to heavy tolls, the rising cost of labor and an older inefficient vehicle fleet. For the manufacturing businesses, IWT, road-IWT and road-rail account for five, 10 and five percent of freight transport, respectively. Utilization of rail-IWT is minimum. On the other hand, logistics service providers utilize more than one mode of transport to provide freight services to their customers, including road-IWT, road-rail and road-rail-IWT that account for 22, 11 and six percent of freight transport, respectively. As such, the
emergence of logistic service providers is important in order to achieve higher utilization of multimodal freight transport. This is because logistics service providers see higher economies of scale by pooling larger shipments.

15. Yichang Port Complex has experienced rapid traffic growth in the past 10 years. The Yichang Port system is made of six port groups that are managed by the Yichang Municipality Port Authority: Central City, Xing (shan), Zhi (gui), Yi (du), Zhi (jiang) and Chang (yang). The proposed project will be part of the Central City group and is located downstream of the main urban area below the dam. Over the last 10 years, the throughput of Yichang Port as a whole has increased from 24 million tons to 78 million tons, at an average growth rate of 12 percent per annum. However, a majority of the ports lack specialized handling equipment and comprehensive logistics services.

16. Although current container traffic accounts for only 2.8 percent of Yichang ports volume in 2014, it has grown at 23 percent per annum from 2010 to 2014. Yet, future container growth is severely constrained by the lack of capacity at the existing Yunchi Container Port, also a part of the Central City group. Additionally, the current Yichang port development plan calls for removal of freight, especially bulk freight, away from ports located in the central city area. The displaced freight traffic will be redirected to existing and proposed new ports outside of the city center. Once this reallocation has been completed, future growth of Yichang Port will continue to increase in line with economic growth. A more detailed discussion of the demand forecast is given in Annex 5.

17. The proposed project will serve local, regional, and in the long term transshipment freight. The proposed Baiyang Port and Logistics Park (the Project) are located in the Baiyang Industrial Park (BIP), a new high value-added manufacturing development zone situated 40 km downstream of Yichang and 70 km downstream of the Three Gorges Dam. The BIP is one of eight planned along the Yangtze River, each with a different industrial concentration. The BIP will focus on fine chemical, equipment manufacturing, new materials and other high value-added light manufacturing. By 2014, the BIP has attracted total investment of USD1.2 billion. It is expected that an additional USD4.4 billion will be invested in the Park by 2020. With an occupancy rate of more than 50 percent, a majority of the businesses in the park are local with a small but increasing number of businesses coming from the coastal regions.

18. The proposed project will be the first integrated freight transport and logistics hub in Yichang. The Project is well connected to the national expressway network. A new 675-meter overpass will connect the Project site to the nearby Ziyun Railway marshalling yard, and the port and logistic park financed under the proposed project will be connected to the railway network.

19. The proposed project is designed to accommodate anticipated future container traffic growth. The port will be an important node in the east-west road-IWT and rail-IWT corridors (Khorgos, Xinjiang (Lanzhou/Xi'an) (Yichang (Shanghai). The proposed Baiyang Logistics Park will primarily serve Yichang and the Baiyang Industrial Park, and will, in the long term, specialize in value-added logistics services supporting manufacturing goods and products, construction materials, and container shipments.

20. Yichang’s proximity to the Three Gorges Dam creates an opportunity for the city to become an important transshipment hub. Total IWT freight passing through the Three Gorges Dam is expected to reach 163 million tons by 2020 and 248 million tons by 2030. Its current operational capacity of 100 million tons was reached in 2011. About 80% of the current volume is bulk (construction materials, minerals and coal) or semi bulk (fertilizer, cement, steel) but most of the growth in future years is expected to be general cargo and domestic container freight. Upstream of the Three Gorges Dam, the Maoping Port is under construction. The port, with roll-on roll-off (RoRo) and general cargo berths, is to provide transshipment for IWT-highway freight transport. In
the medium to long term, Baiyang Port, in conjunction with the upstream Maoping Port will provide transshipment for long distance cargo movements bypassing the dam. Maoping Port is owned and developed by the Yichang Transport Investment Company (YTIC), the project implementing unit of the proposed project and a state owned enterprise that reports to Yichang Municipality.

21. **Value Added of Bank Support.** There is a general lack of comprehensive planning in developing logistics parks as well as integrated freight transport and logistics hubs in China. A majority of the existing logistics parks are located away from railways and inland waterways, and serve primarily as wholesale trading places and warehouses. As a result, many of the logistics parks are underutilized. The proposed Project provides an opportunity for the Bank to actively engage in a pilot demonstration of China’s development of efficient logistics services and an integrated multimodal freight transport network in support of economic development in the western and central regions. In developing the project, the Bank focuses in the areas of demand analysis, value proposition of the logistics park, design of the information platform, integration of the port and the logistics park, container related services, and business plan development. The Bank’s port, logistics, and ICT specialists, as well as international experts, have been engaged to inform the project design to ensure: (i) robust demand analysis; (ii) incorporation of value-added services in logistics park design; (iii) functional integration of the port and logistics park; (iv) a well-designed information platform for high utilization by relevant government agencies, shippers, and logistics service providers; (v) flexibility in the design of the port and logistics park for subsequent build-up by private companies that tailor to their own specific business needs; and (vi) development of a well-thought-out business plan.

22. In addition, Bank support will include technical assistance in policy and planning guidelines for multimodal freight transport system development and management, development of the business plan and market promotion, capacity building, and long-term monitoring and evaluation of environmental and social impacts in the region.

**Relationship to CAS**

The proposed project is aligned with two of the three main pillars of the 2013-2016 World Bank Group Country Partnership Strategy (CPS) for China: support greener growth and promote more inclusive development. Advanced logistics information systems, and a multimodal freight transport hub coupled with a logistics service hub will promote greener growth (Pillar I) by improving transport and logistics service efficiency and greater utilization of greener modes of transport. Utilizing waterways will reduce carbon emissions and air pollution from road transport, while maintaining competitiveness and promoting economic growth.

24. **Twin Goals.** The project will also support more inclusive development (Pillar II) by enhancing opportunities in small towns. It will develop non-farm sources of revenue in the logistics sector. More effective logistics will increase the development of small towns and provide job opportunities to the nearby population. Targeted (focusing on project affected people and women in the project area) logistics-related vocational training is planned as part of the social development strategy of the project. Such training will improve employment opportunities for women in the logistics and service sectors in the region. These project benefits also support the promotion of shared prosperity, which is one of the Bank’s Twin Goals.

**II. Proposed Development Objective(s)**

*Proposed Development Objective(s) (From PCN)*

21. The PDO is to improve multimodal freight transport efficiency and logistics services in Yichang.
Key Results (From PCN)
The achievement of the PDO will be measured through the following key performance indicators:

(a) Reduction of Empty-loading rates of freight trucks in/out of Baiyang Logistics Park (\%).
(b) Reduction of average parking time for trucks inside Baiyang Logistics Park (minutes).
(c) Increase of the waterway freight transport rate in Yichang (\%).
(d) Increase of containerization rate in Yichang (\%).
(e) Reduced GHG emission compared to without project (to measure environmental sustainability).
(f) Number of employees in port/logistic park that are local residents or are women (to measure inclusive development).
(g) Indicators related to Citizen Engagement, Local Beneficiaries, and Gender.

III. Preliminary Description
Concept Description
23. The Baiyang Port and Logistics Park facilities to be developed under the proposed project are located in Baiyang district in Yichang Municipality, 40 km south from downtown Yichang, and 70 km downstream of the Three-Gorges Dam. The location is ideal in that it is removed from the main urban transport corridors and hence does not add to the city's congestion and air pollution, but is close enough to serve the urban freight logistics demand for Yichang Municipality. The proposed site is also well connected to all modes of transport, including the national expressway system, nearby Ziyun Railway Marshalling Yard, and the Three Gorges Airport. International experience shows that the success of logistic parks is determined how well they are connected to multimodal transport system.

24. The Baiyang Port will primarily serve containers, bulk cargo, general cargo, liquid bulk, and 'roll on-roll off' trucks. The Logistics Park will be used to process shipments for equipment, building material, food industry, steel, and city distribution. Currently, a feasibility study is under preparation to project the demand for the port and the logistics park. Project cost is estimated at USD478.3 million, which will be financed in part by a World Bank loan of USD200 million; the remainder will be financed by commercial banks and counterpart funds.

25. Component 1: Baiyang Port and operations area along the Yangzi River (total area: 0.45 square km; total cost: USD158 million). This component will finance the construction of port facilities, and the purchase of equipment (container cranes, conveyor belt machines, container tractors, and other cranes, etc.) and installation to support port operations. Seven berths, a heavy container yard, a break bulk yard, an empty container yard, a bulk cargo yard, administration buildings, warehouses, and parking lots will be constructed under this component. The counterpart is currently constructing six other berths from its own resources, making the total number of berths in the port 13.

26. Component 2: Baiyang Logistics Park (total area: 0.90 square km; total cost: USD241 million). This component will finance the construction of warehouses, trans-shipment yard facilities, urban distribution facilities, living service facilities, business facilities, cleaning and maintenance work areas, internal roads, green spaces, administration buildings, and equipment.
27. Component 3: Transport Connection Infrastructure (total cost: USD51.5 million): This component will finance the construction of: (i) an overpass road connecting Baiyang Port and the Logistics Park to Shawan Marshaling Yard; (ii) G318 underpass section; (iii) surrounding roads and underground utilities (power, water, drainage, etc.), including Guihu Road and Songgang Second Road; and (iv) Traffic engineering, involving traffic signals and junction channelization, etc.

28. Component 4: Baiyang Logistics Information Platform and Facilities (total cost: USD25.2 million): This component will finance the purchase of: (i) computer hardware and equipment, and their installation in the information center; (ii) a system platform; (iii) field surveillance devices; and (iv) telecommunication infrastructure.

29. Component 5: Capacity Building (total cost: USD3 million): This component will finance technical assistance to develop port and logistics operations model, project management consultants, training and capacity building, and port and logistics related sector studies.

IV. Safeguard Policies that might apply

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V. Financing (in USD Million)

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