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ENHANCING FAIRNESS AND EFFICIENCY IN AIR TRANSPORT THROUGH THE DIGITAL LTB SERVICE MODEL

(Presented by China)

EXECUTIVE SUMMARY

This working paper presents China's civil aviation initiative to improve air travel accessibility for small and medium-sized cities as well as remote regions. The initiative introduces a domestic through check-in flight service offering passengers a seamless experience with "one-time payment, one-time check-in, one-time security screening, baggage through-check, and a worry-free journey", along with the "Linking the Trunk and Branch, Connecting Urban and Remote" (LTB) MODEL, an innovative air transport service framework designed to enhance connectivity. By capitalizing on China's digital industry strengths, the LTB MODEL has established a dual digital transfer platform, eliminating information silos between service providers and stakeholders. This system continuously refines route networks and transfer services while fostering operational innovation, significantly advancing China's civil aviation service standards and ensuring "accessible travel for all".

<i>Strategic Goals:</i>	This working paper relates to Strategic Goal of <i>The Economic Development of Air Transport Assures the Delivery of Economic Prosperity and Societal Well-Being for All; and Aviation Delivers Seamless, Accessible and Reliable Mobility for All.</i>
<i>Financial implications:</i>	No additional resources are required for the activities mentioned in this paper.
<i>References:</i>	Doc 9626: <i>Manual on the Regulation of International Air Transport</i>

¹ English and Chinese versions provided by China.

1. INTRODUCTION

1.1 In recent years, the civil aviation sector in China has prioritized top-down planning to tackle issues such as limited transport options and inefficiencies in remote areas. The introduction of domestic through check-in flight and the “Linking the Trunk and Branch, Connecting Urban and Remote” (LTB MODEL), supported by industry-wide digital platforms, has strengthened policy implementation. By optimizing operational frameworks, resource allocation, and information systems, the initiative has achieved widespread adoption with measurable success.

1.2 Terms

1.2.1 Domestic through check-in flight (hereinafter referred to as through check-in flight) are domestic connecting flights where participating airlines and airports operate under multilateral cooperation agreements, providing passengers with a streamlined journey featuring “one-time payment, one-time check-in, one-time security screening, baggage through-check, and a worry-free journey”.

1.2.2 The innovative LTB MODEL leverages domestic through check-in flight as its foundation, supported by efficient transfer mechanisms to create an integrated air transport network. It connects trunk routes, regional routes and short-haul general aviation flights with airports working in synergy. The LTB MODEL aims to ensure seamless and efficient connectivity between major domestic cities and effective accessibility to cities in remote regions, forming a “unified national aviation network”.

1.2.3 The “Payment Once, Settlement Real-Time, Guarantee Whole-Process” (PSG) MODEL for excess checked baggage during interline transfers refers to the service model where transfer passengers with checked baggage exceeding the airline’s free baggage allowance can pay the excess baggage fee for all flight segments at the departure airport in a single transaction. There is no need to claim baggage at transfer airports, ensuring a seamless “baggage through-check” service. Additionally, this collaboration incorporates financial institutions to provide real-time fee settlement for airlines and airports, enabling efficient billing and fund flow.

1.3 The widespread adoption of through check-in flight and the LTB MODEL in China has yielded tangible results. By the end of 2024, 100 per cent of passenger airlines and over 80 per cent of commercial airports had implemented the LTB MODEL. Through check-in flight passengers surpassed 1 million, and the transfer passengers’ market share reached 20 per cent. The model fulfilled 91.2 per cent of domestic travel demand, facilitating nearly 50 million instances of streamlined check-in and baggage through-check services. These advancements have improved service standards across China’s civil aviation sector.

2. DISCUSSION

2.1 The digital LTB MODEL centers on digital transformation and the "Aviation Plus" strategy. Under the initiative, two critical public service platforms have been established: the Domestic Through Check-in Flight Service Management Platform (Through Check-in Flight Platform), and the Civil Aviation Transfer Passenger Service Platform (Transfer Platform). These integrated systems address multiple operational challenges, from regulatory compliance to through check-in flight registration, while empowering airlines and airports to develop and upgrade their transfer service capabilities, so as to provide both through check-in flight passengers and conventional transfer passengers with more diversified options featuring streamlined connections, hassle-free transfers, and better service quality for all, whether on through check-in flight or conventional connecting routes.

2.2 Progress in Building the Digital LTB MODEL

2.2.1 Through check-in flight Platform. It features digital functions such as entity management, flight registration, and end-to-end service support, enabling seamless collaboration among airports, airlines, and online travel agencies for agreement finalization and registrations. It also provides airlines with a one-stop management solution for serving transfer passengers, supporting through check-in flight agreement finalization and flight registrations. The platform enables statistics and analysis of core operational data including the number of through check-in flight, passenger numbers, and baggage quantities, while offering real-time tracking, anomaly alerts and smart notifications for full-chain information, including flight plans, sales data, flight status updates, and departure data.

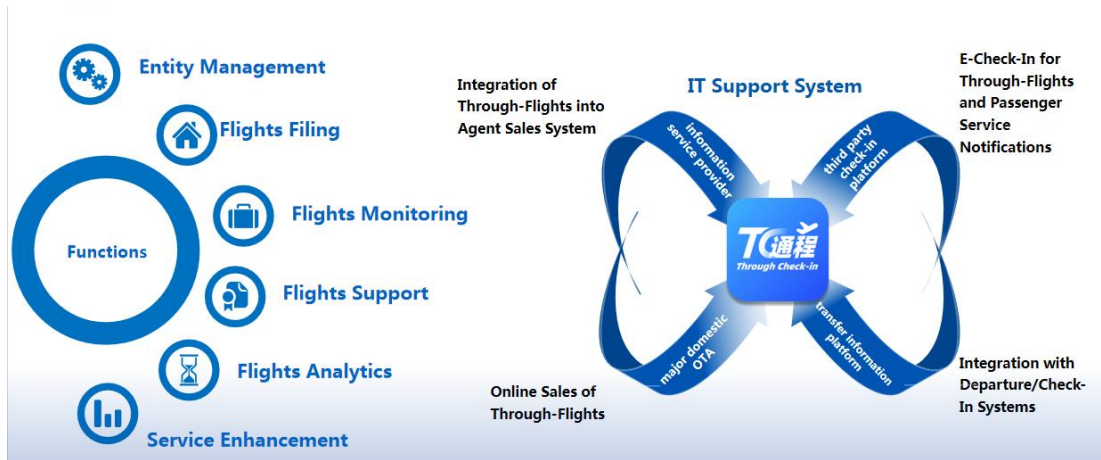


Figure 1 Framework of the Through Check-in Flight Platform

2.2.2 Transfer Platform. It is a unified digital infrastructure that aggregates transfer resources of airports across China, including premium lounge access, catering services, baggage transfer services, accommodation, excess baggage fee management. This centralized system drives operational excellence through automated identification of conventional connecting passengers, cross-airline service reservation and confirmation as well as transfer service collaborations. Under this platform, airports can develop fully integrated transfer service networks that significantly enhance both operational efficiency and passenger satisfaction.

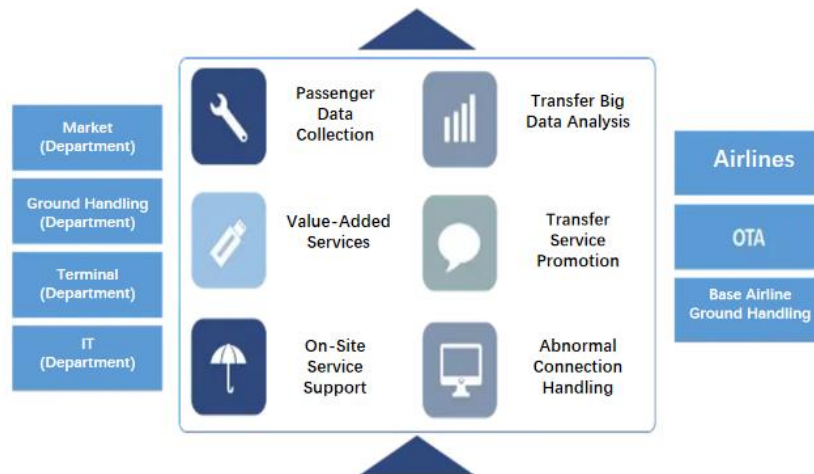


Figure 2 Framework of the Transfer Platform

2.2.3 Expansion of Digital Capabilities. This year, the civil aviation sector in China has focused on addressing LTB MODEL challenges and bottlenecks through government-led digital solutions supported by the clearing system and technological advantages of the dual digital transfer platforms. In collaboration with CAAC Settlement Center and TravelSky, the sector has piloted the implementation of an industry-wide, public-service PSG MODEL that ensures end-to-end data connectivity and seamless services for excess baggage handling. Meanwhile, the Transfer Service Capacity Platform - developed by TravelSky – fosters airline-airport collaboration, promoting data sharing and more convenient transfer under the principle of “smart systems enabling effortless travel”.

2.3 Role of the Digital LTB MODEL in Promoting Fairness and Efficiency in Air Transport

2.3.1 Enhancing Service Fairness. The dual digital platforms have supported the in-depth collaboration between airlines and airports, enabling the broadened route accessibility and enriched travel options, further satisfying the travel demands of passengers across the country. In 2024, the industry offered 19,800 transfer travel products, covering 78.9 per cent of all flight options. Approximately 70 million new air travelers were added, nearly 50 per cent from second to fourth-tier cities, advancing the efficient and seamless connectivity between major domestic cities and effective accessibility to cities in remote regions.

2.3.2 Improving Transfer Operation Efficiency. The platforms have driven remarkable improvements in cost efficiency and information-based, digital and smart transformation for airlines and airports. In 2024, the average through check-in flight transfer time was reduced to just 4 hours, a 50 per cent improvement over conventional transfers. Take Shijiazhuang Airport as an example, it cut minimum transfer time to 50 minutes via digital tools, streamlined processes, and optimized parking stands. The innovative PSG MODEL delivers tangible benefits, including 20 minutes saved per excess baggage item, RMB 10 yuan reduction in manual processing costs, and 75 per cent decrease in IT-related expenses.



Figure 3 Shijiazhuang Airport Through Check-in Flight Passenger Service Process Optimization (2024)

2.3.3 Diversifying the Product Portfolio. Airlines and airports now leverage the dual platforms to extend their "transfer+" service portfolio, offering end-to-end, diversified, personalized and high-quality services. Wuhan Airport’s “Fly via Wuhan Easy Transfer” integrates the local culture-themed experiences. Xinjiang Airport Group’s “My Altay” showcases ethnic tourism, creating niches like “transfer + tourism”, “transfer + leisure”, and “transfer + vlog” among other innovative concepts. On average, each transfer passenger generates RMB 45 yuan in non-aeronautical revenue for airports.

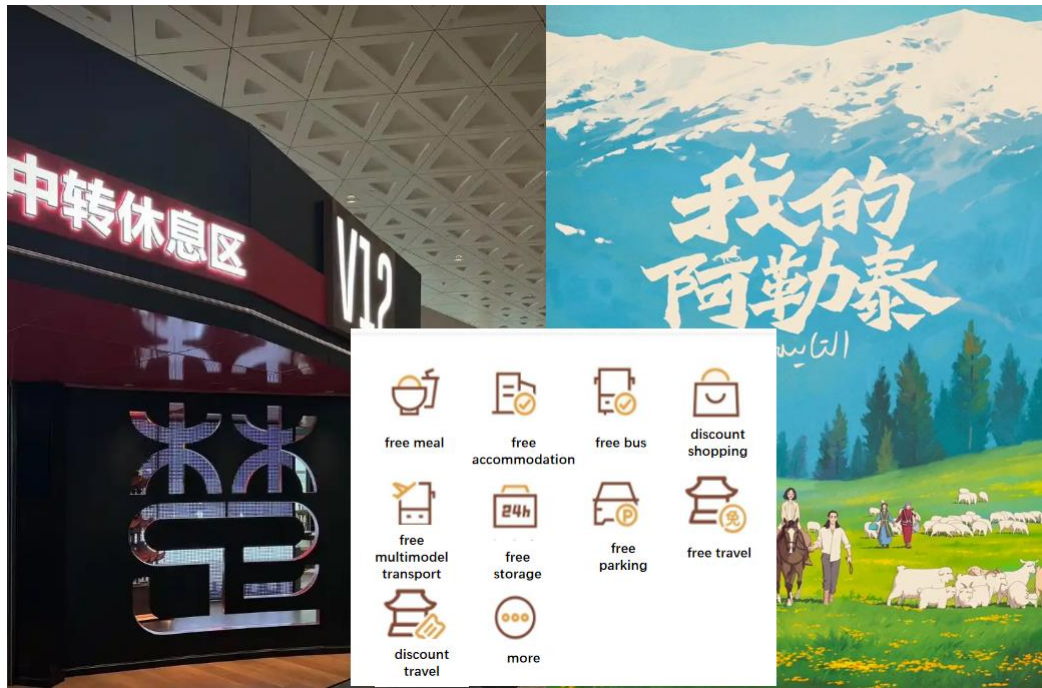


Figure 4 “Aviation+” Ecosystem Development

3. CONCLUSION

3.1 Based on the LTB MODEL, China has systematically developed the dual digital transfer platforms delivering equitable service distribution across all regions, higher operational efficiency, and comprehensive end-to-end travel support, which effectively meets passengers’ growing demands for accessible, convenient, and personalized air travel experience. Looking ahead, the civil aviation sector in China will further develop and refine the digital platform capabilities, share best practices of implementation, drive innovation for highly efficient through check-in flight and transfer services, and elevate service standards across China and in international aviation markets.

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