

Aerospace - International Regulatory and Policy Environment

China

Aerospace industry across the world has generally involved government participation on account of its strategic and military importance. The aerospace manufacturing in China is also concentrated with stateowned enterprises, which have received substantial government support throughout their development period. Over the last five decades, China's aerospace industry has undergone restructuring and organisational reforms guided by the government's strategic, military and economic interest.

China developed its first indigenous commercial aircraft, Y-10 in the late 1960s with the aim of demonstrating the country's technological advancement to the Western countries. Since the early 1980s, China's aerospace industry has also taken on civilian projects not directly related to aviation—by providing other ministries and industries with spare parts, special equipment, instruments, and services.

The economic reforms of 1990s led to restructuring and streamlining of the public sector and state enterprises, which had an impact on the Chinese aviation industry as well. Huge government investments were made in research and development which included introduction of large amount of foreign equipment at major institutes, design offices, and universities and colleges, and increased joint R&D activities by the Chinese Aeronautical Establishment with several foreign organisations from France, Germany, Italy and others.

The last two decades have also witnessed several structural changes in the industry. In 1993, the Ministry of Aviation and Aerospace Industry was converted into the Aviation Industry Corporation of China (Avic), comprising a consortium of Chinese aircraft manufacturers. In 1999, this consortium was split into Avic I and Avic II, with the former focusing mainly on large planes and the latter on smaller ones. By the turn of the century, Avic I succeeded in developing its first indigenously designed regional commercial aircraft, the 70 to 110-seat ARJ21. By 2008, the government merged the two aerospace conglomerates and formed China Commercial Aircraft Company (COMAC) to strengthen aircraft manufacturing capability and thereby develop China's own indigenous large aircraft producer to rival Airbus and Boeing.

The government of China accords high importance to the development of aerospace industry within its economic development agenda. The Chinese Government, through the National Development & Reform Commission (NDRC), has identified the development of the aerospace industry as a key objective of its 11th Five-Year plan (2006-2010). China has placed a high priority on developing a domestic capability in large aircraft manufacturing. Large passenger aircrafts are listed as one of 16 key science & technology major special projects established by the *"National Medium- and Long-Term Science and Technology Development Plan (2006-2020).* The government has played a strong role in making the domestic airline manufacturing internationally competitive. The industry receives substantial subsidies as well as liberal state funding comprising very low interest rate bonds.

Over the last three decades, China has witnessed rapid economic development and emerged as one of the largest markets for new aircrafts. Since Chinese industry is not yet capable of producing large commercial aircraft like Airbus and Boeing, it has allowed China's airlines to import aircrafts. Further, the China's



government has attempted to leverage large commercial aircraft purchases in exchange for arrangements that it hopes will lead to technology transfer that would help modernisation of its aerospace industry. Thus, the government has attempted to attract foreign large commercial aircraft manufacturers to establish manufacturing and assembly joint ventures with state-owned aerospace corporations. Thus, China's aviation sector has become increasingly involved in supplying civilian aircraft components to major foreign manufacturers. China is now able to produce modern military aircraft, highly reliable space launch vehicles, a wide range of military and civilian satellites, and an increasingly wide and sophisticated range of components for Western airframe and engine manufactures such as Boeing, Airbus, Eurocopter, Pratt & Whitney, GE, and Rolls-Royce.