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## **GLOBAL CHALLENGES OF THE AIR CARGO TRANSPORTATIONS REGULATION**

*Today air cargo and global logistics transportations are basis for development of world economics. Present research paper discusses modern approaches to its regulations and development.*

The term air cargo is also used in a broader sense by the airline industry to mean any property (freight, express and mail) transported by air except baggage. An all-cargo service is an air service that carries cargo only, whether scheduled or non-scheduled. To many States, air cargo services are important to their national development and international trade. To freight shippers, air services render a competitive alternative to other forms of transport (rail, trucking or shipping) in meeting their shipping requirements in terms of safety, security, efficiency (speed, quality (much less en-route damage)) and cost. To airlines, air cargo can be an important revenue generator. On some major international routes air cargo has contributed roughly one-fifth of the total revenue on international scheduled air services. Air cargo transportation has become increasingly integrated and globalized via cross-equity investments between airlines and cooperative arrangements such as co-branding and franchising [1, 2].

Air transport carries only 0.5% of goods, which account for 35% of the total value of goods [source: Air Transport Action Group (ATAG) Aviation Benefits Beyond Borders 2104]. 49.3 million tones of freight handled by air in 2013 [source: Annual Report of ICAO Council:2013]. World GDP growth rate can predict the growth-rate of World Air Freight with 98% accuracy [source: World Bank. «World Development Indicators»] [3].

A key component to the global air traffic system, air cargo today is faced with a range of challenges. Although today's aircraft move well over \$5 trillion worth of goods by air each year, the significant growth being projected for this

sector, not to mention its role as a critical enabler of trade and prosperity, require that its processes, procedures and the international standards supporting its global effectiveness become better aligned with modern demands and capabilities [3].

The air cargo supply chain is a combined set of interconnected parties, locations, procedures, and information exchanges that enables cargo to move from its origin to its destination by air. All parties have a shared responsibility to ensure that air cargo moves safely and securely through this chain. The air cargo supply chain is initiated by a seller (or «shipper») and buyer (or «importer» in the context of international trade) who wish to exchange goods between them via air [4]. The development of logistics supply chain is the basis of modern freight transportations. The example of Air Cargo Movement Chain you can see on Fig.1.



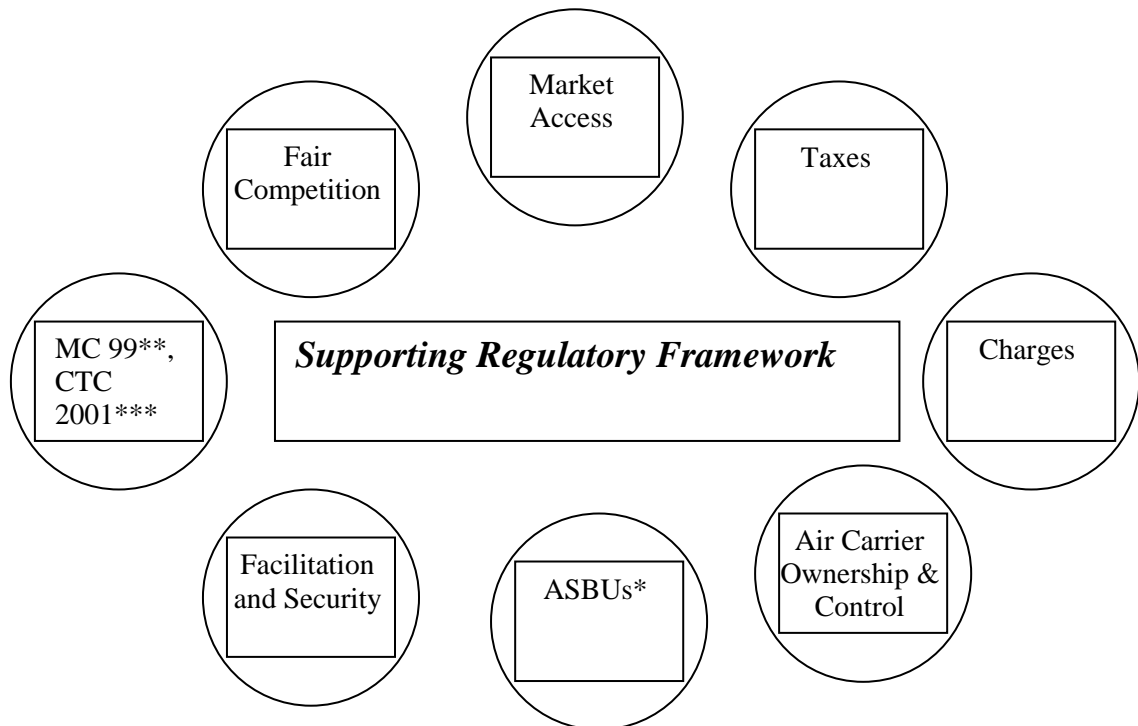
Fig.1 Air Cargo Movement Chain Overview [4]

Leading international governmental (International Civil Aviation Organization (ICAO), World Customs Organization (WCO), Universal Postal Union (UPU), etc) and non - governmental (International Air Transport Association (IATA), International Federation of Freight Forwarders Associations (FIATA), Global Express Association (GEA), The International Air Cargo Association (TIACA) etc.) organizations are involved in air cargo regulation [1, 5-8].

Air cargo transport connectivity is the movement of cargo and mail involving a minimum transit points, with optimal shipper and consignee satisfaction with minimum possible cargo/mail fares. It is need development of adequate supporting framework. This framework includes market access and liberalization, optimization of air navigation, airports and aircrafts systems, improving of aviation security procedures and enhanced facilitation technologies. Effective airline operations and development of intermodal transportation are essential [3].

ICAO provides multidirectional activity for support connectivity by fostering initiatives within that framework. Thirst of all it connected with liberalizing multilateral and bilateral air transportation agreements. The current worldwide air cargo regulatory regime id primarily composed of about 4000 intergovernmental air services agreements. But severe change of air cargo and

logistics transportations growing illuminates the needs for regulatory platform development and for special regulatory base separate from that for passenger service. In an increasingly globalized and liberalized environment, air cargo operations need to be as efficient, economical, and expeditious as possible to meet user demands, particularly for transport of high value and time-sensitive freight. One of the main air cargo problems is the framework of market access rights in multilateral and bilateral air services agreements. The restrictions are usually imposed in respect of freedom of air, points, routes, fares, frequency, etc [2, 5].



\* Aviation System Block Upgrades

Fig. 2. Supporting Regulatory Framework [3].

ICAO provides support to States to implement multilateral arrangements, such as the Montreal Convention for *Unification of Certain Rules for International Carriage by Air (MC 99\*\*)*, which facilitates the use by airlines of electronic records, including electronic airwaybill (e - AWB). There are 14 main documents that may be used along the entire air cargo supply chain: Invoice, Packing List, Certification of Origin, Dangerous Goods Declaration, Air Waybill (MAWB & HAWB), House Cargo Manifest, Export Goods Declaration, Customs Release Export, Air Cargo Security Declaration, Air Cargo Flight Manifest, Export Cargo Declaration, Import Cargo Declaration, Import Goods Declaration and Customs Release Import. The express delivery industry operates highly sophisticated and fully integrated information technology (IT) systems, allowing the processing of supply-chain relevant data and managing of information flow ahead of the associated physical flow of

cargo [3]. ICAO also provides support to States to implement *Cape Town Convention on International Interests in Mobile Equipment 2001 (CNC 2001\*\*\*)*, enabling the acquisition of more modern aircraft [3].

The development of safe, flexible and market-oriented air cargo transportations regulatory framework is essential for the further development of the world air transport and the global economy as a whole.

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