

Airborne Spacing - Flight Deck Interval Management (ASPA-FIM)

Airborne Spacing - Flight Deck Interval Management (ASPA-FIM) describes a set of airborne (i.e., flight deck) capabilities designed to support a range of Interval Management (IM) Operations whose goal is precise inter-aircraft spacing. IM is defined as the overall system that enables the improved means for managing traffic flows and aircraft spacing. This includes both the use of ground and airborne tools, where ground tools assist the controller in evaluating the traffic picture and determining appropriate clearances to merge and space aircraft efficiently and safely, and airborne tools allow the flight crew to conform to the IM Clearance.

IM requires a controller using IM to provide an IM Clearance. While some IM Clearances will keep the IM Aircraft on its current route and result only in speed management, other clearances may include a turn for path lengthening or shortening. The objective of the IM Clearance is for the IM Aircraft to achieve and/or maintain an Assigned Spacing Goal relative to a Target Aircraft. The key addition to current operations is the provision of precise guidance within the flight deck to enable the flight crew to actively manage the spacing relative to the Target Aircraft. During IM Operations, the controller retains responsibility for separation, while the flight crew is responsible for using the FIM Equipment to achieve and/or maintain the ATC Assigned Spacing Goal. This does not differ greatly from current operations when controllers provide speed and turn clearances to manage traffic. With ASPA-FIM, however, the flight crew has the capabilities and responsibility to actively manage the speed of the aircraft to meet the operational goals set by the controller. Enabling flight crews to manage their spacing using the FIM Equipment is expected to reduce controller workload related to the IM Aircraft by relieving the controller of the need to communicate several speed and/or vector instructions.

Source: RTCA (2011). *Safety, Performance and Interoperability Requirements Document For Airborne Spacing - Flight Deck Interval Management (ASPA FIM)*. DO-328. Washington, DC: RTCA.