

SUMMARY

Generally speaking, the present disclosure relates to a system and a method that enable real-time communication between passengers and SWIM infrastructure from door to door.

In one example, a system for providing passenger information includes a passenger electronic device and a managing unit. The passenger electronic device is configured to send at least personal data, device geolocation and device time-stamp information. The managing unit is configured to obtain the passenger itinerary and to confirm passenger identity based upon a match between the personal data, passenger electronic device geolocation and time-stamp, and information contained in the obtained passenger itinerary. The managing unit is further configured to access to updated air traffic information relevant to the passenger upon confirming the passenger identity and to send a passenger report comprising flight status information for display on the passenger electronic device.

In another example, a computer-implemented method for providing passenger information includes sending, to a passenger electronic device, at least personal data, device geolocation and device time-stamp information; obtaining the passenger itinerary and confirming passenger identity, by a managing unit, based upon a match between the personal data, passenger electronic device geolocation and time-stamp, and information contained in the obtained passenger itinerary; and accessing to updated air traffic information relevant to the passenger upon confirming the passenger identity and sending, by the managing unit, a passenger report comprising flight status information for display on the passenger electronic device.

A real-time-connection service-oriented architecture can be implemented to share information between passengers' electronic devices and SWIM infrastructure. To that purpose the present disclosure makes use of System Wide Information Management (SWIM). SWIM includes standards, infrastructure and governance enabling the management and exchange of Air Traffic Management (ATM) related information.

Currently, ATM information is available via SWIM to several stakeholders: aircraft, airports, air traffic controllers and air navigation service providers, airline operation centers, military operation centers, flow management centers and weather service providers. However, at present, the passengers cannot connect to SWIM infrastructure by any means.

It is therefore an aspect of the present disclosure to provide an infrastructure for Passengers Access to SWIM (PAoS), in which access may be in a bidirectional way.

The proposed system and method may enable downlink and uplink of tailored, digital information from and to passengers' electronic devices using a dedicated interface to the SWIM infrastructure upon validating passenger identity.

It is another aspect of the present disclosure to increase or improve the overall functionalities of SWIM by using information from passengers using their electronic devices.

The services and information offered or available through the passenger access device may be based upon the passengers' device identifier (if available), geolocation, itinerary, and other time and location data.

One of the common difficulties associated with providing information to passengers on