

ABSTRACT

A device (100) for managing air traffic, in an airspace comprising a reference aircraft and at least one other aircraft, the device (100) receiving a three-dimensional representation of the airspace at a time when an air conflict is detected between the reference aircraft and said at least one other aircraft, the device being characterized in that it comprises:

- an airspace-encoding unit (101) configured to determine a reduced-dimension representation of the airspace by applying a recurrent autoencoder to the three-dimensional representation of the airspace at the air-conflict detection time;
- a decision-assisting unit (103) configured to determine a conflict-resolution action to be implemented by the reference aircraft, the decision-assisting unit (103) implementing a deep-reinforcement-learning algorithm to determine the action on the basis of the reduced-dimension representation of the airspace, of information relating to the reference aircraft and/or the at least one other aircraft, and of a geometry corresponding to the air conflict.

Figure for the abstract: Figure 1