



---

Agenda Item 1:      **Implementation of provision of Electronic Terrain and Obstacle Data (e-TOD)**

**Type A Charts**

(Presented by IATA)

<p style="text-align: center;"><b>Summary</b></p> <p>This working paper presents proposal for SAM States to consider the need to update charts type A, while the e-TOD is not implemented, or to find out an alternative way to provide the obstacles information for the development of the contingency procedures related to engine failure after takeoff.</p>	
<p style="text-align: center;"><b>References:</b></p> <ul style="list-style-type: none"><li>• Annex 15</li></ul>	
<b>ICAO Strategic Objectives:</b>	<i>A - Safety</i>

1.                    **Introduction**

1.1                    ICAO Annex 6 Standards and Recommended Practices are related to the development of contingency procedures in case of engine failure after takeoff:

*5.2.8 Take-off. The aeroplane shall be able, in the event of a critical engine failing, or for other reasons, at any point in the take-off, either to discontinue the take-off and stop within the accelerate-stop distance available, or to continue **the take-off and clear all obstacles along the flight path by an adequate vertical or horizontal distance until the aeroplane is in a position to comply with 5.2.9.** When determining the resulting take-off obstacle accountability area, the operating conditions, such as the crosswind component and navigation accuracy, must be taken into account.*

*Note. — Attachment C contains guidance on the vertical and horizontal distances that are considered adequate to show compliance with this Standard.*

1.2                    Airlines need obstacle information to be able to meet the aforementioned paragraph and the Annex 6 indicates that the obstacle data must be supplied to users.

**5.3 Obstacle data**

*5.3.1 Obstacle data shall be provided to enable the operator to develop procedures to comply with 5.2.8.*

*Note. — See Annex 4 and Annex 15 for methods of presentation of certain obstacle data.*

## 2. **Analysis**

2.1 The most suitable data for the development of contingency procedures should be provided through Electronic Terrain and Obstacle Data (e-TOD). It is well known by AIM experts the difficulties in the implementation of e-TOD, which will be discussed at the meeting.

2.2 However, considering that knowledge of the obstacles in the vicinity of the airport is necessary for safety, it is essential that the charts provided in Annex 4 (Type A chart) be updated appropriately. There are some Type A Charts in some SAM States that are not updated in the past 5 years, which raises concerns about the degree of confidence that these Charts provide to the development of contingency procedures.

2.3 There are some States in the SAM Region that have reasonably updated obstacles database, which were not yet inserted in the Type A Chart. A possible workaround would be that the State makes available the obstacles database to the users as a way to mitigate the lack of e-TOD and updated type A Charts.

## 3. **Suggested Actions:**

3.1 The meeting is invited to:

- a) take note of the information contained in this working paper;
- b) request the South American Regional Office to follow up on the implementation of e-TOD and updated Type A Charts; and
- c) discuss a strategy to temporarily mitigate the lack of e-TOD type and updated Type A charts with a view to offer the necessary information to the users regarding obstacles for the development of the engine failures contingency procedures.

- END -