

11 RECOMMENDATIONS

Passengers travelling by air should be able to rely on the operator of their choice to have done all that is possible to operate the flight safely and that states have ensured that the airspace used for their flight is safe. When selecting flight routes operators should in turn be able to rely on states restricting or closing their airspace if it is unsafe for civil aviation. Airlines should also be able to assume that states that have or have access to information about risks and threats in foreign airspace ensure that this information, if required, results in advice or warnings on the use of that airspace.

However, in practice this system does not yet work as it should. This investigation reveals that the current structure and functioning of the system of civil aviation responsibilities does not always lead to an adequate assessment of the risks associated with flying over conflict zones. Given the system weaknesses found, the Dutch Safety Board finds the system to be in urgent need of improvement. This applies to regulations, the way in which responsibilities are allocated and fulfilled, and the collaboration between parties.

In the opinion of the Dutch Safety Board it is therefore necessary to implement improvements on three related levels. The first level concerns the management of the airspace in states dealing with an armed conflict in their territory. The second level concerns the manner in which states and operators assess the risks of flying over conflict zones. The third level concerns the accountability of operators regarding their choice of whether or not to fly over conflict zones.

More attention to the first two levels would lead to an improvement in safety and, in the opinion of the Dutch Safety Board, reduces the likelihood of a crash like that of flight MH17 occurring again. Attention to the third level should lead to transparency in the processes airlines use when choosing flight routes, which could lead to a better risk assessment.

In order to realise improvements on these three levels, initiatives will need to be taken in both a national and an international context. The Dutch Safety Board calls on states and the international organisations involved to make as great an effort as possible to contribute to these improvements.

Level 1: Airspace management in conflict zones

The principle of sovereignty forms the basis of the Chicago Convention. This principle implies that each state is responsible for its own airspace and determines independently how and by whom that airspace is used. The safety of the airspace is included in this responsibility of states. However, when a state contends with an armed conflict in its territory, this state may experience difficulty in guaranteeing the safety of its airspace.

The Dutch Safety Board therefore deems it important that sovereign states in such situations should be given more incentives and support in fulfilling this responsibility. On the one hand, the Dutch Safety Board is thinking of a stricter redefinition of the responsibility of states for their airspace and, on the other hand, a stronger, more proactive role for the International Civil Aviation Organization, ICAO. The second consideration also requires States to take a more active role towards ICAO.

In this respect, the following topics require attention:

- The timely closure or restriction of the use of the airspace;
- Providing information to third parties as quickly as possible in the event of an armed conflict with possible risks for civil aviation;
- Such coordination between civil and military air navigation service providers during an armed conflict that the state can fulfil its responsibility for the safety of civil aviation in the airspace.

This requires amendments to the Chicago Convention and in Standards and Recommended Practices. To this end, the Dutch Safety Board makes the following recommendations.

To ICAO:

1. Incorporate in Standards that states dealing with an armed conflict in their territory shall at an early stage publish information that is as specific as possible regarding the nature and extent of threats of that conflict and its consequences for civil aviation. Provide clear definitions of relevant terms, such as conflict zone and armed conflict.
2. Ask states dealing with an armed conflict for additional information if published aeronautical or other publications give cause to do so; offer assistance and consider issuing a State Letter if, in the opinion of ICAO, states do not sufficiently fulfil their responsibility for the safety of the airspace for civil aviation.
3. Update Standards and Recommended Practices related to the consequences of armed conflicts for civil aviation, and convert the relevant Recommended Practices into Standards as much as possible so that States will be able to take unambiguous measures if the safety of civil aviation may be at issue.

To ICAO Member States:

4. Ensure that States' responsibilities related to the safety of their airspace are stricter defined in the Chicago Convention and the underlying Standards and Recommended Practices, so that it is clear in which cases the airspace should be closed.

The states most closely involved in the investigation into the crash of flight MH17 could initiate this.

Level 2: Risk assessment

The investigation revealed that operators cannot take it for granted that an open airspace above a conflict zone is safe. This means that operators, in the light of their responsibility for a safe flight operation, should carry out their own risk assessment, not only for the countries of their destinations but also for the countries which they overfly. States are expected to contribute to this risk assessment by sharing relevant information about the conflict.

Provision of information

Improving the airlines' access to information is first of all a matter for the operators themselves. They should have to gather information about conflict zones more actively and share relevant threat information with one another as much as possible. If states have relevant threat information regarding the airspace it should be shared with operators and other interested parties through a timely and structured process. The safety of passengers, crews and aeroplanes can be improved if states make this information available to all operators and not only to the operators under their control.

On the subject of availability of threat information, the Dutch Safety Board makes the following recommendation:

To ICAO and IATA:

5. Encourage states and operators who have relevant information about threats within a foreign airspace to make this available in a timely manner to others who have an interest in it in connection with aviation safety. Ensure that the relevant paragraphs in the ICAO Annexes concerned are extended and made more strict.

Risk assessment

The assessment of risks can be improved if a role is also assigned to the unpredictability of an armed conflict and to risk-increasing factors for civil aviation. With regard to the assessment of threat information, the Dutch Safety Board makes the following recommendations.

To ICAO:

6. Amend relevant Standards so that risk assessments shall also cover threats to civil aviation in the airspace at cruising level, especially when overflying conflict zones. Risk increasing and uncertain factors need to be included in these risk assessments in accordance with the proposals made by the ICAO Working Group on Threat and Risk.

To IATA:

7. Ensure that the Standards regarding risk assessment are also reflected in the IATA Operational Safety Audits (IOSA).

To states (State of Operator):

8. Ensure that operators are required through national regulations to make risk assessments of overflying conflict zones. Risk increasing and uncertain factors need to be included in these assessments in accordance with the proposals made by the ICAO Working Group on Threat and Risk.

To ICAO and IATA:

9. In addition to actions already taken, such as the website (ICAO Conflict Zone Information Repository) with notifications about conflict zones, a platform for exchanging experiences and good practices regarding assessing the risks related to the overflying of conflict zones is to be initiated.

Level 3: Operator accountability

It is not clear which flights pass over which conflict zones. Ideally, operators should have to actively provide information about routes to be flown and routes recently flown, so that everyone can form a judgement, thereby increasing public attention for this issue. A first step towards this would be to require operators to provide public accountability on a regular basis for routes over conflict zones selected by them. On the basis of this, the Dutch Safety Board makes the following recommendations:

To IATA:

10. Ensure that IATA member airlines agree on how to publish clear information to potential passengers about flight routes over conflict zones and on making operators accountable for that information.

To operators:

11. Provide public accountability for flight routes chosen, at least once a year.