

RESPONSES RECEIVED FOLLOWING CONSULTATION ON DRAFT REPORT

Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
TUI fly	Abbreviations		Add: OSI Overflight Security Instruction	No	This abbreviation is not used in the report.
KLM	Abbreviations	KFSSB KLM Flight Safety & Security Board	Veranderen in KFSSB KLM Flight Safety & Security Briefing	Yes	
KLM	Abbreviations	OCC Operational Control Centre	Veranderen in OCC Operations Control Centre	Yes	
Min Def	1.1	De definitie die wordt gehanteerd voor een conflictgebied is zeer breed. Termen als "likely to occur", "militarized parties" en "heightened state of military alert or tension" zijn beperkt bruikbaar zonder nadere inkadering.	In brede zin blijft het de vraag wie bepaalt of er sprake is van een conflictgebied en op basis van welke informatie? De staat die gaat over het luchtruim, de staat waar de luchtvaartmaatschappij vandaan komt, of de luchtvaartmaatschappij zelf.	No	A wide variety in terminology is used in relation to conflict zones. The ICAO definition is used.
AAIB Iran	1.1	"the word killing should be replace by lost their lives" for PS752 same as MH17		Yes	
Min Def	1.1	Er staat "a missile" het waren er twee.	het Factual Rapport over de lancering van twee raketten. De eerste om 02:44:41 uur (UTC). Deze raket heeft mogelijk het doel niet geraakt. De raket miste zijn doel of genereerde een inslag zonder fatale schade waardoor de Boeing 737 (beschadigd) kon doorvliegen. Zeventig seconden later, werd een tweede raket gevuld die de Boeing fataal werd. Om 02:48:23 uur crashte het toestel in Khalajabad.	No	Indeed two missiles were launched. However, according to the Iranian AAIB, the effect of the second missile could not be determined. We did not investigate the crash as such, so according international conventions we only summarize the findings of the Annex 13 investigation.
Min Def	1.1	Er staat "this crash" crash verwijst alleen naar het neerstorten van het toestel.	Voorstel dit te wijzigen in this incident, om ook de impact van de raketten mee te nemen.	Yes	
KLM	1.1	For the purpose of this report, the following definition of conflict zone is used: Airspace over areas where armed conflict is occurring or is likely to occur between militarized parties, and is also taken to include airspace over areas where such parties are in a heightened state of military alert or tension, which might endanger civil aircraft (ICAO Doc 10084 Risk Assessment Manual for Civil Aircraft Operations over Conflict Zones).	Naast het geven van de definitie zou er context gegeven moeten worden. Dat kan alleen door aan te geven dat de definitie an sich niets zegt over risico's bij het langs- of overvliegen van conflict zones. Dat volgt uit het feit dat er zeer veel landen betrokken zijn bij een intern of extern conflict. Daarbij geldt dat bijvoorbeeld een military alert status ook voorkomt in Zuid-Korea, tussen India en Pakistan, tussen China en Taiwan en actueel tussen de NAVO en Rusland, op alle fronten waar deze beiden elkaar raken. Een grondige analyse en risico assessment zijn vervolgens leidend om te bepalen of er veilig langs- of over deze conflict zones gevlogen kan worden..	No	A wide variety in terminology is used in relation to conflict zones. The ICAO definition is used.
Min Def	1.1.1	Hierin staat dat "helicopters, transport airplanes and fighters" zijn neergeschoten, maar ontbreken de Unmanned Arial Systems (UAS). Voorstel deze ook op te nemen in de tekst.		No	This information follows from the MH17 Crash report.
Min Def	1.1.1	"Operators assumed" voorstel te wijzigen in "Most operators assumed"	Er waren ook luchtvaartmaatschappijen die dit luchtruim meden.	No	We did not investigate which airlines avoided this airspace.

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Min Def	1.1.1	De vraag die in p11 r11/12 wordt gesteld "Why were those aircraft flying over the eastern part of Ukraine" is in de alinea daarboven beantwoord "..... the upper limit of the airspace restriction imposed on civil aviation was increased to 32,000 feet (FL320). [Most] operators assumed that the unrestricted airspace above FL320 over the eastern part of Ukrain was safe"		No	This was the key question of part B of the MH17 Crash report, which we pose here again as an introduction to chapters 2-4. These chapters describe what parties can do to avoid flying over conflict zones.
Min JenV	1.1.3	As Dutch civil aircraft were among those that were flying in the airspace of Iran and Iraq at the time of the crash of flight PS752	Ten tijde van het neerhalen van vlucht PS752 vlogen er geen Nederlandse toestellen meer in de FIRs van Iran en Irak. Zie p. 78.	Yes	
Min lenW	1.1.3	As Dutch civil aircraft were among those that were flying in the airspace of Iran and Iraq at the time of the crash of flight PS752,	In this sentence the reference to "at the time of the crash of flight PS752" is not correct. At the time of the crash of flight PS752, Dutch civil aircraft had already exited the Iran and Iraq Flight Information Regions. See also previous comment.	Yes	
KLM	1.1.3	As Dutch civil aircraft were among those that were flying in the airspace of Iran and Iraq at the time of the crash of flight PS752, additional questions were raised:	KLM wenst op te merken dat er op het moment van de crash van PS752 geen KLM vluchten meer in de luchtruimen van Irak en Iran aanwezig waren.	Yes	
Min Def	1.1	vergelijkbare kwestie als hierboven irt de definitie van "near"		Yes	
Min JenV	1.2	III. providing guidance to airlines by the state of the operator in the form of advice or regulation;	ICAO Doc 10084 kent in Appendix C een derde vorm van guidance, te weten 'provision of information' (zie ook p. 32). Dit element komt wel terug in het rapport maar wordt hier niet genoemd.	Partly	The sharing of information by states is captured under aspect II.
Min lenW	1.2	III. providing guidance to airlines by the state of the operator in the form of advice or regulation;	Incomplete range of guidance examples. The range of guidance as published in the Appendices MH17 Crash Final Report, Appendix U and ICAO Doc 10084, Appendix C is: no/limited guidance, provision of information, recommended actions/advice, regulations. Suggest to complement.	Partly	The sharing of information by states is captured under aspect II.
Min Def	1.2	"The tragic crash" voorstel tot wijzigen in <i>The incident with</i> .	Dit om dezelfde reden als in het vierde punt en, maar dat is redactioneel en niet inhoudelijk, "tragic" weinig toevoegt.	Partly	The word incident is a defined terminology in aviation safety investigation.
TUI fly	1.3	What ... PS752?	General comment: in relation to which airspace and phase of flight?	Yes	
Min JenV	1.5	The aims of this international initiative include establishing a common set of practices for sharing information and issuing recommended actions and restrictions, as well as enhancing the aviation industry's risk management practices in order to better protect passengers from the risk of flying over or near to conflict zones.	De doelstellingen van het Safer Skies Initiative worden niet geheel correct weergegeven. Zie https://tc.canada.ca/en/initiatives/saferskies-initiative#toc1-1	Yes	
Min lenW	1.5	The aims of this international initiative include establishing a common set of practices for sharing information and issuing recommended actions and restrictions, as well as enhancing the aviation industry's risk management practices in order to better protect passengers from the risk of flying over or near to conflict zones.	The summary does not reflect the Safer Skies Initiative correctly. See https://tc.canada.ca/en/initiatives/safer-skies-initiative#toc1-1 . Suggest to rephrase with the following text: One key outcome from the Safer Skies Initiative was the establishment of the Safer Skies Consultative Committee (SSCC) to propose and advance initiatives to mitigating conflict zone risks. SSCC initiatives include seeking improvements to information sharing, re-energizing ICAO Contingency Coordination Team planning efforts, and developing training and mentoring opportunities to develop states' capacity in assessing conflict zone risks, communicating with their respective operators, and establishing mitigation measures. [And in a footnote: The following government and industry partners take part in the SSCC: Canada, CANSO, EGRICZ, France, Germany, IATA, IFALPA, IFATCA, Netherlands, New Zealand, Spain, Ukraine, United Kingdom and United States.]	Yes	

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AAIB Iran	1.5	"the Canadian statistic is not officially approved by Iran AAIB"		Yes	
FAA	1.5	Need to reference some of the Safer Skies initiatives as they relate to improving aviation risk mitigation in or near conflict zones as lessons learned from the PS752 tragedy. Inserted recommended wording in italics.	Insert the following on or about line 25: <i>"One key outcome from the Safer Skies Initiative was the establishment of the Safer Skies Consultative Committee (SSCC) to propose and advance initiatives to mitigating conflict zone risks. SSCC initiatives include seeking improvements to information sharing, re-energizing ICAO Contingency Coordination Team planning efforts, and developing training and mentoring opportunities to develop states' capacity in assessing conflict zone risks, communicating with their respective operators, and establishing mitigation measures."</i>	Partly	The part on the ICAO Contingency Coordination Team has not been included, as this has not been verified during the investigation
FAA	1.5	Add footnote for information on Safer Skies Consultative Committee. Inserted recommended wording in italics.	Insert the following: <i>"The multi-lateral Safer Skies Consultative Committee (SSCC) was established in July 2020 and is chaired by Canada as a international collaborative forum to address the objectives in the Safer Skies Initiative."</i>	Yes	
Min lenW	1.6	"and are elaborated in Annexes, documents (Docs) and Manuals"	Not complete: also in PANS and Circulars. See: www.icao.int	No	Not meant to be complete.
Min lenW	2.2	A Notice to Airmen or NOTAM is a notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.	Throughout the report it is important to differentiate between NOTAMs issued by States managing their airspace and NOTAMs issued by States of Operators, because they address different target groups.	No	That is correct. Chapter 2 about airspace management deals with the first type of NOTAMs and chapter 3 deals with the second type.
TUI fly	2.3	Figure ... 0	General remark: Incorrect reference to paragraph 0.	Yes	
Min lenW	2.3	see paragraph 0.	Unclear reference (table 2 in paragraph 3.4?)	Yes	
KLM	2.3	the US or EASA have published information; see paragraph 0.	vermoeden van verkeerde verwijzing; paragraaf 0 bestaat niet	Yes	
Min BZK	2.3	"In addition, a [...] a conflict zone".	In deze zin wordt verwezen dat er geen specifiek format is voor een NOTAM, terwijl op blz. 19, regelnr. 8 wel wordt gesproken over een soort format, namelijk welke informatie een NOTAM moet bevatten.	Yes	
AAIB Iran	2.4	we suggest:" for many years, there have been political tension between US and some states including Iran in the region "		No	The sentence used is factual and does not allocate blame or responsibility.
TUI fly	2.4		For your consideration: https://gis.icao.int/icaoaviation/#/	Yes	
Min Def	2.4.1	"a missile"	Zie het derde punt	No	Indeed two missiles were launched. However, according to the Iranian AAIB, the effect of the second missile could not be determined. We did not investigate the crash as such, so according international conventions we only summarize the findings of the Annex 13 investigation.

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Min Def	2.4.1	In het blauwe blok staat "The actual range of a missile depends on its trajectory" er zijn ook nog andere factoren die hiervoor bepalend zijn, denk bijvoorbeeld aan tegenwind. Voorstel deze zin te schrappen. Enkele regels daaronder staat: "The launch of missiles requires human action, which makes this type of system prone to human mistakes" In dit geval was ook de radar niet juist gekalibreerd. Waardoor er een ander deel van het luchtruim werd bestreken door de Tor-M1 dan de bedoeling was. Dus ook technisch falen speelde een belangrijke rol. Daarnaast kunnen ook autonome systemen fouten maken bij het identificeren en aangrijpen van een doel. Voorstel is om deze zin te schrappen.		Partly	The last sentence in the blue box is correct. Although automated systems can also misidentify an aircraft, this type of system is prone to human error.
Min Def	2.4.2		Het uitblijven van een NOTAM is militair in dit geval goed te begrijpen, aangezien een NOTAM het verrassingseffect teniet zou hebben gedaan. Daarnaast is de kans dat je met een ballistische raket een toestel uit de lucht schiet bijzonder klein.	No	Noted, the Board did not investigate the background of not issuing NOTAMs by the state with a conflict zone on or near their territory. In addition, it is not the likelihood, but the probability of catastrophic scenarios that should drive the risk assessment.
AAIB Iran	2.4.2	we suggest: "although some operational limitations were implemented in Iran airspace management, No prohibition, restriction"		Yes	
FAA	2.4.2	We would recommend more clearly stating that the relevant Iranian and Iraqi authorities had not closed the airspace, given that the airspace over Iran and Iraq is sovereign airspace of those countries. Inserted recommended wording in bold and italics.	Change first sentence to: "Prior to the ballistic missile attacks and the subsequent crash of flight PS752, the relevant airspace in Iran and Iraq had not been closed by the relevant Iranian and Iraqi officials and civil aviation operations were being permitted."	Yes	
AAIB Iran	2.4.2	sub-conclusion: suggest to delete the last sentence because the ATC internal coordination is not subjected to aeronautical publication." this change of procedure was not..... "		No	This paragraph does not elaborate on the cases for which an aeronautical publication shall be issued. The sentence states the factual information that the change of procedures was not communicated through an aeronautical publication.
Min Def	2.4.3	"The crash of flight PS752 shows similarities with the MH17 crash. There are also some differences"	Dit leest alsof er meer overeenkomsten dan verschillen zijn, terwijl er vier van elk worden genoemd. Daarnaast wordt gesproken over "the crash" terwijl de overeenkomsten en verschillen gaan over beide volledige incidenten en niet slechts over het daadwerkelijk neerstorten (the crash).	Yes	
AAIB Iran	2.4.3	"permission for flight should be changed with three defense layers were implemented including permission"		No	The two other measures reportedly implemented (the exchange of air traffic between the Baghdad FIR and Tehran FIR and vice versa was stopped, and, the four parallel air traffic routes in the western part of Iran were cleared of air traffic) are mentioned in paragraph 2.4.2 but were not relevant for flight PS752 during that phase of flight.

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AAIB Iran	2.4.3	We suggest to add two rows as differences: a) MH17: the aircraft was shut down during military conflict situation PS752: the aircraft was shut down during military alertness situation b) the cause of accident for MH17 was unknown and identified by investigation process in PS752 the cause of accident was officially communicated by relevant military authorities and confirmed by investigation process		No	We did not include the proposed amendments, because: a) A wide variety in terminology is used in relation to conflict zones. The ICAO definition is used. b) These two statements refer to the investigation process.
Min Def	2.4.3	"...the number of SAM systems worldwide is increasing"	Op welke informatie is deze stelling gebaseerd? Het beeld van de diensten is dat nieuwe systemen zijn intrede doen en oude systemen uitfaseren, maar dat in algemene zin er geen significante stijging is.	Yes	
Min Def	2.4.3	voorstel om "back into operation within a day" te wijzigen in back into operation in hours		Yes	
AAIB Iran	2.5	we have a note to add if risk assessment is done, clear-restricted or closed airspace are determined.		No	This statement refers to the recommendation to ICAO member states (MH17 Crash report, 2015): 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.
AAIB Iran	2.5	to change sentence as "Iran restricted the airspace based on his risk assessment but the risk assessment was not inclusive"		Partly	Paragraph 1.4 indicates that the management of Iranian airspace is outside the scope of this investigation. A reference to the risk assessment in relation to the operational measures in Iranian airspace has been added however in paragraph 2.4.2.
KLM	2.5	In conclusion, airspace management in conflict zone situations is a crucial safety barrier, but in practice it is a weak one. Airlines cannot take it for granted that the open airspace above a conflict zone is safe. Hence, additional measures by airlines and their states are necessary to guarantee the selection of safe routes.	De conclusie schuift de verantwoordelijkheid van veilige routes eenzijdig naar de luchtvaartmaatschappijen. KLM is van mening dat de conclusie (ook) zou moeten zijn om onverminderd overheden aan te spreken op de verantwoordelijkheden met betrekking tot de veiligheid van hun luchtruimen. Zie ook de opmerkingen bij pagina pagina's 6 en 7 (gecombineerd)	Yes	
Transavia	2.5	Doorhalen vanaf: Hence ... routes	Deze laatste zin is een niet onderbouwde conclusie. In de beschrijving van het risk mgt systeem in de opvolgende hoofdstukken blijkt bovendien dat de NL staat en maatschappijen zich sowieso niet louter baseren op ATC mgt in conflictgebieden.	Yes	
Min JenV	2.5	Hence, additional measures by airlines and their states are necessary to guarantee the selection of safe routes.	Afhankelijk van de situatie zou het om de luchtvaartmaatschappijen of de staten kunnen gaan. Zie ook p. 30, rij 7 waar wordt gesproken over 'and/or'.	No	This sentence refers to responsibilities of both states and airlines.

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Min lenW	2.5	Hence, additional measures by airlines and their states are necessary to guarantee the selection of safe routes.	Propose to replace "and" with: and/or. Depending on the situation, it may vary which actor should take which action. (Refer to par. 3.1, line 7)	No	This sentence refers to responsibilities of both states and airlines.
KLM	3.1	It is important that states make this type of information accessible to the airlines based in their country.	KLM onderschrijft dit belang maar wil opmerken dat dit in de praktijk nog beter kan.	No	Noted.
Min lenW	3.1	In order to increase the safety of all passengers, crew and aircraft, it is also of importance to share information with other states and with airlines that are not based in their own country	Ambiguity due to the wording "that are not based in their own country". Is this referring to the country of the passengers or the airlines?	Yes	
Min JenV	3.1	Apart from ... (recommended actions).	Het is onduidelijk wat het verschil tussen de twee eerste zinnen van deze alinea is. Beide lijken te refereren aan de 'state of operator' maar omschrijven de wettelijke mogelijkheden anders. Voorstel om beide zinnen samen te voegen tot "Apart from information sharing, the state of the operator can, if their national legal framework allows, prohibit their airlines to fly above a certain area etc."	Yes	
Min lenW	3.1	Apart from information sharing, the state of the operator can provide guidance to airlines	Not every state can do this, it depends on national regulation. Suggest to insert after "information sharing,": and depending the state's (legal) posture,	No	States can change their national legislation and hence their legal posture.
Min Def	3.3.1	P34 r6-8; hier staat dat gerubriceerde inlichtingen worden gedeeld in de expertgroep. P34 r20 In het blok van de samenvatting staat dat gerubriceerde inlichtingen niet gedeeld kunnen worden. Hier lijkt een tegenstelling in te zitten. Verder in het rapport wordt hier dieper op ingegaan en wordt er gesteld dat op basis van wederzijds vertrouwen relevante inlichtingen worden gedeeld. Dit komt overeen met ons beeld; dat de diensten gederubriceerde inlichtingen op basis van wederzijds vertrouwen delen binnen de expertgroep. Het voorstel is dan ook dat daar waar er in het rapport –classified- staat dit te wijzigen in –sensitive- (oa in p30 r15, p36 r7, p35 r10,)	Artikel 3 (instelling stuurgroep en expertgroep 'dreigingsinformatie burgerluchtvaart') 1. Partijen stellen de stuurgroep 'dreigingsinformatie burgerluchtvaart' in. Iedere partij wijst een vertegenwoordiger aan om deel te nemen aan de stuurgroep. 2. De overheid en de luchtvaartmaatschappijen stellen de expertgroep 'dreigingsinformatie burgerluchtvaart' in. Elk van de deelnemers wijst één of meer vertegenwoordigers aan om deel te nemen aan de expertgroep. Gezien het vertrouwelijke karakter en het rubriceringsniveau van informatie dienen de vertegenwoordigers ten minste te beschikken over een verklaring van geen bezwaar voor de burgerluchtvaart als bedoeld in het Besluit aanwijzing vertrouwensfuncties beveiliging burgerluchtvaart 2006 (kenmerk 5405405/06/NCTb, laatstelijk gewijzigd op 20 maart 2014), danwel een gelijkwaardige of hogere screening.	Yes	
Transavia	3.3.1	Transavia is a budget airline	Transavia is geen budget airline. Tekst wijzigen naar: Transavia is part of the AirFrance-KLM Group and conducts both scheduled and charter passenger flights.	Yes	
Corendon Dutch Airlines	3.3.1	Corendon Dutch Airlines is fully owned by the Corendon Holding B.V., which also owns the various Corendon touroperator companies. Corendon Dutch Airlines offers mostly holiday flights. Destinations include Mediterranean countries, such as Turkey, Greece, Portugal, Spain, Bulgaria, Egypt, and Macedonia. As Corendon Dutch Airlines also offers charter flights, requests may come to fly to other destinations as well. The main information sources include the Expert group, NOTAMs, a commercial provider, CZIBs and open sources, such as news media.	Eigendomsstructuur niet correct omschreven.	Yes	
Min lenW	3.3.2	1) the Steering group, which oversees the implementation of the agreement,	Missing task of the Steering group (Source: Artikel 4, lid 1, Staatscourant 2016 nr. 35472 van 8 juli 2016) Suggest to insert after "agreement,": and, if necessary, to make adjustments, (...)	Yes	

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Min Def	3.3.2	r16-17 Hierin staat dat de structurele capaciteit van de diensten ten aanzien van dreiging tegen de burgerluchtvaart beperkt is. De OVV kan op basis van dit onderzoek hierover geen gefundeerde uitspraak doen. Het voorstel is om deze zin te schrappen. Dit past ook bij de afbakening van het onderzoek op p14 r10-12: <i>"The process of collection, analysis and dissemination of intelligence, other than the shared information in the current civil aviation context, was not assessed by the Dutch Safety Board."</i> p37 r14-16 <i>"Furthermore, it is not clear to which [what] extent the information available to the intelligence services is fully employed and specifically analysed with regard to the risks for civil aviation"</i> Het spreekt voor zich dat dit onduidelijk is, aangezien ook dit buiten de scope valt van het onderzoek van de OVV zie p14 r10-12. Voorstel om deze regels te schrappen. Op p38 r.14 staat in de subconclusie: <i>Moreover, it is not clear to what extent the information available to the intelligence services is adequately analysed with regard to the risks for civil aviation.</i> Dit is onjuist. En doet geen recht aan de analyses van de Diensten. Ondanks dat de informatie uit bijvangst afkomstig is, wordt deze wel degelijk adequaat geanalyseerd voordat het met de Expertgroep wordt gedeeld.	Gerelateerd aan de opmerkingen hiernaast: De MIVD richt een unit in waarin de analysecapaciteit op luchtvaart wordt uitgebreid. De aanwezige capaciteit wordt binnen deze Unit ook effectiever ingezet.	Partly	Sentence about the current limited capacity is correct and in line with the comment on extension of the capacity.
Min BZK	3.3.2	"So, there are also practical issues".	Deze zin impliceert dat er praktische belemmeringen zijn, terwijl in deze alinea wordt gesproken over de redenering voor de keuze om geen wettelijke grondslag te creëren voor advies en restricties vanuit de staat.	No	This paragraph details both the policy choices made by the Dutch government and the limitations of the current legal framework.
Min Def	3.3.2	P38 r14 in de subconclusie staat: <i>"The legal security and intelligence tasks of the Dutch intelligence services do not include conducting independent investigations into security of foreign airspace and the security of flight routes into that airspace"</i> Indien er een militaire relevantie is doet de MIVD onderzoek. Inlichtingen die hieruit voortkomen kunnen ook belangwekkend zijn voor de burgerluchtvaart. Indien er relevantie is vanuit de taak van de AIVD om hier onderzoek naar te doen in het kader van de nationale veiligheid of de democratische rechtsorde, doet de AIVD onderzoek. Deze inlichtingen kunnen van belang zijn voor de burgerluchtvaart en worden gedeeld binnen de Expertgroep. Deze inlichtingen worden gedeeld binnen de expertgroep.		Yes	
Min BZK	3.3.2	"Moreover, it is [...] for civil aviation".	Deze zin is geen onderdeel van het onderzoek van OVV, op basis van blz. 14, regelnr. 10 — 12. Het voorstel is om deze zin te schrappen. Deze zin is ook eerder opgeschreven op blz. 37, regelnr. 16-17. Dit is geen juiste weergave en doet geen recht aan de analyses van de diensten (en de MIVD in het bijzonder). Ondanks dat de informatie uit bijvangst afkomstig is, wordt deze wel degelijk adequaat geanalyseerd voordat het met de Expertgroep wordt gedeeld.	Yes	
Min BZK	3.3.2	"The legal security [...] in that airspace".	Indien er relevantie is vanuit de taak van de AIVD om hier onderzoek naar te doen in het kader van de nationale veiligheid of de democratische rechtsorde, doet de AIVD onderzoek. Deze inlichtingen kunnen van belang zijn voor de burgerluchtvaart en worden gedeeld binnen de Expertgroep.	Yes	
Min JenV	3.3.2	it is not clear to what extent the information available to the intelligence services is adequately analysed with regard to the risks for civil aviation.	Op p. 14 wordt in rijen 10-12 aangegeven dat dit onderwerp niet onder de reikwijdte van het onderzoek valt. Het is daarom niet duidelijk op welke bevindingen deze conclusie is gebaseerd.	Yes	

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Min JenV	3.3.2	...currently the Dutch state has chosen not to provide airlines with additional guidance...	Met deze bewoording gaat de conclusie voorbij aan het feit dat hier geen wettelijke basis voor bestaat, zoals genoemd op p. 37, rij 28 e.v. Zie ook p. 80. rij 27, waarin deze conclusie ook is opgenomen.	No	It has been a specific choice not to create this legal framework. Advice could already be provided without a change of legislation.
Min IenW	3.3.2	...currently the Dutch state has chosen not to provide airlines with additional guidance...	The conclusion ignores the fact that there is currently no legal basis for this, as stated on p37, line 28 and p38, line 1-2. See also p80, line 27, which also includes this conclusion.	No	It has been a specific choice not to create this legal framework. Advice could already be provided without a change of legislation.
EU DGMOVE	3.3.3	a cooperative partnership between EU member states, the European Commission, EEAS (EU Intcen), EASA, and other relevant parties.	Factual	Yes	
EU DGMOVE	3.3.3	This culminated in the establishment of a common EU Integrated Aviation Security Risk Assessment process (hereafter referred to as EU Risk Assessment process) and the publication of Conflict Zone Information Bulletins by EASA or information notes by EASA.	The EU Integrated Aviation Security Risk Assessment group assess the level of risk in conflict zones and it can decide on possible mitigation measures including EASA CZIBs (public) or EASA information notes (not public)	Yes	
EU DGHOME	3.3.3	Quarterly meetings involving EU member states, Schengen associated countries	Schengen associated countries' to be added as they (Iceland, Norway and Switzerland) are also members of the group	Yes	
EU DGHOME	3.3.3	guidance to EU airlines regarding the security of flight routes	safety' to be replaced with 'security' as the Integrated EU Aviation Security Risk Assessment Group does not primarily assess safety. Security remains at the core of its work.	Yes	
EU DGHOME	3.3.3	Before each meeting, all available information is collected from INTCEN in the form of classified security updates and from open sources and distributed	the draft to be completed with detailed info on the origin of the classified and non-classified updates circulated ahead of meetings	Yes	
EU DGHOME	3.3.3	physical meetings are required for the process, as classified information is being easier shared	It should be stressed that classified information is shared and discussed easier in classified meetings as compared to secure electronic channels which do not allow for discussion	Yes	
EU DGHOME	3.3.3	several days in advance in order to allow participants to plan ahead their travel to Brussels.	In pre-pandemic times, it was not only about travel to Brussels that may be cumbersome, but also planning ahead that is so important. That is why invites normally are sent out a month ahead of regular meetings and as soon as possible for extraordinary meetings.	Yes	
EU DGHOME	3.3.3	The outcome of the EU Risk Assessment is an indication of a risk level for each of the 4 scenarios assessed (parking/taxiing, take-off/landing, medium altitude and high altitude) for each of the Conflict Zones assessed and related EU	scenarios for which risk levels are assessed to be added for better precision	Yes	
EU DGHOME	3.3.3	There is not always It may be difficult to reach consensus on the decisions to be taken in EU risk assessments.	there is not always' to be replaced with 'it may be difficult to reach'. Ultimately, consensus is always reached in the group.	Yes	
EU DGMOVE	3.3.3	It might be difficult to reach consensus on the decisions to be taken in EU risk assessments. <i>These divergences are caused by economic, diplomatic and other interests, including the fact that not all member states may have the same perception about flying to a specific region or</i>	The decisions of the risk assessment group are taken by consensus. Divergencies arising during the assessment of the risk levels are resolved according to the "reconciliation method" defined in the risk assessment methodology. Although Member States may ultimately agree with the decision at EU level, they sometimes reserve their right to issue more stringent national rules.	Yes	
EU DGHOME	3.3.3	and, EU member states and Schengen Associated Countries participated in the meetings	Schengen Associated Countries, as it was mentioned above, are also members of the Group	Yes	

Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
EU DGHOME	3.3.3	the challenges surrounding the exchange of classified information (EU Restricted or Confidential).	EU Restricted classification level to be added as, especially during the pandemic classified information shared electronically is at the EU Restricted level of classification.	Yes	
EU DGHOME	3.3.3	circulation of classified information requires a time-consuming encryption/ decryption process.	strong' to be replaced by 'time-consuming'.The encryption and decryption procedures require specialised units in national administrations to step in in order to decrypt files which can be very time-consuming.	Yes	
EASA	3.3.3	complete by adding 'on Conflict Zones' - 'European Information Sharing and Cooperation Plateforme on Conflict Zones'		Yes	
EU DGMOVE	3.3.3	In order to improve information sharing at the EU level, EASA launched the first version of a European Information Sharing and Cooperation Platform on conflict zones on 25 February 2021	Factual	Yes	
EU DGMOVE	3.3.3	The aim of the platform is to support (To be deleted: and enhance) the existing EU risk assessment process by improving the availability and swiftness of the exchange of relevant information.	The platform is a supporting tool to the existing EU Conflict Zone Alerting System and particularly the Integrated EU Aviation Security Risk Assessment Group. The information brought by the Platform to the Risk assessment Group will enrich the discussions but it cannot prejudge the decisions taken by the Risk Assessment Group on the most appropriate follow-up in terms of possible mitigation measures.	Yes	
EU DGMOVE	3.3.3	<i>"In addition, there is not always consensus between member states on the decisions to be taken in EU risk assessments". TO BE REPLACED WITH: "In addition, it might be difficult to reach consensus on the decisions to be taken by the EU risk assessment group"</i>	See above comment for page 40	Yes	
EU DGMOVE	3.3.3	After "sharing platform" to be included "on conflict zones"	Factual	Yes	

Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
TSB	3.4	Unlike Germany, the UK and the US, both Canada and France do not have a legal basis in their national regulatory framework to issue prohibitions.	<p>"This comment was made following consultation with the Canadian regulator, Transport Canada.</p> <p>Canada does have the authority to prohibit or restrict a Canadian operator from operating in an airspace that is under foreign control.</p> <p>The authority to restrict airspace is found in 5.1 of the Canadian Aeronautics Act, which reads:</p> <p>Restrictions and prohibitions for safety or security purposes <i>5.1 The Minister or any person authorized by the Minister may by notice prohibit or restrict the operation of aircraft on or over any area or within any airspace, either absolutely or subject to any exceptions or conditions that the Minister or person may specify, if, in the opinion of the Minister or person, the prohibition or restriction is necessary for aviation safety or security or the protection of the public.</i></p> <p>This establishes the authority to restrict airspace. For applications outside of Canada, the Act states:</p> <p>Application of Part <i>4 (1) Subject to any regulations made pursuant to paragraph 4.9(w), this Part applies in respect of aeronautics to all persons and to all aeronautical products and other things in Canada, to all persons outside Canada who hold Canadian aviation documents and to all Canadian aircraft and passengers and crew members thereon outside Canada.</i></p> <p>As such, a NOTAM issued by Canada restricting airspace to an operator in a non-Canadian FIR means a Canadian operator cannot operate that space."</p>	Yes	
FAA	3.4	We think the current U.S. system would be better described as having three levels and suggest revised wording in italics for Column 3 of Line 5.	<p><i>"Three risk levels:</i> <i>- Advisory - Exercise caution</i> <i>- Advisory - Exercise extreme caution</i> <i>- Prohibition"</i></p>	Yes	
TSB	3.4		As per previous comment, Canada has the legal basis for flight prohibition.	Yes	
Min IenW	3.4	Table 1, column 2: Publication	Canada expanded the products it promulgates with the AIC. Suggest to include AIC under NOTAM.	Yes	
FAA	3.4	Administrative: Need to add the color highlighting for the US column in the table	Add "red" highlighting in the US column for eastern Ukraine and Yemen rows to reflect the presence of FAA flight prohibitions on U.S. civil aviation operations in those areas.	Yes	

Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
Min IenW	3.4	As of June 2019, the states that issue aeronautical publications on conflict zones (the United States, Canada, the United Kingdom, France and Germany), together with the Netherlands (because of MH17), form the Expert Group on Risk Information Overflying Conflict Zones (EGRICZ). Later on, Finland, Spain, Sweden and Switzerland also joined EGRICZ.	For the first time in the report reference is made to EGRICZ. Therefore suggest to transposition the new drafted text in italic below to paragraph 1.5 for introduction. In addition, France is not an active member. Delete "France" and add: Spain. Spain issues aeronautical information and is a founding member of EGRICZ. New text could read, including EGRICZ goals: <i>As of June 2019, the states that issue aeronautical publications on conflict zones (the United States, Canada, the United Kingdom, Germany and Spain), together with the Netherlands (because of MH17), form the Expert Group on Risk Information overflying Conflict Zones (EGRICZ). Later on, Finland, Sweden and Switzerland also joined EGRICZ. EGRICZ is an informal international platform for pertinent discussions aimed at building a common/ harmonized approach towards security considerations when flying over or near conflict zones and optimize cooperation, information exchange, and coordination. To this end EGRICZ organized workshops in June and November 2019 together with DGHOME, EASA and industry partners. As of 2020 workshops have been discontinued due to Covid-19.</i>	Yes	
FAA	3.5.1	Recommend replacing entire paragraph with the suggested change to add more context. Replacement wording in italics.	Replace with the following: <i>"On 3 January, the FAA published an information note, which warned of possible escalation and retaliatory attacks from Iran. The FAA distributes information notes to various U.S. and foreign airlines and foreign government partners. Recipients of this particular information note included the Netherlands, EASA, and KLM. The information note indicated tensions in the region were increasing, and elaborated on the nature of the threat. It mentioned, for instance, the possibility of a heightened alert status among Iran's military air defence forces and the use of surface-to-air missiles. It also stated there was an increasing inadvertent risk to civil aviation in the region. This note was also circulated by EASA to its network of members states."</i>	Yes	
KLM	3.5.1	On 3 January, the FAA sent an information note which warned of possible escalations and retaliatory attacks from Iran.	KLM geeft aan dat de informatie welke gegeven wordt in de genoemde FAA information note een breder perspectief geeft dan in deze paragraaf wordt weergegeven en verzoekt derhalve een verwijzing naar de genoemde FAA Information Note in het rapport op te nemen.	No	This information is not public. The Dutch Safety Board carefully selected the information necessary for this report and has coordinated with the FAA whether publishing this information will not disrupt confidentiality and therefore damage the information position of the FAA.
KLM	3.5.1	On 6 January, the Netherlands Defence Intelligence and Security Service provided the Expert group with an extensive situation update by e-mail. In the e-mail, the attack on general Soleimani was analyzed, and several possible targets for a retaliatory attack by Iran were mentioned. Also several scenarios and the possible effects on civil aviation in both the Iran and Iraq region were evaluated. The e-mail stressed the importance of contingency planning by the airlines, as the situation was assessed to be uncertain.	KLM is van mening dat er te beperkt geciteerd is uit de e-mail van de MIVD van 6 januari 2020. Relevante elementen missen nu welke juist tot de conclusie hebben geleid dat KLM daar nog kon blijven overvliegen. KLM verzoekt daarom de gehele e-mail toe te voegen.	No	This information is not public. The Dutch Safety Board carefully selected the information necessary for this report and has coordinated with the Netherlands Defence Intelligence and Security Service whether publishing this information will not disrupt confidentiality and therefore damage the information position of the Netherlands Defence Intelligence and Security Service.

Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
FAA	3.5.1	Recommend replacing entire paragraph with the suggested change to add more context. Replacement wording in italics.	Replace with the following: "On 7 January, Iran launched ballistic missile attacks on two American air bases in Iraq. Shortly thereafter, the FAA published three NOTAMs and also emailed copies of the NOTAMs to various U.S. and foreign airlines and foreign government partners, including the Netherlands, EASA, and KLM. The NOTAMs were all-altitude flight prohibitions for U.S. civil aviation with respect to the Baghdad FIR, the Tehran FIR, and the overwater airspace above the Persian Gulf and the Gulf of Oman."	Yes	
FAA	3.5.1	Adds NOTAM references for FAA issuances on 07-08 January 2020. Replacement wording in italics.	NOTAM KICZ A0001/20, Baghdad FIR, 7 January 2020 23:45 until perm. NOTAM KICZ A0002/20, Tehran FIR, 8 January 2020 until perm. NOTAM KICZ A0003/20, the overwater airspace above the Persian Gulf and Gulf of Oman, 8 January 2020 until perm.	Yes	
FAA	3.5.2	Administrative: Recommend checking the NOTAM identifier for the NOTAM issued by Iraq for accuracy.	Revise for accuracy, if necessary.	No	NOTAM identifier is correct.
FAA	3.5.3	Adds context regarding FAA's mitigation posture between 2-7 January 2020. Otherwise, the sentence leaves the impression vulnerabilities and lack of warning existed for Iranian airspace during that period. Inserted wording in italics.	Add footnote wording: "FAA did not issue any new NOTAMs between 2-7 January 2020 as the existing framework of FAA prohibitions and advisories for the region, to include risk factors in Iranian airspace, were assessed to provide sufficient mitigation and warning to safeguard U.S. civil operators for the situation as it existed during that period."	No	Not investigated.
KLM	3.5.3	This was two and a half hours before the crash of flight PS752	De genoemde 2:30 uur is alleen geldig voor de door de FAA uitgegeven NOTAM voor het Iraanse luchtruim. Voor het Irakese luchtruim werd door de FAA 3:00 uur voor de crash van PS752 een NOTAM uitgegeven. Zie tijdlijn op pagina 50. De genoemde 2:30 uur zou verduidelijkt moeten worden.	Yes	
Min lenW	3.6	There is no legal basis in Dutch law to impose a flight ban or restrictions on Dutch aircraft in connection with flying in foreign airspace. Apart from providing information, the Dutch state has explicitly chosen not to provide specific guidance to Dutch airlines regarding conflict zones. The Dutch state therefore does not carry out risk assessments at state level. Nevertheless, it is involved in the EU Risk Assessment process, where it takes a position in the discussion between member states.	To put this into proper perspective suggest to insert explanatory text that this is the situation for the majority of the European member states.	No	The intention of this paragraph is to indicate that there are states that provide more guidance.
Min Def	3.6	"The Dutch state therefore does not carry out risk assessments at state level." Dit is onjuist om dezelfde reden als hierboven.		Yes	
EU DGHOME		and airlines with a best possible level of information on conflict zone risks to civil aviation.	To replace 'minimum' with 'best possible'. In fact the process strives to provide best possible level of information	Partly	Minimum level changed to equal level.
KLM	3.6	The lack of mandate to disseminate relevant information to airlines directly, limits EASA's effectiveness	Niet alleen de EU consensus vermindert de effectiviteit van EASA. Ook het feit dat EASA voor dit onderwerp een unit heeft die bestaat uit 2 mensen, niet zijnde analisten die ook nog andere werkzaamheden hebben. De informatie van EASA zijn hoofdzakelijk gebaseerd op de commerciële provider Osprey, de enige bron (naast open sources) voor EASA. Ook het hier genoemde platform van EASA wordt gevoed vanuit deze ene bron. Dit baart KLM zorgen gezien het belang van cross validating de available information dat ook door de OVV in paragraaf 3.2 wordt benoemd.	No	Not all aspects having an effect on the effectiveness have been investigated by the Dutch Safety Board.
EU DGHOME		It may be difficult to reach consensus between member states on the decisions to be taken in EU 30risk assessments.	There is now always' to be replaced with 'It may be difficult to reach' – as explained earlier	Yes	

Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
Min JenV	3.6	Contrary to the Netherlands ...	Voor de volledigheid zou vermeld kunnen worden dat de meeste EU-lidstaten niet de praktijk van de genoemde staten volgen.	No	The intention of this paragraph is to indicate that there are states that provide more guidance.
Min Def	3.6	<i>The situation was dynamic and uncertain as there were several possibilities for a retaliatory attack from Iran. Although this information about the situation was available, not one state issued an advice to avoid or a prohibition for Iranian airspace...."</i>	Dit geeft een vertekend beeld van de situatie voorafgaande aan het incident met PS752. Er waren geen inlichtingen beschikbaar over de wijze waarop Iran zou reageren, noch was er duidelijkheid over wanneer dit zou plaatsvinden. Daarbij was de retaliatory attack van Iran gebaseerd op ballistische raketten. De dreiging die uitgaat van een ballistische raket richting de (burger)luchtvaart is buitengewoon klein. Het was de door Iran geanticiperde dreiging van een Amerikaanse tegenreactie op de aanval met ballistische raketten die ervoor zorgde dat Iraanse luchtverdedigingsmiddelen in verhoogde staat van paraatheid waren.	No	The situation was uncertain, due to the escalation of the conflict and the unpredictability of the behaviour of the states involved.
TUI fly	4.1	Two ... transparency.	Incorrect statement request to delete. The airline is legally accountable for safety and security related matters. Not for making information public or transparent in any form or way.	Yes	
TUI fly	4.1	Public ... passengers.	Request to delete: It is not the responsibility of non-subject matter expert who do not have access to restricted information to make judgements. The supervising authority is the proper entity to make an independent judgement.	Yes	
TUI fly	4.1	Ideally ... issue.	Request to delete: It is not the responsibility of non-subject matter expert who do not have access to current restricted information to make judgements. The supervising authority is the proper entity to make an independent judgement. It is not the task of the airline to raise attention of flying over or near conflict zones. Furthermore, consumer organizations and the media cannot form an independent judgement, since their business model is to raise revenue without being accountable for passenger safety. Consumer organizations and the media can form a premeditated inaccurate opinion to attract the general public which in turn increase revenue.	No	The sentence does not state that it is the responsibility of the public to form a judgement. This is also mentioned in the next sentence.
Transavia	4.1	The possibility --- riskassessment	Verband tussen mogelijkheid om vragen van buitenaf (anders dan van de autoriteiten) over keuzes te krijgen en kwaliteit van de risk assessments is niet duidelijk. Mijns inziens is hier geen verband. Anders dit verband uitleggen in het rapport.	Yes	
TUI fly	4.1	The ... assessment.	Request to delete: This could be a responsibility of the supervising authority. Passenger already have the means to question the airline.	Yes	
KLM	4.1	The possibility of being questioned on the decisions can then give rise to a better risk assessment.	Uit niets blijkt waarop de stelling dat "The possibility of being questioned on the decisions can then give rise to a better risk assessment" is gebaseerd en kan daarom volgens KLM niet zo –ongefundeerd- worden opgeschreven.	Yes	

Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
KLM	4.2.1	If a risk assessment is based on historical statistics, the actual probability of being shot at during flight will be determined as low. As a result, the high consequence of a civil aircraft being shot, combined with its low likelihood, will result in only a moderate risk. However, when the situation is uncertain and SAMs are present, it is undesirable that the risk is considered tolerable. The threat analysis should therefore also include an assessment of the possibility of scenarios.	<p>KLM is van mening dat de (onderbouwing van de) stelling dat "If a risk assessment is based on historical statistics, the actual probability of being shot at during flight will be determined as low. As a result, the high consequence of a civil aircraft being shot, combined with its low likelihood, will result in only a moderate risk. However, when the situation is uncertain and SAMs are present, it is undesirable that the risk is considered tolerable. The threat analysis should therefore also include an assessment of the possibility of scenarios." niet juist is en tot disproportionele gevolgen leidt.</p> <p>Allereerst wordt een risico-assesment nooit alleen gebaseerd op historische gegevens. Risico-assessments gaan nl. uit van zeer veel factoren die de likelihood bepalen. Hierbij wordt gekeken naar bedoelde en onbedoelde risico's waarbij onder meer wordt gekeken naar verhoogde (militaire) spanningen, het effectieve hoogtbereik van de aanwezige SAM's, als ook de getraindheid van de schutter, de aanwezigheid van command & control procedures van defensie partijen, het hoogste niveau van de grond t.o.v. overvlieghoogtes, de weersomstandigheden die het bereik hinderen, het zichtbereik van de schutter, het radarbereik gerelateerd aan eventuele gebergtes, etc etc. Deze factoren spelen allen een belangrijke rol en kunnen zeker tot een andere conclusie leiden dan "only a moderate risk".</p> <p>Daarnaast is KLM van mening dat de algemene conclusie dat vliegen niet "tolerable" zou moeten zijn "when the situation is uncertain and SAMs are present" niet proportioneel is.</p> <p>Luchtvaartmaatschappijen nemen wel degelijk onzekere factoren mee in hun risk-assessment. Ons inziens rechtvaardigt een zeer geringe kans op een onwaarschijnlijk scenario niet een dergelijk rigoureuze algemene maatregel van stoppen met vliegen als van genoemde factoren sprake is. Dit is aan de ene kant gebaseerd op het feit dat dit geen recht doet aan de uiterst gedetailleerde wijze waarop invulling wordt gegeven aan het beoordelen van dergelijke scenario's, waarbij het allergrootste gedeelte goed verloopt. Aan de andere kant zal een dergelijke algemene benadering grote gevolgen hebben voor de burgerluchtvaart omdat er zeer veel van dit soort gebieden te definiëren zijn op de wereld, waardoor vliegen zeer beperkt mogelijk zal worden. Om dit laatste te voorkomen is eveneens een gedetailleerde inschatting i.p.v. een algemene en rigoureuze maatregel meer geëigend.</p> <p>Om toch de "onwaarschijnlijke" kans van een human error (welke toch tot in elk geval 2 maal toe tot desastreuze gevolgen heeft geleid) nog kleiner te maken, ziet KLM veel meer in een goede, gedetailleerde en snelle informatievoorzieningen vanuit de overheden naar de airlines en een beter air space management. Dat zijn dé sleutels voor het verbeteren van de vliegveiligheid en het reduceren van deze (al zeer kleine) kans op catastrofale gevolgen. De aanbevelingen zouden wat KLM betreft daar dan ook op moeten zien.</p> <p>Continues on next page </p>	Partly	<p>By assessing risks on the basis of the precautionary principle, states and airlines can take measures in an earlier stadium in order to prevent civil aircraft from flying above conflict zones when the conflict escalates. This means indeed that the rigorous measure - not flying - should be a realistic option that may need to be used more often.</p> <p>Information sharing took place before the crash of flight PS752. However, states did not know the target and the time of the retaliatory attack. It is not realistic that better information sharing alone would help prevent this type of cases from happening. Uncertain situations occur and therefore airlines and states have to anticipate.</p>

KLM	4.2.1		<p>Continued</p> <p>Bij gebieden met verhoogde spanningen en de mogelijkheid tot een snel escalerend conflict draait het om een zo goed mogelijke informatiepositie. Uitbreiding van capaciteit bij de inlichtingendiensten om hiertoe meer informatie te verzamelen kan zeker bijdragen aan het beter/specifieker duiden van deze scenario's. KLM juicht een dergelijke uitbreiding dan ook toe. Daarnaast kan een specifiekere duiding van deze scenario's de Nederlandse overheid ondersteunen om in een vroeger stadium andere landen aan te kunnen spreken op hun (falende) luchtruimbeheer.</p> <p>Los van bovenstaande wil KLM opmerken dat het voorstel van de OVV op dit punt alleen tot meer veiligheid zal leiden als alle luchtvaartmaatschappijen zich hier aan moeten conformeren. Een verplichting voor alleen Nederlandse luchtvaartmaatschappijen levert nauwelijks veiligheidsverbetering op en zal daarnaast tot een onrechtvaardige concurrentiepositie leiden.</p>		
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Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
Min lenW	4.2.1	The threat analysis should therefore also include an assessment of the possibility of scenarios.	The text seems to suggest that ICAO Doc 10084 does not address to include an assessment of the possibility of scenarios. However, chapter 4, paragraph 4.4.1 on page 4-5 states: (...) <i>Both quantitative and qualitative methods are available to this process, and a combination of historical data as well as scenario-building should be applied to appropriately assess likelihood. Qualitative methods can help to consider, for example, the likelihood of the threat increasing over time or uncertainties that need to be taken into account.</i>	Yes	
KLM	4.2.1	"However, as indicated above, the risk matrix has limitations for the assessment of risks related to flying over or near conflict zones when it is limited to strictly examining the statistical probability of threat scenarios. A precaution-based risk approach should result in more weight attached to uncertain but catastrophic scenarios in assessing flight routes above and near conflict zones."	Het is correct dat in veel risico-assessments statistische gegevens een grote rol spelen. Dat zien we ook in de safety afdelingen van een luchtvaartmaatschappij. Het risico op een aanvaring met een vogel of die van een blikseminslag is statistisch berekend. In geval van security speelt statistiek echter nauwelijks een rol. Juist in security risico assessments wordt al gerekend met onwaarschijnlijkheid en onzekerheid. Daar wordt in de maatregelen al rekening gehouden met scenario's die zich toch zouden kunnen voordoen, ook al lijkt het onwaarschijnlijk. Dat is ook de reden waarom KLM een tweemaal zo lange lijst van overvlieg restricties hanteert dan de gemiddelde overheidspartij. Dat is omdat we in Chad al rekening hielden met luchtaanvallen en het gebruik van SAM's (zoals nu actueel is). Dat is waarom we een overvliegrestrictie op Congo hebben en waarom zo goed als de gehele Sahel regio al een medium risk met hoogte restrictie kent. KLM houdt derhalve al rekening met "uncertain but catastrophic scenario's". Ons inziens doen we dat ook al in voldoende mate, zie het commentaar bij Pagina 61, regel 15 en regel 18 – 23. Een meer precaution-based risk approach is wat ons betreft niet de oplossing, maar wel de voorgestelde aanbevelingen omtrent een goede, gedetailleerde en snelle informatievoorzieningen vanuit de overheden naar de airlines en een beter air space management.	No	Paragraph 4.2.1 contains a general description of risk methodology.
Min lenW	4.2.1	The method described in the ICAO manual on conflict zone risk assessments is based on the traditional risk assessment approach. The manual does not describe how and when uncertainties and risk-increasing factors must be included in the analysis. Therewith, possible catastrophic scenarios may be dismissed.	Doc 10084 clearly addresses the importance of the combination of both quantitative and qualitative methods to assess the likelihood of scenarios as a result of MH17, which is not the traditional approach. Suggest to rephrase lines 1-4 into: <i>The ICAO manual on conflict zone risk assessments addresses the importance to include scenario-building, however does not provide criteria how and when uncertainties and risk-increasing factors must be included in the analysis.</i>	Yes	
Min lenW	4.2.1	The ICAO manual on conflict zone risk assessments is based on the traditional risk approach.	Suggest to rephrase this conclusion. See above comments about Doc 10084.	Yes	
EU DGMOVE	4.2.2	At the end of the sentence on line 21, add following text: <i>The European Commission and EASA are in the process of further evaluating whether there is a need to develop additional acceptable means of compliance or guidance material on the particular risk concerning the conflict zones</i>	Lines 1 - 21 under chapter 4.2.2. are in principle correct, however for the sake of completeness, we suggest adding a new line re: development of AMC / GM in order to provide a complete overview	No	We note the intentions to further evaluate the need for additional AMC or guidance material.
Min lenW	4.2.3	(...) due to aspects such as the sensitivity of information and the complexity of considerations.	It is not certain if the full scope of considerations is considered here. Apart from security risk assessment considerations, there are also operational (safety) considerations such as multiple routes to each destination (sometimes up to 30), weather and atmospheric conditions, traffic congestion, etc.	Yes	

Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
KLM	4.2.3	Nevertheless, in 2019 the Dutch Safety Board stated that this does not detract from the fact that airlines could look for ways to provide public accountability regarding the choices they make, such as by explaining the reasons for avoiding certain areas.	<p>KLM stelt vraagtekens bij de haalbaarheid van het voorstel om de redenen van het vermijden van verschillende gebieden uit te leggen aan het publiek. Het maken van een risico assessment m.b.t. het overvliegen van conflict zones kent vele verschillende elementen die ieder een verschillende rol spelen en is daarmee niet op een eenvoudige manier uit te leggen. Dat is ook te zien aan de verschillen tussen de overheidspartijen die notams uitgeven en tussen de luchtvaartmaatschappijen onderling. De passagier heeft niet de benodigde kennis om het samenspel van elementen en wegingsfactoren te doorgronden. Voor experts is het omgaan met vlieghoogtes, AGL, effectief bereik van wapensystemen enz enz al complex genoeg, laat staan voor de passagier.</p> <p>Maar het gaat ook voorbij aan het feit dat de informatie waarop de beslissing is genomen in vertrouwelijke setting wordt gedeeld en niet bedoeld is om publiek te maken. Het gaat immers vaak om geclassificeerde informatie. Daarnaast kan publiek maken van dergelijke informatie kan schade toebrengen aan de bron. KLM heeft als voorbeeld hiervan in een recent verleden het luchtruim van Venezuela gemeden maar was op dat moment de enige luchtvaartmaatschappij. Dit publiekelijk maken had de I&V diensten die daarvan de bron waren in verlegenheid gebracht t.o.v. hun collega diensten in het buitenland.</p> <p>Het publiekelijk maken van gebieden die de luchtvaartmaatschappij vermijdt is daarbij nog relatief eenvoudig. Het doorvliegen op basis van een diepgaand risico-assessment is veel lastiger en zo goed als onmogelijk uit te leggen.</p> <p>En last but not least: in het level playing field kan het leiden tot ongemakkelijke situaties. KLM vliegt op dit moment door luchtruimen waar sommige collega luchtvaartmaatschappijen niet komen. Dat zou m.b.t. de andere airlines uitgelegd kunnen worden als 'veilig', maar heeft meermalen eenvoudigweg als reden dat men die luchtruimen niet nodig heeft voor hun routes en daarom deze vermijdt.</p>	No	Noted.
FAA	4.3.1	To avoid creating confusion amongst industry, it is important to clarify that the impact of FAA flight prohibition NOTAMs on foreign air carriers with US codeshare partners occurs, as a legal matter, through the operation of the Office of the Secretary of Transportation's authority, rather than the FAA's.	We recommend revising the sentence to read as follows: " <i>At the same time, the Office of the Secretary of Transportation of the U.S. Department of Transportation requires all codeshare flights with partner airline Delta Air Lines to abide by flight prohibitions issued by the FAA.</i> "	Yes	
KLM	4.3.1	Security Board meeting (KFSSB, KLM Flight Safety & Security Board). This Board, chaired by the Chief Pilot, is responsible for the acceptance of risks and consequent decision-making. In the event of urgency, a 24/7 ad hoc Security Board meeting	In dit stuk tekst wordt vier keer het woord Board gebruikt. Veranderen in Briefing; zie opmerking bij pagina 8	Yes	
KLM	4.3.1	This Board, chaired by the Chief Pilot, is responsible for the acceptance of risks and consequent decision-making.	KLM heeft meerdere Chief Pilots die bij toerbeurt de KFSSB voorzitten. Derhalve graag "the Chief Pilot" veranderen in "a Chief Pilot".	Yes	
Corendon Dutch Airlines	4.3.1	Corendon Dutch Airlines conducts security assessments establishing the risks of overflying conflict zones, both for the usual areas of operation and for ad hoc flights. The situation is monitored for all conflict zones within the standard area of operation. For areas outside the standard operating area a risk assessment has to be conducted before a flight may be performed. The airline has established risk level guidance for the qualification of the risk. The Outcome of the security risk assessments regarding overflying conflict zones are provided to the Operational Control Centre (OCC). OCC implement restrictions and or mitigations into the operational flight plans.	Toevoeging Turkije is niet relevant voor het stuk en geeft het proces daardoor niet geheel correct weer.	Yes	

Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
TUI fly	4.3	The ... exchanged.	Replace with: Each airline can raise or renew an Overflight Security Assessment (OSA).	Yes	
TUI fly	4.3	There ... Review.	Replace with: There can be several triggers to initiate an OSA: NOTAM driven, intelligence driven, event driven, or a scheduled or unscheduled review. All airlines jointly work on the OSA until it is approved by the Overflight Assessment Board (OAB). Afterwards, the Safety Review Board (SRB) can opt to accept or reject recommendations.	Yes	
TUI fly	4.3	As ... (SRB).	Delete	Yes	
TUI fly	4.3	Following ... operations.	Replace with: Following a positive decision by the SRB, the recommendations are transposed to the Overflight Security Instructions (OSI) for implementation purposes.	Partly	Shortened.
TUI fly	4.3	In ... Netherlands	Replace with: In the event of new information requiring a rapid decision making and response, an Emergency Response Plan (ERP) is activated which includes the main stakeholders at TUI fly Netherlands. Afterwards the OSA is completed/renewed to reconsider the decisions made.	Partly	Shortened.
Transavia	4.3.1	This may affect ... certain area.	Dit is een loze conclusie. Hier mist een kwalitatief oordeel in hoeverre er opvallende verschillen in uitkomsten binnen NL zijn geconstateerd.	Yes	
ILenT	4.3.2	replace The (...) with: In (...)	Generally, a monitoring period of 2 years applies. However, this can be extended but also shortened depending on certain conditions.	Yes	
Min JenV	4.3.2	information coming from the Expert group is not shared with operators that have not signed the covenant.	De reden hiervoor wordt niet nader toegelicht maar is wel relevant. Aan het convenant nemen grotere Nederlandse commerciële luchtvaartmaatschappijen deel, wier reguliere routenetwerk deels over of nabij conflictgebieden kan liggen. Niet-convenantdeelnemende luchtvaartmaatschappijen vliegen in het algemeen geen reguliere routes over of nabij conflictgebieden. Zij kunnen voor vragen over hun route terecht bij het aanspreekpunt (loket) van de AIVD en de MIVD, dat speciaal hiervoor in het leven is geroepen.	Yes	
ILenT	4.3.2	replace evaluate with: judge/assess	Evaluation does take place, namely, does the decision follow logically from the risk analysis process. ILT does not judge the details of the decision. In addition during audits routeplanning is evaluated. Also during flight inspections the flown routing is observed.	Yes	
ILenT	4.3.2	replace evaluation with: judgement/assessment	see line above	Yes	
Min IenW	4.3.2	(...) information coming from the Expert group is not shared with operators that have not signed the covenant.	Suggest to add (in a footnote) that airlines that are members of the covenant are the Dutch commercial airlines that have a regular route network that may partly be over or near conflict zones. Airlines that do not take part of the covenant do not have such a regular route network.	Yes	
Transavia	4.3.3	But Dutch ... or choices	Bedoelde informatie is veelal confidencieel en mag niet worden gepubliceerd. Huidige info over routes op onze websites is met min van IenW afgestemd en biedt reizigers de mogelijkheid om nadere detailvragen over routes aan ons te stellen. Heeft OVV onderzocht wat de behoefte van de reizigers op dit gebied is? Zoals nu weergegeven lijkt het een tekortkoming in onze informatievoorziening. Onderbouwing hiervoor ontbreekt.	Yes	

Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
Min JenV	4.3.3	But Dutch airlines, too, are not transparent on their websites about specific airspace restrictions, flight altitudes or choices.	In het OVV-rapport Vliegen over Conflictgebieden uit 2019 wordt hier in paragraaf 5.2.4 ook op in gegaan. Relevante bevindingen uit dat rapport t.a.v. de beperkte interesse vanuit het publiek en de gevoeligheid van de betreffende informatie, worden hier niet genoemd.	Partly	The Dutch Safety Board does not see the little public interest as an adequate argument for not publishing this information.
Min lenW	4.3.3	But Dutch airlines, too, are not transparent on their websites about specific airspace restrictions, flight altitudes or choices.	Suggest to include that only few questions are asked by the public about the websites and according to the airlines there appears to be little to no interest in public information about flight routes. Source: DSB report Flying over Conflict Zones, 2019, par. 5.2.4, p57.	No	The Dutch Safety Board does not see the little public interest as an adequate argument for not publishing this information.
TUI fly	4.3.3		Add: By detailing the rationale behind a choice could irreversible damage the airline's information position and possibly the source as well.	Yes	
TUI fly	4.4		Paragraph missing: What restrictions were in place before the crash or before 2nd of January 2020? TUI already had restrictions in place which severely limited operations in the Baghdad and Tehran FIR. Overflight of Iranian airspace was only permitted at FL260 or above and only on an and north of airway G665. Operations south of Airway G665 was prohibited. Overflight of Iraqi airspace was only permitted on UL602 (to ALPET), UM860 and UM688 above 25.000 AGL.	Yes	
TUI fly	4.4	For ... (see Figure 19).	Remove figure 18: There is no value of adding this figure dated at 19th of January 2021 to the report it could even be misleading. Why did the OVV not independently assess each country at the time of the event? Why wasn't another source selected? Is OPSGROUP a reliable and accurate source? What did OPSGROUP publish about the threat environment around the time of the event?	Partly	A clarification in the text has been added.
TUI fly	4.3.3	Dutch ... choices.	Add: Dutch airlines provide some information regarding conflict zone decision-making on their websites, but they are not transparent about specific airspace restrictions, flight altitudes or choices, due to possible irreversible damages to its information position.	Yes	
TUI fly	4.4	N/A	Information missing add: On the 7th of January 2020 TUI decided to complete prohibit operations in the Baghdad and Tehran FIRs.	Yes	
Min lenW	4.4.1	2020 2020	Typo	Yes	
AAIB Iran	4.4.1	to correct ...publication only the airways in west of Iran and join airways were closed by operational and tactical process by Iran (see paragraph...)		No	This section of the report discusses the airline decision-making process. Input into this process is information known to the airlines, for example through aeronautical publications. The airspace management related information, including the referred operational measures, is presented in chapter 2.
Min lenW	4.4.1	NOTAMS	Typo. Change into: NOTAMs	Yes	

Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
KLM	4.4.1	Several aviation sources pointed to the increase in tensions and indicated the risk of possible retaliatory attacks from Iran. The next stage in the conflict was very uncertain at that moment. Both the FAA and the Netherlands Defence Intelligence and Security Service had indicated a broad spectrum of possible scenarios, as shown in paragraph 3.5.1. The FAA also noted the possibility of an inadvertent attack on civil aircraft in the region. Nevertheless, change in flight behaviour was only observed after the ballistic missile attacks in Iraq on 7 January.	<p>KLM heeft na de aanslag op de generaal wel degelijk actie ondernomen. N.a.v. een risico-assesment is er op 3 januari 2020 besloten tot aanpassing van het routeplan waardoor vliegtuigen geen gebruik meer konden maken van luchthavens in Iran en Irak in contingency situaties. KLM vliegtuigen konden hierdoor alleen nog op kruishoogte over deze landen vliegen. Op basis van o.a. overheidsinformatie meende KLM dat dit veilig kon plaatsvinden.</p> <p>Alhoewel de zin "Nevertheless, change in flight behaviour was only observed after the ballistic missile attacks in Iraq on 7 January." een feitelijk weergave geeft, proeft KLM hier een waardeoordeel in, terwijl de aangehaalde sources geen verbod inhielden, maar alerts. Er werd alleen gesproken over "the increase in tensions and indicated the risk of possible retaliatory attacks from Iran". Deze waarschuwingen/alerts zijn bedoeld om mee te nemen in de risico-assessments, hetgeen is gebeurd. KLM heeft daar zoals geschreven ook gevolg aan gegeven.</p> <p>Achteraf weten we of de kans op escalatie is verwezenlijkt. Echter, op het moment van verschijnen van dergelijke Information Notes is de toekomst onzeker en de informatie ruim /weinig concreet geformuleerd. Het is wat KLM te kort door de bocht om hieruit de (indirecte) conclusie te trekken dat er te laat gevolg is gegeven aan de Information Notes.</p>	Partly	Flight behaviour has been established using flight data analysis. Text in the report has been further clarified.
FAA	4.4.2	Adds context on the information sharing and coordination on the risk concerns in the pre-shoot down period. Inserted wording in italics.	Insert the following: <i>"Through the Summer, Fall, and Winter months of 2019, as tensions in the Middle East continued to escalate, there was ongoing information sharing, including through emails, phone calls, and distribution of copies of NOTAMs and Information Notes, on aviation risk concerns, mitigation measures, and emergency preparedness. The exchanges occurred state-to-state and state-to-industry to facilitate shared awareness. An example of this state-to-state and state-to-industry dialogue occurred within EGRICZ meetings in June and November 2019, which included open conversations on the potential inadvertent risk to civil aircraft operating into, out of, over, or within the Persian Gulf region during periods of heightened tensions and military activities and planning options in the event of a crisis."</i>	No	Part of this information is in par. 3.5.
Transavia	4.4.2	Transavia had already ... Eastern Iran	Transavia kon inderdaad feitelijk nog over oost Iran vliegen, maar operationeel werd dit niet gedaan omdat voor de route naar DXB de Iraans Perzische Golf niet mocht worden overvlogen.	No	Noted.
KLM	4.4.2	In het figuur van de tijdlijn	Tweede tekstblok aan de rechterzijde: Board vervangen door Briefing; zie opmerking bij pagina 8	Yes	
KLM	4.4.2	In het figuur van de tijdlijn	Eerste tekstblok aan de rechterzijde en derde tekstblok aan de linkerzijde: Board vervangen door Briefing; zie opmerking bij pagina 8	Yes	
KLM	4.4.2	This situation update, which like the FAA information note elaborated on the uncertainties in the Gulf region about possible retaliation attacks, was assessed by KLM but did not lead to an update of the risk assessment.	Voor de duidelijkheid: KLM heeft een risico assessment uitgevoerd welke wel heeft geleid tot aanpassingen Zie opmerking bij 4.4.1	Yes	
FAA	4.4.2	Adds context on the FAA NOTAMs issued in the pre-shoot down period. Inserted wording in italics.	Replace with the following: <i>"At 00:23 on 8 January the operations department of KLM became aware of the just-published FAA flight prohibition NOTAMs for U.S. civil aviation with respect to the Baghdad FIR, the Tehran FIR, and the overwater airspace above the Persian Gulf and the Gulf of Oman, following the ballistic missile attack on two American air bases in Iraq."</i>	Yes	

Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
FAA	4.4.2	Adds NOTAM references. Inserted wording in italics.	Add the following footnote: "NOTAM KICZ A0001/20, Baghdad FIR, 7 January 2020 23:45 until perm. NOTAM KICZ A0002/20, Tehran FIR, 8 January 2020 until perm. NOTAM KICZ A0003/20, the overwater airspace above the Persian Gulf and Gulf of Oman, 8 January 2020 until perm."	Yes	
Min IenW	4.4.2	At 00:23 on 8 January, the operations department of KLM became aware of the just- published FAA NOTAMs following the ballistic missile attacks on American air bases in Iraq.	Missing footnote. Suggest to reposition footnote 99 from line 38 to 37.	Yes	
Min JenV	4.4.2		De kaarten tonen alleen KLM- en BA-vluchten. Hoe verhoudt zich dit tot de informatie op p. 73 waarin ook (maatschappijen uit) andere landen worden genoemd?	Yes	
Min IenW	4.4.2	Correlation between table 3 on page 73 with figures 21 and 22 on page 78	Double check and/or for prevention of possible misunderstanding, suggest to provide additional context between table 3 number of airlines overflying Iraq/Iran and figures 21 and 22. Only KLM and BAW flights are presented.	Yes	
KLM	4.4.2	The KLM Security Board decided to continue overflights, but not to use airports in Iraq and Iran as alternates.	Board vervangen door Briefing; zie opmerking bij pagina 8	Yes	
TUI fly	4.5		Question: Do Dutch airlines take the uncertainty factor into account?	Yes	
TUI fly	4.5	The ... analysis.	Replace with: The ICAO manual does not describe how and when risk-increasing factors and uncertainties must be included in the analysis	Yes	
TUI fly	4.5	Therefore, assessment.	Replace with: Therefore, the Dutch Safety Board recommended to ICAO and IATA in 2015 in the MH17 Crash report, to include risk-increasing and uncertain factors in the risk assessments	No	The exact wording and the addressees of these safety recommendations are included in paragraph 4.2.1.
KLM	4.5	The implementation of the precautionary principle allows to take uncertainties into account in the decision-making phase. This principle has not been integrated in the risk assessment approach concerning the safety of flight routes above or near conflict zones.	Aan de hand van de crash wordt geconcludeerd dat de luchtvaartmaatschappijen de onzekerheidsfactoren niet hadden meegenomen in hun assessments. Dat is een conclusie op basis van de voorbeeld Matrix uit ICAO doc 10084 waarin dit niet wordt weergegeven. In de praktijk wordt dit echter wel degelijk meegenomen in het risico-assenment, zoals hierboven beschreven.	Partly	Clarification on uncertainties and the precautionary principle has been included in paragraph 4.2.1 and in 4.5.
ILenT	4.5	replace evaluated with: judged/assessed	see line above	Yes	
Transavia	4.5	Dutch airlines ... of airlines	Zie opmerking over par 4.3.3.	Yes	
KLM	4.5	Dutch airlines provide some information on their websites about their risk assessment process for flying over or near conflict zones, but like airlines worldwide, they are not transparent about specific airspace restrictions, flight altitudes, or flight routes choices. Therefore passengers, consumer organizations, and media, are not in the position to form an independent judgement and question the decisions of airlines.	Zie opmerking bij paragraaf 4.2.3 pagina 66	Yes	
TUI fly	4.5	Therefore ... airlines.	General remark: Passenger consumer organisations and media are not subject matter experts and do have the means to make a proper assessment. Replace with: By sharing sensitive security information on the website the airline could	Yes	


Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
KLM	4.5	Following assessment of the situation, KLM considered the scenario of an inadvertent SAM attack on a civil aircraft at cruising altitude on an airway unlikely. As the flight behaviour of other EU airlines, too, did not significantly change following the increase 13 in tensions in the period 2-7 January 2020, the Dutch Safety Board concludes that a scenario comparable to that of flight PS752 was either not considered or considered unlikely by most airlines.	Het scenario van PS752 is wel meegenomen in het risk assessment van KLM en heeft daar maatregelen op genomen zodat KLM vluchten niet in een start- en/of landingssituatie terecht konden komen in Irak en Iran; zie opmerking bij 4.4.1	Yes	
Transavia	4.5	Imam Khomeini ... had been identified	Toevoegen dat het geen NL airlines betrof.	No	This has been already mentioned in the first sentence of paragraph 4.4.2. and in the alinea above.
KLM	4.5	Considering both the inherent uncertainty pertaining to the rapidly escalating conflict in the Middle East in January 2020 and the catastrophic consequences of a surface- to-air missile encounter, a precaution-based risk approach is necessary. Indicators as heightened military tension, an increase in the alertness level of a state's military force in combination with the presence of SAMs that can reach cruising altitude, should be key indicators in any risk assessment. The crash of flight PS752 shows that these signals should be acted upon, both by states and airlines, well in advance of an actual escalation of a conflict.	KLM is het hier niet mee eens; zie opmerking bij 4.2.1 pagina's 18 t/m 23	Partly	Text in relation to uncertainties and the precautionary principle has been updated.
AAIB Iran	4.5	SAMs that can reach plow cruising altitude according to DOC.10084		No	Noted.
Min JenV	5	Also, states and international organizations have become more aware of the risks, which is reflected in new ICAO standards, the EU Integrated Aviation Security Risk Assessment process and the Expert group in the Netherlands.	Voor de volledigheid kunnen ook andere initiatieven die in het rapport terugkomen hier genoemd worden, zoals EGRICZ en SSCC.	Yes	
Min lenW	5	Also, states and international organizations have become more aware of the risks, which is reflected in new ICAO standards, the EU Integrated Aviation Security Risk Assessment process and the Expert group in the Netherlands.	Missing international initiatives. Suggest to insert after "the Netherlands": , the establishment of international expert fora on conflict zone risk assessment EGRICZ and SSCC."	Yes	
Transavia	5	in airspace had been identified	Toevoegen dat dit vwb de NL airlines was gebaseerd op een gedegen en actueel risk assessment.	No	The topic risk assessments is described on the next page.
Min JenV	5	The vast majority of EU airlines, including the relevant Dutch airlines, decided to stop flying in the area not until 8 January 2020.	Deze zin maakt geen onderscheid tussen de eerste uren van 8 januari voor de crash en de rest van de dag. Nederlandse luchtvaartmaatschappijen besloten weliswaar op 8 januari niet meer in het betreffende gebied te vliegen maar dit was voor de crash, terwijl andere EU luchtvaartmaatschappijen blijkens p. 73, rij 26-28 nog na de crash vlogen.	No	The threat increased with the start of the ballistic missile attack on 7 January 22:30 UTC.
Min lenW	5	The vast majority of EU airlines, including the relevant Dutch airlines, decided to stop flying in the area not until 8 January 2020.	It is relevant to make a distinction between the first hours of January 8 before the crash of flight PS752 and the rest of the day. Dutch airlines decided to stop flying in the area in question on January 8 but this was before the crash, while other EU airlines were still flying after the crash as shown on p73, lines 26-28.	No	The threat increased with the start of the ballistic missile attack on 7 January 22:30 UTC.
TUI fly	5	The ... 2020.	TUI decided to close the entire Baghdad and Tehran FIRs on the 7th of January 2020.	No	We added this point in paragraph 4.4.2.
TUI fly	5	Overall ... clearly.	Replace with: For your consideration, which could enable you to create a link with intelligence sharing: Overall, it can be concluded that in practice this means that even if threats to civil aircraft are considered possible, flights continue unless there are (specific) signs of an increased threat environment and/or the risk appetite to an unacceptable level.	Partly	The first part of the text suggestion was added as this follows from the investigation.

Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
FAA	5	Adds some conclusion context to indicate there have been improvements following MH17, although more work is needed. Inserted paragraph in italics.	Proposed additional paragraph: <i>"The information exchange and dialogue preceding, during, and following the PS752 tragedy demonstrated the effective implementation of a number of lessons learned and best practices from the MH-17 tragedy to support a vibrant and proactive risk mitigation methodology involving an active partnership of states and operators. Although a tragedy still ensued in this instance, many airlines were sufficiently informed of the risks and ceased operations in the affected area in advance of the shoot down due to direction or guidance from their civil aviation authorities, air navigation service provider action, or as a result of their own risk management decisions. While the downing of flight PS752 demonstrates the need for further improvements, as communicated in the Safer Skies Initiative, the Netherlands, the U.S., and other key partners have been essential in leading conflict zone mitigation initiatives prior to and following from this tragedy. Nonetheless, this tragedy and the risks posed by further advances in anti-aircraft capable weapon technology and weapon proliferation to non-state actors and across conflict zones necessitates continued improvement as detailed in the findings and recommendations."</i>	No	Viewpoint of the FAA.
KLM	5	Both states and airlines dismissed scenarios drawing uncertain threats with catastrophic consequences to civil aircraft as improbable according to the prevailing risk assessment methodology.	KLM acht deze conclusies niet op haar van toepassing vanwege het feit dat dit scenario wel degelijk is meegenomen in haar assessments; zie eerdere opmerkingen. Daarnaast verwerpt KLM met klem de conclusie die volgt in regels 3 t/m 5 "The increased tension in combination with the presence of surface-to-air missiles (SAMs) was despite of identification of these aspects as risk-increasing factors no reason to practice precaution in order to protect passengers."	Partly	Sentence rephrased.
Min lenW	5	The increased tension in combination with the presence of surface-to-air missiles (SAMs) was despite of identification of these aspects as riskincreasing factors no reason to practice precaution in order to protect passengers.	The qualification "in order to protect passengers" seems inadequate and unnecessary, since it affects flight crews too. Suggest to delete the last part of the sentence. It is also known that airlines took precautionary measures such as more fuel for other alternate aerodromes, not situated in Iran/Iraq.	Yes	
AAIB Iran	5	"the airspace in Iran was not closed and was restricted based on own risk assessment and related NOTAM was not issued"		No	Sentence is factual. Management of Iranian airspace is outside the scope of this investigation.
Min JenV	5	The network of the Expert group appears to have been effective with regard to the gathering and sharing of information about this escalating conflict.	Uit het rapport blijkt dat de expertgroep daardoor ook effectief was waar het ging om het tijdig kunnen nemen van actie door de luchtvaartmaatschappijen, zoals geconcludeerd in rij 16-18 op p. 81.	No	This paragraph is only about information gathering and sharing.
Min lenW	5	The network of the Expert group appears to have been effective with regard to the gathering and sharing of information about this escalating conflict.	The report shows that the expert group was (therefore) also effective in terms of the airlines' ability to take timely action, as concluded on p81, lines 16-18.	No	This paragraph is only about information gathering and sharing.
TUI fly	5	The ... aviation.	General remark: Consider adding "because of limited legal basis'.	Partly	This remark is added in the conclusion of chapter 3.
TUI fly	5	The ... terms.	General: What specifically failed? What were the airspace restrictions before and after the incident?	Yes	

Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
TUI fly	5	A ... Altitude.	General comment: Which airspace and phase of flight? What kind of missiles were used? Why is an attack on civil aircraft at cruising altitude relevant to this section? No incident took place and airlines already had restrictions in place and augmented it further in the period 2 - 8 January 2020. How did you conclude that a military attack on a civil aircraft was dismissed? TUI already had restrictions in place which severely limited operations in the Baghdad and Tehran FIR. Overflight of Iranian airspace was only permitted at FL260 or above and only on an and north of airway G665. Operations south of Airway G665 was prohibited. Overflight of Iraqi airspace was only permitted on UL602 (to ALPET), UM860 and UM688 above 25.000 AGL. On the 7th of January 2020 TUI decided to complete prohibit operations in the Baghdad and Tehran FIRs. What exactly failed?	Yes	
KLM	5	The precautionary principle, which allows to take uncertainties into account in the decision- making phase, has not been integrated in the risk management approach.	Zoals eerder beschreven neemt KLM deze factoren wel degelijk mee in haar Risk Assessment; zie opmerking bij 4.2.1 regels 18 t/m 23	No	Dutch airlines, including KLM, take into account uncertainties to some extent, but this does not lead to attaching more weight being given to uncertain but catastrophic scenarios. Text in report has been amended.
Min JenV	5	In accordance with its policy	Dit betreft niet slechts een beleidskeuze maar ook de wettelijke mogelijkheden van de Nederlandse overheid.	No	The regulatory framework is considered to be part of the policy.
Min lenW	5	In accordance with its policy, (...)	Suggest to include after "policy": and regulation,	No	The regulatory framework is considered to be part of the policy.
Min JenV	5	In contrast	Niet duidelijk is hoe bijdragen aan het EU Risk Assessment proces in contrast staat tot het niet uitvoeren van een advies of vliegverbod, terwijl wel informatie is gedeeld met de luchtvaartmaatschappijen.	Yes	
Min lenW	5	(...) In contrast (...)	The investigation report does not make clear how contribution to the EU Risk Assessment process 'contrasts' with not issuing an advisory or not establishing a no-fly zone, even though information was shared with the airlines.	Yes	

Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
KLM	5	The Dutch state's oversight by the Human Environment and Transport Inspectorate (ILT) focuses on the airlines' conflict zone risk assessment processes and the implementation of the outcomes of this process in flight operations. This is in line with the oversight practice on the airline's (safety) management system. The current implementation of oversight activities does not include an evaluation of the actual decisions made by the airlines. The ILT is currently not equipped to assess classified threat information and has no expertise on military aspects.	<p>De onderzoekers constateren dat de overheid geen zicht heeft op de inhoud van de risk-assessments en uitkomsten van de airlines (de kwaliteit van de inhoud).</p> <p>KLM kan zich in een vorm van kwalitatief toezicht vinden. Echter moet dit toezicht te allen tijde objectief zijn, waarbij het slechts draait om een safety en security beoordeling. Politieke, economische of andersoortige elementen mogen hier geen enkele rol spelen.</p> <p>De Inspectie Leefomgeving en Transport (ILT) is de toezichthouder van het Ministerie van Infrastructuur en Waterstaat en houdt zich bezig met (o.a.) veilig transport, waaronder de burgerluchtvaart. De formele toezichtstaak t.a.v. de burgerluchtvaart is daarmee bij ILT belegd en behelst een vanuit infrastructuur beredeneerde en daarmee objectieve /zuivere controle op het safety en security proces binnen airlines. KLM is daarom voorstander om genoemde kwalitatieve beoordeling bij ILT te beleggen, om een objectieve benadering te waarborgen.</p> <p>Dat ILT daar op dit moment wellicht niet toe is geëquipeerd doet aan de juistheid van het daar onderbrengen van genoemde taak ons inziens niets af. Dat is een kwestie van organiseren. Er moet dan wel een wettelijke grondslag komen om ILT toegang te geven tot classified information.</p>	No	Viewpoint of KLM.
ILenT	5	replace evaluation with: judgement/assessment	see line above	Yes	
Min JenV	5	the Dutch State has not implemented any measures as a precaution to protect passengers and citizens.	Uit het rapport blijkt dat de Nederlandse overheid diverse maatregelen heeft genomen om passagiers, bemanning en burgers te beschermen. Zo werd o.m. geconcludeerd dat de mate en het proces van informatiedeling binnen de expertgroep effectief en tijdig verloopt, waardoor luchtvaartmaatschappijen tijdig en effectief risico-analyses kunnen uitvoeren. Deze conclusie lijkt dan ook af te wijken van de lijn van het rapport, en van de conclusies uit het OVV-rapport 'Vliegen over conflictgebieden' uit 2019 (zie bijv. derde gedachtebolletje op p. 69).	Yes	
Min IenW	5	(...) the Dutch State has not implemented any measures as a precaution to protect passengers and citizens.	This conclusion seems to deviate from the line of this report and also from the conclusions in the 2019 report, chapter 6, first page, 3rd bullet. The investigations show that the Dutch government has taken measures to protect passengers, flight crews and citizens. For example, it is concluded that the extent and process of information sharing within the expert group is effective and timely, allowing airlines to conduct timely and effective risk analyses.	Yes	
TUI fly	5	Public accountability	Change to: Public information - General remark: Airlines are not legally accountable for disclosing information	Yes	
TUI fly	5	Dutch ... choices.	Replace with: Dutch airlines provide some information on their websites about their risk assessment process for flying over or near conflict zones, but like airlines worldwide, they are not transparent about specific airspace restrictions, flight altitudes, or flight routes choices, By detailing the rationale behind a choice could irreversible damage the airline's information position and possibly the source as well.	Yes	

Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
TUI fly	5	Therefore ... airlines	Request to delete: Passengers, consumer organization and media are no subject matter experts and cannot form a proper judgement without access to current restricted information. Furthermore, consumer organizations and the media cannot form an independent judgement, since their business model is to raise revenue without being accountable for passenger safety. Consumer organizations and the media can form a (premeditated) inaccurate opinion to attract the general public which in turn increases their revenue.	Partly	Text deleted due to changes in chapter 4. The argumentation provided by TUI fly is their viewpoint. The report states that transparency would allow organizations to provide guidance to passengers in selecting airlines and flights (par. 4.2.3).
Min IenW	A.2	III. providing guidance to airlines by the state of the operator in the form of advice or regulation;	Incomplete range of guidance examples. The range of guidance as published in the Appendices MH17 Crash Final Report, Appendix U and ICAO Doc 10084, Appendix C is: no/limited guidance, provision of information, recommended actions/advice, regulations. Suggest to complement.	Partly	The sharing of information by states is captured under aspect II.
Corendon Dutch Airlines	Appendix A/ A4	Corendon Dutch Airlines	Volledige naam is Corendon Dutch Airlines, dit om geen misverstand te krijgen met andere Corendon vennootschappen en in lijn te blijven met de rest van het rapport.	Yes	
Min IenW	Whole report	Mentioned times in timelines and figures 21-22 (pages 49-50, 52-53, 75-76, 78)	Double check the mentioned times in the timelines and figures related to the sequence of events. Some of the mentioned times seem not to be correct.	Yes	
KLM		<p>Consideration en Recommendations: <u>1. Airspace management als focus.</u></p> <p>Allereerst merkt KLM op dat het draft rapport zich veelal focust op het risico assessment van de airlines en de controle daarop en ons inziens te weinig op het falende airspace management.</p> <p>In hoofdstuk 5 wordt kort gesproken over de falende werking: <i>"In practice, most states with a conflict zone on their territory or near to their territory do not close or restrict their airspace, nor do they share information about the conflict. This was also the case in Iran in January 2020."</i></p> <p>Aan het falende airspace management ligt ten grondslag dat overheden hun verantwoordelijkheid op dit vlak niet nemen. Hier ligt wat ons betreft de (belangrijkste) oplossing, aangezien "airspace management in conflict zone situations a crucial safety barrier is (hoofdstuk 5)".</p> <p>Wat KLM betreft is het niet alleen een "crucial safety barrier" maar ook de éérste barriere. Het begint bij goed luchtruimbeheer. En dat is de verantwoordelijkheid van overheden. Het luchtruim wordt namelijk beschouwd als infrastructuur en wordt geregeld, gefaciliteerd en beheerd door overheden. Airlines zijn in dit verband slechts gebruikers.</p> <p>Wat KLM betreft moet de focus op het aanpakken van de oorzaak van de problemen komen te liggen. En dat betekent in dit geval dat overheden hun verantwoordelijkheid moeten gaan nemen en de eerste en cruciale barriere van airspace management serieus vorm moeten gaan geven. Dit is tevens rechtvaardiger in het kader van een eerlijke concurrentiepositie voor airlines.</p> <p>Wat KLM betreft zou het verbeteren van airspace management een eerste aanbeveling moeten worden.</p>		No	Viewpoint of KLM.

Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
KLM		<p>Consideration en Recommendations: <u>2. Risk assessments airlines en informatiedeling overheden-airlines</u></p> <p>In "5. Conclusions" staat het volgende beschreven:</p> <p><i>"Risk assessments Dutch airlines all implemented a risk assessment process related to flying over or near conflict zones in which they use risk qualification schemes that assess likelihood and consequences. The investigation reveals that in the period 2 –7 January 2020 the problem was not the information available or the decision-making procedure, but a failure to assess the possibility of scenarios in more qualitative terms. A military attack on a civil aircraft at cruising altitude was dismissed as an improbable scenario despite information about the heightened military tension and the uncertainty about further developments of the conflict in combination with the presence of surface-to-air missiles (SAMs) that could reach cruising altitude.</i></p> <p><i>The traditional risk assessment method allows improbable, but possible scenarios to be dismissed. The precautionary principle, which allows to take uncertainties into account in the decision-making phase, has not been integrated in the risk management approach. A precaution-based risk approach is necessary for flight routes over or near conflict zones considering the inherent uncertainty pertaining to rapidly escalating conflicts and the catastrophic consequences of a surface-to-air missile encounter."</i></p> <p>Voor wat betreft KLM gaat de conclusie dat er sprake was van "a failure to assess the possibility of scenarios in more qualitative terms. A military attack on a civil aircraft at cruising altitude was dismissed as an improbable scenario" niet op. KLM heeft namelijk dit scenario wel in haar risico assessment betrokken en er zijn ook maatregelen getroffen.</p> <p>N.a.v. een risico-assesment is er op 3 januari 2020 besloten tot aanpassing van het routeplan waardoor vliegtuigen geen gebruik meer konden maken van luchthavens in Iran en Irak in contingency situaties. KLM vliegtuigen konden hierdoor alleen nog op kruishoogte over deze landen vliegen. Op basis van o.a. overheidsinformatie meende KLM dat dit veilig kon plaatsvinden.</p> <p>Gelet op bovenstaande is KLM van mening dat zij genoemde scenario's, waarbij sprake is van "increased tension", de mogelijkheid tot "rapidly escalating conflicts" en "the catastrophic consequences of a surface-to-air missile encounter" niet alleen assest, maar daar ook –indien nodig- opvolging aan geeft. Niet alleen blijkt dat uit onderhavige casus, maar ook uit het feit dat KLM voor meer dan 50 risico-gebieden restricties heeft ingesteld waarin dit soort elementen een rol spelen.</p> <p>Continues on next page </p>		No	Viewpoint of KLM.

KLM

Continued

Daarnaast is KLM van mening dat de algemene conclusie dat "it is undesirable that the risk is considered tolerable" "when the situation is uncertain and SAMs are present" (p.61 rapport) tot disproportionele gevolgen leidt, als dit betekent dat er (via een precaution-based approach) in die gevallen (zonder nadere analyse) niet meer mag worden gevlogen over conflict zones.

Luchtvaartmaatschappijen nemen wel degelijk onzekere factoren mee in hun risk-assessment. Ons inziens rechtvaardigt een zeer geringe kans op een onwaarschijnlijk scenario niet een dergelijk rigoureuze algemene maatregel van stoppen met vliegen over een conflict zone als van genoemde factoren sprake is (zonder dat er sprake is van een nadere analyse).

Dit is aan de ene kant gebaseerd op het feit dat dit geen recht doet aan de uiterst gedetailleerde wijze waarop invulling wordt gegeven aan het beoordelen van dergelijke scenario's, waarbij het allergrootste gedeelte goed verloopt. Aan de andere kant zal een dergelijke algemene benadering grote gevolgen hebben voor de burgerluchtvaart omdat er zeer veel van dit soort gebieden te definiëren zijn op de wereld, waardoor vliegen zeer beperkt mogelijk zal worden. Om dit laatste te voorkomen is eveneens een gedetailleerde inschatting i.p.v. een algemene en rigoureuze maatregel meer geëigend.

Om toch de "onwaarschijnlijke" kans van een human error (welke toch tot in elk geval 2 maal toe tot desastreuze gevolgen heeft geleid) nog kleiner te maken, ziet KLM veel meer in een goede, gedetailleerde en snelle informatievoorziening vanuit de overheden naar de airlines en een beter airspace management, zoals onder 1 genoemd. Dat zijn dé sleutels voor het verbeteren van de vliegveiligheid en het reduceren van deze (al zeer kleine) kans op catastrofale gevolgen. De aanbevelingen zouden wat KLM betreft daar dan ook op moeten zien.

Continues on next page 

KLM		<p>Continued</p> <p>Bij gebieden met verhoogde spanningen en de mogelijkheid tot een snel escalerend conflict draait het namelijk om een zo goed mogelijke informatiepositie. Uitbreiding van capaciteit en taakstelling bij de inlichtingendiensten om hiertoe meer informatie te verzamelen kan zeker bijdragen aan het beter/specifieker duiden van deze scenario's. KLM juicht een dergelijke uitbreiding dan ook toe. Daarnaast kan een specifiekere duiding van deze scenario's de Nederlandse overheid ondersteunen om in een vroeger stadium andere landen aan te kunnen spreken op hun (falende) luchtruimbeheer.</p> <p>Wat KLM betreft zou een tweede aanbeveling het nog verder verbeteren van een goede, gedetailleerde en snelle informatievoorziening vanuit de overheden naar de airlines zijn.</p>			
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Organisation	Section/Paragraph	Text to be corrected (first ... last word)	Argumentation / substantiation	Corrected	Dutch Safety Board response
KLM		<p>Consideration en Recommendations: <u>3. Toezicht op risk assessments</u></p> <p>De onderzoekers constateren dat de overheid geen zicht heeft op de inhoud van de risk-assessments en uitkomsten van de airlines (de kwaliteit van de inhoud).</p> <p>KLM kan zich in een vorm van kwalitatief toezicht vinden. Echter moet dit toezicht te allen tijde objectief zijn, waarbij het slechts draait om een safety en security beoordeling. Politieke, economische of andersoortige elementen mogen hier geen enkele rol spelen.</p> <p>De Inspectie Leefomgeving en Transport (ILT) is de toezichthouder van het Ministerie van Infrastructuur en Waterstaat en houdt zich bezig met (o.a.) veilig transport, waaronder de burgerluchtvaart. De formele toezichtstaak t.a.v. de burgerluchtvaart is daarmee bij ILT belegd en behelst een vanuit infrastructuur beredeneerde en daarmee objectieve /zuivere controle op het safety en security proces binnen airlines. KLM is daarom voorstander om genoemde kwalitatieve beoordeling bij ILT te beleggen, om een objectieve benadering te waarborgen.</p> <p>Dat ILT daar op dit moment wellicht niet toe is geëquipeerd doet aan de juistheid van het daar onderbrengen van genoemde taak ons inziens niets af. Dat is een kwestie van organiseren. Er moet dan wel een wettelijke grondslag komen om ILT toegang te geven tot classified information.</p>		No	Viewpoint of KLM.
TUI fly	N/A	N/A	General remark: Some terms can be abbreviated earlier in the report.	No	Viewpoint of TUI fly.