

REPORT

of the Committee of Experts formed for the investigation of circumstances related to the transport of equipment for military use on the passenger ferry "Estonia" in September 1994

Background

By its Order No. 129 of 07.03.2005, the Government of the Republic formed a Committee of Experts for the investigation of circumstances related to the transport of equipment for military use on the passenger ferry "Estonia" in September 1994 (hereinafter the Committee). Six questions in connection with possible transport of military equipment on three dates in September 1994 were presented to the Committee. The Committee presented the report on its work on 01.09.2005.

On 06.10.2005 the Government of the Republic extended the term of authorities of the Committee and asked to investigate additionally whether there were any substantial circumstances related to the causes of the sinking of the passenger ferry "Estonia" that had not been investigated thoroughly enough. The Committee presented its second report on 10.03.2006.

On 31.03.2006 the Government of the Republic extended the term of authorities of the Committee with an aim to ask for explanations of members of the Joint Accident Investigation Commission (hereinafter JAIC), which operated from 29.09.1994 until December 1997, regarding the statements in the Committee's report of 10.03.2006.

By letter of the Minister of Justice of 31.05.2006, Captain Uno Laur, who had been Chairman of JAIC, was presented with questions compiled on the basis of the Committee's report, and U. Laur presented a memorandum of 26.07.2006 in reply. According to the preamble of the memorandum, all members of JAIC had an opportunity to study its draft and comment on it; in addition some experts had been heard on various specific issues.

This report provides a summary of JAIC's explanations and reflects the position of the Government Committee on whether the explanations in the memorandum are adequate to drop the issues raised in clauses 1 to 22 of the Committee's report of 10.03.2006. The memorandum and the letter of the Minister of Justice which served as a basis for the memorandum along with their translations are appended to this report. The report also provides a brief summary of developments regarding the circumstances overshadowing the objectivity of the then investigation that were pointed out in clauses 25 to 33 of the report of 10.03.2006.

The structure of the report follows the structure of the Committee's report of 10.03.2006 (hereinafter the Report).

Explanations of JAIC members on issues in the Final Report

1) Investigations to preclude explosion

Clauses 1 to 3 of the Report treated investigations with which JAIC precluded the possibility that the bow visor attachments had broken as a consequence of an explosion. The Committee concluded on the basis of the Final Report and the statements by Kari Lehtola, Finnish Head of JAIC, that in order to determine a possible explosion, thin layer chromatography (TLC), liquid chromatography (LC) and drop analysis of paint samples taken from the interior of the visor were made. As these did not show any traces of an explosive, no other studies were made.

This conclusion was affirmed in the memorandum. An additional explanation was given that based on observation of the visor, experienced experts did not establish any traces of sudden breaking or any traces caused as a result of a rise in temperature, which are characteristic of an explosion. Therefore they did not consider it necessary to make any additional studies.

The Committee finds this explanation understandable and considers JAIC's decision not to make any additional studies to be justified.

2) Inspection and filming of the bottom of the hull

Clauses 4 to 7 of the Report treated the inspection and filming of the bottom part of the hull. It was concluded that it had never been inspected or filmed in the full possible extent. This conclusion is affirmed in the memorandum in principle; at the same time no unambiguous explanation is given on why it was not done.

It is stated in the memorandum that the starboard side of the ship was inside the soil material of the seabed and it was impossible to penetrate it by any means. The Committee admits this fact, and therefore the wording used in the Report was the inspection and filming of the bottom of the hull in the full *possible* extent, i.e. in the accessible extent. As indicated in clauses 5 and 6 of the Report, the bottom part of the hull was filmed both during the diving operation in December 1994 and during ROV inspections carried out by the Finnish Border Guard and the Coast Watch in October the same year. Yet the problem is that video recordings made during these investigations have interruptions and disturbances. The Committee has not stated and does not state that these video recordings have been edited; the Committee states that as far as the Committee knows there is no video material that shows systematic inspection and filming of the bottom part of the hull.

In the opinion of the Committee, the lack of such video material is regrettable, because this makes it difficult to conclusively defend the version of the sinking of the ship presented in the Final Report.

3) Contradictions and disregarded circumstances

Opening of the ramp and heavy blows

Clauses 9 to 17 of the Report treated inconsistencies between the conclusions in the Final Report and statements of the survivors regarding the opening of the bow ramp and the thrusts felt by the witnesses at the beginning of the accident. In the memorandum JAIC members admitted these inconsistencies, giving their brief

explanations why they disregarded some statements or how these matched with the version of the accident presented in the Final Report. As the explanations do not contain in principle any new circumstances as compared to the Final Report, the Committee cannot say that the contradictions are eliminated.

At the same time, the Committee does not find it necessary to repeat these inconsistencies here and to mediate the explanations given in the memorandum. As it is stated in clause 17 of the Report, the Government Committee was not aimed at accusing JAIC of ignoring or distorting of evidence. The aim of the Committee was to draw the Government's attention to the fact that the Final Report and the material that served as its basis are not consistent in all respects, whereas the contradictions relate to circumstances that are essential from the point of view of causes and sequence of events of the accident. Contradictions, which cannot be eliminated, in key issues is obviously a fact that has diminished the credibility of the Final Report and the entire investigation and has made it possible to attack the Final Report.

Water inflow to lower decks

Clauses 18 to 22 of the Report treated the flooding of decks below the car deck and it was noted that the issue was treated very briefly in the Final Report. It was only stated in the Final Report that the watertight compartments below the car deck were flooded from above, because different decks were connected via staircases and other openings. The Committee found it to be uninformative, because the ship is divided into watertight compartments on the lower decks and the free flowing of water is thus excluded. The Committee also suspected that the brief handling of the issue of water filling the ship was not only the issue of writing the Final Report, but rather no adequate attention was paid to it during the investigation.

The memorandum does not contain any new qualitative data about the movement of water on the ship; the statements are general and hypothetical as in the Final Report. It is stated there that water could get down from the car deck through the openings in the elevator doors and doors for passengers as well as through ventilation ducts if they were broken. According to the memorandum there is no doubt that water could get below the car deck at the final stages of the sinking which neither took long nor slowed down the sinking significantly. It is also admitted in the memorandum that the breaking of windows on decks 4 and 5 was not analysed by testing, but it was concluded on the basis of other accidents and the opinion of experts. It is also admitted that divers did not examine the situation of watertight doors, doors on the car deck and ventilation ducts. It does not appear from the memorandum that JAIC had studied the flooding of decks below the car deck by means of special calculations, modelling or other analyses.

The Committee maintains its position presented in its previous Report that JAIC has not exhaustively studied or treated in the Final Report the issue of flooding of lower decks. Until it is not known when and how did water get below the car deck, it is not possible to describe the sinking of the ship accurately. The getting of water on the car deck can only serve as an explanation for capsizing of the ship, but not for its rapid sinking.

4) In summary

The Committee is satisfied with the explanations of JAIC members about the investigations made to preclude the possible explosion near visor attachments. Based on the memorandum, it can also be finally concluded as specified in clause 7 of the Report that the bottom part of the hull has not been systematically inspected or filmed. Yet, other issues raised in the Committee's Report of 10.03.2006 still need an explanation.

Here the Committee wants to point out that the contradiction between the shipwreck scenario presented in the Final Report and the survivors' testimony has also been pointed out in its interim report by the international consortium of scientists, which investigates the sinking of the Estonia upon the commission of the Swedish Government.¹ This consortium has also stated in its interim report that the flooding of decks below the car deck has not been explained by JAIC and there is hitherto no satisfactory explanation about it.²

Information about other circumstances

A reference is made in clauses 25 to 26 of the Report to a video recording of an interview with a person who claims that he took part as a diver in a diving investigation at the shipwreck already a few days after the accident. The person claims that the leader of the divers was a marine officer, who is serving also now in the Swedish Defence Forces. The Committee cannot add anything to it, because it has not been able to meet the interviewed person or the officer mentioned by the person.

A reference is made in clause 27 of the Report to the fax, where Tuomo Karppinen informs Börje Stenström that they had taken to the sea already on Sunday, because they thought that they had found the visor with the sonar and they had touched the visor and ramp with ROV. The fax was sent on 10.10.1994, i.e. ten days before finding of the visor. The author of the fax has later on explained that instead of the visor he wanted to refer to the forebody, where the visor was before it fell off, but he did not know the Swedish term for this part of the ship. The Committee has no information to refute this statement and the Committee does not see any grounds to continue the treatment of this issue.

Clauses 28 to 32 of the Report treat the diving operation, which took place from 2-5.12.1994 and the video recordings made during it. In clause 28, a reference was made to a concrete video clip and, based on its log, to a possibility that the car deck was still inspected during the diving operation, which is contrary to the statements in the Final Report. In clause 29, a question was raised whether and why did divers examine a suitcase of a passenger. Clauses 30 and 31 reviewed the activities of JAIC members in planning and management of the diving operation, and in clause 32 it was stated that the Chairman of the Committee could not obtain a written permit to interview the divers without the confidentiality obligation by which the divers were bound.

¹ See [www.safety-at-sea.co.uk/mvestonia/Public Downloads](http://www.safety-at-sea.co.uk/mvestonia/Public%20Downloads) - Research Study on the Sinking Sequence of m/s Estonia WP2.1, pages 5-15.

² See [www.safety-at-sea.co.uk/mvestonia/Public Downloads](http://www.safety-at-sea.co.uk/mvestonia/Public%20Downloads) - Research Study on the Sinking Sequence of m/s Estonia WP2.2, pages 3-4.

In connection with these diving operations, the Committee wants to point out two developments. First, the Swedish Government has assigned the Swedish National Laboratory of Forensic Science with a task of examining the video recordings made during the diving operations to establish whether the recordings have been edited. Based on an agreement between the Swedish Minister of Defence and the Estonian Minister of Justice, an expert of the Estonian Forensic Service Centre is also involved in carrying out the examination. During this examination, it will also be possible to analyse the above-mentioned video clip of possible inspection of the car deck. As a second new circumstance related to diving operations, it must be pointed out that the Swedish Maritime Board has repealed clause 12, which imposes the confidentiality obligation, of the contract entered into with *Rockwater*, the company that organised the diving operations. As the Committee learnt about it in February this year, the Committee has not been able to organise any meetings with the divers.

Tallinn, 15 March 2007

[Signed]
Margus Kurm

Chairman of the Committee
Leading Public Prosecutor