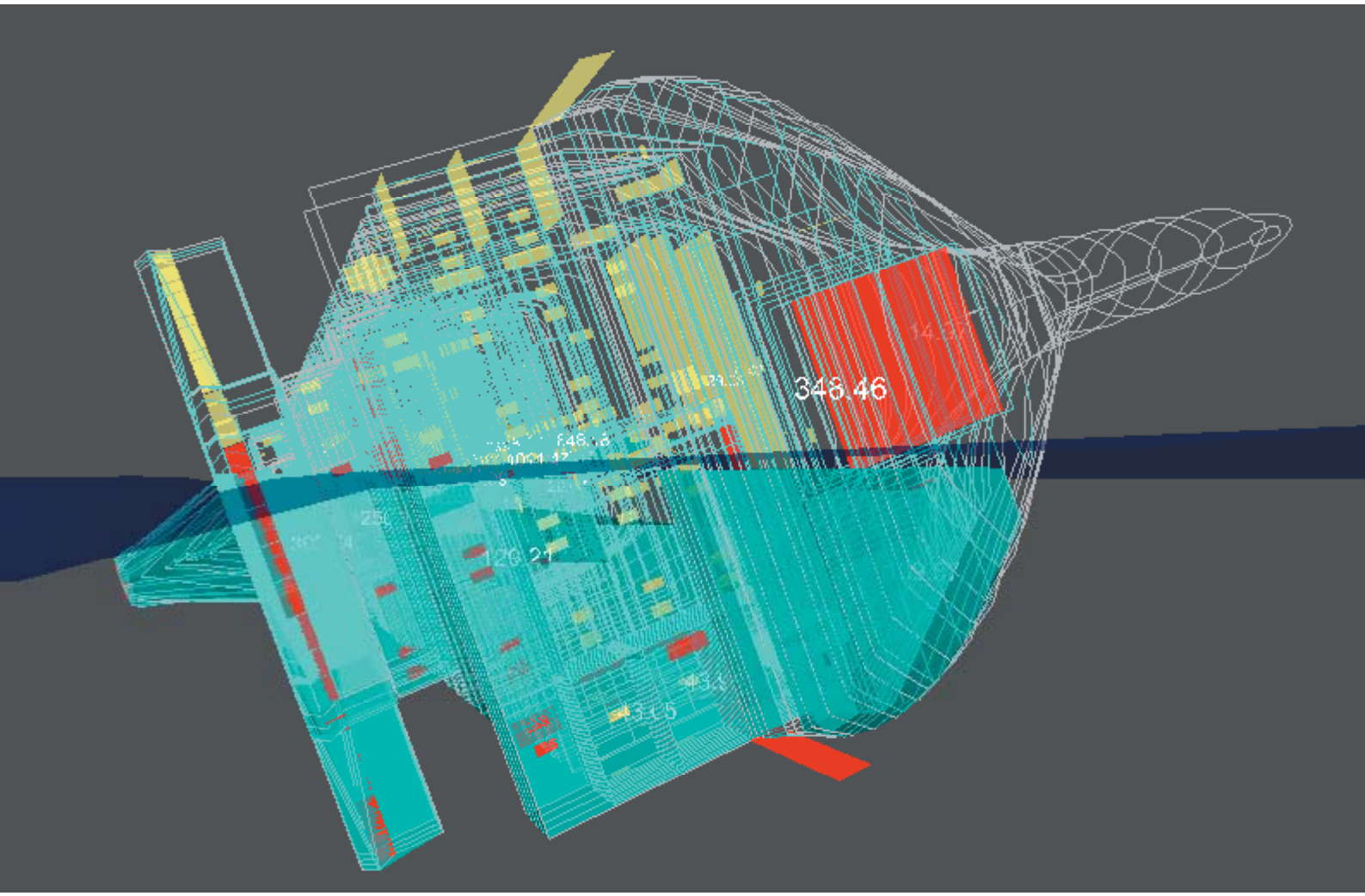
The final reports[1] of the research studies on the sinking sequence of MV Estonia

Workshop in Stockholm

May 23, 2008

IVA, Royal Swedish Academy of Engineering Sciences, Stockholm, Sweden



[1] The final reports are available from the 5th of May 2008 at www.safety-at-sea.co.uk/mvestonia and www.hsva.de

Background of the workshop

The Swedish Government decided in March 2005 that VINNOVA, in its capacity as the authority responsible for the Swedish Maritime Safety Programme, should commission a research study about the sinking sequence of the MV Estonia.

This assignment was carried out by inviting Swedish as well as foreign research institutions of high international standard to submit proposals on a research study on the sinking sequence of MV Estonia.

The Call or Request For Proposals resulted in 4 proposals of which two were chosen to be granted. They were:

The SSPA Consortium comprising

- SSPA Sweden AB in Göteborg, Sweden (Co-ordinator)
- SSRC (Ship Stability Research Centre) / Safety at Sea Ltd, Department of Naval architecture and Marine Engineering, Universities of Glasgow and Strathclyde in Glasgow, UK (Technical Co-ordinator)
- MARIN (Maritime Research Institute Netherlands) in Wageningen, the Netherlands.
- Department of Shipping and Marine Technology, Chalmers University of Technology in Göteborg, Sweden

The HSVA Consortium comprising

- Hamburgische Schiffbau Versuchsanstalt GmbH (Hamburg Ship Model Basin) in Hamburg, Germany, (Co-ordinator).
- TUHH, Technical University of Hamburg, Hamburg, Germany

Background material for the studies were the Joint Accident Investigation Commission's (JAIC) final report (Dec 1997) and the National Board of Psychological Defence (SPF), Pilot Study of the Sequence of Sinking (March 2003).

The overall goal of the research studies is to understand the sinking sequence and explain the underlying causes of the loss of MV Estonia and derive recommendations on design and operation of ro-ro passenger vessels in order to prevent such a tragedy from happening again.

The research studies combines a wealth of ship design, analytical modelling, computer simulation and experimentation expertise deployed to scrutinize and review the available evidence.

Workshop Programme May 23, 2008

Venue: IVA, Royal Swedish Academy of Engineering Sciences, Grev Turegatan 14, Stockholm
Chairman: **Dr Tom Allan**, Former Chairman of IMO Maritime Safety

08.15-08.45 Registration

08.45-09.00 Opening addresses

- Government representative
- **Per Eriksson**, Director General, VINNOVA

09.00-10.30 HSVA consortium

- Simulation of the sinking sequence of the MV Estonia,
  Petri Valanto, HSVA, and **Stefan Krüger**, TUHH
- Simulation of the escape of passengers and crew on the MV Estonia,
  Petri Valanto, HSVA
- Conclusions,
  Petri Valanto, HSVA, and **Stefan Krüger**, TUHH

10.30-10.45 Coffee/Tea break

10.45-12.00 SSPA consortium

- Summary of the research study,
  Claes Källström, SSPA
- Evidence review, course of events and simulations of flooding and sinking,
  Olle Rutgersson, Jan Bergholtz and **Martin Schreuder**, Chalmers
- Model tests and simulations of progressive flooding through accommodation decks,
  Jan Blok, MARIN

12.00-13.00 Lunch - IVA premises

13.00-14.00 SSPA consortium Continuation

- Model tests and simulations of flooding, heeling, capsizing and sinking,
  Björn Allenström and **Claes Källström**, SSPA
- Simulations of the sinking process and conclusions,
  Andrzej Jasionowski, Safety at Sea, and **Dracos Vassalos**, SSRC

14.00-15.00 Short presentations or comments (max 10 minutes each)
By experts who have requested this in advance and provided VINNOVA with a title submitted not later than 15th of May 2008 to VINNOVA (VINNOVA@VINNOVA.se).

15.00-15.30 Coffee/Tea break

15.30-16.30 Questions and answers
Special panel chaired by **Dr. Tom Allan**

Registration

Registration is required not later than 15th of May 2008 to Lena Dalsmyr, VINNOVA, e-mail Lena.Dalsmyr@VINNOVA.se
The workshop is free of charge.

Presentations

Participants who plan to give a short presentation or comment during the afternoon session should register a title to the presentation followed by name and affiliation to VINNOVA@VINNOVA.se, attention John Graffman, not later than 15th of May 2008.

Further information

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