

MSC Guidelines for the Review of Regulation 38 Alternative Design Documentation during the ICOC

Procedure Number: SOLAS-53

Revision Date: 7/23/2018

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References

- SOLAS 2014 Cite: III/38.4.2
 - MSC.1/Circ.1455
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Contact Information

If you have any questions or comments concerning this document, please contact the Marine Safety Center (MSC) by e-mail or phone. Please refer to Procedure Number: **SOLAS-53**.

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Reference Text

SOLAS III/38.4.2: A copy of the documentation, as approved by the Administration, indicating that the alternative design and arrangements comply with this regulation shall be carried on board the ship.

MSC.1/Circ.1455: 7.2.2: In General, the following documentation should exist:

- .1 certificates (see paragraph 6.12.2.2) stating that the ship has an alternative and/or equivalency, including condition of approval, if any; and
- .2 information on the alternative and/or equivalent design, comprising of the following:
 - .1 scope of the analysis or design, including the critical design assumptions and critical design features;
 - .2 description of the alternative and/or equivalent design and arrangements, including drawings and specifications;
 - .3 list of IMO regulations affected;
 - .4 summary of the results of the engineering analysis and basis for approval; and
 - .5 test, inspection, and maintenance requirements.

MSC.1/Circ.1455: 7.4 IMO Reporting

- 7.4.1 The Administration that approves an alternative and/or equivalent design should submit detailed relevant information to the IMO, based on the form set out in the appendix, as appropriate, for circulation to the Member Governments. This information should enable Member Governments to trace the basis of the decision but not infringe upon any Intellectual Property Rights and it should comprise, as a minimum:
 - .1 scope of the analysis or design, including the critical design assumptions and critical design features;
 - .2 description of the alternative design and arrangements, including drawings and specifications;
 - .3 list of IMO regulations affected;
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- .4 summary of the results of the engineering and risk analysis, and basis for approval (including criteria, standard, ect.);
 - .5 description of any model used in the risk and engineering analysis (including risk models as well as computational software), and the verification procedure used during the model development;
 - .6 description of any design casualty scenarios and related software simulations, tests and trials made during the approval process;
 - .7 test, inspection, and maintenance requirements for the operational phase; and
 - .8 condition of approval, if any
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Guidance

Vessels in the Initial Certificate of Compliance (ICOC) program, employing Regulation 38 to show equivalence to regulations contained in Chapter III, must present the completed documentation required by the regulation prior to the successful completion of MSC plan review. A final copy of this documentation must be submitted to MSC during the plan review process and be available during the ICOC examination.

Background

The increasing use of performance based designs to extend vessels beyond the prescriptive limits contained in SOLAS Chapter III has created the potential for future arrangement changes which violate assumptions contained in an alternative design. The primary means to prevent this from occurring is to ensure complete documentation of the alternative design is available to designers, classification societies, and port state examiners. In order to verify these documents are available and are complete, the MSC will review and retain a copy of the final required documentation and verify during the ICOC examination that copies are available onboard the ship.

Disclaimer

This guidance is not a substitute for applicable legal requirements, nor is it itself a rule. It is not intended to nor does it impose legally-binding requirements on any party. It represents the Coast Guard's current thinking on this topic and may assist industry, mariners, the general public, and the Coast Guard, as well as other federal and state regulators, in applying statutory and regulatory requirements. You can use an alternative approach for complying with these requirements if the approach satisfies the requirements of the applicable statutes and regulations. If you want to discuss an alternative, you may contact The Marine Safety Center, who is responsible for implementing this guidance.
