

INTERNATIONAL MARITIME ORGANIZATION
4 ALBERT EMBANKMENT
LONDON SE1 7SR

Telephone: 020 7587 3152
Fax: 020 7587 3210



IMO

E

Ref. T1/3.02
T5/1.01

MSC/Circ.1180
MEPC/Circ.474
25 August 2005

**AMENDMENTS TO THE GUIDELINES FOR FORMAL SAFETY ASSESSMENT (FSA)
FOR USE IN THE IMO RULE-MAKING PROCESS (MSC/Circ.1023 - MEPC/Circ.392)**

1 The Maritime Safety Committee, at its seventy-fourth session (30 May to 8 June 2001), and the Marine Environment Protection Committee, at its forty-seventh session (4 to 8 March 2002), approved Guidelines for formal safety assessment (FSA) for use in the IMO rule-making process, as set out in the annex to MSC/Circ.1023 - MEPC/Circ.392.

2 The Maritime Safety Committee, at its eightieth session (11 to 21 May 2005), and the Marine Environment Protection Committee, at its fifty-third session (18 to 22 July 2005), reviewed the aforementioned Guidelines in the light of the experience gained with their application and approved amendments thereto as set out in the annex.

3 Member Governments and non-governmental organizations are invited to apply the Guidelines contained in MSC/Circ.1023 - MEPC/Circ.392 as amended by this circular.

ANNEX

AMENDMENTS TO THE GUIDELINES FOR FORMAL SAFETY ASSESSMENT (FSA) FOR USE IN THE RULE-MAKING PROCESS (MSC/CIRC.1023 - MEPC/CIRC.392)

- 1 Paragraph 3.1.2.1 is replaced with the following:

“3.1.2.1 The depth or extent of application of the methodology should be commensurate with the nature and significance of the problem; however, experience indicates that very broad FSA studies can be harder to manage. To enable the FSA to focus on those areas that deserve more detailed analysis, a preliminary coarse qualitative analysis is suggested for the relevant ship type or hazard category, in order to include all aspects of the problem under consideration. Whenever there are uncertainties, e.g. in respect of data or expert judgement, the significance of these uncertainties should be assessed.”
- 2 The last sentence of paragraph 3.2.2 is replaced with the following:

“Such data must be reviewed objectively and their reliability, uncertainty and validity assessed and reported. The assumptions and limitations of these data must also be reported.”
- 3 New paragraphs 3.2.3 and 3.2.4 are added as follows:

“3.2.3 However, one of the most beneficial qualities of FSA is the proactive nature. The proactive approach is reached through the probabilistic modelling of failures and development of accident scenarios. Analytical modelling has to be used to evaluate rare events where there is inadequate historical data. A rare event is decomposed into more frequent events for which there is more experience available (e.g. evaluate system failure based on component failure data).

3.2.4 Equally, consideration should also be given to cases where the introduction of recent changes may have affected the validity of historic data for assessing current risk.”
- 4 Paragraph 10.1.3 is amended as follows:

“3 explain and reference the basis for significant assumptions, limitations, uncertainties, data models, methodologies and inferences used or relied upon in the assessment or recommendations, results of hazard identifications and risk analysis, risk control options and results of cost benefit analysis to be considered in the decision-making process.”
- 5 Paragraph 6.2 in appendix 8 is amended as follows:

“2 assumptions, limitations or uncertainties and the basis for them; and”.

6 At the end of paragraph 5.1 of appendix 8, the following text is added:

“and the name and contact point (e-mail address, telephone number and mailing address) of the co-ordinator of the FSA”.

7 At the end of appendix 8, for the annexes, the following is added at the end of paragraph .1:

“and the name and contact point (e-mail address, telephone number and mailing address) of the co-ordinator of the FSA”.
