

IP: N°98

**IP title: Impact of Extended Service Goal (ESG) exercise on MRBR /
consideration of Design Service Goal DSG in MSG 3 analysis.**

Meeting:2009 IMRBPB

Initial proposal from MPIG

Where Systems/structure/zonal analysis takes into consideration the selected design service goal (DSG) in order to determine the result of the analysis, the DSG shall be mentioned as part of the assumptions taken into consideration during analysis for each MRBR.

(para to be included in MSG-3 – location to be determined)

MSG-3 analysis that has taken a DSG value into consideration shall be reconsidered to confirm the continued effectiveness of the results. This may be accomplished through evaluation of in-service data.

(para location to be discussed – not appropriate for MSG-3 or IP44 guidelines)

Meeting: Ottawa PB meeting 2009

Date :01/12/2009

Design Goal Extension criteria: Applicants must go back to the applicable type certification authority (Flight Standards and Aircraft Certification Office) for the aircraft and establish what specific areas need to be revisited to extend the goal. The following are some, but not necessarily all of the items that need to be included in the proposal to provide objective justification for the request:

Revisit existing MSG-3 analysis for validation regarding the new DSG.

Note: In addition to revisiting the analysis, other data/analysis/inputs, from in service data should be considered during validation of the new DSG.

Such as AD, service bulletins, Alert bulletins, service letters....

Meeting IMRBPB 2010 SIN

Date: 28/04/2010

MPIG comment prior regulatory outout from Ottawa meeting:

- MPIG support PB proposal to introduce the following paragraph into MSG-3 (location tbd):
Where systems/structure/zonal analysis takes into consideration the selected design service goal (DSG) (or equivalent) in order to determine the result of the analysis, the DSG shall be mentioned as part of the assumptions taken into consideration during analysis for each MRBR.
- MPIG understand that any MSG-3 analysis that takes the DSG into account in reaching its result shall need to be revisited if DSG is subsequently extended. Validation is only required when an MSG-3 dossier takes the DSG into consideration. No action is required on other dossiers.
- MPIG do not consider that the following paragraph proposed by the PB is related to the DSG extension issue.
As a basis, PB confirms that the MRBR must be a living document and updated on an annual basis to take into account in service experience
MPIG suggest that this is not retained in the 'Recommendation' paragraph of IP98. If the PB disagree it is requested to consider the following change:
As a basis, the MRBR must be a living document and the need for revision shall be reviewed on an annual basis. This review shall include an assessment of in-service experience
- MPIG understand that this sentence will not go into the MSG-3 document.

Date : 29/APR/ 2010

MPIG comment from MPIG caucus:

Design Goal Extension criteria: Applicants must go back to the applicable type certification authority (Flight Standards and Aircraft Certification Office) for the aircraft and establish what specific areas need to be revisited to extend the goal. The following are some, but not necessarily all of the items that need to be included in the proposal to provide objective justification for the request:

Examine existing MSG-3 analysis to establish if the DSG was used in the determination of the analysis result. If this is the case, then validation of the specific analysis must be performed.

Note: In addition to revisiting the analysis, other data/analysis/inputs, from in service data should be considered during validation of the new DSG.

Such as AD, service bulletins, Alert bulletins, service letters....

Final regulatory proposal to be discussed by MPIG:

Design Goal Extension criteria: Applicants must go back to the applicable type certification authority (Flight Standards and Aircraft Certification Office) for the aircraft and establish what specific areas need to be revisited to extend the goal. The following are some, but not necessarily all of the items that need to be included in the proposal to provide objective justification for the request:

IF Operational life of the design (service life / Design Service Goal / Limit of validity (LoV) / life extension / DS Objective....) is established at certification was this considered when the maintenance schedule/requirement was developed

Examine existing MSG-3 analysis to establish if the DSG was used in the determination of the analysis result. If this is the case, then validation of the specific analysis must be performed.

Note: In addition to revisiting the analysis, other data/analysis/inputs, from in service data should be considered during validation of the new DSG.

Such as AD, service bulletins, Alert bulletins, service letters....

Date: 30/04/2010

MPIG position

If Design Goal extension is sought, applicants must go back to the applicable type certification authority (Flight Standards and Aircraft Certification Office) for the aircraft and establish what specific areas need to be revisited to extend the goal. The following is one of the items that needs to be included in the proposal to provide objective justification for the request:

- Examine existing MSG-3 analysis to establish if the 'operational life' was used in the determination of the analysis result. If this is the case, then validation of the specific analysis must be performed.

NB: 'operational life' is an unofficial term that shall be understood to refer to such terms as Design Life (DL) / Design Service Goal (DSG) / Limit of Validity (LoV) / Extended Service Goal (ESG) / Design Service Objective (DSO)....

Note: In addition to revisiting the analysis, other data/analysis/inputs, from in service data should be considered during validation of the new DSG such as AD, service bulletins, Alert bulletins, service letters....

PB comments:

PB welcome this new wording and accept it and close this IP