

INCOSE IS SUBMISSION REVIEW PROCESS FOR PAPERS

This document contains the proposed categories and rubrics for submissions to INCOSE IS. The categories are presentation only, tutorials, panels, and manuscript submissions revision process for INCOSE IS. For manuscripts two categories are proposed: Academic/Research and Practical/Applied manuscripts. There are two sections that cover the criteria and rubrics for each category.

Proposed Criteria

1. Academic/research

(Practical/Applied in page 6)

Reviewers will score each submission, based on the guiding questions in each section, using the following criteria/instructions.

Technical Merit

Please assess how sound/robust is the content in the manuscript. You may use the following questions as a guide in your evaluation process for the technical merit of the work presented in this manuscript:

- Are the assumptions reasonable?
- Is the research need clearly articulated?
- Are the samples, measures, methods, observations, procedures, and/or statistical analyses sound?
- Are research procedures (e.g., statistical, data analysis, validation, etc.) used correctly and appropriately?
- Are the major assumptions of the techniques reasonably well met and justified (i.e., no major violations)?
- How appropriate is this submission for INCOSE IS? *Note: Sometimes even good submissions are better suited to other locations. If you mark this low, please provide suggested venues (or at least the appropriate topic area) in the comments area.*

Scoring Grades

Please select the option that best describes the technical merit of this manuscript:

1 Unacceptable - Submission has serious errors in approach that invalidate the results, contains clearly erroneous data, and/or the submission is not appropriate for INCOSE IS.

2 Poor - Methodology is unclear, data may have major errors (but unclear), questionable assumptions.

3 Acceptable - Only minor flaws in method/data.

4 Good - Seems technically sound.

5 Excellent - Exceptionally thorough/accurate in methodology and results.

Originality

Please assess if this manuscript provides any new insights into attaining solutions to SE challenges. You may use the following questions as a guide in your evaluation process for the originality of the work presented in this manuscript:

- Are there any new insights for existing theory, methods, processes, tools, and/or practice?
- Do the author(s) make a case for why their insights go beyond diligently applying rules for following processes and using tools and provide arguments on how their work can be leveraged to attain solutions to SE challenges.
- Will attendees of INCOSE IS and readers of the proceedings learn something that they didn't already know from this submission?

Scoring Grades

Please select the option that best describes the originality of this manuscript:

1 Not at all Original - This particular work has already been sufficiently addressed by the community.

2 Low Originality - This work presents a small incremental improvement over existing published work.

3 Minor Improvement - The same problem has been examined before, but this presentation presents a new approach or data that has not yet been presented.

4 Major Improvement - This work represents a significant expansion of a previously investigated topic and offers a potential path towards attaining solutions to an SE challenge.

5 New/Novel Approach – This work presents a promising and/or potential new approach to addressing SE challenges; examples include a dramatically different methodology, tool, or approach; or presents (valid) data dramatically challenging current assumptions and/or provides a very promising approach at attaining solutions to SE challenges.

Relevance

Please assess how relevant is this submission to INCOSE IS. You may use the following questions as a guide in your evaluation process for the relevance to INCOSE IS of the work presented in this manuscript:

- Is the work presented in this manuscript related to the disciplinary areas identified in the SEBoK, INCOSE Handbook, FuSE, TechOps, INCOSE initiatives, and/or of interest to SE?
- Is this submission, regardless of its quality, better suited to other events or publication channels?

Note: If you mark this category low, please provide suggested alternative events or publication channels (or at least the appropriate topic area) in the comments area.

Scoring Grades

Please select the option that best describes the relevance of this manuscript to INCOSE IS:

1 Not at all Relevant - Does not belong at INCOSE IS.

2 Low Relevance - The submission is of low relevance to INCOSE IS.

3 Borderline Relevance - The submission has borderline relevance to INCOSE IS.

4 Relevant - The submission is relevant to INCOSE IS and/or INCOSE at large.

5 Very Relevant - The submission presents material that would be highly welcomed by INCOSE IS attendees and INCOSE's community.

Contribution

Please assess if this manuscript makes a novel/relevant contribution to systems engineering. You may use the following questions as a guide in your evaluation process for the contribution of the work presented in this manuscript:

- Do the author(s) make a compelling case for how their manuscript contributes to INCOSE's mission 2035 or other needs of SE?
- Does the manuscript contribute to SE research, body of knowledge?
- Can the manuscript's findings inform SE practice.
- Does the manuscript test, validate, falsify, propose something new, or extend SE knowledge in a meaningful way?
- Are contributions clearly defined?

Scoring Grades

Please select the option that best describes the contribution level of this manuscript to INCOSE IS:

1 Little to no contribution of value - This particular work has already been sufficiently addressed by the community.

2 Some minor contributions - This work presents a small incremental improvement over existing published work.

3 Minor Improvement - The same problem has been examined before, but this presentation presents a new approach or data that has not yet been presented.

4 Major Improvement - This work represents a significant expansion of a previously-investigated topic

5 New/Novel - This is a new topic in this area; a dramatically different methodology, tool, or approach; or presents (valid) data dramatically challenging current assumptions.

Background/Context

Please assess if this manuscript presents sufficient background information and context to support the work reported. You may use the following questions as a guide in your evaluation process to determine the quality, relevance, and scope of the background presented in this manuscript:

- Does the background include *need to know* content only and avoids *nice to know* content?
- Does the background ignore key knowledge to help readers understand the need for this work?
- Does the background ignore key knowledge to help readers value this work?
- Does the background ignore work that have addressed a similar issue?

Note: Keep in mind that, while we strive for rigor, the scope and burden of proof is not equal to that of a journal publication.

Scoring Grades

Please select the option that best describes the scope, relevance, and quality of the background information and context to support the work presented.

1 Unacceptable - Background provided does not support the work in the manuscript.

2 Poor - Background provided does provide relevant support the work in the manuscript

3 Acceptable - Background is either too lengthy or insufficient for the reader to follow.

4 Good – Background provides adequate background for the readers to follow.

5 Excellent – Background provides great background for the readers to follow.

Readability

Please assess if this manuscript is written in a style that is accessible to a general SE audience. You may use the following questions as a guide in your evaluation process to determine the readability of this manuscript:

- How easy is it to understand the submission?
- Are writing style, use of language, grammar, spelling appropriate for a SE context? (*Note: English is the official language for INCOSE IS*)
- Is there an over-use (or under-use in some cases) of equations, figures, tables, or improper font sizes?
- Is the submission length inappropriate (too short, too long)?

Scoring Grades

Please select the option that best describes the readability of this manuscript?

1 Unacceptable - I had a really hard time understanding the manuscript (Please comment on the reason in the "Feedback for Chair" section).

2 Poor - I was able to make a little bit of sense of the manuscript (Please comment on the reason in the "Feedback for Chair" section).

3 Acceptable - Manuscript is acceptable, but could be shortened, or rewritten to improve readability. (Please provide comment in the "Feedback to Chair" section).

4 Good – Manuscript is overall well-written with a few minor revisions needed, it is fairly well-written and the length is appropriate.

5 Excellent - Manuscript is well-written and easy to follow. The length is appropriate.

Formatting

Please assess if this manuscript follows the format specified for submissions to INCOSE IS. You may use the following questions as a guide in your evaluation process to determine the readability of this manuscript:

- Are the margins correct?
- Are headers, sections, bullets, numbering correct?
- Are font, spacing, figures, tables, equations formatted as specified?
- Is the length between 2,000 and 7,000 words?

Scoring Grades

Please select the option that best describes how well this manuscript adheres to the formatting guide?

Note: If you would like to attach an edited version of the manuscript, please make sure that you remove any identifiable information about you and upload a PDF file. Please upload it in the 'Author Comments' section below.

1 Unacceptable - Manuscript does not follow the formatting guide at all.

2 Poor - Manuscript does follow few formatting guidelines.

3 Acceptable - Major formatting errors, however, it is clear to me that the author is trying to follow the formatting guide.

4 Good - Some minor formatting errors, but overall, conform to the formatting guide.

5 Excellent - Manuscript conforms to the formatting guide.

Other

Best Manuscript Award Recommendation

Do you think that this manuscript should be nominated for INCOSE IS's Best Manuscript Award? For more information on the award, please see the INCOSE IS webpage.

Scoring Grades

Please indicate if you think that this manuscript should be nominated for INCOSE IS Best Manuscript Award? For more information on the award, please see XXXX.

Yes, this manuscript should be considered.

No.

Format

While uploading a submission, authors indicated a preference for either an oral or poster presentation (shown above). If accepted, which presentation format do you believe is most appropriate for this submission? (You are not required to agree with the author's preference.)

Acceptance

Please indicate if this manuscript should be accepted for publication.

Please note that we have only one cycle of review. If a manuscript requires extensive revision and another review, please do not accept the manuscript for publication.

This is an international symposium, as such, we have a large number of authors for whom English is not their first language. If the manuscript requires extensive language revision, please consider that as a manuscript requiring extensive revision.

Scoring Guide

Please indicate if this manuscript should be accepted for publication.

Please select the option that best describes your assessment below:

Note: If you suggest moving the manuscript to another topical area, please indicate the domain you think would be the best fit below.

5 Definitely Accept – It meets all criteria (in some cases exceeding some) evaluated in this form.

4 Probably Accept – It meets most criteria in this form.

3 Borderline Accept/Reject – It fails to meet a few criteria in this form.

2 Weak Reject – It does not meet many criteria and/or may not be a good fit to INCOSE IS.

1 Do Not Accept – It does not meet any criteria in this form and/or is not a good fit to INCOSE IS.

Confidence

As a reviewer, how confident were you within the knowledge area discussed in this submission?

5 Very Confident – I am an expert in this topic.

4 Confident – I am well versed in this topic.

3 Some Confidence – I have some experience in this topic.

2 Low Confidence – I am vaguely familiar with this topic.

1 No Confidence – I am not familiar with this topic.

2. Practical/Applied

Reviewers will score each submission, based on the guiding questions in each section, using the following criteria/instructions.

Technical Merit

Please assess how sound/robust is the content in the manuscript. You may use the following questions as a guide in your evaluation process for the technical merit of the work presented in this manuscript:

- Are the assumptions reasonable?
- Is the need/value of the approach utilized clearly articulated?
- Are the observations from the practice valid?
- Are the samples, measures, methods, observations, procedures, and/or statistical analyses sound?
- Are the major assumptions of the techniques reasonably well met and justified (i.e., no major violations)?
- How appropriate is this submission for INCOSE IS? *Note: Sometimes even good submissions are better suited to other locations. If you mark this low, please provide suggested venues (or at least the appropriate topic area) in the comments area.*

Scoring Grades

Please select the option that best describes the technical merit of this manuscript:

1 Unacceptable - Submission has serious errors in approach that invalidate the results, contains clearly erroneous data, and/or the submission is not appropriate for INCOSE IS.

2 Poor - Methodology is unclear, data may have major errors (but unclear), questionable assumptions.

3 Acceptable - Only minor flaws in method/data.

4 Good - Seems technically sound.

5 Excellent - Exceptionally thorough/accurate in methodology and results.

Originality

Please assess if this manuscript provides any new insights into attaining solutions to SE challenges. You may use the following questions as a guide in your evaluation process for the originality of the work presented in this manuscript:

- Are there any new insights for existing methods, processes, tools, and/or practice?
- Do the author(s) make a case for why their insights go beyond diligently applying rules for following processes and using tools and provide arguments on how their work can be leveraged to attain solutions to SE challenges.
- Will attendees of INCOSE IS and readers of the proceedings learn something that they didn't already know from this submission?

Scoring Grades

Please select the option that best describes the originality of this manuscript:

1 Not at all Original - This particular work has already been sufficiently addressed by the community.

2 Low Originality - This work presents a small incremental improvement over existing published work.

3 Minor Improvement - The same problem has been examined before, but this presentation presents a new approach or data that has not yet been presented.

4 Major Improvement - This work represents a significant expansion of a previously investigated topic and offers a potential path towards attaining solutions to an SE challenge.

5 New/Novel Approach - This work presents a promising and/or potential new approach to addressing SE challenges; examples include a dramatically different methodology, tool, or approach; or presents (valid) data dramatically challenging current assumptions and/or provides a very promising approach at attaining solutions to SE challenges.

Relevance

Please assess how relevant is this submission to INCOSE IS. You may use the following questions as a guide in your evaluation process for the relevance to INCOSE IS of the work presented in this manuscript:

- Is the work presented in this manuscript related to the disciplinary areas identified in the SEBoK, INCOSE Handbook, FuSE, TechOps, INCOSE initiatives, and/or of interest to SE?
- Is this submission, regardless of its quality, better suited to other events or publication channels?

Note: If you mark this category low, please provide suggested alternative events or publication channels (or at least the appropriate topic area) in the comments area.

Scoring Grades

Please select the option that best describes the relevance of this manuscript to INCOSE IS:

1 Not at all Relevant - Does not belong at INCOSE IS.

2 Low Relevance - The submission is of low relevance to INCOSE IS.

3 Borderline Relevance - The submission has borderline relevance to INCOSE IS.

4 Relevant - The submission is relevant to INCOSE IS and/or INCOSE at large.

5 Very Relevant - The submission presents material that would be highly welcomed by INCOSE IS attendees and INCOSE's community.

Contribution

Please assess if this manuscript makes a novel/relevant contribution to systems engineering. You may use the following questions as a guide in your evaluation process for the contribution of the work presented in this manuscript:

- Do the author(s) make a compelling case for how their manuscript contributes to INCOSE's mission 2035 or other needs of SE?
- Does the manuscript inform or improve our understanding of systems engineering practice?
- Can the manuscript's findings inform SE practice.
- Are contributions clearly defined?

Scoring Grades

Please select the option that best describes the contribution level of this manuscript to INCOSE IS:

1 Little to no contribution of value - This particular work has already been sufficiently addressed by the community.

2 Some minor contributions - This work presents a small incremental improvement over existing published work.

3 Minor Improvement - The same problem has been examined before, but this presentation presents a new approach or data that has not yet been presented.

4 Major Improvement - This work represents a significant expansion of a previously-investigated topic

5 New/Novel - This is a new topic in this area; a dramatically different methodology, tool, or approach; or presents (valid) data dramatically challenging current assumptions.

Background/Context

Please assess if this manuscript presents enough background information and context to justify the need for this work. You may use the following questions as a guide in your evaluation process to determine the quality, relevance, and scope of the background presented in this manuscript:

- Does the background include *need to know* content only and avoids *nice to know* content?
- Does the background provide enough context to understand the context of application?

Note: Keep in mind that, while we strive for rigor, the scope and burden of proof is not equal to that of a journal publication.

Scoring Grades

Please select the option that best describes the scope, relevance, and quality of the background information and context to support the work presented.

1 Unacceptable - Background provided does not support the work in the manuscript.

2 Poor - Background provided does provide relevant support the work in the manuscript

3 Acceptable - Background is either too lengthy or insufficient for the reader to follow.

4 Good – Background provides adequate background for the readers to follow.

5 Excellent – Background provides great background for the readers to follow.

Readability

Please assess if this manuscript is written in a style that is accessible to a general SE audience. You may use the following questions as a guide in your evaluation process to determine the readability of this manuscript:

- How easy is it to understand the submission?
- Are writing style, use of language, grammar, spelling appropriate for a SE context? (*Note: English is the official language for INCOSE IS*)
- Is there an over-use (or under-use in some cases) of equations, figures, tables, or improper font sizes?
- Is the submission length inappropriate (too short, too long)?

Scoring Grades

Please select the option that best describes the readability of this manuscript?

1 Unacceptable - I had a really hard time understanding the manuscript (Please comment on the reason in the "Feedback for Chair" section).

2 Poor - I was able to make a little bit of sense of the manuscript (Please comment on the reason in the "Feedback for Chair" section).

3 Acceptable - Manuscript is acceptable, but could be shortened, or rewritten to improve readability. (Please provide comment in the "Feedback to Chair" section).

4 Good – Manuscript is overall well-written with a few minor revisions needed, it is fairly well-written and the length is appropriate.

5 Excellent - Manuscript is well-written and easy to follow. The length is appropriate.

Formatting

Please assess if this manuscript follows the format specified for submissions to INCOSE IS. You may use the following questions as a guide in your evaluation process to determine the readability of this manuscript:

- Are the margins correct?
- Are headers, sections, bullets, numbering correct?
- Are font, spacing, figures, tables, equations formatted as specified?
- Is the length between 2,000 and 7,000 words?

Scoring Grades

Please select the option that best describes how well this manuscript adheres to the formatting guide?

Note: If you would like to attach an edited version of the manuscript, please make sure that you remove any identifiable information about you, and upload a PDF file. Please upload it in the 'Author Comments' section below.

1 Unacceptable - Manuscript does not follow the formatting guide at all.

2 Poor - Manuscript does follow few formatting guidelines.

3 Acceptable - Major formatting errors, however, it is clear to me that the author is trying to follow the formatting guide.

4 Good - Some minor formatting errors, but overall, conform to the formatting guide.

5 Excellent - Manuscript conforms to the formatting guide.

Other

Best Manuscript Award Recommendation

Do you think that this manuscript should be nominated for INCOSE IS's Best Manuscript Award? For more information on the award, please see the INCOSE IS webpage.

Scoring Grades

Please indicate if you think that this manuscript should be nominated for INCOSE IS Best Manuscript Award? For more information on the award, please see XXXX.

Yes, this manuscript should be considered.

No.

Format

While uploading a submission, authors indicated a preference for either an oral or poster presentation (shown above). If accepted, which presentation format do you believe is most appropriate for this submission? (You are not required to agree with the author's preference.)

Acceptance

Please indicate if this manuscript should be accepted for publication.

Please note that we have only one cycle of review. If a manuscript requires extensive revision and another review, please do not accept the manuscript for publication.

This is an international symposium, as such, we have a large number of authors for whom English is not their first language. If the manuscript requires extensive language revision, please consider that as a manuscript requiring extensive revision.

Scoring Guide

Please indicate if this manuscript should be accepted for publication.

Please select the option that best describes your assessment below:

Note: If you suggest moving the manuscript to another topical area, please indicate the domain you think would be the best fit below.

5 Definitely Accept – It meets all criteria (in some cases exceeding some) evaluated in this form.

4 Probably Accept – It meets most criteria in this form.

3 Borderline Accept/Reject – It fails to meet a few criteria in this form.

2 Weak Reject – It does not meet many criteria and/or may not be a good fit to INCOSE IS.

1 Do Not Accept – It does not meet any criteria in this form and/or is not a good fit to INCOSE IS.

Confidence

As a reviewer, how confident were you within the knowledge area discussed in this submission?

5 Very Confident – I am an expert in this topic.

4 Confident – I am well versed in this topic.

3 Some Confidence – I have some experience in this topic.

2 Low Confidence – I am vaguely familiar with this topic.

1 No Confidence – I am not familiar with this topic.