Scope

International Standard, developed by ISO/IEC Joint Technical Committee 1/Standardization Subcommittee 7 (Systems and Software Engineering)/Working Group 4 (Tools and Environment) detailing reference model, processes, methods and tool capabilities for MBSSE

- Terms and definitions related to MBSSE;
- MBSSE reference framework;
- Process Reference Model for organizing all MBSSE-specific processes;
- MBSSE-specific processes for model-based systems and software engineering
- Methods to support the defined tasks of each process; and,
- Tool capabilities to automate or semi-automate tasks or methods.
MBSSE Process Reference Model

Four Process Groups

Plan MBSSE
- Define the scope and objectives of MBSSE
- Plan model development and governance
- Plan resources and assets
- Manage knowledge reuse

Perform MBSSE
- Perform business and mission analysis
- Perform functional analysis
- Perform system structure design
- Perform system analysis
- Perform domain design integration
- Perform system verification and validation

Build Models
- Produce system models
- Verify models
- Simulate systems using models
- Produce discipline-specific models
- Validate models
- Evaluate alternative models

Support Models
- Manage technical quality
- Manage technical configuration
- Manage data and models
- Share models for collaboration

Process Description Structure
1. Title of the process
2. Purpose of the process
3. Inputs to produce outcomes
4. Process outcomes
5. Tasks to achieve the outcomes
6. Method and tool capabilities for performing tasks effectively and efficiently

30/01/2021 www.incose.org/IW2021
INCOSE CD1 Draft Review
INCOSE CD1 Draft Review Process

2020

03/10
Review Team Established

Jim Armstrong
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Robert Halligan
David Hetherington
Shelley Higgins
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04/29
CD1 Draft Received

06/05
1st CD1 Comments Submitted

06/22
2nd CD1 Comments Submitted

11/17
Comments Disposition Received From ISO

03/10
04/29
06/05
06/22
11/17
## CD1 Ballot Results

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Liaison: INCOSE
## CD1 Draft Comments

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Major organizational, structural, content and process changes
## CD1 Draft Comments

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ISO Feedback on CD1 Draft Comments

- Very exhaustive (all clauses or near)
- Very constructive (editorial and technical)
- Strong involvement from INCOSE (as a liaison)
- Some redundancies (e.g. on the usage of the proposed pattern)
- Annex B (ARCADIA), Annex C (Capella) deleted
INCOSE CD2 Draft Review
INCOSE CD2 Draft Review Process

2020

11/25
Review Team Established

2021

01/07
CD2 Draft Received

01/29
Comments Reviewed by Team

02/03
CD2 Comments Submitted

06/01
CD2 Comments Collated for Review by ISO

11/10
Comments Disposition Received From ISO

Barclay Brown
Steve Dam
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James Wetzel

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## INCOSE CD2 Draft Comments

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Terms, definitions, relationships to other standards