



International Council on Systems Engineering
A better world through a systems approach

OMG's Approach to Developing its SysMLv2 Certification Program



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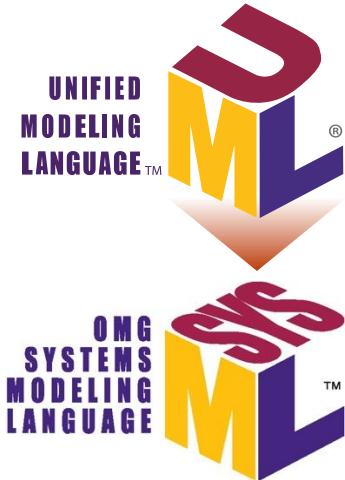
Matthew Johnson (STC/Arcfield)



Key questions

- Why is SysMLv2 important to you?
- Why is SysMLv2 ***certification*** important to you?
 - Why should I trust it?
- How is SysMLv2 certification ***different*** from v1 (OCSMP)?
 - Will it keep up with spec changes?
- When will certification be available?

Why is SysMLv2 Important? (1)



Rigor
Consistency
Expressiveness
Access

KerML 1.0



System
Modeling
API &
Servcs 1.0

Part 1
Language
Part 2
Transition



Why is SysMLv2 Important? (2)

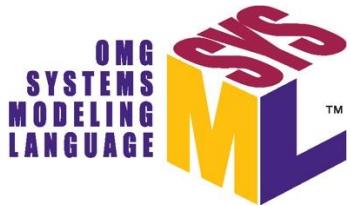


Rigor
Consistency
Expressiveness
Access



Representative, **incomplete** collection of early adopters

Why is SysMLv2 *Certification* Important?



Rigor
Consistency
Expressiveness
Access



Updated
Competency
Assessment

?

How is SysMLv2 Certification *different* from OCSMP?



- Small development team, broad range of experience levels
- **Rapid** development
- **Graphic only** language (limited tooling at time)
- 4 levels: **L1** user, **L2** basic builder, **L3** intermediate, **L4** advanced
- Built on SysML 1.2 (**not updateable**)



Certification

- Small development team, highly experienced
- **Deliberate** development
- Both **graphic** and **textual** notation (**much** better tooling available)
- 3 practical levels/personas: **L1** basic reader, **L2** basic builder, **L3** advanced builder
- Focus on Maintainability: update exam with each spec release

Why should I *Trust* OMG SysMLv2 Certification?

- 12 **experienced** SMEs
 - Most helped **create** SysMLv2 spec, ongoing involvement in working groups
- Each exam item is **carefully reviewed**
 - SME/Tech Review, Level & Quality review
 - Beta test statistics -> final exam

1 Show items visible to SMEs

2 Show all items

3 Workflows/Tasks

4 Item Statuses

5 Custom Filter

1.1.1.346 - v1 399 Ryan Noguchi

1.1.1.347 - v1 400 Ryan Noguchi

1.1.1.348 - v1 401 Tom Ford Copy of 300

1.1.1.349 - v1 402 Ryan Noguchi Copy of 127

Manual ID: Copy of 133 Locked By:

Item ID: Scenario:

Objective: General L1 Items

Original Item Development (oDV)

To all right...

Write Item (001) -- 63 items

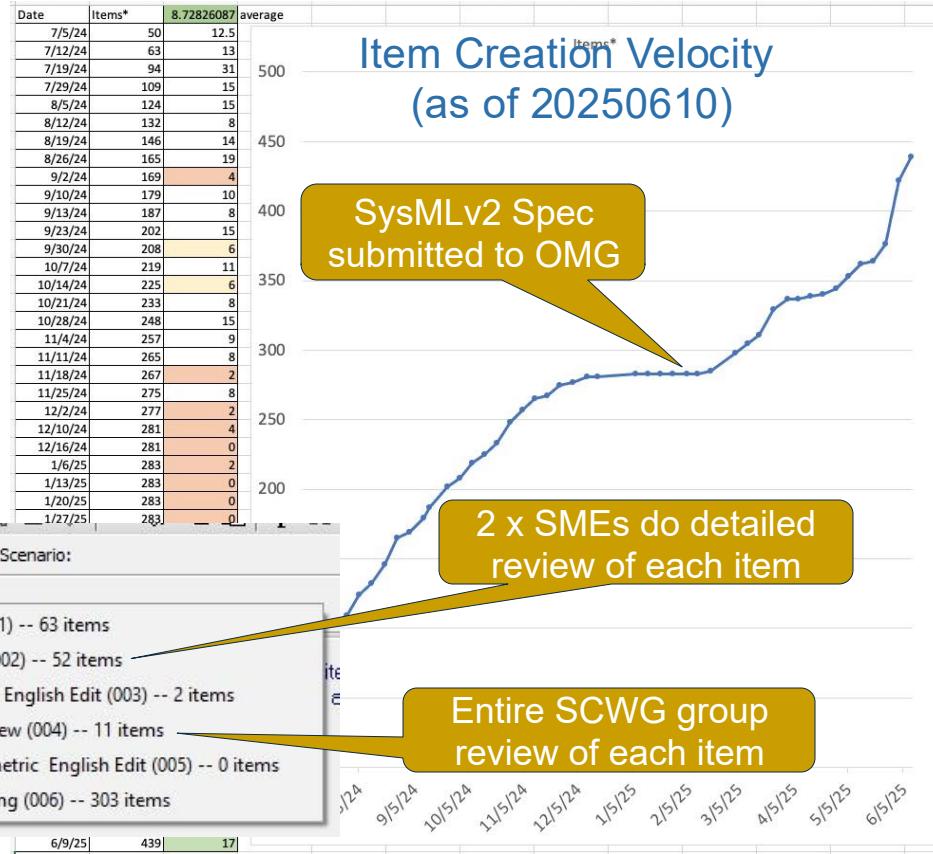
SME Review (002) -- 52 items

Psychometric English Edit (003) -- 2 items

Technical Review (004) -- 11 items

Final Psychometric English Edit (005) -- 0 items

Standard Setting (006) -- 303 items



When will SysMLv2 Certification be *available*?

- On track to submit questions for L1 Beta Exam - September 2025
 - Should have public L1 exam ready by end of 2025
- Expect L2 detailed planning in earnest in September/October 2025
 - L2 beta exam Q3 2026?
 - Better L1 definition has helped frame L2.
- L3 planning hasn't started yet.

Any Questions?