

Vision & Roadmaps Work Stream.

On-line session on Thursday 6th 2023

Paul Schreinemakers

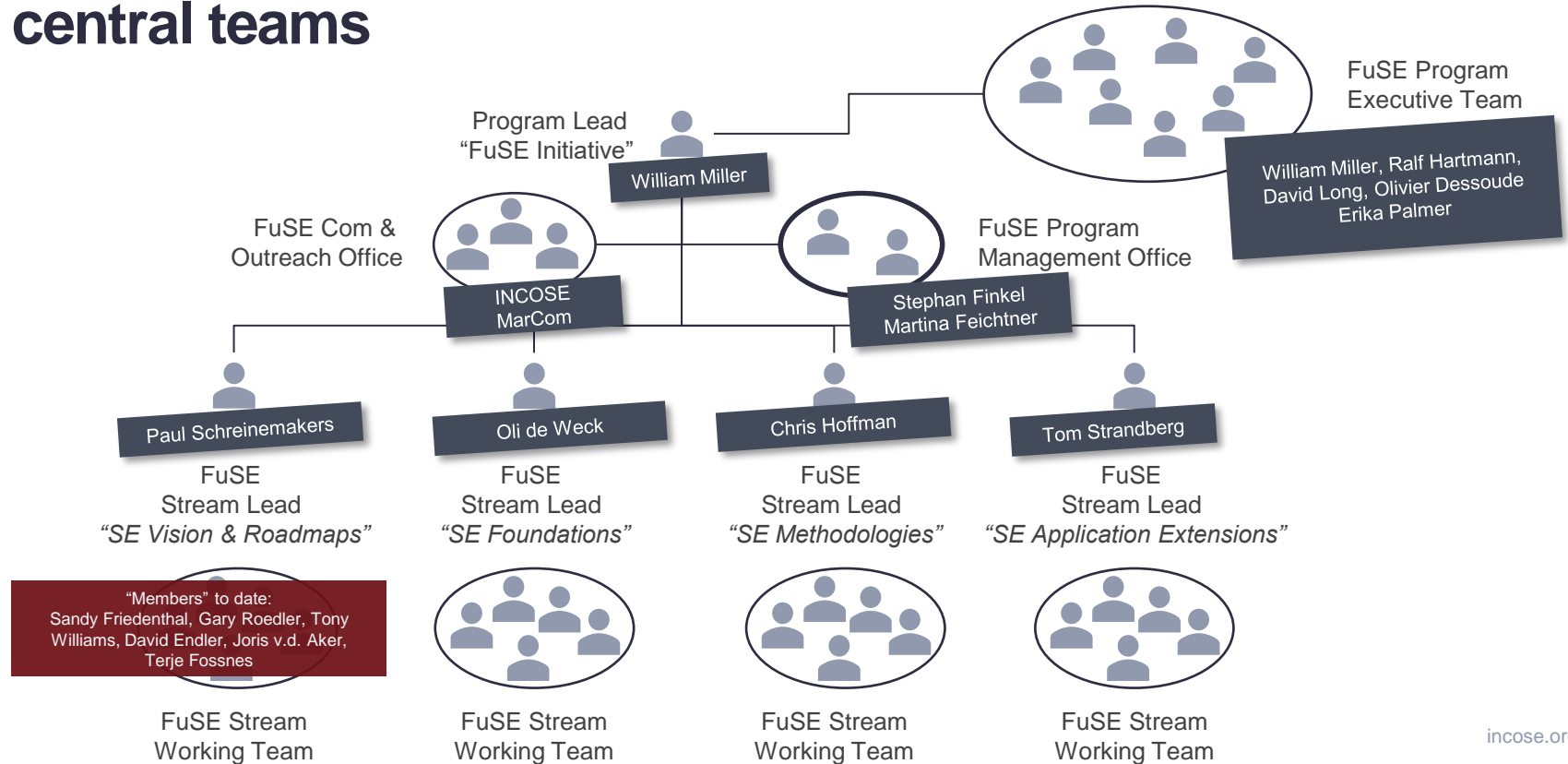
Agenda.

- Stream Intro (10 min)
General overview of the SE Vision & Roadmap stream
- 2023 activities (10 min)
What is the planning of activities during 2023
- Collect feedback (2x45 min)
Collect feedback of the in the SE Vision 2025 listed challenges & roadmap topics + roadmap topics
- Inventory of willingness to participate (10 min)
Who of the participants of this session is willing to participate in the stream's near future activities
- Closure

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The FuSE program is organized in 4 streams with additional central teams



The V&R Stream's objectives

- The Systems Engineering Vision and Roadmaps stream continuously refines, evolves, and complements the SE Vision 2035. Furthermore, we create an integrated set of roadmaps across the four interrelated FuSE streams. The concurrently executed streams will guide and influence each other.
- **The 2023 goal is to frame the structural relationships and value models for the roadmaps' creation.**

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SE V&R interactions & participations in 2023

- Vision supplements

- Quarterly meetings to evaluate add-on information and white-papers

- Roadmap activities

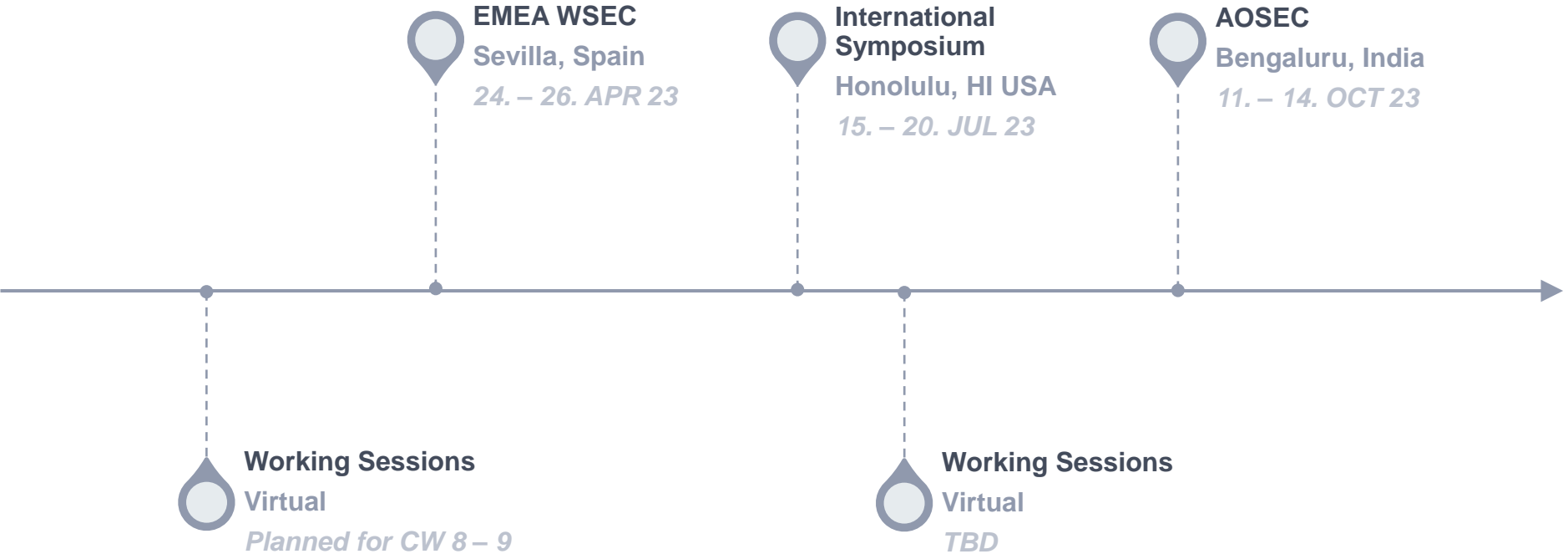
- Synchronize plans for the overall and stream specific roadmaps
- Meet every 1 to 2 months (frequency as needed)

- V&R Stream meetings

- Quarterly meeting to evaluate white paper submissions
- Synchronize roadmaps with FuSE and other streams

Targeted Events in 2023

Where to engage



Topics for today's session.

- Stream introduction,
- Share planning for the stream, incl. how people can participate during the IW and beyond
- Collect feedback on the SE Grand Challenges
- Collect feedback on the Roadmap

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Feedback on SE Challenges

- 15 min – Group gets acquainted with the grand challenges including recommendations (“Gallery walk” through vision)
- 20 min – Give your reasoning for prioritization of SE Challenges (Post-its on the posters (including reasoning))
- 10 min – Recommendation what to work on first (place dots on topics listed on the posters)

Please do the following actions on the Miro ‘room’ dedicated to this effort:

1. 20 min: Identify missing key-topics in the SE Challenges (by using post-its)



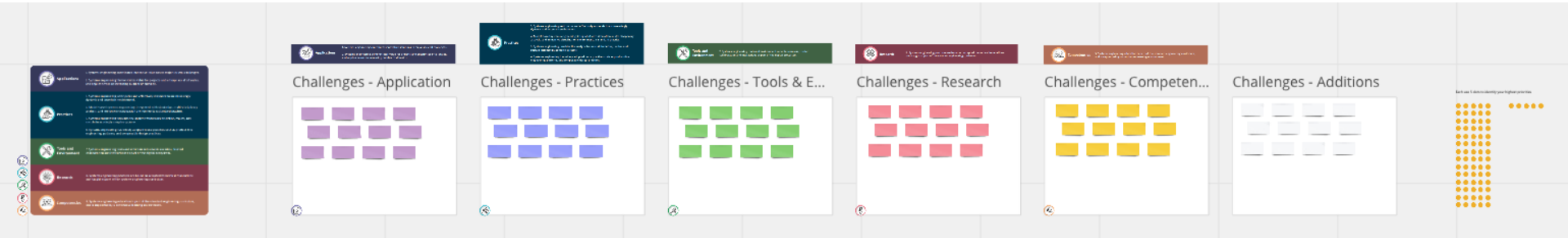
2. 10 min: Prioritize the topics to be addressed by FuSE (by allocating the dots provided to you)



 <p>Applications</p>	<p>1. Systems engineering contributes innovative solutions to major societal challenges.</p> <p>2. Systems engineering demonstrates value for projects and enterprises of all scales, and applies across an increasing number of domains.</p>
 <p>Practices</p>	<p>3. Systems engineering anticipates and effectively responds to an increasingly dynamic and uncertain environment.</p> <p>4. Model-based systems engineering, integrated with simulation, multi-disciplinary analysis, and immersive visualization environments is standard practice.</p> <p>5. Systems engineering provides the analytic framework to define, realize, and sustain increasingly complex systems.</p> <p>6. Systems engineering has widely adopted reuse practices such as product-line engineering, patterns, and composable design practices.</p>
 <p>Tools and Environment</p>	<p>7. Systems engineering tools and environments enable seamless, trusted collaboration and interactions as part of the digital ecosystem.</p>
 <p>Research</p>	<p>8. Systems engineering practices are based on accepted theoretical foundations and taught as part of the systems engineering curriculum.</p>
 <p>Competencies</p>	<p>9. Systems engineering education is part of the standard engineering curriculum, and is supported by a continuous learning environment.</p>

Miro application

<https://miro.com/app/board/uXiVMZPhNws=/>

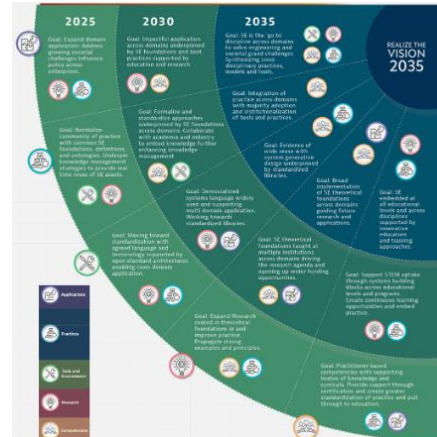


Elaborate Roadmaps

- 15 min – Group gets acquainted with the Vision Roadmap
- 20 min – Identify additional / modified topics for the roadmap (collection on post-its)
- 10 min – Prioritize roadmap items, to be addressed by FuSE (Identify priorities by allocating 5 Dots each)

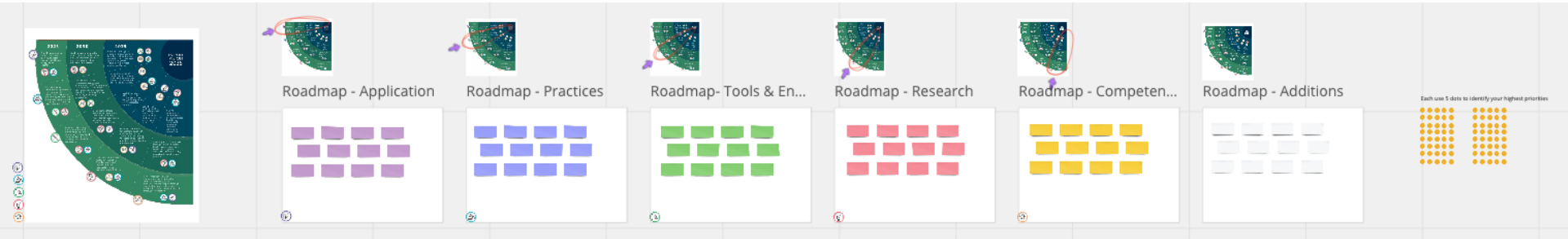
Please do the following actions on the Miro ‘room’ dedicated to this effort:

1. 20 min: Identify missing key-topics in the SE Vision Roadmap (by using post-its)
2. 10 min: Prioritize the topics to be addressed by FuSE (by allocating the dots provided to you)



Miro application

https://miro.com/app/board/uXjVMZPhNws=



Roadmap - Application

Roadmap - Practices

Roadmap- Tools & En...

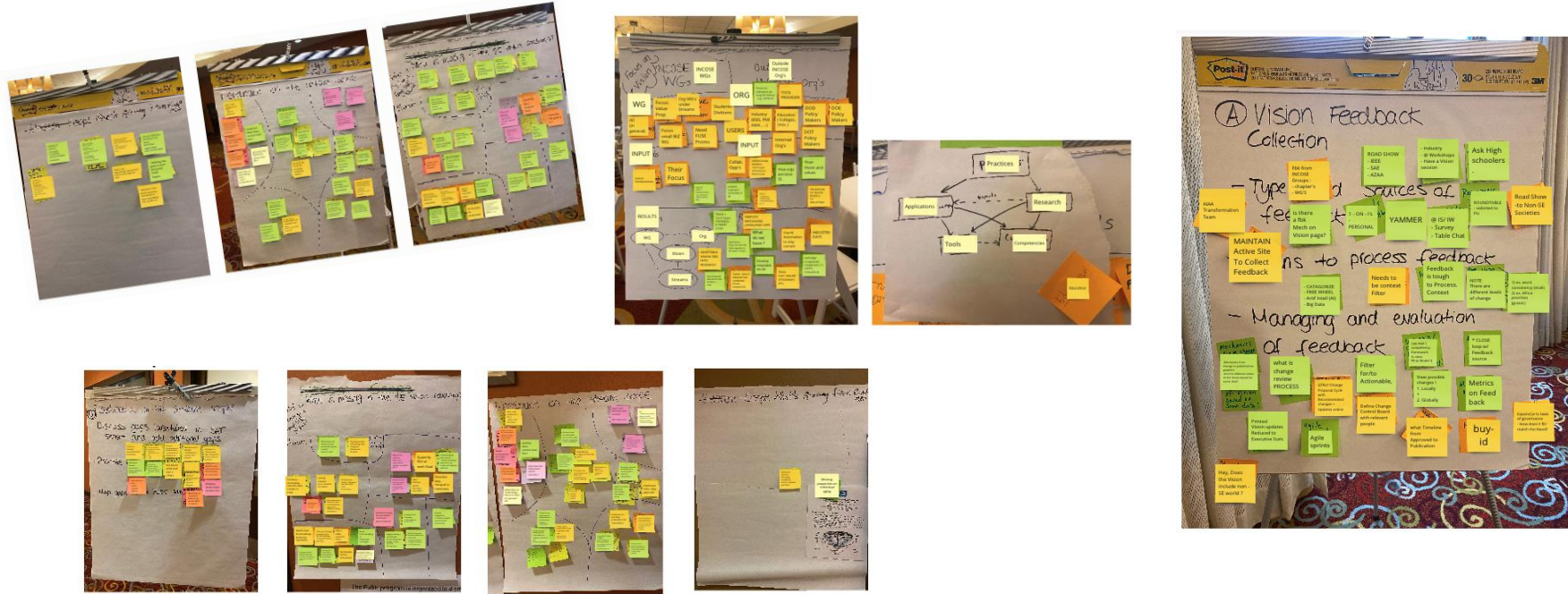
Roadmap - Research

Roadmap - Competen...

Roadmap - Additions

Each use 5 dots to identify your highest priorities

... and this is what we got out of IW2023



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Are you willing to actively participate?

- The FuSE team and specifically this stream welcomes your involvement in the effort.
- Are you willing to participate?
Please add your name / e-mail address to fuse@incose.net



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Let's connect.

Or find us on
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FUTURE OF SYSTEMS ENGINEERING (FUSE)

Vision: Inspire the global community to realize the SE Vision

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The FuSE Program is organized in 4 streams.



Vision & Roadmaps



Foundations



Methodologies



Application Extensions

