



**2022**  
Annual **INCOSE**  
international workshop  
**HYBRID EVENT**  
Torrance, CA, USA  
Jan 29 - Feb 1, 2022

# Requirements

---

[www.incose.org/IW2022](http://www.incose.org/IW2022)

## CHAIR

Tami Katz (Ball Aerospace)

## CO-CHAIRS

Lou Wheatcraft (Wheatland Consulting)  
Mike Ryan (Capability Associates Pty Ltd)

## INCOSE WEB PAGE



<https://connect.incose.org/WorkingGroups/Requirements/Pages/Home.aspx>

## INCOSE CONNECT ADDRESS



<https://www.incose.org/incose-member-resources/working-groups/process/requirements>

# Charter Summary



**2022**  
Annual **INCOSE**  
international workshop  
**HYBRID EVENT**  
Torrance, CA, USA  
Jan 29 - Feb 1, 2022

## **WG PURPOSE/MISSION**

The purpose of the Requirements Working Group (RWG) is to advance the practices, education and theory of needs and requirements development and management and the relationship of needs and requirements to other systems engineering functions.

## **WG GOAL(S)**

Expand and promote the body of knowledge of needs and requirements and its benefits within the systems engineering community.

# Charter Summary



**2022**  
Annual **INCOSE**  
international workshop  
**HYBRID EVENT**  
Torrance, CA, USA  
Jan 29 - Feb 1, 2022

## WG SCOPE

Activities relating to best practices for needs and requirements development and management throughout the product lifecycle including:

- Elicitation
- Elaboration
- Expression
- Analysis
- Management
- Verification and Validation

## OUTCOMES (PRODUCTS/SERVICES)

The requirement working group will realize the following outcomes:

- Maintain the working group charter
- Maintain the INCOSE Guide to Writing Requirements
- Maintain the whitepaper Integrated-data as a Foundation of Systems Engineering
- Propose and develop new products
- Contribute to the requirements-related portions of the SE handbook and SEBoK
- Contribute to the development of SE ontologies
- Formulate guidance for the development and management of needs and requirements
- Contribute to development and management of need and requirements in data-centric environments
- Maintain the RWG connect website
- Ensure accurate content on the RWG public website
- Provide services supporting standards activities relevant to requirements engineering

Additional content is on the INCOSE RWG YouTube channel: [INCOSE RWG - YouTube](#)

# IW Outcomes



**2022**  
Annual **INCOSE**  
international workshop  
**HYBRID EVENT**  
Torrance, CA, USA  
Jan 29 - Feb 1, 2022

## IW OUTCOMES

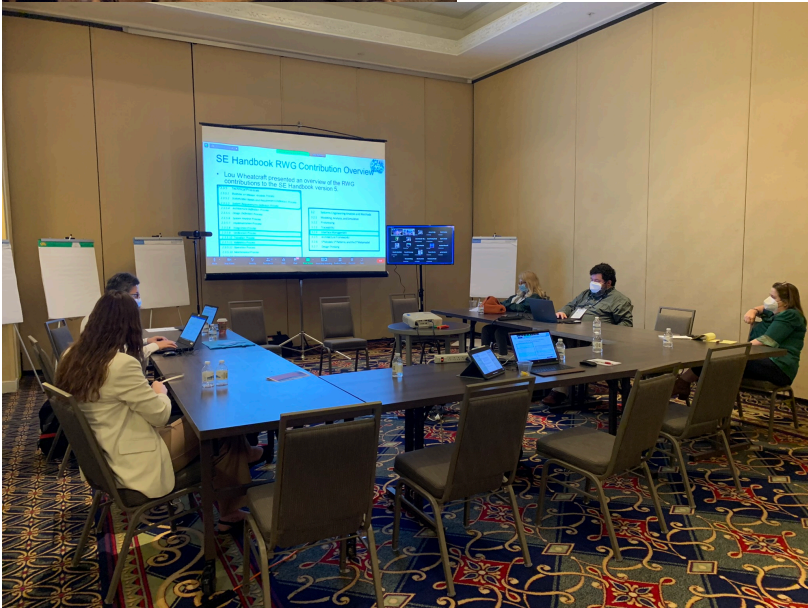
- Welcomed Members
- Gave Overview of RWG
- Gave Overview of RWG 2021 Activities
- Highlights of pre-IW2022 Two Day Event
- Discussion of RWG 2022 Activities and Interests

***IW2022 Photos and Pre-Event Info:***

# IW Outcomes

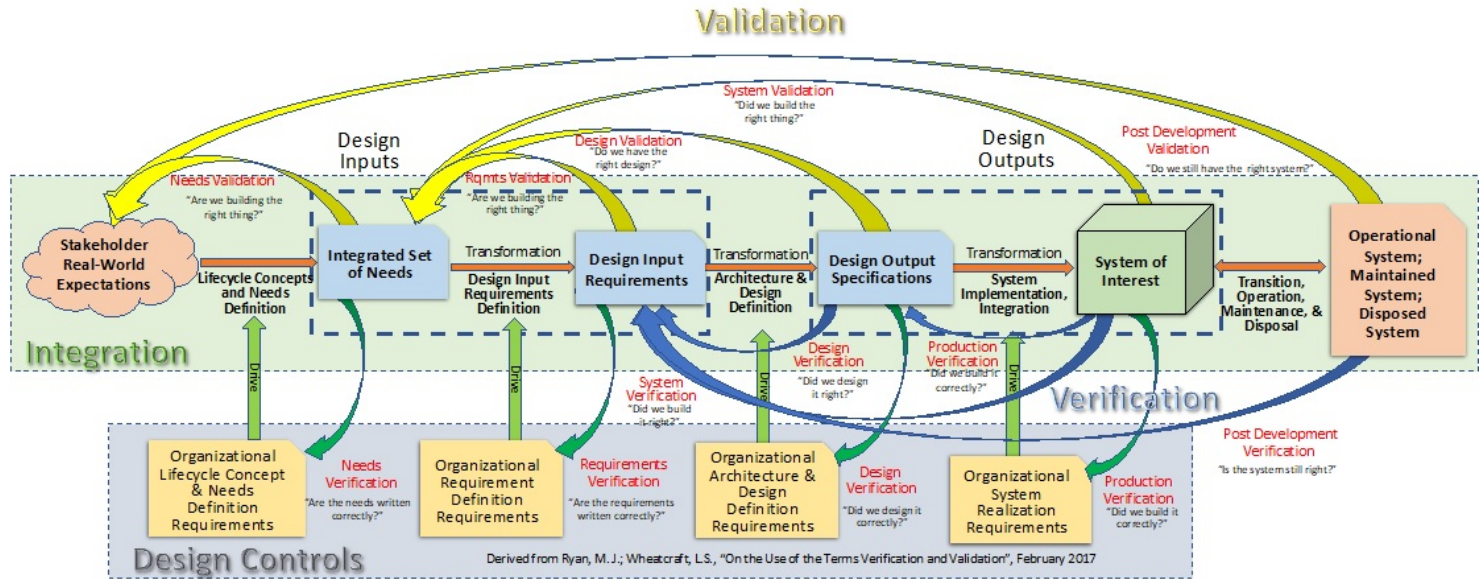


**2022**  
Annual **INCOSSE**  
international workshop  
**HYBRID EVENT**  
Torrance, CA, USA  
Jan 29 - Feb 1, 2022





# IW Outcomes




Tuesday 1/25 (Wed 1/26 in Australia)					Zoom Meeting ID: 942 4499 2450		
Denver (MST)	Orlando (EST)	London (GMT)	Paris (CET)	Canberra (AEDT)	Topic	Speaker	Duration
1:00 PM	3:00 PM	8:00 PM	9:00 PM	7:00 AM	Welcome and Overview of 2021 RWG	Tami Katz	0:30
1:30 PM	3:30 PM	8:30 PM	9:30 PM	7:30 AM	Needs, Requirements, Verification and Validation Life cycle Manual (Status and Highlights)	Lou Wheatcraft	1:00
2:30 PM	4:30 PM	9:30 PM	10:30 PM	8:30 AM	RWG Guide status and highlight	Tami Katz, Raymond Wolfgang	1:00
3:30 PM	5:30 PM	10:30 PM	11:30 PM	9:30 AM	RWG Inputs to SE Handbook v5	Lou Wheatcraft, Mike Ryan	0:45
4:15 PM	6:15 PM	11:15 PM	12:15 AM	10:15 AM	Break		0:15
4:30 PM	6:30 PM	11:30 PM	12:30 AM	10:30 AM	The digital thread - Enabler of Automated Requirement Quality Assessment	Henrik Mattfolk	1:00
5:30 PM	7:30 PM	12:30 AM	1:30 AM	11:30 AM	Requirements and Verification Management Using Sharepoint Tools	Tony Williams	1:00
6:30 PM	8:30 PM	1:30 AM	2:30 AM	12:30 PM	Day 1 Wrap Up	Tami Katz	0:15
6:45 PM	8:45 PM	1:45 AM	2:45 AM	12:45 PM	END DAY 1		


Wednesday 1/26 (Thurs 1/27 in Australia)					Zoom Meeting ID: 912 8521 8883		
Denver (MST)	Orlando (EST)	London (GMT)	Paris (CET)	Canberra (AEDT)	Topic	Speaker	Duration
8:00 AM	10:00 AM	3:00 PM	4:00 PM	2:00 AM	Welcome and Overview of 2021 RWG (recap)	Tami Katz	0:30
8:30 AM	10:30 AM	3:30 PM	4:30 PM	2:30 AM	Ontologies as a cornerstone to merge knowledge from models and documents	Ilyes Youssi (ReUse Co)	1:00
9:30 AM	11:30 AM	4:30 PM	5:30 PM	3:30 AM	Introduction to EARS (Easy Approach to Requirements Syntax)	Mav (Alistair Mavin)	1:00
10:30 AM	12:30 PM	5:30 PM	6:30 PM	4:30 AM	Break		0:15
10:45 AM	12:45 PM	5:45 PM	6:45 PM	4:45 AM	Today's tools gaps, upcoming tools gaps, and new capabilities that vendors should be paying attention to? (discussion)	Cary Bryzcek (Jama)	1:00
11:45 AM	1:45 PM	6:45 PM	7:45 PM	5:45 AM	How to Be Successful in the Absence of Requirements	Ron Carson	1:00
12:45 PM	2:45 PM	7:45 PM	8:45 PM	6:45 AM	Engaging the RWG Community, RWG Plans for 2022	Tami Katz	0:45
1:30 PM	3:30 PM	8:30 PM	9:30 PM	7:30 AM	Day 2 Wrap Up	Tami Katz	0:15
1:45 PM	3:45 PM	8:45 PM	9:45 PM	7:45 AM	END DAY 2		




**2022**  
Annual **INCOSE**  
international workshop  
**HYBRID EVENT**  
Torrance, CA, USA  
Jan 29 - Feb 1, 2022




**IW2022 RWG Intro Session Day 1 (1-25-22)**  
INCOSE RWG  
25:36




**IW2022 Guide Overview**  
INCOSE RWG  
58:04



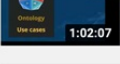
**IW2022 Digital Thread for Requirement Quality...**  
INCOSE RWG  
49:10



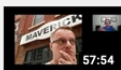
**IW2022 Requirements Management With SharePoint**  
INCOSE RWG  
53:57




**IW2022 RWG Intro Session Day 2**  
INCOSE RWG  
24:18




**IW2022 Ontologies Usage in Requirements Ilyes Yousfi**  
INCOSE RWG  
1:02:07




**IW2022 Introduction to EARS Mav**  
INCOSE RWG  
57:54



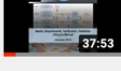
**IW2022 Gaps in Tools Panel Discussion**  
INCOSE RWG  
1:00:26




**IW2022 Success in Absence of Requirements Ron Carson**  
INCOSE RWG  
1:02:03




**IW2022 RWG Plans for 2022**  
INCOSE RWG  
12:02



**IW2022 NRVLN Overview 012522**  
INCOSE RWG  
37:53



**IW2022 RWG SE HB v5 012522**  
INCOSE RWG  
26:30



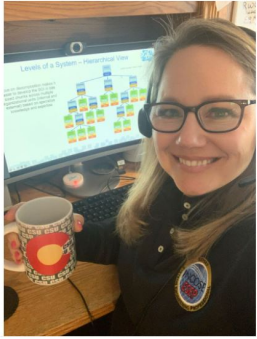
INCOSE  
17,457 followers  
2d •

We so love this time of year! Thanks [Tami](#) for getting the excitement going for [#incoselw](#)!






**Tami Katz**  
Chief Systems Engineer at Ball Aerospace  
3d • Edited •

Starting off our Requirements Working Group virtual meetings, getting ready for INCOSE International Workshop IW2022! ...see more



 Mark Jean and 62 others 1 comment

 Like  Comment  Share  Send

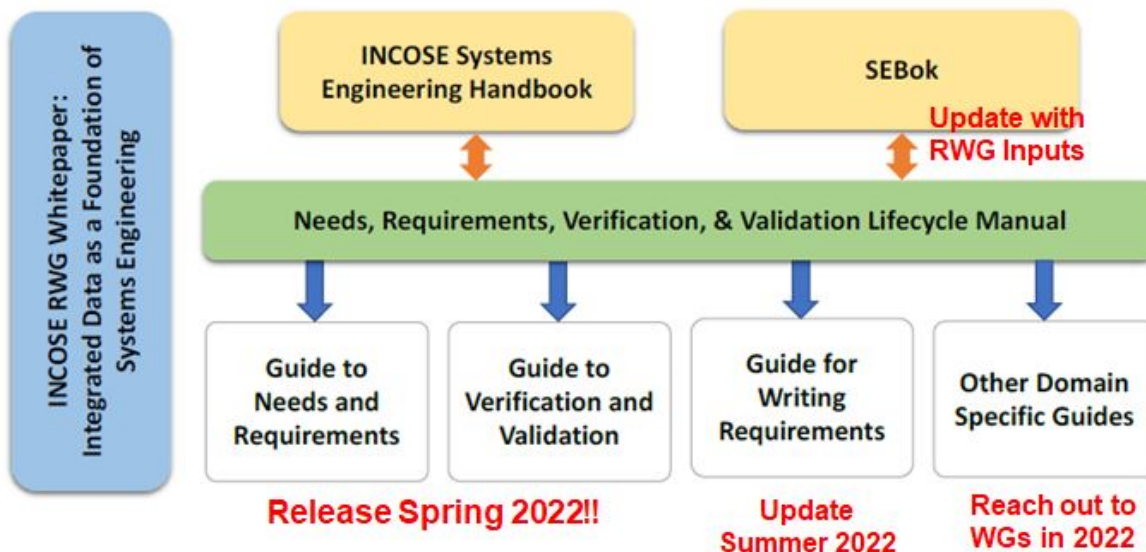


# IW Outcomes

## PLANNED ACTIVITIES AFTER IW

- Regular Web Meetings, Speakers or Exchange Cafés (~monthly)
- Continued CAB Interactions and Support
- Release of the new Guides
- Update to the Guide for Writing Requirements to align with new products
- Engagement with other Working Groups (IV&V, Security, others)
- Continued use of YouTube for content to RWG
- Regular use of Yammer for collaboration
- Change to the INCOSE intranet platform for RWG written content as the Connect site will be discontinued by INCOSE; Improve the public facing website

## PLANNED WORK PRODUCTS AFTER IW



# IW Outcomes



**2022**  
Annual **INCOSE**  
international workshop  
**HYBRID EVENT**  
Torrance, CA, USA  
Jan 29 - Feb 1, 2022