

➤ **Webinar rules:**

- You'll be muted all along the Webinar
- There's a *Question* section to ask your questions or send your comments whenever you want
- The Webinar will be recorded. A link to the recording will be sent to you in few days

Boosting Requirements Management capabilities in MS Word:

Writing high-quality requirements in MS Word



José M. Fuentes

The REUSE Company

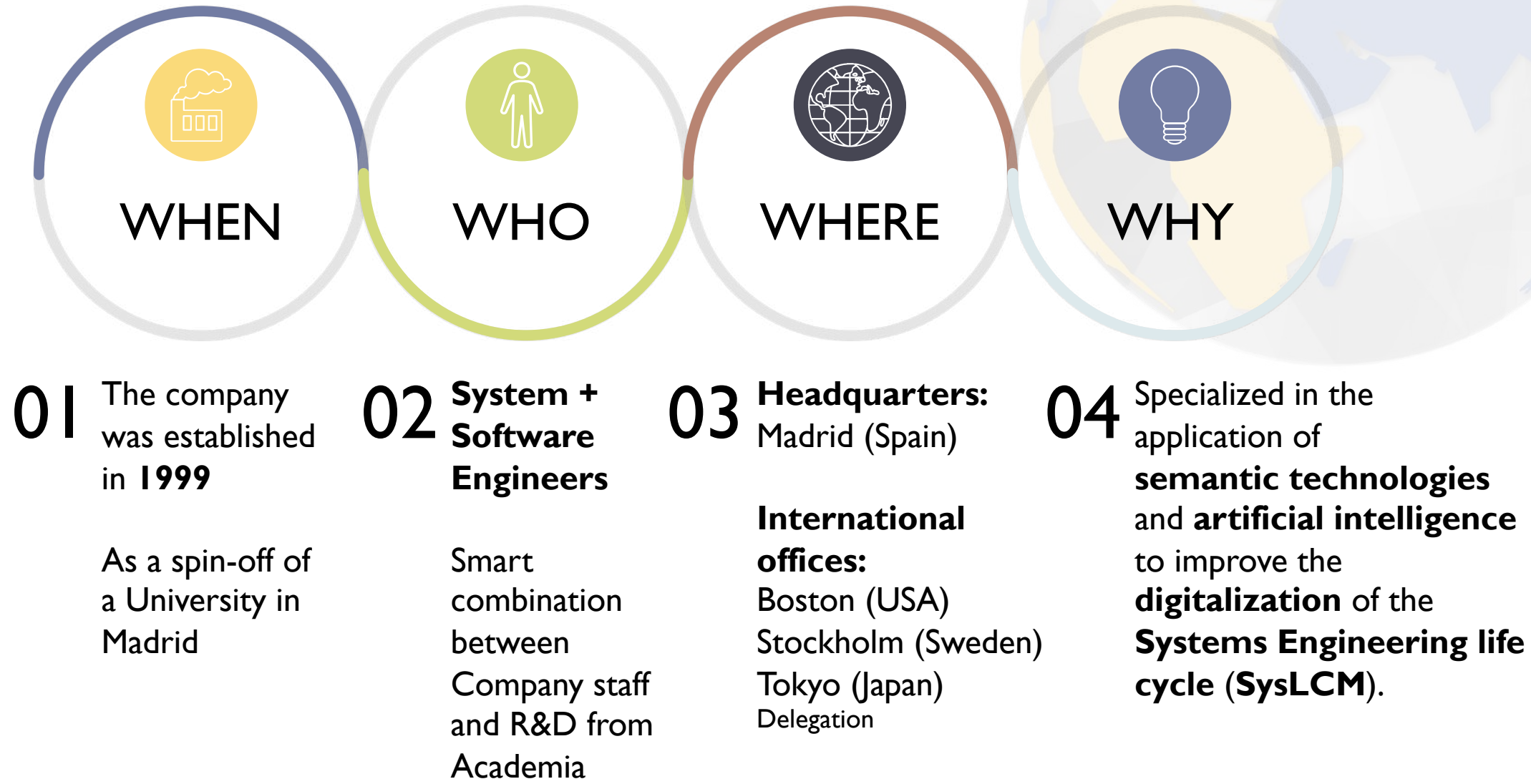
Chief Operating Officer

jose.fuentes@reusecompany.com



THE
REUSE
COMPANY

- Introduction to The REUSE Company and the speaker
- Frameworks and guidelines for requirements quality rules
- The notion of requirement patterns
- Live demo
- Q&A





- **The Systems **ENGINEERING** Suite:**
 - RQA – QUALITY Studio
 - RAT – AUTHORIZING Tool
 - TRACEABILITY Studio
 - V&V Studio
 - KM – Knowledge Manager
- SES ENGINEERING Studio
- SES ENGINEERING Studio add-in for MS Word



José Fuentes



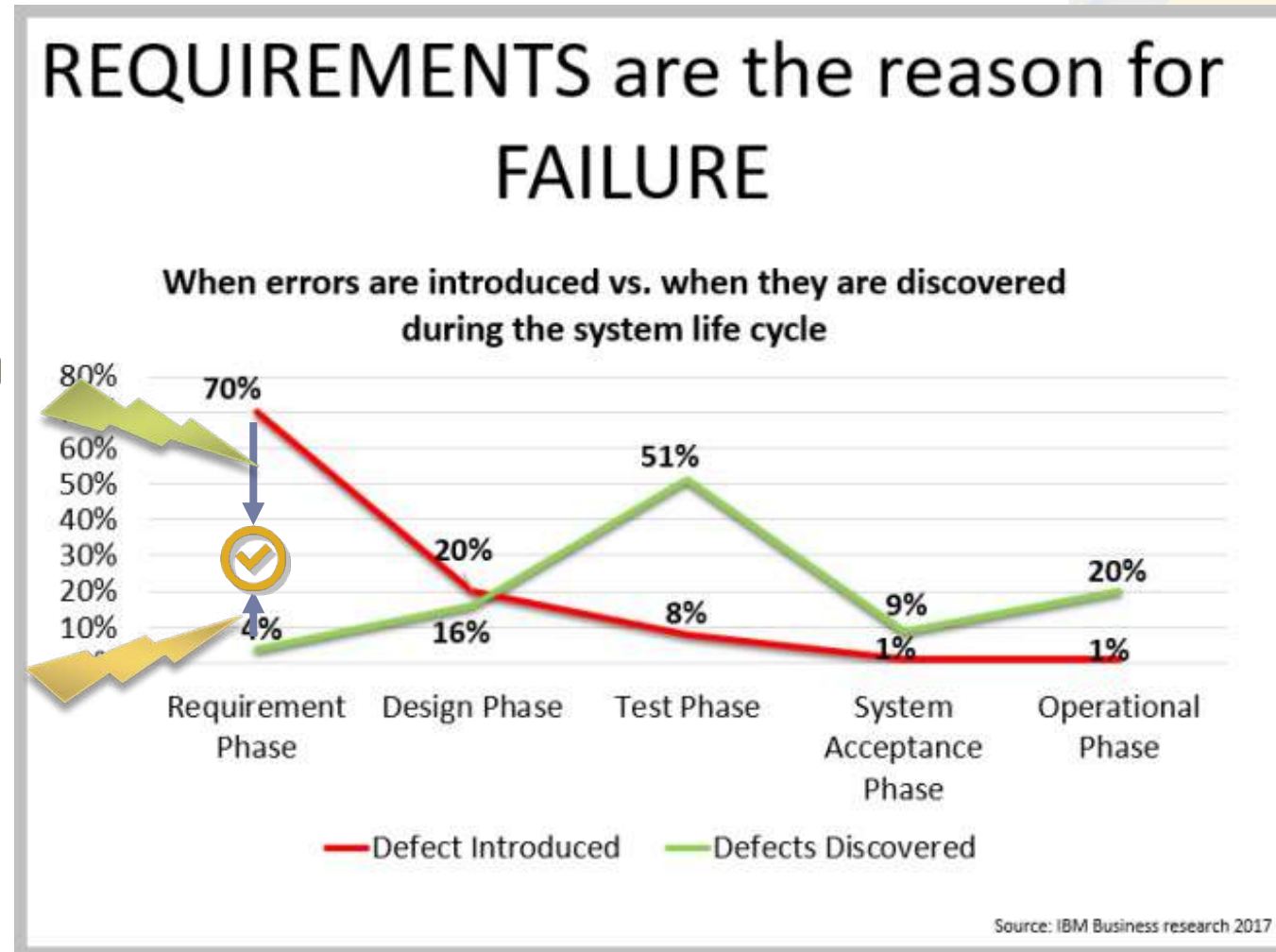
- **Current Position:** Chief Sales Manager of The REUSE Company
- Former Product Manager of RQA and the Systems Engineering Suite
- INCOSE CSEP Certified
- Graduated in the INCOSE Institute for Technical Leadership
- Member of the board of AEIS – The Spanish chapter of INCOSE
- Active contributor to the INCOSE Guide to Writing Requirements
- Other certifications: ITIL
- Other interests: Project Management, Business Analysis, Risk Management

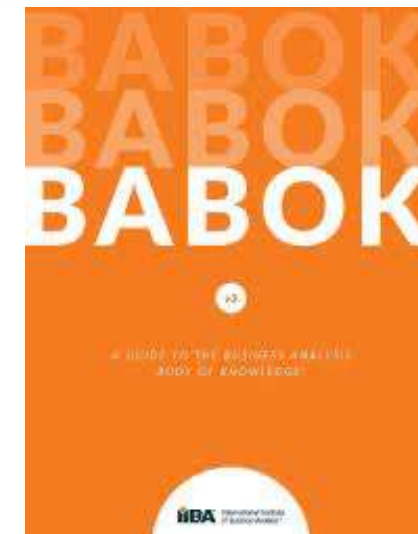
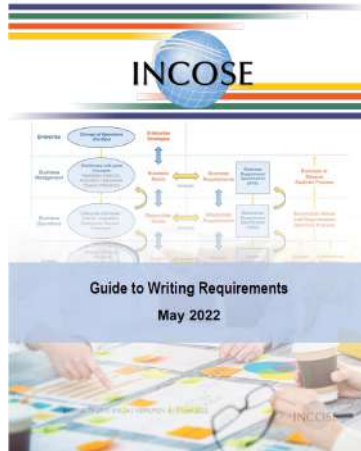


Frameworks and guidelines of quality for requirements

Authoring with a tailored set of rules

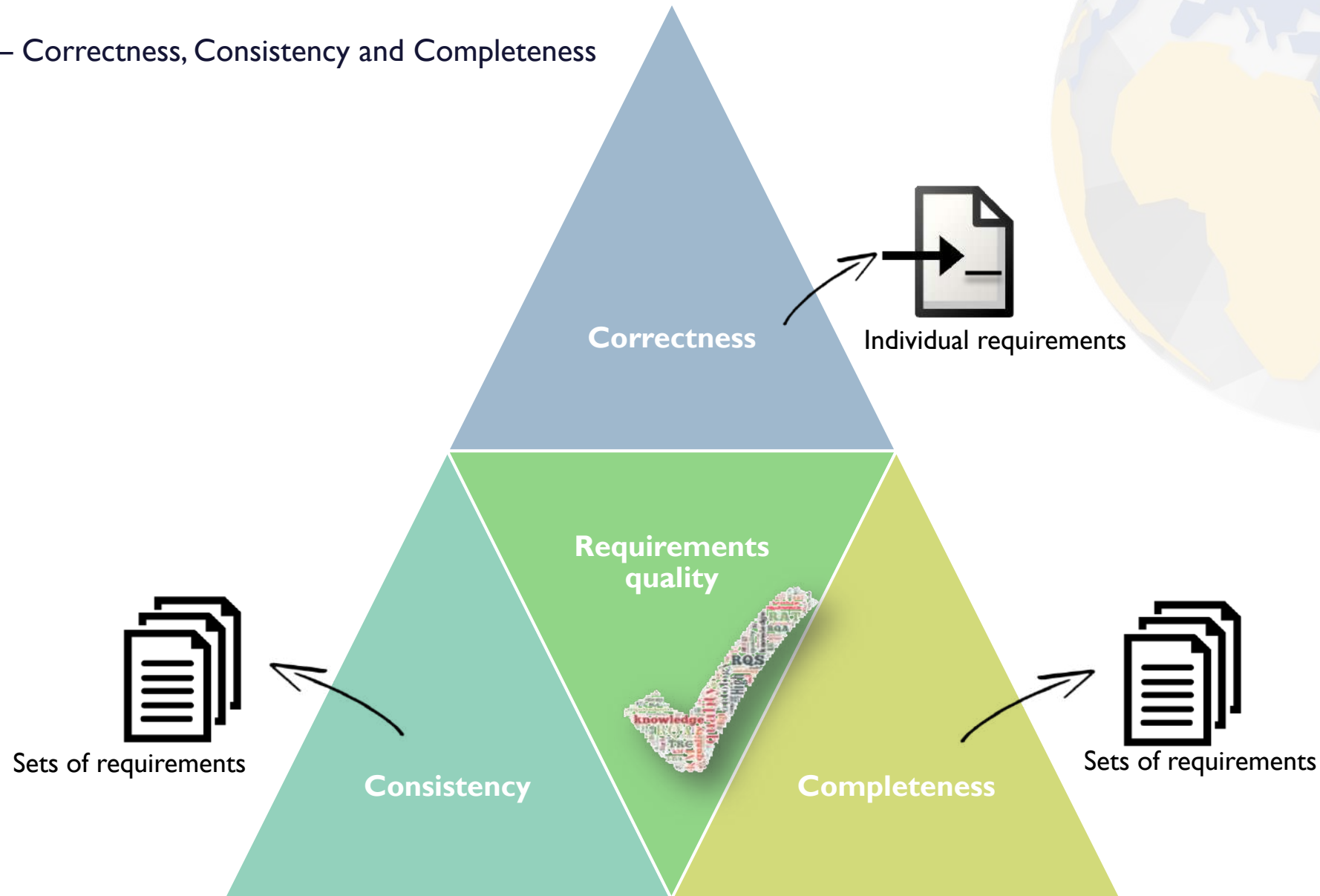
Inspection with a tailored set of rules







➤ CCC – Correctness, Consistency and Completeness



Enabling SMART Systems Engineering



When writing textual requirements, why is it more difficult to choose the correct numbers than to choose the correct words?



How to generate a quality report of your requirements based on the INCOSE guidelines

SISTEMISTAS



(In Spanish) Podcast
Sistemistas – Calidad de requisitos, con José Fuentes



COMPLETENESS

Completeness: tips and tricks for high-quality specifications



CONSISTENCY

Why CHALLENGING the INCOSE Consistency Metrics it benefit your requirements



CORRECTNESS METRICS

Improve the quality of your requirements using advanced Correctness metrics in RQA – QUALITY Studio



From zero to hero: The Temperature War



Tailoring and Deployment of SE Suite in F4E



Optimization of the requirements Engineering



Requirements Quality for Beginners



RAT for Capella – The perfect way for working with both



SMART Traceability: the core of a successful systems



← Active poll

0 



I normally follow the requirements writing rules as described in:

INCOSE Guide to Writing Requirements

☐ 0%

ECSS/ESA

☐ 0%

NASA - Systems Engineering Handbook

☐ 0%

SOPHIST

☐ 0%

IEEE 830

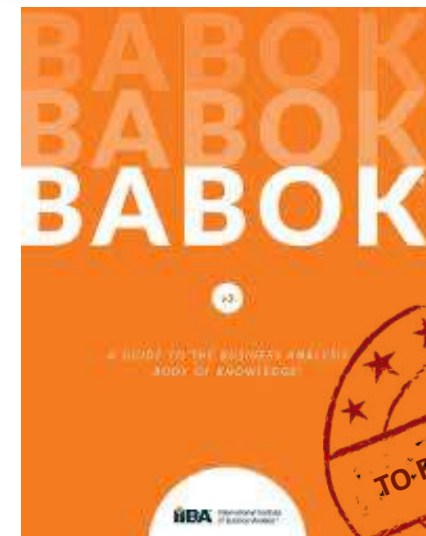
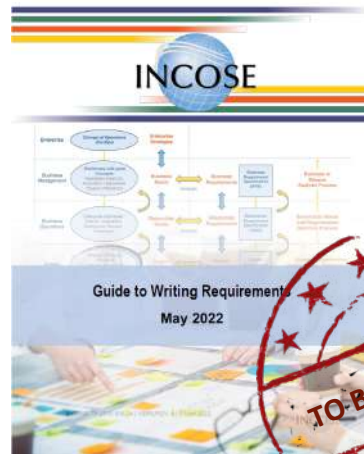
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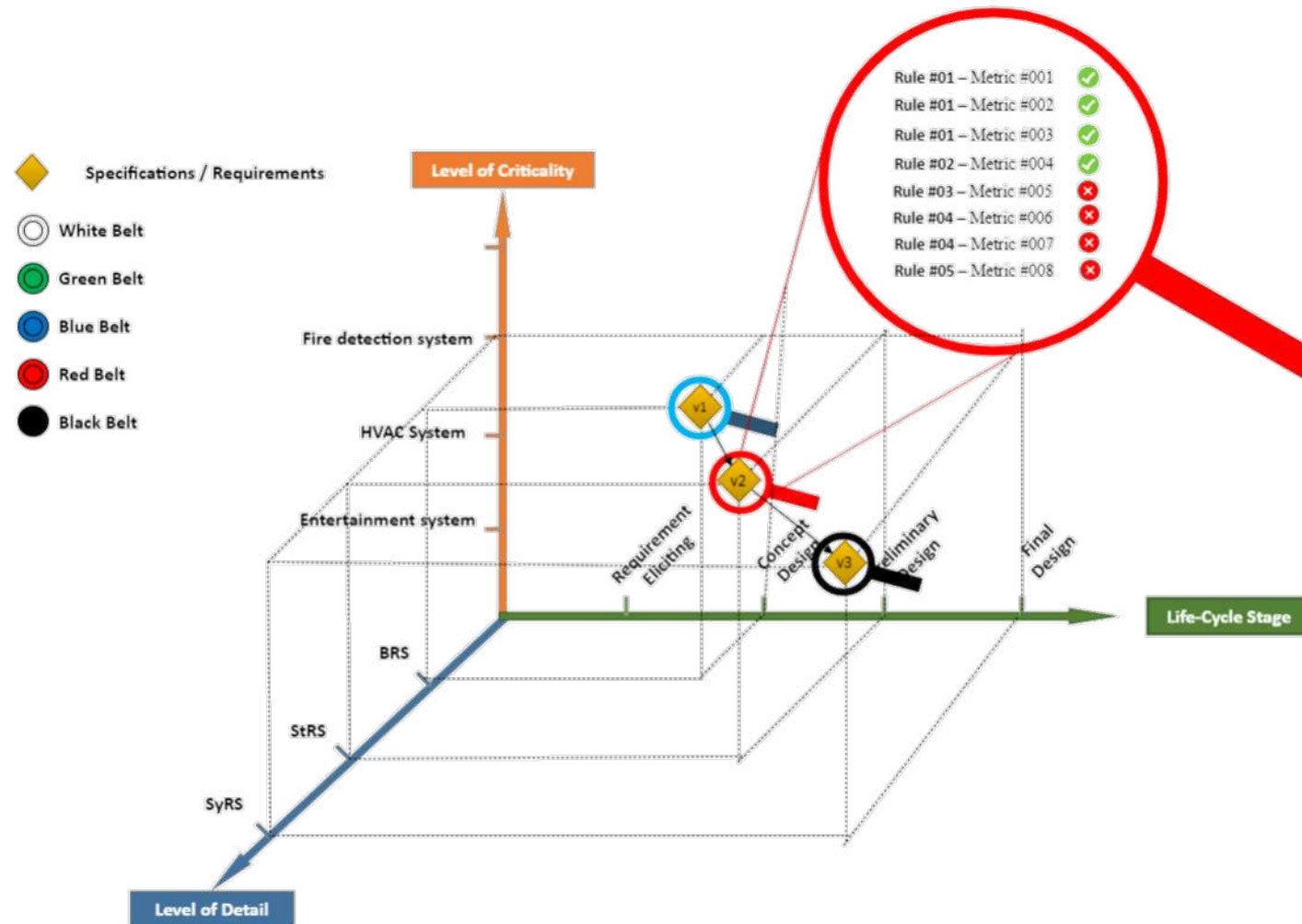
ISO 29148

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INCOSE Guide for Writing Requirements

reusecompany.com/webinars/real-time-quality-assessment...

Enabling SMART Systems Engineering

THE REUSE COMPANY

Real-time quality assessment tailoring the INCOSE Guide for Writing Requirements

A practical solution to an implementation assessment and requirements writing

Description:

Even though the INCOSE Guide for Writing Requirements (INCOSE) is a recognized reference for requirement engineers all over the world, the INCOSE Guide for Writing Requirements still poses many challenges. For example, the levels of abstraction, the components addressed by those requirements of different types,...

The INCOSE GWR thus requires tailoring so that its implementation could fit the project and organization needs and practices.





☁ Active poll

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Which is the most challenging rule to cover in your requirements?

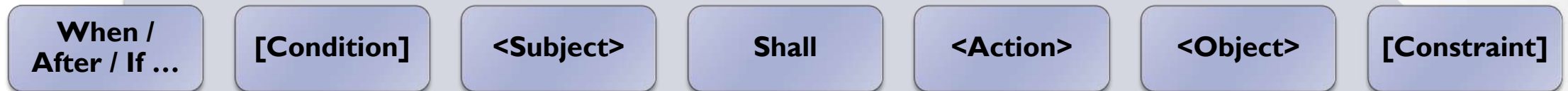
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Patterns for writing requirements

- When the heater enters warm-up mode, the display shall show an orange led in less than 0,5 s.



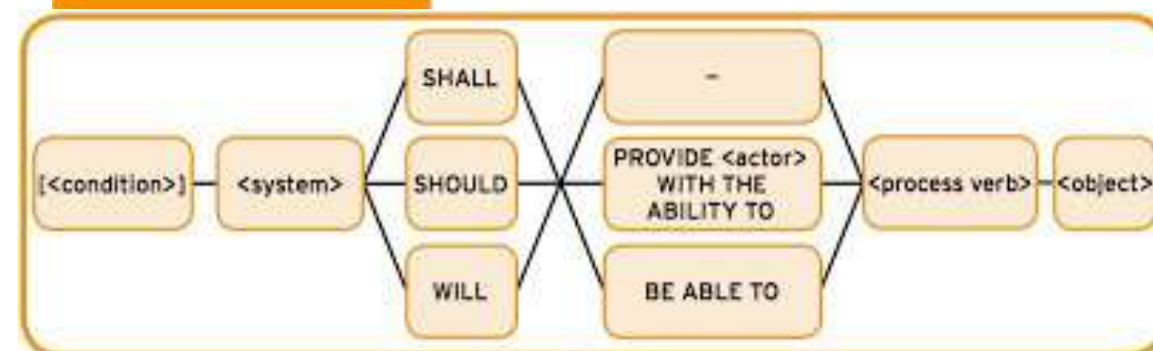
- The weight of the heads-up display shall be less than 700 gr.



EARS



| Pattern name | Pattern |
|-------------------|---|
| Ubiquitous | The <system or actor> shall <action> <object> |
| Event-Driven | WHEN <trigger> <optional precondition> the <system or actor> shall <action> <object> |
| State-Driven | WHILE <system state or actor state>, the <system or actor> shall <action> <object> |
| Unwanted Behavior | IF <unwanted state or unwanted event>, THEN the <system or actor> shall <action> <object> |
| Optional Feature | WHERE <feature is included>, the <system or actor> shall <action> <object> |
| Compound | Combinations of the previous patterns |





☰ Active poll

0 



I normally write requirements following this pattern/boilerplate/template:

EARS - Easy Approach to Requirements Syntax

☐ 0%

SOPHIST

☐ 0%

ISO 29148

☐ 0%

PABRE Catalog

☐ 0%

Others...

☐ 0%

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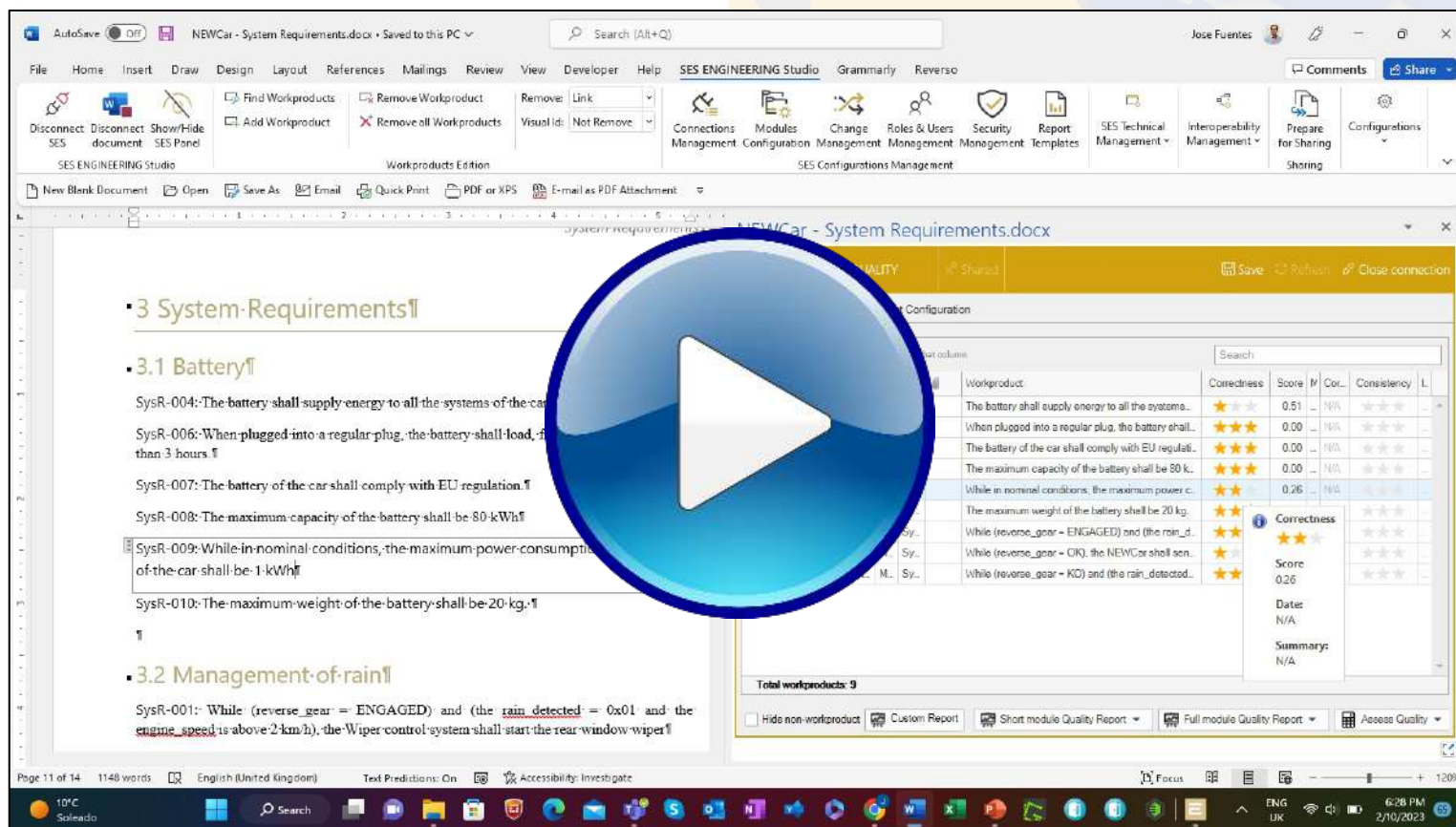




Demonstration

Steps:

1. Open MS-Word
2. Connect to your ontology
3. Choose a catalogue of patterns
4. Use the authoring tool to correct a requirement
5. Use the authoring tool to follow a pattern
6. Assess the overall quality of the document



The screenshot displays the Microsoft Word interface with the 'SES ENGINEERING Studio' ribbon active. The document is titled 'NEWCar - System Requirements.docx'. A large blue play button is overlaid on the document content.

The document content includes the following sections:

- 3 System Requirements**
 - 3.1 Battery**
 - SysR-004: The battery shall supply energy to all the systems of the car.
 - SysR-006: When plugged into a regular plug, the battery shall load, for less than 3 hours.
 - SysR-007: The battery of the car shall comply with EU regulation.
 - SysR-008: The maximum capacity of the battery shall be 80 kWh.
 - SysR-009: While in nominal conditions, the maximum power consumption of the car shall be 1 kWh.
 - SysR-010: The maximum weight of the battery shall be 20 kg.
 - 3.2 Management of rain**
 - SysR-001: While (reverse_gear = ENGAGED) and (the rain_detected = 0x01 and the engine_speed is above 2 km/h), the Wiper control system shall start the rear window wiper.

The right sidebar shows a quality assessment table for workproducts:

| Workproduct | Correctness | Score | Cor. | Consistency | L |
|---|-------------|-------|------|-------------|---|
| The battery shall supply energy to all the systems of the car. | ☆☆☆ | 0.51 | N/A | ☆☆☆ | - |
| When plugged into a regular plug, the battery shall load, for less than 3 hours. | ☆☆☆ | 0.00 | N/A | ☆☆☆ | - |
| The battery of the car shall comply with EU regulation. | ☆☆☆ | 0.00 | N/A | ☆☆☆ | - |
| The maximum capacity of the battery shall be 80 kWh. | ☆☆☆ | 0.00 | N/A | ☆☆☆ | - |
| While in nominal conditions, the maximum power consumption of the car shall be 1 kWh. | ☆☆☆ | 0.26 | N/A | ☆☆☆ | - |
| The maximum weight of the battery shall be 20 kg. | ☆☆☆ | - | - | ☆☆☆ | - |
| While (reverse_gear = ENGAGED) and (the rain_detected = 0x01 and the engine_speed is above 2 km/h), the Wiper control system shall start the rear window wiper. | ☆☆☆ | - | - | ☆☆☆ | - |

The bottom status bar shows 'Page 11 of 14', '1148 words', 'English (United Kingdom)', 'Text Predictions: On', and 'Accessibility: Investigate'.



Boosting MS Word with Requirements Management Capabilities

1. Introduction to the MS Word Add-in of SES ENGINEERING Studio
2. Writing high-quality requirements in MS Word
3. Parsing existing MS Word documents using different techniques.
4. Managing Requirements in MS Word.
5. Managing traceability in MS Word.
6. Transforming MS Word requirements.
7. Propagating changes from traceability links.
8. Collaboration
9. Reporting Systems Engineering artifacts through MS Word.

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15 ‘
webinar

Episode 3. Parsing existing MS Word documents

In some cases, the requirements are created by an external party, and you are given the document (MS Word or PDF) to be integrated with other engineering artefacts. In this episode we will show how an existing document can be automatically parsed to delimit the different requirements and provide a unique identifier so that all the technical management capabilities can also be applied to those external documents.

Date:

Tuesday, February 28, 2023, 5:00 PM CET (Madrid)/ 5:00 PM JST (Tokyo)/ 7:00 PM AEDT (Sydney)

Thursday, March 2, 2023, 9:00 PM CET (Madrid)/ 8:00 AM PST (Los Angeles)/ 11:00 AM EST (Detroit)





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| | | | |
|--|---|--|--|
|  <p>Requirements management through AIG Contracts</p> |  <p>Connecting the Dots: Interoperability between your favourite Systems Engineering tools</p> |  <p>Semantic traceability: how to keep the digital thread all along the SE lifecycle</p> |  <p>The MBSE Podcast Trust us we are Systems Engineers MBSE around the world: Spain Guest: Juan Llorens</p> |
|  <p>Passive voice requirements: Why "passive voice" actually can become a nightmare</p> |  <p>(In Spanish) Invitados al podcast 'Sistemistas': V&V ¿Qué es qué?</p> |  <p>Connecting textual requirements and Capella models (Invited presenters)</p> |  <p>Requirements Management: Managing data over entire life cycles</p> |
|  <p>How to kick off your KM – KNOWLEDGE Management project</p> |  <p>Taming the System Engineering Life cycle using Connectivity and Interoperability: the SES ENGINEERING Studio</p> |  <p>Raise the ante: high-quality models is the only way forward after high-quality requirements</p> |  <p>Digitalizing the V&V process on both sides of the V-Model</p> |



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SMART
Technical Management
DIGITALIZATION
2:57

INTEROPERABILITY
FRAMEWORK
1:00:41

MORE
OF THE
CONNECTIONS
BY MAKING THEM
INTEROPERATE
1:47

Signals and messages
in the
automotive
domain
24:04

Configuration Management
at
Life Cycle level
1:06:56

Boosting MS Word with Requirements Management...
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38 visualizaciones • hace 7 días

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