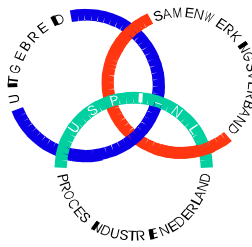


USPI - Industry Tagging Philosophy

MB meeting Status Update & Invitation to join

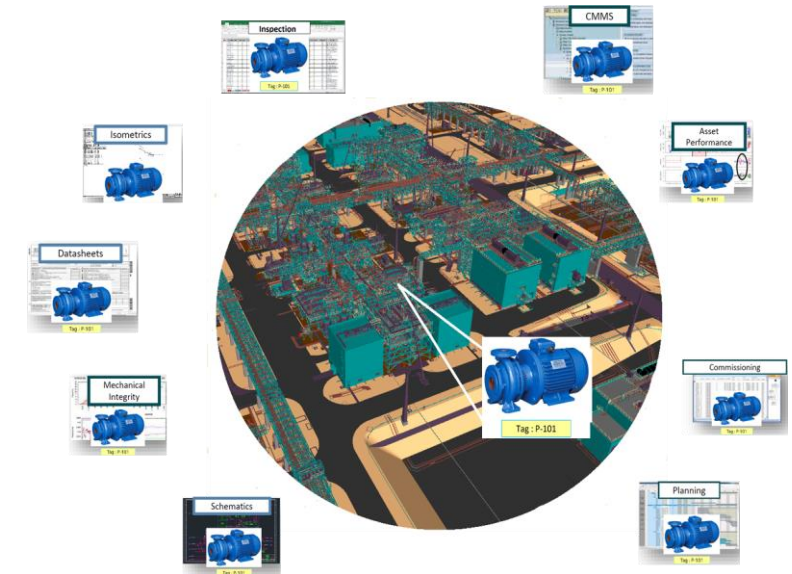
Peter Paul Pruijn, June 2024

Problem Statement



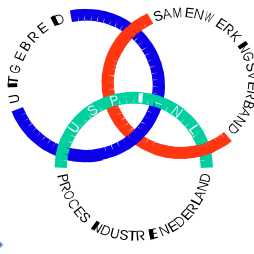
Tagging is a unique identifier in the field and in digital systems....

- Clarity about extent of tagging the ability to implement different engineering or operational use cases. Examples
 - Design - The increasing use of modular and package systems can lead to inconsistent levels of tagging with the parent facility and need for rework
 - Construction - identification or tagging of objects required to enable Advance Work Packaging
 - Operational – identification of manual valves, civil infrastructure or flanges to enable specific operational or digital use cases
 - Digital – level of tagging determines level of classification required. E.g. Do we stop the classification at Apples or do we need to subclassify into Granny Smith, Fuji, Pink lady, Belle de Boskoop. Consistency of tagging affects interoperability of digital systems.
- A digital representation of the facility that does not reflect the necessary level of content means expensive rework after project handover

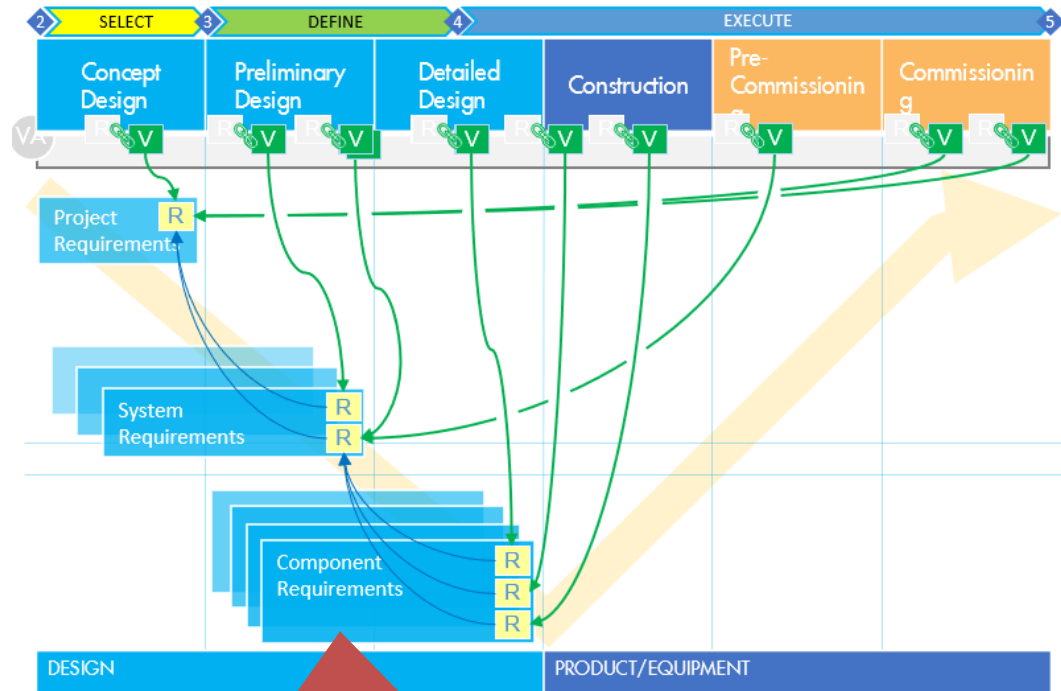


.....but there is no industry guide about what to tag

Objectives



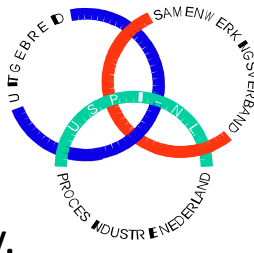
- Specify requirements for what to tag or label to enable consistent and adequate identification of processes, functions, equipment, bulk items, and infrastructure to serve the needs of different users across a process plant lifecycle, which can be validated.
- Define specific use cases and associated value associated with resolving identified pain points. Outline best practices anticipated for closing gaps to address pain points. Project and operational use cases require different levels of granularity.



The Tag is the lowest level of requirements decomposition.


How low do you go?

Sprint 1: Tagging Use Case Definitions & Standards

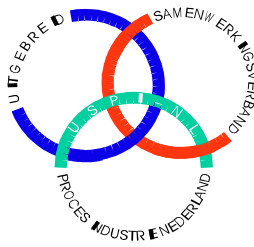


The project completed the Tagging-Use Case matrix that can be used to define or validate a tagging philosophy. The matrix can be used to set tagging priorities. It includes a list of relevant tagging standards.

The most important use cases for tagging are in Maintenance, Inspection and Safety in Operations.

		USPI TAGGING PROJECT SCOPE			Tagging - Use Case Matrix																				
	Potential Taggable item	£	Future	Out	Typically mastered in/on?	Reliability Analysis	Maintenance	Inspection	Requirements beyond maintenance (i.e. original design envelope)	Design: tag maturity	Procurement tracking	Material Management	Construction Tracking	Precommissioning	Commissioning Tracking	Decommissioning (obsolescence)	Facility (Plant) Operation & Automation	Spare Part Management	Leak Detection	Corrosion Monitoring	HSE Engineering	Safety in Operations	Risk/Hazard assessments (LOPA, etc)	Project Maintenance (flange management)	Management of Change
						4	33	33	16	21	22	18	26	21	19	16	9	17	13	16	21	12	21	14	11
	Define scope boundaries clearly	0																							
	Civil Infrastructure and structures	0	x																						
	Buildings	12			3D		x	x		x	x	x	x	x	x	x						x		x	
	Roads	9			3D		x	x		x	x	x	x									x		x	
	Bridges	9			3D		x	x		x	x	x	x									x		x	
	Jetties	1			3D																				
	Chimneys	1			3D																				
	Structural steel onshore	7			3D		x	x		x	x	x	x												
	Structural steel offshore	7			3D		x	x		x	x	x	x												
	Underground (ditches, trenches, drainage/sewage etc)	9			P&IDs		x	x		x	x	x	x	x	x										
	Fences, Gates	5			3D		x	x														X		x	
	Foundations	3			3D		x	x																	
	Berms (bund walls)	5			3D		x	x														x		x	
	Work Packages (e.g. Engineering Work Packages, Procurement, Material Management, Construction; CWA, CWP, IWP)	15								X	X	x	X	X	X	X		X		X	X		X	X	X

Tagging Philosophy Standard Status & Timeline



Sprint 2:

Q1/Q2 2024

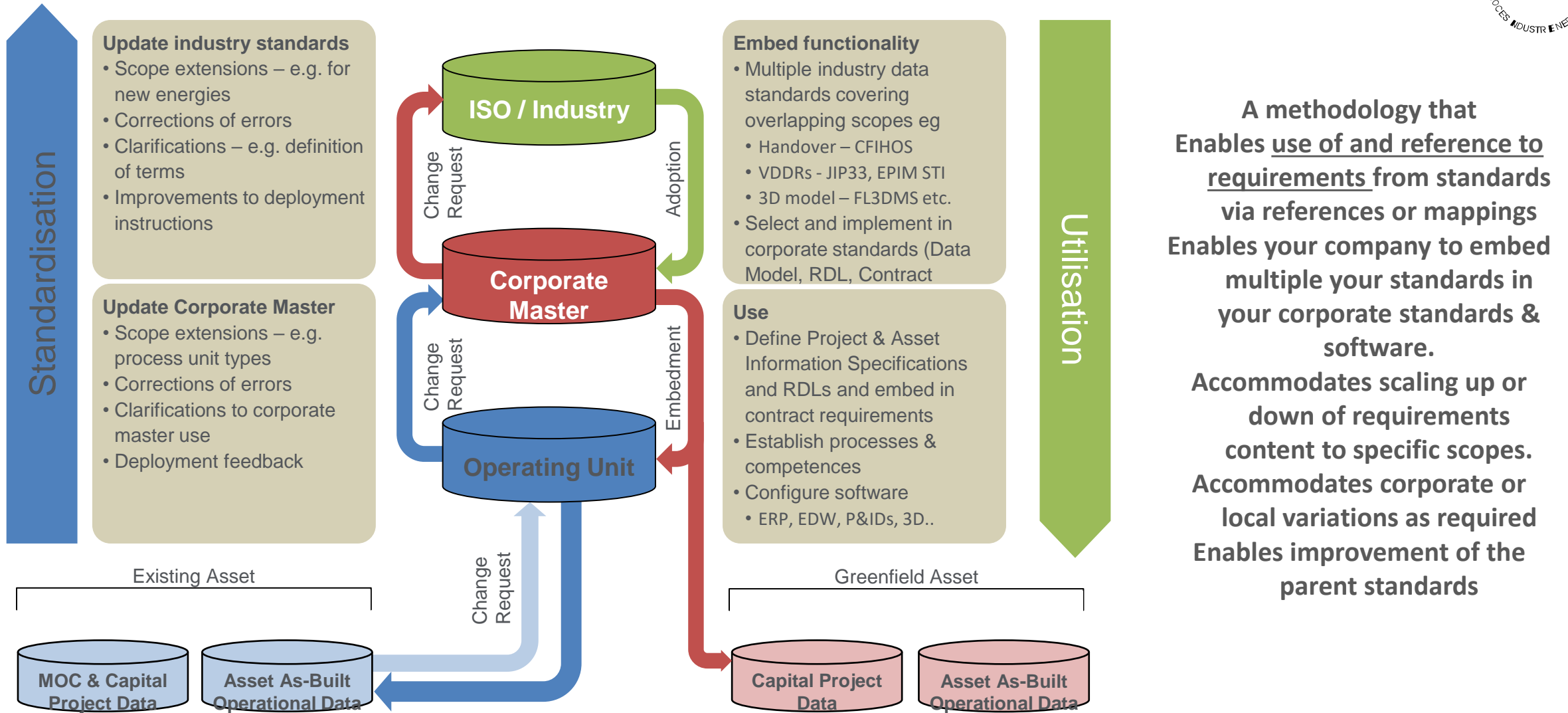
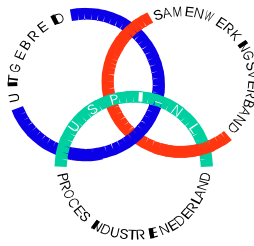
- Collection & sharing of Relevant Tagging Standards & Specifications
- Business Case Definition – based on most important use cases
- Sharing major companies tagging philosophies

Sprint 3:

Q3 2024

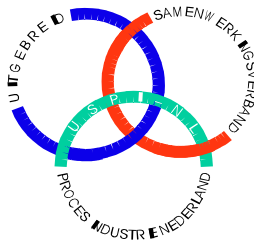
- Apply envelope concept on Relevant Tagging Standards & Specifications
- Create a best practise guide

Envelope Concept – what is it?



A methodology that
Enables use of and reference to
requirements from standards
via references or mappings
Enables your company to embed
multiple your standards in
your corporate standards &
software.
Accommodates scaling up or
down of requirements
content to specific scopes.
Accommodates corporate or
local variations as required
Enables improvement of the
parent standards

Who to contact for more information

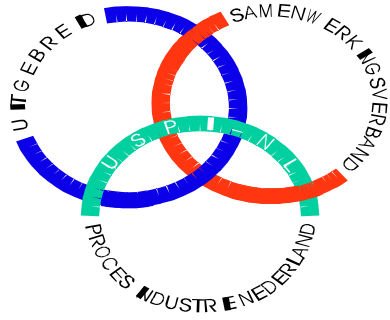


For information about the project

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Questions?

