D05.01 20230126 Meeting Minutes: Webinar on the review of the Style Guide

Project:	SEMIC: Style Guide	**Meeting Date/Time:**	26/01/2023 10:00 - 12:00
Meeting Coordinator:	Bert Van Nuffelen, Eugeniu Costetchi	**Issue Date:**	31/01/2023

Meeting Agenda
1. Welcome 2. SEMIC overview & Webinar Introduction 3. Introduction Style Guide 4. Feedback 5. Conclusion

Meeting Slides
LINK

Participants		
Name	**Initials**	**Organisation**
Agis Papantoniou	AP	Cognizone
Alberto Abella	AA	Fiware
Alejandro Villar	AV	Open Geospatial Consortium
Alexandros Vassiliades	AV	Aristotle University of Thessaloniki
Ana Rosa Guzmán	ARG	General secretary for digital administration Spain
Anabel Fraga	AF	Ministry of Territorial Policy and Civil Service spain
Andreea Pasare	AP	QIAGEN

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Anja Loddenkemper	AL	Geodateninfrastruktur Niedersachsen
Anssi Ahlberg	AA	Finnish Digital Agency
Antonella Lunelli	AL	Autonomous Province of Trento
Bart Hanssens	BH	FPS BOSA DG Digital Transformation
Benny Lund	BL	Swedish Companies Registration Office
Casper	C	KOOP Netherlands
Costas Simantos	CS	Sigma Cubed
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Denis Dechandon	DD	EC Publications Office
Cécile Guasch	CG	EC DIGIT
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Dorota Kazanecka	DK	Ministry of Digital Affairs Poland
Sjaak Kempe	SK	EUCARIS
Franck Cotton	FC	INSEE France
Fredrik	F	National Archives of Sweden
Fredrik Nordlander	FN	DIGG
Geert Thijs	GT	Digital Flanders
Geertrui Timmers	GT	ABB - Flemish Government
Honza F	HF	Cognizone
Ismael Arribas	IA	International Association for Trusted Blockchain Applications
Ivan Penava	IP	Central State Office for Development of Digital Society Hungary
Jaana Mõtsar	JM	Ministry of the Environment Estonia
Jakub Klímek	JK	Ministry of Interior of the Czech Republic

Javier orozoco	JO	EC CNECT
Justyna John	JJ	KPRM
Kent Jonsrud	KJ	Norwegian Mapping Authority
Kuldar Aas	KA	Ministry of Economic Affairs and Communications for Estonia
Lyubo Blagoev	LB	United Software Writers Ltd.
Martin Nečaský	MN	Charles University in Prague
Martin Ots	MO	Estonian Transport Administration
Martynas Mockus	MM	Informacinės visuomenės plėtros komitetas
Mikaela	M	Saint Louis University
Morits Herter	MH	Geodateninfrastruktur Niedersachsen
Natan Cox	NC	Cognizone
Nedyalka Ivanova	NI	Bulgaria
Niki Chatzilvasili	NC	Deloitte
Nuno Freire	NF	EuropeanaTech Community
Peter Bruhn Andersen	PBA	The Danish Agency for Digitalisation
Jorge Sousa	JS	Public Administration Digital Competencies Centre
Riita Alkula	RA	Digital and population data services agency Finland
Rob Atkinson	RA	Open Geospatial Consortium
Robert Czarny	RC	DG Education, youth, sport culture
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Stina Avvo	SA	Ministry of economic affairs and communication Estonia
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Radovan Pajntar	RP	Unknown
Phil Barker	PB	Unknown

Peter	P	Unknown
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William Verbeeck	WV	SEMIC Team
Jitse De Cock	JDC	SEMIC Team
Nathan Ghesquière	NG	SEMIC Team

Summary

SEMIC presented an overview and introduced their Style Guide as can be found in these slides.

The discussion afterwards highlighted that conceptual modelling is done by some in UML and others in OWL or SHACL. Both have their advantages and disadvantages. UML requires some additional rules to be accurate but allows non-semantic experts to participate in the modelling. While OWL and SHACL allow semantic experts to model faster and more accurately.

The Style Guide promotes the adoption of light weight ontologies since big extensive ontologies may hinder reusability. Currently the Style Guide does not focus on governance and it intends to boost adoption through formalisation.

Further clarifications on the tooling used by SEMIC will be given during the tooling for the data specification life cycle webinar on February 7th.

Full meeting minutes

Welcome Slide 1-4	• PF welcomed the participants and presented the agenda.
SEMIC overview & webinar introduction Slide 5-11	• PF gave an introduction to SEMIC. • She sketched the motivation and context of the Style Guide.
Introduction Style Guide Slide 12-16	• BVN explained that the main goal of the webinar is collecting feedback.
1. **Audience** Slide 17-23	• EC presented the proposed audience of the Style Guide.
2. **Terminology** Slide 24-35	• EC presented the terminology of the Style Guide.
3. **Reuse principles** Slide 36-59	• EC presented the reuse principles.
4. **Overview of rules & guidelines** Slide 60-69	• EC gave an overview of rules and guidelines.
Feedback	**BVN opened the first topic of discussion by asking the question "Should we use UML as language for conceptual models or treat it as a visual diagram and nothing more?"** RA replied that there needs to be a separation of concerns. UML is good for modelling while SHACL and OWL are good for reuse. If there is tooling support to convert UML to SHACL and OWL the approach is realistic. CS proposed to treat UML as a visual aid but not as something more formal.

	RP: It would be better to find RDF design tools and generate an UML from the RDF. He asked whether, in the context of making ontologies, only concepts should be modelled or also the syntax. Replies to Roberto's statement on RDF and UML were posted in the chat. RA: UML from SHACL is more realistic than from RDF or OWL. GT:UML is more formal than you would think, if in doubt about some graphical element you should check the UML specification. We experimented with graph diagrams but they were too complex for the reader. EC clarified that the presentation did not touch on any drawbacks of UML. One such drawback is that UML does not have formal semantics defined.There are ways to express the same thing in multiple ways. One might argue, UML is unfit. To overcome this challenge we have a set of UML conventions on how things should be expressed. SEMIC uses validators to check whether a UML diagram adheres to these conventions. If it adheres, it is suitable for automated transformation. The conversation in the chat continued during EC's explanation. RA: Using MDA with UML usually requires a lot of work to make the diagram reflect the intended model. I have done a lot of this in the OGC and now much prefer to model with OWL + SHACL and then derive the UML diagram to explain it. VT: It's not about the formality of UML but the expressivity of UML. Is UML as expressive as OWL? Can it be backward compatible? RP in response to comment GT: The point is that UML was designed to do a different thing. and is not a language that is going to evolve. GT:There is indeed some information loss between OWL and UML (in both directions). I do not totally agree that certain things can be expressed in multiple ways. BVN elaborated on EC's explanation that there is a need for a graphical language and a choice was made to use a subset of UML and further formalise it with conventions.

	EC highlighted a second drawback: the fact that UML was made for OO programming. The way it is interpreted for OO programming differs from the way it is interpreted for data modelling. When BVN and EC spoke the discussion in the chat continued. Honza F:s far as I understand the OWL expression according to the Style Guide is quite minimal, and for those the UML may be aligned sufficiently. RA: ISO19103 (a UML profile) revision included the constraint that the same named property of different classes is assumed to be the same property,but this is limited to the package scope. CN wanted the conversation to focus on a specific issue related to UML and RDF usage, mainly the transformation from UML to RDF and the reverse. EC stated that UML was chosen since it allows domain experts to participate in the conception of data models. CS Agreed and added that generation of RDF from UML is easier than the other way around. GT: ISO uses its own metamodel, although based on the UML metamodel. Same with INSPIRE. RP: While I understand this UML profiling stuff, I think that in time this will create maintenance issues. VT in reply to HF: That is also my understanding of using the term lightweight so they can be backward compatible. RP: The issue is just finding tooling to bridge the communication gap with domain experts. GT:We also tried UML profiles, but it needs stereotypes. And the problem remains: to communicate the meaning of the stereotypes. JK:I agree that tooling to communicate with domain experts is independent from formal representation of the result. +1 for generating UML from an ontology just for visualisation purposes.

	RA:The reuse of UML is a pain point. He said the Style Guide should take into account all use cases meaning both those starting from UML and those starting from OWL or SHACL. BVN acknowledged the pros and cons of both approaches. He said it is important that what we share should be aligned. Roberto Polli: If we just want graph representation, I won't buy UML, which is more than plots. GT: UML is a more logical starting point in working groups developing standards with mostly not OWL- or RDF-savvy people. So it is the actual starting point in practice. **RC: Did you consider having a hands-on session during the upcoming workshop?** BVN: A webinar on tooling will take place next. That webinar is not hands-on but will highlight key concepts and considerations. A tutorial session could be considered in the future if there is enough demand.. **BVN opened the next topic for discussion. Should we name things or profile things to SHACL only? How shall we scope or reframe to shapes or explicitly name it? He asked to share experiences or current practices.** RA: Note the profile's vocabulary supports SHACL as well as any other form or resource with other roles. He shared the following link https://www.w3.org/TR/dx-prof/ with the comment "rules URIs" = profiles as things with their own canonical model. HF: Putting strong semantics in OWL makes it harder to reuse. EC: The creation of formal ontologies is beyond the needs for achieving interoperability. The Style Guide encourages the usage of lightweight ontologies only. RA: Both UML and OWL allow over-specification that stops re-use - lightweight in both cases are better for conceptual models.

	GT: what is understood by lightweight? Since it often is not an option. BVN: With lightweight they do not refer to the complexity of a model but it is more related to the technical aspects. GT: It could be interesting to make an additional distinction for implementation models, additional to CVs and APs. BVN: Indeed the Style Guide does not clarify what belongs to the semantic model and what is related to implementations. EC: The lack of the implementation layer is mentioned in the scope. GT: Our representations are even more light-weight. PB:I wonder if even phrasing the discussion around OWL implies too heavy-weight? For some lightweight means (mostly) not OWL, but RDFS instead. RA: DCAT and SOSA both stripped out heavy use of OWL to a bare minimum as they evolved. Does this lightweight profile have a formal dereferencable URI and validation checks ? Complexity of domain does not equal complexity of the metamodel to describe it. RP: I like dereferenceable URIs. in general. They pose some security risks when used at runtime. As long as it's for modelling, that’s okay. **AA: With regards to the aspect of adoption. Could the language be a barrier to adopters?** BVN: The Style Guide in its current state does not touch on governance. The current focus is on the coherence of data specifications. GT: A well formalised model will be more rapidly adopted by developers and data exchange implementers. A good adoption is indeed an ongoing thing, but if you don't have a well formalised standard, it will hamper adoption.

	BVN:It is indeed a goal which we are working towards. **RA: How do you make the tooling available enough to support adoption? Since in the world of UML-modelling multiple closed source tools are being used by different individuals and organisations.** BVN: The Style Guide focuses more on the rules. In the upcoming tooling session there will be more information on tooling. The tool chain is open source but does use some proprietary artefacts. CG: About reusability, guidelines about creating application profiles and how to reproduce this tool chain in the creation of application profiles would help reusability.
Conclusion	The Session was wrapped up and everyone was thanked for their participation.