ICEG Hydrants: Second Thematic Working Group

Welcome!

22 June 2023

Virtual working group – Google Meet

Agenda

#1	Welcome
#2	Process, input and timeline
#3	**Reminder** of identified use cases and requirements
#4	Presentation of the first draft of the data model
#5	Kick-off of the **public review period** and next steps

Practicalities

Audience sound is muted by default.

Use the hand in Google Meet if you want to say something.

Questions, comments and suggestions can be communicated via the chat function. Interaction is encouraged!

A yes/no question can be answered simply and quickly via the chat:

Agree = +1
Do not agree = - 1
Indifferent = 0

Goal for today

Discussion on the selected use cases and the storylines for the model as a first step towards the first version of the ICEG Hydrants model.

Summary of the 1st thematic workshop

Presentation of the first draft of the data model

Kicking off the public review period

Welcome and introduction to ICEG

Introduction to ICEG

- The ICEG review group ‘open standards’ has a permanent character and is responsible for the central coordination and follow-up of the work related to the standardisation of information.
- A cooperation agreement between the federal, regional and community governments to harmonise and align the initiatives aimed at realising an integrated e-government.
- Defining data standards
    - Exchanging data (syntax (grammar) and technical standards)
    - Define concepts in an unambiguous way (semantic)
    - Bottom-up development
- Mission aligned to the existing ICEG collaboration agreement between the federal, regional and community authorities (dd. 2013-08-26). Already modelled ICEG Public Organisation, ICEG Public Service & ICEG Building.
- Based on previous work and specifications when existing, such as OSLO (Flanders), INSPIRE

DIGITAAL VLAANDEREN

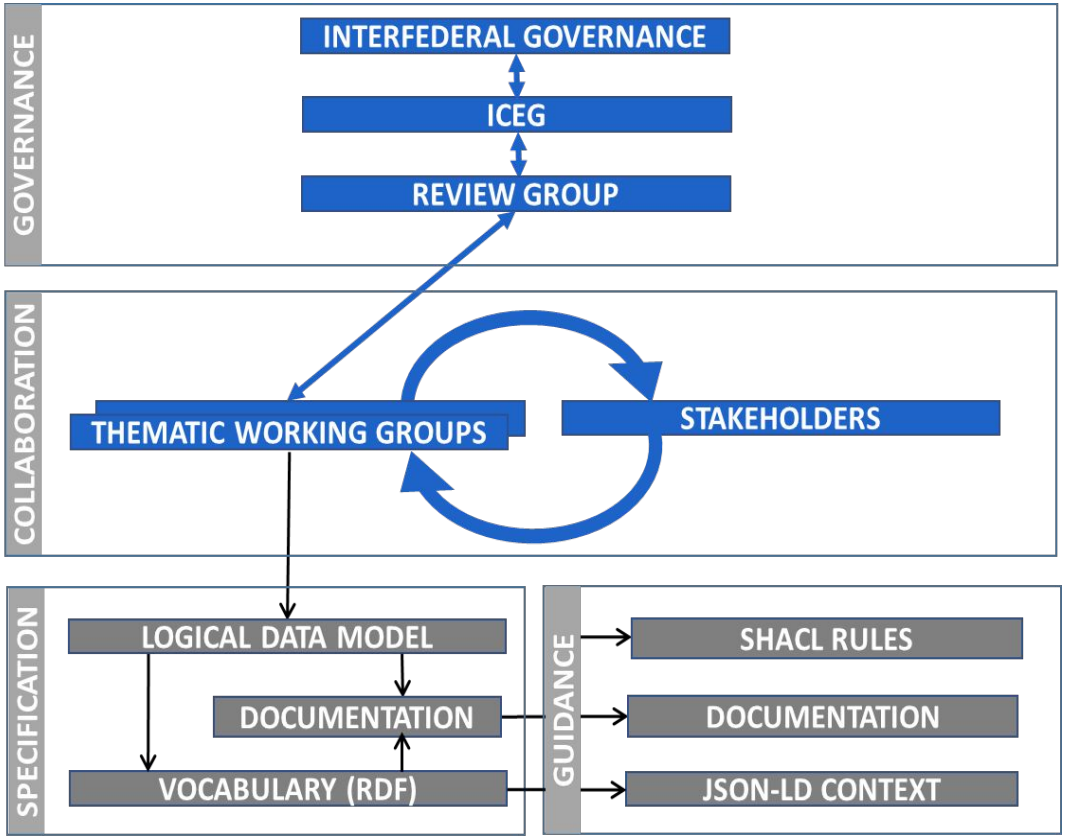
Wallonie

be be.brussels

FÉDÉRATION WALLONIE-BRUXELLES

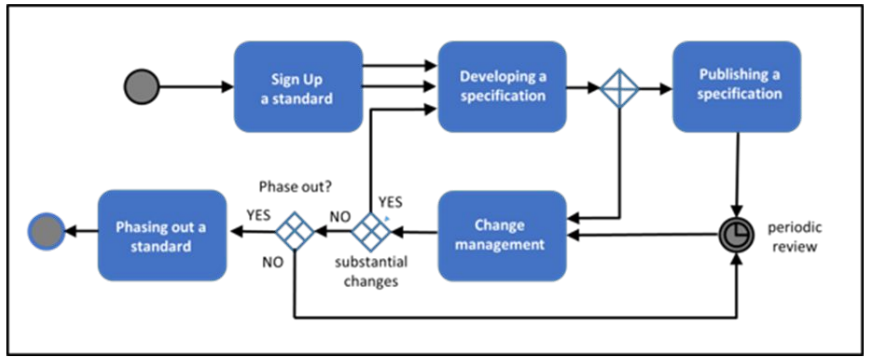
BOSA DG Digitale Transformatie FOD Beleid en Ondersteuning DG Transformation digitale SPF Stratégie et Appui

Governance


GOVERNANCE
INTERFEDERAL GOVERNANCE
ICEG
REVIEW GROUP
COLLABORATION
THEMATIC WORKING GROUPS
STAKEHOLDERS
SPECIFICATION
LOGICAL DATA MODEL
DOCUMENTATION
VOCABULARY (RDF)
GUIDANCE
SHACL RULES
DOCUMENTATION
JSON-LD CONTEXT

Governance: ICEG process and method

- Scalable process for registering, developing, changing and phasing out data standards.




INFORMATIE VLAANDEREN

PROCESS AND METHOD FOR THE DEVELOPMENT OF DATA STANDARDS

Version /// 1.0

Publication date /// 24 may 2019

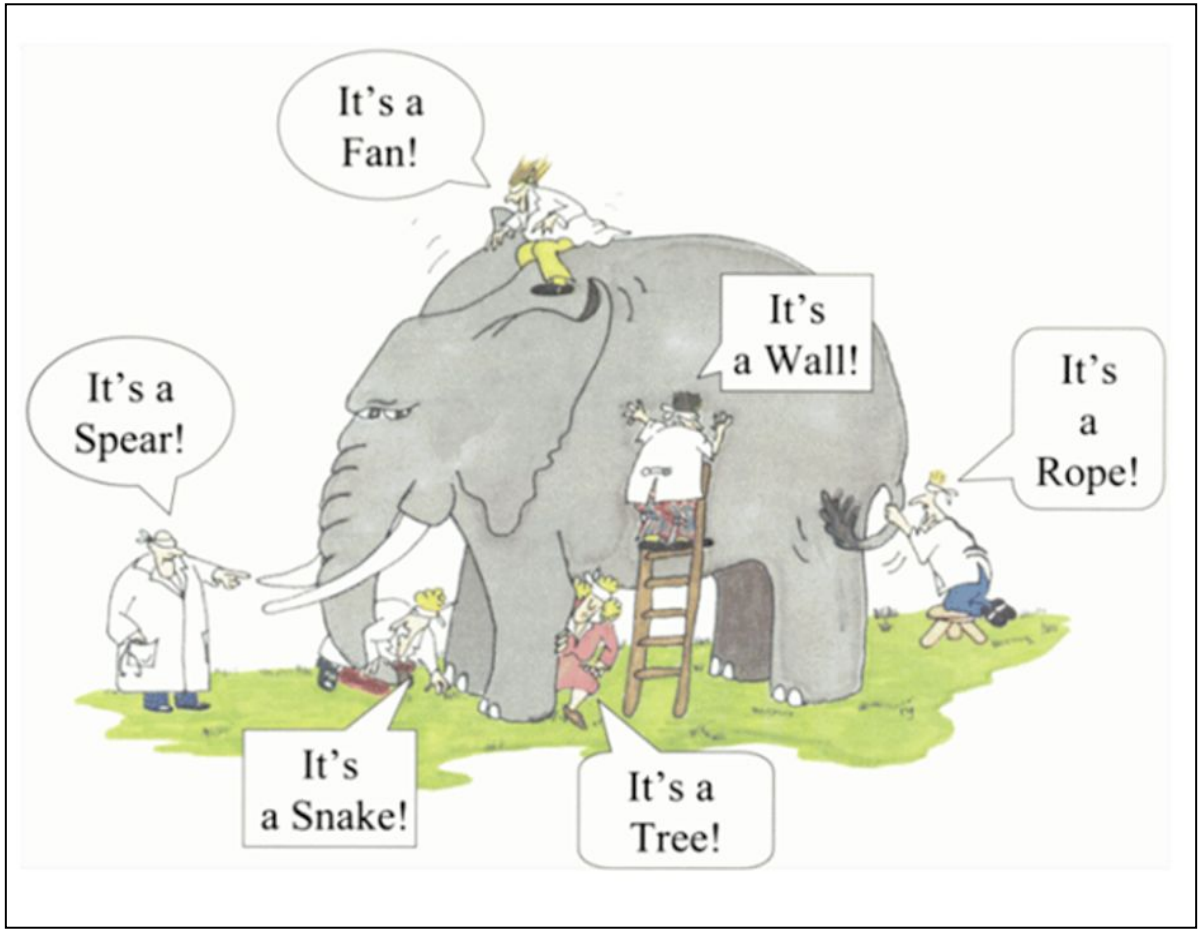
Abstract: French, Dutch
Full paper: English

W3C, IEEE, IETF, IAB en ISA, Open Stand, OSLO

The importance of harmonisation in the Belgian context

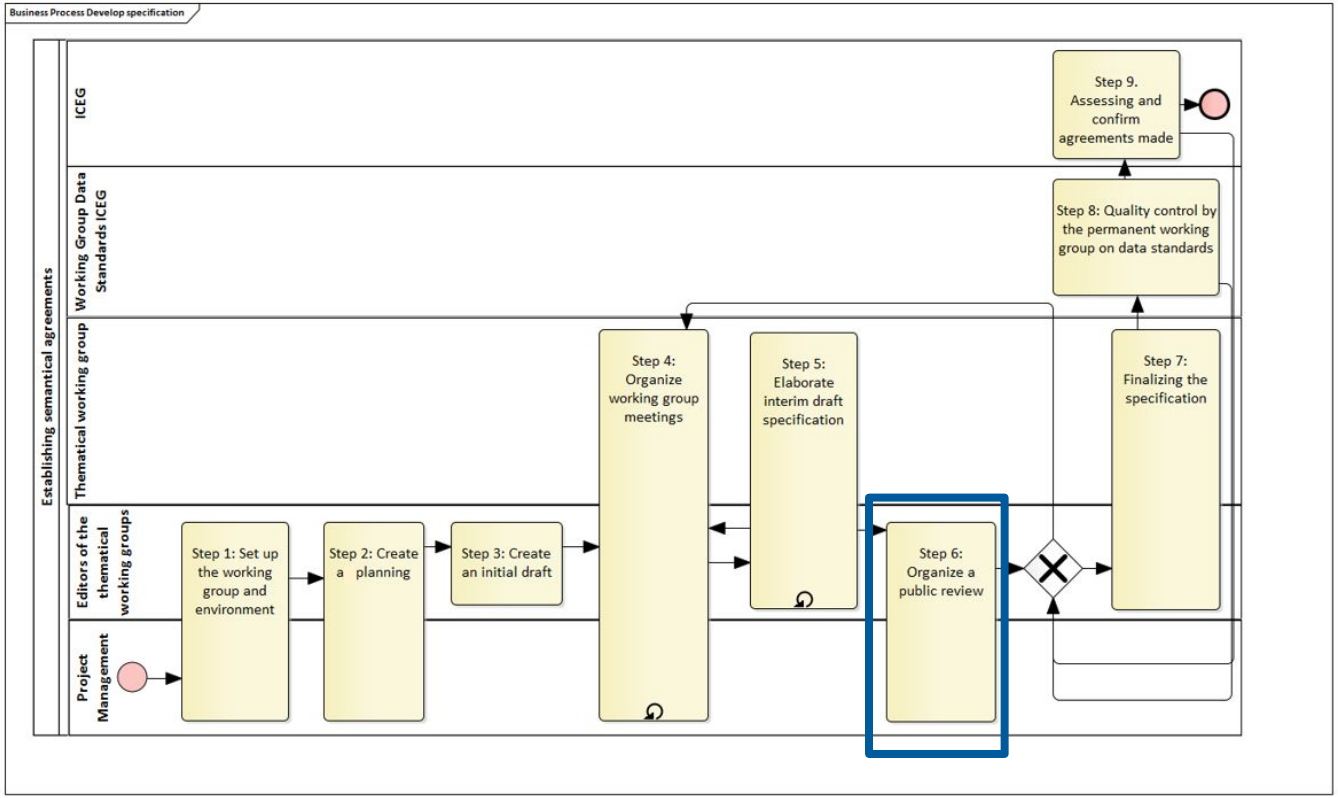
By standardising data pertaining to hydrants, several benefits can be achieved, including:

- **Improved accuracy and reliability of information** → Increased transparency and consistency in the data
- **Enhanced collaboration** among Belgian emergency services during field operations and major incidents → Easier sharing and exchange of data among different organisations
- **Improved cartographic interfaces** that establish connections between attributes and standardised symbols → Facilitated integration with other datasets
- **Better management** of hydrants and extinguishing water sources.


It's a Fan!
It's a Spear!
It's a Wall!
It's a Rope!
It's a Snake!
It's a Tree!

How do we achieve this

Process and methodology defined by ICEG



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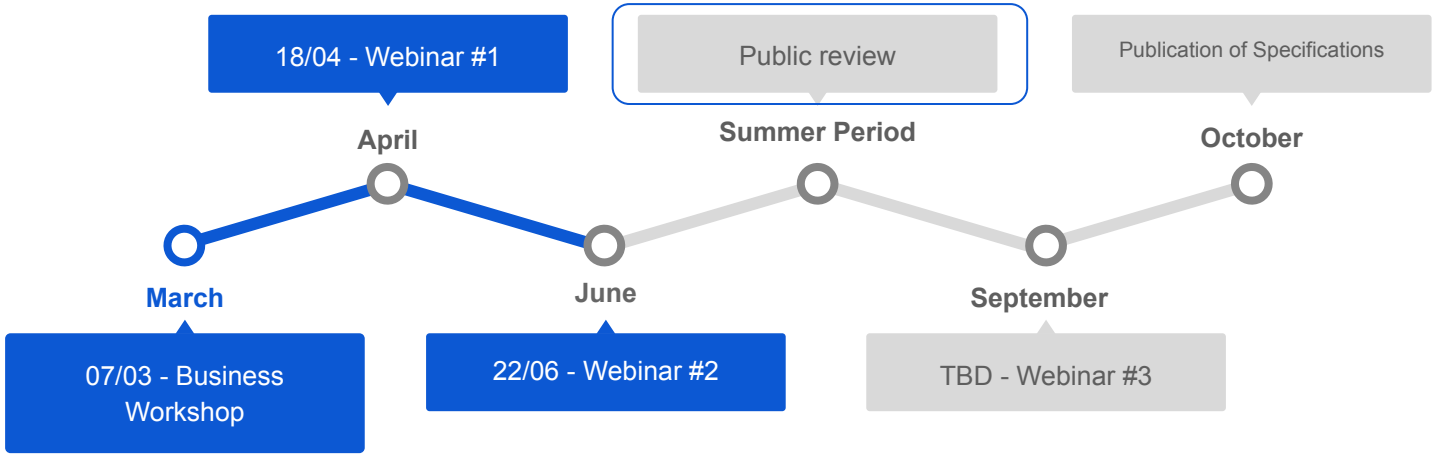
Timeline


18/04 - Webinar #1
Public review
Publication of Specifications
April
Summer Period
October
March
June
September
07/03 - Business Workshop
22/06 - Webinar #2
TBD - Webinar #3

Identified use cases

Original use cases

1	**Extinguishing water sources** are essential for emergency response services during a fire or other emergency situations.	They are **objects with a location** that can be identified through a set of **geographic coordinates**. These sources are typically owned by water distribution companies or enterprises with a high-risk profile. Clear **ownership information** is essential to enable linking with relevant authorities, such as the Enhanced Crossroad Bank for Enterprises
2		**To make these sources useful, standardized attributes** are required, such as unique-id, type, capacity, source, hose connection type, availability, accessibility, and contact point to inform the owner about the use of the source so that appropriate action can be taken
3		Some owners, emergency services, municipalities and provinces have a system and process to register the **status of the extinguishing water sources** (broken, checked-and-working, last-check-date). It must be possible to establish a link with the water source and its management status/follow-up.
4	It is important to use **standardized symbols** in the context of hydrants, therefore a link should be created between the attributes and a standardized symbol to be **shown in cartographic interfaces**.	

Use cases enrichments

#	Use case	Description		
1	Location	• Accessibility • Location of signalisation • Above or below ground • Use of vector data	• Municipality name • Municipality code • Street name • House number	• Postal code • Type of location
2	Ownership	• Owner name • Responsibility area • Phone number • Email address		
3	Attributes	• Identifier • Hydrant type • Hydrant shape • Usage • Flow rate	• Signage • Pressure • Valve diameter • Valve type • Pipe shape	• Pipe diameter • Pipe status • Pipe type • Pipe material • Pipe ID
4	Maintenance and repair	• Status • Installation date • Last inspection date • Serial Number	• Last Inspector	
5	Standardized symbols	• “H” = Below ground hydrant • “B” = Above ground hydrant	• Three colours for diameter size • Status	Signalisation (A11, A12, (...), B, H, (...))

What did we do in the previous workshop?

1. Discussion on a first ‘data model’ based on a review of material shared by the different water companies, municipalities, and firefighting zones.
2. Agreement of a first set of attributes to be captured by the model

Slides and meeting report can be consulted here: https://github.com/belgif/thematic/tree/master/hydrants

First draft model

Starting point

Water companies data models	**Flanders**	• De Watergroep • Water-Link • Farys • IWVA • AGSO-Knokke • PIDPA & HVZ Taxandria • Fluvia
	Brussels	• VIVAQUA
	Wallonia	• SWDE • Zone 2-3 Liège • IEG • AIEC • Zone VHP
	The Netherlands	• National data model
Existing specifications	**EU**	• INSPIRE: Data Specification on Utility and Government Services • SEMIC: Core Location Vocabulary
	Federal Government	• ICEG Public Organization • ICEG Building
	Flemish Government	• AWV OTL • OSLO Brandleiding (Wegen en Verkeer) • OSLO Openbaar Domein
	Other	• SAREF4WATR

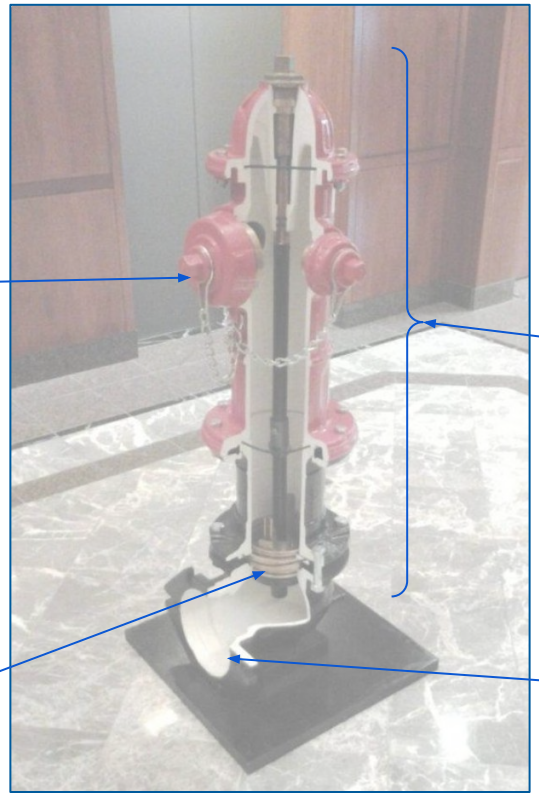
Attributes underlined have predefined values

Defining a hydrant

A fire hydrant is a fitting in a street or other public place with a nozzle by which a fire hose may be attached to a water main.

Source: https://saref.etsi.org/saref4watr/v1.1.1/

Outlet
outlet.type
outlet.diameter



Valve
hydrant.valveDiameter

Organisation
organisation.name
organisation.type
organisation.contactPoint

isManagedBy
isOperatedBy

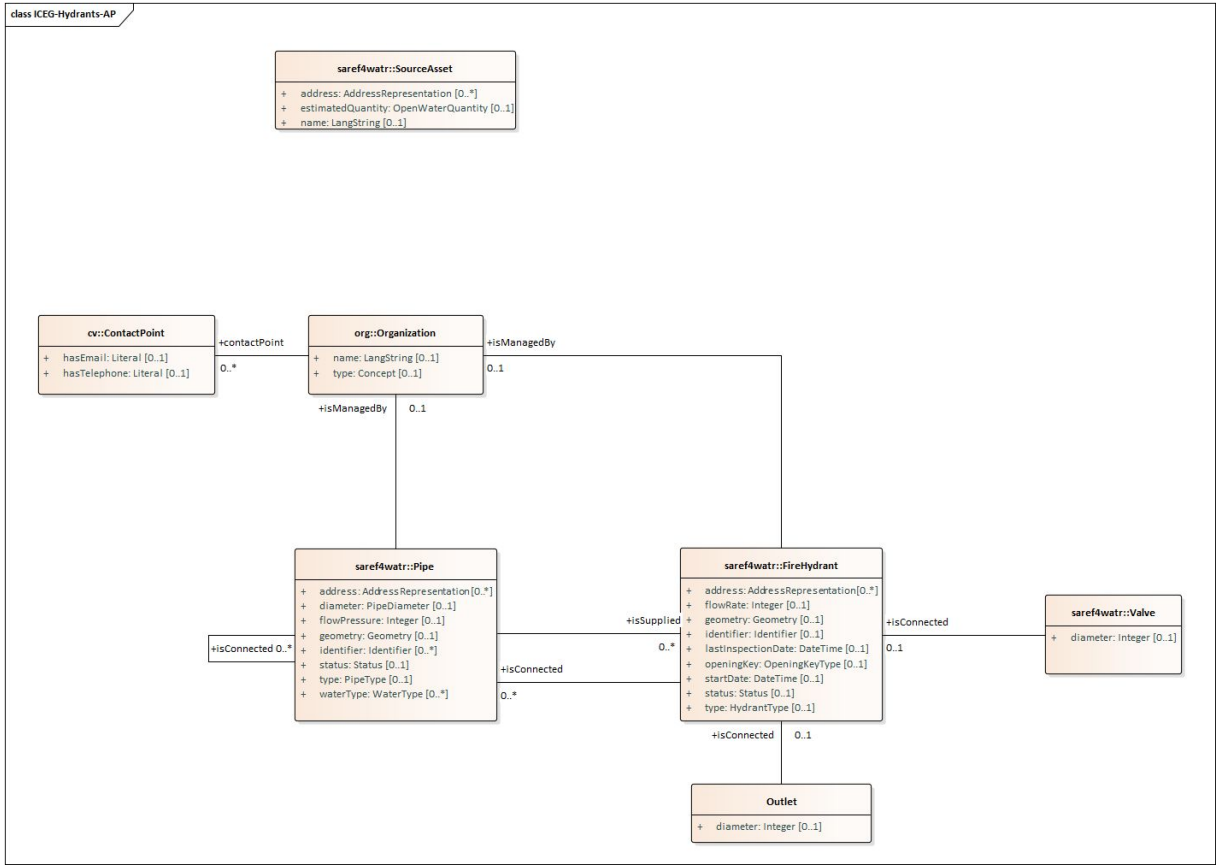
Hydrant
hydrant.identifier
hydrant.type
hydrant.shape
hydrant.startDate
hydrant.lastInspectionDate
hydrant.openingKey
hydrant.status
hydrant.flowRate

isConnectedTo

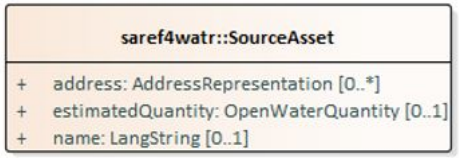
Pipe
pipe.identifier
pipe.type
pipe.diameter
pipe.pressure
pipe.status
pipe.waterType

Location

Data model for review



Discussion | Source Asset



Definition: A source asset is a water asset that is a natural source of water (e.g., a lake or lagoon). Link (from SAREF)

Rationale: requests to capture other sources of water which could be used by firefighters in addition to hydrants.

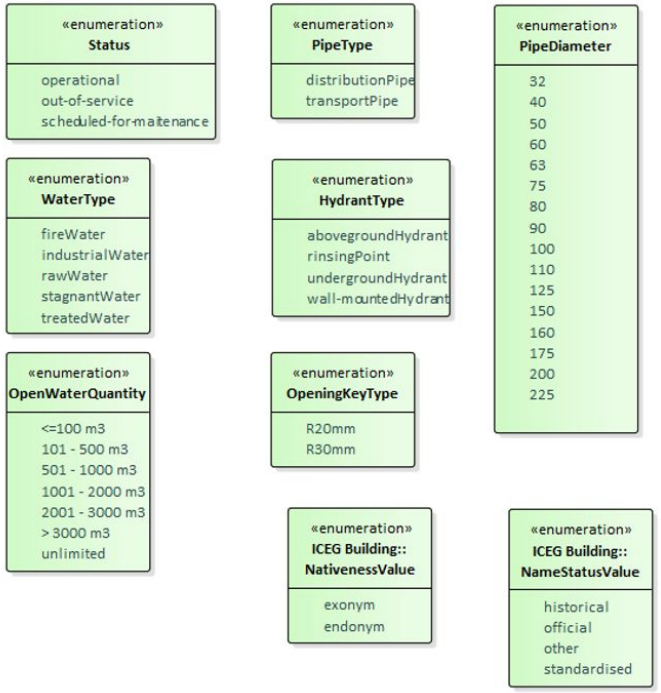
From the request, capturing this information seems outside the scope of Hydrants.

Questions:

- Is this rationale/use case correct? Are there other use cases related to the usage of sources of water?
- Does the Working Group agree to exclude the source asset from the model?

Discussion | Measurements

1. Are the measurements frequently updated, or are the **PipeDiameter values restricted to a predefined set of codes**?
2. Are there situations where you require a **free-form field to input any value**, or are predefined options sufficient for data entry?



Discussion | Signage

One use case for standardising hydrants is the visualisation of the harmonised data. Such harmonisation of the data requires symbols or signages to be agreed between all parties.

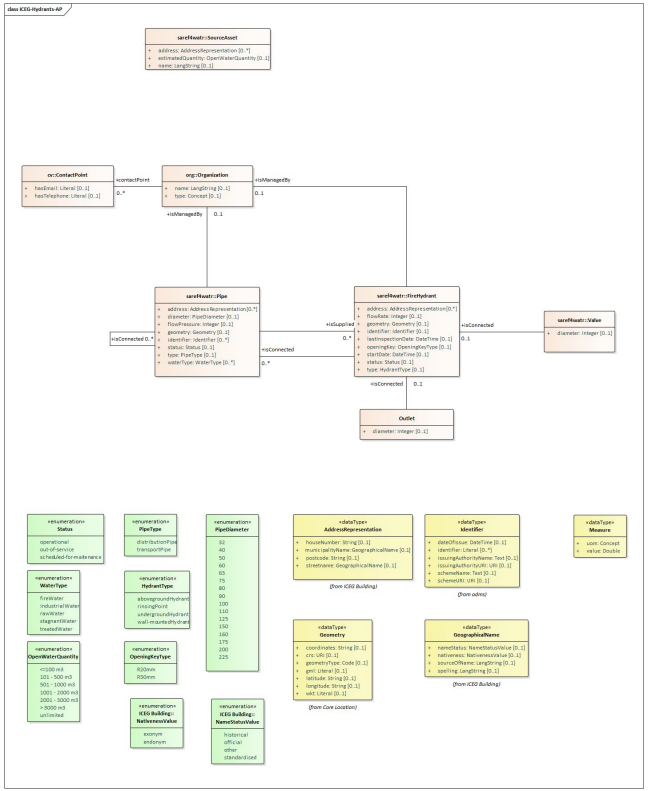
Do you confirm that harmonised symbols would be useful?

The symbols concerned are:

- B
- H
- Colours of diameter

Do you validate these symbols? Are we missing important symbols?

Data model for review

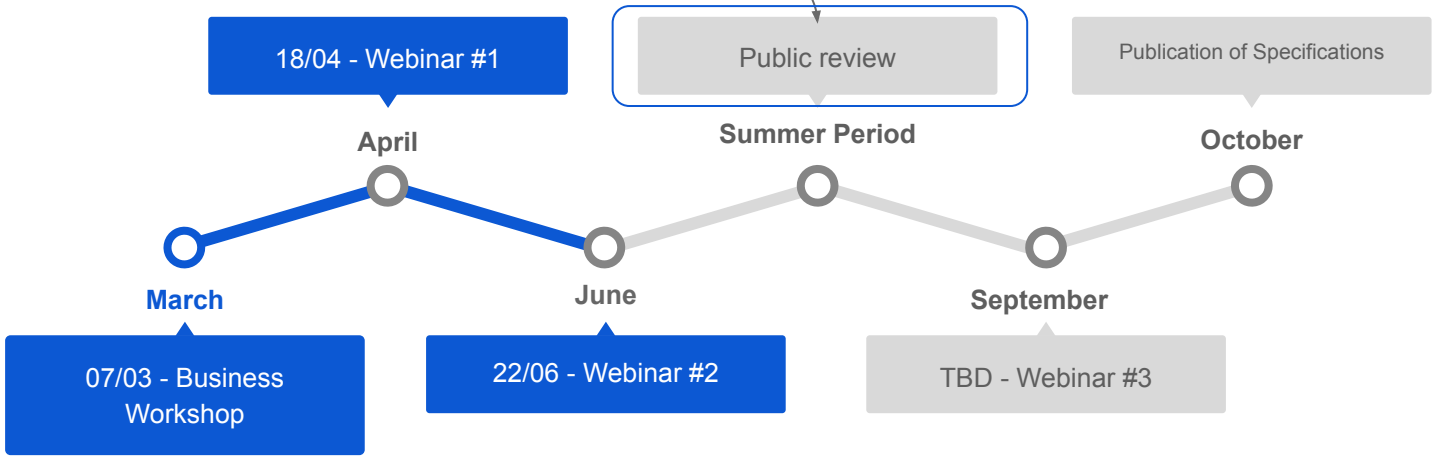


- *Water Usage*: Should this be modeled? Is this relevant for the model?
- *Outlet type*: the rationale is to describe the type of connector. Does the working group confirm this need? What are the types of values needed?
- Are there any entities or attributes missing from the model?
- Is something still unclear in our model?
- Is there anything else you would like to mention?

Next steps

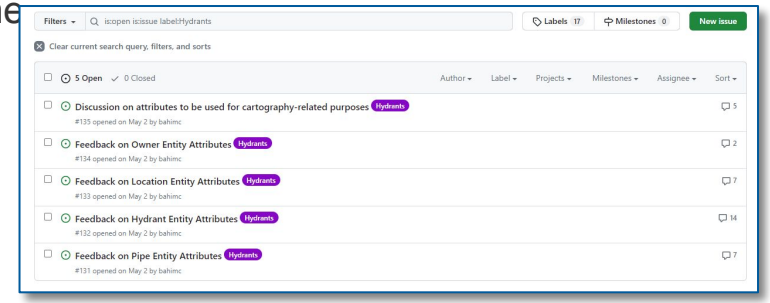
Timeline

Start of the public review period today!



Public Review Period

- Public review period starting for the 3rd of July until early October (date to be determined)
- Model will be accessible in HTML format, with entities, attributes, definitions, cardinalities and code lists
- Please review the model against your data and use cases to determine adequacy and completeness of the latter
- Preferred communication mean is GitHub, but feedback can also be shared via email
- The next and last webinar will only serve to present the final version of the model. **Therefore, the public review is very important to collect your inputs!**



Next steps – In the meanwhile...

01	Identify existing committee(s) who would need to be involved in the validation process, to ensure parties are present to meetings and requirements are subsequently expressed
02	Continue to onboard domain experts from the relevant public administrations in the Working Group
03	Process the input from the 2nd thematic workshop (today's webinar)
04	Circulate the main findings/report of this workshop. Feedback is appreciated!
05	**Compare the model – its entities, definitions, attributes, codelists – with your requirements and discuss the later on GitHub**
06	Capture further input through GitHub!

Last Opportunity

Feedback can be provided either

on GitHub at:
https://github.com/belgif/thematic/issues

or via email to:
vincent.feremans@pwc.com
christophe.bahim@pwc.com

Thanks!