

TOWARDS A COMMON SEMANTIC DATA MODEL FOR SMART CITIES
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MULTIPLE PERSPECTIVES ON IOT



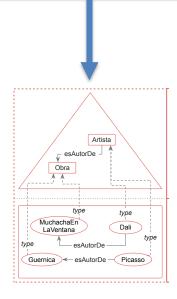


KEY ASPECT: CONSENSUS



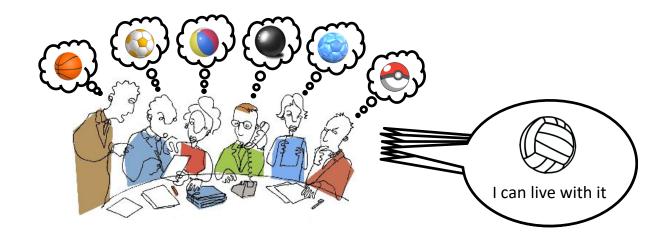
An ontology is a formal specification of a shared conceptualization





CONSENSUS INSIDE A USER COMMUNITY





Consensus is needed... but it is expensive

CONSENSUS AMONG USER COMMUNITIES



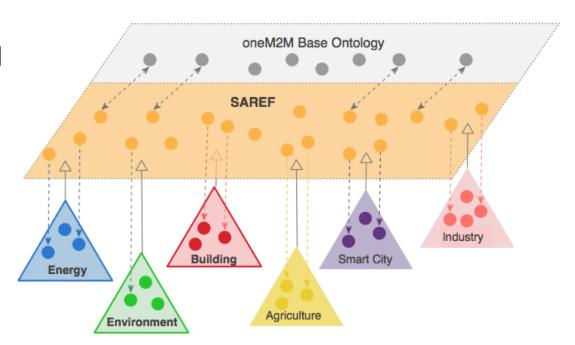


Challenging in practice!

THE SAREF INITIATIVE



- Started in 2013
- Promoted by the EC and ETSI (TC SmartM2M)
- Development of the SAREF ontology and its extensions
- Publication as ETSI standards



DEVELOPING SAREF4CITY



Stakeholder identification & Desk research

Raising awareness

Stakeholders:

- Public administrations
- Associations
- Projects
- Platforms
- SDOs

Resources:

- Ontologies
- Data models
- Datasets
- Standards

- Connected Smart Cities Conference (11 Jan)
- ITU WS on Data Processing and Management (19 Feb)
- OGC TC/PC meeting (22 May)
- IoT platforms & standardisation Workshop (27 Apr)









Requirements validation

IoT Week (4 Jun)



Implementation validation

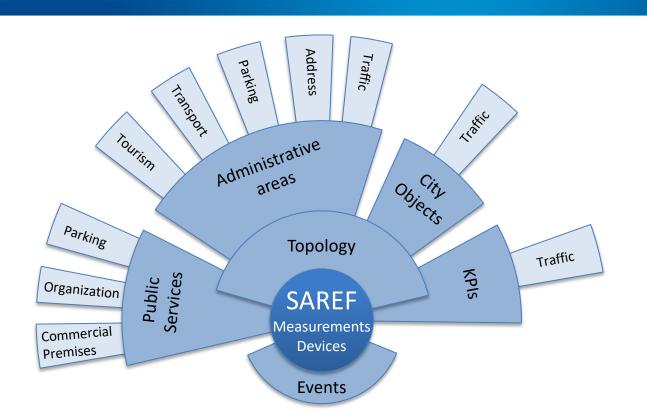
2-3 October

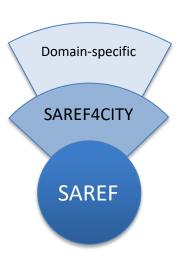
@ Brussels



SAREF4CITY AT A GLANCE

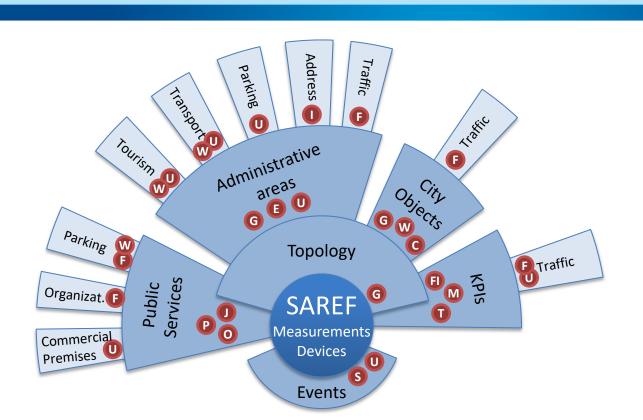






SAREF4CITY REQUIREMENTS SOURCES





Requirements:

- E EU Metadata Registry
- FEMP Open Data Guide exemplary datasets
- FI FIWARE data model for KPIs
- ISA Programme Location Core Vocabulary
- Joinup Core Public Organization Vocabulary
- Joinup Core Public Service Vocabulary
- OGC CityGML
- G OGC GeoSPARQL
- schema.org
- Vocabulary referenced by AENOR UNE 178301:2015
- W3C Registered Organization Vocabulary
- W W3C WGS84 Geo Positioning vocabulary
- M ISO/IEC 30182:2017
- T ITU-T Y.4903/L.1603 (10/2016)

NEXT STEPS FOR SAREF4CITY



- A report on the validation workshop will be published online
 - https://portal.etsi.org/STF/stfs/STFHomePages/STF534
- Final requirements after feedback ready by the end of June
- Implementation of a cross-domain core model from requirements
 - Reuse existing solutions rather than reinvent the wheel
- Your feedback is welcome!
 - Next validation workshop @ Brussels on 2nd-3rd October



Thanks for your attention!