

## ANNEX 4

### ISG CIM Terms of Reference

(approved by the Director-General on 1<sup>st</sup> February 2019 following Board#121consultation)

#### Scope

The main objective of ISG CIM continues to be to create technical specifications and reports to enable multiple organisations to develop interoperable software implementations of a cross-cutting Context Information Management (CIM) Layer. The standards work is designed to bridge the gap between abstract standards and concrete implementations.

The ISG CIM has developed an API called NGSI-LD to enable applications to update, manage, and access context information from many different sources, as well as publishing that information through interoperable data publication platforms. The API is designed to be agnostic to the architecture (central, distributed, federated or combinations thereof) of the applications which share information. The NGSI-LD API continues to be the focus of the ISG CIM, but in the next year(s) of work the intention is particularly to collaborate with other groups and technical communities to encourage interworking and use of the API, as well as to respond to critique with improvements and guidelines for the API.

#### Areas of activity

- Report analysing need for one or more additional bindings to expand interworking using the Core Information Model based on property graphs and the NGSI-LD API.
- Specification, if required, for additional binding(s) of NGSI-LD API for interworking with other systems
- Report in form of examples of usage and messaging to aid developers, using ETSI Forge and Gitlab resources.
- Reports (Whitepapers, tutorials and/or workshop materials) to build a real dialogue with a number of “communities” interested in data exchange so as to validate and expand acceptance of the NGSI-LD API.
- Report providing guidelines for improved interoperability by encouraging reuse of ontologies e.g.: (a) very general NGSI-LD Cross Domain Model and (b) SAREF (domain-specific) ontologies
- Report showing validation of the NGSI-LD API for expressing a number of externally-defined models, especially SAREF activities should enable leveraging of their work in many domains.
- Report considering how NGSI-LD functionality could be proposed into oneM2M (mechanism could be e.g. liaisons, workshops or direct contributions by Members who are in both organisations) and might involve collaboration on new or existing Work Items
- Report updating WI-002 Use Cases document to include SmartAgri and SmartIndustry use cases not covered in the previous period. It is not expected that new requirements for new features of the API will be found, but if so then the NGSI-LD API specification may be extended.
- Report investigating the API requirements for handling the rising priority on GDPR and ePrivacy compliance. ISG CIM will carefully collaborate with other groups (e.g. TC CYBER) and SDOs regarding the CyberSecurity, Privacy and Identity Management trends and consider additional requirements on NGSI-LD API facilitating users to exercise their rights. There is already an open Work Item WI-007 for the study.
- Specification of additional security/privacy functionality in NGSI-LD.

#### Organization

ISG CIM has organized itself according to the following method, which is likely to continue unchanged:

- There is a single Working Group which handles all work items and holds regular “Ordinary Meetings” with decision-making approximately weekly
- Work Item rapporteurs hold additional RG calls as needed, however the consensus found during the RG meeting is carried back into the main ISG group for approval
- The physical Plenary Meetings are used for f2f discussion and whiteboarding of new or controversial topics, to aid reaching consensus

## Annex (informative): collaboration with other bodies

Note that congruence with the CyberSecurity, Privacy and Identity Management trends in regulation will be influenced in 2019 by EC policies, directives and regulations, and including trends due to EU eGovernment interfaces. Collaboration with TC CYBER will be sought as shown below.

ISG CIM has or will set-up the appropriate communication channels to the following groups both within and outside of ETSI.

### ETSI groups

[oneM2M](#)

[TC SmartM2M](#)

[SmartBAN](#)

[TC CYBER](#)

### External groups

[OASC](#)

[OMA](#)

[European Data Portal](#)

[FIWARE](#)

[W3C](#)

[OGC](#)

[GSMA](#)

EC H2020 Projects

