

## NGSI-LD

### JSON-LD based representation and Open APIs for Property Graphs

(W3C Workshop on Web Standardization for Graph Data)

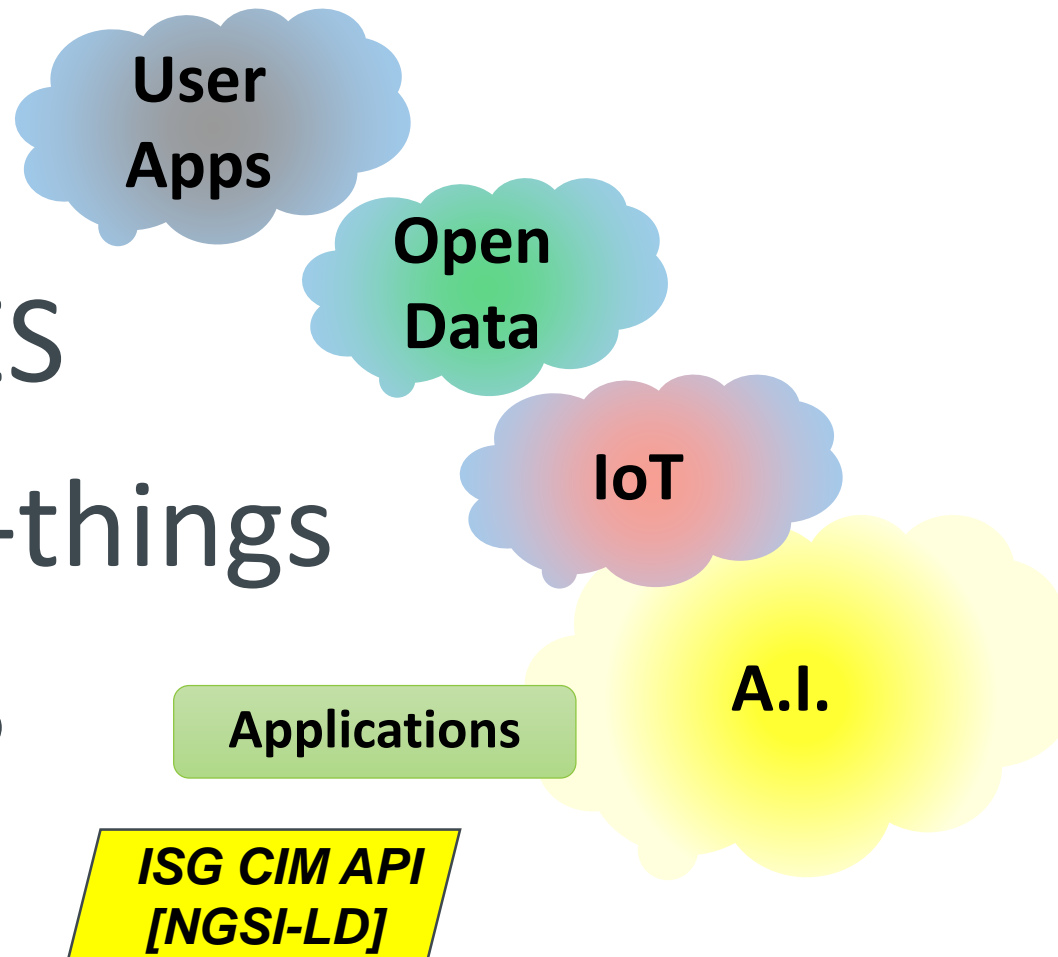
Presented by: **José Manuel Cantera**  
(FIWARE Foundation e.V.)  
On behalf of  
ETSI ISG CIM

For: **Public review**  
04th March 2019

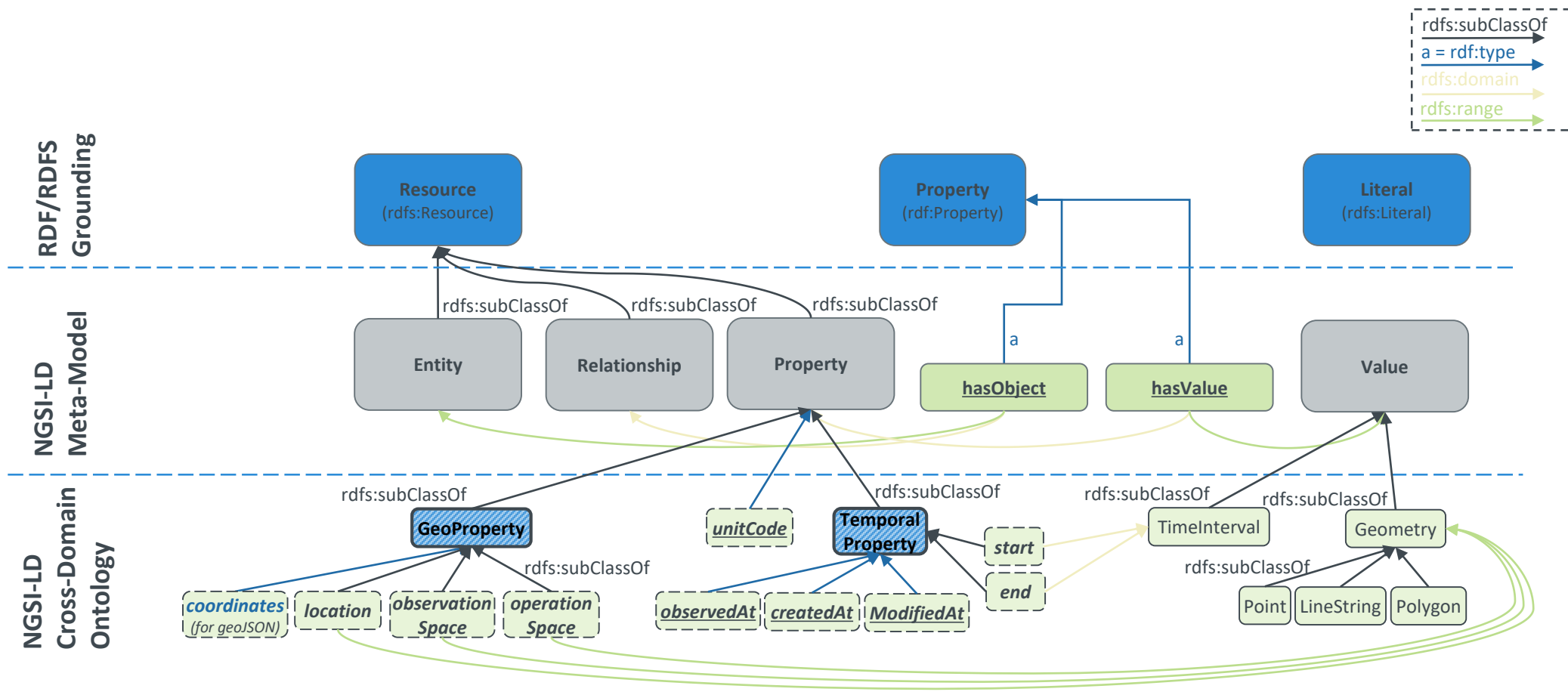


## ETSI ISG CIM: Mission

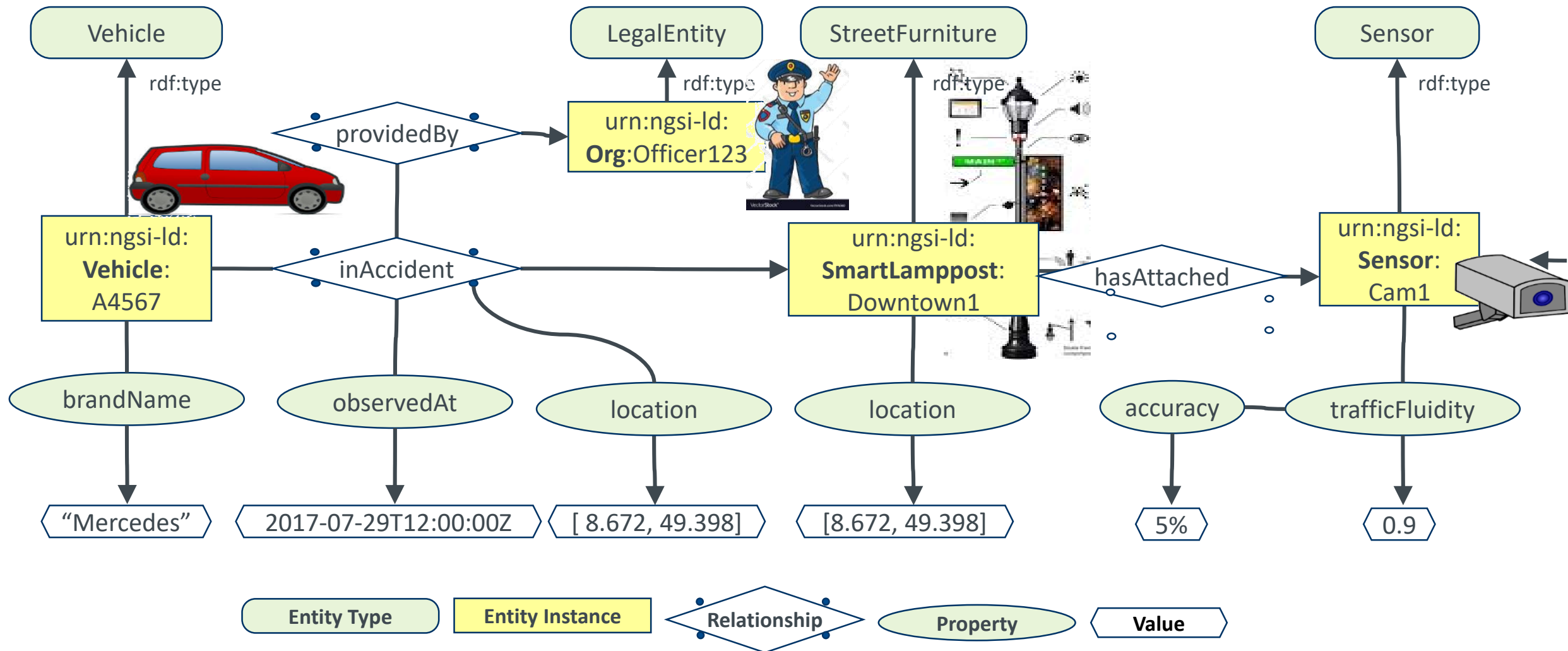
... to make it easier  
for END-USERS  
and CITY DATABASES  
and IoT internet-of-things  
and 3rd-party APPS  
to exchange INFO



# NGSI-LD Information Model



# Example: Combined data Exchange using property graphs



# Example: Entity "Vehicle" and its @context in NGSI-LD

```

{
  "id": "urn:ngsi-ld:Vehicle:A4567",
  "type": "Vehicle",
  "brandName": {
    "type": "Property",
    "value": "Mercedes"
  },
  "inAccident": {
    "type": "Relationship",
    "object": "urn:ngsi-ld:SmartLamppost:Downtown1",
    "observedAt": "2017-07-29T12:00:00Z",
    "providedBy": {
      "type": "Relationship",
      "object": "urn:ngsi-ld:Org:Officer123"
    }
  }
}

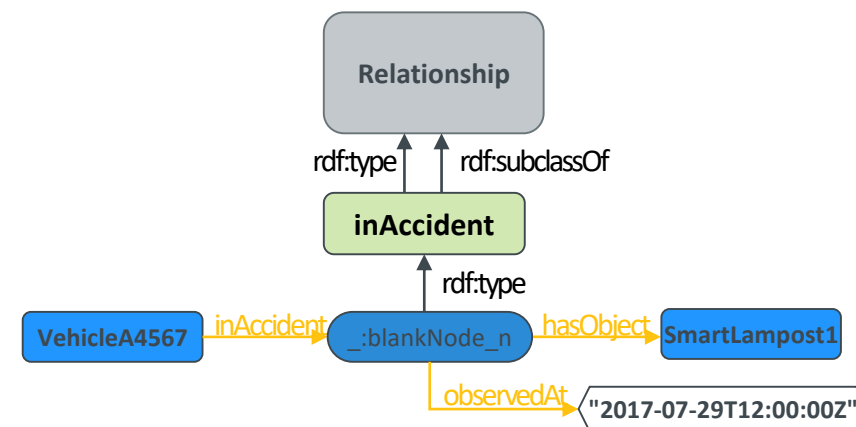
```

```

"@context": [
  "http://uri.etsi.org/ngsi-ld/v1/ngsi-ld-core-context.jsonld",
  "http://example.org/vehicle/my-user-terms-context.jsonld"
]

```

## Blank node reification



# References

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## Additional resources on NGSI-LD

- ✔ [NGSI-LD Specification \(January 2019\)](#)
- ✔ [NGSI-LD HTTP REST binding - Open API Specification](#)
- ✔ [NGSI-LD Test Suite](#)
- ✔ [NGSI-LD open source implementation \(FIWARE\)](#)
- ✔ ISG CIM Public materials (whitepapers, etc.) can be found at
  - ✔ <https://portal.etsi.org/CIM/OPEN>

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Rapporteur NGSI-LD spec

***Thank You !***

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Chairman:

Lindsay Frost (NEC)

Open pages for consensus material:

<https://docbox.etsi.org/ISG/CIM/Open>

+ visit at: <https://portal.etsi.org/CIM>