Context Information Management

Help form a ETSI Industry Specification Group
(Urgent need. Planned activities.)

Main Points   1/2

- **Urgent need** for specifications in Context Information Mgt.
  - BigData, OpenData, IoT ... Lots of opportunities, but remember GIGO
  - → Label the data, match up "publisher" & "consumer", check reliability ...

- **Practical Use Cases exist**
  - Use cases in SmartCity transport, Citizen involvement, SmartAgriculture...

- **Need survey of existing scattered SDO work, then check gaps**
  - AIOTI overview, ITU-T overview, ...
  - oneM2M current work; ETSI SmartM2M current work; ...
  - W3C WoT, etc

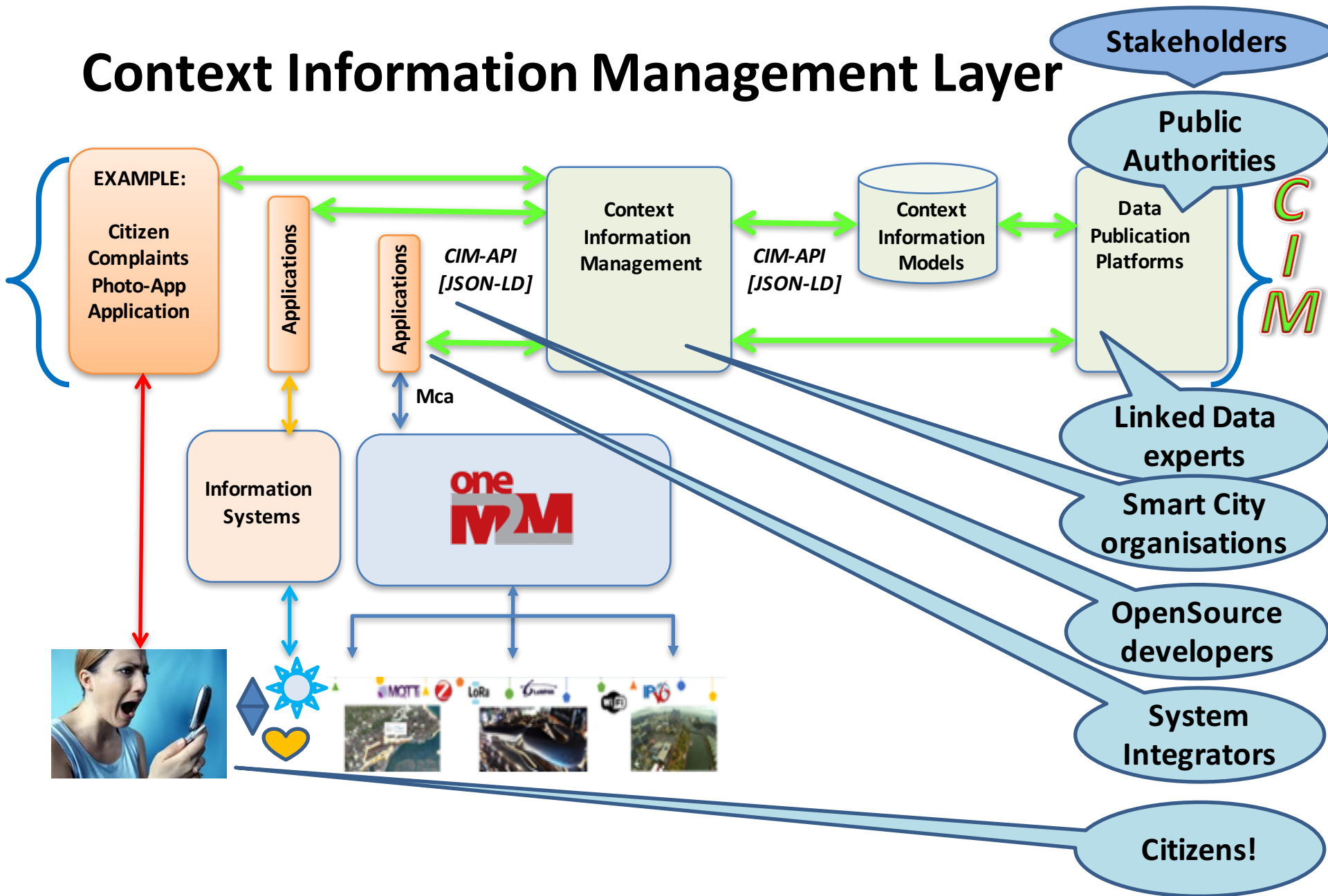- <u>**Now seeking Stakeholders**</u> **to start a CIM Specification Group**
  - Initially:

     easy global market   **imec**   **NEC**   **orange**   *Telefónica*

  - Supporters:

    AtoS   **caTAPULT** Future Cities   **DFKI** Deutsches Forschungszentrum für Künstliche Intelligenz GmbH   **ENGINEERING**   **OASC** OPEN & AGILE SMART CITIES

  - Trying first for an ETSI ISG: non-ETSI members welcome!

- **Outreach**: OpenData & Smart Cities
  - CIM is a collaborative activity!
  - We need your experience/requirements/feedback …
- **Main Deliverables** for Context Information Mgt specifications:
  - Survey of existing SDO work / specifications
  - Use Cases
  - Gap Analysis
  - API Specification
  - Example Data Models
- **Making the API Gap Analysis**
  - Checking with SDOs for their status → starts asap
  - Understanding the Requirements based on Use Cases / Examples
  - e.g. FIWARE NGSI API is already widely used and has many advantages … but what is still missing?

Context Information Management Layer

EXAMPLE:

Citizen Complaints Photo-App Application

Applications

Applications

CIM-API [JSON-LD]

Context Information Management

CIM-API [JSON-LD]

Context Information Models

Data Publication Platforms

Mca

Information Systems

one M2M

Stakeholders

Public Authorities

CIM

Linked Data experts

Smart City organisations

OpenSource developers

System Integrators

Citizens!

Initial Planning (T0=February 2017)

Note:	*ETSI Approval process for ISG started, but not yet complete on 09.01.2017*
(T0)	**First General Meeting** (vote on Chairs, WG deliverables, schedule, etc)
(T0+01)	**Liaisons** to major organisations informing of the work and requesting comment/input. Invite participation/membership.
(T0+03)	Group Report describing **overall architecture and standardization gaps**
(T0+03)	**Joint f2f-workshop** (with webinar attendance possible) with ETSI SmartM2M, oneM2M and possibly other organisations.
(T0+05)	Group Specification: (preliminary) **Context Information Management API** together with a preliminary example data model (e.g. tourism)
(T0+05)	Group Specification: **Data Publication Metadata** supporting CIM-API
(T0+05)	Group Specification of languages/processes/domains for data modelling
(T0+07)	Group Specification: **First set of data models** (e.g. mobility, tourism)
(T0+09)	Group Specification for a Context Information Management API (v1.0)
(T0+09)	Group Specification: Second set of data models
(T0+12)	Group Specification: Third set of data models

Surveying CIM Standards (a few of >200 links)

- [AIOTI: Alliance for Internet of Things Innovation](#)
- [DCAT application profile for data portals in Europe](#)
- [European Data Portal](#)
- [ITU SG-20](#)
- [oneM2M](#)
- SAREF reference (and [ETSI STF 513](#))
- [W3C Web of Things Interest Group](#)

Organisations to contact re CIM or "Smart City"

- [Centre for Liveable Cities (CLC)](#)
- [City Protocol](#)
- [Connected Smart Cities Network](#)
- [eG4U](#)
- [ESPRESSO](#)

- [EuroCities](#)
- [GSMA IoTBDE](#)
- [NIST IES-SmartCity](#)
- [Open City Platform](#)
- [World Council on City Data](#)
- …

THANK YOU …

And please join the effort to converge Context Information Management.
Contact Lindsay.Frost@neclab.eu for further information.