

MIMs: Institutional Capacity Development for Connected Places

Pametne skupnosti in digitalna ekonomija - Digitalno središče Slovenije



Dr. Davor Meersman, CEO

7 JULY 2021

Argentina - Australia - Austria - Belgium - BIH - Brazil - Croatia - England - Denmark - Finland - France - Germany - Greece - Hungary - Ireland - Italy - Japan - Mexico - Netherlands - Norway - Philippines - Poland - Portugal - Romania - Scotland - Sweden - Serbia - Slovenia - South Korea - Spain - Switzerland - Turkey



**WE EMBODY A SINGULAR, GLOBAL,
DEMAND-SIDE CONSENSUS**

on the minimal common ground for
sharing solutions, services, and data

**between, within, and with
cities, towns, and rural areas.**



OASC is

CHANGE. Made possible.

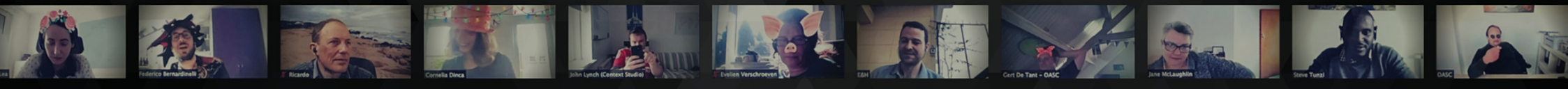


PERPETUALLY FREE
UNIVERSALLY ACCESSIBLE
RELIABLY ADDRESSABLE
RADICALLY TRANSPARENT
EASILY UNDERSTANDABLE
PRACTICALLY VALUABLE

**FOR AND BY
ALL CITIES, TOWNS
AND RURAL AREAS
ON PLANET EARTH.**



Brought to **you** by OASC HQ.



FROM
POST-HYPE

TO

POST-COMPETITIVE

OPEN

CITYxCITY Festival	ATTENDANCE +1000%, COST -70%
CITYxCITY Catalogue	100+ SOLUTIONS, 17% CONVERSION
CITYxCITY Academy	219+ LEARNERS
OASC EP Programme	16 IN PIPELINE
NextGen MIMs	5 NEW, 10 TOTAL
OpenWorks	3 WHITE PAPERS COMMITTED
OpenChapters	SOFT LAUNCHED & ANNOUNCED
OpenKnowledge	200% MORE CONTENT
OpenCalls	1 RUNNING PROPOSAL ONBOARDED
Fraunhofer	JOINED
FIWARE MIM2	SIGNED - BOD, SDM, CXC
OGC MIM7	SIGNED
MDG MIM4	SIGNED, DELIVERED
STANDICT ALL MIMS	SIGNED
LIVING-IN.EU	WORK IN PROGRESS
U4SSC	WORK IN PROGRESS
OpenEthics	WORK IN PROGRESS



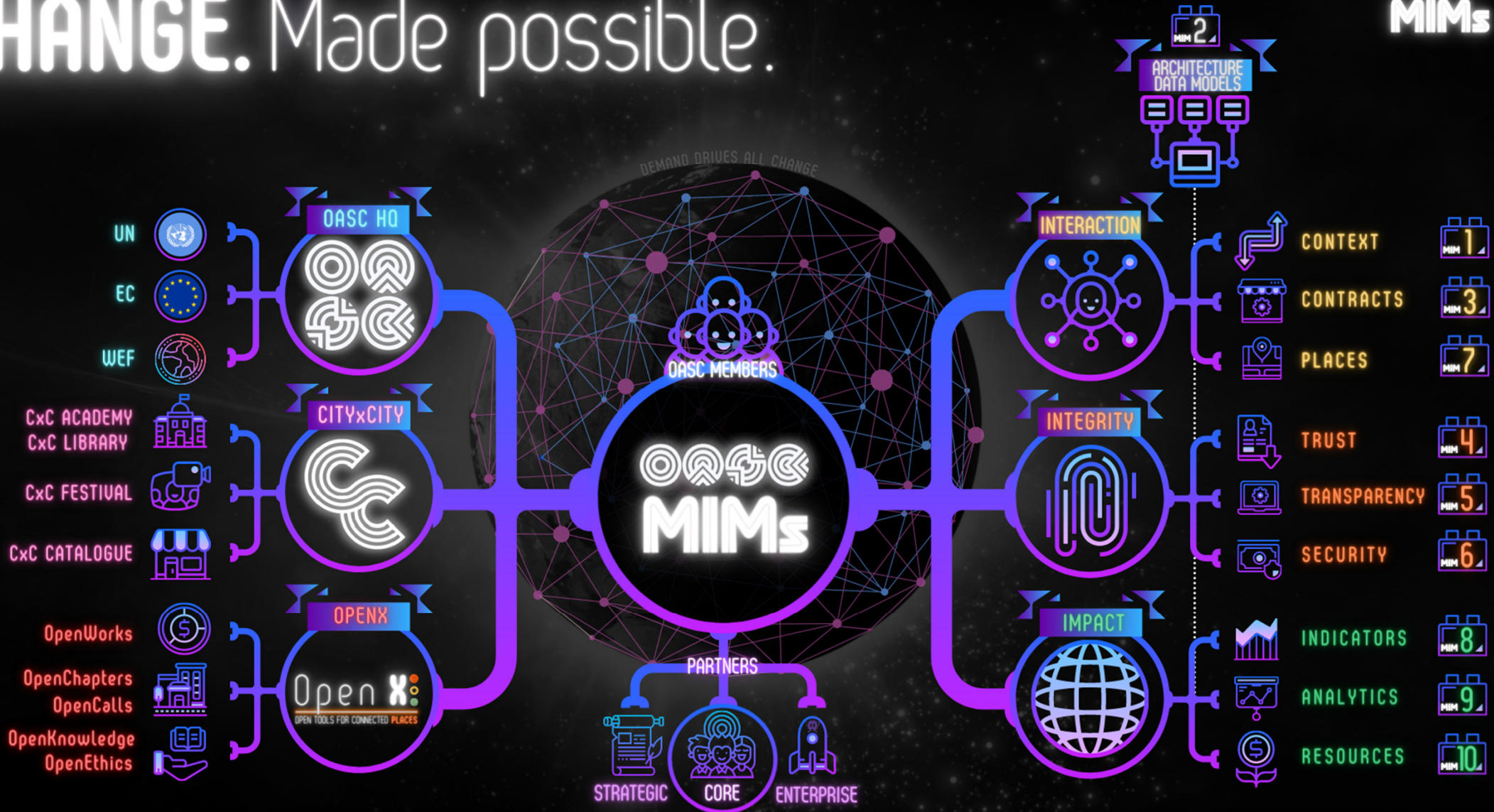
OASC MIMS SUPPORT
INSTITUTIONAL CAPACITY
DEVELOPMENT FOR
CONNECTED PLACES
IN A WORLD OF CHANGE.

“ We are not a drop in the ocean. We are the mighty ocean in the drop. ”

- Rumi (1207-1273)

CHANGE. Made possible.

DEMAND DRIVES ALL CHANGE



OASC WORKING GROUPS

 Improved formula



WG
ARCHITECTURE DATA MODELS



New! proud supporter of Smart Data Models

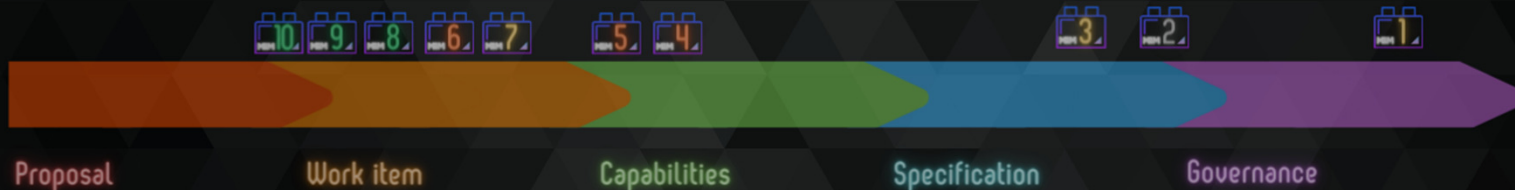
WG
INTERACTION



WG
INTEGRITY



WG
IMPACT





CITYx CITY

CONNECTING CITIES,
EMPOWERING COMMUNITIES.

LIVING-IN.EU

The European Commission's
100 Intelligent Cities
Challenge

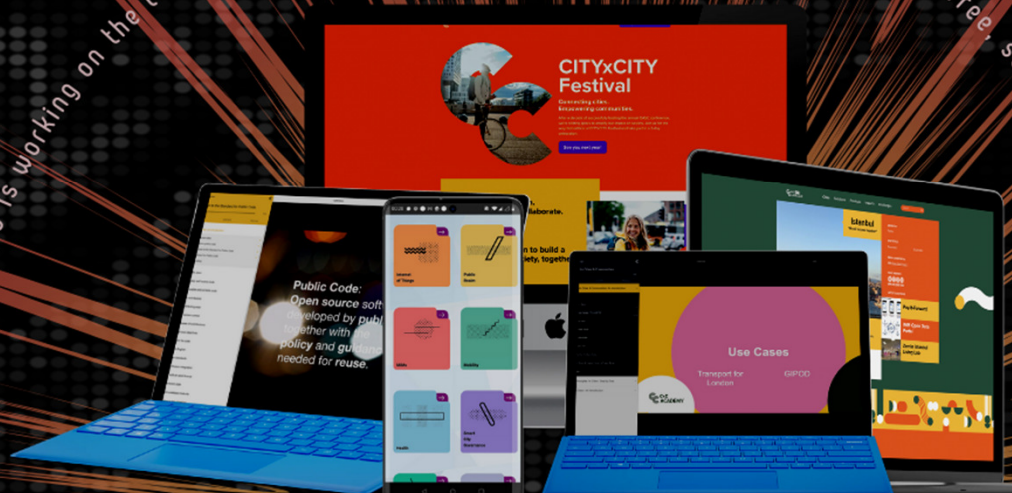


FIWARE
FOUNDATION



T4G
OPEN & AGILE SMART CITIES

Engaging with OASC is working on the technical foundations for societal pivots towards a more open, free, sustainable, and flourishing world.





CITYxCITY Festival

**Connecting cities.
Empowering communities.**

After a decade of successfully hosting the annual OASC conference, we're shifting gears to amplify our impact on society. Join us for the very first edition of CITYxCITY Festival and take part in a 2-day celebration.

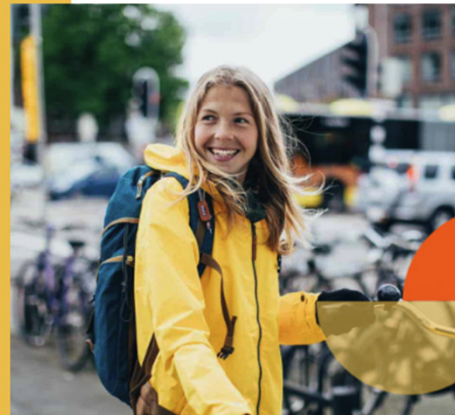
[See you next year!](#)



**This is an invitation.
To innovate. To collaborate.
And to celebrate.**

**An invitation to build a
smarter society, together.**

Step by step.



Molina de Segura Spain

Lille Metropole France

Sunshine Coast Australia

Ipswich Australia

Ghent Belgium

Metropolitan City of Capital Rome Italy

Brno Czech Republic

Szombathely Hungary

Ajunt de Castelldefels Spain

Bratislava Slovakia (Slovak Republic)

Split Croatia (Hrvatska)

Terrassa Spain

Alcobendas Spain

Ventspils Latvia

Eindhoven Netherlands

Ioannina Greece

Istanbul Turkey

Vienna Austria

Municipality of Fundão Portugal

Stavanger Norway

Split Croatia

Terrassa Spain

Alcob Spain

Bagnes - Verbier Switzerland

Antwerp Belgium

Gijón Spain

L'Aquila Italy

Mantova Italy

Alcoy Spain

Karlskrona Sweden

Gdansk Poland

Botoșani Romania

Porto Portugal

Espoo Finland

IRMA Privacy-Friendly Identity Platform

TECHNOLOGY FUNCTIONS

IMPACT GOALS

CHALLENGES

IMPACT GOALS

CHALLENGES

TECHNOLOGY FUNCTIONS

LATEST DEPLOYMENTS

Amsterdam Metropolitan Region

SDG 4: Quality Education

SDG 5: Gender Equality

SDG 6: Clean Water and Sanitation

SDG 7: Affordable and Clean Energy

SDG 8: Decent Work and Economic Growth

SDG 9: Industry, Innovation and Infrastructure

SDG 10: Reduced Inequalities

SDG 11: Sustainable Cities and Communities

SDG 12: Responsible Consumption and Production

SDG 13: Climate Action

SDG 14: Life Below Water

SDG 15: Life on Land

SDG 16: Peace, Justice and Strong Institutions

SDG 17: Partnerships for the Goals

Clean Air School Districts

IMPACT GOALS

CHALLENGES

TECHNOLOGY FUNCTIONS

LATEST DEPLOYMENTS

Amsterdam Metropolitan Region

Digital Twin - Boosting automatic traffic test area creation

IMPACT GOALS

CHALLENGES

TECHNOLOGY FUNCTIONS

LATEST DEPLOYMENTS

Tampere

The CITYx CITY Catalogue is the catalogue built by cities to learn about solutions built by you.

catalogue.by.city

Molina de Segura Spain

Lille Metropole France

Metropolitan City of Capital Rome Italy

Brno Czech Republic

Szombathely Hungary

Gava - Castelldefels Consortium Spain

Bratislava Slovakia (Slovak Republic)

Split Croatia (Hrvatska)

Terrassa Spain

Alcobendas Spain

Ventspils Latvia

Eindhoven Netherlands

Ioannina Greece

Istanbul Turkey

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Gijón Spain

L'Aquila Italy

Mantova Italy

Alcoy Spain

Karlskrona Sweden

Gdansk Poland

Botoșani Romania

Porto Portugal

Espoo Finland

Jubjuba Ethiopia

Geneva Switzerland

Rijeka Croatia (Hrvatska)

Hamburg Germany

Barcelona Spain

Amsterdam Metropolitan Region Netherlands

L'Aquila Italy

Mantova Italy

Alcoy Spain

Karlskrona Sweden

Gdansk Poland

Porto Portugal

Espoo Finland

Alicante Spain

Aarhus Denmark

Karlskrona Sweden

Gdansk Poland

Porto Portugal

Introduction to the Standard for Public Code

1. Public Code: an introduction

- Introduction video ✓
- Introduction public code
- Introduction to the Standard for Public Code
- The Standard for Public Code
- Basic reading

2. Code in the open

3. Bundle policy and source code

4. Create reusable and portable code

5. Welcome contributors

6. Make contributing easy

7. Maintain version control

8. Require review of contributions

9. Document your objectives

10. Document the code

11. Use plain English

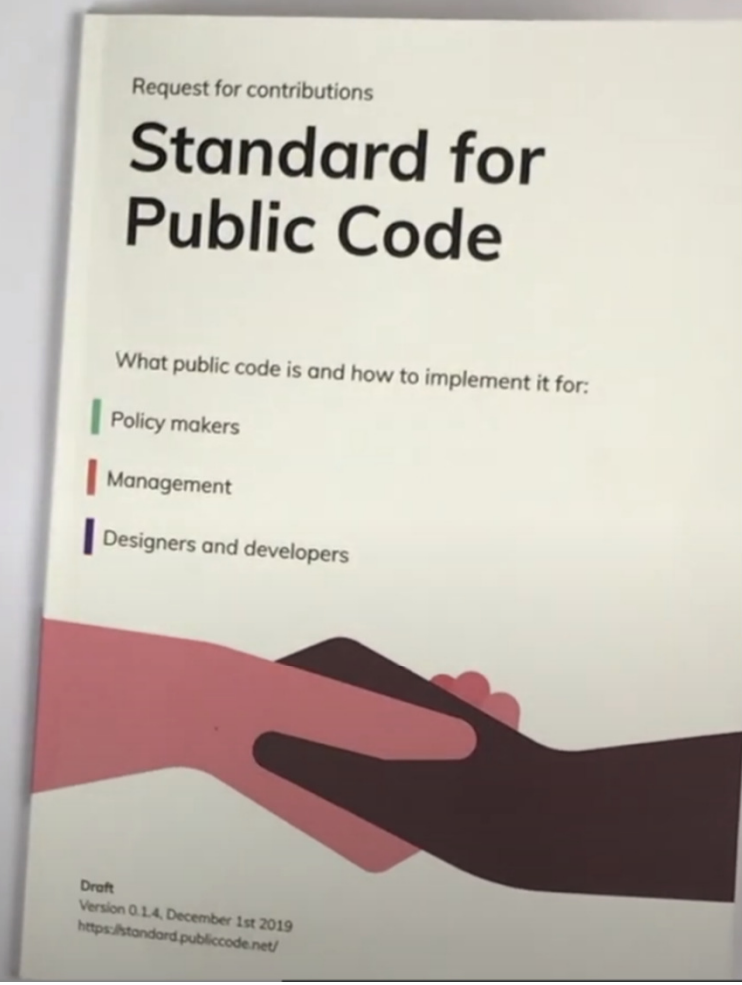
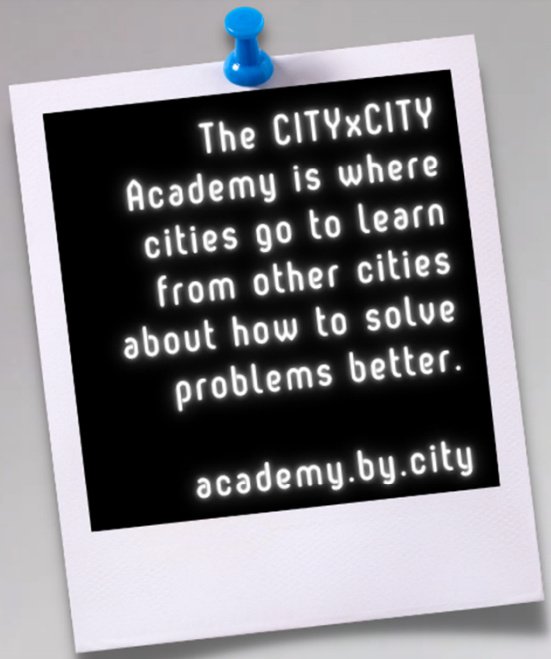
12. Use open standards

13. Use continuous integration

14. Publish with an open license

15. Use a coherent style

16. Document codebase maturity



MORE VIDEOS

Open X

OPEN TOOLS FOR CONNECTED PLACES



OpenEthics

ETHICS & INTEGRITY
GOOD GOVERNANCE
RISK MANAGEMENT



OpenWorks

TOTAL HQ TRANSPARENCY
EXTERNAL FUNDS ALLOCATION
NEEDS PUBLISHING



OpenKnowledge

FREE AND OPEN KNOWLEDGE
OPEN BY DEFAULT
COLLABORATIVE QUALITY



OpenChapters

FOR AND BY CITIES & COMMUNITIES
FEDERATED
INCLUSIVE



OpenCalls

COMPLETELY TRANSPARENT
AUTOMATED
FREE SEATS FOR ALL MEMBERS



Open Knowledge



OASC MIMs

1.0.1


Introduction


OASC Minimal Interoperability Mechanisms

All information currently being updated following 2021 OASC General Assembly. Please bear with us whilst we process all changes and decisions.

OASC MIMs (mims.oasc.io) support institutional capacity development for connected places in a changing world. MIMs work around three key dimensions:

- Impact:** driven by societal objectives with measurable outcomes towards those objectives, taking into account existing indicators, analytics, and resource management frameworks
- Interaction:** knowledge and context information exchange, rules of access and use for data and services, and management of location data
- Integrity:** protection of rights (personal data, privacy, dignity, equality...), transparency (societal governance of all technology use and deployment), and security (systems and society)



Watch on  YouTube

OASC MIMs: the 2 minute version

Minimal Interoperability Mechanisms (MIMs) are universal tools for achieving interoperability of data, systems, and services between cities and suppliers around the world. Because the mechanisms are based on an inclusive list of baselines and references, they take into account the different backgrounds of cities and communities and allow cities to achieve interoperability based on a minimal common ground.

Implementation can be different, as long as crucial interoperability points in any given technical architecture use the same interoperability mechanisms. The MIMs are vendor neutral and technology agnostic, meaning that anybody can use them and integrate them in existing systems and offerings.

OASC MIMs

1.0.1

MIM1 - Context

OASC MIM1: Context Information Management

Status

Work Item	Capabilities	Specification	Governance
✓	✓	✓	✓

Objectives

Context information management ensures comprehensive and integrated access, use, sharing, and management of data across different solutions and purposes. It manages the context information coming from Internet of Things (IoT) devices and other public and private data sources providing cross cutting context data and access through a uniform interface.

Capabilities

Context information contains comprehensive status information about real-world entities defined in a structured way with formal definitions and provides functionalities to enable access to different data sources and analyse context information, e.g. for detecting events.

The information that cities, regions and communities possess or gather is available and easily accessible to applications across different domains. To make the information usable the context information is key.

Applications are able to discover the information relevant to their context. For example by specifying what is needed and retrieve or subscribe to this requested information. To share and re-use this information an agreement is in place on the concepts, this can be provided by data information models.

Discovery and querying of information, both current and historical, is possible, also in a geospatial way.

Applications can subscribe to changes of information so that they are always aware of the current and latest status.

The implementation across (and even within) the city, or any application ecosystem, can be very diverse and heterogeneous. An agreement on the interfaces is necessary to be able to access the information. This is enabled by the context management API and the data information models.



OpenCalls

Open **X**
OPEN TOOLS FOR CONNECTED PLACES



The screenshot shows the ClickUp interface with a Kanban board for 'Proposals'. The board is organized into columns representing different stages: SCOPING (3 items), CONSORTIUM BUILD... (10 items), PROPOSAL WRITING (1 item), SUBMITTED (2 items), ACCEPTED (1 item), REJECTED (5 items), and CLOSED (6 items). Each item is a proposal card with details such as the proposal name, status, and assigned team members. The left sidebar shows navigation options like Home, Notifications, Favorites, and Spaces. The bottom of the interface displays various project categories and filters.



OpenWorks

Open 
OPEN TOOLS FOR CONNECTED PLACES

ABOUT CONTRIBUTIONS **CONTRIBUTE** BUDGET CONNECT SUBMIT EXPENSE CONTACT

Contribute

Become a financial contributor.

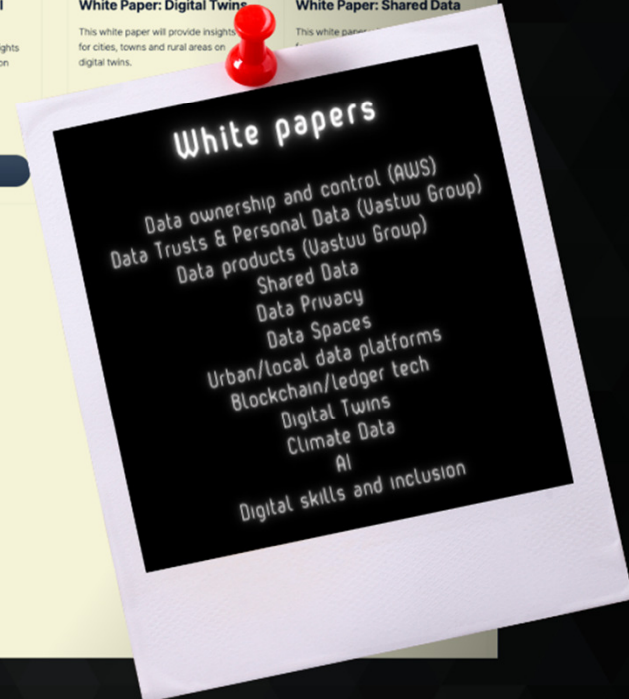
MEMBERSHIP	ONE-TIME CONTRIBUTION	ONE-TIME CONTRIBUTION	ONE-TIME CONTRIBUTION	ONE-TIME CONTRIBUTION	ONE-TIME CONTRIBUTION	ONE-TIME CONTRIBUTION	ONE-TIME CONTRIBUTION	ONE-TIME CONTRIBUTION
Enterprise Partnership Baseline The DASC Enterprise Partnership Programme Read more €50,000 EUR / year Contribute	MIM1 Context Broker Certification Software to test Context Brokers for functionality (see MIM 1: Context Information Management) €50,000 EUR Contribute	White Paper: Data Ownership and Control This white paper will provide insights for cities, towns and rural areas on data ownership and control. It is supported by AWS. €15,000 EUR Contribute	White Paper: Trust and Personal Data This white paper will provide insights for cities, towns and rural areas on trust and personal data. It is supported by Vastuu Group. €15,000 EUR Contribute	White Paper: Data Products This white paper will provide insights for cities, towns and rural areas on data products. €15,000 EUR Contribute	White Paper: Local Data Platforms This white paper will provide insights for cities, towns and rural areas on local data platforms. €15,000 EUR Contribute	White Paper: Artificial Intelligence (AI) This white paper will provide insights for cities, towns and rural areas on Artificial Intelligence (AI). €15,000 EUR Contribute	White Paper: Digital Twins This white paper will provide insights for cities, towns and rural areas on digital twins. €15,000 EUR Contribute	White Paper: Shared Data This white paper will provide insights for cities, towns and rural areas on shared data. €15,000 EUR Contribute

[All ways to contribute ->](#)

Events

Open & Agile Smart Cities is hosting the following events.

EVENT	EVENT
Smart City Expo World Congress 2021 Nov 16 - Nov 18, 2021 10:00 AM GMT+1 We're inviting projects, members and partners to team up for a stand at the expo of the 2021 edr... Read More View Event	NORDIC EDGE Expo 2021 Sep 20 - Sep 23, 2021 09:00 AM GMT+2 We're inviting projects, members and partners to team up for a stand at the expo of the 2021 edr... Read More View Event




















OpenChapters

ABOUT CONTRIBUTIONS CONTRIBUTE BUDGET CONNECT SUBMIT EXPENSE CONTACT

Contributions

We are fiscally hosting 30 Collectives

All Contributions Hosted Collectives Hosted Events

 OASC Australia Collective Host since March 2021	 OASC Belgium Collective Host since May 2021	 OASC Argentina Collective Host since May 2021	 OASC Austria Collective Host since May 2021	 OASC Bosnia and Herz... Collective Host since May 2021
 OASC Brasil Collective Host since May 2021	 OASC Croatia Collective Host since May 2021	 OASC Denmark Collective Host since May 2021	 OASC England Collective Host since May 2021	 OASC Finland Collective Host since May 2021
 OASC France Collective	 OASC Germany Collective	 OASC Greece Collective	 OASC Hungary Collective	 OASC Turkey Collective



OpenEthics

HONESTY

1. No Conflict of Interests
2. No Bribery & No Favouritism
3. Clean Funding, No Fraud & No Money laundering
4. Antitrust & Competition

OPENNESS

5. Transparency & Accountability
6. Assets & Intellectual property
7. Confidentiality
8. Reporting & Whistleblowing

SECURITY

9. Democracy
10. SDGs
11. Justice & Rule of Law
12. Peace, No terrorism financing, No embargo trespassing

TRUST

13. Data & Tech Ethics
14. Human Rights & Dignity
15. Climate & Environment
16. Non-discrimination, Diversity & Inclusion



ETHICS/INTEGRITY

- ◆ Ethics Charter
- ◆ Ethics Communication, Training & Onboarding
- ◆ Integrity Line

GOOD GOVERNANCE

- Statute upgrade
- Governance Charter (overall) + By-laws (decentralised)
- R & R Chair and CEO
- Rules of Engagement (beyond LOI)
- KPI, evaluation & steering processes

RISK MANAGEMENT

- COI Disclosure & Mitigation Plan
- Due Diligence
- Risk Assessment



WE MAKE LOCAL DEMAND ADDRESSABLE

WE ARE

CHANGE

Made possible

OPEN & AGILE SMART CITIES

CAPITAL SUPPORTS WINNING OPPORTUNITIES

IN
MIMS
WE TRUST