



**United Smart
Sustainable
Cities**

The Impact of New Frontier Technologies in Cities

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U4SSC Leaders



Introduction

- The latest trends on Artificial Intelligence, Big Data and IoT challenge the traditional ways of management and distribution.
- Understanding these trends underpins innovations in city management and the development of smart sustainable cities.
- The proposal:
 - To develop 3 key deliverables for city stakeholders
 - Deliverable 1 “ The impact of Artificial Intelligence and Cognitive Computing in Cities”
 - Deliverable 2 “The impact of Data Processing and Computation in Cities”
 - Deliverable 3 “The impact of Sensing technologies and IoT in Cities”
 - Each deliverable will cover different aspects of the related technology as well as their impacts on city management.
 - Each deliverable will also highlight the importance of education and talent management in leveraging these new technologies.





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Deliverable I – The Impact of Artificial intelligence and Cognitive Computing in Cities

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- **Scope:** Artificial Intelligence has emerged as the key enabler to a wide-range of other technologies for innovations. This deliverable will look at the transformative potential of A.I. and its application in city development.
- **Aspects of A.I. covered in this deliverable will include:**
 - Machine learning
 - Deep learning
 - Cognitive computing
 - Health and Life Science
 - Bots and Language Understanding
- **Their area of Impacts in city management:**
 - Traffic management
 - Infrastructure design and exploitation
 - Quality of life
 - Public services 4.0
- **Deadline: Mid-August, 2018**





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**Deliverable II – The Impact of Data Processing and
Computation in Cities**

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- **Scope:** Data analytics serve as the foundation for smart cities improvements. This deliverable will examine how data processing is catalytic in improving city's efficiency in different areas.
 - **Aspects of data processing covered in this deliverable will include:**
 - Big data
 - Open data
 - Edge computing
 - Quantum computing
 - Digital transformation
 - Trend analysis
 - Virtual and augmented reality
 - Blockchain
 - **Their area of Impacts in city management:**
 - Public Administration efficiency
 - Resilience
 - Public participation
 - Social cohesion
 - **Deadline:** Mid-August, 2018





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**Deliverable III – The Impact of Sensing Technologies
and IoT in Cities**

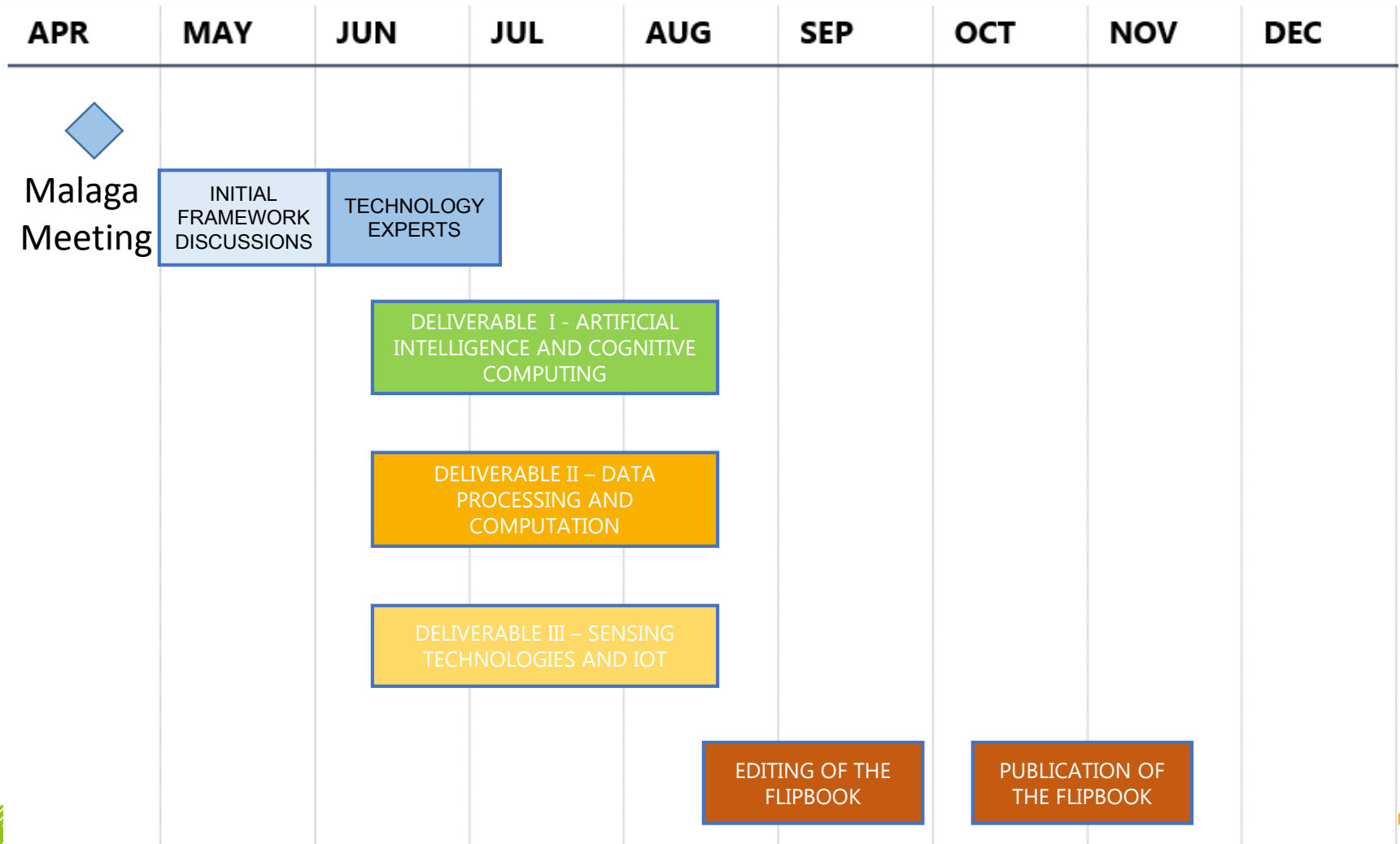
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- **Scope:** IoT will enable a coordinated management of city sensors. This deliverable will look at how IoT applications and smart sensors can transform different aspects of city management.
- **Aspects of IoT covered in this deliverable will include:**
 - Robotic – Drones
 - City IoT
 - Wearables
 - Indoor positioning
 - Mobility positioning
 - Integrated sensing
 - Industry 4.0
- **Their area of Impacts in city management:**
 - Security
 - Emergency response
 - Mobility
 - City services' management
 - City sustainability
- **Deadline: Mid-August, 2018**



TIMELINE DIAGRAM – 2018 & 2019



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