

SMART CITY SUPPORTED BY JAPAN ASEAN MUTUAL PARTNERSHIP

SMART JAMP

APPLICATION FORM for Smart City Project Formulation Study

1. PROJECT DIGEST

(1) Project Title : KLUO (KUALA LUMPUR URBAN OBSERVATORY)

(2) Name Of The City: KUALA LUMPUR, MALAYSIA.

(3) Category Of The Study:-

(B) Pre- feasibility study – To determine priority among several alternatives on a particular field or part of an entire smart city project

(D) Capacity building program – To build the capacity of the stakeholders including government officials or municipal staff through training programs or seminars (may be done online)

(E) experimental implementation – To confirm applicability of a particular solution or technology for the smart city project in cooperation with Japanese solution provider.

(4) Justification Of The Project.

KLUO (Kuala Lumpur Urban Observatory)

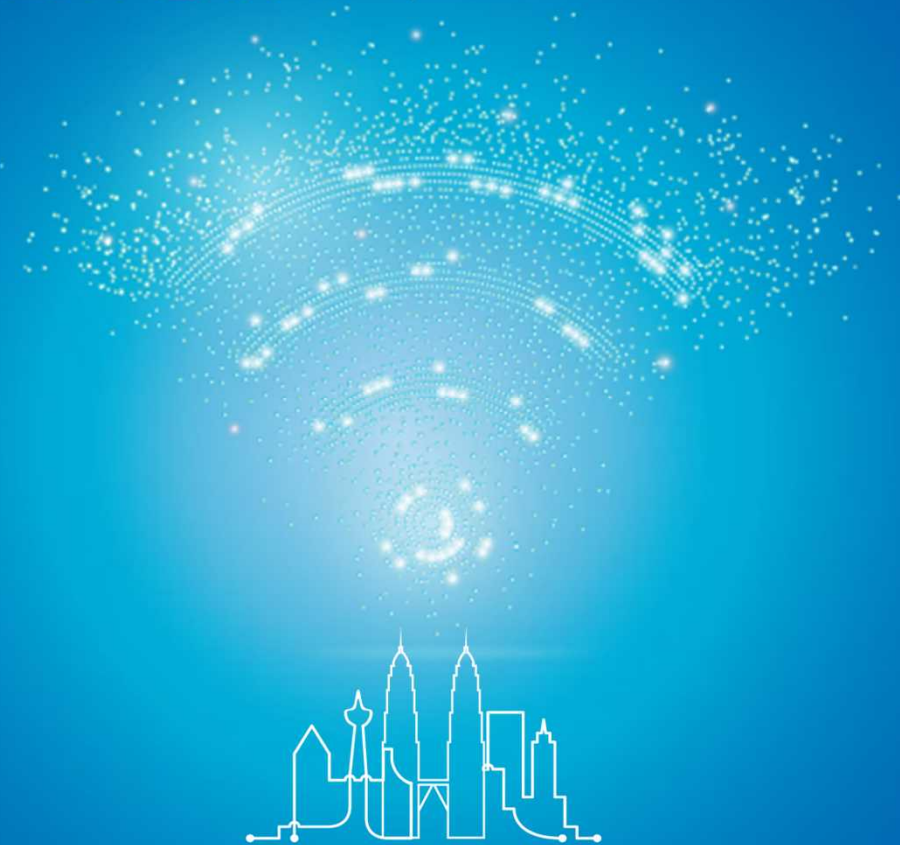
- Upgrading of DBKL JCT hardware, server, network, software.
- Hub for the collection, management and distribution of Kuala Lumpur city data.
- Open access and sharing of data between departments and agencies. Allow public access to data and maximise the potential of Kuala Lumpur by utilising city-data.
- Programme to support open data and open ecosystem.

Outline Of The Study

- The urban observatory will have adequate data analytics platform where it is able to comprehend multiple sources of data and populate them into a presentation layer. The platform also has sentiment analytics to ensure the data received from My Opinion can be automatically sorted by identifying the 'sentiment' of each opinion.
- Data received from various DBKL and public platforms can be processed and delivered to relevant departments for further actions, e.g. illegal business or structures, which in turn will increase revenue through efficient and effective enforcements.

KUALA LUMPUR SMART CITY MASTER PLAN 2020 - 2025

EXECUTIVE BRIEF



DEWAN BANDARAYA KUALA LUMPUR

Menara DBKL 1, Jalan Raja Laut, 50350 Kuala Lumpur, Malaysia.

www.dbkl.gov.my

SMART KUALA LUMPUR BY SMART CITIZENS

“Kuala Lumpur is beginning to and will continue to integrate technological solutions into local operations, from transportation to communications and other areas. The mechanisms of these systems are not always observable to the communities. Still, as technologies' integration becomes more visible in our lives, we could begin to see significant and tangible changes in Kuala Lumpur.”

Datuk Nor Hisham Ahmad Dahlan, Mayor of Kuala Lumpur 2018-2020



CONTENT

1

CHAPTER 1
Introduction

2

CHAPTER 2
Kuala Lumpur as a Smart City

3

CHAPTER 3
Kuala Lumpur
Smart City Aspirations

4

CHAPTER 4
Smart City Framework

5

CHAPTER 5
Key Urban Challenges

6

CHAPTER 6
Strategies and Initiatives





CHAPTER 1: INTRODUCTION

THE CHALLENGES OF URBANISATION

The rapid urbanisation that has taken place in the last decades has resulted in various urban issues such as congestion and pollution. With the integration of technologies, we now have an opportunity to re-engage how cities are planned, designed, financed, developed, and governed.

Society has a big responsibility in addressing future needs, advancing towards greater social cohesion, breaking down social divides, promoting participatory and inclusive local governance, and fostering sustainable development.

THE CHALLENGES OF URBANISATION

Rapid urbanisation has had consequences for the distribution of population and enormous demands on land, water, housing, transport, and employment. Such geographical concentrations of people, growing rapidly, have presented challenges of both numbers and quality in ensuring an adequate housing supply, solving urban congestion, and protecting the environment at the local and national policy levels.

NATIONAL CONTEXT

The National Smart City Framework will be the point of reference for DBKL to take progressive steps to upgrade connectivity, infrastructure, and communication effectiveness with the people, businesses and communities, thus improving the quality of life of Kuala Lumpur's dwellers.

KUALA LUMPUR CONTEXT

Kuala Lumpur Smart City Master Plan 2021 - 2025 is a giant leap forward towards transforming KL into a renowned and an exemplary urban centre of the future. KLSCMP2025 shares the Smart City aspirations with Pelan Strategik DBKL 2016 - 2020 and Pelan Struktur Kuala Lumpur 2040 (PSKL 2040) to address the capital's rapid urbanisation challenges.



SIGNIFICANCE OF SMART CITY

1. To Address Urban Challenges Arising from Rapid Urbanisation

2. To Meet National and Global Agenda

3. To Adopt New Global Development Trends

4. To Promote Digital Economy

5. To Position Kuala Lumpur to be on Par with other Cities Globally



The variety of views about what a Smart City is has resulted in broad definitions with no focus on specific technologies or sectors. Kuala Lumpur's approach to Smart City is people focused. Kuala Lumpur commits to using information and communication technology to enhance its liveability, workability and sustainability.

KUALA LUMPUR DEFINITION OF SMART CITY

In Kuala Lumpur, Smart City is defined as the concerted urban management approach that places people at the centre of its initiatives and will apply various technologies to enhance and improve its citizens' lives.

WHERE WE ARE NOW

KLSCMP2025 is a cornerstone for advancing Kuala Lumpur's global reputation as one of the most thriving, liveable, and sustainable cities. It provides a platform to enhance the city's unique places and environment, foster its innovation ecosystem, celebrate its rich cultural diversity, and strengthen sense of community and belongingness.



These are the top global Smart City indexes that Kuala Lumpur are being benchmarked against.

These city rankings embody the growing global demand for urban metrics, city performance measurement, and internationally oriented comparisons.



CHAPTER 2: KUALA LUMPUR AS A SMART CITY

LEARNING FROM TOP WORLD SMART CITIES

Kuala Lumpur strives to learn from the top smart cities of the world. In the course of developing this Master Plan, we have evaluated selected Smart Cities for comparison and benchmarking. The criteria for selecting these cities is based on their focus of implementing smart solutions that improve the wellbeing of its people and communities.



IoT Living Lab
Creating Sensitive Cities
Amsterdam



New York

HunchLab



MASTER PLAN DEVELOPMENT APPROACH

This Master Plan is manifested on the works done by applying the three-phased Gap Analysis approach with a significant focus on co-creation to align with the definition of Kuala Lumpur Smart City, which is people centric.

APPROACH

THREE-PHASED GAP ANALYSIS

CURRENT STATE ANALYSIS

Determine Smart City concepts including objectives, vision and mission, definition, benchmarking, criteria and components.

01

02

03

STRATEGIC RECOMMENDATIONS

Refine initiatives, provide implementation and monitoring mechanisms to ensure that the Master Plan is properly executed by the implementing agencies and stakeholders.

FUTURE STATE SCENARIOS

Perform gap analysis, design and develop policies and strategies, map issues against strategies, indicators and initiatives, and propose new initiatives.



OBJECTIVES AND OUTCOMES

of Kuala Lumpur Smart City Master Plan 2021 - 2025

Objectives

- 1 Define Smart City concepts, vision and mission, definition, and components.
- 2 Design and develop policies, strategies, roadmaps and action plans for the implementation of Smart City framework.
- 3 Provide implementation and monitoring mechanisms to ensure that the Master Plan is properly executed.

Outcomes

DIRECTION

Fulfil the country's direction to make our city competitive in line with national and international agendas (e.g. SDGs, MSCF, et cetera).

POSITION

Position our city's standing on par with global smart cities.


COLLABORATION

Provide a collaborative space for stakeholders and strategic partners based on directions/roles in Smart City development.

SOLUTION

Enable stakeholders to address the urbanization issues through the Smart City initiatives to improve the wellbeing and quality of life.





CHAPTER 3: KUALA LUMPUR SMART CITY ASPIRATIONS

VISION

KUALA LUMPUR, A CITY FOR ALL

A Smart City that places people at the center of its initiatives, harnessing technology and data to enhance and improve its citizens' lives.

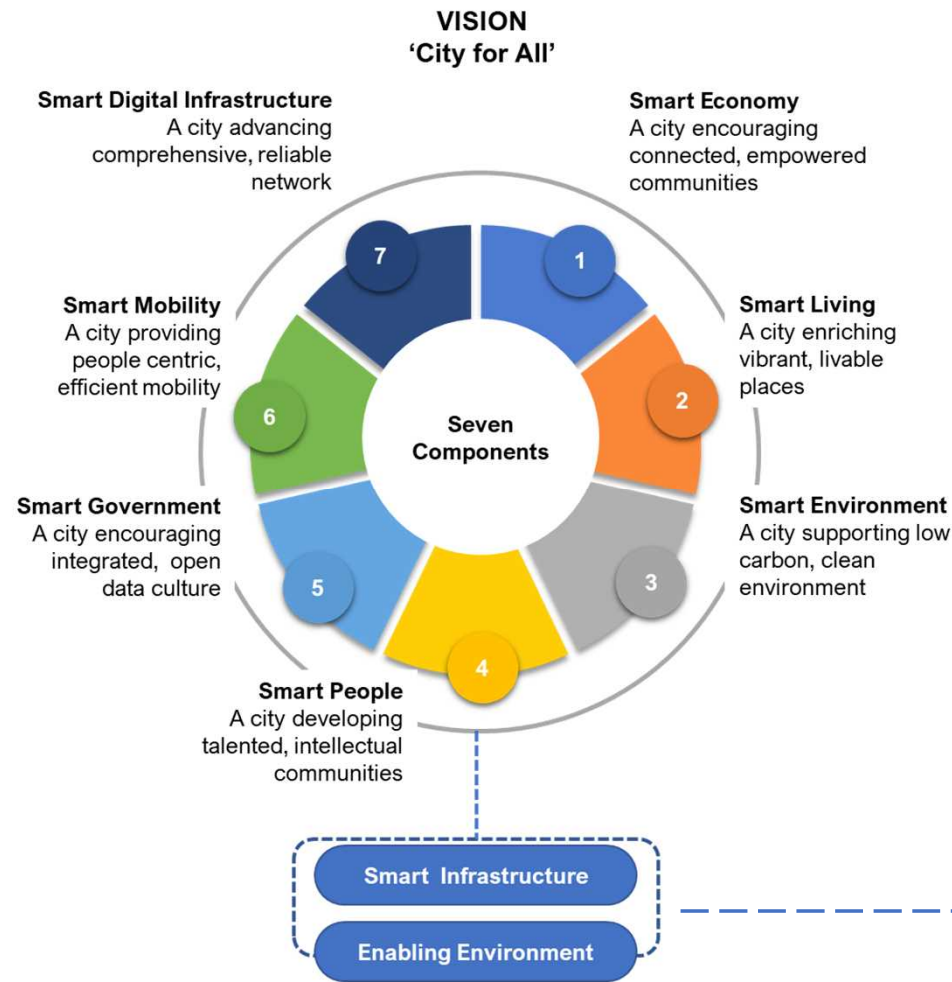
MISSION

To Endeavour becoming a Smart City that is Safe and Secure, Clean and Green, Efficient and Sustainable.

TAGLINE

Smart Kuala Lumpur by Smart Citizens

CHAPTER 4: SMART CITY FRAMEWORK



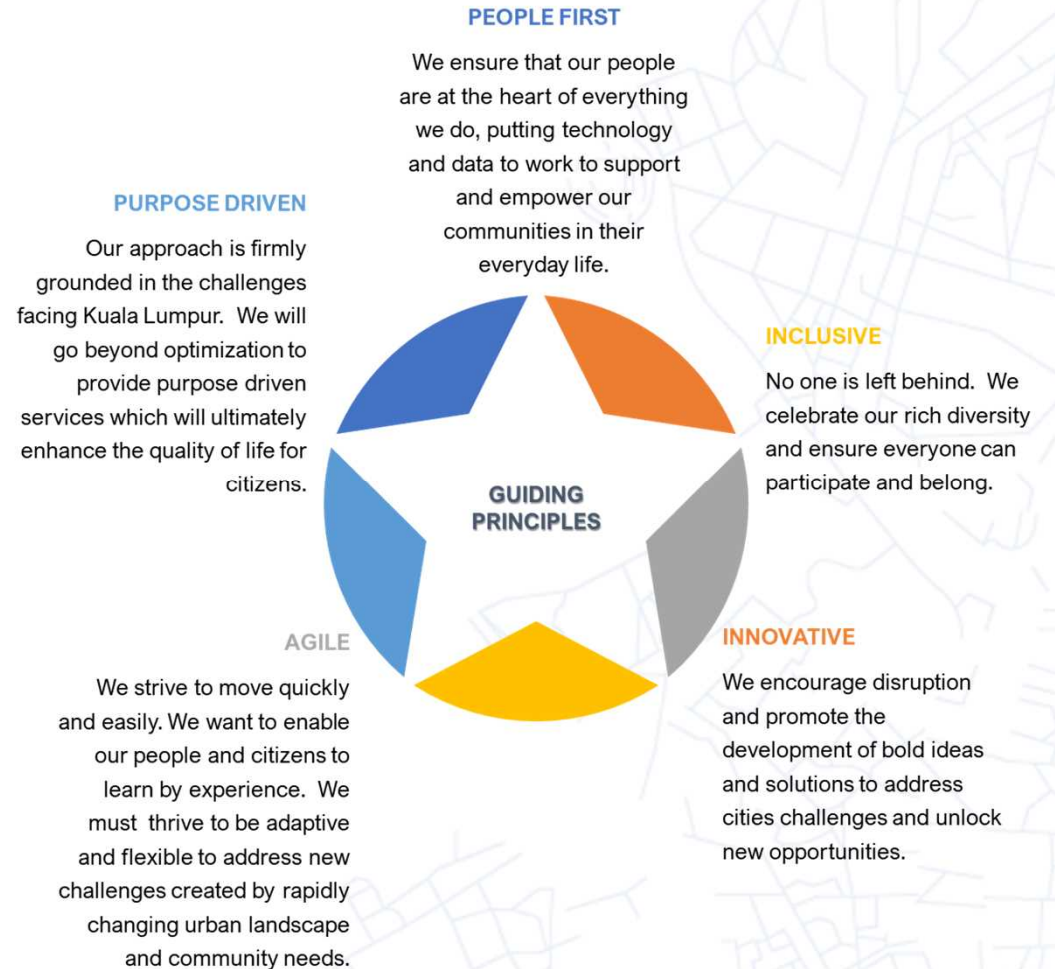
KUALA LUMPUR SMART CITY FRAMEWORK

The Smart City Strategic Framework is structured around seven outcomes. While each result focuses on a specific component, the success of the city's smart transformation is dependent on a holistic approach, whereby the seven outcomes seamlessly integrate and support each other.



GUIDING PRINCIPLES

A set of principles has been collaboratively developed to underpin Kuala Lumpur Smart City implementation. These principles will help us to navigate the rapidly evolving urban landscape, address complex challenges and ensure the design, development and deployment of our smart future is grounded in our true intent.

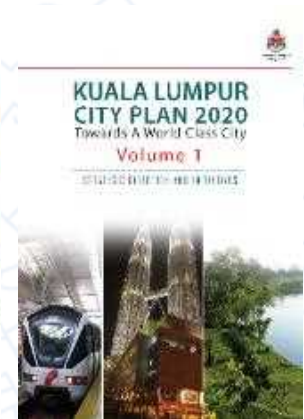
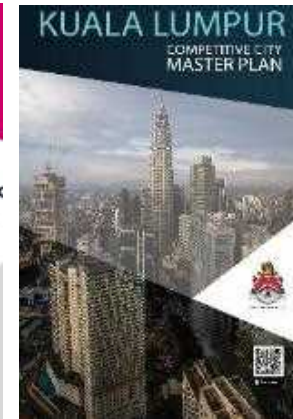


CHAPTER 4: SMART CITY FRAMEWORK

GUIDELINES AND REFERENCES



The Kuala Lumpur Smart City Master Plan 2021 - 2025 has also referred to these publications to enhance its comprehensiveness and inclusivity in its planning of Smart City



CHAPTER 5: KEY URBAN CHALLENGES

KEY URBAN CHALLENGES

Smart City initiatives are widely used to address urban challenges resulting from rapid urbanisation. Here are the urban challenges for Kuala Lumpur.

Economy

- Readiness to transition into high value-added industries
- Development of innovative businesses and enterprises
- Implementation of e-wallet in businesses
- Productivity in economy
- Creation of high value-added jobs
- Space for hawkers
- Illegal businesses

Living

- Price of Smart Homes
- Affordable homes
- Prevention of crime
- Monitoring systems
- Illegal immigrants
- Quality of life and public facilities
- Demand for healthcare services

Environment

- Management of solid waste
- Air pollution
- Water pollution
- Carbon footprint
- Illegal structures by factories and businesses
- Traffic congestion
- Landslide
- Flood
- Availability of green areas
- Disaster warning systems
- Consumption of non-renewable energy
- Management of non-revenue water
- Awareness of recycling

People

- Skilled manpower and talent pool
- Adaptability to emerging technologies
- e-Commerce knowledge
- Harmonious integration and community empowerment
- Gender friendly environment and inclusivity of vulnerable groups
- Moral intelligence and social integrity

Government

- Information and data sharing in and between government agencies
- Public information sharing from government
- Coordination between departments and agencies
- Participation from public and other external stakeholders
- Quality of e-government services
- Data integrity

Mobility

- Traffic congestion
- Volume of traffic into city
- Rail ridership and private vehicle ownership
- Accessibility/interconnection between public transport
- First and last mile connectivity and accessibility
- Public transport coverage
- Service quality and facility provision in public transportation
- Enforcement for traffic violation

Living

- Indoor and outdoor network coverage
- Fibre optic readiness
- Internet speed and connectivity
- Functionality of ITIS
- Integration between various systems
- Cybersecurity

STRATEGIES AND INITIATIVES

The analyses performed on the current state (including on current initiatives that have been confirmed, developed or deployed by DBKL) against future state scenarios during the development of the Kuala Lumpur Smart City Master Plan 2021 - 2025 produced insights for DBKL to embark on new strategies and initiatives to minimise or close the gaps to achieve its Smart City vision.

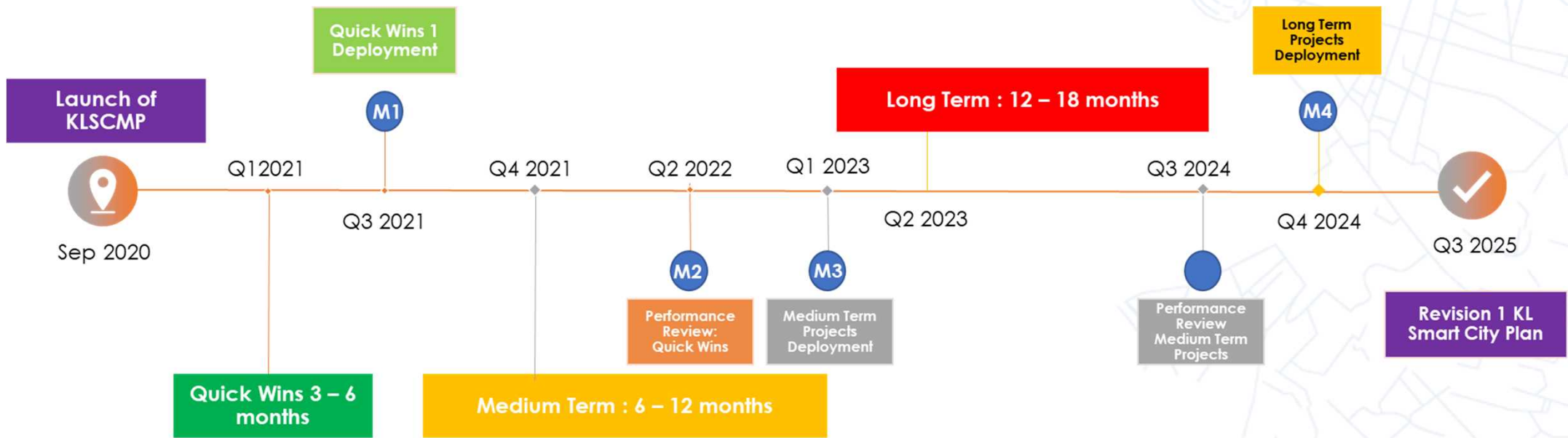


PROPOSED INITIATIVES

Smart Economy	Smart Living	Smart Environment	Smart People	Smart Government	Smart Mobility	Smart Digital Infrastructure
<ol style="list-style-type: none">1. Kolabora-C2. Tourism Destination: Experience Through Technology3. Kuala Lumpur Tourism Product Online Store4. e-Channel	<ol style="list-style-type: none">1. Smart Home Ready for People2. Safe City3. Enhanced Bodycam for Enforcement Officers	<ol style="list-style-type: none">1. Smart Waste Management2. Smart Pollution Control3. Smart Disaster Prediction & Resilience4. Climate Action Plan5. Smart Renewable Energy6. Smart Energy Street7. Smart Green Building	<ol style="list-style-type: none">1. KL Digital Community2. DBKL e-Library3. Duta e-Commerce	<ol style="list-style-type: none">1. My Opinion (Co-Creation Platform)2. KLCARES App/iSPAAA Enhancement3. Improve KL City-Wide Collaboration4. KLUO - Urban Observatory5. Collaboration with Telcos6. Cashless Society7. Smart KL Division	<ol style="list-style-type: none">1. Smart Traffic Management	<ol style="list-style-type: none">1. KL City Data Analytics Programme



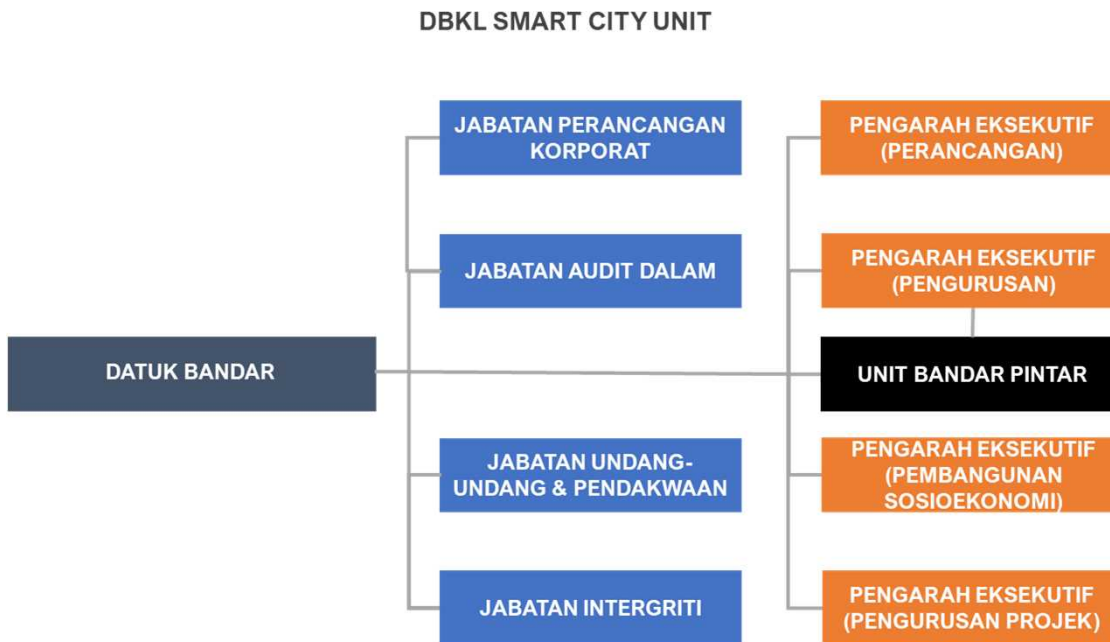
IMPLEMENTATION ROADMAP



M - Milestone



COMMUNICATION ACTION PLAN



There is a need to have a coordinated approach for the Kuala Lumpur Smart City Master Plan's internal and external communication. To ensure that the Kuala Lumpur Smart City Master Plan is delivered successfully, a new DBKL Smart City Unit is proposed. DBKL Smart City Unit will be responsible for ensuring Kuala Lumpur Smart City Master Plan is delivered and implemented through active communication, monitoring, advisory, and reporting.

Activities:

1. Coordination of communication activities
2. Media/press releases
3. KL Smart City website
4. Project profile on social networks
5. A blog dedicated to the project
6. Smart City project dashboard

