



NUSANTARA

Nusantara Command Center Tech Landscape 2024

Deputy for Green and Digital
Transformation, Nusantara Capital City
Authority

**Smart City Investment Package
Nusantara Capital City Authority**

Market Briefing, March 2024



Nusantara Command Center(NCC) Development Plan



Definition and Scope of Command Center

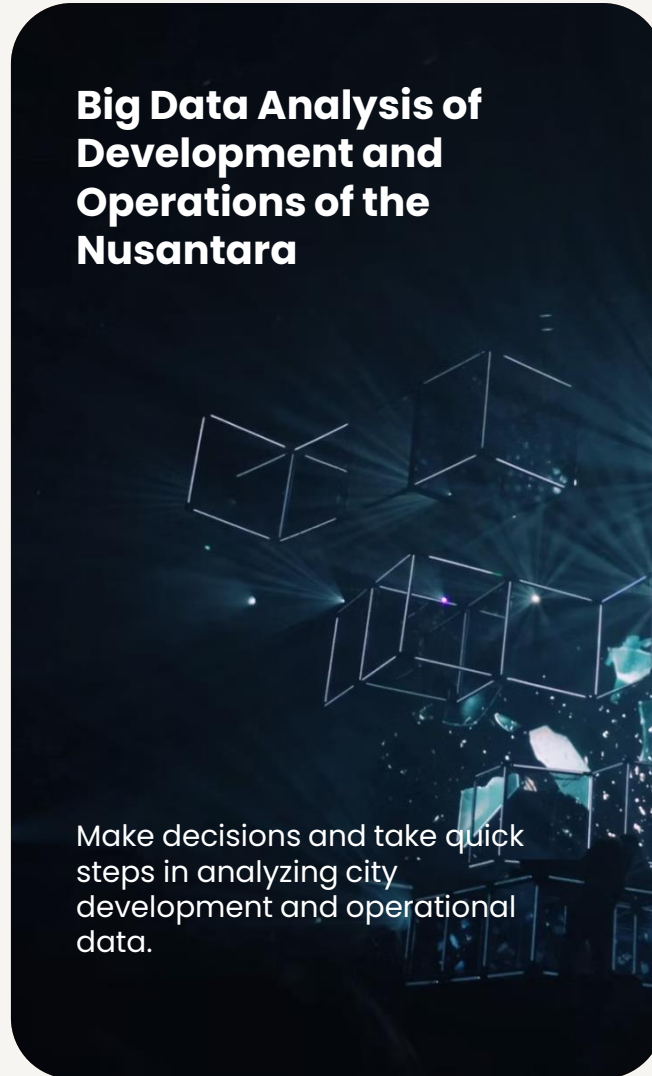
The Nusantara Command Center is a monitoring and control service for the Indonesian smart city based on big data and computer vision technology utilizing CCTV-based monitoring and monitoring technology, as well as optimizing digital services for IKN citizens

Supervision and Monitoring of the Development of Nusantara



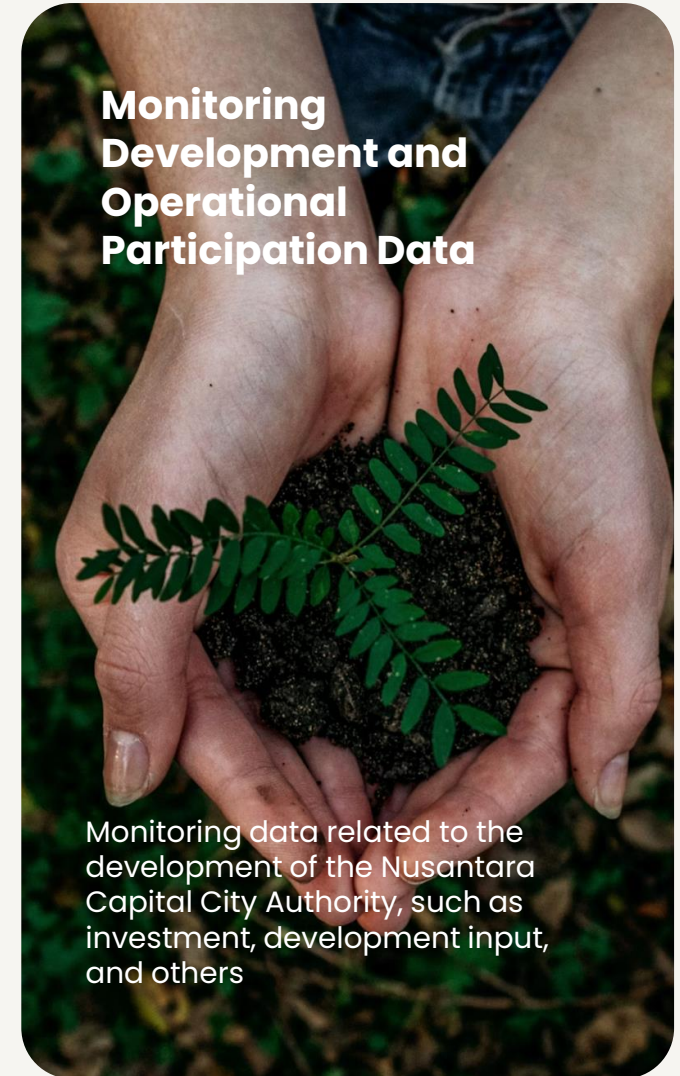
Monitoring the location and development of the Indonesian Capital City via CCTV to provide appropriate responses.

Big Data Analysis of Development and Operations of the Nusantara



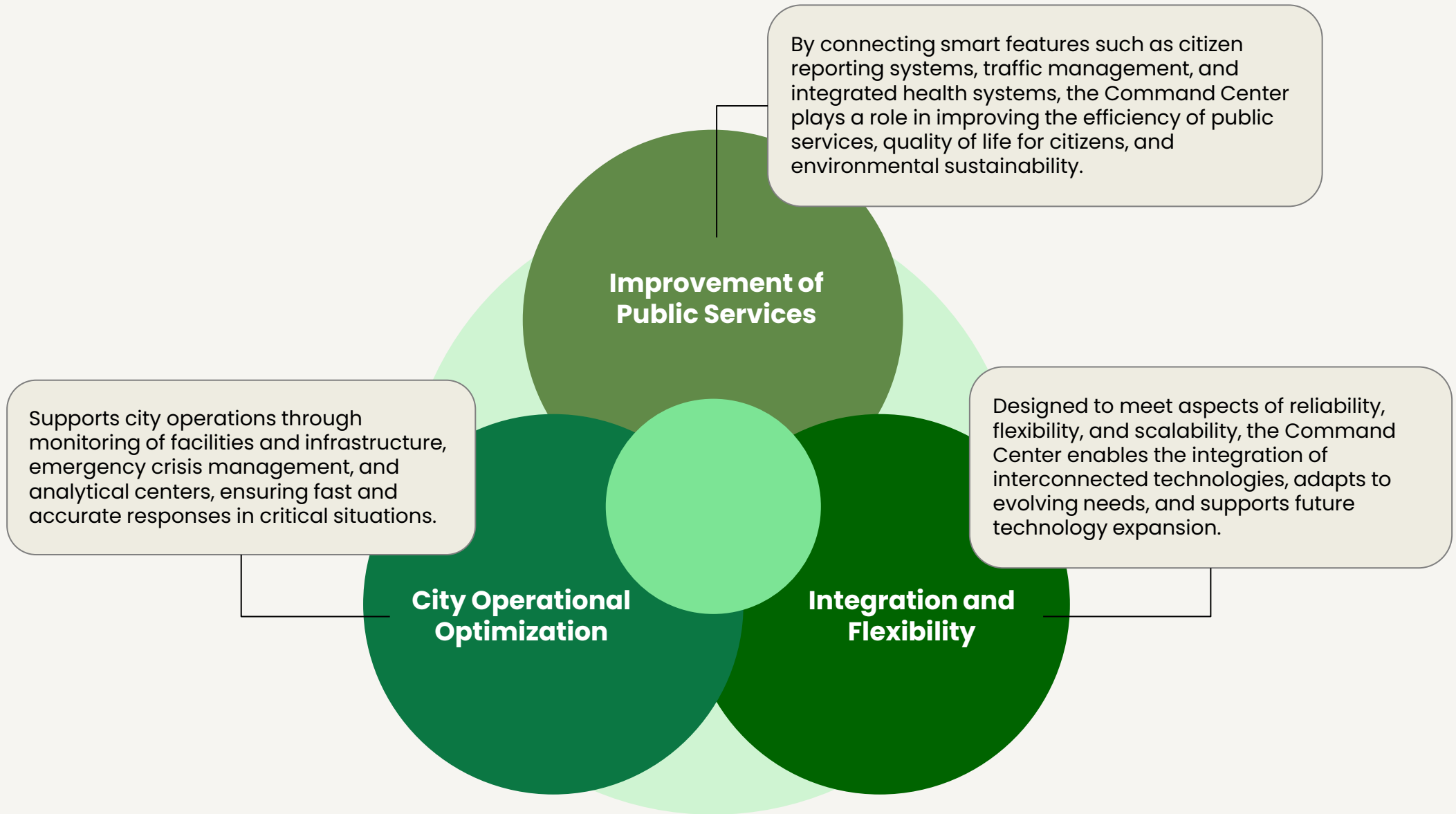
Make decisions and take quick steps in analyzing city development and operational data.

Monitoring Development and Operational Participation Data

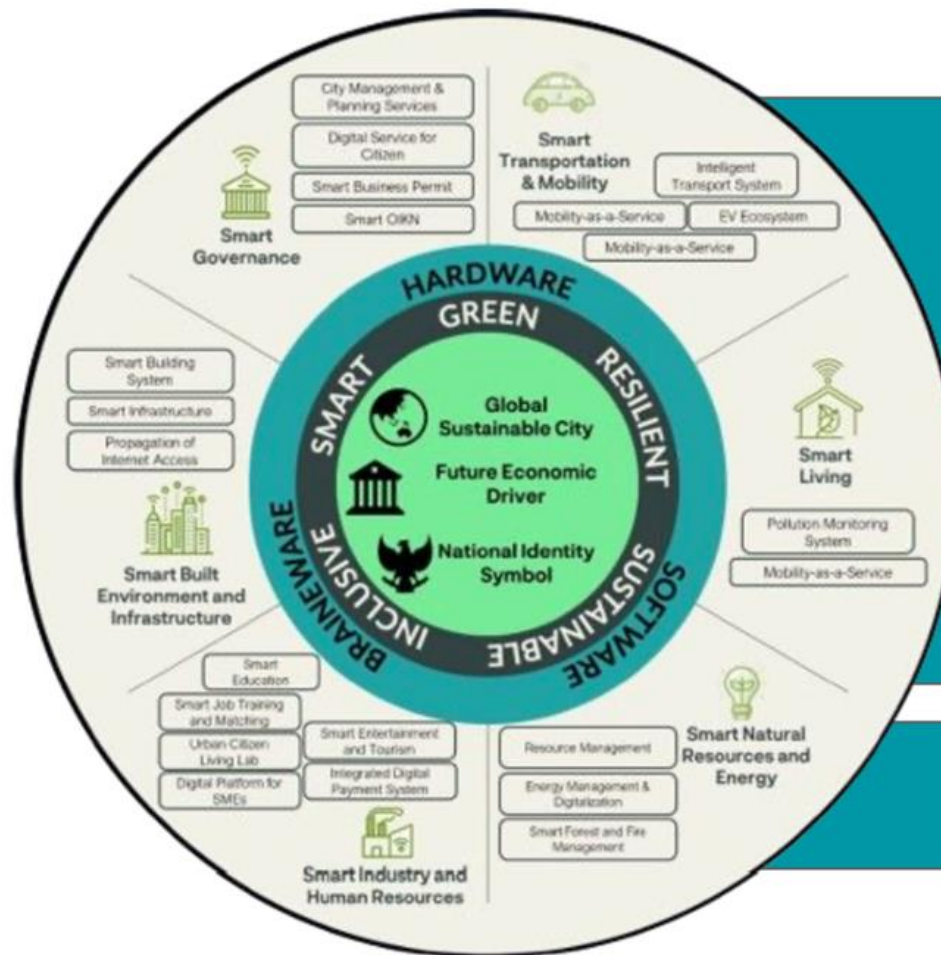


Monitoring data related to the development of the Nusantara Capital City Authority, such as investment, development input, and others

Command Center Benefits for IKN



Principles of Command Center Planning



Reliable: Nusantara Command Center that will be built at IKN must be reliable to achieve its mission of supporting city operations, including monitoring facilities and infrastructure, emergency crisis management and an analytical center.

Flexible: The Command Center must be flexible enough to accommodate unexpected conditions that arise during an emergency. Systems and spaces must be able to adapt to new users, unexpected circumstances, and extremely high loads

Scalable: The Command Center must be able to develop and support existing technology

About the Nusantara Command Center

What is Nusantara Command Center?

Nusantara Command Center is an urban service technology system through efficient integration and monitoring.

This system combines a CCTV video system for security and traffic monitoring, coordinates emergency services and public complaints for rapid response in emergency situations, and integrates social and economic services to support the growth and prosperity of the entire IKN community

Emergency and Crisis Management

Integrated digital public contact service for incidents and emergencies (BSSN, BMKG, Basarnas)

Security and Surveillance

Monitoring roads and public places in real time and connecting with relevant authorities (Polri, TNI, etc.)



Monitoring all IKN public facilities

Visibility to the surrounding environment and integration with energy and public services

Analytics Goals Dashboard

Digital Twin for development analysis and potential risks that may occur in the IKN area

Command Center V.1

Version I - Construction Worker Housing (HPK)

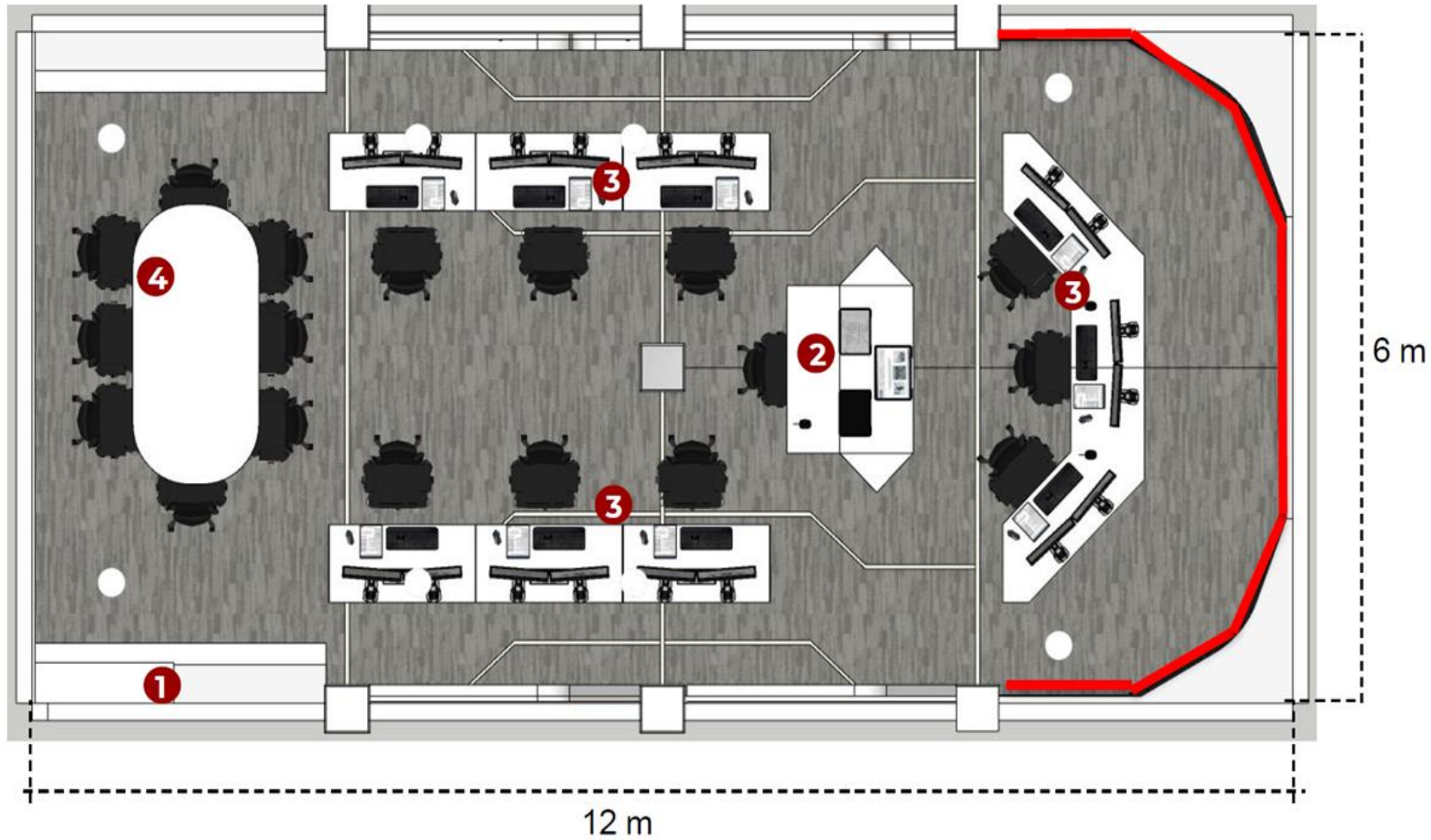
Command Center V.1



FEB 2024

Completion of Command Center V.1

Floor Plan of ICCC



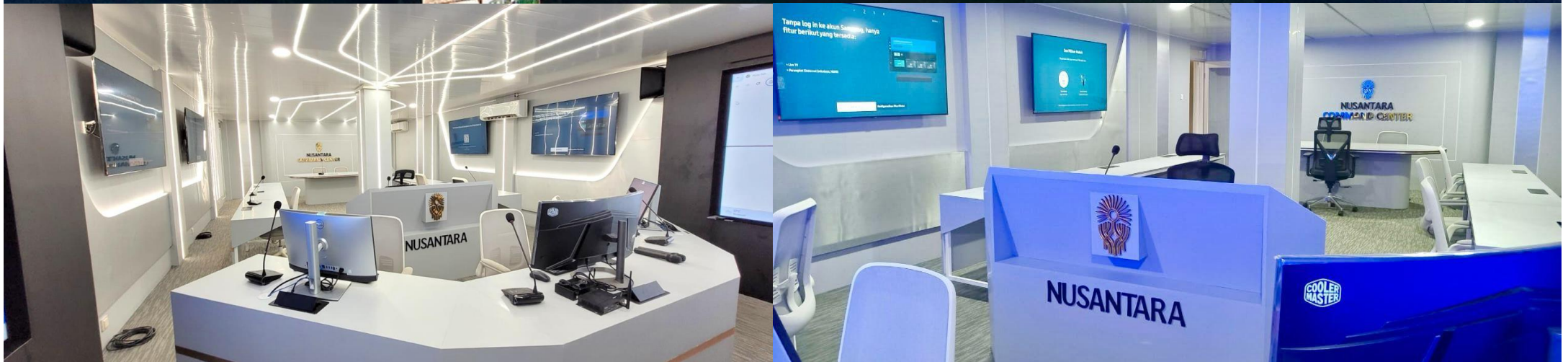
Legend:

1. Main Entry
2. President Area
3. Control Area
4. Meeting Area

Remarks:

 : LED TV

Gallery Command Center V.1



Nusantara Command Center Phase 1 Data and Services Integration Center



Grand Design Nusantara Command Center

Data Sources

OIKN

Development Plan Data



Development Status Data



Data CCTV



Spatial Data



Investment Data



Reporting Data / Social Media



Command Center Digital Operation

MONITORING DASHBOARD



Development Achievements



Monitoring Visual



Data analysis



Control Management

TEAM



ICCM Manager



ICCM Officer



Reporting Officer

ACTIVITY



24/7 Monitoring



Analysis and Research



Reporting

FACILITIES



- Interactive Flat Display
- Video Wall Seamless
- Video Conference

Services

REAL TIME MONITORING



Desktop Device



Tab Device



Mobile Device

ANALYSIS & REPORTING



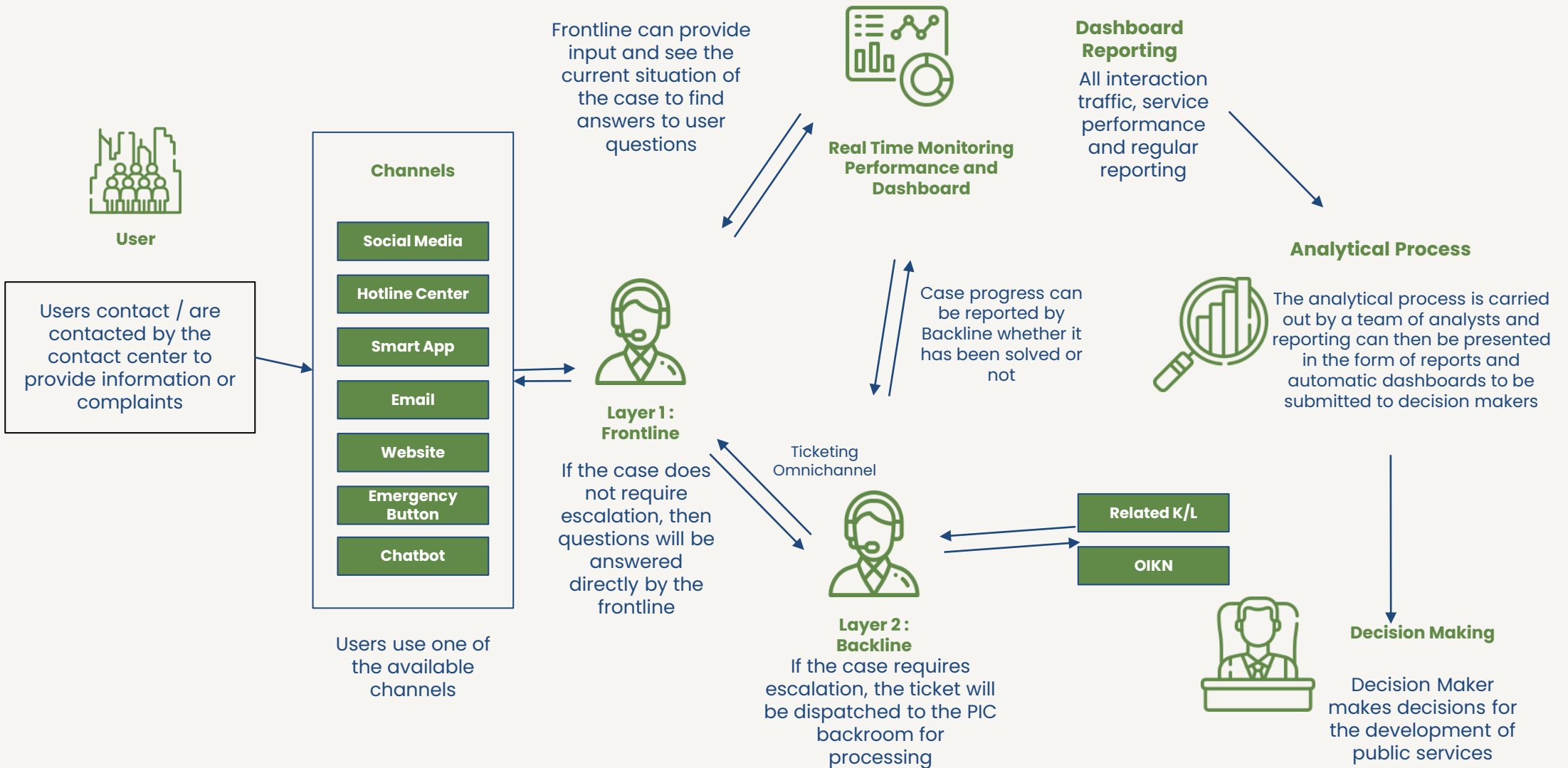
- Traffic Conversation
- Sentiment Analysis
- Engagement Analysis
- Influencer Identification
- Geo Location Based Analysis
- Social Network Analysis, etc.
- Daily, Weekly, Monthly, Annual, ad hoc report, etc.

CRISIS MANAGEMENT ALERT



- Immediate alerts when certain conditions are encountered
- Verify alerts and short Summary from Analyst
- Sending warnings in the form of notifications

Nusantara Control Center Basic Workflow



Nusantara Control Center Contents List



Live Progress



Project Overview

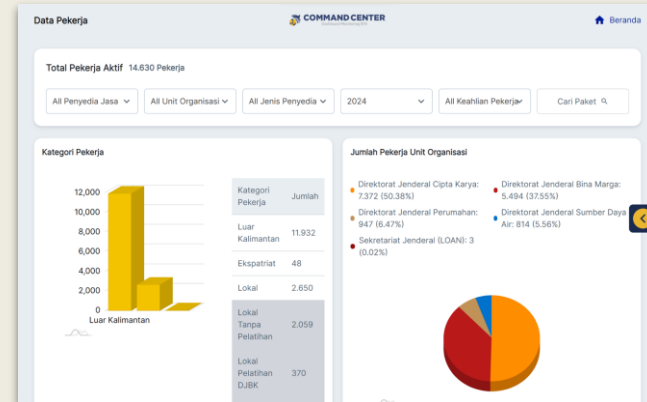


Cost Progression

List of Issues

Tipe Risiko	Deskripsi Risiko / Isu	Deskripsi Dampak	Dampak	Langkah Mitigasi	Status	Komentar
Kendala Biaya	Ketebalan anggaran, kekurangan dana	Kualitas terancam, penundaan proyek	High	Perencanaan keuangan komprehensif, audit berkala	Open	
Lingkungan	Bencana alam (gempa bumi, banjir, tsunami)	Kerusakan infrastruktur, risiko keselamatan	High	Rencana kesiapsiagaan bencana yang detail serta desain yang tangguh	Open	
Penundaan Infrastruktur	Pembangunan infrastruktur penting yang tertunda	Fungsionalitas terbatas, mengganggu kelayakan	High	Perencanaan proyek detail serta jadwal kontrajensi	Open	
Politik dan Regulasi	Perubahan kepemimpinan atau peraturan politik	Penundaan, perubahan kebijakan, perselisihan	High	Keterlibatan rutin dengan pembuat kebijakan, perlindungan hukum	Open	
Akuisisi Lahan	Pembebasan lahan yang lambat dan relokasi masyarakat	Demonstrasi, tantangan hukum, publisitas negatif	Medium	Konsultasi dengan masyarakat yang terkena dampak, kompensasi yang adil	Open	
Inflasi (Biaya Bahan)	Peningkatan biaya bahan	Peningkatan biaya namun anggaran kecil	Medium	Pemantauan biaya rutin, sumber alternatif	Open	
Teknologi	Tantangan dalam penerapan	Inefisiensi, masalah operasional	Medium	Tenaga kerja, terampil serta dukungan teknis berkelanjutan	Open	
Tenaga Kerja	Kekurangan tenaga kerja serta potensi keributan	Kualitas terancam, penundaan proyek	Medium	Program pelatihan, praktik ketenagakerjaan yang adil	Open	

The Number of Workers



Fleet Management



Technical Components Required at Command Center V.1

Display & Command Center Support Devices

1. Modular LED Display P2.5 (5120x1440mm)
2. VideoWall Controle M10
3. Kabel HDMI 15M
4. AIO Computer i7-9700/16GB/1TB/23.88"/Win10Pro
5. TV 65" + Bracket & Instalasi

Procurement of Speaker & Microphone System Equipment

1. Professional UHF 2 Channel Wirelss microphone
2. Wallmount Speaker
3. Mixer Amplifier 120 Watt

Power Backup and Cooling & Electrical Command Center

1. UPS 10 KVA
2. POWER / Panel Induk Command Centre

Installation

1. Video Wall Installation & Configuration & Settings
2. 10 KVA UPS Installation & Configuration
3. Transport & Living Costs
4. After Sales Warranty 1 Year

Interior and Furniture

1. UK Room. 6x12
2. Carpet Tile
3. Video Wall Structure
4. Backdrop Video Wall Finishing HPL
5. Wall Finishing WPC 8mm / Plywood 9mm +HPL
6. IKN logo & Command Center writing
7. Operator's Seat
8. Custom Operator Desk 120x90x80

Command Center V.2

Coordinating Ministry Office (Kemenko)

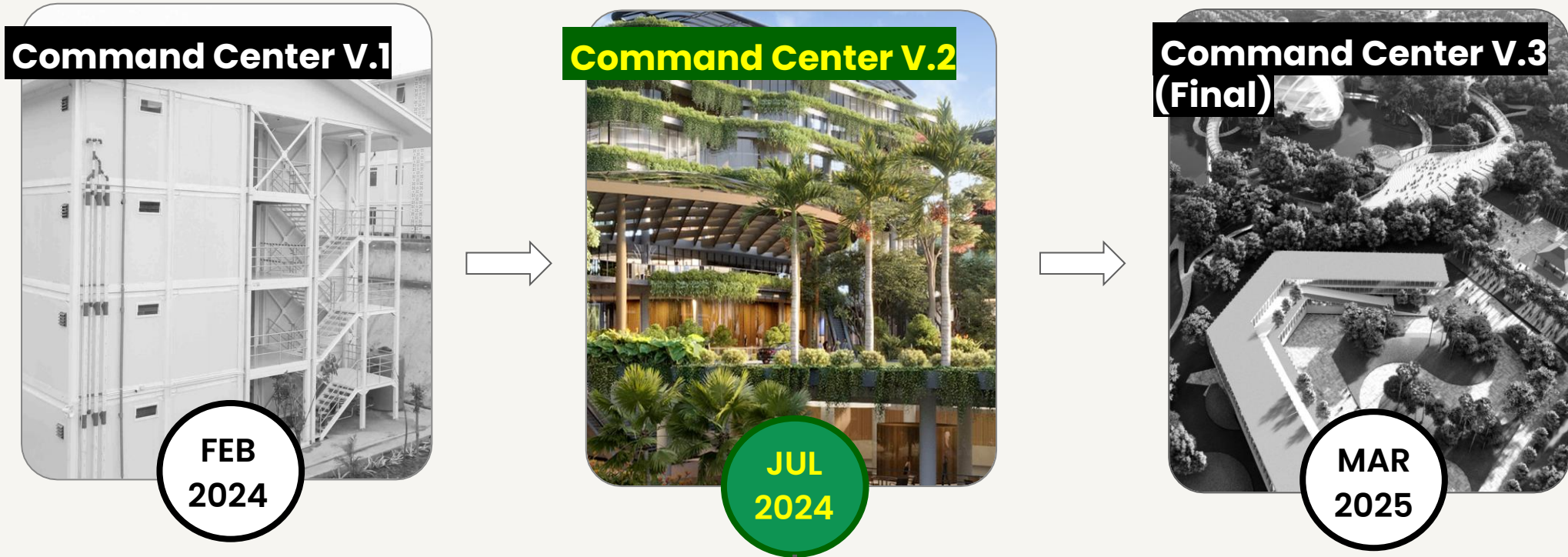
PLAN

Command Center V.2



JUL
2024

Nusantara Command Center(NCC) Development Plan



Objective: To support the flag ceremony activities which will be held on the Republic of Indonesia's Independence Day on 17 August 2024 at WP IKN, a more capable CC is needed as a showcase for more comprehensive and future-proof digital infrastructure development.

Hardware Specs

A. Display & Perangkat Pendukung Command Centre

No	Keterangan	Qty	
1	LCD Video Wall 1.8mm 500nits	27	Unit
2	Bracket Video Wall	27	Unit
3	Chasiss Video Wall Controller	1	Unit
4	Quad Channel HDMI Input Card	3	Unit
5	Quad Channel HDMI Output Card	8	Unit
6	Preview Card	1	Unit
7	Kabel HDMI 10M	6	Unit
8	Kabel HDMI 15m	16	Unit
9	AIO Computer	10	Unit
10	Camera Video Conferences	1	Unit
11	Pengiriman Barang JKT-IKN	1	Ls

B. Pengadaan Perangkat Control AV

No	Keterangan	Qty	
1	AMX Wallmount Touch Panel	1	Unit
2	DVX-2265-4K-TAA 6X2 ALL IN ONE 4K60	1	Unit
3	PR-WP-412	1	Unit
4	JPK-1300	1	Unit

C. Pengadaan Perangkat Speaker & Microphone System

No	Keterangan	Qty	
1	Control Host AM-5000M	1	Unit
2	Microphone Chairman	2	Unit
3	Microphone Delegate AM-5000D	12	Unit
4	Wireless Conference System infrared AM-5000R	1	Unit
5	Charger Pack AM-5000P	1	Unit
6	Battery Base Chairman AM-5000BC	2	Unit
7	Battery Base Delegate AM-5000BD	1	Unit
8	Ceiling Speaker AC-A601	8	Unit
9	Ceiling Subwoofer AC-S601	4	Unit
10	Mixer Amplifier MA600U	1	Unit

D. Power Backup & Pendingin & Elektrikal Command Centre

No	Keterangan	Qty	
1	UPS 20 KVA	1	Unit
2	AC	2	Unit
3	Pipa AC & Kelengkapan Material Instalasi	2	Ls
4	Power / Panel Induk Command Centre	1	Ls

E. Interior

No	Keterangan	Qty	
1	Backdrop Video Wall & Dinding Dengan Perendam Suara	200	M2

F. Instalasi Perangkat Command Centre

No	Keterangan	Qty	
1	Instalasi Video Wall & Konfigurasi & Setting	27	Unit
2	Instalasi Audio System & Konfigurasi	1	Ls
3	Instalasi AC 5PK	2	Unit
4	Instalasi & Konfigurasi UPS 20KVA	1	Unit
5	Programming & Setting Control System AV	1	Ls

Notes: Requirements above are indicative and prospective investors/consortiums may propose recommendations that's considered more strategic on their Feasibility Study for PoC

Proof of Concept Requirements

PoC System Minimum Functional Requirements

FEATURES	Integrated Command Control Center (ICCC)	
FUNCTIONAL REQUIREMENT	<ul style="list-style-type: none"> • Emergency and Crisis Management <ul style="list-style-type: none"> ○ ICCC administrators will receive alerts from IKN citizen’s ‘emergency button’ and respond accordingly ○ ICCC administrators will act as one stop digital public contact service for incidents and emergencies, and take necessary actions with respective relevant parties in dispatch response ○ ICCC administrators will receive public safety and natural disaster warnings from relevant parties and relay these information to IKN citizens • Safety and Surveillance <ul style="list-style-type: none"> ○ ICCC administrators can monitor roads and public places in real time ○ ICCC administrators will be connected with relevant parties for safety & security (e.g., POLRI, TNI, firefighter) as part of communication chain for emergency and crisis management 	<ul style="list-style-type: none"> • Ability to monitor of all IKN public facilities, services, and infrastructure <ul style="list-style-type: none"> ○ ICCC administrators can monitor the mobility of citizens and ensure smooth traffic/commute, integrated with Intelligent Transport System command center ○ ICCC administrators can monitor congestion or crowd levels, and share alert to citizens through IKN Smart City App, integrated with Intelligent Transport System command center ○ ICCC administrators have visibility on surrounding environmental (pollution levels, weather, humidity, temperature, etc.) and biodiversity conditions ○ ICCC administrators can monitor public utilities (e.g., water, gas, solid waster, sewerage & drainage, roads, streetlights) conditions, integrated with energy and water command centers • Analytic Purposes <ul style="list-style-type: none"> ○ ICCC administrators can use digital twin for analytics on development and potential risk that can happen to related building/roads ○ ICCC administrators have information on hospitals, disease control and prevention, integrated with help desk ○ ICCC administrators can monitor staple food supply prices and inflation to be used for food security planning <p style="text-align: right;">References: Synergy, Portugal</p>

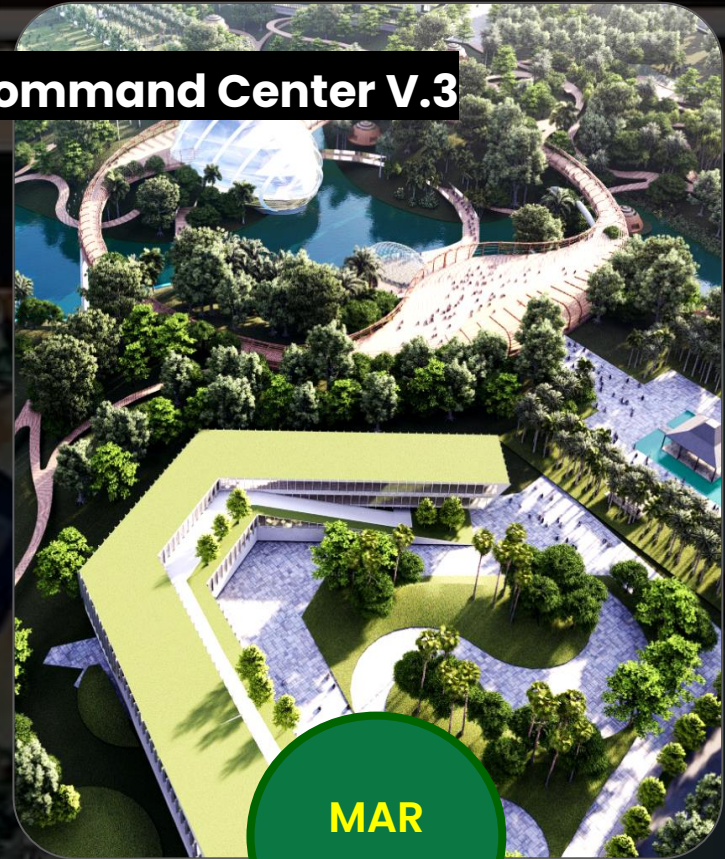
Notes: Requirements above are indicative and prospective investors/consortiums may propose recommendations that’s considered more strategic on their Feasibility Study for PoC

Command Center V.3 (Final)

PLAN

Located at OIKN's Main Headquarter

Command Center V.3



MAR
2025

Nusantara Command Center(NCC) Development Plan

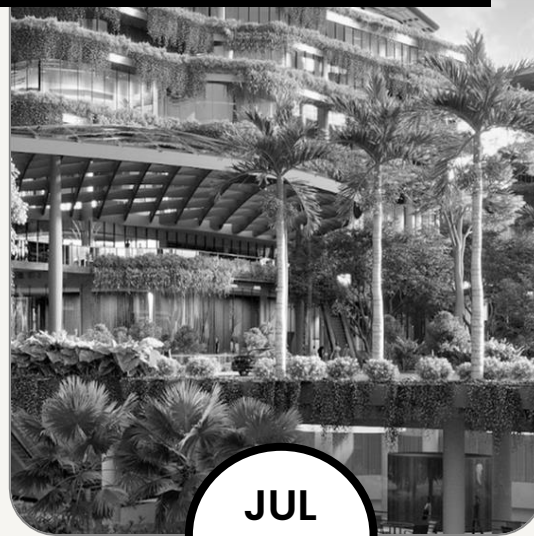
Command Center V.1



**FEB
2024**

**Construction Worker
Housing (HPK)**

Command Center V.2



**JUL
2024**

**Coordinating Ministry
Office (Kemenko)**

**Command Center V.3
(Final)**



**MAR
2025**

**OIKN Main
Headquarter**

Technology Architecture



Room Details and Area Requirement

#	Room Name	Total Room	Remarks	Metrics	Area (m2)	Total area (m2)
1	Main Command Center + Operation Room	1	1	room	500.00	500.00
2	Control Center Room	1	1	room	40.00	40.00
3	Discussion Room	3	1	room	40.00	120.00
4	UPS and Electric Room	1	1	room	120.00	120.00
5	Crisis Center / War Room	1	1	room	90.00	90.00
			Total staff	Effective Area	Sub-Total	870.00
				% Circulation + SP/ME	25%	217.50
				Total GFA		1087.50

Hardware Requirement (1/2)

Ruang War Room

No.	Keterangan	Vol	Satuan
1	Profesional Monitor	1	unit
2	3D LED Hologram Table	1	unit
3	Conference Host	1	unit
4	Network Chairman Unit	2	unit
5	Network Delegate Unit	18	unit
6	8" Full Range Speaker	2	unit
7	Power Amplifier	1	unit
8	8-channel Audio Mixer	1	unit
9	FHD AV KVM Over IP NPL Series	2	unit
10	Intelligent Recording Server	1	unit
11	7" Touch Control Processor	1	unit
12	HDMI Splitter 1in 2out	1	unit
13	HDMI Capture Card	1	unit
14	Intelligent Conference Camera	1	unit
15	Network Switch	1	unit
16	USB Soundcard	1	unit

Ruang Rapat Pimpinan

No.	Keterangan	Vol	Satuan
1	136" All in One LED	1	unit
2	Conference Host	1	unit
3	Network Chairman Unit	2	unit
4	Network Delegate Unit	18	unit
5	Intelligent Conference Camera	1	unit
6	8" Full Range Speaker	2	unit
7	Power Amplifier	1	unit
8	8-channel Audio Mixer	1	unit
9	FHD AV KVM Over IP NPL Series	1	unit
10	Intelligent Recording Server	1	unit
11	7" Touch Control Processor	1	unit
12	HDMI Splitter 1in 2out	1	unit
13	HDMI Capture Card	1	unit
15	Network Switch	1	unit
16	USB Soundcard	1	unit

Ruang Diskusi 1 Selatan

No.	Keterangan	Vol	Satuan
1	86" Interactive Flat Panel	1	unit
2	Open Plugable Slot	1	unit
3	FHD AV KVM Over IP NPL Series	1	unit
4	HDMI Splitter 1in 2out	1	unit
5	HDMI Capture Card	1	unit
6	Network Switch	1	unit

Ruang Diskusi 2 Selatan

No.	Keterangan	Vol	Satuan
1	86" Interactive Flat Panel	1	unit
2	Open Plugable Slot	1	unit
3	FHD AV KVM Over IP NPL Series	1	unit
4	HDMI Splitter 1in 2out	1	unit
5	HDMI Capture Card	1	unit
6	Network Switch	1	unit

Ruang Diskusi 1 Utara

No.	Keterangan	Vol	Satuan
1	65" Interactive Flat Panel	1	unit
2	Open Plugable Slot	1	unit
3	FHD AV KVM Over IP NPL Series	1	unit
4	HDMI Splitter 1in 2out	1	unit
5	HDMI Capture Card	1	unit
6	Network Switch	1	unit

Ruang Diskusi 2 Utara

No.	Keterangan	Vol	Satuan
1	65" Interactive Flat Panel	1	unit
2	Open Plugable Slot	1	unit
3	FHD AV KVM Over IP NPL Series	1	unit
4	HDMI Splitter 1in 2out	1	unit
5	HDMI Capture Card	1	unit
6	Network Switch	1	unit

Hardware Requirement (2/2)

Ruang Media

No.	Keterangan	Vol	Satuan
1	65" Interactive Flat Panel	1	unit
2	Open Plugable Slot	1	unit
3	FHD AV KVM Over IP NPL Series	1	unit
4	HDMI Splitter 1in 2out	1	unit
5	HDMI Capture Card	1	unit
6	Network Switch	1	unit

Ruang Command Center

No.	Keterangan	Vol	Satuan
1	Backlight LED Video Wall 55"	48	unit
2	Backlight LED Video Wall 55"	4	unit
3	Front Access Bracket	48	unit
4	FHD AV KVM Over IP NPL Series	48	unit
5	FHD AV KVM Over IP NPL Series (<i>back-up unit</i>)	4	unit
6	4K AV KVM Over IP NPL Series	95	unit
7	4K AV KVM Over IP NPL Series (<i>back-up unit</i>)	8	unit
8	Core PC with Quad 4K HDMI Output Card	9	unit
9	Core PC with Dual 4K HDMI Output Card	4	unit
11	4K Monitor Operator 49"	16	unit
12	Monitor Commander 32"	3	unit
13	Tablet	20	unit
14	4K Webcam Camera	1	unit
15	Full-range Point-source Coloum Speaker	2	unit
16	LF Modular Line-source Bass Coloum	2	unit
17	Amplified Controller	1	unit
18	1-phase Power Sequential	1	unit
19	2-channel Wireless Microphone	1	unit
20	32-channel Mixer	1	unit
21	4-ports 78K Rhodium A/C Line Filter	1	unit
22	Speaker Cable	2	rol
23	Audio Cable	1	rol
24	305m Unikat Cable	7	rol
25	Rack Server	2	unit

Ruang Monitoring CCTV

No.	Keterangan	Vol	Satuan
1	Backlight LED Video Wall 55"	22	unit
2	Backlight LED Video Wall 55" (<i>back-up unit</i>)	4	unit
3	Front Access Bracket	22	unit
4	FHD AV KVM Over IP NPL Series	22	unit
5	4K AV KVM Over IP NPL Series	8	unit
6	4K Monitor Operator 32"	8	unit
7	Network Switch	1	unit

Ruang Auditorium

No.	Keterangan	Vol	Satuan
1	Indoor LED	1	set
	Pixel pitch: P2.5		
	Screen size: 768x336cm		
	Total resolutions: 3072x1344 pixels		
2	LED Processor	2	unit
3	FHD AV KVM Over IP NPL Series	3	unit
4	4K AV KVM Over IP NPL Series	1	unit
5	Network Switch	1	unit
6	Intelligent Recording Server	1	unit
7	Open Plugable Slot	1	unit
8	Micro Line-array Speaker Systems	6	unit
9	Micro Line-array Bass Systems 12"	2	unit
10	Flying/ Stacking Grid	2	unit
11	Amplified Controller	1	unit
12	1-phase Power Sequential	1	unit
13	2-channel Wireless Microphone	1	unit
14	32-channel Mixer	1	unit
15	4-ports 78K Rhodium A/C Line Filter	1	unit
16	Audio Cable	1	rol
17	Speaker Cable	2	rol

Supporting Hardware Requirements

No.	Keterangan	Vol	Satuan
1	Network Video Recorder	18	Set
2	Network Video Recorder AI	2	Set
3	Storage	160	Set
4	Varifocal Camera	48	Set
5	PTZ Camera	2	Set
6	Network Cable	40	Roll
7	Switch Hub PoE	14	Set
8	Accessories	1	Lot
9	Joystick	4	Set
10	Video Management System	1	Lot
11	Firewall	1	Lot
12	Gateway	1	Set
13	Core Switch	1	Unit
14	Network Access Controller	1	Unit
15	Wireless Access Point	27	unit
16	Power Adaptor	2	unit
17	Lisence	27	Lisence
18	Lisence	27	Lisence
19	Lisence	1	Lisence
20	Network Cable	15	Roll
21	Accessories	1	Lot
22	Controller Core	10	unit
23	Lisence	1	unit
24	Reader Access	27	unit
25	Box Enclosure	37	unit
26	Exit Button	27	unit
27	Lock	27	unit
28	Door Sensor	27	unit
29	Emergency Door Release	27	unit
30	Battery	27	unit
31	Door Module	27	unit



NUSANTARA

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