



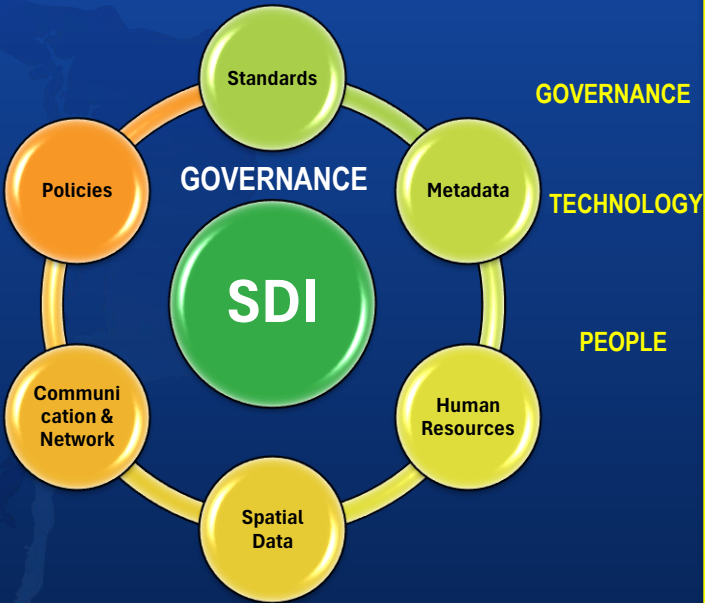
**MEMPERKASAKAN PERANAN  
GEODATARAYA KESELAMATAN  
NEGARA BERDASARKAN GEOSPATIAL  
KNOWLEDGE INFRASTRUCTURE (GKI)**

**Daripada;  
Kolonel Gs. Norazlin bte Pamuji  
Timbalan Pengarah Bahagian Geospasial  
Pertahanan Jabatan Ukur dan Pemetaan  
Malaysia**



# GEOSPATIAL INFRASTRUCTURE

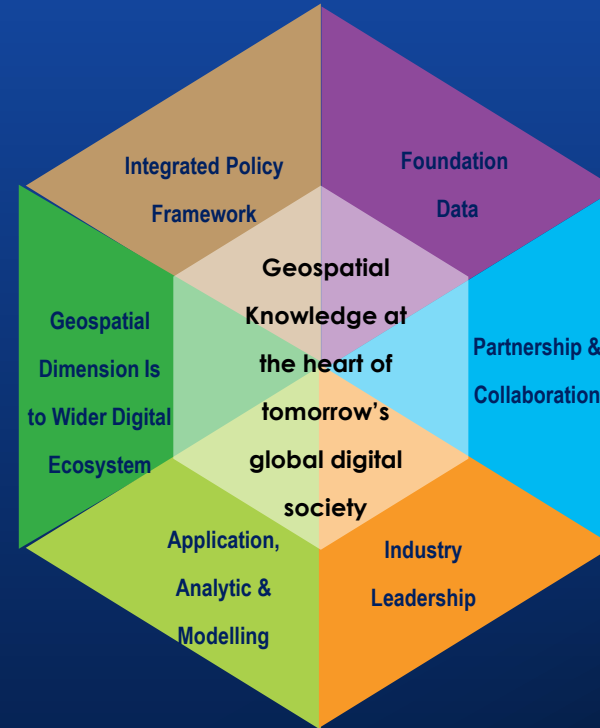
**SDI**



**UN - GIF**



**GKI**



**FUTURE GEOSPATIAL ECOSYSTEM?**



**DATA**

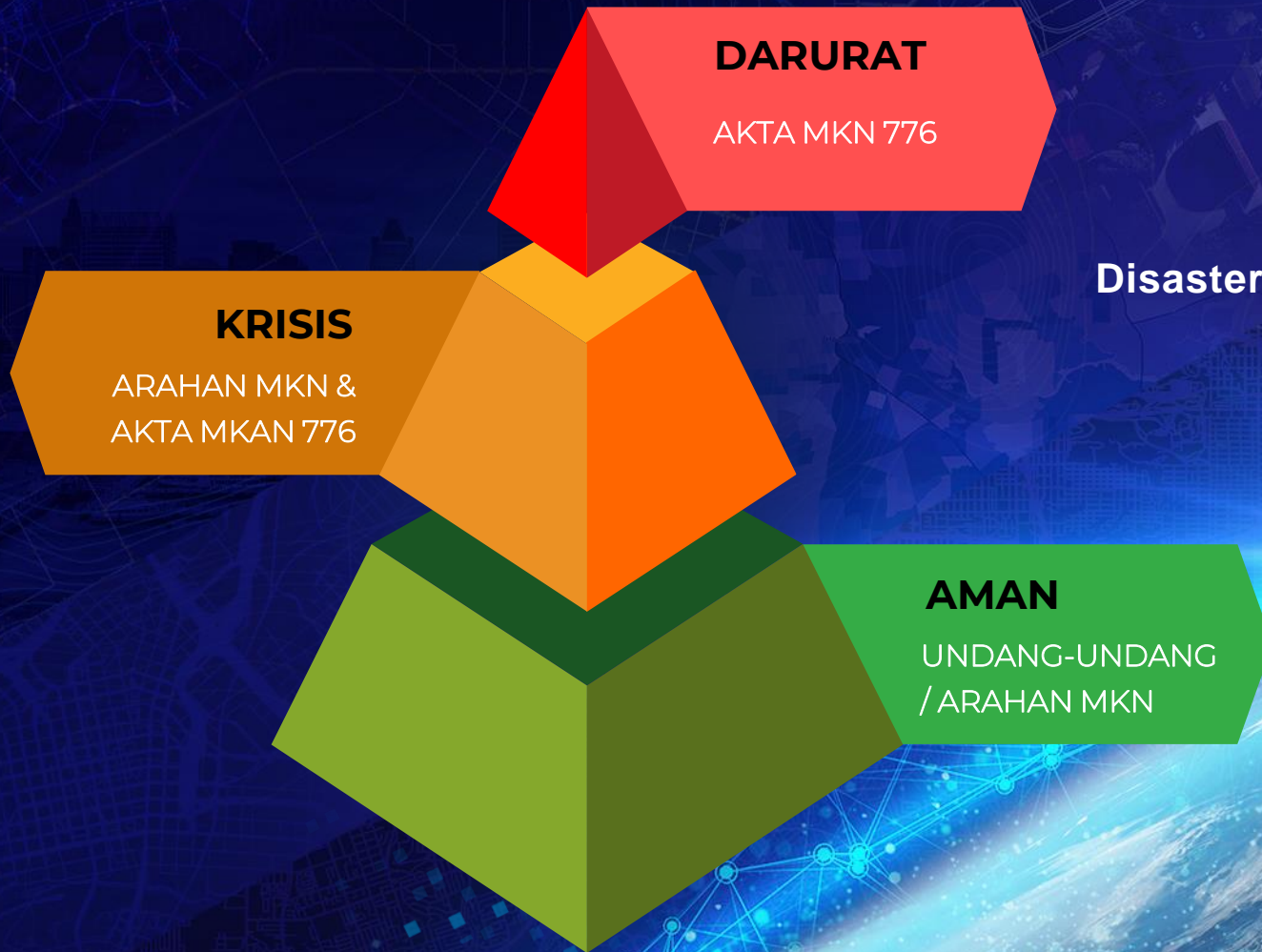
**INFORMATION**

**KNOWLEDGE**

**WISDOM**

**MOVING UP THE VALUE CHAIN**

# NATIONAL SECURITY CHALLENGES



Public Health Security

Border Security

Cybersecurity and Cyber Threats

Disaster Management

Terrorism and Extremism

Infrastructure Protection

Environmental Threats

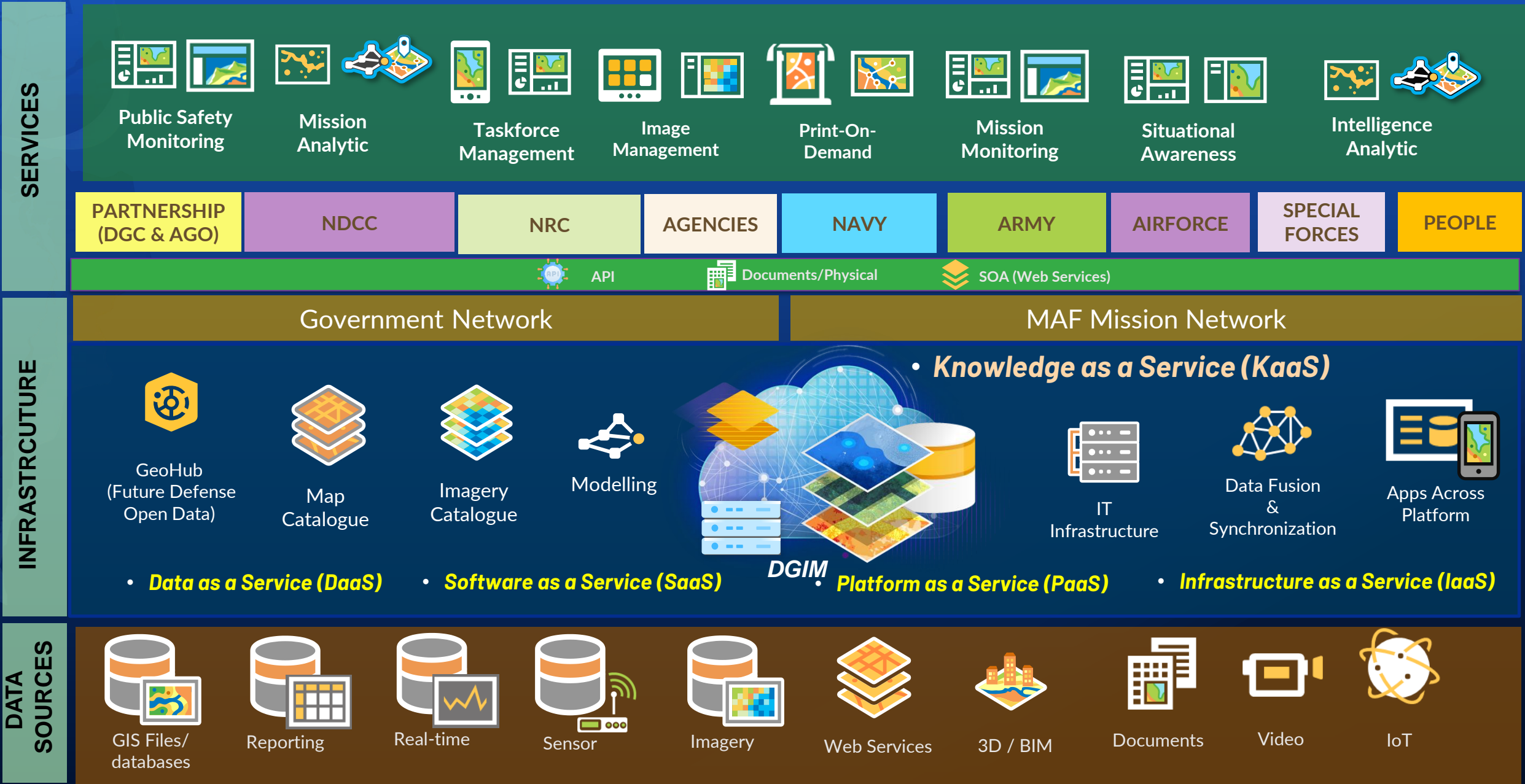
Transnational Crime

Humanitarian Crises

Geopolitical Tensions

*Applying The Geographic Approach . . .*

# DEFENCE GEOSPATIAL INFORMATION MANAGEMENT (DGIM) ARCHITECTURE



# IMPORTANT ROLE OF NATIONAL SECURITY GEOSPATIAL DATA

Seeing the World as One Single Ecosystem

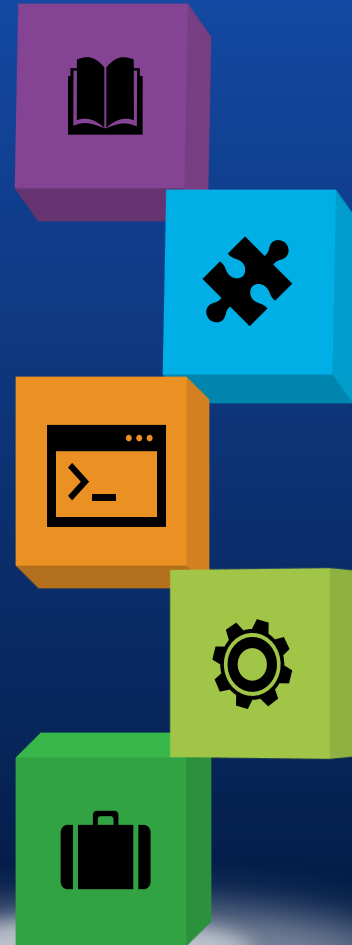
## Actionable Intelligence

enables the extraction of actionable intelligence from diverse sources, including social media, sensors, and open-source data



## Future-Proofing National Security

Quantum computing, artificial intelligence, and emerging technologies will continue to shape the future of National Security.



## Effective Resource Allocation

Optimizing logistics, personnel deployment, and strategic planning, resulting in cost savings and improved readiness.



## Enhancing Situational Awareness

empowers user with real-time insights, bolstering situational awareness on a global scale to ensure that decisions are made with the most accurate and up-to-date information available.

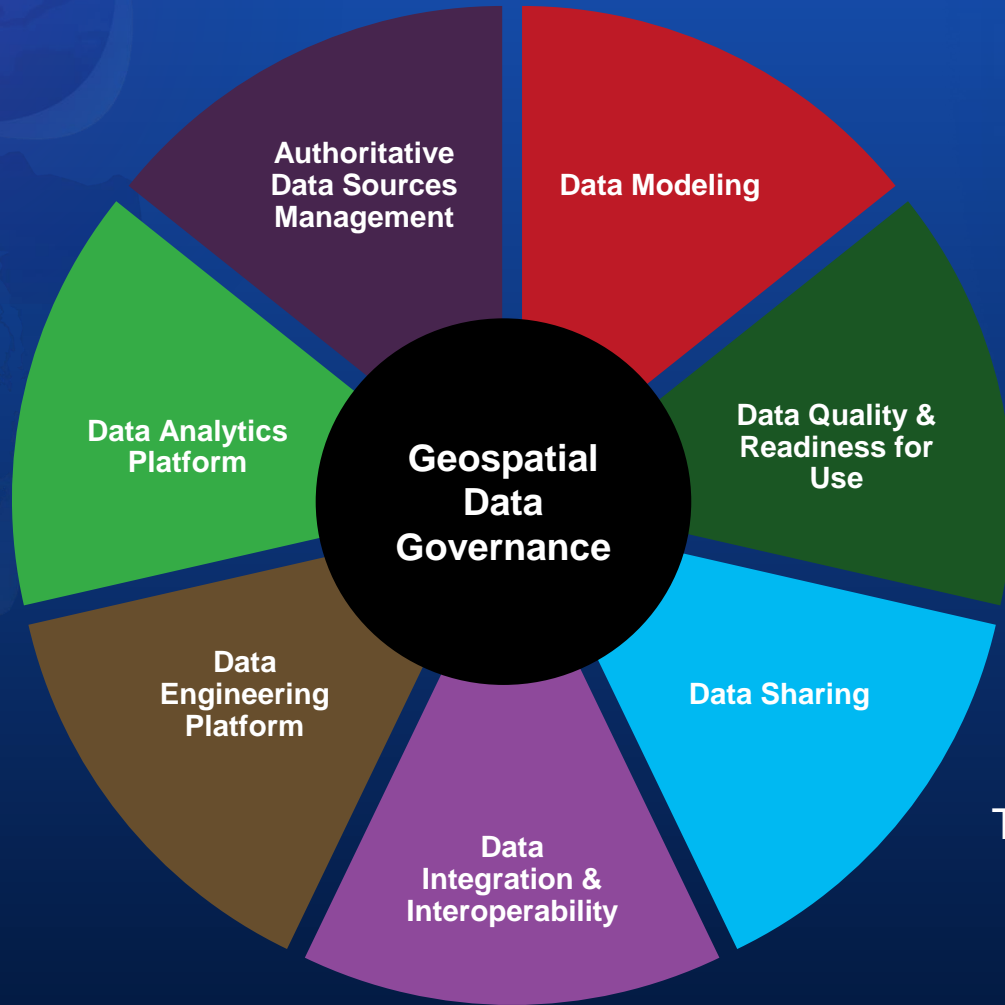


## Threat Detection and Mitigation

identify emerging threats, cyberattacks, and unconventional challenges, allowing user to respond swiftly and effectively.



# GEOSPATIAL DATA POLICY & GOVERNANCE



Global Collaboration  
Disaster Resilience  
Emergency Response

National Security  
Public Services

**Effective Decision Making**

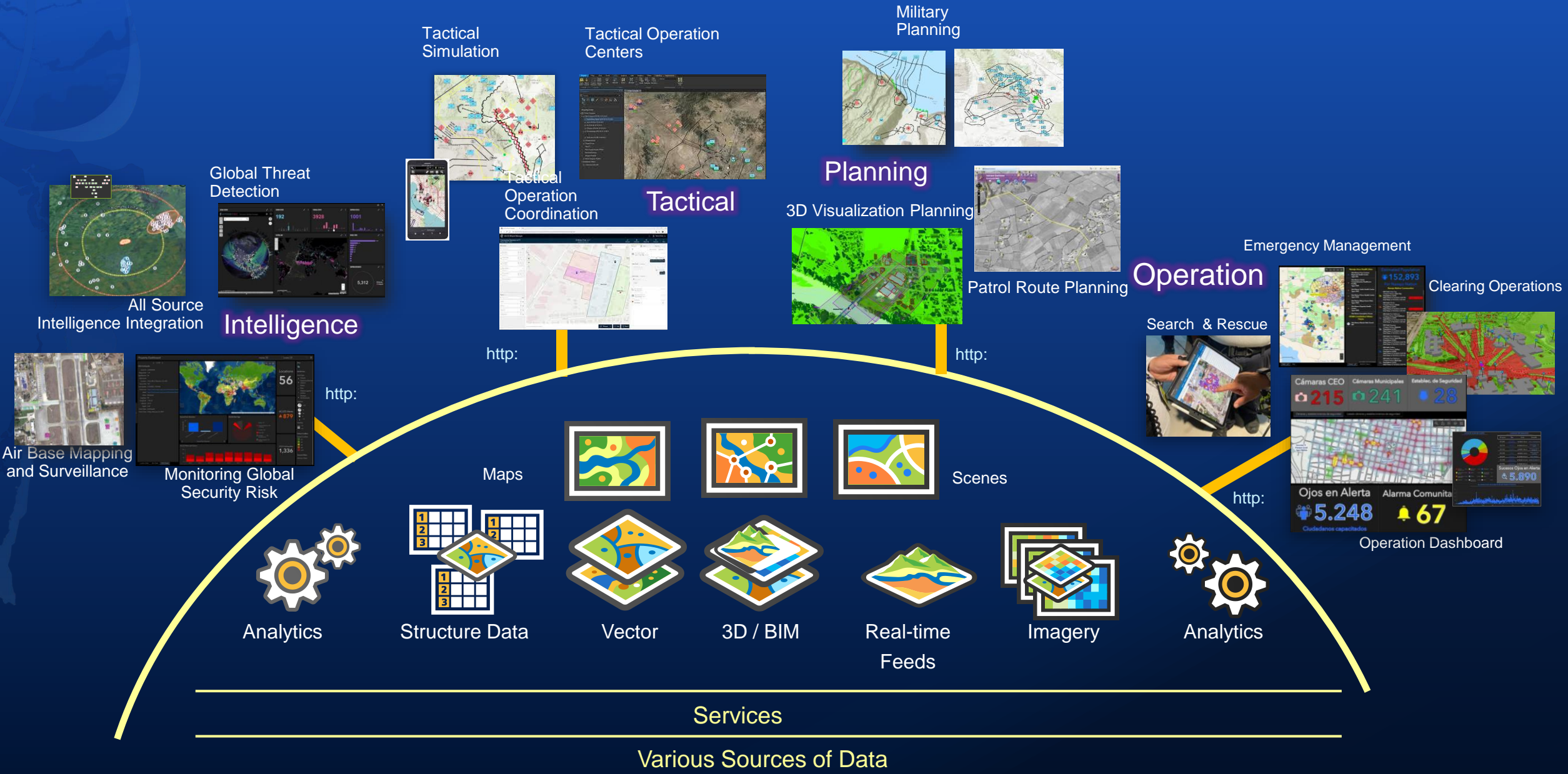
Resource Management  
Spatial Understanding

**Infrastructure Development**

Economic Growth  
Transparency and Accountability

Environmental Monitoring

# GEOSPATIAL INFRASTRUCTURE SUPPORTING NATIONAL SECURITY OPERATION





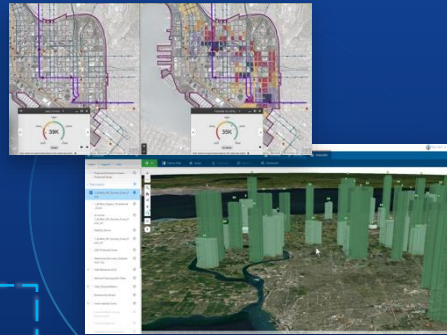
# INNOVATION IN GEOSPATIAL INFRASTRUCTURE

Shaping The Future Of National Security Operation

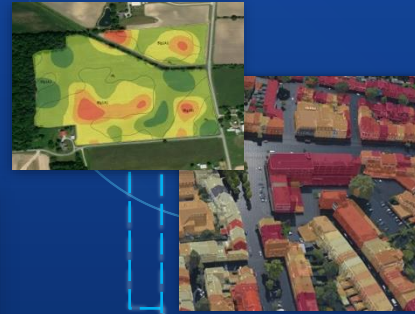
## 3D & Real-Time GIS



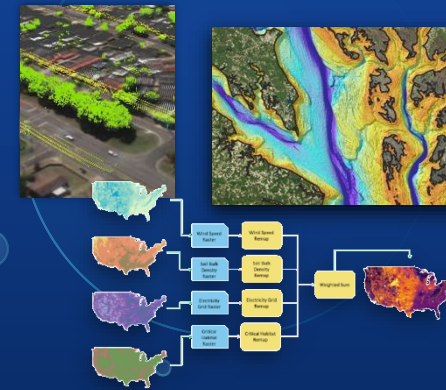
## Geodesign



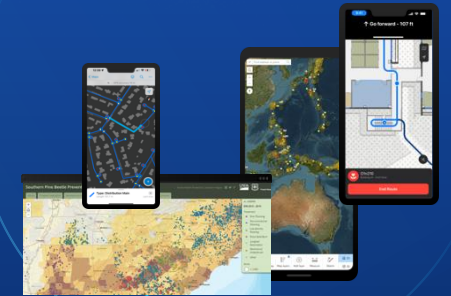
## Imagery & Remote Sensing



## Advanced Analytics & AI



## Pervasive Web & Mobile Apps



## Reporting & Storytelling



## Interactive Data-Driven Maps

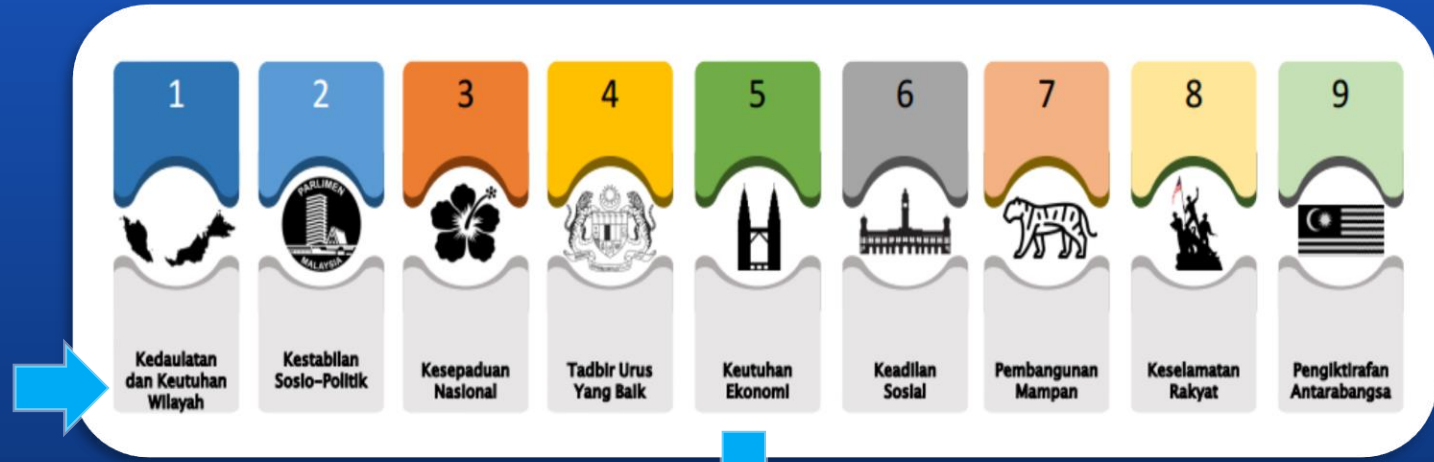


# DASAR KESELAMATAN NEGARA

## Teras DKN

“Nilai-nilai teras keselamatan negara merupakan nilai yang perlu dipelihara, dikekalkan dan diperkukuhkan bagi menjamin kelangsungan Persekutuan Malaysia sebagai sebuah negara **Berdaulat, Aman dan Sejahtera**”

Sumber : DKN 2021 - 2025



## Visi KPP

“ Menegekalkan Malaysia Sebagai Negara Yang **Selamat, Berdaulat & Makmur** ”

Sumber : KPP 2020 – 2030

# DASAR KESELAMATAN NEGARA

MKN

Meneraju penggubalan dasar dan pengurusan keselamatan negara secara komprehensif, bersepadu dan berkesan

Mempertahankan kedaulatan negara dan kepentingan strategik

Pengurusan Krisis & Bencana

Pengurusan sempadan tanah, maritim dan udara

Peringkat Strategik,

Decision Support –  
descriptive, diagnostic,  
predictive, prescriptive

Geo-Dataraya

Taktikal

Peringkat  
Operasional

- Dataraya pelbagai agensi.
- Integrasi data
- Analisa data
- Perisikan – insight / foresight.

- Maklumat GIS terperinci
- Peta topografi
  - Lokasi penting
  - Maklumat real time.
  - Imej satelit.
  - Lokasi Persempadanan.
  - Populasi penduduk

Kerjasama agensi

- Kawalan persempadanan terancang.
- Information Superiority lead decision superiority

*Joint Common Operating Picture (JCOP)*

- Pengurusan krisis / bencana efektif dan efisien.
- Kawalan dan perancangan isu pandemik dengan bersasar.

Perkongsian platform, data dan infra

- Keputusan strategik yang tepat, relevan dan terkini.
- Penjimatan duit kerajaan kerana pembangunan hanya tempat.
- *Single source of truth*, integrity data terjamin dan selamat kerana dikendali oleh pengeluar data.

# DEFENCE GEOSPATIAL INFORMATION MANAGEMENT (DGIM)

DGIM

VARIOUS USE CASES

DEFENCE

DISASTER  
MANAGEMENT

NATIONAL  
SECURITY

NATIONAL  
DEVELOPMENT

WELFARE OF  
PEOPLE

INFRASTRUCTURE

AUTHORITY

MULTI DOMAIN

PLATFORM

APPLICATION

SERVICES

INTEGRATION

DATA SOURCE

User based  
on 5 Domain

Platform/  
Development

Platform that give  
various tasking in  
order to achieve 1  
**Common  
Operating  
Picture (COP)**

# DGIM DELIVERS POWERFUL JCOP

Supporting Many Types of Missions

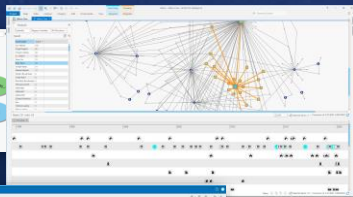


## Powerful Desktop Apps

ModelBuilder  
(Defense Analysis)

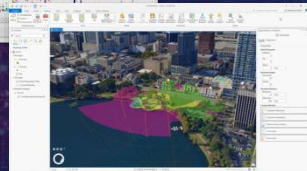


Pro for Intel



Insights

3D (Visibility)



## Massive Mobile Deployments

Awareness

Task Management

Data Collection

Tracking

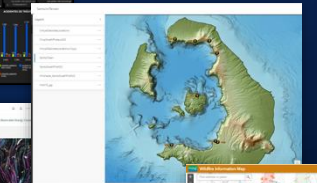
A collage of several mobile devices (tablets and smartphones) displaying various data visualizations, maps, and task management interfaces.

## Pervasive Web Apps

COP Dashboards

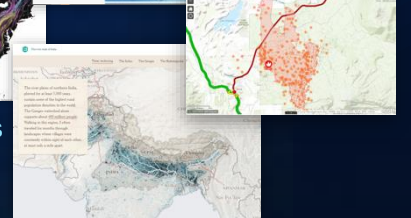


Mapping



Infographics

Story Maps



DGIM Infrastructure



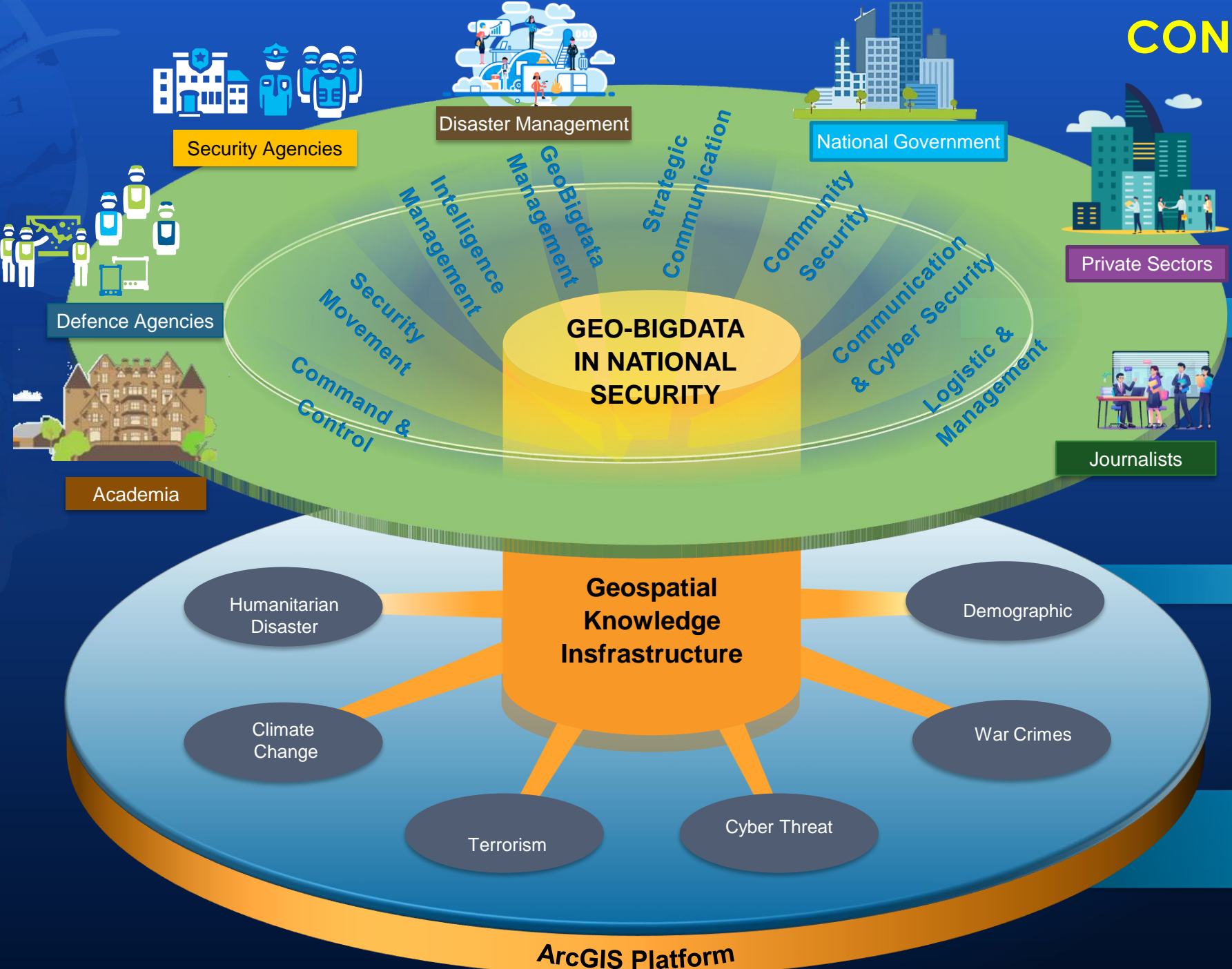
Empowering Everyone . . .  
. . . across all Domains



PEMBANGUNAN APLIKASI COP DAN DASHBOARD COVID-19  
BAHAGIAN GEOSPATIAL PERTAHANAN (BGSP) JUPEM



# CONCLUSION



Public engagement platform, powered by services and open data

Administrative tools for making data, services, and apps available for decision making process during Crisis/disaster/emergency

Platform for sharing all kinds of data (spatial, non-spatial, sensor/IoT, 3D, BIM) and for cross-departmental collaboration

ArcGIS Platform







OPPO F11 Pro

# TERIMA KASIH

