

You, me and geodesy

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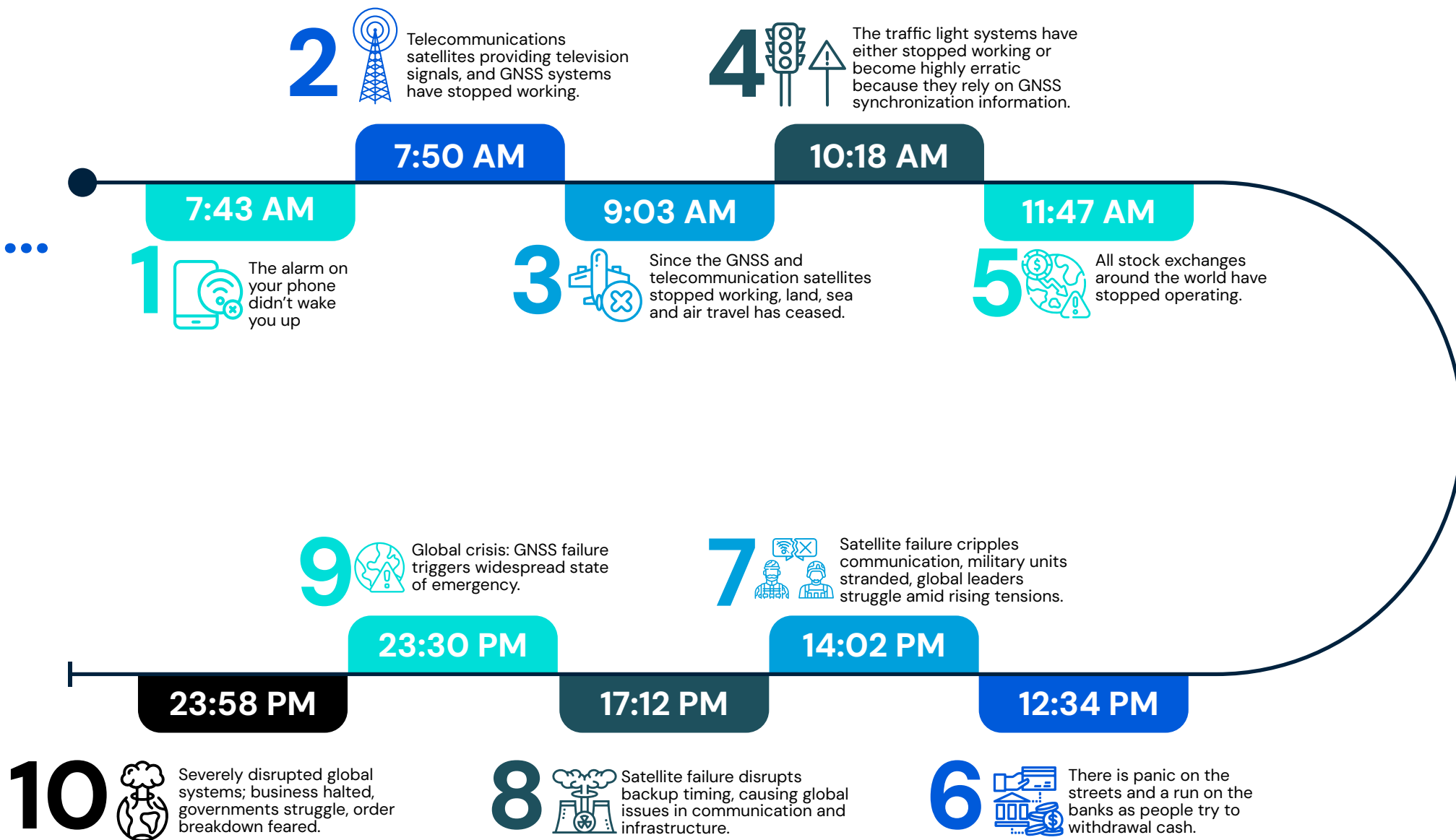
United Nations Global Geodetic Centre of Excellence



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United Nations Global Geodetic Centre of Excellence and
United Nations Global Geospatial Information Management
Subcommittee on Geodesy

Imagine this scenario...



Operating Critical Infrastructure

“15 of 18 critical infrastructure and key resources sectors relied on the Global Positioning System (GPS) including telecommunications, emergency services and financial exchanges.”

~ U.S. Department of Homeland Security



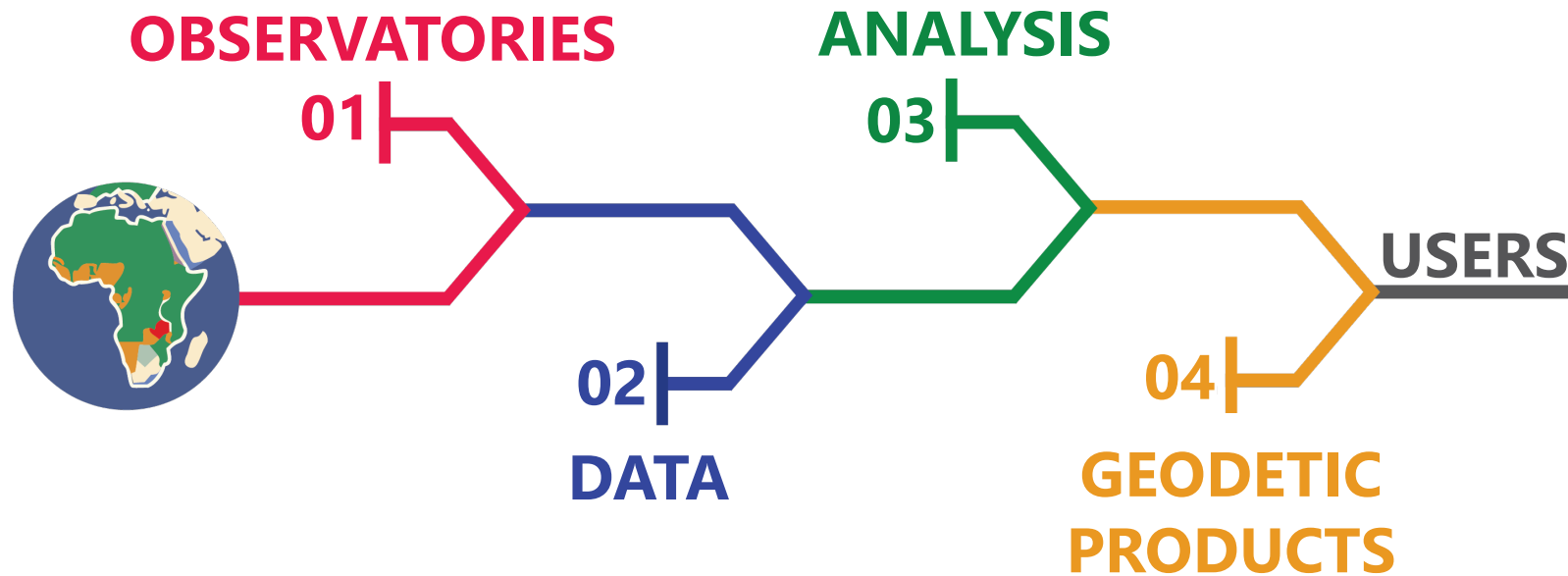
Driving Economic Development

“Over the next decade, revenue from GNSS, Earth Observation and satellite telecommunications (80% of the space industry market revenue) has growth rate of ~9%”

~ EUSPA Market Report and Euroconsult

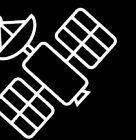
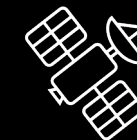
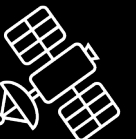
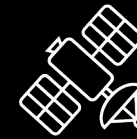


Global Geodesy Supply Chain



Global Navigation
Satellite Systems

Safety of life



Communications

Earth
Observation



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UN General Assembly Resolution (2015)



UN General Assembly resolution (2015) “A global geodetic reference frame for sustainable development”

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“Doomsday” scenario

1. **Short** timeframe

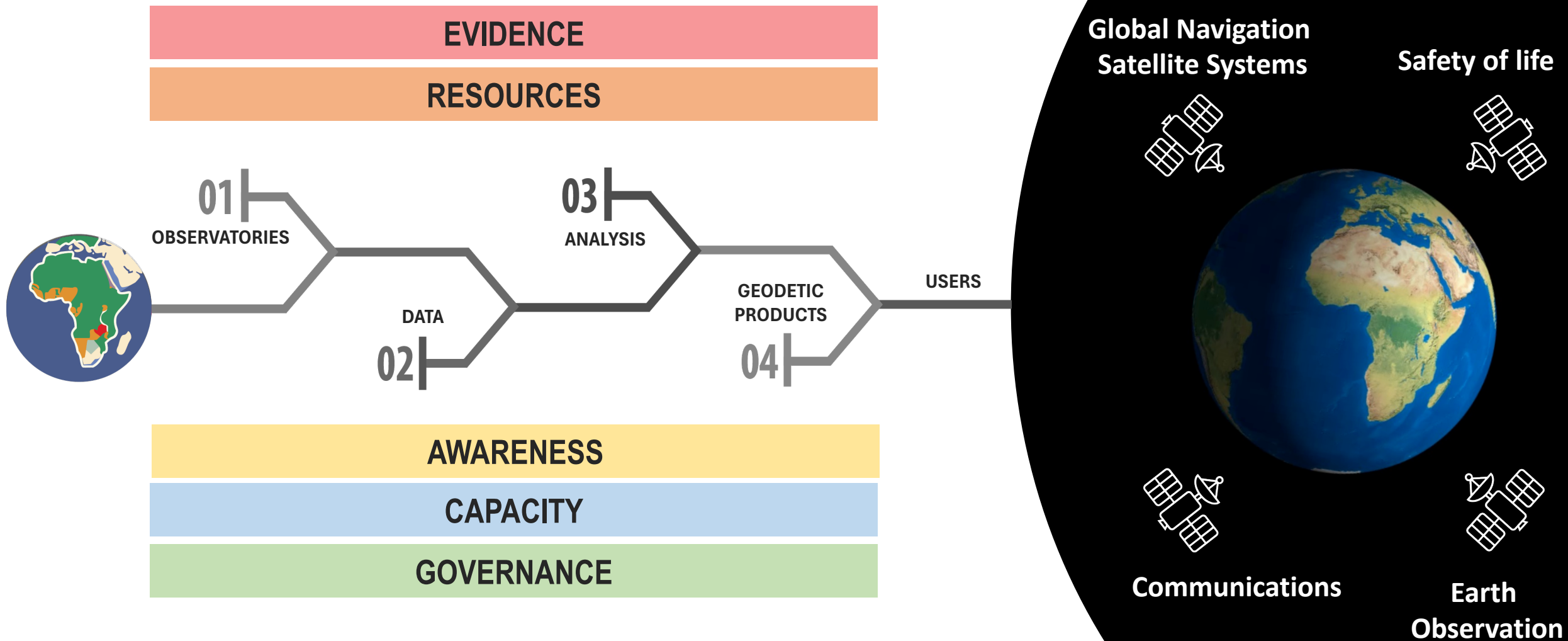
- e.g. Coordinated cyber-attack, space debris collision event, deliberate attack
- Member States, space agencies and satellite operators are aware of these risks and are actively working to mitigate them.

2. **Unknown** timeframe

- Degradation or failure of the global geodesy supply chain
- Many Member States, space agencies and satellite operators are **not** aware of these risks and are **not** actively working to mitigate them.



Weaknesses in the Global Geodesy Supply Chain



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1st Joint Development Plan for Global Geodesy

- Joint Development Plan with activities to:
 1. **Avoid further degradation** of the supply chain (support current operational requirements)
 2. **Robust** (improve reliability)
 3. **Next Generation** (meet more ambitious requirements)
- Plan will include activities for UN-GGCE, Member States and partners
- Draft available for review and feedback (mid June 2024)
- Draft presented to fourteenth Session of the United Nations Committee of Experts on Global Geospatial Information Management (August 2024)

