

Asymmetric Warfare - Countering Adaptive Threats



CDCA C4ISR Transformation & Fusion
Government and Industry Conference
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Agenda

- **Current and Future Environments and Adversaries, i.e. Asymmetric and Adaptive Threats**
- **Implications and Challenges for Intelligence**
- **What is Needed?**
 - **Topics**
 - **Current Example**
- **Other Thoughts**

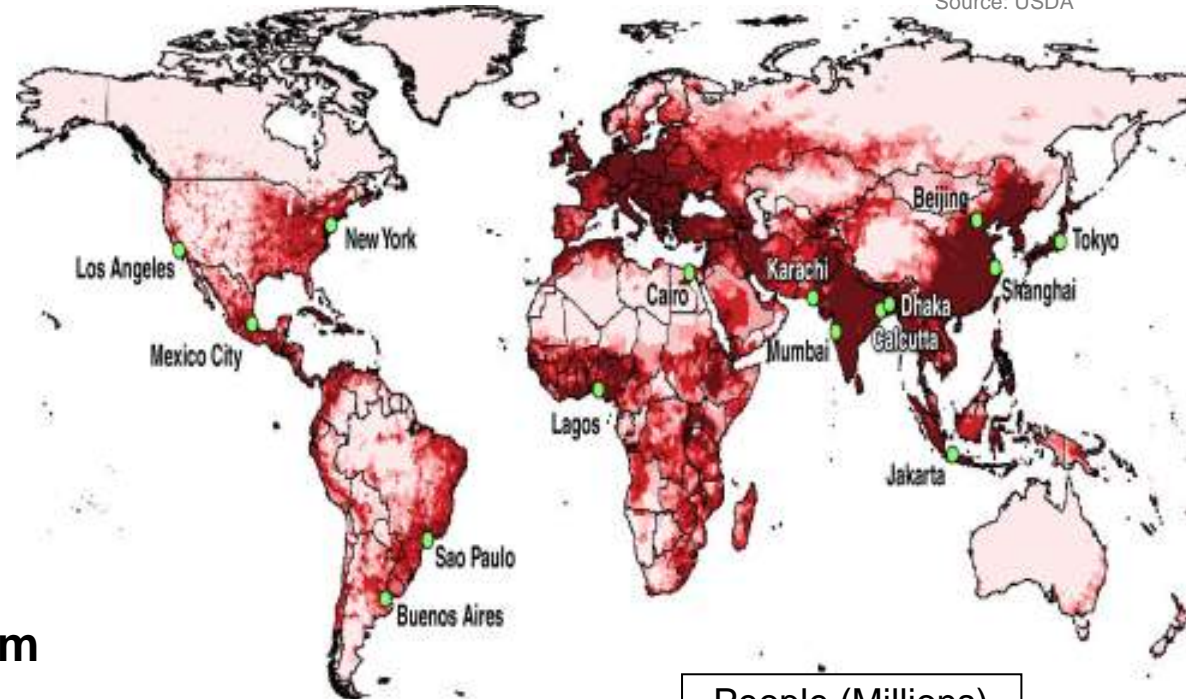


Global Trends

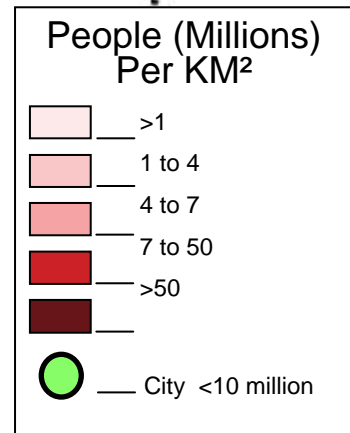
Source: USDA

Trends / Drivers:

- Population is the Terrain
 - Urbanization rising
 - Youth Bulge (Africa/Mid-East)
 - Poor Healthcare/HIV
 - Migration
- Resource Competition
- Environmental Factors
- Emerging/Re-emerging powers
- Religious/Ethnic Extremism
- Terrorism
- Diffusion of Technology
- Irregular Warfare

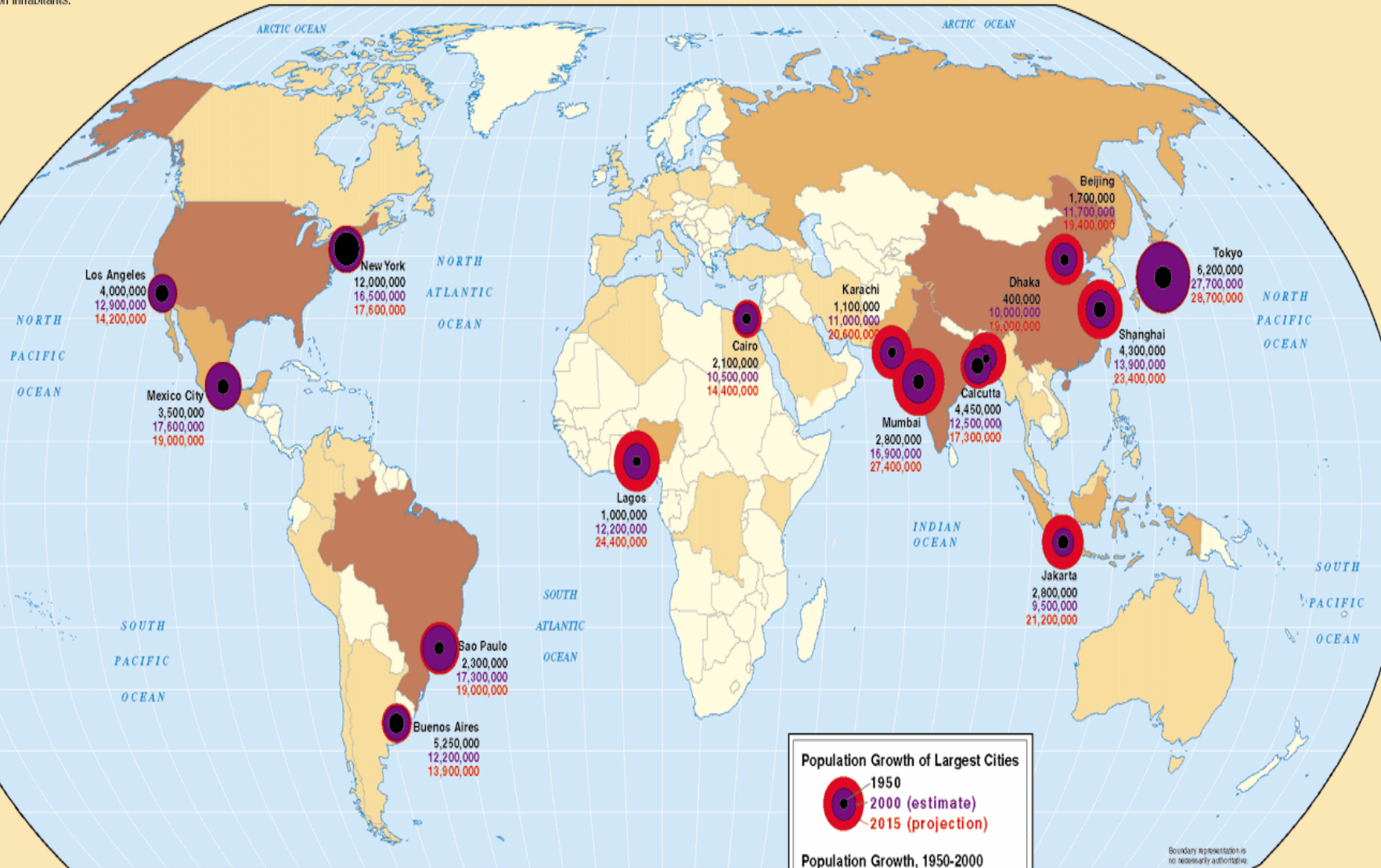


- Population 2025: 8.7 Billion (up 23%)
- Littoral population ~ 3 Billion (up 35%)
- Most in developing world



Growth in Megacities^a

^aCities containing more than 10 million inhabitants.

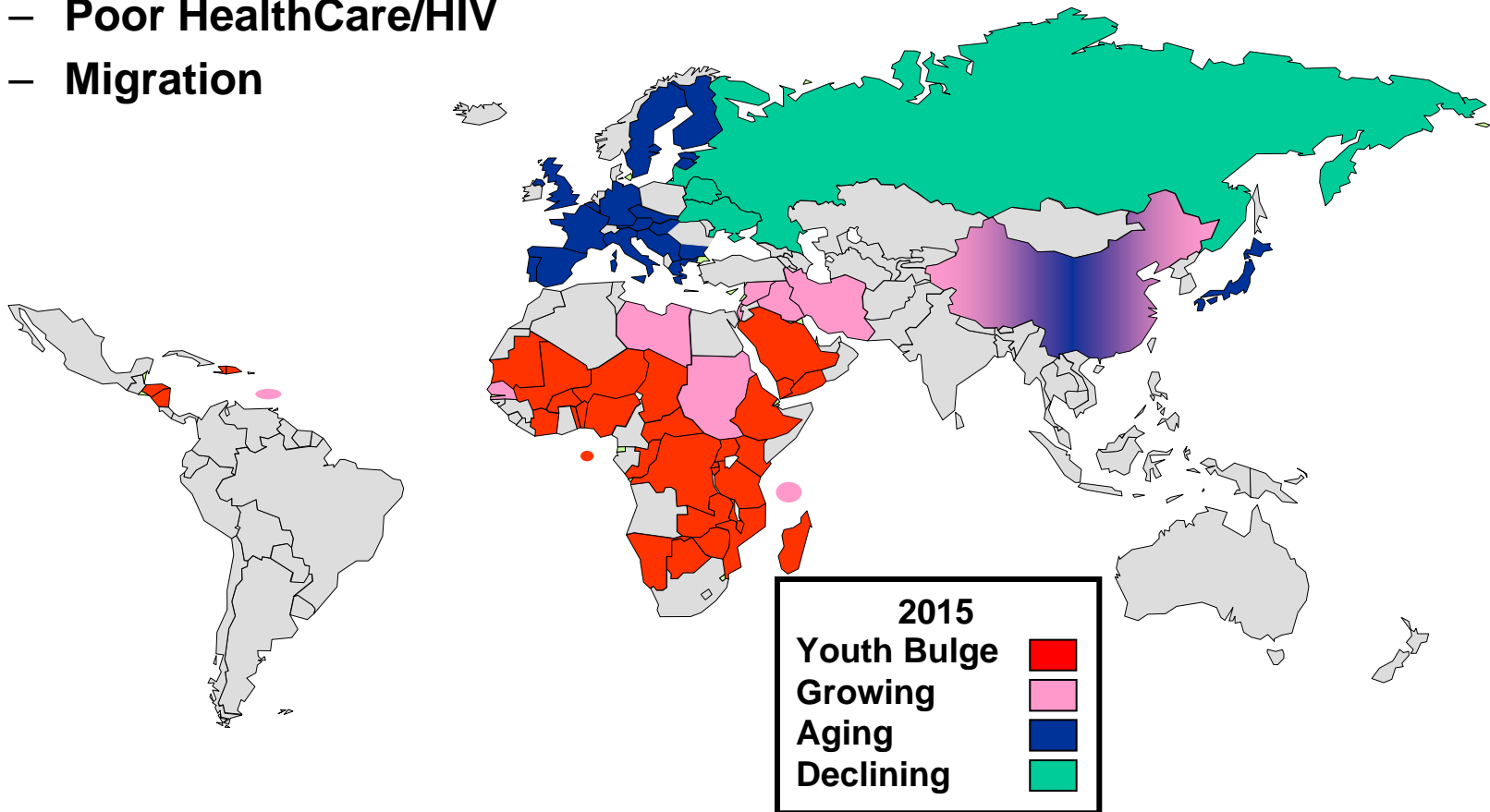


Sources: The National Geographic Society and United Nations.



Population is the Terrain

- Youth bulges will persist. Destabilizing when combined with
 - High unemployment
 - Poor HealthCare/HIV
 - Migration





Resource Competition

- **Water**

- >3 billion people will live in water-stressed countries
- Nearly one-half land surface consists of river basins shared by more than one country
- Water shortages coupled with other tensions could create conflict



- **Energy**

- 50% increase in demand for energy
- Oil demand will increase from ~8M bpd to >100M bpd
- Natural gas usage expected to increase by 100%



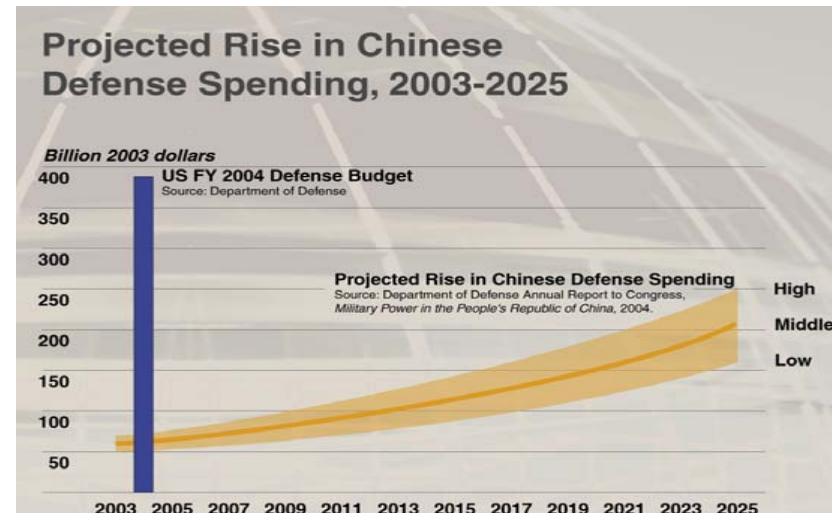
- **Other**

- Diamonds, gold, coltan, copper, timber



Emerging/Re-emerging Powers

- Rise and re-emergence of Regional Powers
 - Economic growth (BRIC)
 - Brazil (Rapid GDP Growth)
 - Russia
 - India (Rapid GDP Growth)
 - China (Rapid GDP Growth)
- Potential to erode Western influence
- Broader use of national power
- Competition over influence and resources





Diffusion of Technology

- **Globalization of technology base is leveling the capabilities**
 - **Sophisticated RDT&E conducted in more and more countries**
 - **Decreasing development and response cycle time**
 - **COTS equipment often surpasses capability of military systems**
- **Enables targeting of perceived vulnerabilities and areas of over-reliance, e.g. C4, ISR, integrated systems, etc.**
- **Don't have to be high tech to use high tech tools (e.g. cell phones, GPS, Google Earth) to negate our advantages**



Irregular Warfare

- **Increased external support**
 - Funding
 - Fighters
 - Weapons/Technology
 - Media coverage
- **Hybrid warfare**
 - Blurring the line between conventional and non-conventional warfare
 - State and non-state collaboration
 - Mix of basic and sophisticated weaponry
 - Sophisticated Information Operations



Requires flexible response options to counter complex threats

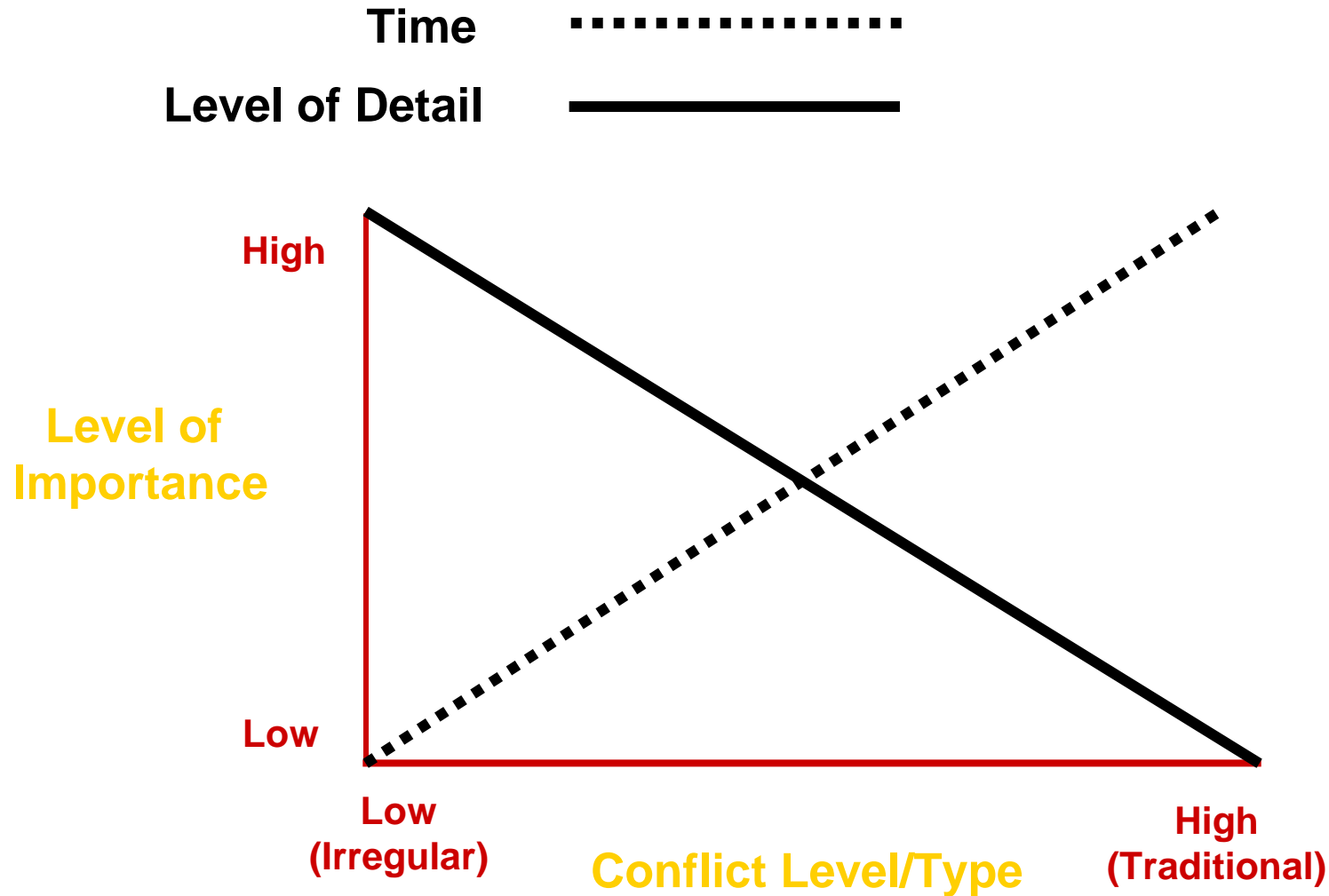


Implications and Challenges for Intelligence

- **A Blurring of Lines between**
 - **Operations and Intelligence**
 - **Conventional and Special Operations**
 - **Tactical, Operational, and Strategic levels**
 - **Military Intelligence and other “brands” of intelligence.**
- **Need to adapt in both the military and Intel Communities and with our allies to deal with**
 - **the changing environment,**
 - **“enemies”**
 - **the “blurring of lines”**
- **In many cases, where we are is not where we need to be.**

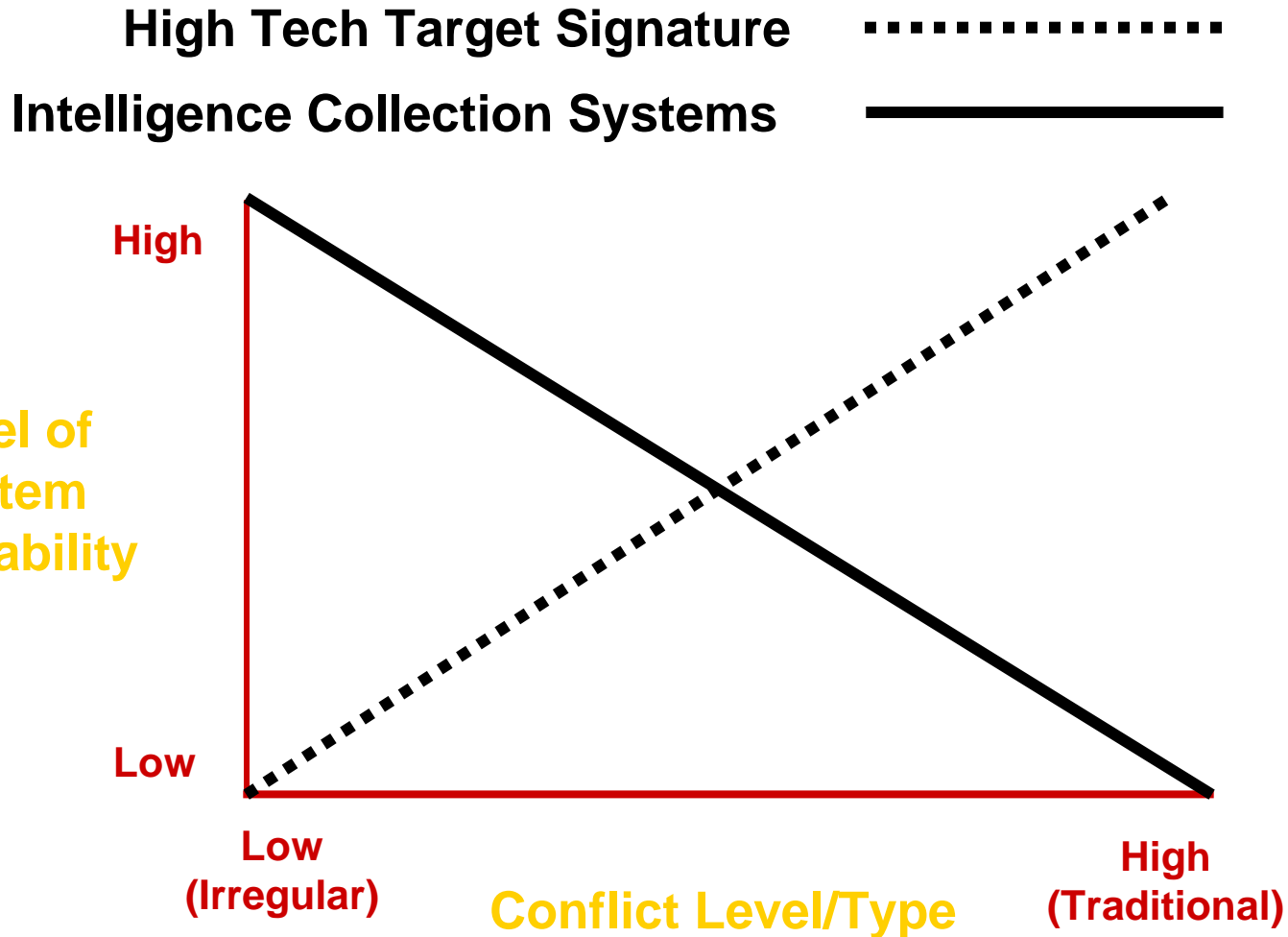


Intelligence Factors in Different Types of Conflict – Time & Level of Detail





Intelligence Factors in Different Types of Conflict – Signature & Collection System





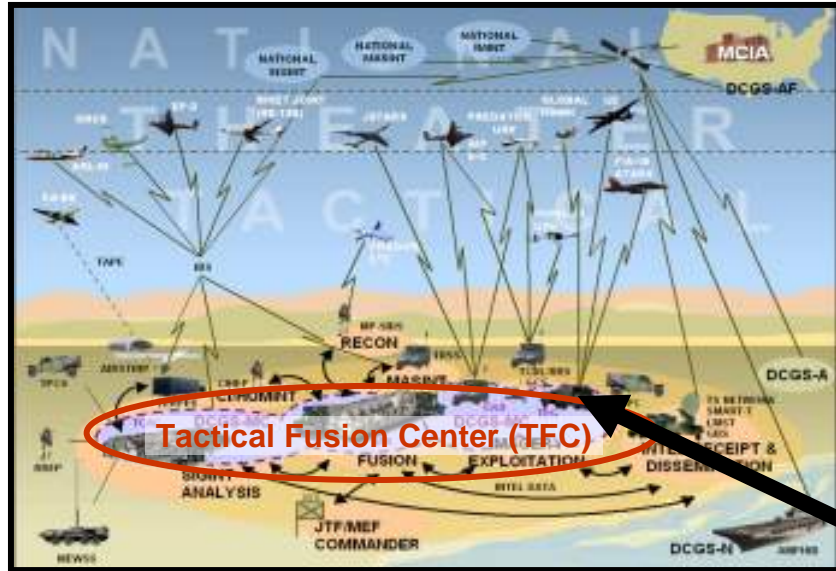
Changing the Emphasis

Traditional: **FIND** **FIX** **FINISH**

Required: **FIND** **FIX** **FINISH**



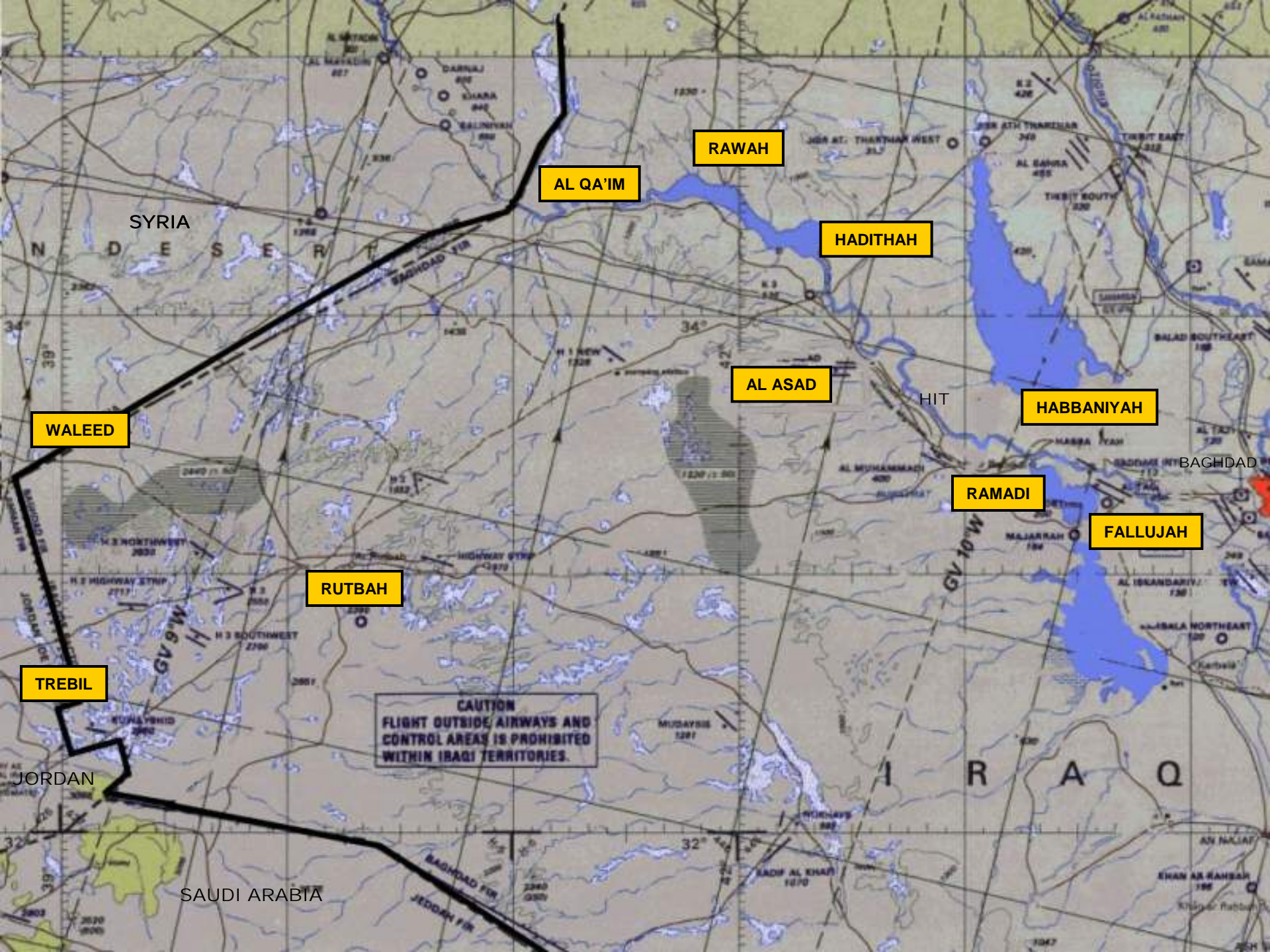
Getting Intel 'Down to and Back from' the Lowest Tactical User





What is Needed?

- **Intel using the “Fire Support” Model**
 - A minimal capability at every level
 - Ability to mass and shift support
 - Centralized Coordination, Decentralized execution
- **All source vice stovepipes**
- **Capability, authority, and practice in flow of information to all**
 - Simultaneously or near-simultaneously
 - Flat networks, database access, and discoverability
 - Responsibility to provide vice need to know
- **National-Tactical Integration**
- **Increased Intel Training and Education for all – Every Marine a Collector**
- **Intelligence = Operations. Operations = Intelligence**



WALEED

RUTBAH

AL QA'IM

RAWAH

HADITHAH

AL ASAD

HABBANIYAH

RAMADI

FALLUJAH

TREBIL

CAUTION
FLIGHT OUTSIDE AIRWAYS AND
CONTROL AREAS IS PROHIBITED
WITHIN IRAQI TERRITORIES.

SYRIA

JORDAN

SAUDI ARABIA

I R A Q

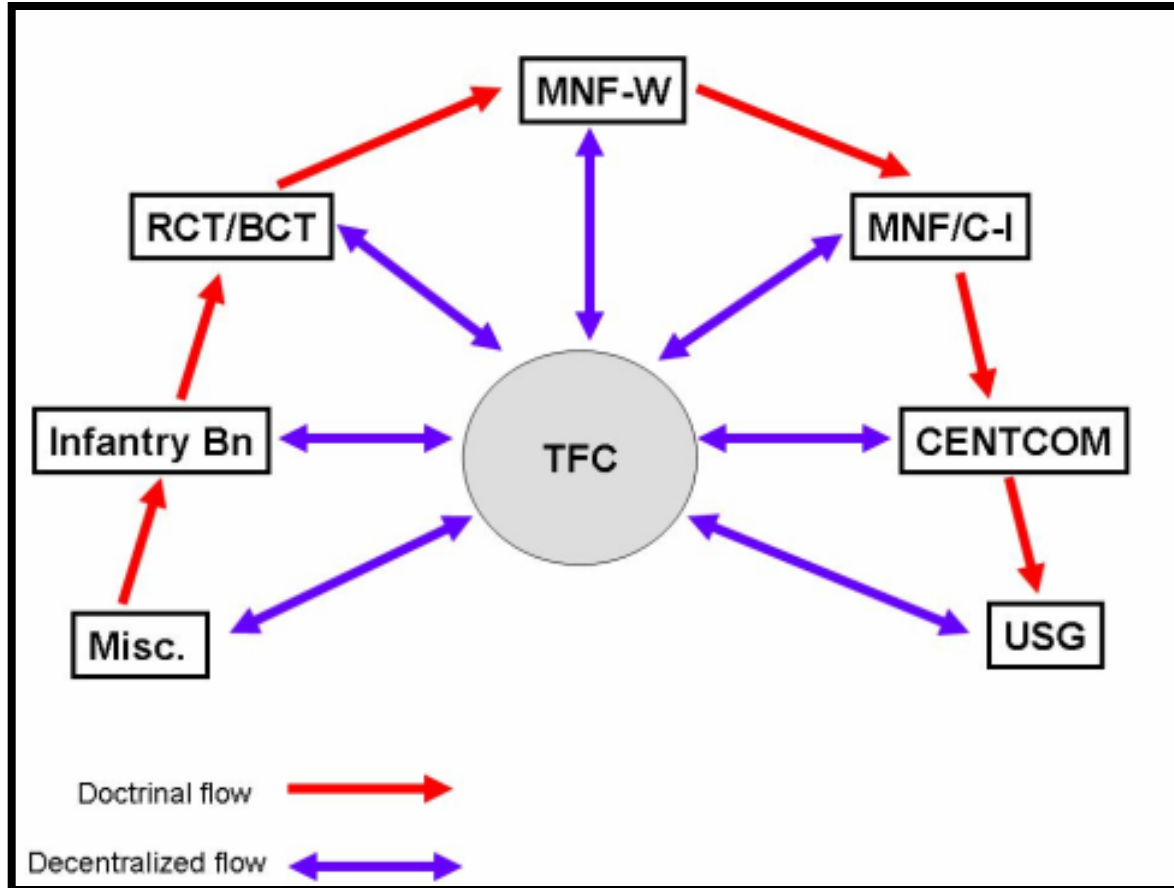
BAGHDAD

N D E S E R T



What is Needed? – A Current Example

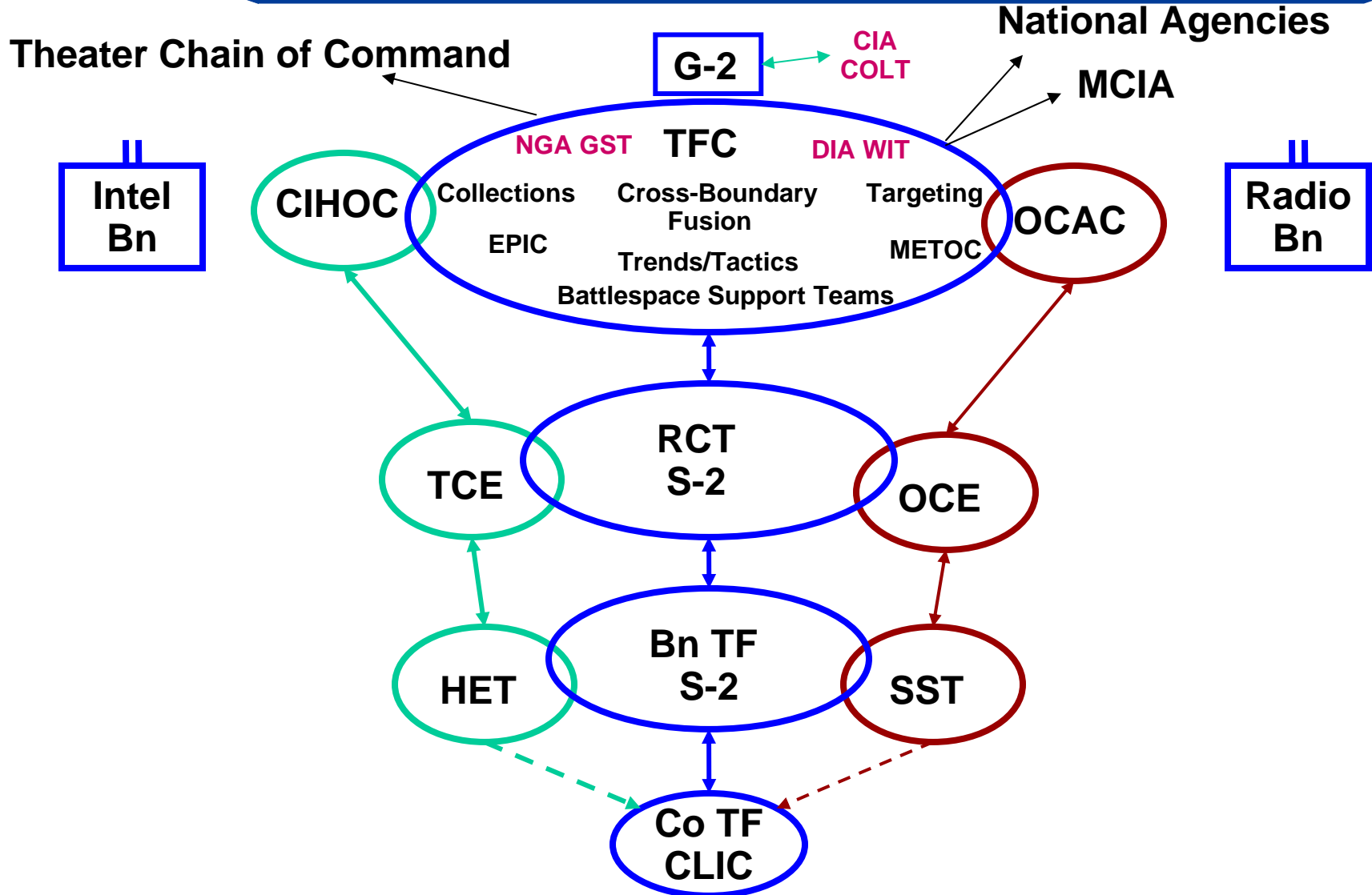
Centralized Coordination, Decentralized Execution



Better Intel Flow = Better informed/more agile decision making + more efficient force



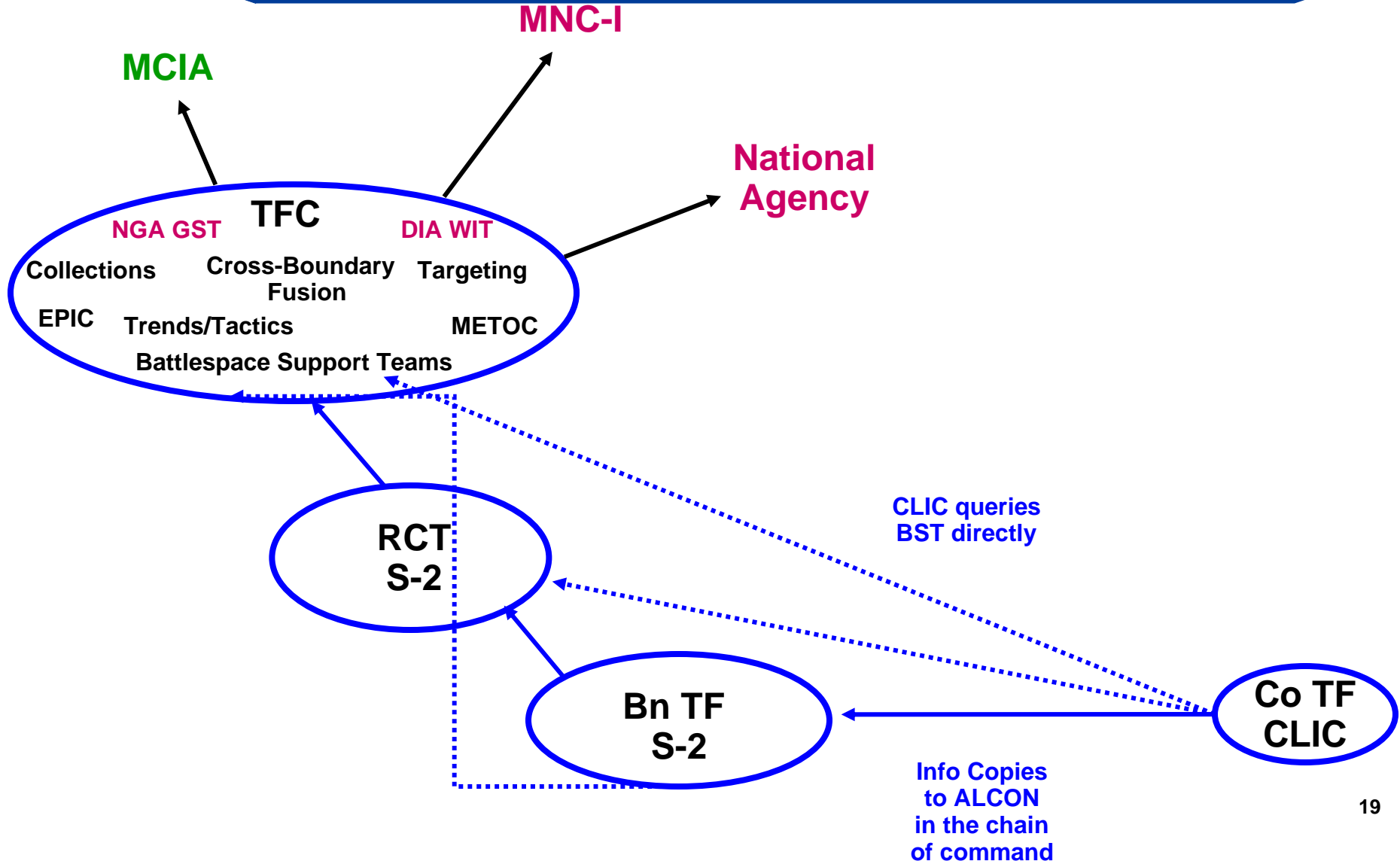
What is needed? – A Current Example





What is needed? – A Current Example

“Intelligence Support like Fire Support”





What is Needed? – A Current Example

- Intel using the “Fire Support” Model
 - A minimal capability at every level – **Co Level Intel Cells**
 - Ability to mass and shift support - **HET, SST, SET, WIT, Persistent ISR (UAS) etc.**
 - Centralized Coordination, Decentralized execution – **Lateral & Vertical Coordination, Intel Execution at lowest level.**
- All source vice stovepipes – **Practice and Mindset: Write to release, sanitization**
- Capability, authority, and practice in flow of information to all
 - Simultaneously or near-simultaneously
 - Flat networks, database access, and discoverability
 - Responsibility to provide vice need to know
 - **Connectivity & limited computer/database tools down to at least Co Level, e.g., MarineLink and Intel “Wikis”.**
- National-to-Tactical Integration –
 - **Higher has info of use to lower and makes it accessible**
 - **Lower can input “local” intel for use by higher**
 - **Result > national or tactical alone**
- Increased Intel Training and Education for all – Every Marine a Collector – **TQ, Combat Hunter, SSE, Co Level Intel Cell, Biometrics**
- Intelligence = Operations. Operations = Intelligence
 - **Intel-driven operations leading to more Intel leading to more operations.**



Unintended Consequences of Persistent Surveillance

“There are so many Unmanned Aerial Systems our satellites can't see the ground.”

“Yes, but this way, we get to fight in the shade!”





Other Thoughts

- **People are more important than technology**
 - **Develop the “Right” Organizational Culture – shared values & vision**
 - **Train & Educate individuals & units**
 - **Increasing need for language & culture training for all – Population is the terrain.**



Cultural Knowledge

Cultural Intelligence

- How does it shape the Battlefield?
- Operational Implications?

Level 3



Cultural Understanding

Level 2



Perceptions

Mindset

Attitudes

Customs

Cultural Awareness

Level 1

Language

영어를 할수있습니까



Do's and Don'ts

Religion



Complexity



Other Thoughts

- **People are more important than technology**
 - **Develop the “Right” Organizational Culture – shared values & vision**
 - **Train & Educate individuals & units**
 - **Increasing need for language & culture training for all – Population is the terrain.**
 - **Equip people vice manning equipment**
 - **Leverage diversity**
- **Decide what is needed and reverse plan to get there.**
- **Keep a relentless focus on what’s important**
 - **the main thing must be the main thing**



Conclusions

- **Global environment & trends require flexible response options to counter complex threats.**
- **Good Intel is increasingly essential but...**
 - **The environment, threats, and the Intel problem is more complex & less well defined**
- **Intel must be able to rapidly and continuously adapt**
 - **People**
 - **Organizations**
 - **Policies**
 - **Technology**



Questions?

