

The Future is FASTER than you THINK Understanding the possibility of Predicting Instability

International Security Assessment and Analytic Capability - ISR

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International Security Assessment and Analytics Capability-Intelligence, Surveillance, and Reconnaissance (ISAAC-ISR)



1980: "In 2023 we will have flying cars!" 2023:



Background

The consensus among experts within senior level Army/Joint commands that there's currently a need for a system that provides the correlated, fused, linked, geographically displayed, auto-generated data from multiple sources that enable Commanders and senior staff to have an advantage over our competitors and make **decision** in regards to:

- Stability Operations
- Irregular Warfare
- ➢ GPC (Great Power Competition)
- Interagency Collaboration and assessments
- Humanitarian assistance
- All Domain Full Spectrum Operations
- Unconventional Warfare
- Special Operations
- TSC (Theater Security Cooperation)

ISAAGISR Transition Strategy



- Capability Program Office
 - Joint Force Product Manager
 - Joint Force Capability Coordination Office
 - Joint Force Capability Funding



- Capability Technical Management/Program Office
 - Acquisition/Contract Management Office
 - Technology Sustainment
 - Data Acquisition and Fusion
 - Analytical Reach back Cell- Stability
 - Capability Distribution to GCC
 - Test & Experimentation

ISAAC-ISR Technical Capability





PARTNERS/STAKEHOLDERS



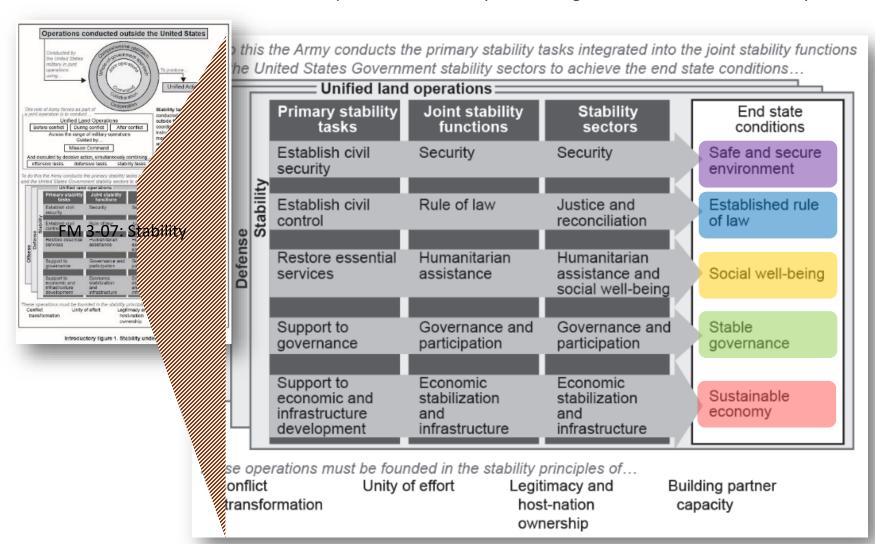
Military Stability Operations List

- 1. Security Sector Reform (SSR):** Enhancing the capacity and effectiveness of security forces.
- 2. Disarmament, Demobilization, and Reintegration (DDR):** Managing the transition of ex-combatants to civilian life.
- 3. Civil-Military Cooperation (CIMIC):** Collaboration between military and civilian entities for shared goals.
- 4. Counterinsurgency (COIN):** Combating and neutralizing insurgent threats.
- 5. Humanitarian Assistance and Disaster Relief (HADR):** Providing aid in crises to support affected populations.
- 6. Governance and Institution Building:** Strengthening governance structures and institutions.
- 7. Rule of Law and Justice Sector Reform:** Promoting legal frameworks and justice systems.
- 8. Information Operations (IO):** Using information to shape perceptions and influence behavior.
- 9. Psychological Operations (PSYOP):** Influencing attitudes and behaviors through communication.
- 11. Economic Stabilization and Development:** Supporting economic growth and stability in post-conflict areas.
- 12. Infrastructure Rehabilitation and Development:** Rebuilding and improving essential infrastructure.
- 13. Population Protection:** Safeguarding civilians from harm, including refugees and internally displaced persons.
- 14. Gender Mainstreaming and Women, Peace, and Security (WPS):** Integrating gender perspectives and empowering women in peace and security efforts.
- 15. Security Sector Assistance (SSA):** Providing support and advice to build the capacity of security forces.
- 16. Cybersecurity Operations:** Addressing threats in the digital domain to ensure stability.
- 17. Public Health Initiatives:** Combating disease outbreaks and promoting health in conflict-affected regions.
- 18. Environmental Stewardship:** Mitigating environmental damage and promoting sustainability.
- 19. Crisis Response Operations:** Rapid deployment to manage and respond to emerging crises.
- 20. Cultural Heritage Protection:** Preserving and safeguarding cultural sites and artifacts during conflicts. These operations collectively contribute to establishing conditions for sustainable peace and development in affected areas.
- 21. Media and Information Support:** Managing information flows and countering misinformation to shape public perception.
- 22. Border Security and Management:** Enhancing control and stability along national borders.
- 23. Transitional Justice:** Addressing past human rights abuses and promoting accountability.
- 24. Community Engagement and Empowerment:** Involving local communities in decision-making processes.
- 25. Water Resource Management:** Addressing water scarcity and ensuring access to clean water.
- 26. Counter-Narcotics Operations:** Combating the production and trafficking of illegal drugs.



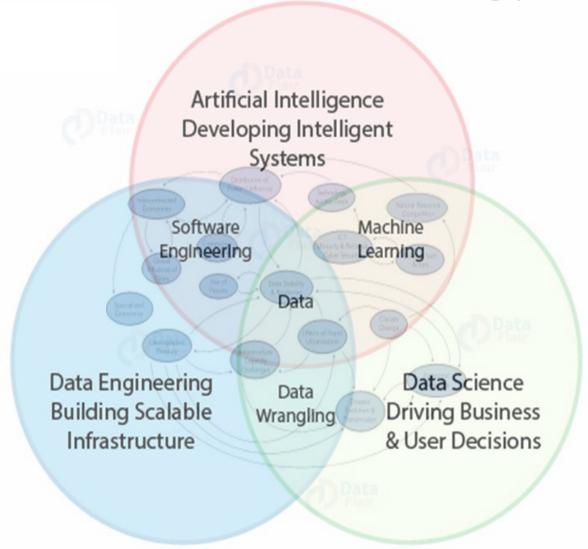
GPC Stability Index Methodology

STEP 1 | Define GPC Stability Index Categories based on JP 3-07: Stability



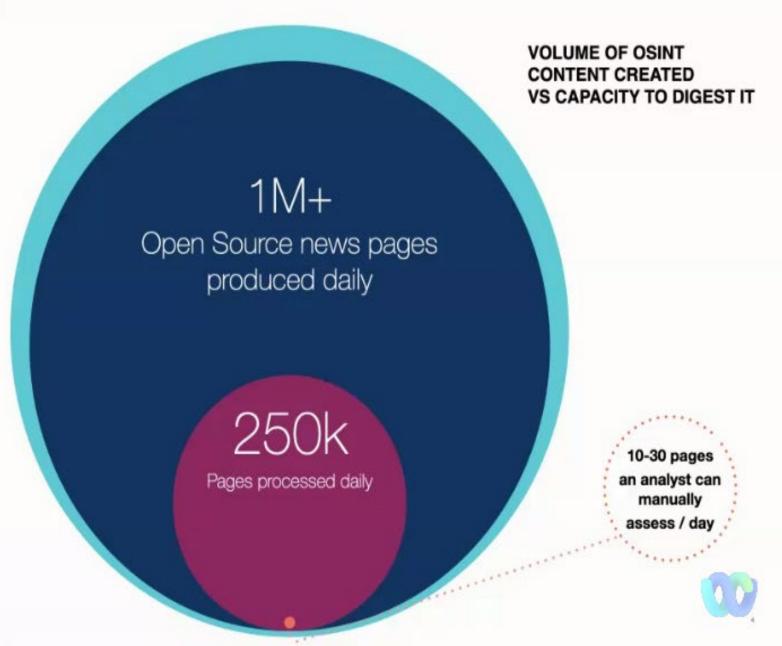
Key Elements of the ISAAC-ISR Prototype Science & Technology





ISAAC-ISR in Minsky

News Sources	250k+
Articles (total)	150m+
Articles (daily)	250k+
Models trained	35
Entities ID'd	10m+
Languages	20+



Generative AI for ISAAC: Stability CKI Files

Reports, Manuals and Doctrine Publications



Doctrine Publications

- ADP 3-0 Operations
- ADP 3-07 Stability
- ADRP 3-07 Stability
- AFDD 2-0 Global Integrated Intelligence, Surveillance & Reconnaissance Operations
- JDN 1-19 Competition Continuum
- JDN 1-22 Joint Force in Strategic Competition
- JDN 2-19 Strategy
- Joint Guide for Interagency Doctrine



Field Manuals

- FM 3-0 Operations
- FM 3-13 Information Operations
- FM 3-22 Army Support to Security Cooperation
- FM 3-24 Insurgencies and Countering Insurgencies
- FM 3-24.2 Tactics in Counterinsurgency
- FM 3-57 Civil Affairs Operations
- FM 3-61 Communication Strategy and Public Affairs
 Operations



Large-Scale Combat Operations Books

- Volume 1 Weaving the Tangled Web
- Volume 2 Bringing Order to Chaos
- Volume 3 Lethal and Non-Lethal Fires
- Volume 4 The Long Haul
- Volume 5 Deep Maneuvers
- Volume 6 Into the Breach
- Volume 7 Perceptions are Reality
- Volume 8 The competitive Advantage
- Volume 9 The last 100 Yards



Generative AI for ISAAC: Stability CKI Training Files Reports, Manuals and Doctrine Publications



Joint Publications

- JP 3-07 Joint Stabilization Activities
- JP 2-0 Joint Intelligence
- JP 2-01.1 Joint Tactics, Techniques and Procedures for Intelligence Support Targeting
- JP 3-0 Joint Campaigns and Operations
- JP 3-02 Amphibious Operations
- JP 3-04 Information in Joint Operations
- JP 3-05 Joint Doctrine for Special Operations
- JP 3-06 Joint Urban Operations
- JP 3-07.3 Peace Operations
- JP 3-08 Interorganizational Cooperation
- JP 3-09 Joint Fire Support
- JP 3-10 Joint Security Operations in Theatre
- JP 3-13.2 Military Information Support Operations
- JP 3-16 Multinational Operations



Joint Publications (cont.)

- JP 3-18 Joint Forcible Entry Operations
- JP 3-22 Foreign Internal Defense
- JP 3-24 Counterinsurgency
- JP 3-27 Homeland Defense
- JP 3-28 Defense Support of Civil Authorities
- JP 3-29 Foreign Humanitarian Assistance
- JP 3-31 Joint Land Operations
- JP 3-34 Joint Engineer Operations
- JP 3-57 Civil-Military Operations
- JP 3-60 Joint Targeting
- JP 3-68 Joint Noncombatant Evacuation
 Operations
- JP 4-0 Joint Logistics
- JP 4-02 Joint Health Services
- JP 5-0 Joint Planning



Misc. Documents

- Joint Guide for Intelligence Preparation of the Operational Environment
- R46389 Intelligence, Surveillance and Reconnaissance Design for Great Power Competition
- Rand Corporation Preparing the Army for Stability Operations



Why is the ISAAC-ISR GPC Stability Index Important

HEAT MAP Where is the highest risk of water conflict?

WATER: A map on conflict and cooperation

This map shows almost 2,000 incidents related to conflict and cooperation in transboundary basins that took place between 1990 and 2008. The coloured circles include an additional 200 disputes over resources other than shared water resources. Overall, there were approximately twice as many cooperative events as conflictual events during this period. Circle size does not automatically translate into conflict danger, as the circles illustrate the

total number of events with varying degree of hostility. However, when external events overwhelm institutional coping mechanisms, conflict becomes dangerous (Wolfet al. 2003). This is reflected in the hotspots on the map, which coincide with regions where resilient conflict resolution mechanisms are absent. In the Danube River basin, for example, conflictual events were mitigated by the presence of strong cooperation incentives, embedded in the process of European integration (Pohlet al. 2014).

HOTSPOTS



By the end of 2015. Turkey expects to complete the Ilisu Dam on the Tigris River, part of a national push to boost electrical power capacity. Besides submerging the 12,000-year-old settlement of Hasankeyf, the dam may damage the already fragile Mesopotamian marshes downstream in Iraq, Germany, Austria, and Switzerland withdrew funding for the dam in 2009.



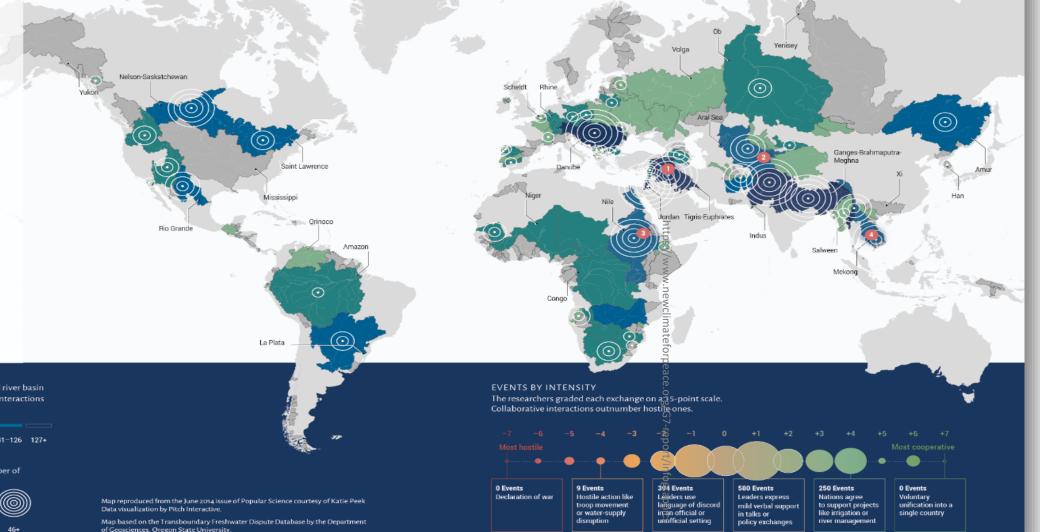
Tajikistan is planning the Rogun hydroelectric dam on a tributary of the Amu Darya river. The dam would be the tallest in the World and help alleviate the country's energy shortages. Uzbekistan, fearing irrigation shortfalls, has imposed tariffs and travel restrictions on its neighbor to the east.



In 2011, Ethiopia began building the Grand Renaissance Dam on the Blue Nile, a tributary that provides about 60 percent of the Nile's water. Egypt and Sudan are concerned about the dam's effect on water flow downriver. Ethiopia says it will finish the project in 2017.



In a channel of the Mekong two miles north of the Cambodian border, Laos intends to construct the Don Sahong Dam. The power project could affect fishing in Cambodia, Vietnam, and Thailand, so those countries are demanding a say in the plan.



The color of each international river basin indicates the total number of interactions there from 1990 to 2008.

None 1-2 4-15 16-40 41-126 127+

Circle size indicates the number of hostile events in each basin.

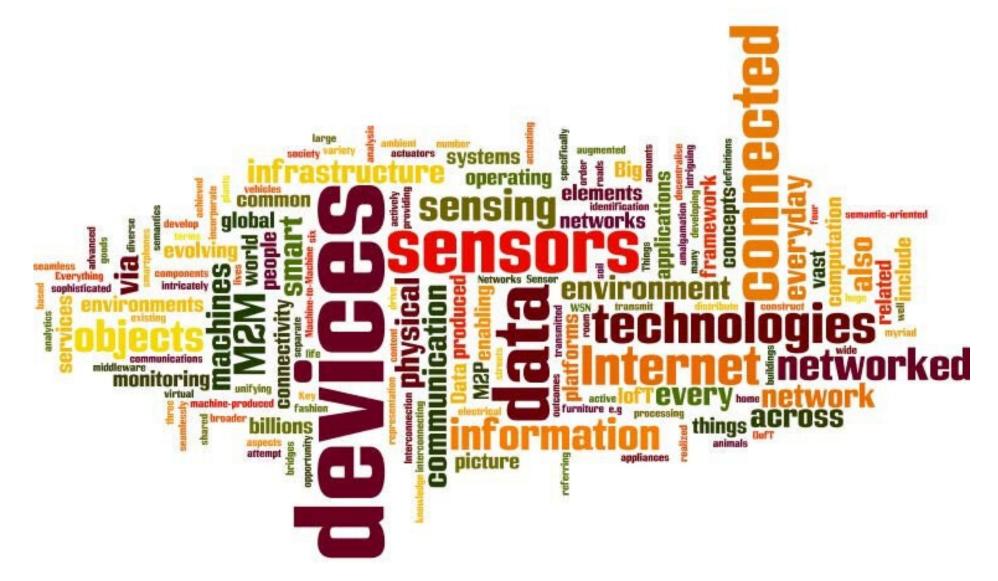








Convergence of Technology



TECHNOLOGY CONVERGENCE

COMPUTING

Explosition of devices, data and hyperconnectivity to drive larger automation

DEVICES

Devices available everywhere driving by a sensors, data and embedded everywhere

INTERACTIONS

New experiences of interactions powered by decentralized communications

Massive

Intelligent

Connected

Distributed

Generated

Embedded

Immersive

Decentralized

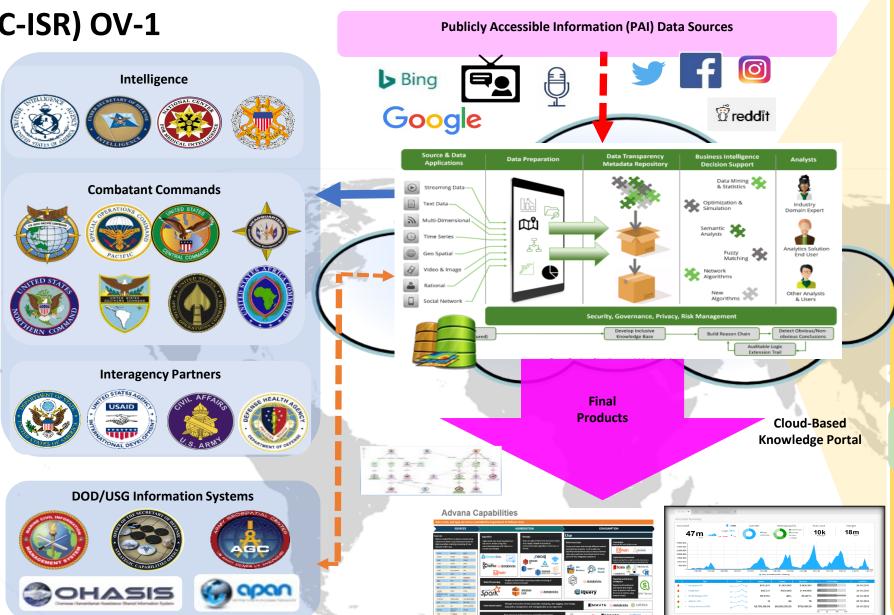
Virtual

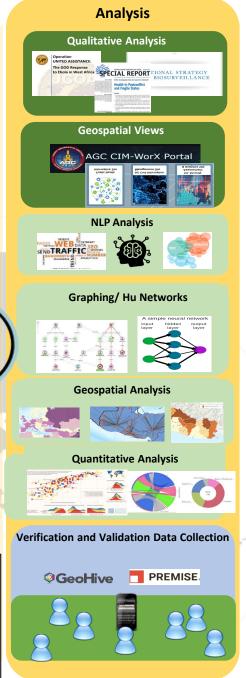


International Security Assessment and Analytic Capability –

Open Source Intelligence, Surveillance and Reconnaissance







Generative Al for ISAAC: Stability Training Files

Trusted, Approved Publications, Videos and Podcasts



- A Good Neighbor of Bad Governance: China's Energy and Mining Development in Southeast Asia
- A New Framework for Understanding and Countering China's Gray Zone Tactics
- A Restraint Approach to US China Relations
- Assessments of Operations in the Information Environment for the Eastern Mediterranean and South China Sea
- CCP Weapons of Mass Persuasion
- China is testing the limits of India and the world
- China's Emergence as a Second Nuclear Peer
- China's Grand Strategy
- China's Historical Plutonium Production
- China's Nuclear Modernization and Expansion
- Common Characteristics of "Successful" Deradicalization Programs of the Past
- Competing in the Gray Zone: Russian Tactics and Western Responses
- Deterring Countering and Defeating Conventional Nuclear Integration
- Evaluating Chinas Road to Cyber Super Power
- Gaining Competitive Advantage in the Gray Zone
- How Russian and Chinese News Media Present the Commercialization and Militarization of the Space Domain
- Korea-Strategic-Outcomes-ViTTa-Q8-Summary-Report
- NSI Aggrieved Populations Reports: Indonesia Country Report
- Operations in the Information Environment
- Spheres of Influence in the Coming Decades
- Toward an Inclusive & Balanced Regional Order: A New US Strategy in East Asia
- UNO Terrorism in the Philippines and Its Influence on Great Powers
- US Command Perspectives on Campaigning in Support of Integrated Deterrence

ISAAC-ISR Wrap up

- Increase participation from the CoP and Col
- Leverage current and future RDT&E/O&M Funds for Phase II
- The only Convergence Tech Program developed focused on this community with 100 years of SME Advisors equivalency
- Phase I, Phase II, Transition to PKSOI/AGC
 - INDOPACOM
 - AFRICOM
 - CENTCOM
 - NORTCOM (Artic)

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Questions