Systems for Collaborating and Sharing Information in Stabilization and Reconstruction (S&R) Operations

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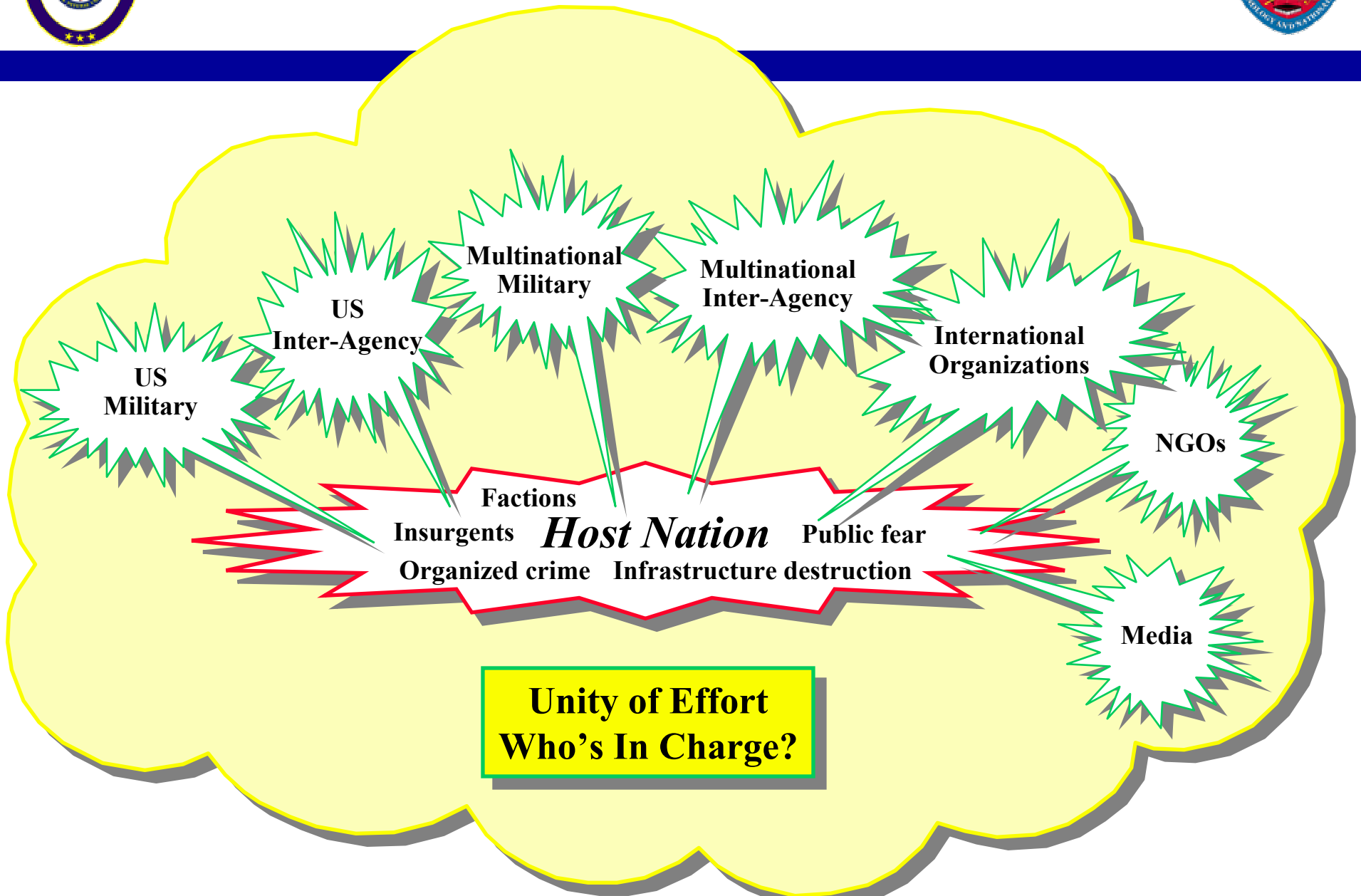
Outline

- Nature of the Problem
- Baseline Systems for Collaborating and Sharing Information
- Vision for an Objective System
- Way Ahead

S&R: A Complex Environment



Nature of the Problem

- Diversity of participants
  - People, culture, language
  - Different needs and capabilities
  - Experience and agendas
  - IO/NGO neutrality and impartiality
- Lack shared understanding of
  - Expectations and situation
  - Roles, relationships, capabilities
- Collaboration and sharing disconnects
  - Political "will" and culture
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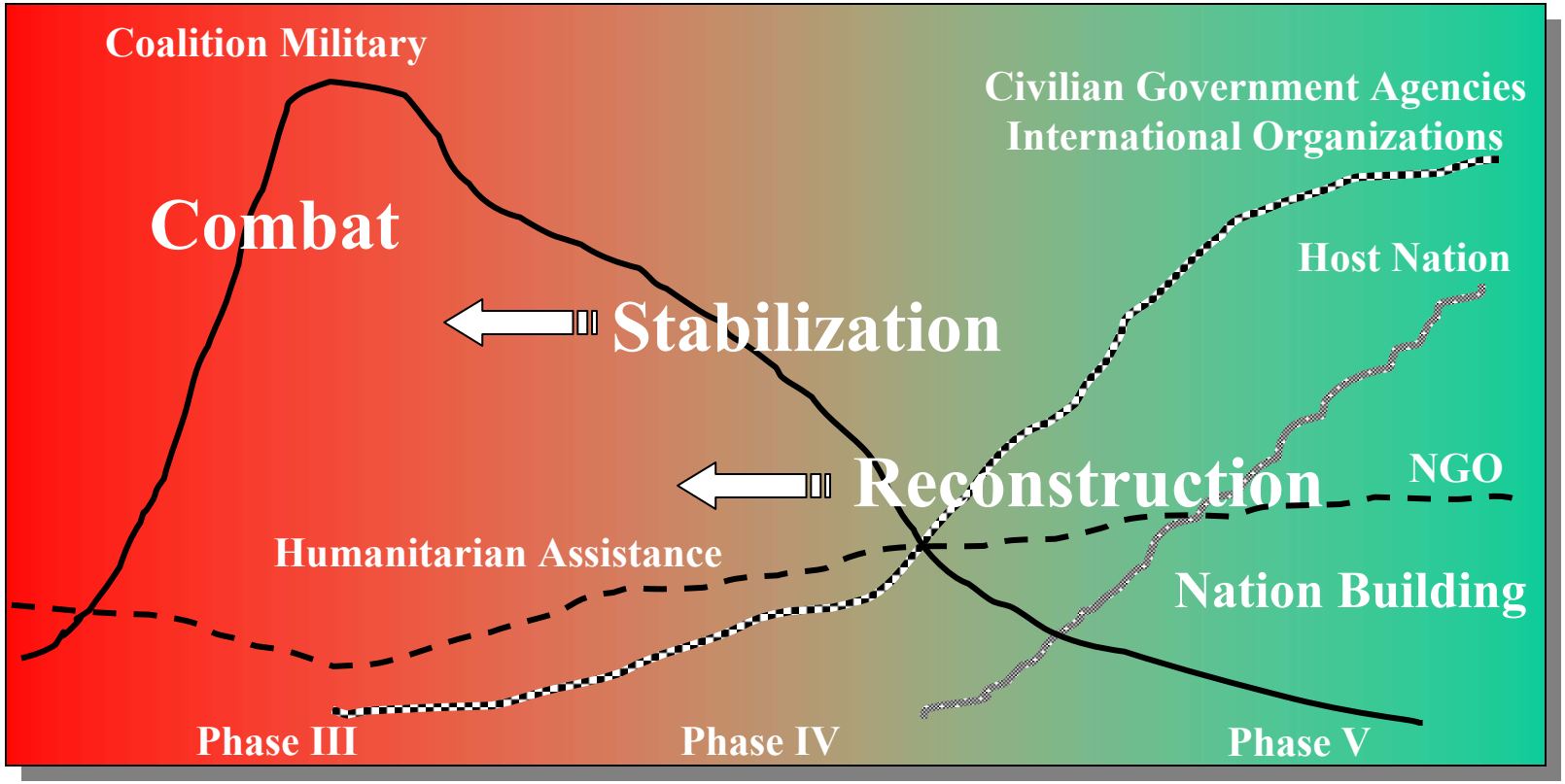
  - Funding and security restrictions
  - Lack of trust
- Ad hoc arrangements
  - C2 and Intelligence
  - Communications and IT
  - Maps, Imagery, Video
  - Collaboration tools
  - Decision aids
  - Visualization
  - Liaisons

S&R Ops Time Phasing



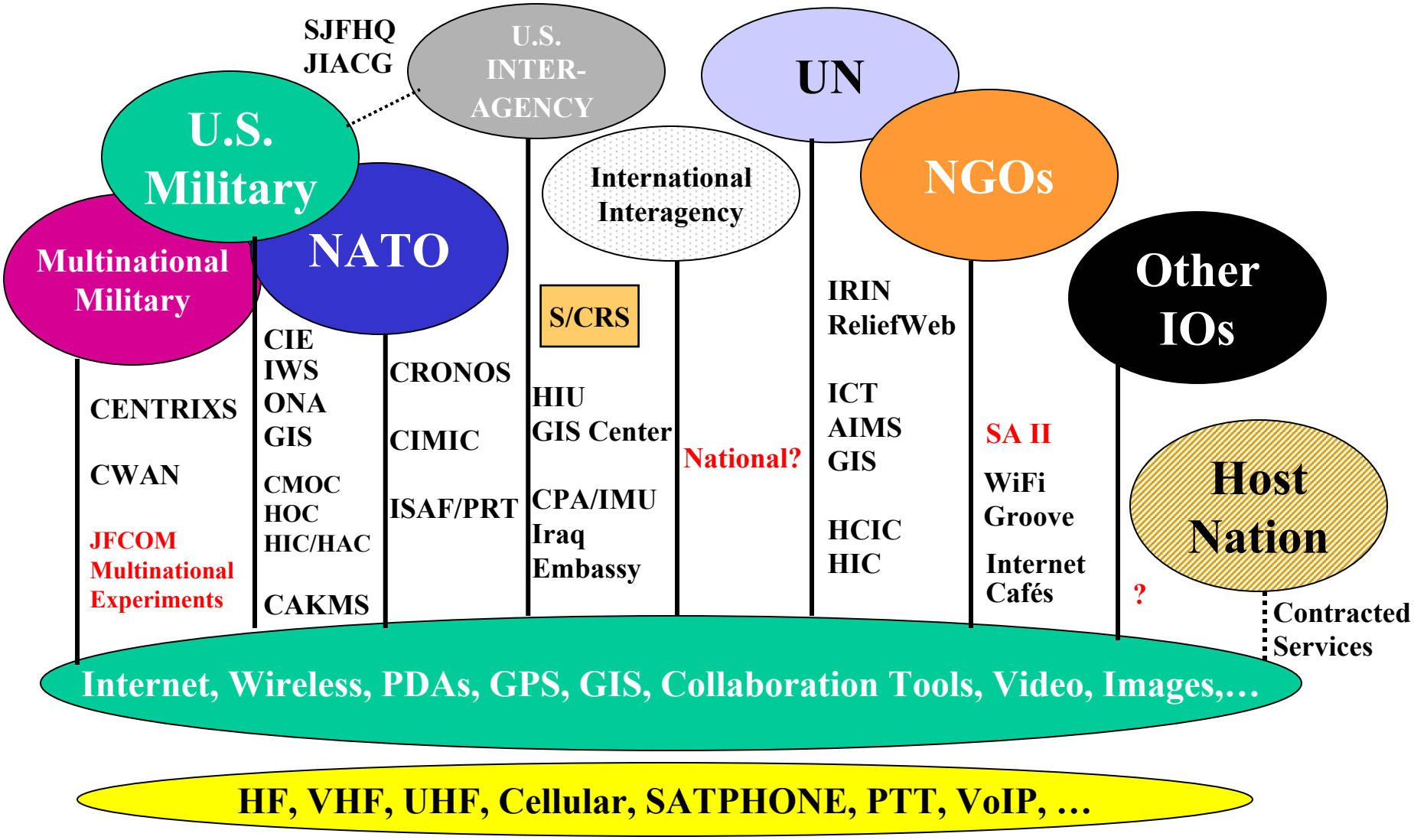
Key Gaps and Challenges

- Key Civilian-Military Gaps
  - Joint planning
  - Civilian deployment capacity
  - Mutual goals/expectations
  - Roles/Relationships/Responsibilities
  - Transfer from military to civilian responsibilities (Phase III to IV)
  - Collaboration and information sharing capabilities
    - Assessments, planning, coordinating, training, and funding
  - Joint experimentation and training
- Reconstruction Challenges
  - Security
  - Justice/Reconciliation
  - Social/Economic Well-Being
  - Governance/Participation

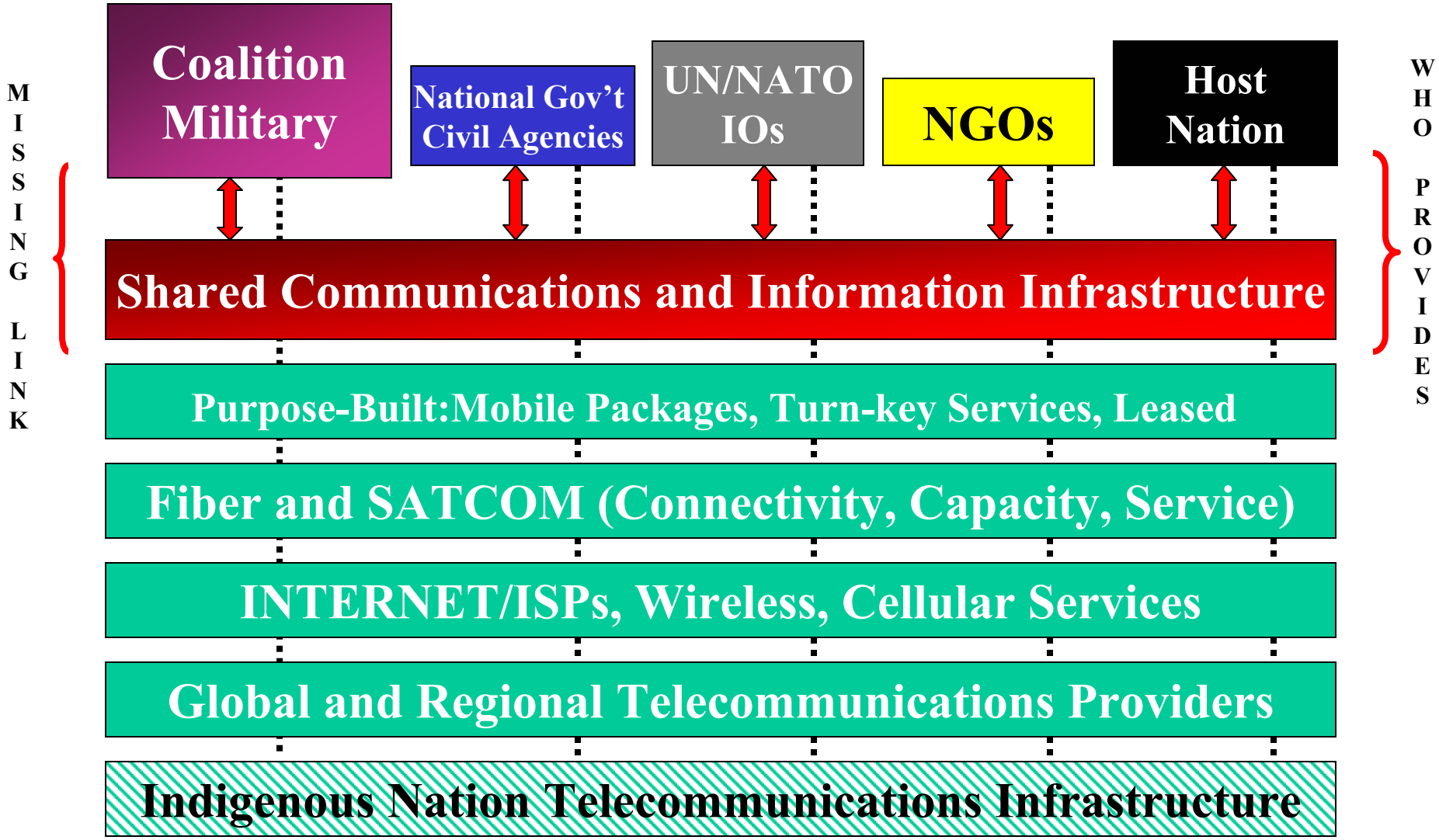
Civil-Military "As Is" CIE

- Lacks a holistic strategy and framework for implementation
- Ad hoc arrangements the norm
  - Independent civil and military capabilities
  - Multiple approaches, e.g., CMOC, CIMIC, HIC, HAC
  - Sneaker nets and liaisons for collaboration and information sharing
  - Internet is the "de facto" Collaborative Information Environment (CIE)
  - Information management disconnects
- Activities are underway to address selected gaps
  - Military, Civilian Government, IO, NGO
    - Some ad hoc efforts to improve collaboration, information sharing and information management
      - Studies (CSIS, RAND, NDU,…), workshops and experimentation
      - Deployable capabilities
  - U.S. Government organizations
    - NDU, ASD NII, State Department INR and CRS, PKSOI, JFCOM, NGA, USIP,….

Sample of Ad-hoc Stove-Piped Capabilities and Activities



Challenge: Building a CIE



Way Ahead

- Baseline current “as is” civil-military arrangements
  - Document “as is” capabilities and who is doing what
  - Identify information exchange needs
  - Document what works and what does not
  - Identify gaps and needs
- Near term actions
  - Identify low hanging fruit to be considered
  - Agree on capabilities to be implemented and by whom
  - Develop information management strategy
  - Identify entity to work solutions
- Longer term actions
  - Develop national policy and strategy for S&R operations
  - Develop a vision for a CIE
  - Develop a strategy, concept of operations, framework, and implementation, management and training plan

Questions?

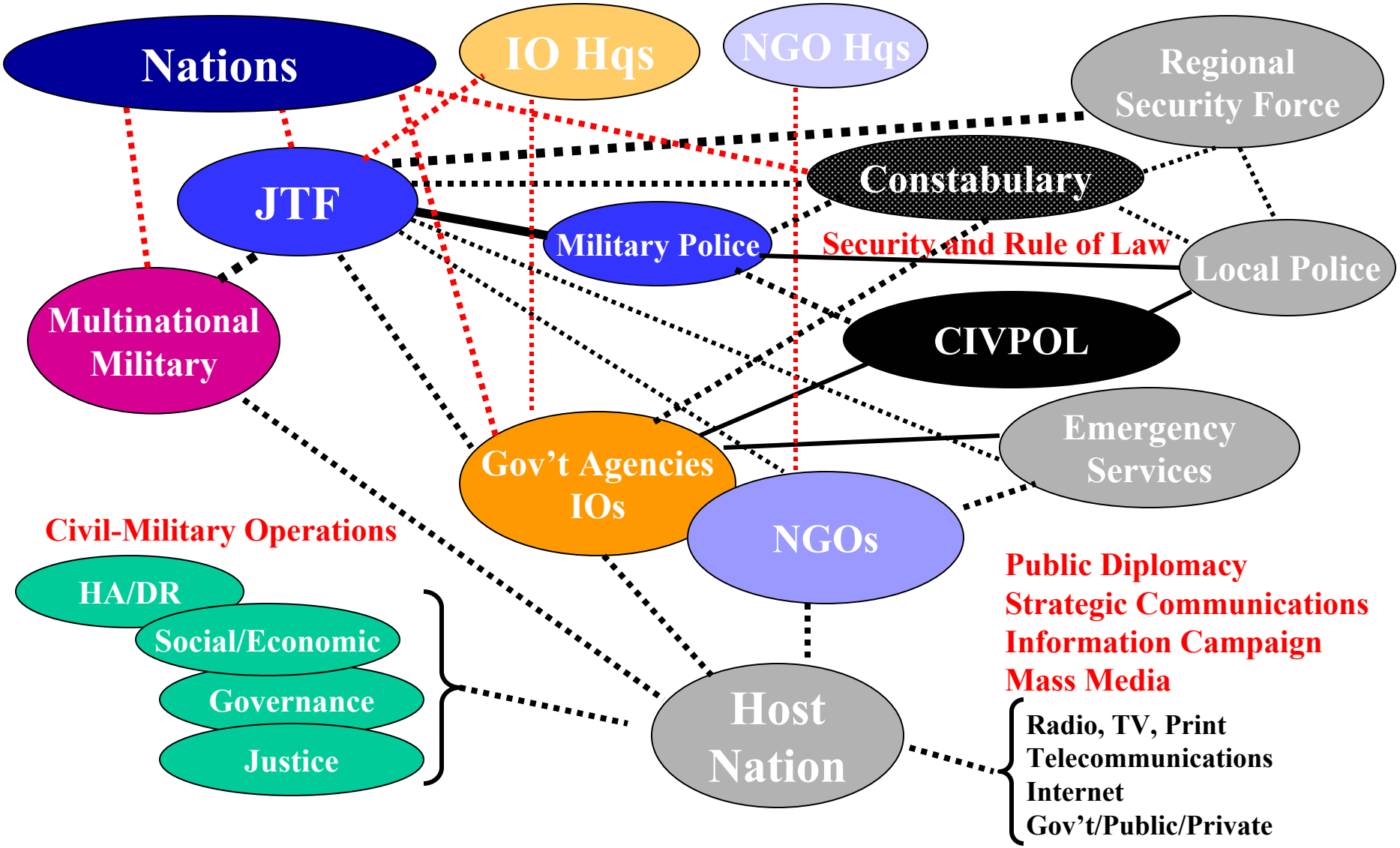
Backups

Civil-Military Information Exchange Needs

Operational Phases

Civil-Military Information Needs	Initial Response (III)	Transformation (IV)	Fostering Sustainability (V)
Mil			
Civ			
IO			
NGO			
Host Nation			

Civil-Military Communications/IT Environment



Collaborative Information Environment Way Ahead

- Develop an S&R policy and strategy
- Identify lead government agency with funding, legal and *reformed* acquisition authority
- Implement process for developing desired civil-military S&R operational capabilities and civil-military information exchange needs, including lessons learned
- Develop a framework for acquiring, implementing and managing a civil-military collaborative information environment tailored to the S&R operational needs, including joint civil-military experimentation, exercises and training
- Security and information management plans
- Joint civil-military planning, exercises and training
- Strategy for dealing with post-conflict host nation needs

- Civil-Military Collaborative Information Environment (CIE)
  - Federated globally accessible CIE
  - Deployable civil-military “plug and play” capabilities
  - Network services tailored to operational needs
  - Joint civil-military planning, exercises and training

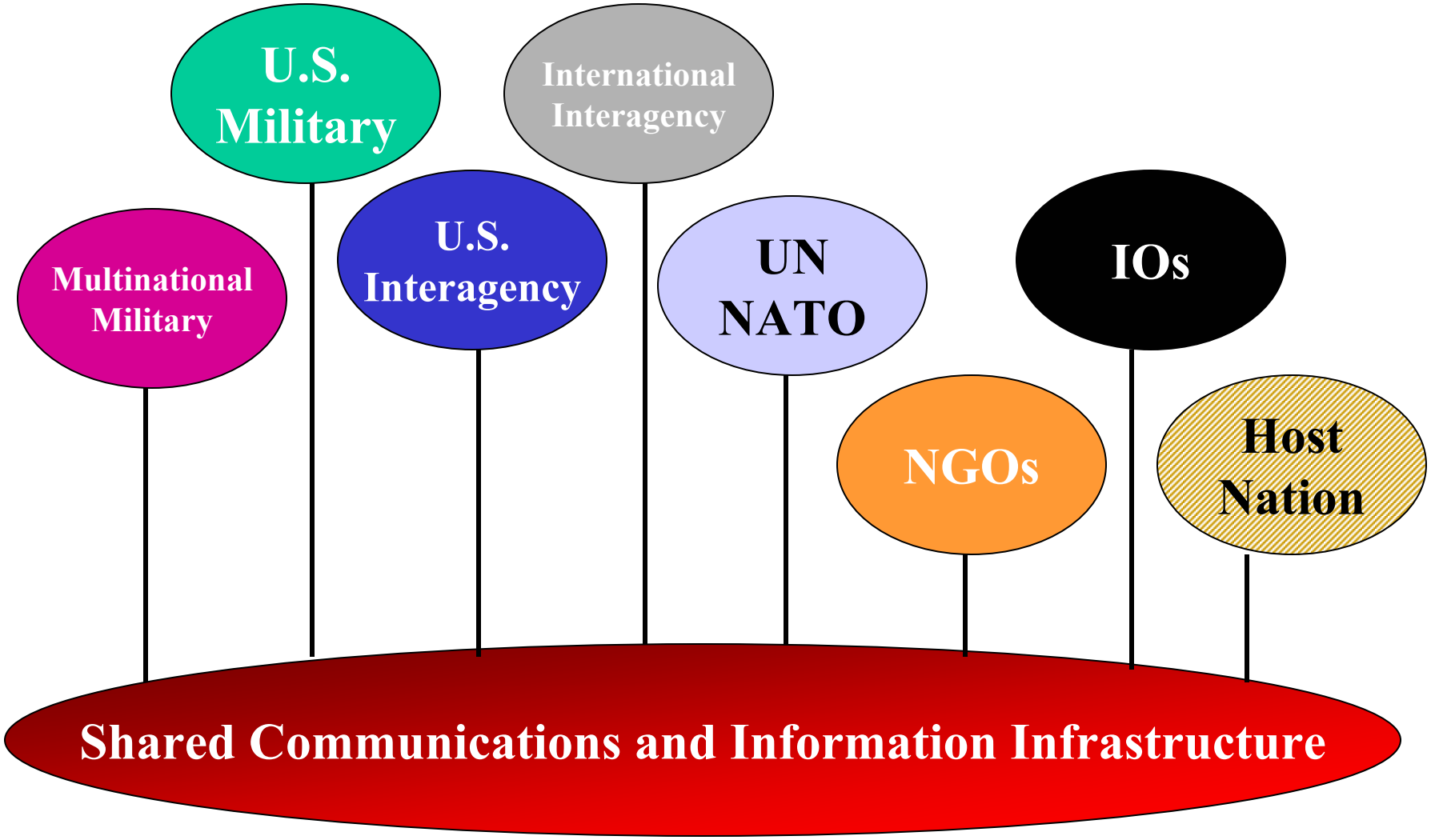
Objective CIE for S&R Ops

- **An on-demand worldwide, collaborative military and civilian computing and communications environment that facilitates:**
  - Multi-level "smart" info-sharing among military, political, civil agencies, international organizations, non-governmental organizations, and indigenous country leaders and population
  - Analysis support aimed at providing knowledge, understanding, and visualization to decision-makers for making rapid, effective decisions (military and civilian entities)
  - Distance learning capability which are user friendly; effective/easy reach-back to analysis and data centers
  - Leveraging the collective intellectual capital and technology to provide a transparent, seamless, and robust capability that accommodates differences in capabilities, policies, languages, and facilitates "plug and play" in order to get the right information to the right place, all of the time for those participating in S&R operations
  - A scalable, rapidly-deployable communications and open source IT capability ***that can be handed off***. Diversified service package such as that provided by UN DPKO is an attractive model.

S&R Civil-Military CIE

- Accommodate
  - A diversity of users consisting of military, civilian government, IO, NGO and host nation on a "plug and play" basis
  - Gradation of security levels for collection and dissemination of data, information and knowledge
  - Differing IT capabilities and databases and storage needs of user elements
  - Language differences
  - Virtual presence in hostile areas for supporting elements such as analysts and subject matter experts
  - Virtual training for geographically dispersed participants and users in area of operation
  - Management of access privileges, security and service performance
  - Interoperability among appropriate civil and military systems
- Agile, adaptable and responsive to changing operational needs of users and environment
- Decision aides, databases and collection and analysis capabilities and visualization tools
  - Situation awareness and understanding
  - Predictive assessment, social network analysis, human language interpretation
  - M/S for course of action planning and assessments
- Scalable and rapidly deployable into region of interest

Civil-Military Collaborative Information Environment



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