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# Multi-Sector Collaboration in Complex Contingencies

## TIDES Concepts & Research (Transportable Infrastructures for Development & Emergency Support)

Lin Wells

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A project under a broader initiative called  
Sustainable Technologies, Accelerated Research (STAR)

# What is STAR-TIDES?

# TIDES

- Broad, international research project
- Promote sustainable, affordable support to stressed populations
  - post-war, post-disaster, impoverished; domestic or foreign; military involved or not
- Knowledge-sharing to support decision-makers and those in the field
- 3 Goals:
  - **Enhance** ability of civil coalitions to work in stressed environments
  - **Extend** military interoperability
  - **Economize** with low-cost logistics and supply chain rationalization
- Public-private partnership, whole of government, international
- All information is shared: [www.star-tides.net](http://www.star-tides.net)



# Why is this Important?



- Military is engaged in new roles
  - Stabilization and Reconstruction
  - Humanitarian Assistance
  - Building Partnership Capacity
  - Defense Support to Civil Authorities
- Goals include avoiding war and setting conditions for peace
  - Defense, Diplomacy and Development
- Supports “Engagement” and “Relief and Reconstruction” from Capstone Concept for Joint Operations (CCJO)
- NATO adopting “Comprehensive Approach”
- Multi-sector civilian partners more engaged
  - So-called “Complex Operations”
- TIDES addresses real world problems

# 7 Infrastructures

Transportable,  
vice Deployable

- Shelter
- Water
- Power
- Sanitation
- Integrated Cooking
- Cooling/Heating/Lighting
- Information and Communications Technology (ICT)
  - Including information sharing and situational awareness



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## Some individual infrastructure items...

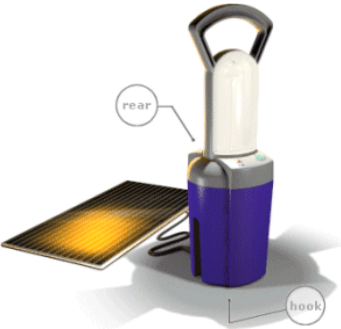


Situational Awareness

### Information & Communications Technology (ICT)



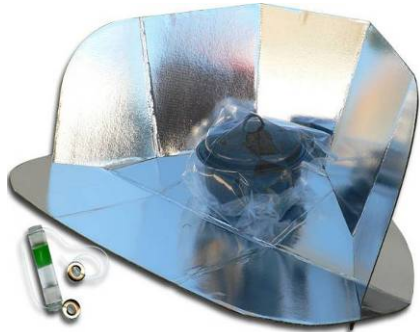
Power



Heating/Lighting/  
Cooling



Shelter



Integrated  
Cooking



Water

# Timeline

- Phase I & II (Finished) Oct 2007-Sep 2008
  - Held demonstrations (US and abroad)
  - Joined multiple exercises
  - Infrastructure and scenario analysis
  - Conducted environmental testing
- **Phase III, Oct 2008-Sept 2009**
  - **Extend analyses and field trials**
  - **Develop scenario-based solutions**
  - **Expand long-term partnerships**
  - **Stabilize diverse funding sources**
- Phase IV, Oct 2009-2010
  - Expand and refine Phase III activities
  - Enhance analytical efforts
  - Include new scenarios
  - Start educational projects



# Working through a Scenario

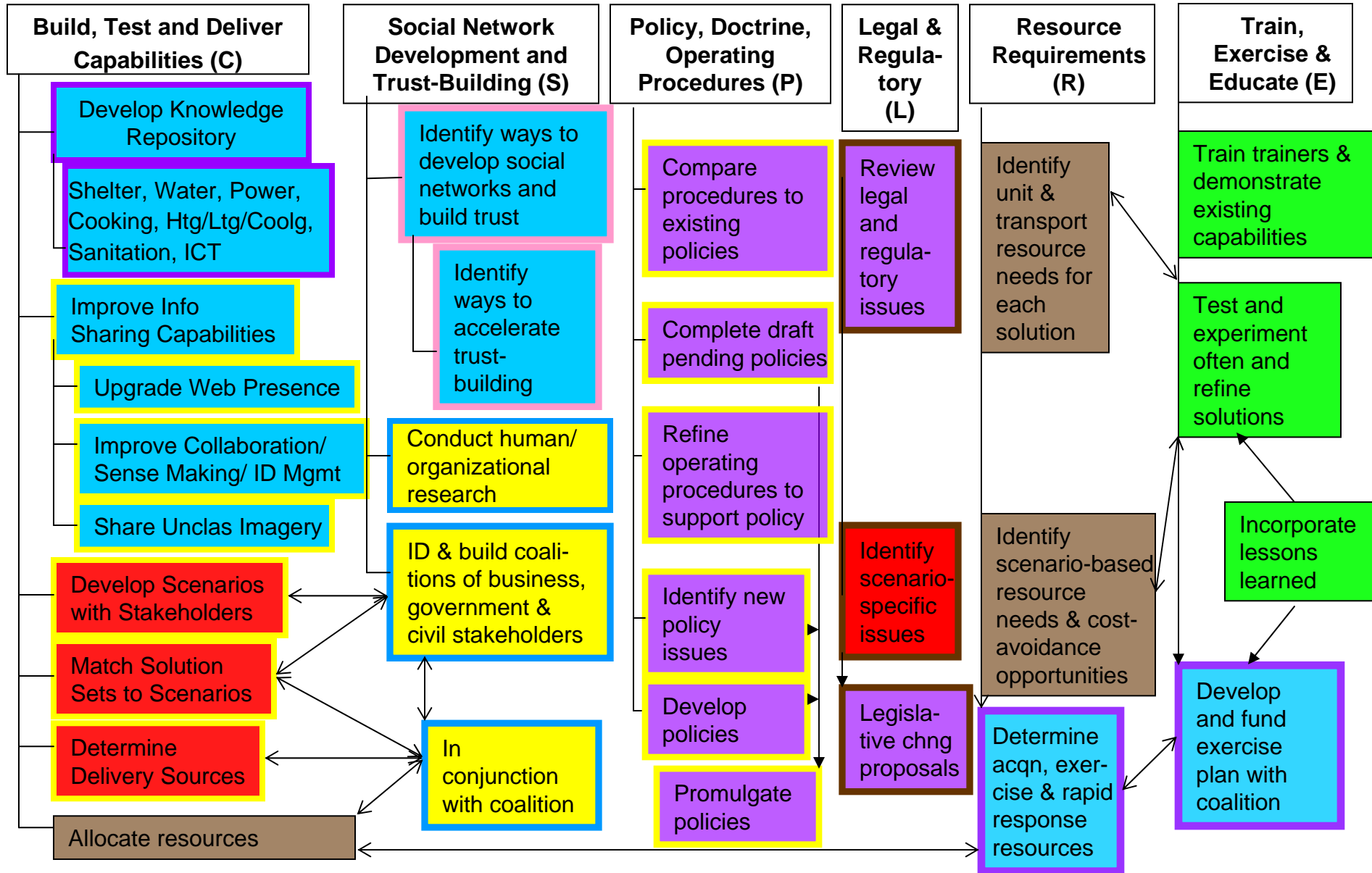
1. Postulate desired end state and success metrics, and build paths to them from initial scenario conditions
2. Postulate solution sets that are appropriate to each scenario
3. Identify local coalition partners (business, govt., civil society)
4. Collaborate with partners to refine scenario, metrics, and solution sets
5. Identify sources of supply for solutions
6. Address legal and regulatory issues
7. Estimate resource needs and execute
8. Work through field operating procedures
9. Develop training, exercise, and educational programs
10. Assess progress and adjust



# Action Areas

1. Regional Players – red
2. Local Populations – yellow
3. Civilian Engagement - blue

4. Whole of Gov't – purple
5. Building Capacity – pink
6. Saving money – brown
7. Lessons learned - green





# Major Field Initiatives



## ■ Pre-Positioned Expeditionary Assistance Kits (PEAK)

- Support first responders
  - US & Partner Nation
  - 24 Hours to 10-14 Days
  - While International Relief Effort Ramps Up



## ■ Afghanistan

- Delivering essential services, defined by Afghans
  - Emphasizing info and comms, supported by distributed, renewable energy
- Multi-sector (business, whole-of-govt, civil society), multi-national
- Pilot in Nangarhar Province



## ■ Domestic—Working with NORTHCOM at USAFA

# Recent & Forthcoming Presentations and Papers



- Afghan-related Reports (Feb 09)
  - Expanded Access to Information in Nangarhar Province
  - Rationalization of Info and Comms Technology (ICT) Activities
  - Distributed Infrastructure in Afghan Reconstruction and Stabilization
- Papers and Book Chapters
  - *Odd Couples: DoD and NGOs*, w/Chip Hauss in “*Inside Defense*”
  - *Engaging Local Actors*, w/Larry Wentz & Walker Hardy in “*Civilian Surge*”
  - *Social Software & National Security*, w/Mark Drapeau
- Field Experimentation Guide & Observation Results (ongoing)
- Sample Presentations
  - Ensuring Effective Interoperability with Allies and Coalition Partners, 1-09
  - Human Interoperability Enterprise (HIE) in NATO NEC, 4-09
  - Multi-Sector Collaboration in Latin American Homeland Security, 4-09
- Forthcoming
  - *Transformational Initiatives in Civil-Military Operations: STAR-TIDES in Maritime Environments*, w/Walter Christman
  - *STAR-TIDES and Starfish Networks*, w/Walker Hardy, Vinay Gupta, et. al.
  - *Understanding and Leading Porous Network Organizations*, w/Paul Bartone

- **Encourage Unity of Effort Where there's no Unity of Command**
  - Build on Agility, Focus and Convergence
  - Investigate alternate approaches like "Command and Feedback"
  - Emphasize criticality of UNCLAS info sharing: Implementation of DoDI 8220.02
- **Regional & Mission Focus**
  - Understanding views of diverse players
  - In widespread regions
  - Potential partnerships with Singapore, Sweden and UAE
- **Irregular Warfare**
  - Focus on delivering capabilities of use to "relevant populations," in their worlds
- **Enhance Civilian Engagement**
  - Support National Defense Strategy (NDS) and Guidance for Development of the Force (GDF)
    - Enhance civilian capabilities and improve DoD engagement with civil-military mission partners
  - Use world-wide network to develop knowledge repository and share it via web
- **Inter-Agency, Whole-of-Government Approaches**
  - Facilitate inter-agency and international engagement, capabilities, policy development, and planning
  - Build links to DHS/FEMA, Center for Complex Operations (CCO), S/CRS, USAID.
- **Build Partnership Capacity**
  - Leverage private sector initiatives to improve local economy and encourage entrepreneurship
- **Save Money**
  - Use low-cost logistic solutions and supply chain rationalization
  - Leverage distributed talent: volunteers, NGOs
- **Institutionalize Lessons Learned**
  - Implement training, exercise and education approaches with business-government-civil society and international stakeholders

- Research Opportunities
  - Physical & Information Domains
    - Rapid and accurate data visibility
    - UNCLAS info sharing with Civil-Military Mission Partners
      - Implementing DoDI 8220.02
      - Imagery sharing: overhead and local
    - Resilient networks
      - Mission assurance and graceful degradation
    - Use of virtual reality and social media
  - Social & Cognitive Domains
    - Sensemaking
      - Getting to critical knowledge quickly vice information overload
    - Leadership development for complex, chaotic environments
      - Adaptive leaders who can cope with “wicked” problems
      - Interactions between leadership and technology
    - Social network development in multi-stakeholder coalitions
      - Identifying key stakeholders and their agendas
      - Rapid trust-building
    - Application of HIE and HSCB, including M&S
      - Especially in Afghan, PEAK & US domestic scenarios

# Upcoming Events



- Aid & Trade Conference, July 9-10, DC
- SOUTHCOM Crisis Management Experiment IV (CME IV), Guyana, mid-July
- Camp Roberts Field Experiments, Aug 5-15
- Fort McNair Fall Demo, week of Oct 5
- Pentagon Display, week of Oct 12
- El Capitan NIUSR event, Oct 22-24
- Camp Roberts Field Experiments, early Nov

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