

# Working Group C

## Working Group Focus:

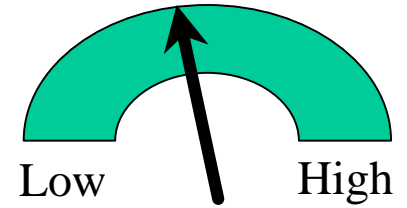
- Collaboration between US Gov't, other agencies, communities
- Collaboration between US Gov't and International Organizations

# Working Group C

## Participants

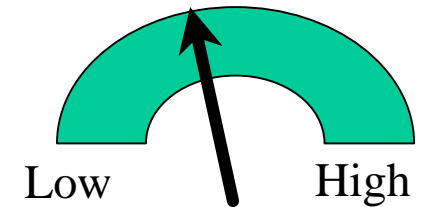
John Eisenhower*	Greenleaf Point	Charles Tupitza	CENTRA
Sheldon Gardner	NRL	Larry Wiener	OPNAV
Bowen Loftin	ODU/VMASC	Chuck Sanders	OSD
Priscilla Glasow	MITRE	Jeff Kahan	EBR
Jim Kunder	IDA	Julia Loughran*	ThoughtLink
Bob Fleming	SPAWAR	Keith Curtis	J9
Mark Sinclair	Veridian	Richard Klimoski	GMU
MAJ Frank Miller	DIA		

# The Collaboration Continuum: Measures of Success:



- Help in understand availability of resources in rest of community
  - Bringing right combination of assets to a task
- Time- collaboration can reduce time for some tasks
- Assessment of need: does collaboration fulfill the need
- Ensures coverage of humanitarian/security needs
- Confirmation of information
- Greater pool of information/data/ideas
  - Increasing experience of one or more parties involved

# The Continuum Continued



- As a training tool
- Reduction of tensions/cultural barriers
- Management support
- Reliability
- Quality of the resulting product
- Level of engagement
- Quality/effectiveness of user interface
  - Technical
  - Human
- Level of agreed processes/standards
  - Technical
  - Human

# Barriers

- Lack of uniform standards across echelons with respect to what goes into collaborative efforts
- No fundamental shared document for response
- Uneven levels of capabilities (talent, intelligence, technology)
- Incentives:
  - Differing collaboration goals
  - Lack of sufficient benefits
- Information:
  - To be used as evidence (legal)
  - To be used as general knowledge

# Barriers (II)

- Culture:
  - Language barrier
  - Inter-Branch culture problem
  - IO's, NGO's, and other organizations
  - Individual's ability/desire to use collaboration/tools
    - Personality type (e.g. extravert/intravert)
  - Lack of trust/comfort level
  - Lack of clearly defined Rules of Engagement
  - Rice Bowl effect
  - Need to maintain status quo/impartiality

# Barriers (III)

- Security:
  - Multi-level security
  - Access restrictions
  - Keeping hackers out
  - Firewalls/network security
  - Risk management vs risk aversion
  - Personal risk -- need for impartiality/security
  - Information over-classification

# Barriers (IV)

- Cost vs. resources
  - Training, tools, time
  - Sunk costs
  - Budgeting- costs saved not put back into collaboration
- Organizational
  - Training in collaborative tools
  - Personnel Rotation
  - Lack of consistent management process
  - Cross-hierarchical communication
  - Policy definitions of type of operation (can information be shared by current rules?)



# Barriers (V)

- Technical
  - User interface
  - Lack of consistent standards/system compatibility/protocols
    - Interoperability
  - Lack of sufficient bandwidth/pipes
    - Flooding of existing networks- too many separate networks
  - Level of latency
  - Lack of training in use of technology
  - Heterogeneous architectures
  - Cost of technology upgrades/improvements
  - Data mining capabilities
  - Lack of sufficient research on Human-Machine-Human Interfaces
    - Man-Machine Interfaces (MMI)

# Prescriptions for Improvement: Ways to Overcome Barriers

- The problem is complex and you must attack it one byte at a time
- Facilitate communication between involved parties
- Government support for baseline technology standards
  - move away from proprietary products & incompatibility
- Expand knowledge of each others' mission, structure, processes and practices
- Use of intelligent agents
- Identify motivating factors
- Need for collaboration facilitator
- Leveraging research done and identifying needs for future research
- Universal address book of people involved with collaboration

# Ways to Overcome Technology Barriers

- Establish baseline inter-operability standards (hardware, software)
- Create and support groups to research the current situation of standards and where it is headed
  - Create Federal/World standards
- Training/familiarity

# Ways to Overcome Organizational Barriers

- Develop joint crisis exercises and simulations that require personnel from State, the military, and other agencies to work together
  - Acquire funding to develop inter-agency exercises
  - Use collaborative environments to execute exercises
- Foster collaborative communities based around shared goals, interests and incentives
  - Functional and/or geographical areas of interest
  - Mission types (HADR, ETO, RDO, etc...)
- Training/familiarity

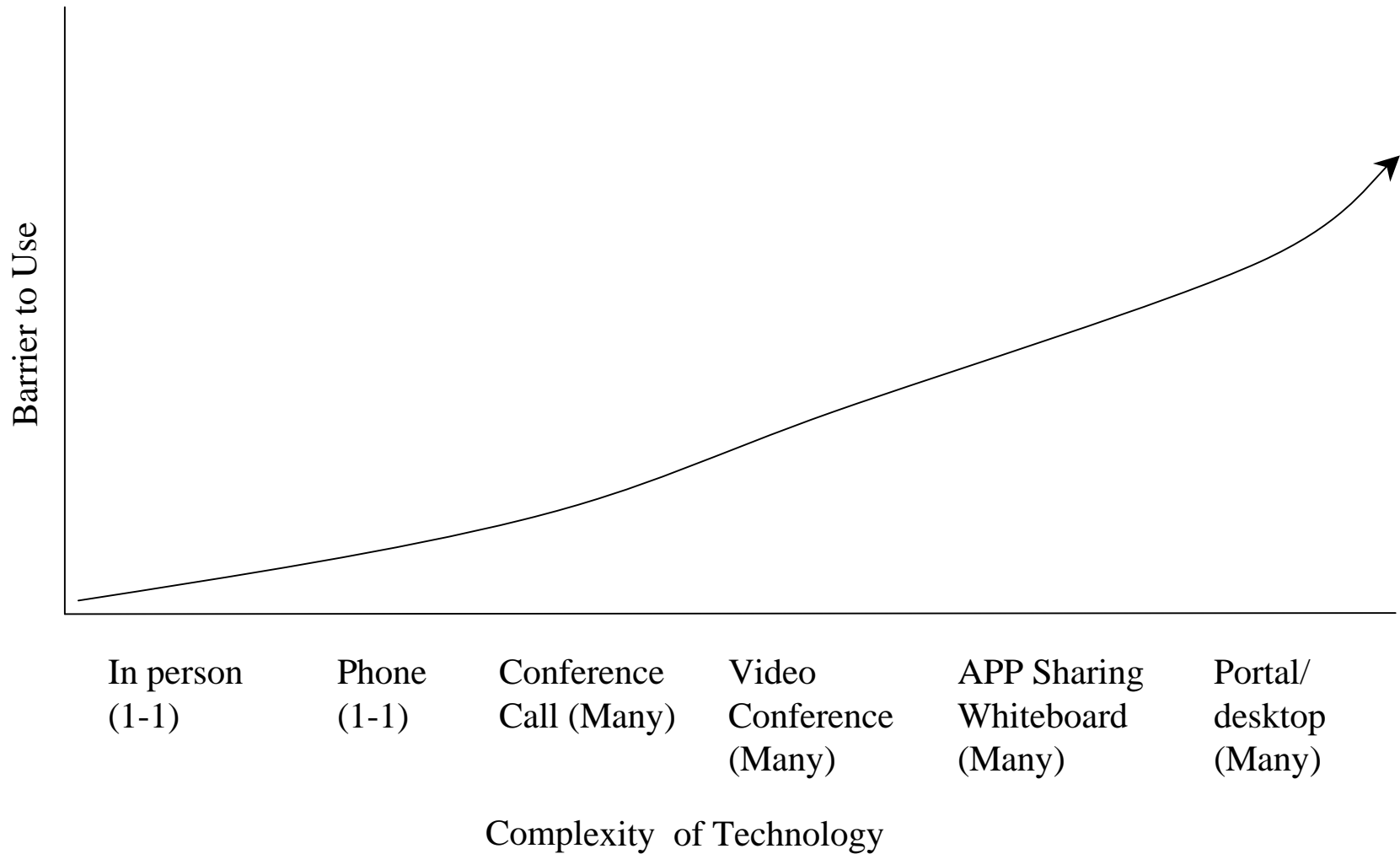
# Ways to Overcome Policy Barriers

- Effective approved multi-level security standards
- Establish an inter-agency organization that is chartered and financially empowered to investigate and establish universal collaboration standards

# Ways to Overcome Inter-personal Barriers

- Training/familiarity
  - Build trust/confidence of tools/process
- Comfort level/trust building
  - Frequency of contact, shared interest, gaming, etc...
- Understanding of others' cultures, situation, needs, goals

# Advancing Technological Complexity



# Barrier/Proposal

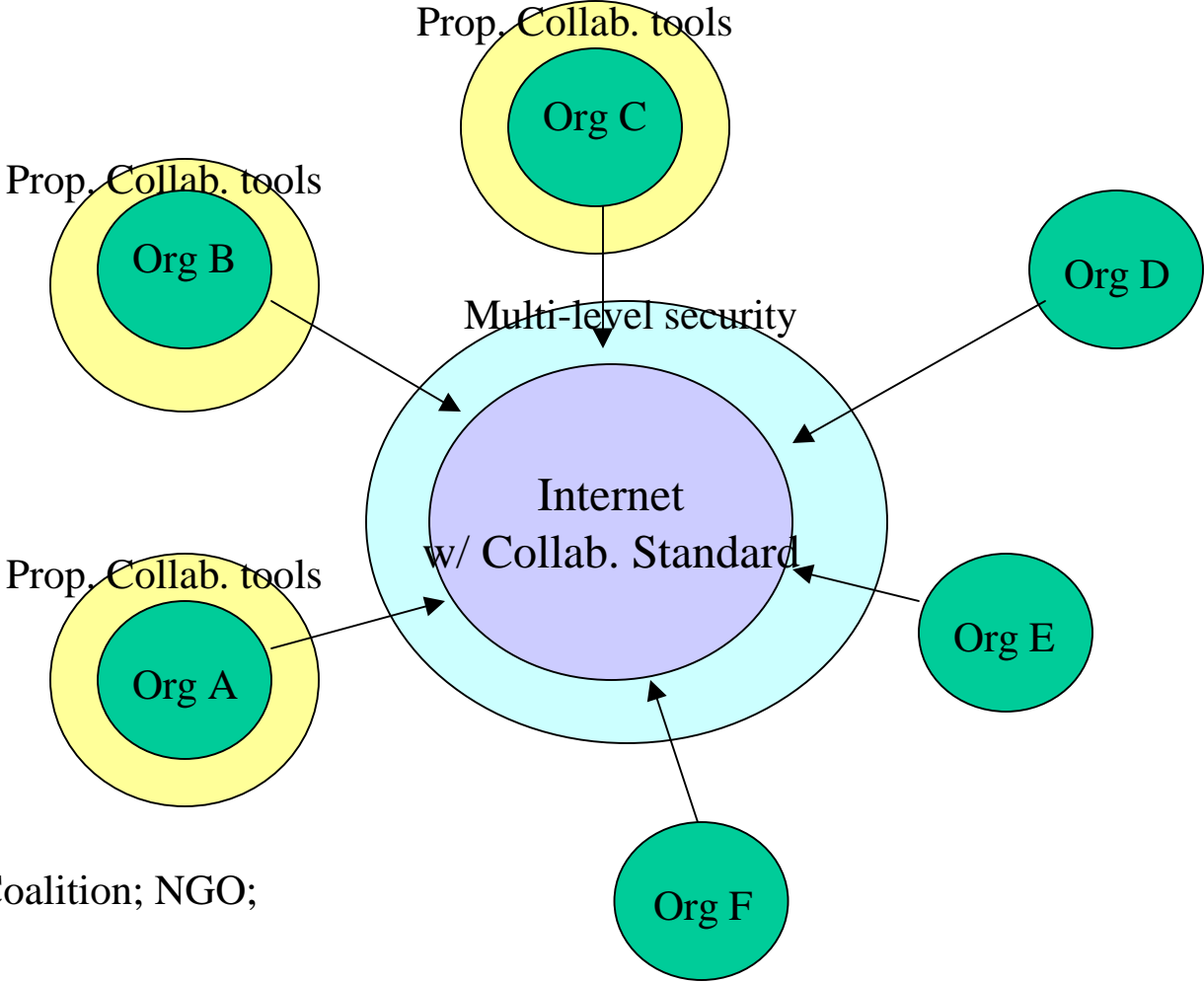
- **Barrier: No one in charge at the top**
  - Proposal: Establish agency/group to facilitate collaboration across IA; foster IA training coordination (NDU effort)
  - Proposal: This subject (policy for collab. issues/standards) should be addressed by one of the functional PCCs under the NSC or a similar subgroup reporting to the NEC
- **Barrier: Interoperability**
  - Proposal: Develop/adopt requirements for interoperability (Partnership w/ industry and USG)
- **Barrier: No common pipe for service**
  - Proposal: Accept Internet as common pipe;
  - Proposal: Need for multi-level security solutions - Commercial standards do exist and USG should take another look (risk management vs. risk aversion)



# Barrier/Proposal (II)

- **Barrier: Lack of shared knowledge/understanding**
  - Proposal: Develop portals for shared areas of interest; Pull together POC data; Internet-based exercises to stimulate the use of collab. tools; sharing LL re: collab.
- **Barrier: Culture/trust**
  - Interpersonal: Increase frequency of contact; exercises/games; focus collab. Track at big shows - e.g., AFCEA, AUSA, etc.
  - Tools: Frequency; training,

# Supporting Multi-Org, Agency Collaboration



Orgs: USG-IA; Coalition; NGO;