



GULFNET:

***A GCC Network-Enabled Capability for
Regional Education, Training and Exercises***

“from Challenges... to Opportunities...to Solutions”



Presenters:

Dr. Walter L. Christman

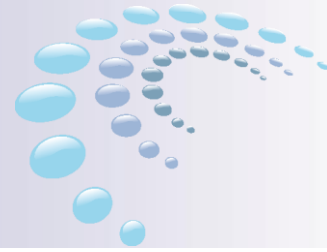
Chairman, Global Challenges Forum Foundation

Mr. Stephen B. Moore

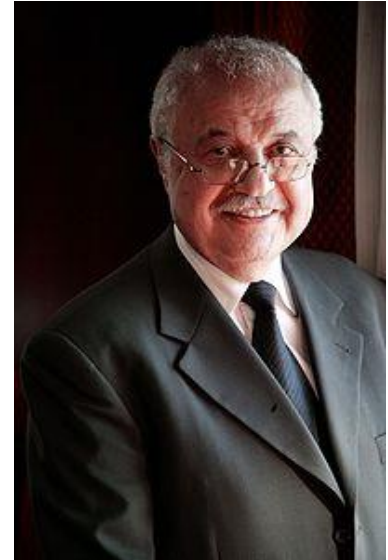
Vice President, Booz Allen Hamilton

***(Former Deputy Director, Joint Warfighting Center
US Joint Forces Command)***

An Arab World, Global Visionary



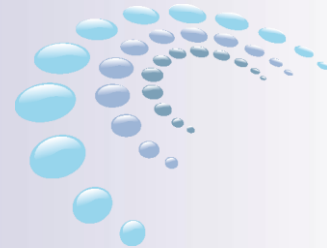
- Co-Founder and Honorary Chairman, Global Challenges Forum Foundation
- Chairman, UN Global Alliance for ICT and Development
- Arab World Leader for the Knowledge Society (IP, ICT, Education +)



“The foremost challenge is that of the knowledge revolution. Economic power will depend on creativity and innovation. Creation of wealth will move from traditional resources to the one asset: knowledge.”

-- Talal Abu Ghazaleh

A New Era of Security Challenges...



- Globalization has brought new **challenges** that appear to be beyond the ability of our current institutions to address
- In response there is a need to generate new education and training **opportunities** on a global basis
- This will allow the exploration of more partnership-oriented **solutions** to contemporary threats and risks



Maritime



Human



Environment



Economic



Energy



Critical
Infrastructure

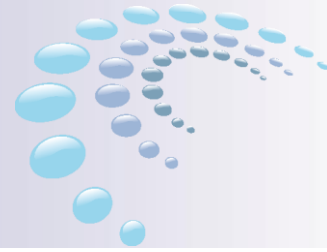


Cyber



Missile Defense

The Gulf Region Is At Risk ...

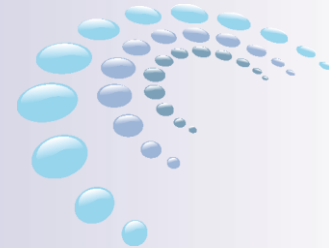


In 1987, the GCC countries approved a **comprehensive security strategy**, in the form of a general framework for organizing cooperation to support mutual security. It covers cooperation in multiple aspects of defense and security.

Primary concerns: illicit trafficking, punishing and rehabilitating threat-based organizations, immigration, passports, airport security, drug fighting, weapons, explosives, border guards, coastal guards and civil defense



A New Response – Unified Command and a Gulf Academy



- Leaders of the Gulf Cooperation Council (GCC) in December 2013 announced the formation of a **unified military command** for the GCC countries
- The council also announced the establishment of the **Gulf Academy for Strategic and Security Studies** in the United Arab Emirates

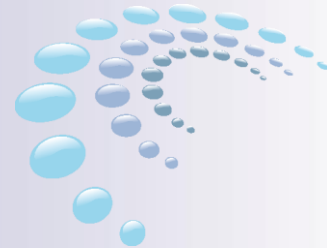
The academy will aim to bolster military cooperation through a unified education based institution. Its initial focus to include missile defense, border security and counter terrorism



Leaders of the Gulf Cooperation Council in Kuwait at the final meeting of the 34th Annual Summit, Dec 2103
Raed Quten /EPA

***Saudi Minister:
GCC To Set Up
Joint Force of
100,000 troops!***

Challenge

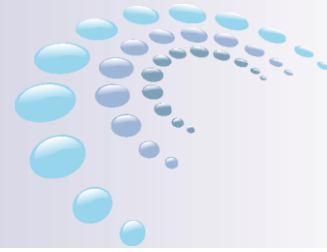


- When incidents grow in numbers and severity – a crisis situation is not far away
- This is when you most need trained risk and crisis management organizations with allocated resources and procedures to manage the situation effectively, and depending on scale – the ability to work together



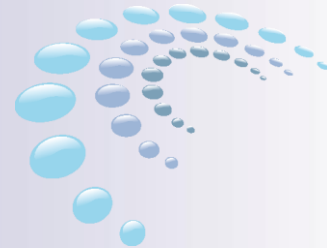
Organizations are at different levels of scale and maturity and readiness, which can have severe consequences!

Opportunity



- Most civilian and military organizations have to manage complex and interconnected operations in the event of a crisis
- To minimize losses, casualties and to maintain trust and continuity, both common procedures and training are required
- **Network-connected simulated exercise scenarios can build shared readiness and capability**
- There are no “lessons learned” until behavior is changed

Solution



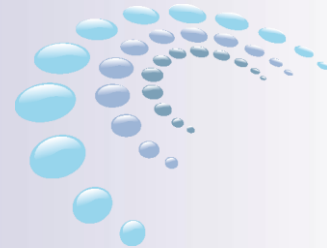
Establish GULFNET to promote effective risk and crisis management through a Simulation Network linking the GCC Joint Command with member states



- Lessons Identified/Learned by “others”
- Evaluate all the relevant parts that need to be in place for a fully functioning risk and crisis management system
- Build methods, models and capabilities to achieve GCC-shared objectives and goals in support of the new Joint Command!

GULFNET:

A GCC Network-Enabled Capability

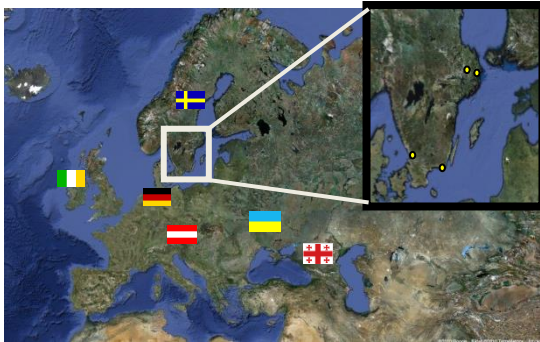


GULFNET is an Education, Training and Simulation Network to address emerging security threats. It is:

- A **persistent network** to link the Gulf Cooperation Council (GCC) Joint Command to member state national command centers, and....
- Focuses on **new and expanded security missions**, including Humanitarian Assistance and Disaster Response (HA/DR) using “best of Web” technology to enable participation by leading institutions and individuals, by....
- Taking advantage of an explosion of **next generation training tools** and designed to **evolve as technology changes**, primarily through....
- **Scenario-based thinking** that ties together and integrates diplomacy, defense and security, as well development and humanitarian threads for holistic national security solutions.....

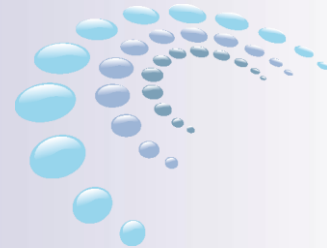
Result: Enhanced GCC Joint readiness and interoperability

The Viking Exercise Concept As Example



- *Viking is the world's premier distributed Civil-Military Computer Assisted Exercise*
- *In VIKING 11; 2500 participants from 30 nations and 40 organizations*
- *9 distributed remote sites*
- *Real time Exercise Control*
- *The exercise is a joint venture between Sweden and USA*
- *15 years of continuous success in delivering a venue for Commander and Staff interoperability!*

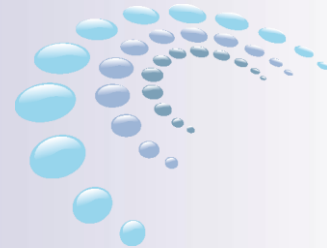
GULFNET Plan (notional)



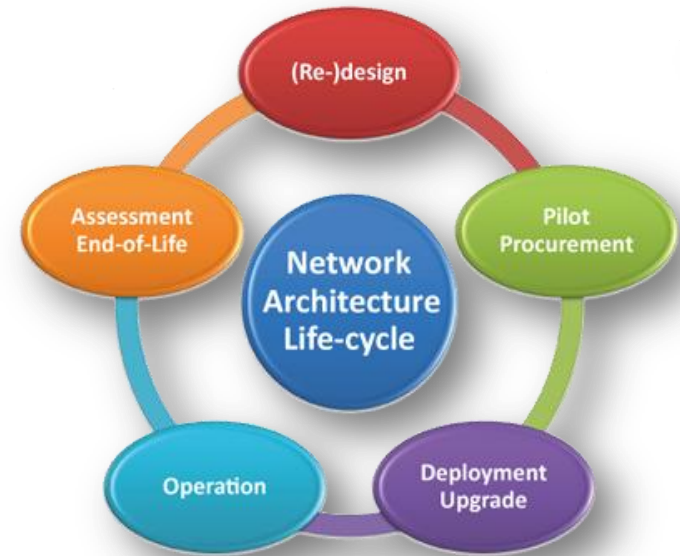
- *Start with member nations
– nations choose the
nodes/locations that play*
- *Over time, invite external
nations that GCC wants to
incorporate*
- *GCC Secretariat and Joint
Command together lays
out roadmap for multi-
year capability*



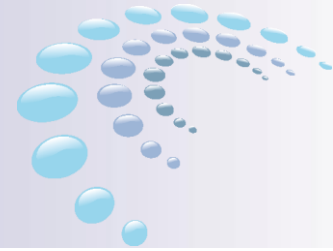
What are the Requirements?



- ***Build-Verify-Track***
- ***Identify Common Procedures/Risks***
- ***Supervise Progression***
- ***Connect the Forces/Organizations***
- ***Implement Interoperability***
- ***Implement Lessons Identified***
- ***Implement Standards***
- ***Minimize Resources***
- ***Visualize Aggregated Real Time Overview***
- ***Advanced Methods Guidance in Handbooks***



Two Major Technology Components of GULFNET



To enable an affordable and incremental build out of training and exercises capability under GULFNET construct, it should employ:

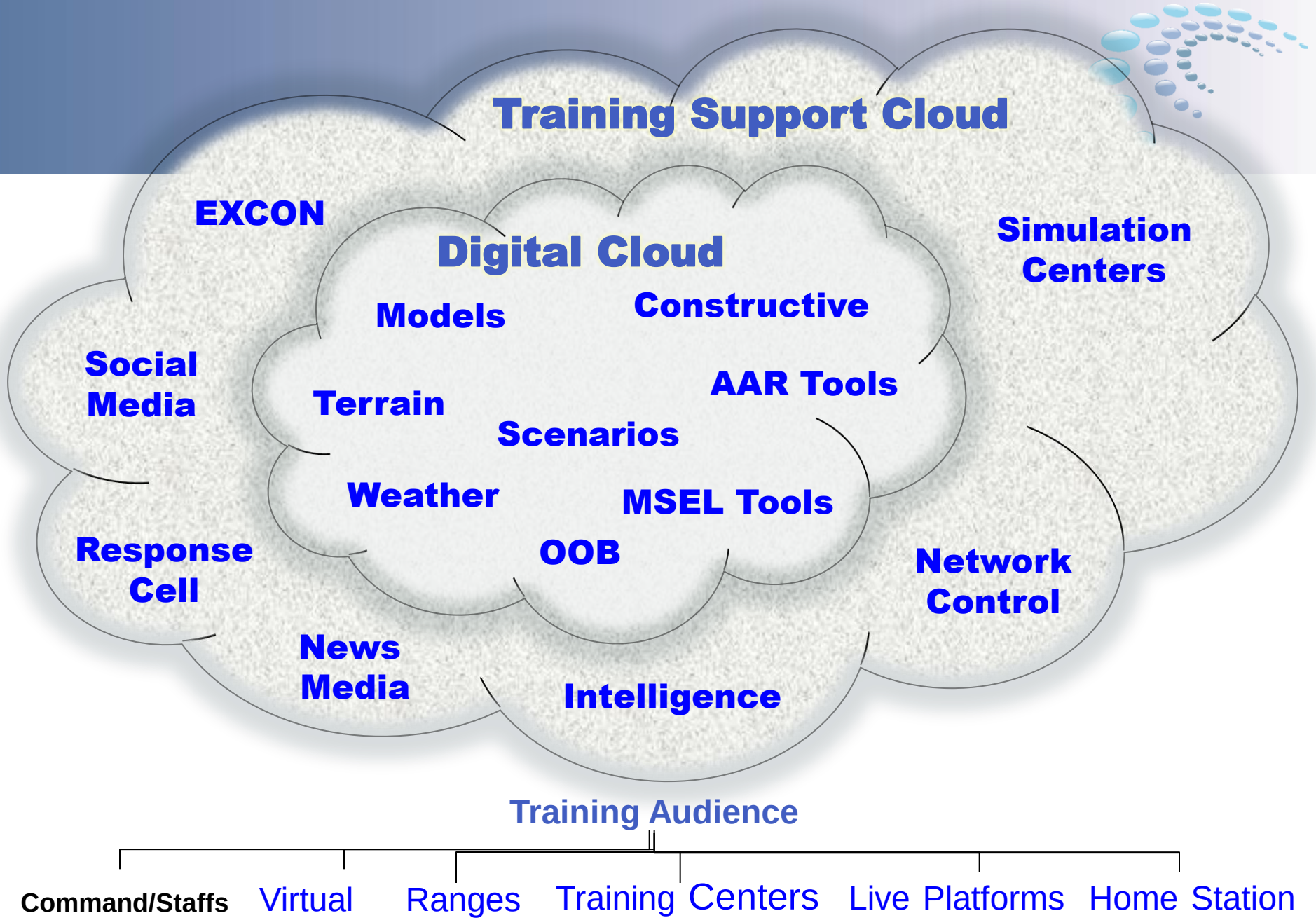
Cloud Technologies incorporate:

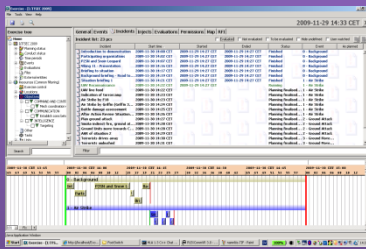
- Virtualization
- Data Center Management
- Grid Computing



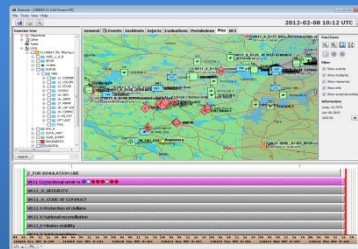
**Service Oriented
Architecture
offers agility
in integration**







Exercise Management



Theater Level View



Constructive Simulation



Virtual Simulation

HLA-
bridge

HLA-
bridge

HLA-
bridge

HLA-
bridge

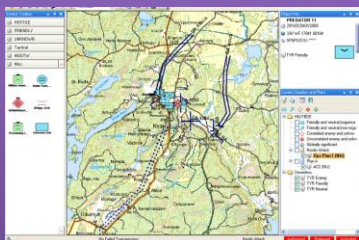
HLA RTI – Run Time Interface based on the FOM – Federation Objective Model

Middle
ware

Middle
ware

HLA-
bridge

HLA-
bridge



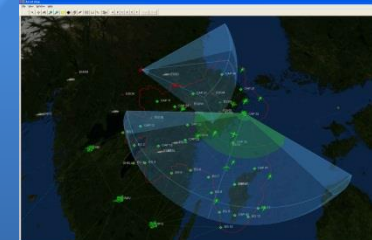
Command & Control



Tactical Picture

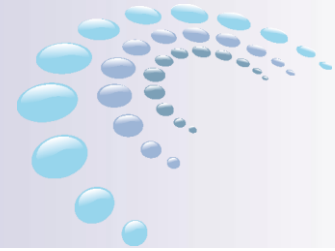


UAV Simulation

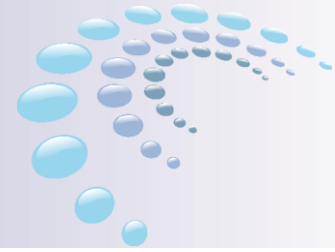


Air Simulation

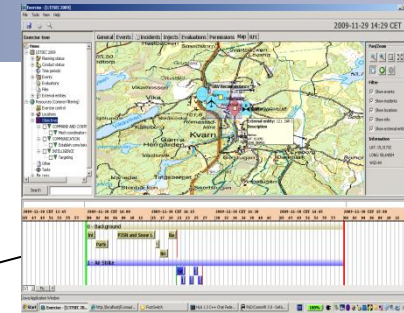
Enhanced by Collaborative Portal and Social Media



Results in Integrated Capabilities



Scenario
Viewer

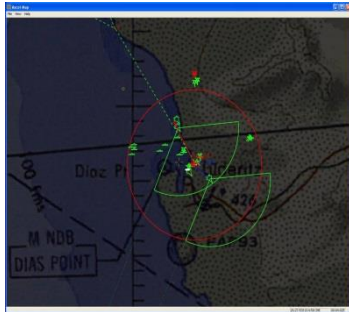


Exercise Management



Collaborative
portal

Combat &
Air C2 sim

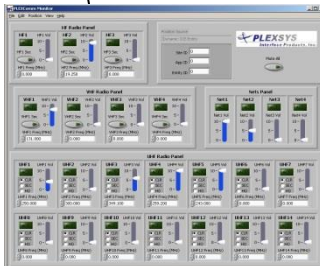


**GULFNET
FEDERATION
(HLA IEEE 1516)**

Tactical
Picture



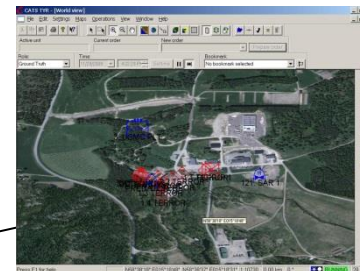
Voice &
Radio sim



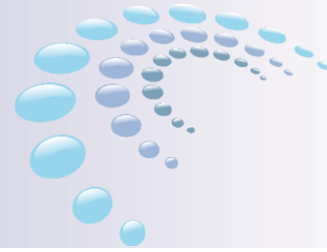
Virtual sim
& 3D viewer



Operational/
Tactical
Constructive sim



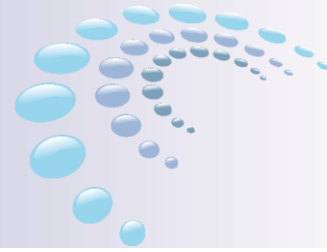
Transferring Lessons Learned



- ***GULFNET Lessons Learned can be transferred to the proposed Gulf Academy for Strategic and Security Studies for analysis and dissemination***
- ***GULFNET proposal includes establishment of a complementing program of “Leadership Education for the Advancement of Development and Security” through a “LEADS Institute”***
- ***First proposed by Talal Abu Ghazaleh***



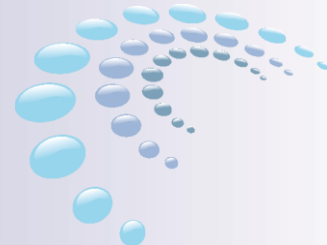
Network-Enabled Knowledge



**LEADS
INSTITUTE**

GULFNET enabled by The LEADS INSTITUTE can provide uniquely tailored online professional development courses and Professional Military Education (PME) for the Arab World :

- ***Gulf Knowledge Online (GKO)***
- ***GCC Defense University (GDU)***



Summary

- ***GULFNET can build the education, training and exercise component of an integrated GCC Unified Command mission network for member states:***
 - Incrementally Affordable
 - Modular -- allows individual GCC states to implement those parts of GULFNET that meets their needs – while enhancing overall GCC capabilities through the integrated architecture
 - GCC Secretariat and Joint Command could be responsible for Strategic Thinking, Capability Development and Education and Training Roadmap
 - GCC Academy complemented by LEADS Institute for Online Learning
 - Any GCC nation can lead the entire concept (example of Sweden for NATO and Partners) and help define and drive the continuous evolution