Common Operational picture as an extension to ArcGIS paper session UC 950

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Wednesday, 22th July 1:30 p.m.
Omni Ballroom C
Agenda

+ Brief company introduction
+ Challenges to build a common operational picture
+ Approach
+ Solution „bricks“
+ Conclusion
Brief company introduction

+ Professional Service with focus
  > Defense und Intelligence
  > Public security

+ Founded in 2012
  > former Defense & Intelligence Business Unit of Esri Germany
  > independent

+ 30+ employees
  > GIS-Professionals, IT-Professionals, Software-Developer, often with military background
  > long term experienced personal
Brief company introduction

Esri Deutschland Group GmbH

- Esri Inc.
- Esri Rwanda Ltd.
- Esri Schweiz AG
- Esri Deutschland GmbH
- Geosecure Informatik GmbH
- con terra GmbH
- Geocom GmbH
- Geocom AG

Partner
Partner
Partner
Partner
Partner
Partner
Partner
Partner

Technology
Solutions

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unclassified
Brief company introduction

+ ArcGIS platform as foundation
  > Research & Development
  > Installation, configuration, support services in complex IT-environments
  > Software development
Challenges to build a common operational picture

+ "stove pipes"
  > isolated processes: financial, security, service, enhancement
  > Lack of a common safety and security management

Joint support

Army

Air Force

Navy
Challenges to build a common operational picture

+ Breakup level of echelons

Diagram showing levels of operational echelons:
- Tactical
- Operational
- Strategic
+ Geospatial core services as foundation
  > Map
  > Image
  > Geoprocessing
  > Geocoding
  > Coordinate transformation
+ ArcGIS platform for integration and development
  > Simple to use viewers
  > Multiple information layers
  > Collaboration
Integration of widely-used NATO software

- Jchat
- JOCWatch
Integration of widely-used NATO software

> Network interoperable realtime information services

- Link 1
- Link 11
- Link 16
- OTH-G
- VMF
- NFFI/FFI
- etc.

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Smart document and message management

- Enhanced search
- Fast Query including big data environments
- Automated workflows
- Spatial selection
JISR integration
Common safety and security management
> Protection
> Gateways
Solution „bricks“

+ Extend the ArcGIS platform

- Commercial off the shelf

- Geosecure software development

- Portal for ArcGIS
- ArcGIS for Server
- GeoEvent Extension
- NVG Adapter
- MilSym Processor
- NIRIS/NVG Adapter
- MilSym Server Extension
- Openfire Chat Server
- Chat - Widget für Web App Builder
- Mobile Client

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ArcGIS is an appropriate technology to provide a common operational picture in today's operations.

The effective approach is to use „GIS“ as backbone technology & integration plattform, extended by military specific solution „bricks“

„...to develop and share a common operational picture which collates information layers from different automated information systems to provide a single portal for georeferenced information in the area of interest“

Source: NATO comprehensive planning directive December 2010