

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

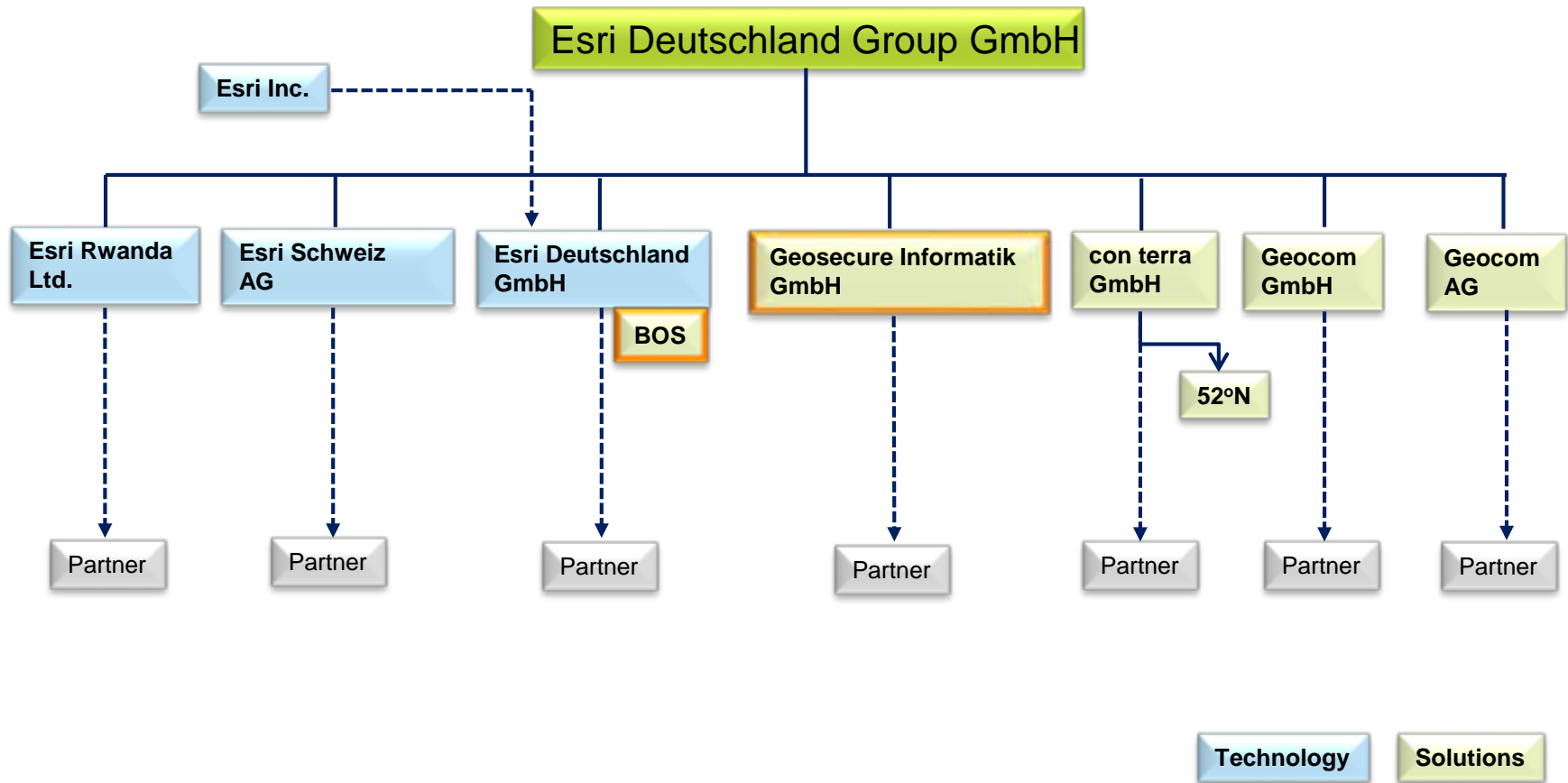
- + Brief company introduction
- + Challenges to build a common operational picture
- + Approach
- + Solution „bricks“
- + Conclusion

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



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

Army

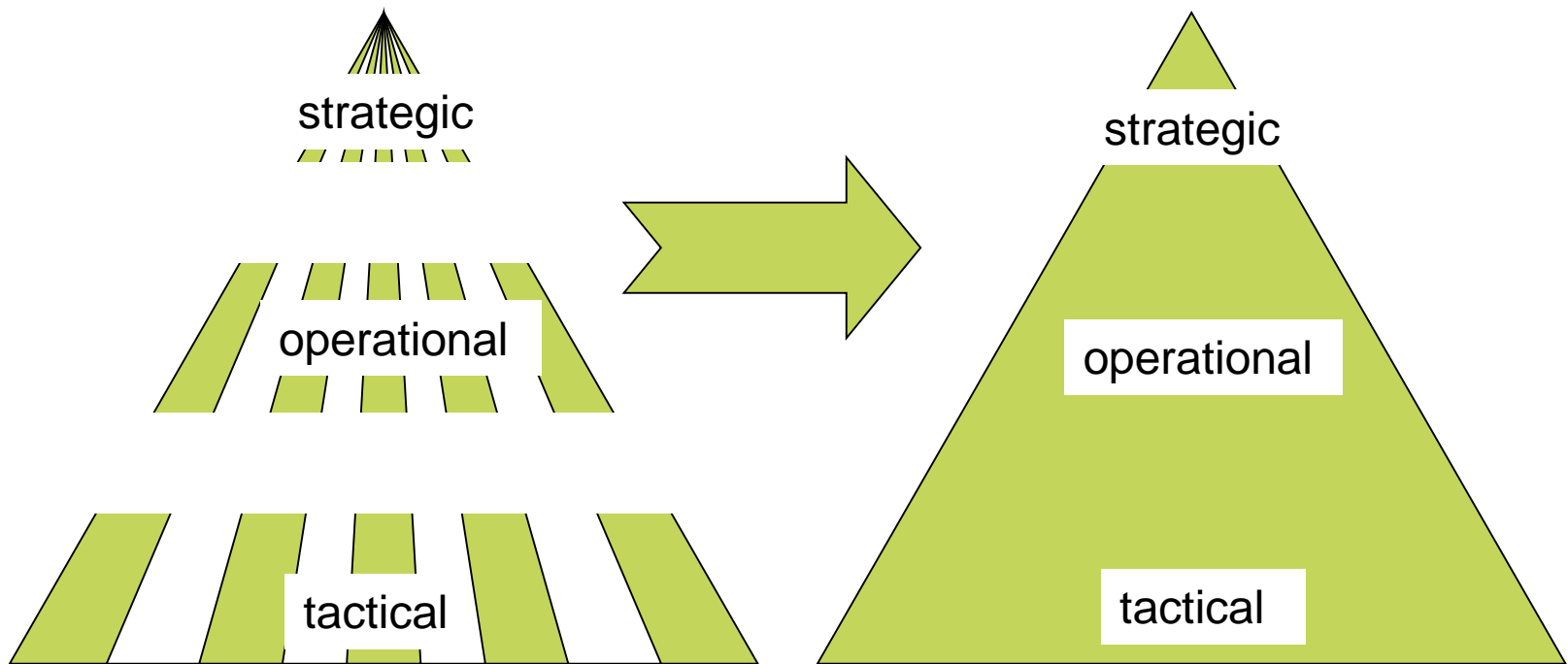
Air
Force

Navy

Joint support

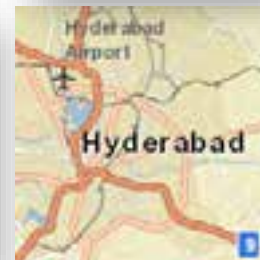
Challenges to build a common operational picture

+ Breakup level of echolons



approach

- + Geospatial core services as foundation
 - > Map
 - > Image
 - > Geoprocessing
 - > Geocoding
 - > Coordinate transformation



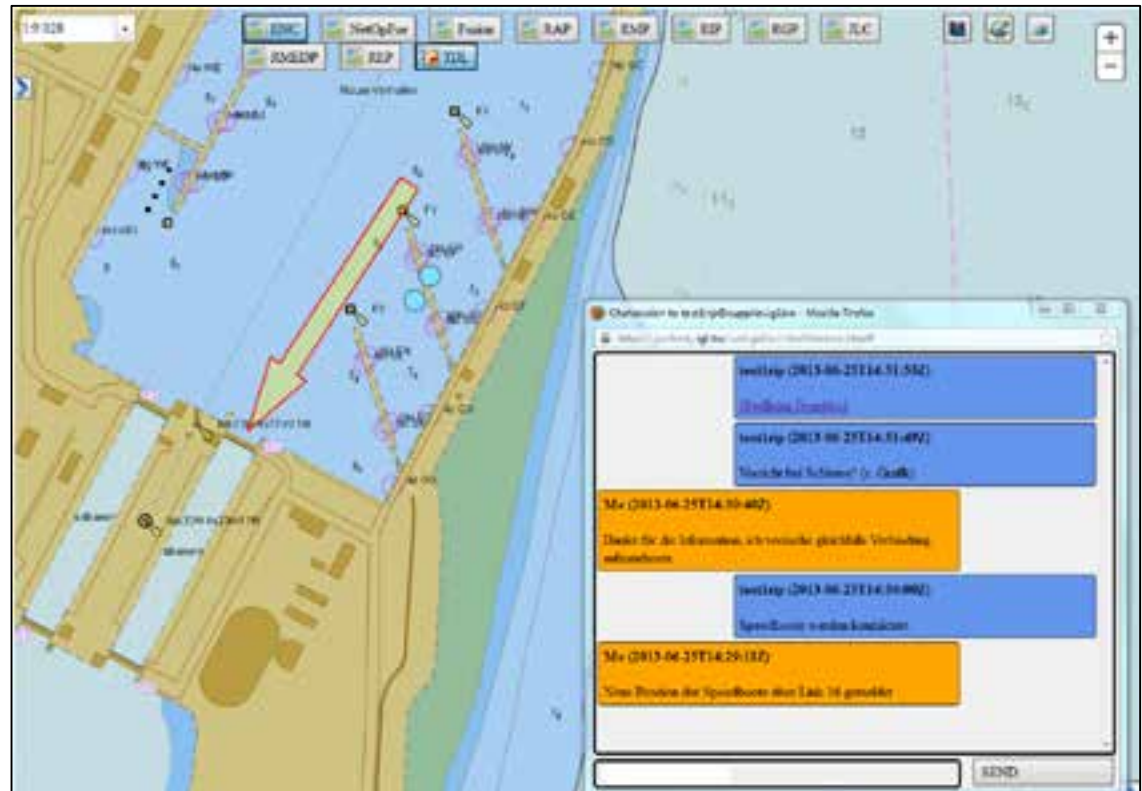
approach

- + ArcGIS platform for integration and development
 - > Simple to use viewers
 - > Multiple information layers
 - > Collaboration



approach

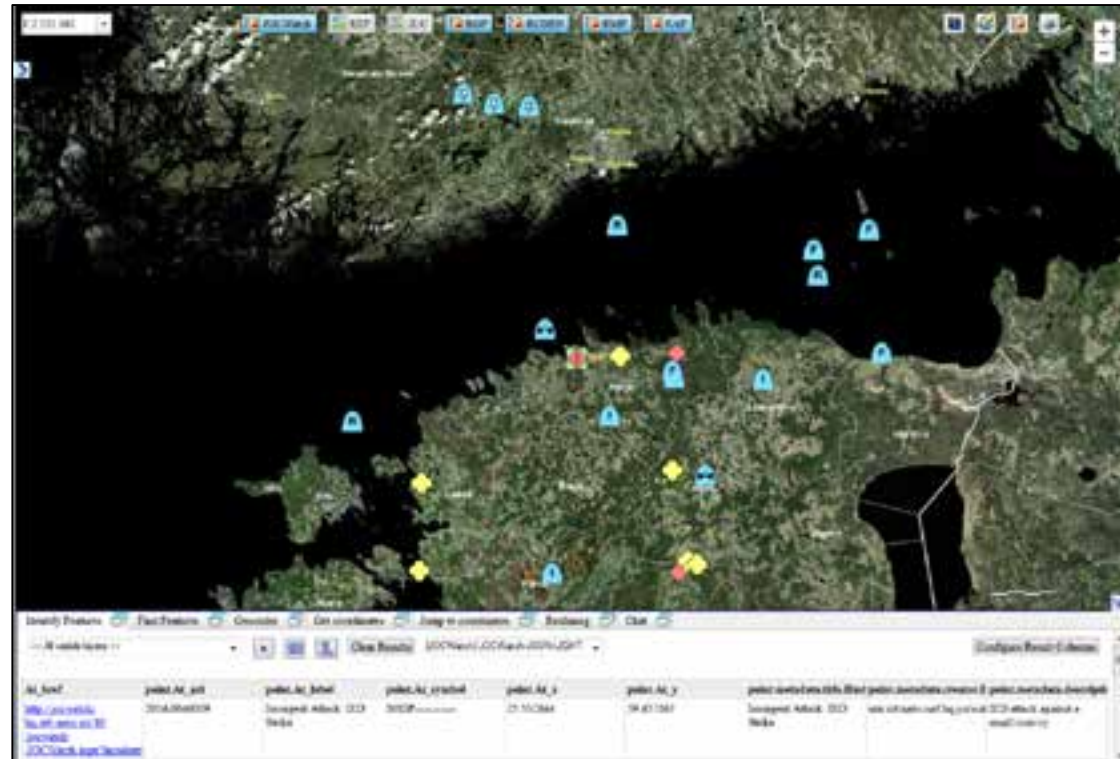
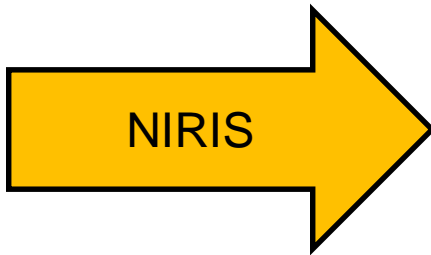
- + Integration of widely-used NATO software
 - > Jchat
 - > JOCWatch



approach

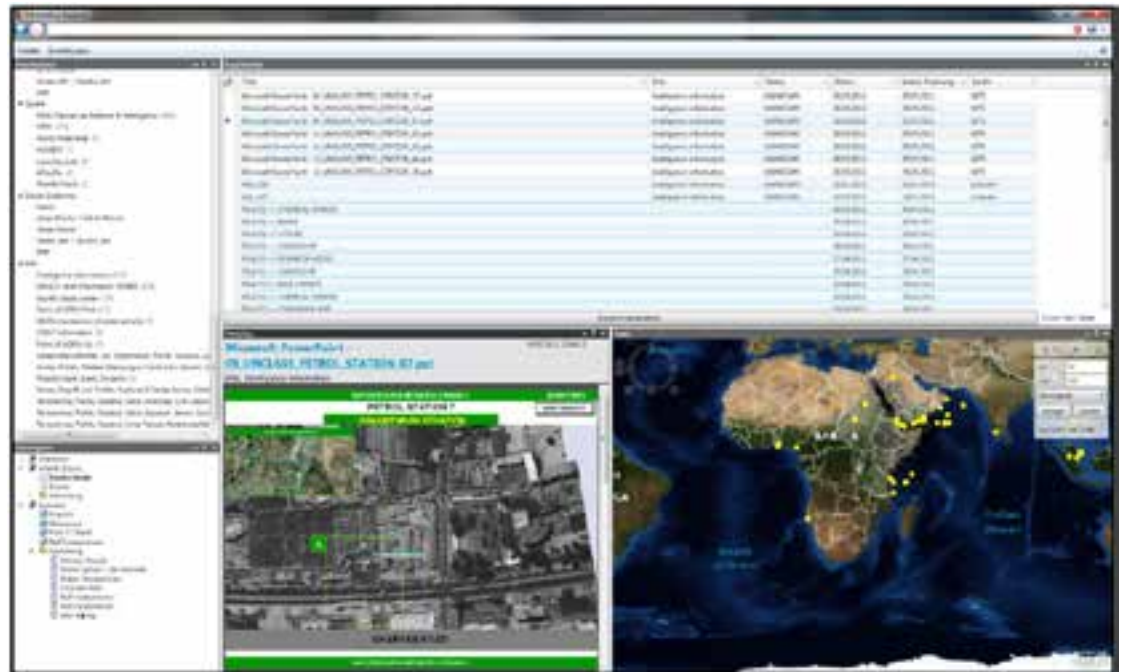
- + Integration of widely-used NATO software
 - > Network interoperable realtime information services

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



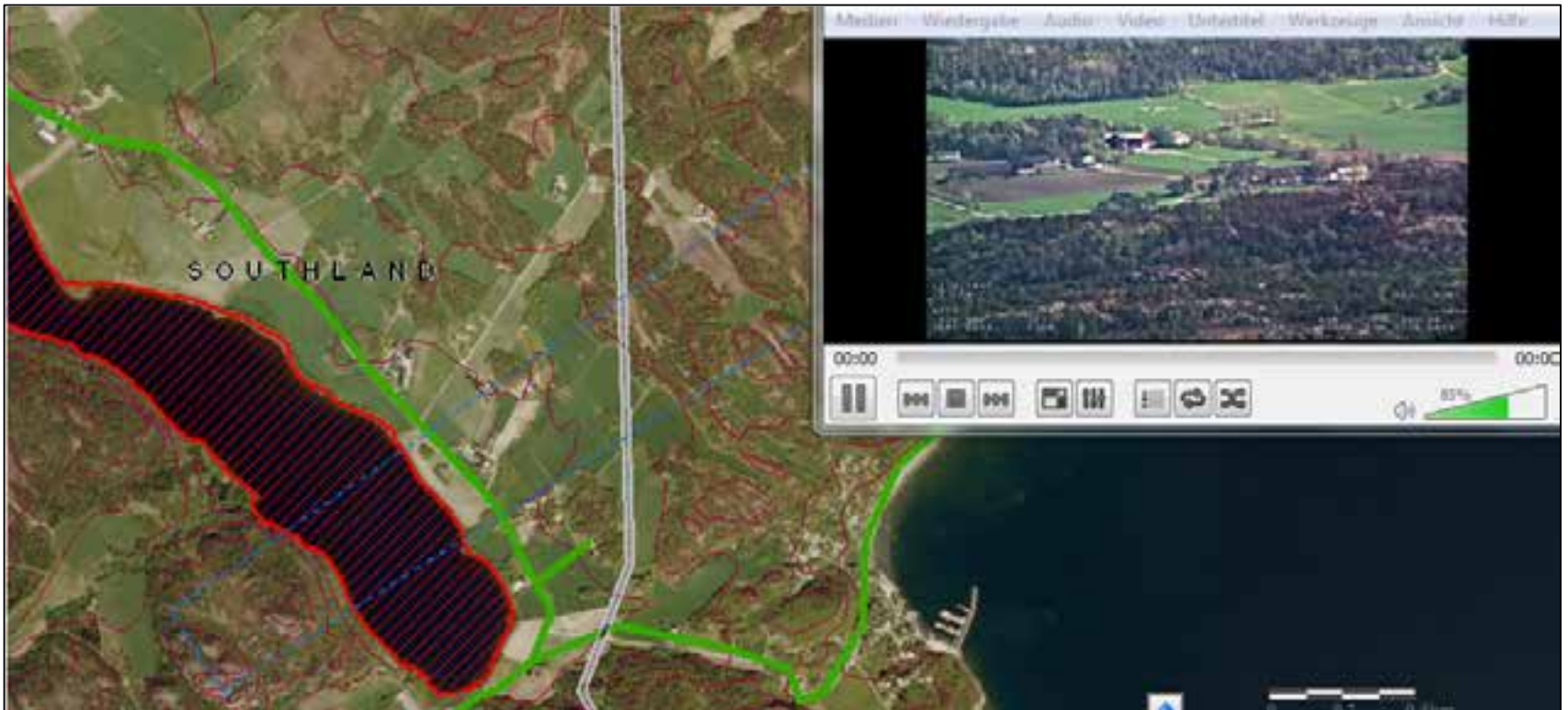
approach

- + Smart document and message management
 - > Enhanced search
 - > Fast Query including big data environments
 - > Automated workflows
 - > Spatial selection



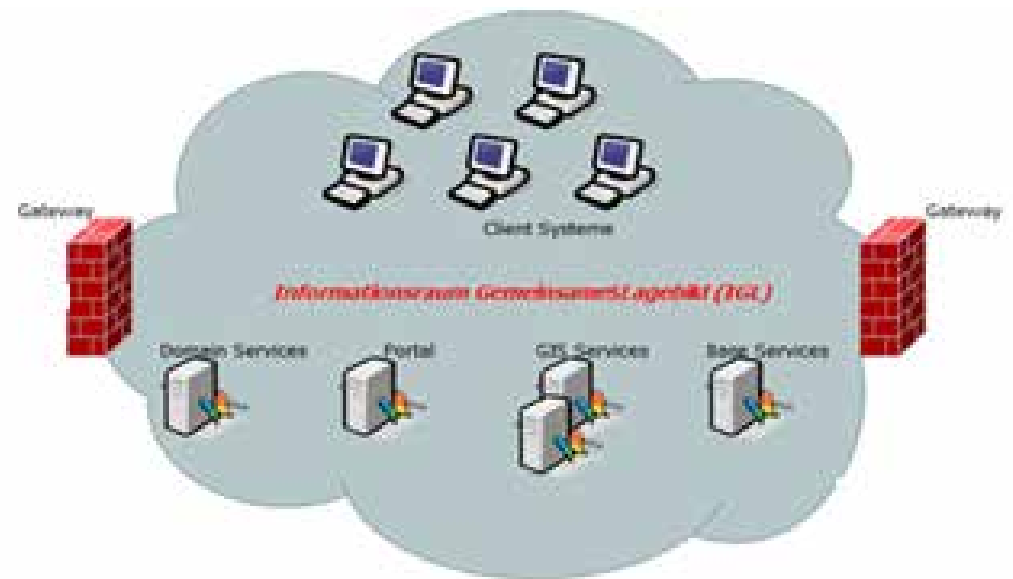
approach

+ JISR integration



approach

- + 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

conclusion

- + 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 platform, 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