



Looking to the Future: Representing Higher Level Planning in a Wargaming or Synthetic Environment

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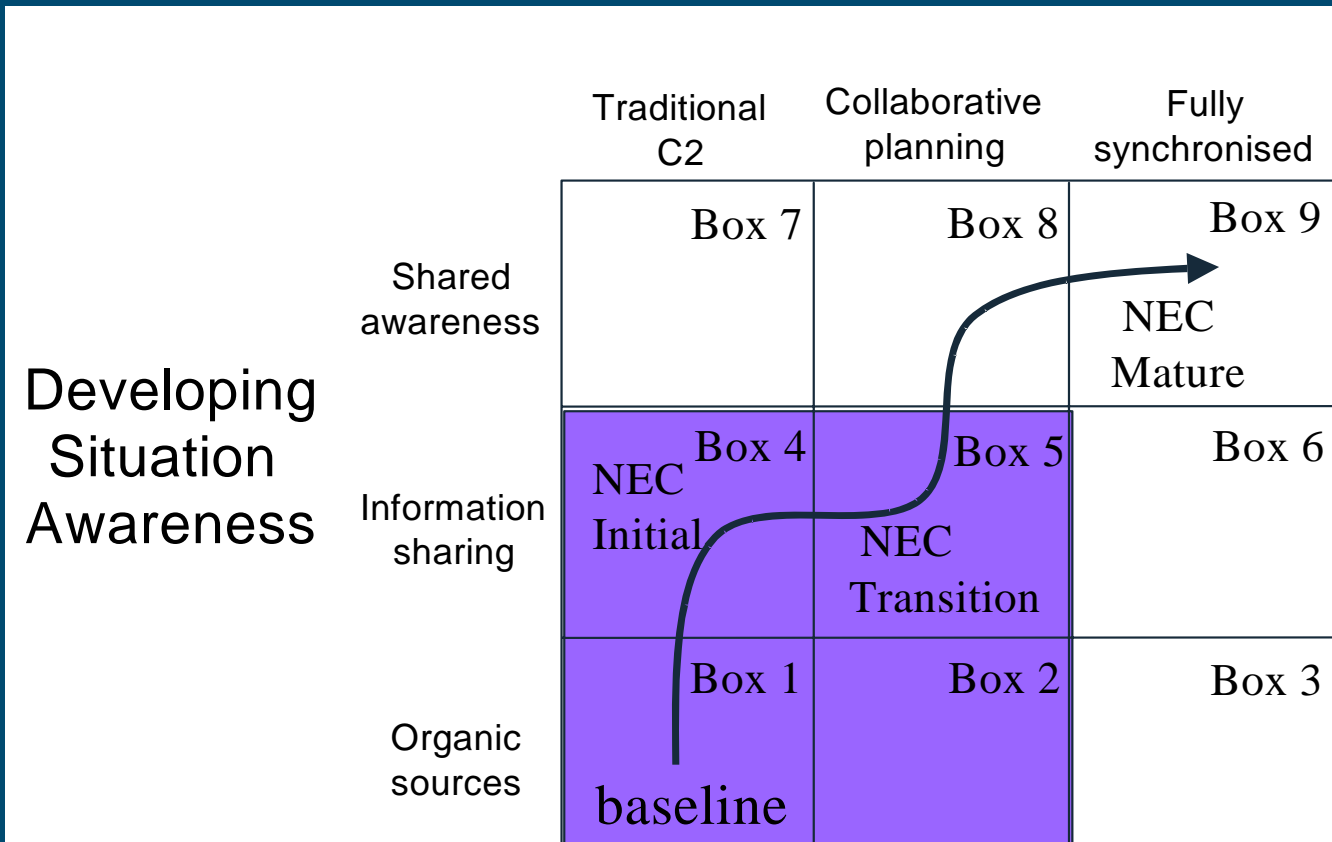
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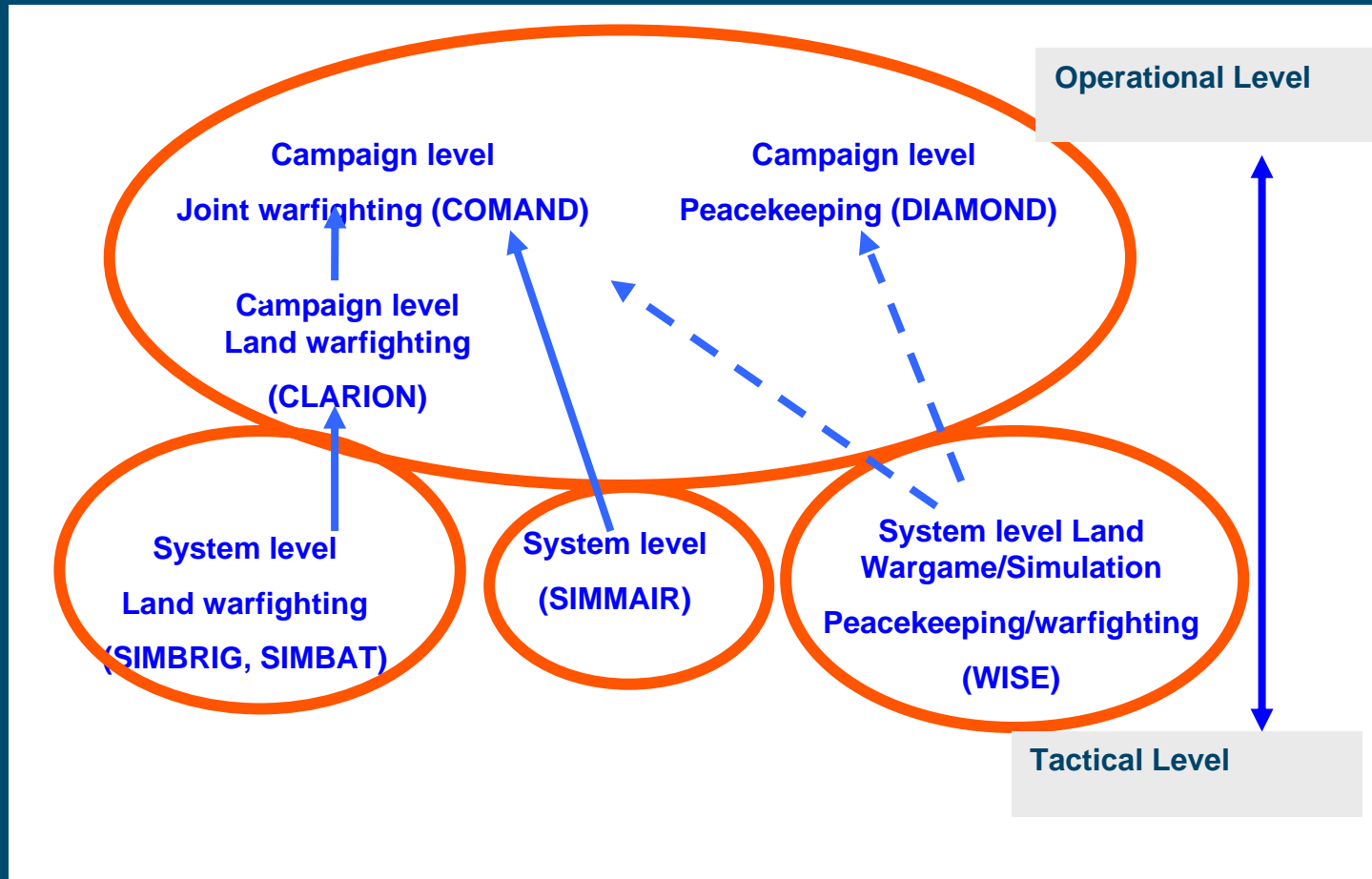
The Changing Context

- JHLOC paints picture of a more complex battlefield and agile, asymmetric threats
- NATO, US, UK Policy & doctrine show that Information Dominance enabled by NEC is key to success
- So...
 - Our modelling tools and skills have to be able to adjust to the new paradigm

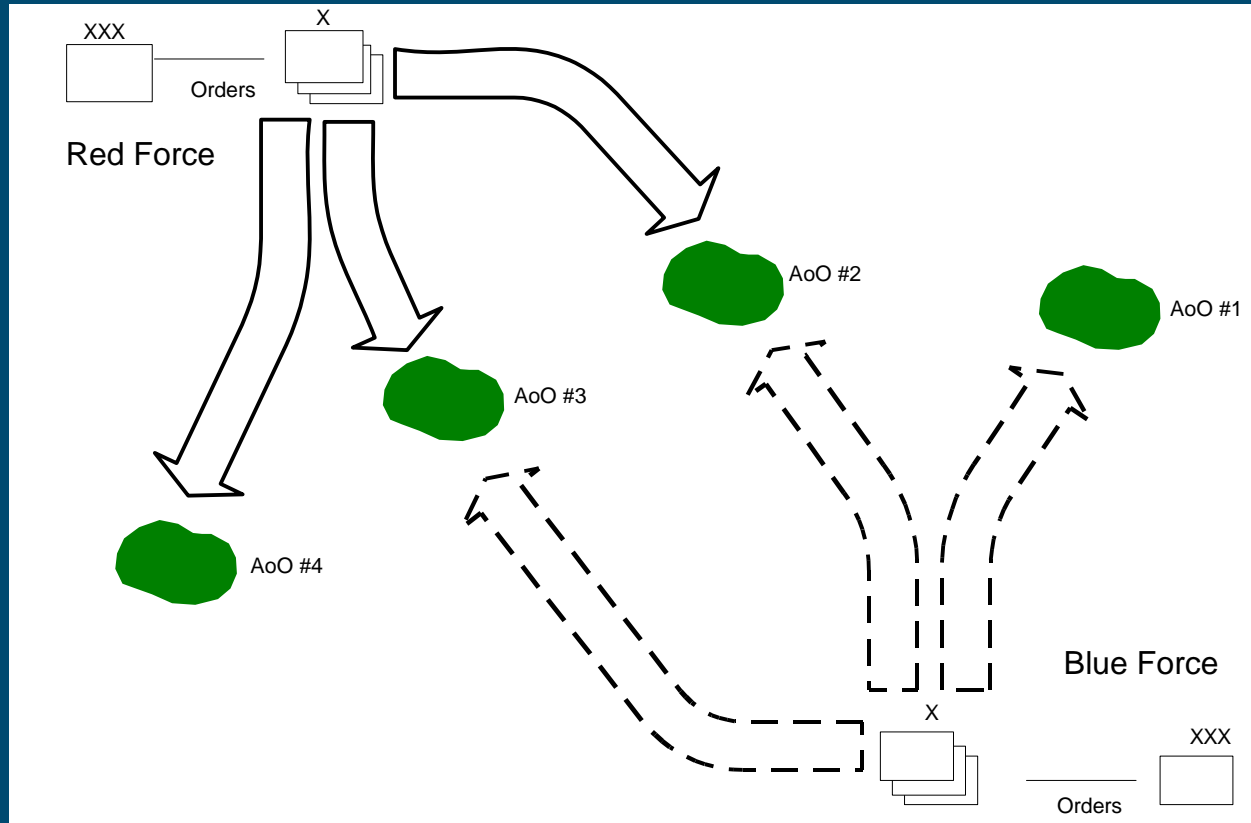
The NEC Journey



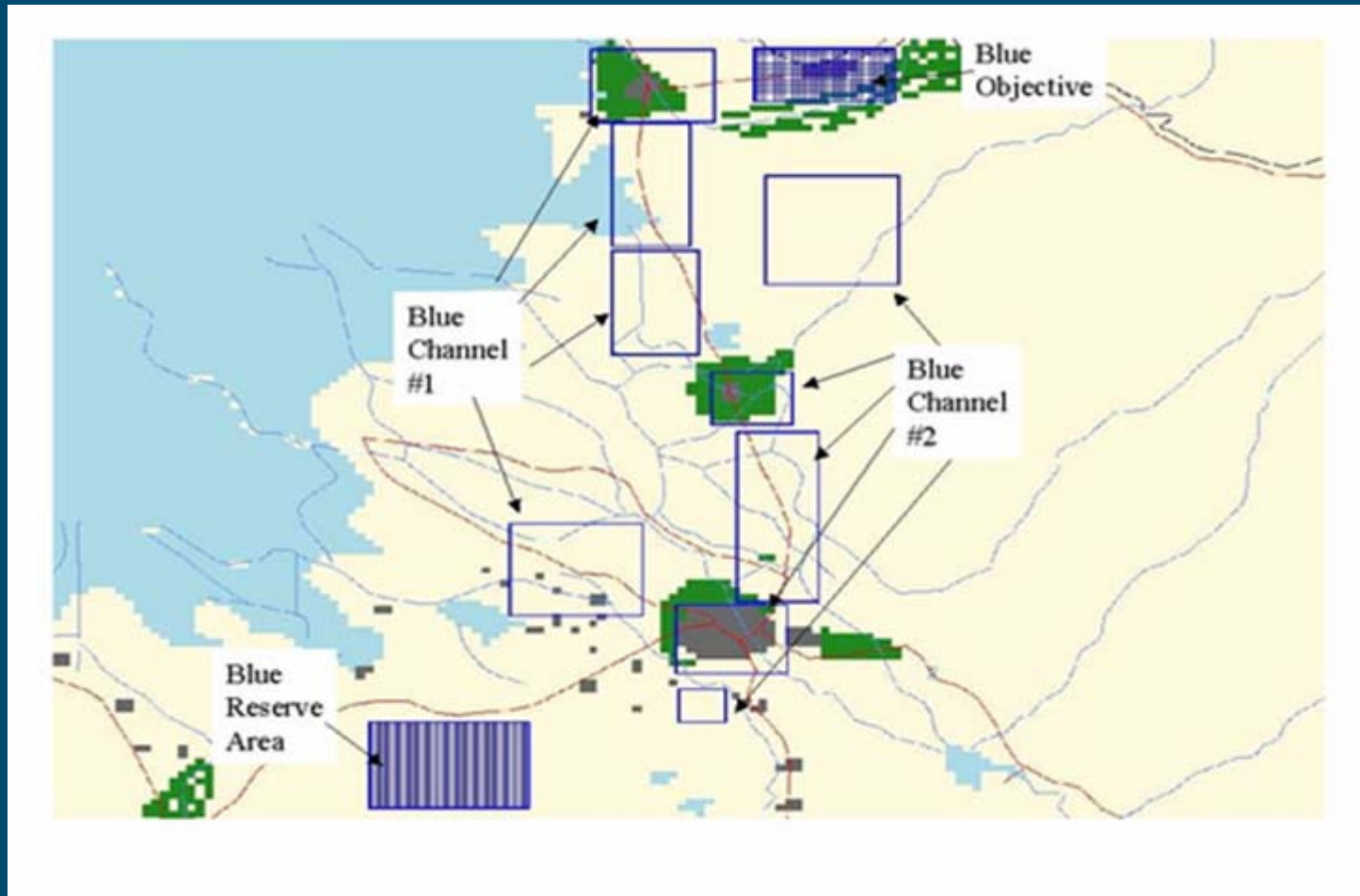
The Core Model Hierarchy



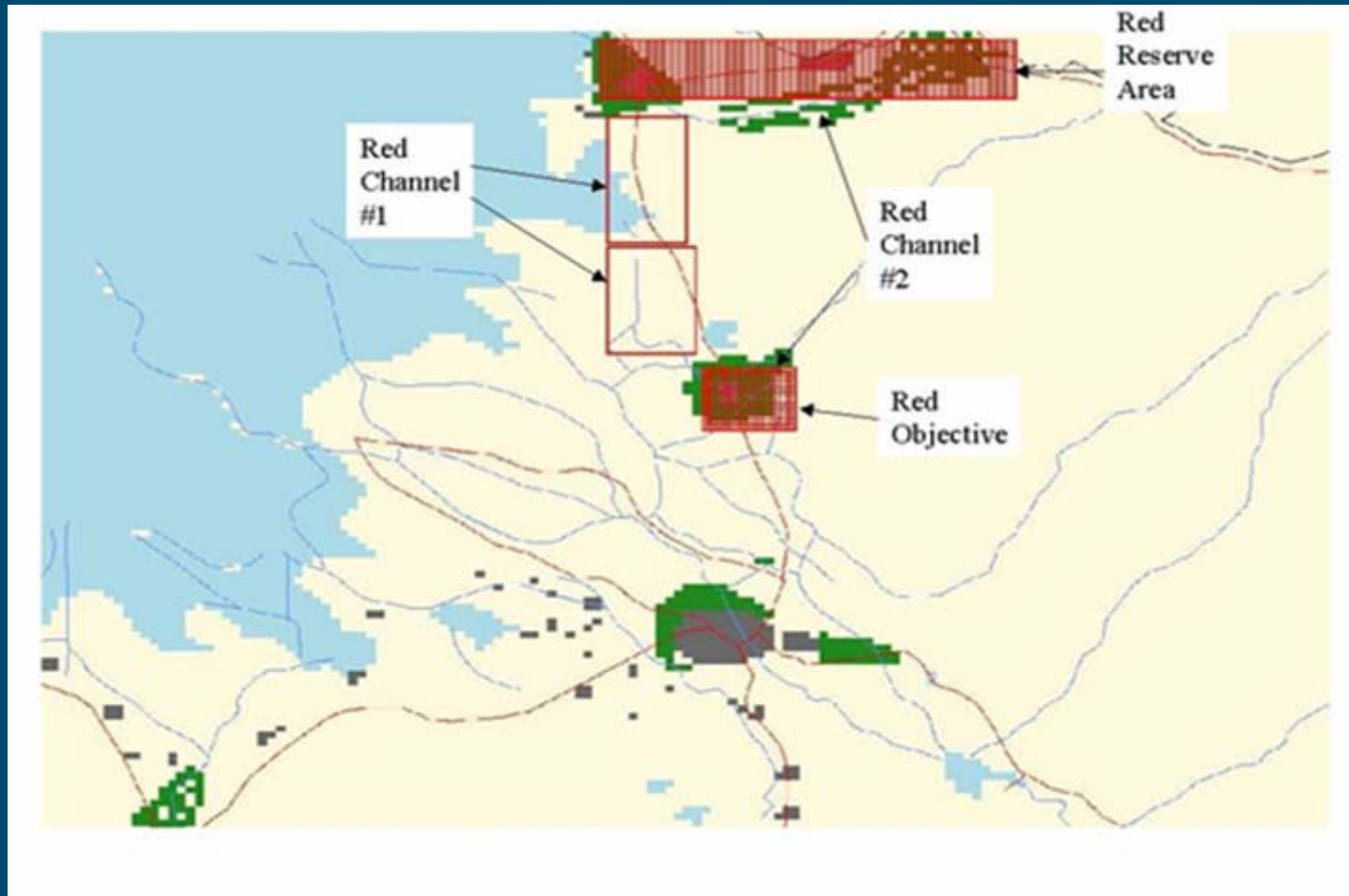
Deliberate Planning



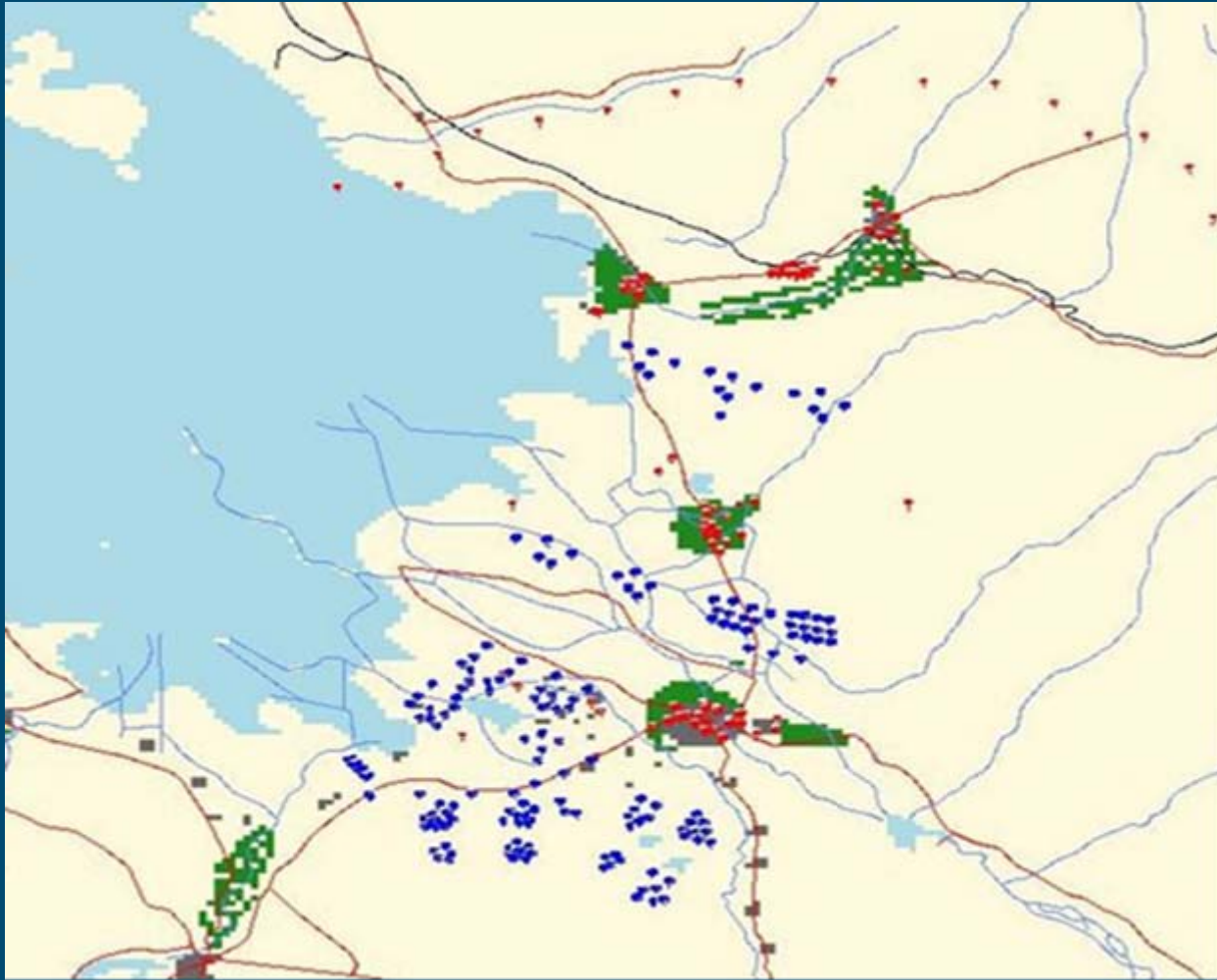
Blue Areas of Operation



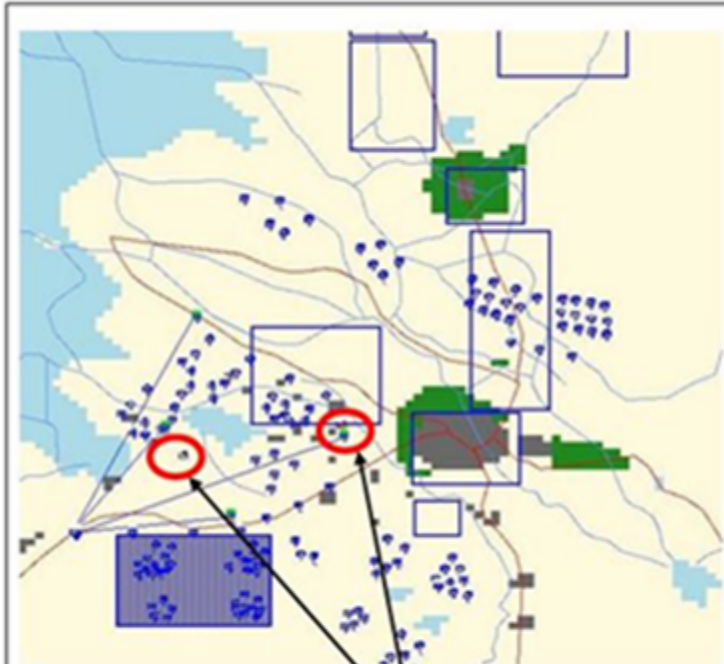
Red Areas of Operation



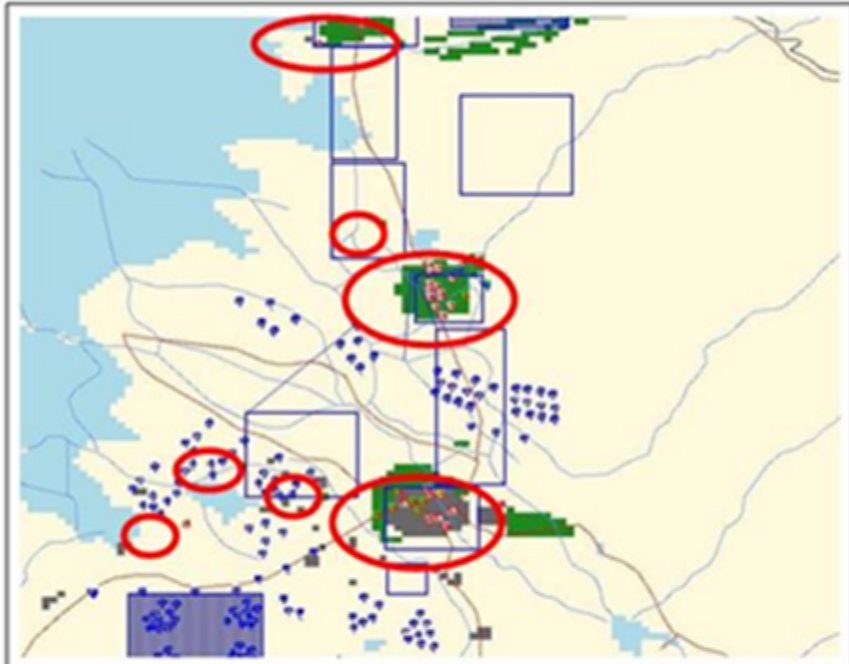
Blue and Red Initial Deployments



Perception Improvement from Sensor Information

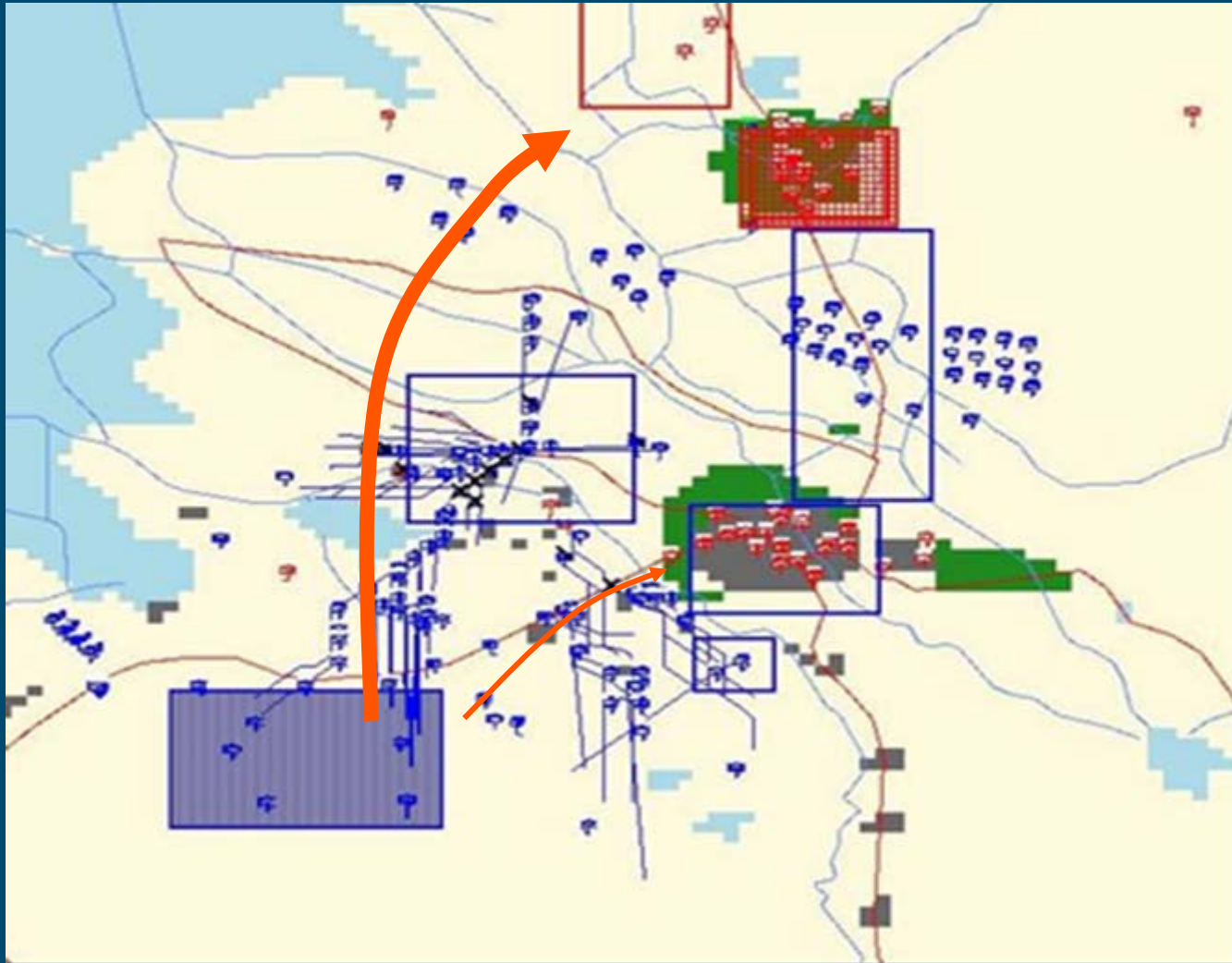


Initial Acquisitions of Enemy Force



Improved perception as sensor units acquire more of the Enemy Force

Implementation of the Plan



Conclusions

- Higher Level Planning can be carried out using genetic algorithms
 - Being exploited in current model developments
- The plan generated made military sense, but requires some refinement