

# Network-Centric Strategic-Level Deception

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# Problem Definition

- ◆ What is network-centric strategic-level deception?
- ◆ What is involved in planning and executing network deception?
- ◆ How should the command and control structure be organized to support NSD?



# Case Studies

## ◆ The London Control Section

- Small Group of Influential Individuals
- Military Activities Conducted around Deception Actions

## ◆ Yom Kippur War

- Highest Levels of Leadership Directly Involved
- Complimentary Political Actions

# Planning and Execution of Deception



## Deceptors

- ◆ Specific network activities intended to manipulate adversarial perceptions and influence actions are called deceptors. The term "deceptor" is applicable to deceptive data, network components, or possibly an entire network.



# Deception Techniques & Deceptors

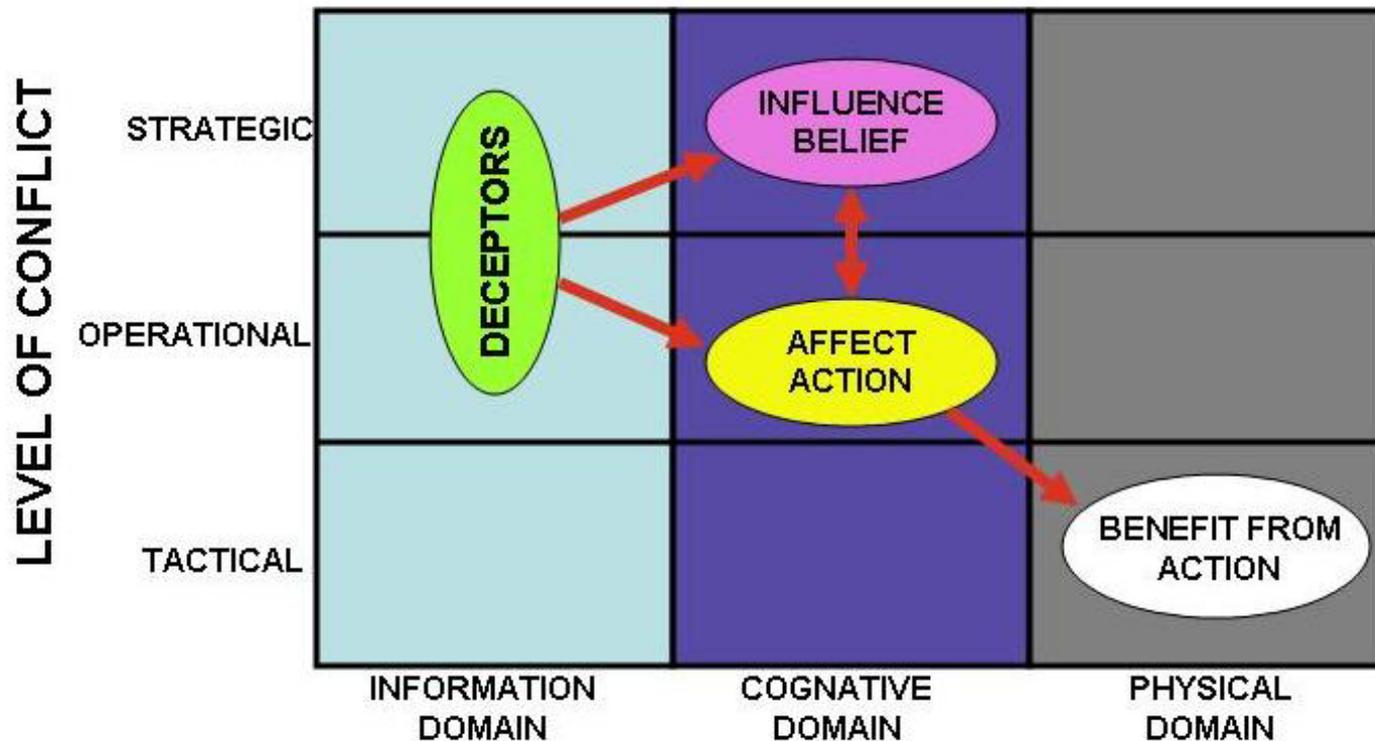
<b>Deception Technique</b>	<b>Battlespace Deception</b>	<b>Deceptor</b>
<b>Camouflage &amp; Concealment</b>	<b>Use of terrain and environment features in effort to hide, blend, or disguise tactical assets and personnel.</b>	<b>Cloaked information, communication assets, or networks that are undetectable or indistinguishable from adjacent superficial networks.</b>
<b>Demonstrations, Feints, or Diversions</b>	<b>Exhibition of military force intended to delude the enemy to an unfavorable course of action.</b>	<b>A network action intended to distract or draw adversarial attention away from an intended target of information.</b>
<b>Displays, Decoys, or Dummy</b>	<b>Authentic or imitation tactical assets and personnel statically displayed to enemy intelligence sensors.</b>	<b>Fictitious network or sub-components serving as a static front or cover purposely exposed to observation.</b>
<b>Mimic, Simulations, Spoofs</b>	<b>Tactical systems and assets that do not exist are projected onto the battlefield for enemy observation.</b>	<b>A network activity conducted to assume resemblance of a trusted relationship in order to either protect or exploit information, computers, or networks.</b>



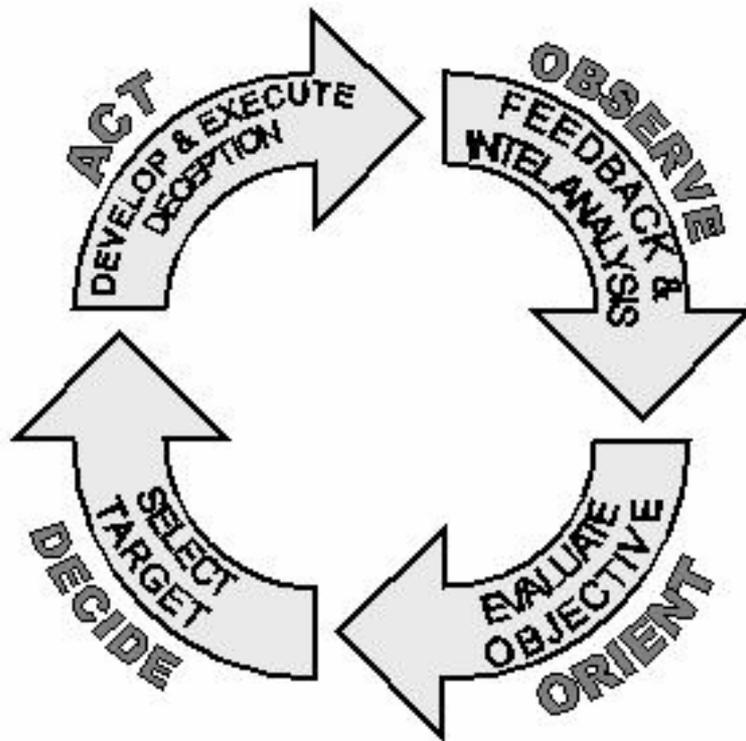
# Deception Techniques & Deceptors

<b>Deception Technique</b>	<b>Battlespace Deception</b>	<b>Deceptor</b>
<b>Dazzle or Sensor Saturation</b>	<b>Screening activity that causes temporary loss of visual or sensor surveillance degrading enemy targeting ability.</b>	<b>Screening action that disrupts sensor acuity, temporarily degrading an opponent's intelligence collection ability.</b>
<b>Disinformation or Ruses</b>	<b>Tactical action involving fraudulent information or maneuvers intended to deceive adversarial intelligence collection and leadership.</b>	<b>Fraudulent network assets or information purposely exposed to adversarial sensors in order to exploit or gain advantage.</b>
<b>Conditioning</b>	<b>Tactical actions that generate and subsequently exploit a target's preexisting bias, belief, or habit.</b>	<b>Network operations or communication activities intended to establish, reaffirm, and exploit adversarial bias and beliefs.</b>

# Levels of Conflict



# OODA Loop and the Deception Process



- Evaluate Objective
- Select Target
- Develop & Execute Deception
- Feedback & Intelligence Analysis

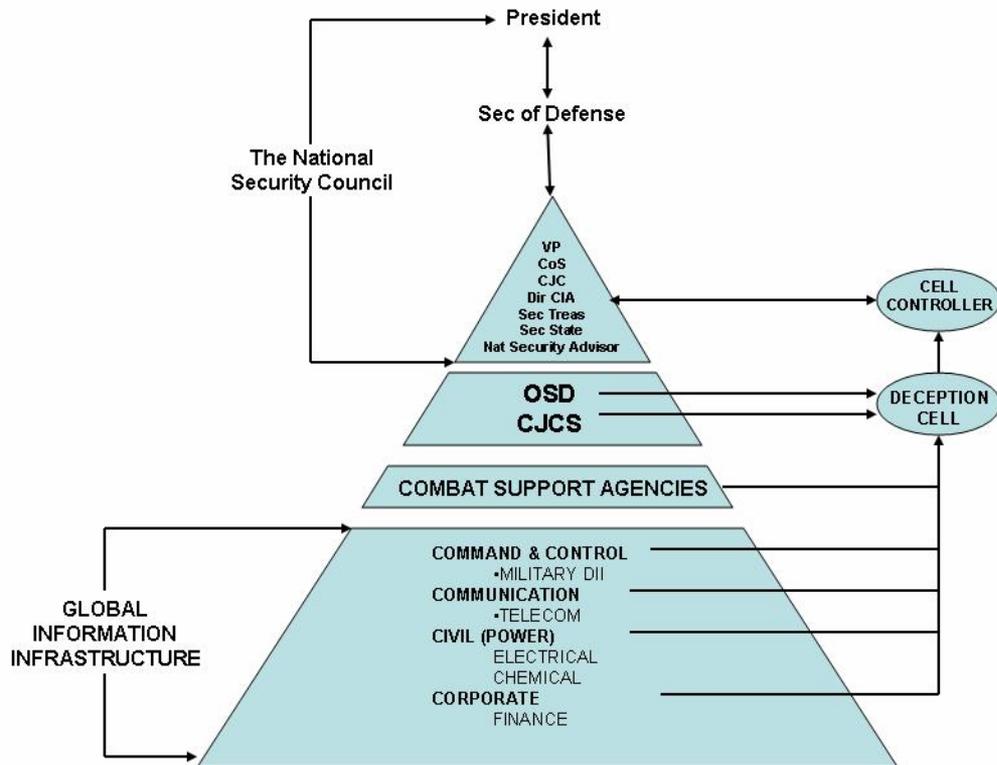


# Requirements for NSD

- ◆ Central Organization and Control
- ◆ Planning, Preparation, and Timing
- ◆ Credibility, Confirmation, and Flexibility



# NSD Management Model



## DECEPTION CELL

- ◆ Banking & Finance
- ◆ Transportation
- ◆ Manufacturing
- ◆ Telecom
- ◆ Government Agencies
- ◆ Military
- ◆ Civil Infrastructure
- ◆ Academia

# Deception Campaign

## Model Validation



### ◆ Story-Line

- Objective: Conflict Deterrence
- Target: Country X Leadership
- Develop Campaign: U.S. possesses EMP resistant integrated circuit technology
- Execution: DoD, Academia, Financial, Gov't Labs, and Corporate Networks



# Conclusion & Summary

## ◆ NSD

- Succession of network measures conducted with the purpose to manipulate perceptions