Theatre Information Architectures

Dr Dave Sloggett &
Brig (Retd) Chris Holtom

Anite Public Sector Ltd
### The Theatre Information Architectures

**1. REPORT DATE**  
23 AUG 2004

**2. REPORT TYPE**  
N/A

**3. DATES COVERED**  
-

**4. TITLE AND SUBTITLE**  
Theatre Information Architectures

**5a. CONTRACT NUMBER**  
-

**5b. GRANT NUMBER**  
-

**5c. PROGRAM ELEMENT NUMBER**  
-

**5d. PROJECT NUMBER**  
-

**5e. TASK NUMBER**  
-

**5f. WORK UNIT NUMBER**  
-

**6. AUTHOR(S)**  
-

**7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)**  
Anite Public Sector Ltd

**8. PERFORMING ORGANIZATION REPORT NUMBER**  
-

**9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)**  
-

**10. SPONSOR/MONITOR’S ACRONYM(S)**  
-

**11. SPONSOR/MONITOR’S REPORT NUMBER(S)**  
-

**12. DISTRIBUTION/AVAILABILITY STATEMENT**  
Approved for public release, distribution unlimited

**13. SUPPLEMENTARY NOTES**  
See also ADM001711 Meeting C4ISTAR Requirements: Implementing and Exploiting Technology Solutions, The original document contains color images.

**14. ABSTRACT**  
-

**15. SUBJECT TERMS**  
-

**16. SECURITY CLASSIFICATION OF:**  
<table>
<thead>
<tr>
<th>a. REPORT</th>
<th>b. ABSTRACT</th>
<th>c. THIS PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>unclassified</td>
<td>unclassified</td>
<td>unclassified</td>
</tr>
</tbody>
</table>

**17. LIMITATION OF ABSTRACT**  
UU

**18. NUMBER OF PAGES**  
28

**19a. NAME OF RESPONSIBLE PERSON**  
-

---

Standard Form 298 (Rev. 8-98)  
Prescribed by ANSI Std Z39-18
The ISTAR Operating Environment

• Since the Cold War:
  – small, fast, surveillance aware targets
  – impact of accountability - collateral damage
  – risk averse conditions
  – multi-sensor platforms and processing
  – near-real time outputs, any time
  – expectations of higher tempo
Who has got it
Who wants it
Who knows who has got it
Who knows who wants it
• Federation of sensors/ fusion centres.
• Use of fusion agents
• Split-based working
• Collaborative production
• Contextually relevant information
Anite Public Sector Ltd
Theatre Architecture Problems

- Complicated networks
- Security levels and access rights
- Data v. information v. intelligence
- Timeliness and response
- Quality control
- Directory to Information
- Communities of Interest
- Collaborative working
- Database maintenance
- Double feed back
Other Problems

- Customer 2 is diverse and numerous
- Emerging doctrine, imminent capability
- Operational experience shared thinly
- Wealth of data, limited fusion capability
- Digitising the “enemy”? 
- Counter-measures and deception v. tempo
Theatre Architecture Problems

- Complicated
- Security levels and access rights
- Data v. information v. intelligence
- Timeliness and response
- Quality control
- Directory to Information
- Communities of Interest
- Collaborative working
- Database maintenance
- Double feed back
Theatre Architecture Problems

- Complicated
- Security levels and access rights
- Data v. information v. intelligence
- Timeliness and response
- Quality control
- Directory to Information
- Communities of Interest
- Collaborative working
- Database maintenance
- Double feedback

Anite Public Sector Ltd
Theatre Architecture Problems

• Complicated
• Security levels and access rights
• Data v. information v. intelligence
• Timeliness and response
• Quality control
• Directory to Information
• Communities of Interest
• Collaborative working
• Database maintenance
• Double feed back

Operational

Procedural
Theatre Architecture Problems

- Complicated
- Security levels and access rights
- Data v. information v. intelligence
- Timeliness and response
- Quality control
- Directory to Information
- Communities of Interest
- Collaborative working
- Database maintenance
- Double feedback

Anite Public Sector Ltd
Part of a Solution

• Where is:
  – A concentration of ISTAR expertise?
  – The only joint ISTAR training done?
  – The only training ISTAR SE?
  – The know-how to build an ISTAR testbed?
  – A need for a Joint ISTAR training SE?
  – A recent operational database (KOSOVO)?
  – A facility ready made to run experiments?
Industry & Malvern

- Where is:
  - there a concentration of ISTAR expertise?
  - The only joint ISTAR training done?
  - The only ISTAR SE?
  - The know-how to build an ISTAR testbed?
  - There a need for a Joint ISTAR training SE?
  - A recent operational database (KOSOVO)?
  - A facility ready made to run experiments?

DISC Chicksands
Evolution not Revolution

But quickly
Theatre Information Architectures

Dr Dave Sloggett &
Brig (Retd) Chris Holtom

Anite Public Sector Ltd