Sustaining Army Readiness
Installation Status Report
### Sustaining Army Readiness Installation Status Report

**Abstract**

Presented at the NDIA Environment, Energy Security & Sustainability (E2S2) Symposium & Exhibition held 9-12 May 2011 in New Orleans, LA.
Components of ISR

Installation Status Report

ISRWEB

ISR-I (Infrastructure)

ISR-NI (Natural Infrastructure)

ISR-S (Services)

Built Infrastructure
Condition / Quality Cost Model

Natural Infrastructure
Capability / Capacity

Installation Service
Quality / Cost

“9” Facility Classes
- Operations & Training
- Maintenance & Production
- Mobility
- RDT&E
- Supply
- Medical
- Administrative
- Housing & Community
- Utilities & Grounds Improvement

Major Resource Categories
- Land
  - Training Areas & Ranges
  - Encroachment
- Air
  - Air Shed
  - Airspace
- Energy
  - Energy Security
  - Renewable Energy
- Water
  - Potable Water
  - Wastewater / Storm Water

Major Service Areas
- Command Support
- Housing
- Soldier and Family Support
- Logistics
- Infrastructure Support
- Natural Infrastructure Support
- Security Services
- Information Technology
- Human Resources Management
- Mission Support *
- Health Services *

*Non-BOS Major Service Areas
Why ISR-NI?

Sizing Variables:

- Frequency
- Number
- Scale / Intensity
- Concurrency
- Ops Risks
- Duration
- Policy
- Environment
- Partner Capabilities
• Natural Infrastructure provides the following:
  – Quantitative and spatial analysis through an interactive GIS Viewer
  – Ability to perform ‘what-if’ scenarios to provide visibility of mission impacts before they occur
    • Mission essential indicators and risk scores help assign priority for mitigation measures
  – Status of actionable sustainability initiatives and milestones
  – Consolidation of existing natural asset data (e.g., training areas, energy, water, airspace) into an ‘early warning system’
ISNR-NI Framework

Mission Support
- Land Resources
- Water Resources
- Air Resources
- Energy Resources

Sustainability
- Land Resources
- Water Resources
- Air Resources
- Energy Resources
- Implementation and operations
- Materials Management

Environmental Quality
- Land Resources
- Water Resources
- Implementation and operations

Commander’s Overall Readiness Assessment
At Installation level only

Current Platform Readiness
Future Platform Readiness
Environmental Status
ISR-NI Data Requirements

- ISR-NI determines natural asset capability via Performance Measures
  - ISR-NI Measures
    - 170 performance measures for NonVirtual Organizations
    - 86 performance measures for Virtual Organizations
  - Auto-populate from existing feeder systems (data consistency)
  - Installation data within system persists from year to year, validate and update each cycle
  - Rating criteria aligns with Army standards
  - ISR-NI requires installation support to be successful – YOU know your installation and how ISR-NI can best serve you
### Measures / Functional Leads

<table>
<thead>
<tr>
<th>Primary Functional Organization - Mission Support Measures</th>
<th># of Measures</th>
<th>Percent of Total Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAIO</td>
<td>6</td>
<td>11.8%</td>
</tr>
<tr>
<td>DPTMS</td>
<td>3</td>
<td>5.9%</td>
</tr>
<tr>
<td>DOL</td>
<td>3</td>
<td>5.9%</td>
</tr>
<tr>
<td>DPW</td>
<td>36</td>
<td>70.6%</td>
</tr>
<tr>
<td>Master Planning*</td>
<td>3</td>
<td>5.9%</td>
</tr>
<tr>
<td><strong>Total of 51 Measures</strong></td>
<td><strong>51</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Primary Functional Organization - Sustainability Measures</th>
<th># of Measures</th>
<th>Percent of Total Measures</th>
</tr>
</thead>
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<td>PAIO</td>
<td>6</td>
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<td><strong>100%</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Primary Functional Organization - Environmental Quality</th>
<th># of Measures</th>
<th>Percent of Total Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPW</td>
<td>13</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Total of 13 Measures</strong></td>
<td><strong>13</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*These functional leads are identified for assistance and are listed for informational purposes.*
ISR-NI Connection to Army Databases

ISR-Natural Infrastructure Topload Data Sources

ACSIM Databases
- ISR-I
- ISR-S
- AEWRS
- IGI&S
- SWARWeb

Commercial
- Claritas

ATSC Databases
- ARRM

Overall – 30% Measures Toploaded
- Mission Support – 23 of 106 Measures (21.7%)
- Sustainability – 17 of 51 Measures (33.3%)
- Environmental Quality – 11 of 13 Measures (84.6%)

Output
- IMCP
- IGI&S
- OSD-NIM
- G3 SRR (FY10)
# Measure Rating Definitions

## Color Ratings

<table>
<thead>
<tr>
<th>Color</th>
<th>Score</th>
<th>Rating Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green +:</td>
<td>1</td>
<td>Additional Capability or Outstanding Performance</td>
</tr>
<tr>
<td>Green:</td>
<td>1</td>
<td>Supports current mission without work-arounds (adjustments that can increase time and/or cost)</td>
</tr>
<tr>
<td>Amber:</td>
<td>2</td>
<td>Minimal or moderate work-arounds (adjustments that can increase time and/or cost) required to accomplish mission</td>
</tr>
<tr>
<td>Red:</td>
<td>3</td>
<td>Cannot fully support current mission, or may require significant work-arounds (adjustments that can increase time and/or cost) to accomplish mission</td>
</tr>
<tr>
<td>Black</td>
<td>4</td>
<td>Cannot support mission</td>
</tr>
</tbody>
</table>
Mission Support Results

<table>
<thead>
<tr>
<th>Resource Category</th>
<th>Rating</th>
<th>Score</th>
<th>Condition Rating Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land (1)</td>
<td>C2</td>
<td>1.63</td>
<td>4.0 C4 3.5 C3 2.5 C2 1.5 C1 1.0</td>
</tr>
<tr>
<td>Air (2)</td>
<td>C1</td>
<td>1.21</td>
<td>4.0 C4 3.5 C3 2.5 C2 1.5 C1 1.0</td>
</tr>
<tr>
<td>Water (3)</td>
<td>C1</td>
<td>1.20</td>
<td>4.0 C4 3.5 C3 2.5 C2 1.5 C1 1.0</td>
</tr>
<tr>
<td>Energy (4)</td>
<td>C1</td>
<td>1.41</td>
<td>4.0 C4 3.5 C3 2.5 C2 1.5 C1 1.0</td>
</tr>
</tbody>
</table>

Sliding Scale Report displays numerical value within condition rating spectrum
## Installation Status Report

### Land Results

<table>
<thead>
<tr>
<th>Resource Category</th>
<th>Resource SubCategory</th>
<th>Rating</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land (1)</td>
<td>Encroachment (02)</td>
<td>C1</td>
<td>1.26</td>
</tr>
<tr>
<td>Land (1)</td>
<td>Trng Areas &amp; Ranges (01)</td>
<td>C2</td>
<td>1.87</td>
</tr>
<tr>
<td>Land (1)</td>
<td>Land Use &amp; Planning (03)</td>
<td>C2</td>
<td>1.65</td>
</tr>
<tr>
<td>Land (1)</td>
<td>Land (00)</td>
<td>C4</td>
<td>1.29</td>
</tr>
<tr>
<td>Land (1)</td>
<td>Cultural &amp; Natural Res (05)</td>
<td>C1</td>
<td>1.17</td>
</tr>
</tbody>
</table>
FY11 Training Areas and Ranges (MS101)

- Shortfall of maneuver training land on majority of installations due to increase in doctrinal requirements

- 25% of installations have issues that can significantly impact training in the next 5 years. Examples include:
  - Training Land Shortage
  - Threatened and Endangered Species
  - Environmental Issues
  - Water Shortage
## FY11 Training Areas and Ranges (MS101)

<table>
<thead>
<tr>
<th>Reason for FTX Workaround</th>
<th>Number of Inst</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weather issues (too dry, too hot, too windy)</td>
<td>27</td>
</tr>
<tr>
<td>Vegetation issue (too thick/dense)</td>
<td>18</td>
</tr>
<tr>
<td>Threatened and Endangered Species Issue</td>
<td>15</td>
</tr>
<tr>
<td>Wetland issues</td>
<td>13</td>
</tr>
<tr>
<td>Smoke/Obscurant issues</td>
<td>11</td>
</tr>
<tr>
<td>Noise Issues</td>
<td>13</td>
</tr>
<tr>
<td>Frequency issues</td>
<td>10</td>
</tr>
<tr>
<td>Cultural Site Issues</td>
<td>10</td>
</tr>
<tr>
<td>Air Space issues</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
</tr>
<tr>
<td>Dust</td>
<td>2</td>
</tr>
</tbody>
</table>
“Map It” Functionality allows the user to validate the Auto-Populated Mission Support Land Measures.
FY11 Fenceline Encroachment (MS102)

• 41% of installations have contours that go off-post
• 62 installations have approximately 2 million acres under administrative control for training if mitigation measures occurred
• Future Encroachment – 45% of installations estimated to have significant population growth outside the base boundary in the next five years
Questions?