Supply Chain Awareness Reporting (SCARe)
Supply Chain Awareness Reporting

**Input**
- BOMs
- Procurement Records
- Part Photos

**Identify Internal Supply Chain Specifics**
- Corporate/Design/Engineering
- Raw Materials/Equipment
- Software/IP
- Fab/Assembly/Test
- Warehouse/Distribution

**Identify External Supply Chain Drivers**
- Board Members/Executives
- Customers/Sales
- Partnerships/Joint Ventures
- Contracts/Users
- Litigation
- Shareholders

**Compile Narrative**
- Foreign Affiliations
- Counterfeit Risk
- Obsolescence
- Buyouts
- Sales Declines
- IP Access/Site Security
- Location Based Risk Factors

**Output**
- Report areas of interest for assessment by LE/IC/TAC

---

Statement A: Approved For Public Release
The Supply Chain Specifics

- Changes to materials or processes that may compromise function or reliability.
- Headquarters and country of incorporation.
- Largest national producers of raw material for production.
- Design Locations
- Design Tools
- Fabrications Locations
- Packaging Locations
- Test Locations
- Part Markings
- Warehouse Locations
- Third Party IP
- Equipment and Material Suppliers
- Sales Offices
- Authorized and Independent Distributors
- Obsolescence
- Counterfeit or Clone Activity
- Contractor/Integrator
Distributor Analysis

- **Authorized**
- **Reliable**
- **Risky**

How risky are they?

Who has the part for sale?

Broker Listing Services:
- NC
- BF
- IC
- ERAI

Statement A: Approved For Public Release
Supply Chain Drivers

- Primary Customers
- Sales by Region
- Partnerships
- Joint Ventures
- Previous Federal Contracts
- Other DoD Users of the Device
- Past or Pending Litigation (For/ Against)
- Mergers and Acquisitions
- Management Staff/Board of Directors
- Primary Shareholders
Design and Engineering
<table>
<thead>
<tr>
<th>Index</th>
<th>Title</th>
<th>Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI</td>
<td>Corruption Perception Index</td>
<td>Transparency International</td>
</tr>
<tr>
<td>RPR</td>
<td>Regional Political Risk Index</td>
<td>PRS Group</td>
</tr>
<tr>
<td>FSI</td>
<td>Fragile State Index</td>
<td>Fund for Peace</td>
</tr>
<tr>
<td>PSAVI</td>
<td>Political Stability and Absence of Violence Index</td>
<td>World Bank</td>
</tr>
<tr>
<td>GEI</td>
<td>Government Effectiveness Index</td>
<td>World Bank</td>
</tr>
<tr>
<td>RQI</td>
<td>Regulatory Quality Index</td>
<td>World Bank</td>
</tr>
<tr>
<td>ROL</td>
<td>Rule of Law Index</td>
<td>World Bank</td>
</tr>
<tr>
<td>NDRI</td>
<td>Natural Disaster Risk Index</td>
<td>United Nations University</td>
</tr>
<tr>
<td>USIII</td>
<td>U.S. Chamber International IP Index</td>
<td>U.S Chamber of Commerce</td>
</tr>
</tbody>
</table>
Example

Step 1: Base Map

- Foundry
- Shipping
- Design
- Tools
- Software
- Assembly
- Test
- Material
- IP

Statement A: Approved For Public Release
Step 2: Relationships
Example

Step 3:
Device Data

Diagram:
- Device A
- Foundry
- Shipping
- Design
- Tools
- Software
- Counterfeit
- Vulnerability
- Test
- Material
- IP
- Assembly
- Obsolescence
- Product Changes

Statement A: Approved For Public Release
Example

Step 4: Analyst Input

Device A

- Foundry
- Shipping
- Design
- Tools
- Software
- Material
- IP
- Counterfeit
- Vulnerability
- Test
- Obsolescence
- Product Changes
Example

Step 5: Aggregate

Diagram:
- Device A
- Device B
- Device C
- Foundry
- Assembly
- Test
- Shipping
- Design
- Tools
- Software
- Material
- IP
Example

Step 5: Display

- 24% Obsolete
- 13% GIDEP Alert
- 9% Packaged by Amkor
- 8% Unprocurable
- 21% Designed in China
- 38% Sole Source
- 68% fabricated in Taiwan
- 3% Product Change in last 6 months
- 7% Cloned
- 1% Known Vulnerability
- 31% Copper Bond Wire
- 14% High Risk for Counterfeit
- 6% Long Lead