



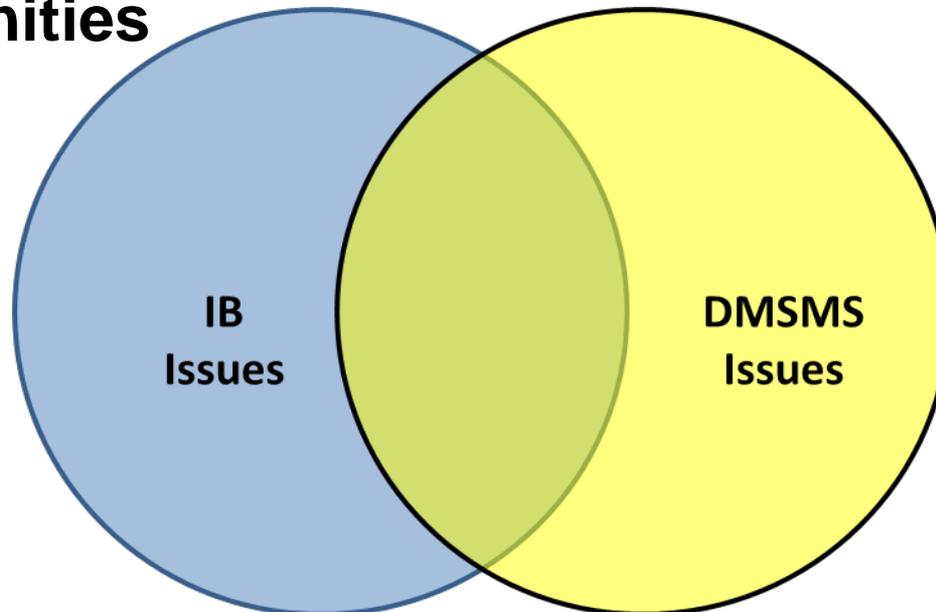
**Proactive Parts Management
in Collaboration with the
Industrial Base Community**

**PSMC Meeting
Seattle, Washington
November 3-5, 2015**

IDA

Background

- **There are overlapping interests between the Industrial Base (IB) and Diminishing Manufacturing Sources and Material Shortages (DMSMS) communities**



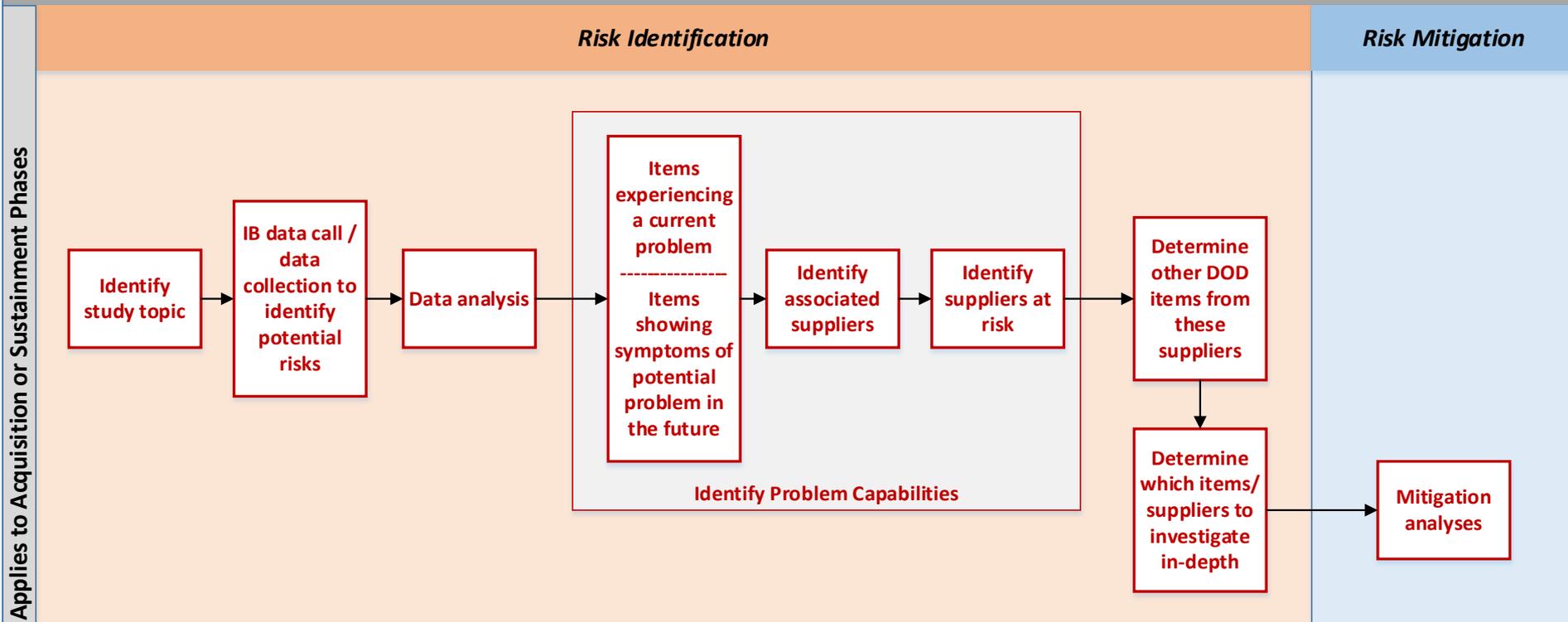
- **Overlap increases when risks taken into account**

Premise

- **The ability to identify future part availability risks can be improved if interfaces are developed with ongoing industrial base studies**
- **Risks are posed by—**
 - **Item criticality**
 - **Supply Chain**
 - **Time to Implement a Resolution**
- **These risks can be considered in part selection**

The Industrial Base Study Process

Conceptual Flow of the IB Study Process



Identify Study Topic

- **Studies may be sector based or may focus on critical items in the supply chain**
- **Reasons for conducting a study**
 - **Customer identification of a specific problem**
 - **Broad indicators or even the perception of a potential problem**
 - **Qualitative or quantitative determination of a concern**
 - **Inability to make arrangements for the supply of critical go-to-war items during a future contingency**
 - **Need to develop or update DOD's understanding of the health of some aspect of the industrial base without any indication of a problem**

Data Collection and Analysis

- **Data collected to determine the potential risk areas**
 - Sources include program offices, commercial and/or defense industry, the DOD/service supply system or some combination thereof
- **Analyses conducted to highlight potential risks**
 - Could be item-based, supplier-based, or both
 - Analyses could be based on data in the DOD supply system
 - May simply be information from the program office

Identify Problem Capabilities

- **Based on data analysis, one or more problem capabilities (e.g., design capabilities, industrial capabilities) are identified**
- **These problem capabilities correspond to issues pertaining to:**
 - **At-risk items**
 - **At-risk suppliers**

Identify Problem Items

- **Data sources may be asked to identify—**
 - **Critical items where they are experiencing a problem, e.g.,—**
 - **Obsolescence**
 - **Substantial backorders**
 - **Unusually long lead times, etc.**
 - **Items showing symptoms of potential problems in the future**
- **Primary sources for information on item-based risks, due to obsolescence and the potential for obsolescence, are program offices and industry and the supply system**

Identify At-Risk Suppliers

- **Suppliers of interest are identified either based—**
 - **Directly on identified capability problems; or**
 - **Identified at-risk items**
 - **Although, just because an item is at-risk, does not mean that a supplier is at-risk**
- **A high level analysis, based on surveys, supply chain analysis, and financial ratings, is conducted to:**
 - **Better understand whether an identified capability problem or item-based problem signals the existence of at-risk suppliers**
 - **Identify the nature of problem**
 - **Technical manufacturing issues would be mitigated outside of the industrial base community**
 - **Supply chain availability issues could involve the industrial base**

Determine Other Parts from At-Risk Suppliers

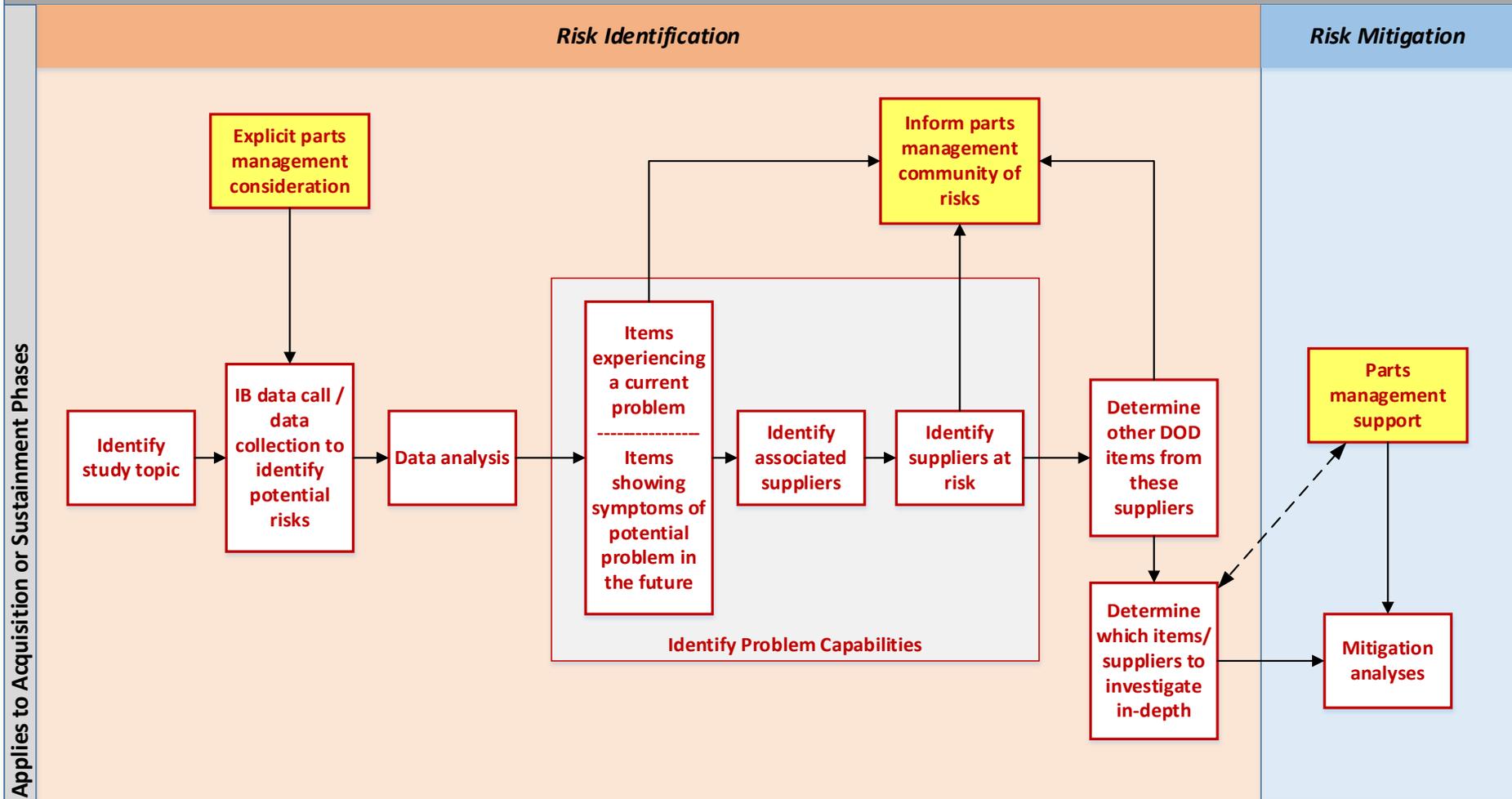
- **While an at-risk item may not mean an at-risk supplier, all items produced by an at-risk supplier can be considered to be at-risk**
- **While DOD supply systems might be able to identify some of the items that these at-risk suppliers sell to DOD, a more thorough approach would involve contacting the suppliers for this information**
 - **Contacting the suppliers directly could be difficult**
 - **Need workable method to do this easily**
- **The number and criticality of these items is a key factor**

Investigate In-Depth where appropriate

- **All of the risks that have been identified in the data analyses, either from an item-based or a supplier-based perspective, should be considered to determine where it is necessary to examine them in greater depth**
- **In depth analysis seeks to uncover the root cause of the problem and determine whether any mitigation options are warranted**
- **Fragility and criticality assessments are the process through which the IB community determines on what to perform a deep dive analysis**

Potential Parts Management Interfaces with Industrial Base Study Process

Conceptual Flow of the IB Study Process with Parts Management Interfaces



Potential Parts Management Interfaces with Data Collection

- **Data collection could explicitly highlight potential risks**
 - DMSMS (known obsolescence and items at-risk for becoming obsolete)
 - Lead free
 - Environmental
- **Parts management community could formulate some basic questions**
 - These would be valuable to the industrial base community as well

Parts Management Interfaces with Issues

- **Parts management community should have awareness of the identified problem parts highlighted in the study as well as other DOD parts produced by at-risk suppliers**
 - Within the programs involved in the study
 - Across the Department
- **Does the parts management community also need awareness of at-risk suppliers?**
- **How can communication flow more freely?**
 - Through GIDEP?
- **How valuable is the free flow of information?**

Parts Management Could Help with Mitigation

- **Parts management community—**
 - Has experience resolving similar issues
 - May even have experience with the particular problem item
- **To what extent is there interest in the parts management community?**
 - Is it feasible?
 - What are the mechanisms?

Way Ahead

- **Industrial base community engagement**
- **Parts management community engagement**
- **GIDEP engagement**