

Perspectives on the Analysis M&S Community

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OSD/PA&E

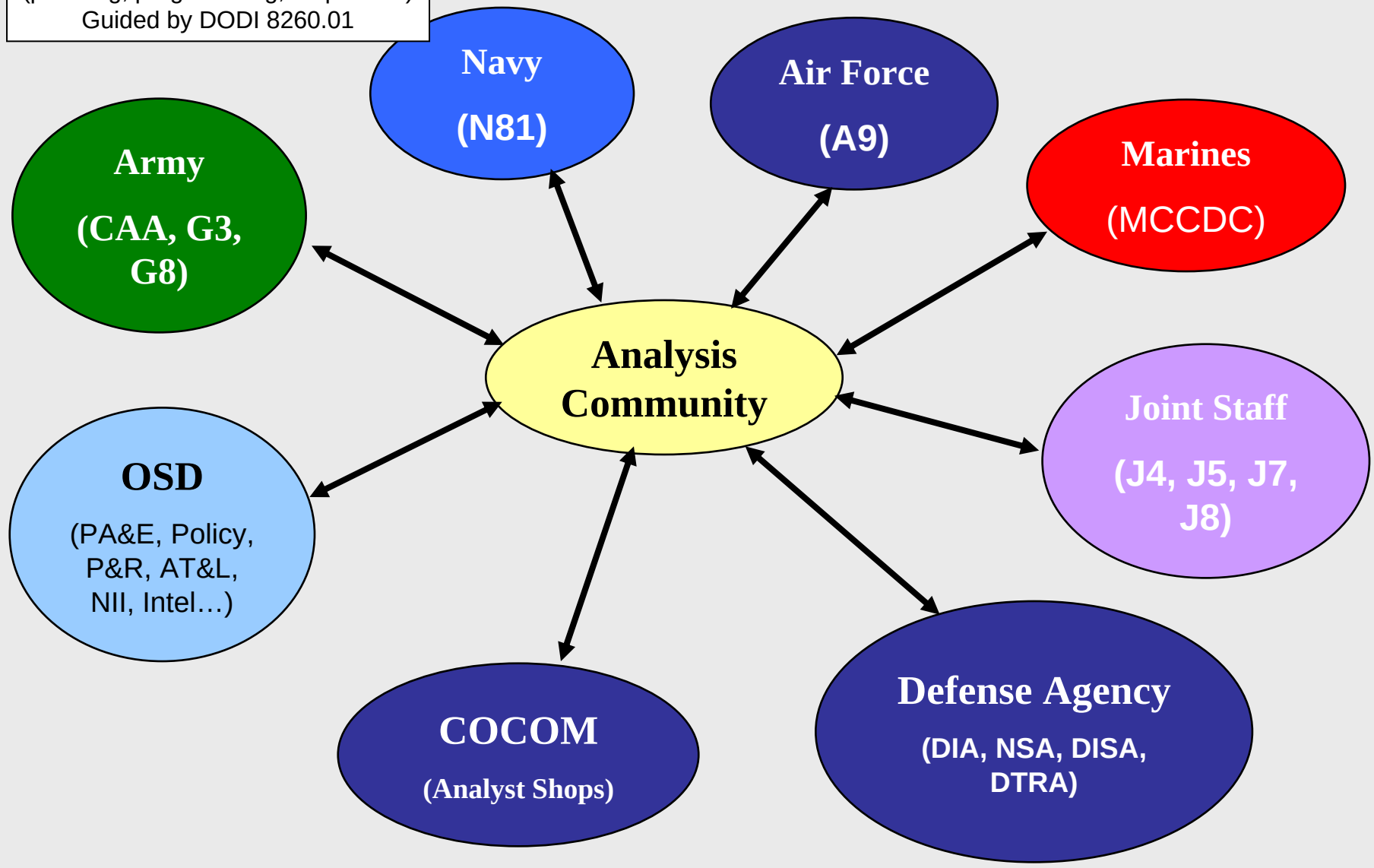
Director, Joint Data Support

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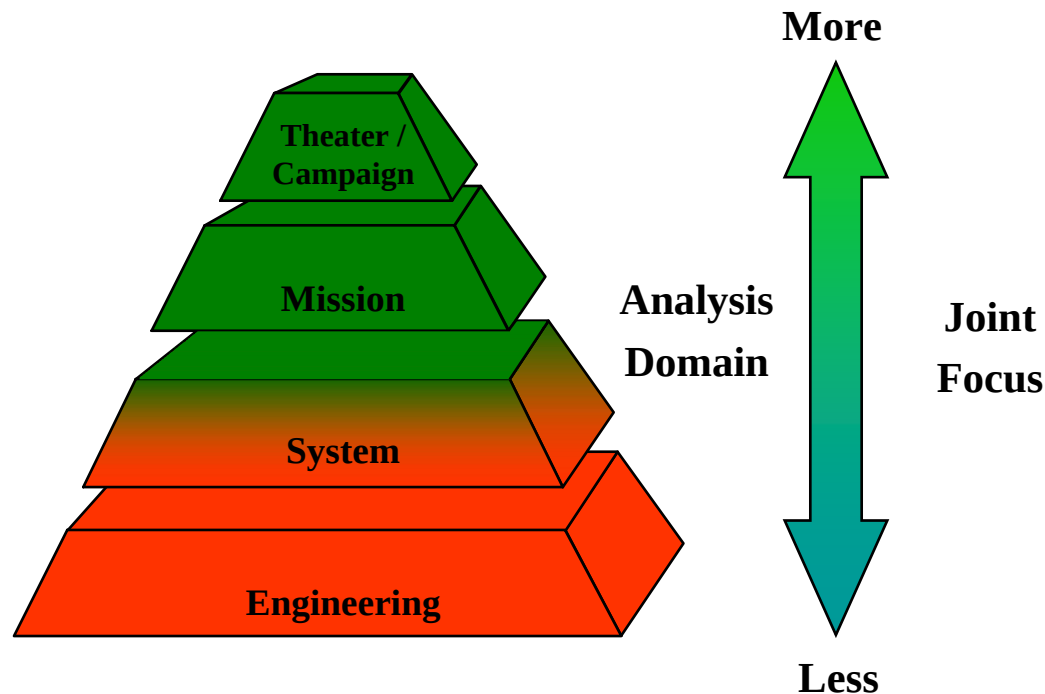
Who We Are

DoD Analysis Community
(planning, programming, acquisition)
Guided by DODI 8260.01



What We Do

- *We perform analysis to support senior level defense decisions (e.g., planning, programming, and acquisition)*
- *Recent emphasis on Irregular Warfare (IW), Stability Operations, Homeland Defense (HD)*



Examples of Decisions We Inform

- ***What capabilities do we need to find and neutralize WMD? (Counter WMD Study)***
- ***What capabilities do we need to execute our war on terror strategy? (GWOT X-Game)***
- ***What is the best mix of tactical air forces? (Joint Air Dominance Study)***
- ***Are our projected future forces sufficient to meet the defense strategy? (Operational Availability Studies)***
- ***What is the best composition (number, mix, and characteristics) of the future tanker fleet? (Tanker Analysis of Alternatives)***
- ***What capabilities does DoD need to support civil authorities when responding to a domestic disaster? (H/D Civil Support Study)***

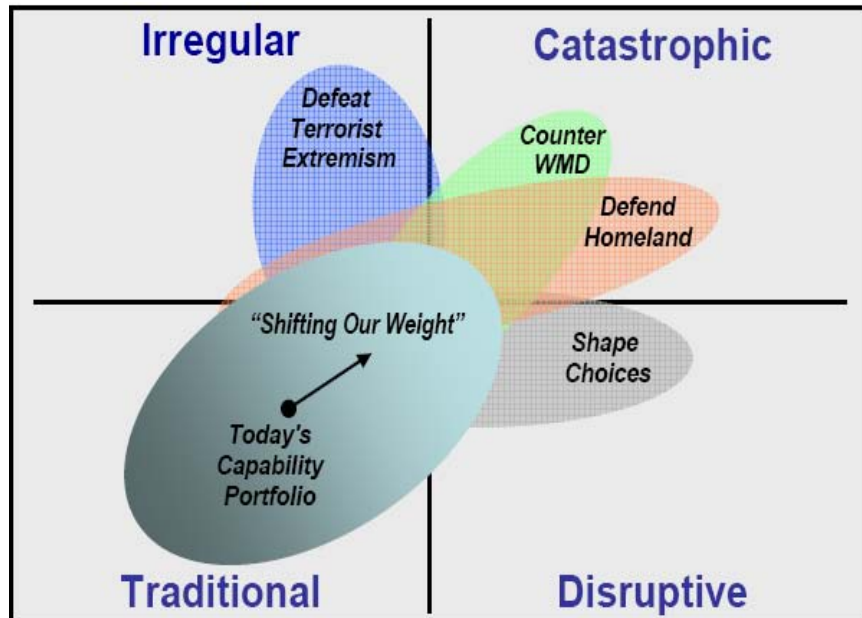
Shape Leadership Decisions: Help answer the question -

How should DoD invest its scarce resources?

Analysis Community Vision

- A robust and inter-connected analytical community which supports the formulation, discussion, and assessment of National Security options across DoD through the use of M&S

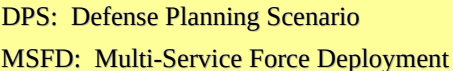
Increasing complexity of the new strategic environment



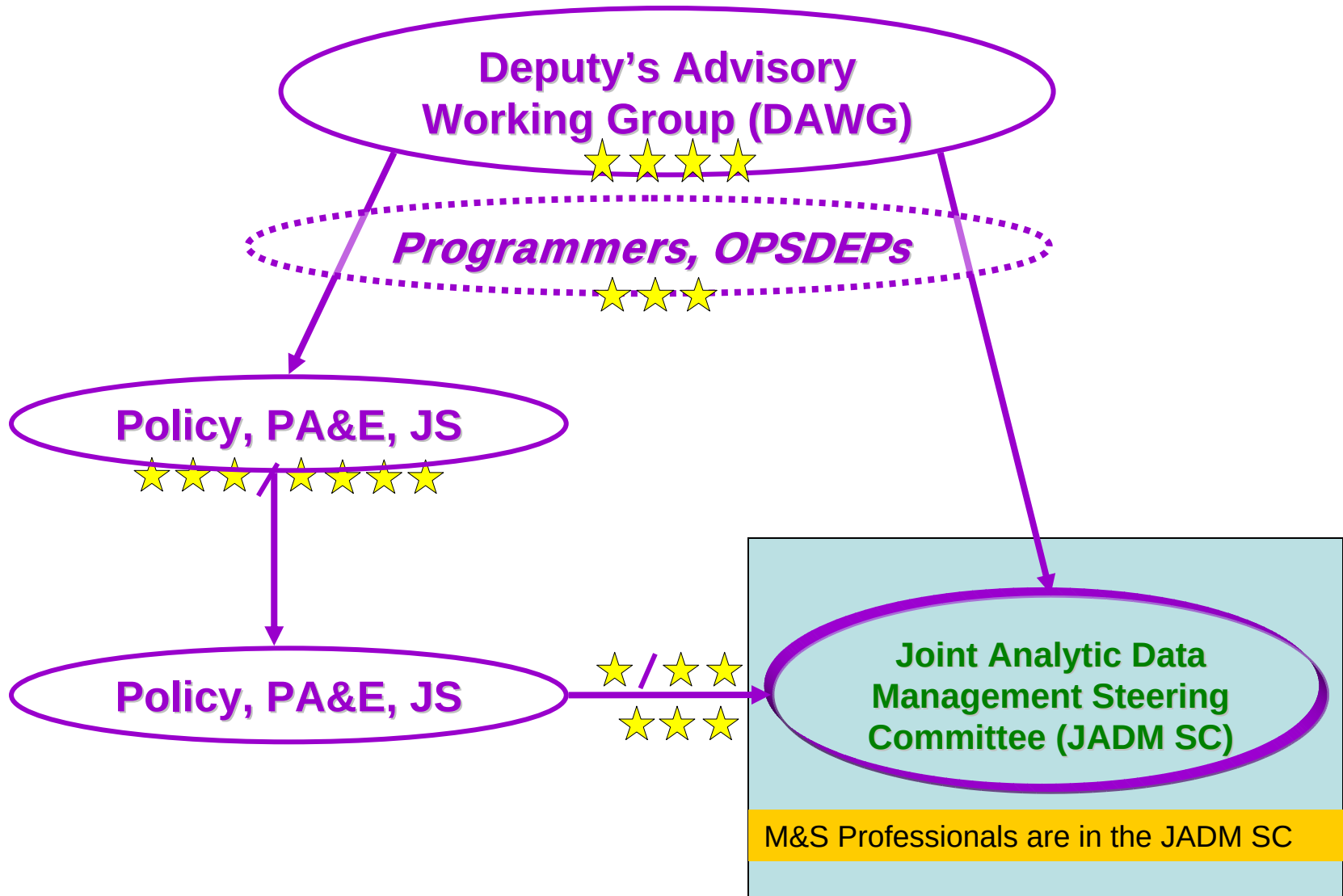
Force Planning Construct (source: 2006 QDR)



[Collaborative] Studies	PA&E-approved FYABs
1. 2017-2018 2. 2018-2019 3. 2019-2020 4. 2020-2021 5. 2021-2022 6. 2022-2023 7. 2023-2024 8. 2024-2025 9. 2025-2026 10. 2026-2027 11. 2027-2028 12. 2028-2029 13. 2029-2030 14. 2030-2031 15. 2031-2032 16. 2032-2033 17. 2033-2034 18. 2034-2035 19. 2035-2036 20. 2036-2037 21. 2037-2038 22. 2038-2039 23. 2039-2040 24. 2040-2041 25. 2041-2042 26. 2042-2043 27. 2043-2044 28. 2044-2045 29. 2045-2046 30. 2046-2047 31. 2047-2048 32. 2048-2049 33. 2049-2050 34. 2050-2051 35. 2051-2052 36. 2052-2053 37. 2053-2054 38. 2054-2055 39. 2055-2056 40. 2056-2057 41. 2057-2058 42. 2058-2059 43. 2059-2060 44. 2060-2061 45. 2061-2062 46. 2062-2063 47. 2063-2064 48. 2064-2065 49. 2065-2066 50. 2066-2067 51. 2067-2068 52. 2068-2069 53. 2069-2070 54. 2070-2071 55. 2071-2072 56. 2072-2073 57. 2073-2074 58. 2074-2075 59. 2075-2076 60. 2076-2077 61. 2077-2078 62. 2078-2079 63. 2079-2080 64. 2080-2081 65. 2081-2082 66. 2082-2083 67. 2083-2084 68. 2084-2085 69. 2085-2086 70. 2086-2087 71. 2087-2088 72. 2088-2089 73. 2089-2090 74. 2090-2091 75. 2091-2092 76. 2092-2093 77. 2093-2094 78. 2094-2095 79. 2095-2096 80. 2096-2097 81. 2097-2098 82. 2098-2099 83. 2099-2100 84. 2100-2101 85. 2101-2102 86. 2102-2103 87. 2103-2104 88. 2104-2105 89. 2105-2106 90. 2106-2107 91. 2107-2108 92. 2108-2109 93. 2109-2110 94. 2110-2111 95. 2111-2112 96. 2112-2113 97. 2113-2114 98. 2114-2115 99. 2115-2116 100. 2116-2117 101. 2117-2118 102. 2118-2119 103. 2119-2120 104. 2120-2121 105. 2121-2122 106. 2122-2123 107. 2123-2124 108. 2124-2125 109. 2125-2126 110. 2126-2127 111. 2127-2128 112. 2128-2129 113. 2129-2130 114. 2130-2131 115. 2131-2132 116. 2132-2133 117. 2133-2134 118. 2134-2135 119. 2135-2136 120. 2136-2137 121. 2137-2138 122. 2138-2139 123. 2139-2140 124. 2140-2141 125. 2141-2142 126. 2142-2143 127. 2143-2144 128. 2144-2145 129. 2145-2146 130. 2146-2147 131. 2147-2148 132. 2148-2149 133. 2149-2150 134. 2150-2151 135. 2151-2152 136. 2152-2153 137. 2153-2154 138. 2154-2155 139. 2155-2156 140. 2156-2157 141. 2157-2158 142. 2158-2159 143. 2159-2160 144. 2160-2161 145. 2161-2162 146. 2162-2163 147. 2163-2164 148. 2164-2165 149. 2165-2166 150. 2166-2167 151. 2167-2168 152. 2168-2169 153. 2169-2170 154. 2170-2171 155. 2171-2172 156. 2172-2173 157. 2173-2174 158. 2174-2175 159. 2175-2176 160. 2176-2177 161. 2177-2178 162. 2178-2179 163. 2179-2180 164. 2180-2181 165. 2181-2182 166. 2182-2183 167. 2183-2184 168. 2184-2185 169. 2185-2186 170. 2186-2187 171. 2187-2188 172. 2188-2189 173. 2189-2190	



Governance



Analytic Agenda Product Registry

The screenshot shows the Joint Data Support website in a Microsoft Internet Explorer browser window. The address bar displays <https://jds.pae.osd.smil.mil/>. The website's left sidebar contains a list of links, with three items circled in purple: 'Data', 'Tools', and 'Studies'. A blue bracket on the left side of the page groups these three items. The main content area features a 'Home (U)' link, a 'Login | Help' link, and a section titled 'Our Objective' which lists goals such as 'improve data quality', 'reduce study setup time', and 'allow study team to focus on analysis'. At the bottom of the page, there is a disclaimer and contact information for Joint Data Support.

Joint Data Support - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Reload Home Search Favorites

Address <https://jds.pae.osd.smil.mil/> Go Links

Joint Data Support

Expand All - Collapse All

- Home (U)
- What's New (U)
- Analytic Agenda (U)**
- Scenarios (DPS, MSFD, AB) (U)
- Studies (U)
- Forces, Units, Equipment (U)
- Models and Tools (U)
- Reference Data and Links (U)
- Archived Products (U)
- JDS Web Site Access (U)
- Acronyms and Abbreviations (U)
- Suggestions and Feedback (U)
- About JDS (U)

Data

Tools

Studies

Home (U) Login | Help

Our Objective

improve data quality
reduce study setup time
allow study team to focus on analysis

(U) This Web site may not be accessible for users requiring the use of assistive technology. If you cannot access any part of this Web site for this reason, please contact Joint Data Support via email at jdsWeb@pae.osd.smil.mil or Jim Stevens, Director of JDS, at (703) 699-1702. Under Federal Law, JDS is required to provide you the information in an alternate, accessible, format upon your request.

(U) We welcome feedback on our Web site. Contact us via email at jdsCustomerSupport@pae.osd.smil.mil or (703) 699-1724.

Done Internet

Products available via the JDS SIPRNET Website-<https://jds.pae.osd.smil.mil>

Additional Information Sites

- **M&S Tool Registry**

- Collection of tools, documentation, data, and model POCs:
 - Focus on tools in use or in development (government sponsored)
 - Includes information on user groups and recent uses with study POCs
- Benefits:
 - Promotes collaboration among model users
 - Encourages reuse
 - Provides senior leadership visibility of investments DoD wide
- Access via:
 - JDS Classified Website (SIPR): <https://jds.pae.osd.smil.mil>

- **Wiki and Forum sites on:**

- Scenario Development
- Insurgency and Counterinsurgency (COIN) Analysis
- Irregular Warfare Analysis
- Access via classified website at:
 - forum url: <http://analysiscommunityforum.pae.osd.smil.mil>
 - wiki url: <http://analysiscommunitywiki.pae.osd.smil.mil>

- **Military Operations Research Society (MORS)** [includes DoD, Industry, and Academia]
 - Annual Symposium in June
 - 4-5 workshops each year (recent examples):
 - Analysis of Non-Traditional Security Challenges: Methods & Tools
 - Agent-Based Models & Analytical Tools in support of Stability Ops
 - Publications: Newsletter (*PHALANX*), Journal, and professional books
- **Joint Collaboration Analysis Conference (JCAC)**
 - Semi-annual (spring, fall): led by Joint Staff
 - Focused on combatant commander analysis needs and capabilities
- **Other organizations include:**
 - Institute for Operations Research and Management Science (INFORMS)
 - Military Applications Society (MAS-INFORMS)

Community Identified M&S Challenge Areas

Operational Areas	Cross-cutting Missions/ Functions
Conventional Operations (e.g. MCOs)	Deterrence (Phases 0-4)
Irregular Warfare (e.g., COIN, Counter Terrorism)	Representation of ISR
Stability, Security, Transition and Reconstruction	C4 and Net-centric Operations
Homeland Defense/Defense Support for Cvl Ath	Human Behavior, Social, Cultural (HSCB) Aspects
Management Issues	Information Operations including Cyber Warfare
Education and Training (analysts, decision makers)	CBRNE Activities
Ensuring Credibility of M&S (e.g., VV&A)	Space Operations
M&S Governance and Best Practices (e.g., Policies for use of proprietary tools)	Logistics
	Joint, Interagency, Multi-national (JIM) Analysis
Outreach	Hot Topics
Configuration Management (e.g., data, tools, standards)	Portfolio Management
	Representation of Complex Adaptive Systems

Challenges (near term)

- Irregular Warfare Analysis Tools and Data
 - Expand M&S in support of analysis of IW issues (DIMEFIL/PMESII, etc))
- Joint, Interagency, Multinational Analysis
 - DoD “cannot meet today’s complex challenges alone” (QDR 2006) but must join with coalition, interagency, and other partners. To that end, DoD analysis (using M&S tools and data) must examine interaction between DoD and partner capabilities.
- QDR 2010: Comprehensive review of the defense strategy.
 - M&S Tools and Data will help analysis of capabilities required to meet the challenges (Example: TACAIR, IW Capabilities...)
 - Analysis (using M&S tools and data) to inform leadership decisions updating the defense strategy and shaping/sizing the force for the next ten years.