

# TRADOC



## Capability Development Document (CDD) Writer's Guide

**Version 1.5**

**16 June 2009**

The proponent for this guide is the ARCIC Operations, Plans and Policy Division, Army Capabilities Integration Center (ATFC-O), TRADOC. This guide is one of a series of web-based publications available at <https://www.us.army.mil/suite/kc/5232873> and the ARCIC Portal at <https://cac.arcicportal.army.mil/ext/jcids/default.aspx>. Users are encouraged to send comments using MS Word Track Changes approved by a COL or equivalent to [Monr.arcicgatekeeper@us.army.mil](mailto:Monr.arcicgatekeeper@us.army.mil). Updates will be uploaded as changes become necessary.

# Summary of Changes

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## Version 1.4

- Added subparagraph 14.i (6) Corrosion Prevention and Control (CPC).
- Added subparagraph 14.i (7) Item Unique Identification (IUID).

## Version 1.5

- Revised paragraph 14, Other DOTMLPF and Policy Considerations, in response to an Army Audit Agency preliminary recommendation in an ongoing JCIDS audit that “CDDs/CPDs don’t contain all the necessary DOTMLPF requirements to support acquisition for a Milestone C decision. The information contained in the documents is inconsistent, generalized and incomplete.”

## 16 CDD Instructions and Template

17

18 *NOTE: This version of the CDD Writer's Guide is based upon the instructions outlined in the*  
 19 *CJCSI 3170.01G, Joint Capabilities Integration and Development System, 1 Mar 09, the online*  
 20 *[Manual for the Operation of the Joint Capabilities Integration and Development System, 1 Mar](#)*  
 21 *[09](#), and applicable Army and TRADOC regulations. This is supplemental information and not*  
 22 *intended to replace or replicate the JCIDS Manual in its entirety.*

23

24 1. **CDD Format and template.** The CDD format described below and included on the attached  
 25 template is mandatory for all Army-developed CDDs. The information in this guide complies  
 26 with instructions provided by the Office of the Secretary of Defense (OSD), Chairman of the  
 27 Joint Chiefs of Staff (CJCS), and Headquarters, Department of the Army (HQDA) and leads the  
 28 user through each paragraph of the CDD format. Annotations for each paragraph and entry  
 29 describe the information that it must contain, the source of that information, and how that  
 30 information is developed in analyses. Use the template below to develop the CDD.

31



CDD Template (16  
Jun 09) .doc

32

33

34 a. Each subparagraph should be numbered to facilitate requirements correlation and  
 35 traceability, and for ease of identifying issues during staffing. Use conventional alpha-numeric  
 36 numbering of paragraphs. **The use of scientific numbering is unacceptable.**

37

38 b. CDDs must be submitted in MS-Word (6.0 or greater) format. Use Times New Roman, 12  
 39 pitch font. **Do not submit document in Microsoft 2007 format, use 97-2003 compatible**  
 40 **documents with the extension “.doc”** HQDA is not postured to accept them and the G3  
 41 automated staffing tool, Capabilities and AROC Management System (CAMS), does not  
 42 recognize them as valid files.

43

44 c. Architecture products should be embedded into the MS-Word file for ease of review during  
 45 the staffing process except the SV-6 which is provided as a separate MS Excel file or an  
 46 embedded Excel file in Appendix A – Net-Ready KPP Products.

47

48 d. All CDDs must be clearly labeled with draft version number, date, classification, and  
 49 include any caveats regarding releasability, even if UNCLASSIFIED. Paragraphs that contain  
 50 non-releasable information (allies or industry) will be marked appropriately.

51

52 e. Draft documents must be submitted with continuous line numbers displayed.

53

54 f. The Manual for the Operation of the Joint Capabilities Integration and Development  
 55 System contains the format to be used for the body of the CDD. The CDD should be no more  
 56 than 35 pages in length. ARCIC's internal “goal” is to keep the body of the CDD to 10 pages or  
 57 less.

58

59 g. The Executive Summary must be no more than two (2) pages.

60

61 h. Do not use photos, symbols, or logos on the front page as part of the title page, or in other  
62 locations throughout the document.

63

64 i. There are 3 mandatory Appendices listed for all CDDs. *Ensure the appendix names*  
65 *conform exactly to what is prescribed. Innovation in this area is not appropriate. The only*  
66 *exception is supporting analysis, it should be added as appendix D.*

67

68 (1) Appendix A. Net-Ready KPP Products.

69

70 (2) Appendix B. References.

71

72 (3) Appendix C. Acronym List.

73

74 (4) Appendix D. Analysis.

75

76 j. Supporting Documents are not mandatory, but provide supporting information relevant to  
77 the CDD. *Supporting documents should be submitted with the draft CDD forwarded to ARCIC*  
78 *for validation. Submit them as a separate file labeled as “Supporting Documents for XXX*  
79 *CDD.”* Examples of supporting documents are:

80

81 (1) Operational Mode Summary/Mission Profile (OMS/MP). *The OMS/MP, if required,*  
82 *should be developed to support the CDD submission.*

83

84 (2) Basis of Issue Guidance (BOIG). *The BOIG is a clear articulation of the units and*  
85 *amount of equipment projected to be fielded to the unit. If the information can be displayed in*  
86 *less than 1 page, it will be captured in paragraph 12, Assets required to Achieve Initial*  
87 *Operational Capability (IOC,) then a separate supporting document for BOIG is not necessary.*

88

89 (3) System Training Plan (STRAP). *If needed, an initial STRAP should be developed on a*  
90 *parallel path with the CDD. Submit early in the CDD development process to give ATSC*  
91 *sufficient time to review and approve the STRAP or STRAP Waiver if the proponent determines a*  
92 *STRAP is not necessary.*

93

94 (4) Template for Supporting Documents.

95



Supporting  
Documents template |

96

97

## 98 2. Considerations.

99

100 a. **Resource Informed.** Determine if adequate resources are available to develop the  
101 capability as envisioned in the CDD prior to writing the document. There is no mythical pot of  
102 “new money” waiting for a claimant. If there are not sufficient resources for RDTE or at least a

103 viable strategy to get resourcing, then it will not be approved. Be prepared to discuss resource  
 104 trades within your capability portfolio and leverage the APRB through the ARCIC Gatekeeper,  
 105 to get a feel for resourcing.

106  
 107 **b. Considering and Conducting Trades.**

108  
 109 (1) The most difficult thing for the capability developer to do is to understand all the things  
 110 they should consider when making effective trades (refer to the CDD Trades Considerations  
 111 Checklist for examples of some of those considerations). The magnitude of effort required to  
 112 accomplish beneficial and sound trades must not be minimized. Trades should be evaluated  
 113 across the DOTMLPF domains to determine the tactical, operational, and strategic impacts of  
 114 any trades in a holistic fashion. The effect of a change in one domain must be considered, as  
 115 well as the second and third order effects on other domains, other interdependent systems, and  
 116 other warfighting organizations, both Army and Joint. Trades provide a means in which we can  
 117 propose alternative paths to close or mitigate gaps. Those trades must be analytically based,  
 118 analytically sound and risk informed. Additionally, they must consider the integration of joint  
 119 and other service capabilities.

120  
 121 (2) At the CDD phase, trades should focus on defining affordable, feasible, authoritative,  
 122 measureable, and testable capabilities needed by the Warfighters to support the Engineering &  
 123 Manufacturing Development (EMD) phase of an acquisition program. Consider: Organizational  
 124 Impacts, Functional Impacts, Operational Risk (Internal – that is, Army dependence on its own  
 125 Service capabilities; External – that is, Joint Integration and dependence on external (Joint,  
 126 Intergovernmental, Interagency and Multinational) capabilities), Level of Integrated Capability,  
 127 Resource Availability (dollars, personnel, etc.), and Technical Feasibility (technical readiness),  
 128 when trading Performance, Cost, and Schedule.

129  
 130 (3) CDD Trades Considerations Checklist. This checklist is not intended to be a step by  
 131 step guide for developing and documenting trades, there are too many variables to adequately  
 132 cover all possible situations. The purpose of this checklist is to provide capability developers an  
 133 illustrative list of things they should consider during the JCIDS process.

134



CDD Trades  
 Considerations.docx

135

136

137 **3. CDD Preparation Instructions.**

138

139 a. **Cover Page.** Determine the most likely JPD as the first step in preparing the cover page.

140

141

142 (1) **Title** – Type “CAPABILITY DEVELOPMENT DOCUMENT”  
 143 FOR  
 144 *Title for the Capability*  
 145

146 (2) **Increment** – “Increment: 1” is the correct entry unless you are working on a follow-on  
 147 increment of a previously developed capability.  
 148

149 (3) **ACAT** – Insert the likely Acquisition Category (ACAT) based on the forecast cost of  
 150 the system or previous milestone decisions. For a description of each category see [AR 70-1,](#)  
 151 [Army Acquisition Policy, table 3-1.](#)  
 152

153 (4) **Validation Authority** – The Validation Authority is dependent upon the Joint Potential  
 154 Designator (JPD) assigned by the Joint Staff Gatekeeper during staffing. For a description of  
 155 each designation see [CJCSI 3170.01G, Joint Capabilities Integration and Development System.](#)  
 156 Appropriate validation authority entries correlate to JPD entries as shown below:  
 157

158 (a) JROC Interest - The JROC is the validation authority.

159 (b) JCB Interest – The JCB is the validation authority.

160 (c) Joint Integration - HQDA is the validation authority.

161 (d) Joint Information - HQDA is the validation authority.

162 (e) Independent - HQDA is the validation authority.

163 (5) **Approval Authority** – Fill in based on the JPD assigned. For additional information  
 164 on approval authority see [CJCSI 3170.01G](#). Once the approval authority has been determined,  
 165 insert one of the following in the space provided:  
 166

167 (a) JROC – for ACAT I and programs designated as JROC Interest.

168 (b) JCB – for ACAT II and below programs designated as JCB Interest.

169 (c) HQDA – for ACAT II and below programs that are not JROC or JCB Interest  
 170 Programs.  
 171

172 (6) **Milestone Decision Authority (MDA)**. The MDA is dependent upon the ACAT. For  
 173 additional information on MDA designation see [DODI 5000.02, Operation of the Defense](#)  
 174 [Acquisition System](#), Enclosure 3, table 1 or [AR 70-1, Army Acquisition Policy, Chapter 3, Table](#)  
 175 [3-1](#). Generally accepted guidance follows:  
 176  
 177

178 (a) ACAT I - The MDA is either the Defense Acquisition Executive (DAE) who is dual-  
 179 hatted as the Under Secretary of Defense for Acquisition, Technology and Logistics (USD  
 180 AT&L) or the Army Acquisition Executive (AAE), also referred to as the Assistant Secretary of  
 181 the Army for Acquisition, Technology and Logistics (ASAALT).  
 182

183 (b) ACAT II & III – Generally, MDA is delegated by the AAE to the managing Program  
184 Executive Officer (PEO) unless the program has been designated “special interest”. The AAE  
185 may delegate milestone decision authority to any of the PEOs listed below:

- 186 • PEO Ammunition.
- 187 • PEO Aviation.
- 188 • Joint PEO Chemical and Biological Defense.
- 189 • PEO Combat Support & Combat Service Support.
- 190 • PEO Command Control and Communications (Tactical).
- 191 • PEO Enterprise Information Systems.
- 192 • PEO Ground Combat Systems.
- 193 • PEO Intelligence, Electronic Warfare and Sensors.
- 194 • PEO Missiles and Space.
- 195 • PEO Simulation, Training, and Instrumentation.
- 196 • PEO Soldier.

197  
198 (7) **Designation.** Use the designation assigned during the ICD or CDD approval process  
199 unless this is the first capability document prepared for this system. If this is the first document,  
200 use the information on designation in the [Manual for the Operation of the Joint Capabilities](#)  
201 [Integration and Development System, Enclosure D, paragraph 1.c.](#)  
202

203 (a) “JROC Interest” designation will apply to all ACAT I/IA programs and capabilities  
204 that have a potentially significant impact on interoperability in allied and coalition operations.

205 (b) “JCB Interest” designation will apply to ACAT II and below programs where the  
206 capabilities and/or systems associated with the document affect the joint force and an expanded  
207 joint view is required.

208 (c) “Joint Integration” designation will apply to ACAT II and below programs where the  
209 concepts and/or systems associated with the document do not significantly affect the joint force  
210 and an expanded review is not required, but staffing is required for applicable certifications  
211 (information technology and National Security Systems interoperability, intelligence and/or  
212 insensitive munitions), and for a weapon safety endorsement when appropriate.

213 (d) “Joint Information” designation applies to ACAT II and below programs that have  
214 interest or potential impact across Services or agencies but do not have significant impact on the  
215 joint force.

216 (e) “Independent” designation applies to ACAT II and below programs where the  
217 capabilities and/or systems associated with the document do not significantly affect the joint  
218 force, an expanded review is not required and no certifications or endorsements are required.  
219

220 (8) **Prepared for Milestone B Decision.** *Unless there is another specified acquisition*  
221 *decision point identified, use the statement “Prepared for Milestone B Decision.”*  
222

223 (9) **Draft Version Number.** Use draft version numbers to maintain good configuration  
 224 management of the CDD. Each time the document undergoes a significant revision, the draft  
 225 version number will be updated, i.e. 1.0, 1.1, 1.2.  
 226

227 (10) **Date.** Enter the date the CDD was signed out by the last Headquarters. **DO NOT**  
 228 **BEGIN THE LINE WITH THE WORD “DATE” AS IT IS REDUNDANT.** For the  
 229 proponent, enter the date their Headquarters approved the CDD as the proponent position and  
 230 approved forwarding to ARCIC for validation. Similarly, ARCIC will date the CDD with the  
 231 date validated by the appropriate ARCIC Director.  
 232

233 (11) **Releasability.** A CDD defines system level parameters for the current increment of  
 234 production. The use of one of the following releasability statements is mandatory for CDDs that  
 235 contain no classified or FOUO Information:  
 236

237 (a) **Releasability:** Approved for public release; distribution unlimited.  
 238

239 (b) **Releasability:** Distribution authorized to U.S. Government Agencies and their  
 240 contractors to protect information and technical data that advance current technology or describe  
 241 new technology in an area of significant or potentially significant military application or that  
 242 relate to a specific military deficiency of a potential adversary. Information of this type may be  
 243 classified or unclassified, when unclassified, it is export-controlled and subject to the provisions  
 244 of [Department of Defense \(DOD\) Directive 5230.25](#) (reference c), date of determination: **XX**  
 245 **Month XXXX.** Other requests for this document should be referred to: [List your Organization’s](#)  
 246 [Mailing Address here.](#)”  
 247

248 (c) Other appropriate releasability instructions can be found in [AR 380-5, Department of](#)  
 249 [the Army Information Security Program](#), 29 Sep 00, in paragraph 4-12.h.  
 250

251 (12) **Classification.** Mark the CDD, header and footer, with the appropriate security  
 252 classification of the document.  
 253

#### 254 b. **Instructions by Document Section.** 255

256 (1) **Executive Summary.** Limited to a maximum of two pages, one is preferred. Do not  
 257 duplicate information that is required in the body of the CDD. Use the Executive Summary to  
 258 set the stage and explain the importance of the capability the Army should “acquire/produce.”  
 259

260 (2) **Table of Contents (TOC).** Adjust as required and ensure it’s accurate.  
 261

262 a. The paragraph numbers and names are “fixed.” DO NOT ADJUST THEM!  
 263

264 b. Use the CDD template provided in paragraph 1 of this guide with the Microsoft  
 265 Word Table of Contents feature embedded in the template. **Do not delete any of the**  
 266 **embedded formatting, i.e.** {TC “1. Capability Discussion” \f c\1 “1”}, **or the TOC will not**  
 267 **function properly.** Once the draft CDD is complete and you are finalizing the version, right  
 268 click on the TOC and select “update field.” Then, select “update page numbers only.” That will



269 refresh the TOC and ensure all page and paragraphs correlate properly. Add a list of figures, if  
 270 used, to complete the TOC. *If you manually create a TOC or have added a list of tables and*  
 271 *figures, check this for accuracy as your last editorial review of the CDD.*  
 272

273 (3) **Revision History.** Use the revision history table below for configuration management  
 274 of the Draft CDD. *Ensure the information is consistent with the revision history table and the*  
 275 *cover entries for the Draft Version and Date.*  
 276

Draft Version	Date	Purpose
0.1	Day-Mon-Yr	Initial Draft
		Developmental (Worldwide) Staffing
		ARCIC Staffing/Validation

277  
 278 (4) **Points of Contact (POCs).** POCs should cover the primary writer/editor at the  
 279 proponent and a Program Manager Representative if available/appropriate. **Ensure at least two**  
 280 **Proponent level POCs are listed, to include valid SIPRNET (.smil) e-mail addresses.** *All*  
 281 *staffing post-ARCIC Validation (ARSTAF & JSTAF) takes place on SIPRNET and staffing*  
 282 *comments will be returned to the proponent/document sponsor on SIPRNET. It is imperative*  
 283 *that the proponent/document sponsor be prepared to operate in a SIPRNET environment.*  
 284

Name	Agency/Organization	Phone Number & DSN	Email Address
			NIPR: SIPR:
			NIPR: SIPR:

285  
 286 **Note:** *Standard paragraph numbering was restarted at this point to allow for consistency*  
 287 *between the guide and the CDD Template in paragraph 1.*  
 288

289 **1. Capability Discussion.** Limit this paragraph to one page. Cover the four areas outlined as  
 290 subparagraphs in the attached template.

291  
 292 *a.* Discuss the operating environment of the system. Address how the capability will be  
 293 employed on the battlefield and where it will be employed and/or based.

294  
 295 *b.* If the CDD is part of a FoS or SoS solution, discuss the source ICD and the related CDDs,  
 296 CDDs, integrating DOTMLPF and policy changes and required synchronization.  
 297

298  
 299 *c.* It is critical to “list” direct predecessor documents that support the CDD. If the capability  
 300 development effort preceded the implementation of JCIDS, list the requirements document that  
 301 supports and underpins the CDD, i.e. the Operational Requirements Document (ORD).

302  
 303 *d.* Identify the JCAs (Tier 1 and 2) in which the capabilities being delivered through the CDD  
 304 directly contribute. “List” only the applicable JCAs, there is no requirement to provide rationale  
 for their inclusion. However, there should be a high correlation to the capability advocated for

305 production and the JCA Lexicon at <http://jcams.penbaymedia.com/>. Ensure all JCAs listed in  
306 paragraph 1.d appear and should be consistent with the KPPs and KSAs in paragraph 6 and  
307 Table 7.1 – Supported ICDs and Related CDDs/CDDs in Paragraph 7.  
308

309 **2. Analysis Summary.** Summarize all analyses (AoA or other support analysis) conducted to  
310 determine system performance attributes and KPPs. Include the alternatives, objective, the  
311 criteria, assumptions, recommendation, and conclusion. If the discussion consumes more than  
312 two pages, move the Summaries to Appendix D. If you can get it in the body of the CDD, delete  
313 Appendix D from the TOC and final page of the template (Appendix D listing).  
314

315 **3. Concept of Operations Summary.** The information in this paragraph should serve as the  
316 basis for OMS/MP development. Cover these five areas in the attached template:  
317

318 *a.* Relevance to Joint Operations Concepts (JOpsC).

319 *b.* Operational Outcomes.

320 *c.* Effects it must produce.

321 *d.* How it complements the integrated Joint Warfighting Force.

322 *e.* Enabling capabilities required to achieve its desired operational outcomes.  
323  
324  
325

326  
327 **4. Threat Summary.** Cover these three areas in the attached template:  
328

329 *a.* Projected threat Environment.

330 *b.* Specific threat capabilities to be countered. Include the nature of the threat, threat tactics,  
331 and projected threat capabilities (lethal and non lethal) over time.  
332

333 *c.* Include Defense Intelligence Agency (DIA) validated threat references when appropriate.  
334  
335  
336

337 Note: For assistance in framing the Threat against a specific capability, contact your local threat  
338 office or the TRADOC G-2 for assistance or you can contact the DIA Defense Warning Office,  
339 Acquisition Support Division for assistance at DSN 428-0788; SIPRNET:  
340 <http://www.dia/smil/mil/admin/di/dwo/dwo3.html>.  
341

342 **5. Program Summary.** Provide a “summary” of the overall program strategy for reaching full  
343 capability and the relationship between the production increment described in the CDD and any  
344 other increments planned for the program.  
345

346 **6. System Capabilities Required for the Current Increment.** All systems capabilities  
347 described in this paragraph must be achievable, measurable, testable, and operationally relevant.  
348 Statutory KPPs derived from public law (Force Protection and Survivability) and compliance  
349 KPPs derived from policy (Net-Ready and Sustainment) **must be addressed** regardless of the  
350 sponsor’s determination of applicability. Selectively applied KPPs (Energy Efficiency and

351 System Training) should be considered, but are not required to be addressed if the sponsor  
352 determines they are not appropriate. If the document sponsor determines one or more of these  
353 KPPs are not applicable, they must provide the rationale for non-inclusion based on solid  
354 analysis. The rationale and analysis will be reviewed by higher level authorities to determine the  
355 validity of the claim.

356

357 a. Traceability to Tier 1 & 2 JCAs. Correlate the KPPs to the Tier 1 & 2 JCAs the capability  
358 supports directly and ensure consistency with the JCA discussion in paragraph 1.

359

360 b. Force Protection. Is the capability “designed to prevent or mitigate hostile actions against  
361 personnel, resources, facilities, and critical information?” If that is the focus, then the KPP  
362 should be developed. (Reference: [Manual for the Operation of the JCIDS, 1 Mar 09, Enclosure  
363 B, paragraph 2.a\)](#)

364

365 c. Survivability. Determination of whether the capability you are producing is a “manned  
366 system” is the central focus for the Survivability KPP. Is the equipment designed to enhance  
367 personnel survivability? Has the system entered low rate initial production (LRIP)? If you are at  
368 or beyond LRIP, this KPP is not applicable. If you answered yes to a manned system and have  
369 not entered LRIP, then the KPP should be developed. (Reference: [Manual for the Operation of  
370 the JCIDS, 1 Mar 09, Enclosure B, paragraph 2.a\)](#)

371

372 d. Sustainment (Availability). This KPP is mandatory for all **ACAT I** programs involving  
373 materiel solutions. The KPP has 2 metrics: Materiel Availability ( $A_m$ ) a fleet measurement of  
374 the total inventory of system’s operationally capable (ready for tasking) and Operational  
375 Availability ( $A_o$ ) that measures a group of systems within a unit that are operationally available.  
376 Additionally, there are the two mandatory Key System Attributes (KSAs) of Materiel Reliability  
377 and Ownership Cost. For ACAT II and below programs, the sponsor will determine  
378 applicability. (Reference: [Manual for the Operation of the Joint Capabilities Integration and  
379 Development System, Appendix B, Enclosure B\)](#)

380

381 e. Net-Ready. The capability will be developed for all information technology (IT) and  
382 national security systems (NSS) used in the automation acquisition, storage, manipulation,  
383 management, movement, control, display, switching, interchange, or transmission or reception of  
384 DOD data or information regardless of classification or sensitivity.” There is an exception for  
385 those systems that are “closed loops” and do not communicate with external sources. Another  
386 way to approach it is to determine whether the capability has a C4I interface capable of any  
387 communication through the Global Information Grid (GIG). If yes, then the NR-KPP is required  
388 with all the mandated architecture, compliance statements, and Key Interface Profiles (KIPs)  
389 Declaration in Appendix A. (Reference: [CJCSI 6216.01E, Interoperability and Supportability  
390 of Information Technology and National Security Systems, Enclosure E\)](#)

391

392 f. Selectively applied KPPs: System Training and Energy Efficiency. The sponsor will  
393 perform an analysis to determine the applicability of Selectively Applied KPPs. *Selectively  
394 applied KPPs are not required to be addressed by the document sponsor if your analysis  
395 determines they are not appropriate.*

396

397 (1) System Training. A System Training KPP is required where the sponsor has  
 398 determined that “training” is a significant part of total life cycle costs. (Reference: [Manual for](#)  
 399 [the Operation of the Joint Capabilities Integration and Development System, Enclosure B,](#)  
 400 [Appendix C](#))

401  
 402 (2) Energy Efficiency. If you have a program that involves a “fleet of vehicles” or a “fleet  
 403 of equipment that consumes energy” (i.e. generators or heaters that use fuel), use the guide below  
 404 to develop the Energy Efficiency KPP.  
 405



Energy Efficiency  
 KPP Development.pdf

406  
 407

408 g. If the document sponsor determines one or more KPPs (Force Protection, Survivability,  
 409 Net-Ready, and Sustainment) is not applicable, you must provide the rationale for excluding it.

410

411 h. If there are Statutory or Compliance KPPs that are not appropriate for the capability you  
 412 are developing, restructure paragraph 6 as shown below in Figure 6-1:

413

- 414 • Revise the subparagraphs in the template.
- 415 • Add a new subparagraph “a” titled “Statutory and Compliance KPPs not appropriate for  
 416 XXXXXXXX Capability.”
- 417 • The revised paragraph should mirror the box shown below where subparagraphs b-d  
 418 are already in the template and only require revising the alphabetic designator that  
 419 precedes the description.

420

421

Figure 6-1 Alternate Paragraph 6 Structure

a. Statutory and Compliance KPPs not appropriate for XXXXXXXX Capability.

(1) Net-Ready (NR). This capability does not have a C4I interface with any other system or capability. As a result, there is no NR-KPP and only the OV-1 has been developed.

(2) Force Protection. This capability is not designed to prevent or mitigate hostile actions against personnel, resources, facilities, and critical information.

(3) Survivability. This capability is an unmanned system and does not contribute to survivability. Therefore, the Survivability KPP is not appropriate.

(4) Sustainment. XXXXXXXX Capability is not a JROC Interest program. Furthermore, the sponsor has determined that this KPP and its two mandated KSAs are not appropriate for this capability for the following reason(s)....

b. Key Performance Parameters (KPPs).

c. Key System Attributes (KSAs).

d. Additional Performance Attributes.

422

423 **7. Family of Systems and System of Systems Synchronization.** Use of the table in the  
 424 template is mandatory per HQDA G-3/5/7. Ensure all JCAs listed in paragraph 1.d appear and  
 425 are correlated to Table 7.1–Supported ICDs and Related CDDs/CDDs (*Joint Capability*  
 426 *Documents (JCDs) are no longer created but you should still reference any applicable ones*).  
 427 No capability stands alone on the battlefield. Consider the relationship of the system described  
 428 in the CDD to other systems contributing to the capability.

429  
 430 **8. Information Technology and National Security Systems Supportability.** For systems that  
 431 receive or transmit information, provide an estimate of the expected bandwidth and quality of  
 432 service requirements for support of the system(s) (on either a per-unit or an aggregate basis, as  
 433 appropriate). The description must explicitly distinguish IT and NSS support to be acquired as  
 434 part of this program from the IT and NSS support to be provided to the acquired system through  
 435 other systems or programs. Use ARCIC Policy Letter 19 for assistance in determining the  
 436 content of paragraph 8.



ARCIC Policy Ltr 19  
 Capability Developme

438  
 439  
 440 **9. Intelligence Supportability.** Identify all requirements for intelligence support throughout the  
 441 projected life-cycle of the capability. Requirements for consideration are outlined in [CJCSI](#)  
 442 [3312.01A, Joint Military Intelligence Requirements Certification](#), 23 Feb 07. Assistance is also  
 443 available from J-2 Intelligence Requirements Certification Office (J2P/IRCO) for assistance at  
 444 DSN 225-8085 or 671-9539; SIPRNET: <http://j2sid.js.smil.mil/IntelCertification/j2sid.html>

445  
 446 **10. Electromagnetic Environmental Effects (E<sup>3</sup>) and Spectrum Supportability.** Define the  
 447 electromagnetic spectrum requirements that the system must meet to assure spectrum  
 448 supportability. Describe the electromagnetic environment in which the system will operate and  
 449 coexist with other US, allied, coalition, and non-government systems.

450  
 451 *a.* Identify potential operational issues regarding electromagnetic interference from threat  
 452 emitters and from other E3 effects such as electromagnetic pulse. (Reference [DODD 3222.3,](#)  
 453 [DOD Electromagnetic Environmental Effects \(E3\) Program](#).)

454  
 455 *b.* Define the electromagnetic spectrum requirements that the system must meet to assure  
 456 spectrum supportability in accordance with [DODD 4650.1, Policy for the Management and Use](#)  
 457 [of the Electromagnetic Spectrum](#).

458  
 459 *c.* For spectrum dependent systems, equipment spectrum certification is required and  
 460 sufficient availability of frequencies from host nations.

461  
 462 *d.* Describe the electromagnetic environment in which the system will operate and coexist  
 463 with other US, allied, coalition, and non-government systems.

464

465 e. Specifically address safety issues regarding Hazards of Electromagnetic Radiation to  
 466 Ordnance (HERO), Hazard of Electromagnetic Radiation to Fuel (HERF), and Hazard of  
 467 Electromagnetic Radiation to Personnel (HERP).

468

469 **11. Technology Readiness Assessment.** Discuss the program's critical technology elements in  
 470 accordance with the [DOD Technology Readiness Assessment Deskbook](#).

471

472 a. Identify any critical technology elements linked to the program's KPPs.

473

474 b. Identify who performed the technology readiness assessment, when it was accomplished,  
 475 whether an independent technology readiness assessment is planned, and, if applicable, when the  
 476 Deputy Under Secretary of Defense, Science and Technology (DUSD(S&T)) review of the  
 477 program technology readiness assessment is planned.

478

479 **12. Assets Required to Achieve Initial Operational Capability (IOC).**

480

481 a. Describe the types and quantities of assets required to attain IOC.

482

483 b. Identify the operational units (including other Services or government agencies, if  
 484 appropriate) that will employ the capability and define the asset quantities (including spares,  
 485 training, and support equipment, if appropriate) required to achieve IOC.

486

487 c. If the discussion consumes more than 1 page, move the discussion to the "Supporting  
 488 Documents" file and leave summary level detail in the paragraph that describes the types and  
 489 quantities of assets required to attain IOC.

490

491 d. The USAFMSA documentation team and ARCIC's Force Design Division (FDD) must be  
 492 included during the development of BOI guidance and attend any other meetings where BOI  
 493 concerns arise.

494

495 **13. Schedule and IOC and Full Operational Capability (FOC) Definitions.** Define the  
 496 actions that, when complete, will constitute attainment of IOC and FOC for the current  
 497 increment. Specify the target date for IOC attainment.

498

499 **14. Other DOTMLPF and Policy Considerations.** Consider the following areas. *This should*  
 500 *not be considered an "a la carte" menu. Each DOTMLPF domain and policy must be*  
 501 *addressed.* The JCIDS manual states "DOTMLPF and policy changes should be considered  
 502 from two perspectives: 1) DOTMLPF that supports the implementation, operations and support  
 503 of the specific system; 2) DOTMLPF that must be changed to support integration of this system  
 504 with existing capabilities. Discuss any additional DOTMLPF and policy implications associated  
 505 with fielding the system that have not already been addressed in the CDD, to include those  
 506 approaches that would impact CONOPS or plans within a combatant command's area of  
 507 responsibility. Highlight the status (timing and funding) of the other DOTMLPF and/or policy  
 508 considerations. Describe implications for likely changes to any aspect of DOTMLPF or policy."  
 509 Use the question sets below as examples or "guides" to help you identify potential issues to  
 510 consider, create a write-up for each DOTMLPF domain and Policy Considerations. You do not

511 have to answer each question, but you must include a subparagraph for each domain and for  
 512 policy. If other information comes to mind that has impact on the various DOTMLPF areas,  
 513 discuss those issues under the appropriate subparagraph. *If you more than one domain where*  
 514 *no changes are necessary, you may address them collectively in one subparagraph.*

515  
 516 a. Doctrine.  
 517

1	Is there an existing concept of the operation to leverage or will this require the development of a new concept of the operation?
2	What doctrinal development work will have to be done to support the institutionalization of this capability?
3	Which proponent(s) should take the lead to develop this doctrine/TTP?
4	When is the earliest that the doctrine can be developed (projected timelines)?
5	Does this new capability require a new TTP, or can existing TTP be modified to support its introduction into the force? When is the earliest that the TTP for its use can be developed?
6	Can the TTP/doctrine work be done within existing resources? What additional resource is required?
7	Are there any joint doctrine/TTP implications?

518  
 519 b. Organization.  
 520

1	What organization will operate this equipment? Does it require a new organization or a modification to a current organization? What changes are required for the TOE?
2	Does the proposed change warrant a Force Development Update (FDU)? If so, who will coordinate with ARCIC FDD?
3	Can an existing organizational task be changed to provide resource to execute this mission and what is the impact on the organization, if any?
4	What units will provide logistic support to these organizations? Will this require new units, or can existing maintenance/logistics organizations support this capability? Does the support organization require augmentation? Will this require Contractor Logistics Support (CLS)?
5	What is the total potential requirement for new organizations?
6	Which organization is responsible to implement these changes?
7	Are there joint organizational considerations for employing this capability, e.g., would the combatant commander be better served by a joint-manned capability?

521  
 522 c. Training.  
 523

1	Will training be executed by a contactor support team, by a mobile training team, by a unit training system or by a school? If conducted by some combination of these approaches, what will the schedule be for transitioning between the options?
2	What school(s) will take the lead to implement this training?
3	How many courses will be added to the curriculum?
4	Is there a joint training requirement (e.g., training for other Services)?
5	Does this capability suggest creation of a new Military Occupation Specialty (MOS) or Special Skill Identifier (SSI)? If so, what “describes” that new MOS or SSI? And, what are the most critical training

	support requirements, timelines, and resources?
6	If a new MOS or SSI is not required, what MOS/SSI has the appropriate competencies to best employ this capability?
7	What resources will be needed by the school to support training?
8	How many additional instructors are required to support the training?
9	What additional resources are required to support course development?
10	What Training Aids, Devices, Simulators, and Simulations (TADSS) will be required to support training? What modifications to existing TADSS are required?
11	Will training be required for support or maintenance personnel? Where will this training be conducted?
12	What is the projected total cost and timelines for the training support required to field this capability in the Army?
13	What is the projected total cost and timelines to support training for other Services?

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*d. Materiel.*

1	Does this system require new (or modifications to current) materiel systems in order to enable the total capability, e.g., new C2 software for Army Battle Command System (ABCS) to accompany new sensor platform?
2	Will the acquisition of this capability result in other materiel impacts or special Package, Handling, and Storage (PHS) requirements (e.g., additional lines of ammunition, fuel, batteries, power sources, etc.)?
3	Are there ecological or hazardous waste issues that will result from this acquisition?
4	Can it be deployed within existing transportation assets, or does it require outsized/oversized lift capability?
5	Will other systems or subsystems have to be developed or modified to support this equipment (e.g., radio mounts/night vision equipment/crew served weapons mounts)?
6	Does this system operate on a network or frequency that will potentially interfere with other systems in the Army? Does it potentially interfere with systems in other Services?
7	Does the C2 for this system require an interface with existing C2 systems? What systems? What are the architecture requirements?
8	What is the cost associated with the materiel impacts of this system?
9	Should there be a formal review of the potential legal implications of using this technology? Who will coordinate for that review and on what timeline?
10	Do supporting organizations have proper and adequate numbers of support equipment, tools, TMDE, etc.?
11	Does the system transmit or receive information/data with other than ancillary C4ISR systems, i.e. SINCGARS, EPLRS, FBCB2, etc?
12	Which organization should take the lead to resolve these issues?

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529

*e. Leadership & Education.*

1	What new leadership training is required (if any)?
2	What changes to existing leader courses are required?
3	Are unit level professional development (PD) courses required? If so, what are they?



4	Are there cultural barriers or drivers to overcome?
5	What resources are required to enable leadership to use this capability?
6	Which school/organization will be responsible for implementing these changes?
7	What is the timeline required to develop leaders to use the capability?

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532

*f. Personnel.*

1	Will there be a requirement for additional personnel to operate this equipment or can it be fielded within existing personnel limits?
2	Do the Soldiers have the necessary skills to operate the equipment (and support equipment)?
3	What are the likely personnel implications (MOS/SSI designations) for: Primary Users Maintenance Personnel Support Personnel
4	Will contract personnel support this equipment? How many are required per unit? What is the anticipated yearly cost of this support across the Army?
5	Are there any Training, Transient, Hospital, and School (TTHS) implications?
6	Which office/agency is responsible to resolve the issues and what is the timeline to resolve the personnel challenges associated with delivering this capability to the Army?

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*g. Facilities.*

1	What changes to the facilities in the supporting schools will have to be made to support training?
2	Does this require any new, modified, or special facilities at either the unit or support levels?
3	Are current range capabilities adequate to support training requirements associated with this capability?
4	Will current motor pool, storage facilities, and other facilities support this equipment?
5	Which organization will take the lead to coordinate these changes?
6	Are there facilities considerations for Joint manned/operated capabilities?

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*h. Policy.*

1	Will fielding the capability require any changes to existing policy articulated in Army Regulations or other authoritative sources, i.e. Joint Instructions, DOD Directives, NATO STANAGs, etc?
2	Are there any changes in public law required?

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*i. Logistics.* Use the guide below in crafting Logistics considerations. Refer to Paragraph 14 instructions for handling areas that are not applicable to the capability you are describing.



logistics  
supportability guide R

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(1) Maintenance.

(a) Maintenance/Support Concept.

- The maintenance concept. (Logistics Supportability Guide (LSG), see page 3, paragraph 1a)
- If CLS or ICS is initial source of system support. (LSG, see page 4, paragraph 1b)
- Level of Repair Analysis. (LSG, see paragraph 4, paragraph 1c)
- Provisioning Plan. (LSG, see page 4, paragraph 1d)
- Supportability Test & Evaluation Program. (LSG, see page 4-5, paragraph 1e)
- Performance Based Logistics (PBL) and Performance Based Agreements (PBA) Requirements. (LSG, see page 5, paragraph 1f)

(b) Maintenance Manpower Support.

- Current vs. New MOS Requirements. (LSG, see page 6, paragraph 2a)
- Force Structure Implications. (LSG, see page 6, paragraph 2b)
- Table of Organization and Equipment (TO&E)/Modified TO&E (MTO&E) Changes. (LSG, see page 6, paragraph 2c)
- Supply, Ammunition, POL support requirements: (LSG, see page 6, paragraph 2d)
- Human Factors Engineering: (LSG, see page 6, paragraph 2e)

(c) Supply Support: (LSG, see page 7, paragraph 3a)

(d) Support Equipment.

- Test, Measurement and Diagnostic Equipment (TMDE): (LSG, see page 8, paragraph 4a)
- Calibration requirements: (LSG, see page 8, paragraph 4b)
- Material Handling Equipment (MHE) or Container Handling Equipment (CHE) Requirements. (LSG, see page 8, paragraph 4c)

- 590
- Specialized or Standard Shelters: (LSG, see page 8, paragraph 4d)
- 591
- Vehicle Recovery: (LSG, see page 8, paragraph 4e)
- 592
- Standard or Unique Support Requirements (When Applicable). (LSG, see page 9
- 593
- , paragraph 4g)
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- 596
- 597 (e) Technical Data. (Logistics Supportability Guide, see page 9, paragraph 5 a)
- 598
- 599 (f) Training and Training Support
- 600
- Weapon System Family of Vehicles (FoV) Training: (LSG, see page 10,
- 601
- paragraph 6a)
- 602
- Training Structure: (LSG, see page 10, paragraph 6b)
- 603
- Training Support: (LSG, see page 11, paragraph 6c)
- 604
- New Equipment Training: (LSG, see page 11, paragraph 6d)
- 605
- Institutional Training: (LSG, see page 11, paragraph 6e)
- 606
- Unit (Sustainment) Training: (LSG, see page 11, paragraph 6f)
- 607
- Weapon System FoV Simulators: (LSG, see page 12, paragraph 6g)
- 608
- 609
- 610 (g) Computer Resource Support: (LSG, see page 12, paragraph 7)
- 611
- 612 (h) Facilities: (LSG, see pages 12-13, paragraph 8)
- 613
- 614 (i) Packaging, Handling, Storage and Transportability
- 615
- Storage and Preservation: (LSG, see page 13, paragraph 9a)
- 616
- Containerization Requirements: (LSG, see page 13, paragraph 9b)
- 617
- Transportability Modes Analysis: (LSG, see page 14, paragraph 9c)
- 618
- Hazardous Materials Requirements: (LSG, see page 14, paragraph 9d)
- 619
- Other Special Handling Requirements: (LSG, see page 14, paragraph 9e)
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- 631 (j) Design Interface.
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- 634           • Safety & Health Issues for Use and Maintenance: (LSG, see pages 14-15,  
635 paragraph 10a)  
636
- 637           • Built in Test (BIT)/ Built In Test Equipment (BITE) Requirements: (LSG, see  
638 page 15, paragraph 10b)  
639
- 640           • Standardization and Interoperability (LSG, see page 15, paragraph 10c)  
641
- 642       (2) Conditions Based Maintenance Plus (CBM+): (LSG, see pages 15-18, paragraph a-f)  
643
- 644       (3) Common Logistics Operating Environment (CLOE): (LSG, see pages 18-20, paragraph  
645 g)  
646
- 647       (4) Life Cycle Sustainment (LCS) Metrics: (LSG, see page 20)  
648
- 649       (5) Reliability, Availability and Maintainability (RAM)  
650
- 651           (a) Materiel Availability Key Performance Parameter (KPP): (LSG, see page 21,  
652 paragraph a)  
653
- 654           (b) Materiel Reliability: (LSG, see page 21 , paragraph b)  
655
- 656           (c) Maintainability (Field Level): (LSG, see page 22, paragraph c)  
657
- 658           (d) Maintenance Ratio: (LSG, see page 22, paragraph d)  
659
- 660           (e) Maintainability (Sustainment Level): (LSG, see page 22, paragraph e)  
661
- 662           (f) Platform Re-Generation (PRG): (LSG, see page 23, paragraph f)  
663
- 664           (g) Platform Re-Generation-Maximum (PRG-M): (LSG, see page 23, paragraph g)  
665
- 666       (6) Corrosion Prevention and Control (CPC). CPC is a critical consideration in assuring the  
667 sustained performance, readiness, economical operation and service life of Army systems and  
668 equipment. It requires active consideration in the materiel development, acquisition, fielding,  
669 operation, and storage processes. CPC requires life cycle management planning and action in  
670 design, development, testing, fielding, training, and maintenance. The Product Manager for  
671 [XXXXXXXXX capability](#) is responsible for ensuring that a suitable corrosion prevention strategy  
672 is in place for the [XXXXXXXXX capability](#) in accordance with AR 750-59, Army Corrosion  
673 Prevention and Control Program.  
674
- 675       (7) Item Unique Identification (IUID). IUID is a DOD initiative that will enable easy  
676 access to information about DOD possessions that will make acquisition, repair, inventory, and  
677 deployment of items faster and more efficient. The implementation of IUID requirements means  
678 that qualifying items must be marked with a Unique Item Identifier (UII) in accordance with the  
679 DOD Guide to Uniquely Identifying Items. Specifically, MIL STD 130

680 <http://www.uidsolutions.com/milstd130.aspx> requires that all XXXXXXXX capability  
681 qualifying components, to include legacy components that transition through organic depots,  
682 must be marked with a UII in the form of a machine readable 2D Data Matrix, the contents of  
683 which will be encoded in the syntax of ISO/IEC 15434 and the semantics of ISO/IEC 15418 or  
684 the Air Transport Association (ATA) Common Support Data Dictionary (CSDD). All 2D Data  
685 Matrix bar codes must meet the verification standards for mark quality as established in ISO  
686 15415 and SAE AS9132.

687  
688 **15. Other System Attributes.** *This should be considered an “a la carte” menu. Only choose*  
689 *those areas where you have something to say. Do not use the subparagraph heading followed by*  
690 *NA.*

691  
692 a. Address attributes that tend to be design, cost, and risk drivers, including environment, safety  
693 and occupational health, human systems integration, embedded instrumentation, electronic attack,  
694 information protection standards, information assurance, and wartime reserve mode requirements.

695  
696 b. Address natural environmental factors (such as climatic, terrain, and oceanographic factors);  
697 and unplanned stimuli (such as fast cook-off, slow cook-off, bullet impact, fragment impact,  
698 sympathetic detonation, and shape charge jet).

699  
700 c. Define the expected mission capability (e.g., full, percent degraded) in the various  
701 environments. Include applicable safety parameters, such as those related to system, nuclear,  
702 explosive, and flight safety.

703  
704 d. Identify physical and operational security needs.

705  
706 e. When appropriate, identify the weather, oceanographic and astro-geophysical support needs  
707 throughout the program’s expected life cycle.

708  
709 f. Include data accuracy and forecast needs.

710  
711 g. For intelligence, surveillance, and reconnaissance platforms, address information protection  
712 standards.

713  
714 h. Describe the non-information technology/national security system capabilities required for  
715 allied and coalition operations, identify the potentially applicable US-ratified international  
716 standardization agreements, and provide an initial indication of which ones will be incorporated in the  
717 system requirements. (References [DODD 8320.2, Data Sharing in a Net-Centric Department of](#)  
718 [Defense](#) available at: <http://www.dtic.mil/whs/directives/corres/pdf/832002p.pdf> and [DODD 2010.6,](#)  
719 [Material Interoperability with Allies and Coalition Partners](#).)

720  
721 i. Address conventional and initial nuclear weapons effects and CBRN survivability. In the event  
722 the mission requires CBRN survivability, consider elevating this attribute to be a KPP.

723  
724 j. *The following statements are examples only and information provided should reflect the*  
725 *attributes of the specific system addressed in the CDD. Consider the following areas:*

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(1) Storage Environment. The appropriate storage temperature and air quality should be specified. This should include length of time to remain in storage, frequency and duration of maintenance actions, etc.

(2) Embedded Instrumentation. The **XXXXXXXXX capability** will have embedded diagnostics that can identify errors or faults down to the Line Replaceable Units/Line Replaceable Module (LRU/LRM) level.

(3) Conventional Weapons Effects and Initial Nuclear Weapons Effects. *Include the assessment of whether the capability is mission critical.*

(4) Nuclear, Biological, and Chemical Contamination (NBCC) Survivability. The **XXXXXXXXX capability** is (or is not) mission critical, however, it will be Chemical, Biological, Radiological, and Nuclear (CBRN) contamination and decontamination survivable against the effects of CBRN agents and decontaminates so that it remains operational in all CBRN environments, with the exception of rubber and canvas field replaceable items, and is compatible with personnel operating and maintaining while in MOPP IV.

(5) Expected Mission Capability. *Environmental operating conditions (percentage of use in Hot, Basic, Cold, etc.) along with dust, smoke, rain, etc. will be included here.*

(6) Physical and Operational Security Needs. **XXXXXXXXX capability** will be physically secured in the same way as other property book items (i.e. Arms Room, Supply Room, Platoon Equipment Room, or on Vehicles).

(7) Human System Integration/MANPRINT.

(a) Manpower. *State manpower constraints (if any).*

(b) Personnel. *State MOS constraints (if any).*

(c) Training. *State training requirements for host station, NET, and field refresher training as required including resources required to meet training levels.*

(d) Human Factors Engineering – The **XXXXXXXXX capability** design shall promote effective Soldier-machine integration for optimal total system performance. Design principles taking into account human capabilities and limitations shall be incorporated into system definition, design, development, and evaluation. This includes concepts of human-computer interface (e.g., ease of perception and comprehension of displays, ease of use of controls) and compatibility of **XXXXXXXXX capability** with other mission-essential equipment (including but not limited to use with standard combat gear, CBRN, and environmental clothing). The **XXXXXXXXX capability** should not interfere with the performance of common Soldier tasks. Equipment design must consider mission-dependent tasks and demands through consultation with SMEs, in order to maximize ease of use, minimize workload and enhance mission performance.

772  
 773 (e) System Safety. *State appropriate System Safety requirements to include any*  
 774 *regulatory requirements the system must meet.* For example “The XXXXXXXX capability  
 775 design and operational characteristics shall minimize the possibilities for accidents or mishaps  
 776 caused by human error or system failure. Safety, health, environmental, fire, and ergonomic  
 777 hazards associated with the use, maintenance, transportation, storage, handling, and  
 778 demilitarization of the XXXXXXXX capability will be identified, evaluated/assessed, and  
 779 mitigated or controlled to an acceptable level. The resolution of all hazards will be formally  
 780 documented through a hazard tracking system and the risk associated with the residual hazard, if  
 781 any, will be accepted by the designated approving authority IAW [AR 385-10, The Army Safety](#)  
 782 [Program](#) (available at: [http://www.apd.army.mil/pdffiles/r385\\_10.pdf](http://www.apd.army.mil/pdffiles/r385_10.pdf)) and [DA Pam 385-16,](#)  
 783 [System Safety Management Guide](#) (available at: [http://www.apd.army.mil/pdffiles/p385\\_16.pdf](http://www.apd.army.mil/pdffiles/p385_16.pdf)).

784  
 785 (f) Health Hazards. Insert the following statement “A Health Hazard Assessment (HHA)  
 786 will be requested from the Center for Health Promotion & Preventive Medicine (CHPPM) early  
 787 in the development or procurement process. This HHA will be updated at each Milestone  
 788 Decision Review (MDR) as required by AR 40-10.”

789  
 790 (g) Soldier Survivability. *State other survivability requirements applicable to the system*  
 791 *which are different than those which may be included as a KPP.*

792  
 793 **16. Program Affordability.**

794  
 795 a. Describe life-cycle cost (include all associated DOTMLPF and policy costs).

796  
 797 b. Describe sponsor’s estimates of the appropriate funding level for developing, producing,  
 798 and sustaining the desired capability.

799  
 800 c. State cost in terms of a threshold and objective capability (not necessarily a KPP) to  
 801 provide flexibility for program evolution and cost as an independent variable tradeoff studies.

802  
 803 d. Describe applicable cost analyses conducted to date.

804  
 805 e. The structure of the paragraph and the two tables are mandated by HQDA G8 as  
 806 promulgated in the HQDA G3 memo, 18 Oct 07, *Approval of Army Warfighting Capabilities*  
 807 *DCS G-3/5/7, Interim Implementation Guidance..* The full version of the memo is located in the  
 808 ARCIC AKO Policy Site at URL: <https://www.us.army.mil/suite/kc/5232873>. An excerpt of the  
 809 G8 section is enclosed below in the PDF file. An information paper put out by the Director,  
 810 Capabilities Developments is also enclosed to help document sponsors properly frame resource  
 811 requirements. The PM provides this information to the capability developer.

812



Part VI, G8  
Affordability Requirer



Applying  
Resource-Informed t

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816 **Mandatory Appendices**

817

818 **Appendix A - Net-Ready KPP Products.** At a minimum, you should have a High-Level  
819 Operational Concept Graphic (OV-1), even if the capability does not have a NR-KPP and  
820 doesn't require all architecture views.

821

822 *a. CJCSI 6212.01E, Interoperability & Supportability of Information Technology and*  
823 *National Security Systems, 15 Dec 08 (available at:*  
824 *[http://www.dtic.mil/cjcs\\_directives/cdata/unlimit/6212\\_01.pdf](http://www.dtic.mil/cjcs_directives/cdata/unlimit/6212_01.pdf)) significantly changed the*  
825 **content of Appendix A**, but many of the changes advocated are not available and the CJCSI  
826 6212.01D has been grandfathered for 6 months continued use through 15 Jun 09.

827

828 *b. All views included should have accompanying text to highlight the salient point of the*  
829 *architecture view as mandated by the DOD Architecture Framework (DODAF) available at:*  
830 *[http://www.defenselink.mil/cio-nii/docs/DoDAF\\_Volume\\_II.pdf](http://www.defenselink.mil/cio-nii/docs/DoDAF_Volume_II.pdf).*

831

832 *c. If the OV-1 is the only view included in the appendix, add the following statement "This*  
833 *capability has no C4I interface with any other system or capability. The NR-KPP is not*  
834 *applicable. The architecture enclosed supports and underpins the CONOPS discussion in*  
835 *paragraph 3."*

836

837 *d. If you are developing the full NR-KPP, the following products are mandatory and should*  
838 *appear in appendix A in the order shown below for ease of review and evaluation:*

839

- 839 • NR-KPP statement, copy and paste the KPP description, production threshold,  
840 and production objective from the KPP table in paragraph 6. Do not paste the Tier 1  
841 & 2 JCA column.

842

- 842 • NCOW-RM Compliance Statement (Net-Centric Operations & Warfare  
843 Reference Model).

844

- 844 • Information Assurance (IA) Statement of Compliance. Verbiage for a CDD must  
845 state that the "Program is in compliance" with appropriate regulations and directives.  
846 The distinction between verbiage appropriate for a CDD and that of a CDD is not  
847 captured in CJCSI 6212.01D.

848

- 848 • KIP Declaration. Use the table below. Only fill out the rows that apply to the  
849 capability you are producing.

850



KIP Declaration Table  
DISR (29 Jun 07).doc

851

852

- 853 • All Views & Operational Architecture: AV-1, OV-1, OV-2, OV-3 (*new*  
854 *requirement, previously submitted only SV-6 that captures critical information from*  
855 *the OV-3*), OV-4, OV-5, OV-6C.

856

- 856 • Systems Architecture: SV-2, SV-4, SV-5, SV-6. The SV-5 is either an Excel file  
857 or a Word table at the discretion of the System's Architect. **The SV-6 must be**  
858 **submitted as a separate Excel file.** A blank SV-6 template is enclosed below based



859 on DODAF V1.5, April 2007. Systems Architecture is the PM's responsibility.  
 860 Close coordination is required to ensure products are developed to support staffing of  
 861 the capability document.  
 862



SV-6 Template  
DODAF 1.5.xls

- 863  
864
- 865 • Technical Architecture. TV-1 & TV-2 (Draft IT Standards Profile generate by the  
866 DOD IT Standards Registry (DISR) Online. Note: This view must be developed on  
867 DISR Online (NIPRNET), exported to disk, and published on DISR Online SIPRNET  
868 Registry. The PM is responsible for developing this product.
  - 869 • OV-7, SV-11, & TV-2 are included as appropriate and relate to shared data and  
870 data warehousing and future data standards. Review the DODAF for more fidelity  
871 and their use.
  - 872 • Architecture products (except TV's) must be stored in CADIE and metadata  
873 tagged to meet the requirements of ARCIC Policy Letter # 12 and CJCSI 6212.01D.  
874



ARCIC Policy Ltr 12  
Operational Architect

875  
876 e. Additional assistance is available on the [J6 wiki Portal](#).

877  
878 **Appendix B – References.** The attached template lists six standard references. Add other  
879 references that are germane to the CDD. This is not a library listing.  
880



Appendix B  
References - Minimun

881  
882  
883 **Appendix C – Acronym List.** Add only acronyms and definitions used in the CDD. *This is not*  
884 *a glossary of JCIDS terms and definitions. If an acronym or definition is not used in the*  
885 *CDD, do not include it in this appendix.*  
886

### 887 **Other Appendices**

888  
889 **Appendix D – Analysis (As required).** If unable to complete the analysis discussion in the  
890 main CDD document (e.g., > two pages or less), then summarize the analyses here. Describe the  
891 analysis (AoA or other supporting analysis) conducted to determine system attributes and  
892 identify KPPs. Include the alternatives, objective, the criteria, assumptions, recommendation,  
893 and conclusion. If you don't use this appendix, delete it from the TOC and final page of the  
894 template (Appendix D listing).  
895  
896

897 **Standard Comment Matrix**

898 *The comment matrix below is the recommended matrix for both worldwide (proponent level*  
899 *developmental staffing) and ARCIC validation staffing.*

900



Recommended  
comment matrix for A

901