



DEFENSE SECURITY COOPERATION AGENCY

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MEMORANDUM FOR DEPUTY UNDER SECRETARY OF THE AIR FORCE FOR  
INTERNATIONAL AFFAIRS  
DEPUTY ASSISTANT SECRETARY OF THE ARMY FOR  
DEFENSE EXPORTS AND COOPERATION  
DEPUTY ASSISTANT SECRETARY OF THE NAVY FOR  
INTERNATIONAL PROGRAMS  
DIRECTOR, DEFENSE CONTRACT MANAGEMENT AGENCY  
DIRECTOR FOR SECURITY ASSISTANCE, DEFENSE FINANCE  
AND ACCOUNTING SERVICE – INDIANAPOLIS OPERATIONS  
DIRECTOR, DEFENSE INFORMATION SYSTEMS AGENCY  
DIRECTOR, DEFENSE LOGISTICS INFORMATION SERVICE  
DIRECTOR, DEFENSE LOGISTICS AGENCY DISPOSITION  
SERVICES  
DIRECTOR, DEFENSE THREAT REDUCTION AGENCY  
DIRECTOR, NATIONAL GEOSPATIAL – INTELLIGENCE  
AGENCY  
DEPUTY DIRECTOR FOR INFORMATION ASSURANCE,  
NATIONAL SECURITY AGENCY  
DIRECTOR, DEFENSE TECHNOLOGY SECURITY  
ADMINISTRATION

SUBJECT: Targeting Infrastructure Policy, DSCA Policy 19-58 [SAMM E-Change 461]

REFERENCE: A) DSCA Policy Memorandum *Interim Requirements for Proposed Sales of Air-to-Ground and Indirect Fire Surface-to-Surface Munitions and Their Delivery Systems*, August 1, 2019 (For Official Use Only)  
B) DSCA Policy Memorandum *Targeting Infrastructure Policy*, October 31, 2019 (For Official Use Only)

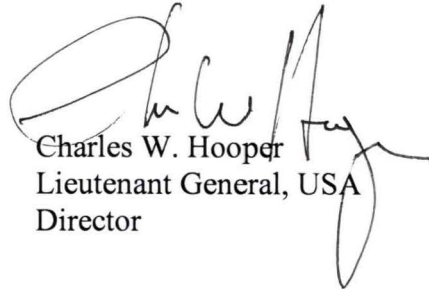
Ref B supersedes Ref A memorandum to establish policy regarding the provision of targeting infrastructure to foreign partners in conjunction with the transfer of certain munitions and delivery systems. This memorandum incorporates the requirements of Ref B into the Security Assistance Management Manual (SAMM). U.S. Government personnel may contact DSCA Weapons via NIPR email ([dscanrcstrliststrwpmallmembers@mail.mil](mailto:dscanrcstrliststrwpmallmembers@mail.mil)) for copies of the referenced memoranda.

The Defense Security Cooperation Agency (DSCA) will review and, as necessary, update this policy no later than June 1, 2020.

The attached changes will be included in the online version of the SAMM found on the DSCA Web Page as SAMM E-Change 461. For questions on this policy, please contact the DSCA working group at [dscanrcfo.list.dscacivcaswg@mail.mil](mailto:dscanrcfo.list.dscacivcaswg@mail.mil). For general questions about



the SAMM, please contact Mr. Mike Slack, DSCA/STR/SPI, at 703-697-9058 or e-mail:  
micheal.d.slack.civ@mail.mil.



Charles W. Hooper  
Lieutenant General, USA  
Director

Attachments:  
As described

**Security Assistance Management Manual (SAMM), E-Change 461  
Targeting Infrastructure Policy**

**1. Revise Paragraph C4.3.2. to read as follows:**

**C4.3.2. Total Package Approach (TPA).** A TPA ensures that FMS purchasers can obtain support articles and services, to include construction of necessary support facilities, required to introduce and sustain equipment and to operate in a responsible and effective manner consistent with U.S. intent in approving the transfer. The complete sustainability package must be offered to the purchaser when preparing Price and Availability (P&A) data or LOAs. In addition to the system itself, other items to consider in a total package include: training, technical assistance, initial support, software, ammunition, follow-on support, etc.

**2. Revise Paragraph C4.4.18. with the following text including Table C4.T6. to read:**

**C4.4.18. Air-to-Surface and Indirect Fire Surface-to-Surface Munitions and their Delivery Systems.** The Total Package Approach to air-to-surface (A/S) and/or indirect fire surface-to-surface (S/S) munitions and their delivery systems must account for targeting capabilities that enable the responsible and effective employment of such munitions. A U.S. targeting solution will be required unless the IA has determined that the country has a sufficient previously-established U.S., indigenous, or third party solution for targeting infrastructure, as applicable under Table C4.T6. Air Force Life Cycle Management Center (AFLCMC) will be the default program office for targeting solutions, regardless of the lead IA for the requested munition(s) or delivery platform. In international competitions involving more than one U.S. bidder, DSCA will assume an active role in providing guidance to the IAs to ensure a common targeting solution is offered across platforms, where applicable.

**C4.4.18.1.** The IA must follow the process in this section for all LORs for LOA, Pre-LOR Assessment Requests (PARs), and P&A responses that include LOA-quality data in response to a competition. For other partner requests, the IA should determine whether to conduct the full process in this section, based on factors including the likelihood of the request resulting in a sale and the need to manage partner expectations regarding targeting costs associated with a future case. In instances in which the IA chooses not to follow the process in the section, responses should note, at a minimum, that the case may require additional advanced target development capability, including a target coordinate mensuration (TCM) [if munition is coordinate-seeking], weaponeering, and collateral damage estimation (CDE) capability.

**C4.4.18.2.** Within 14 calendar days of receipt of a valid Request for Information (RFI), PAR, or LOR for P&A or LOA that includes A/S or indirect fire S/S munitions or their delivery platforms, the lead IA will submit an LOR Advisory (Figure C5.F1b. Air-to-Surface or Indirect Fire Surface-to-Surface Munitions and their Delivery Systems LOR Advisory Format) to DSCA Weapons via NIPR email ([dscan.cr.str.list.str-wpn-all-members@mail.mil](mailto:dscan.cr.str.list.str-wpn-all-members@mail.mil)). The IA need not submit an LOR advisory for a transfer of munitions that have already undergone steps 1 through 14 of this process. Because CDE

and weaponeering requirements vary by munition, country requests must go through this process for each munition. If any of this information is not available within 14 calendar days of receipt of the LOR, the IA may proceed with the Advisory without it. If DSCA disagrees with an IA recommendation that a U.S. targeting solution is not required, DSCA will inform the IA no later than 14 calendar days after receipt of the Advisory and facilitate an interagency decision, with the IA, GCC, and State Department, on the targeting infrastructure requirements.

**C4.4.18.3.** A targeting solution must account for software, data, training, and applicable publications, in line with Table C4.T6. DoD will build a targeting solution into transfers that require it, regardless of whether a targeting requirement is identified in the LOR. However, if DoD personnel participate in a LOR generation discussion with a partner for an A/S or indirect fire S/S munition or delivery system, they will recommend the inclusion, at a minimum, of the following standard language:

*“Advanced target development capability to support the effective use of the following U.S. origin munitions: [identify munitions here]. This capability should include, at a minimum, a target coordinate mensuration [if munition is coordinate-seeking], weaponeering, and collateral damage estimation capability.”*

Targeting subject matter experts (SME) will generally not be required in pre-LOR discussions.

**C4.4.18.4.** Advanced target development capabilities include TCM, weaponeering, and CDE. Targeting infrastructure is the software, data, and training necessary to conduct TCM, weaponeering, and CDE. TCM, weaponeering, and CDE improve mission effectiveness and help partners fulfill their obligations under the law of armed conflict. TCM (often referred to as Precision Point Mensuration or PPM) provides the ability to generate geographic points at the level of precision and accuracy necessary for the effective use of a coordinate-seeking weapon. TCM refers to the measurement of a feature or location to determine an absolute latitude, longitude, and elevation of a target. Weaponeering provides the ability to predict the type and the quantity of a particular type of weapon required to achieve a specific level of target damage by considering the effects of target vulnerability, warhead damage mechanisms, delivery errors, damage criteria, and weapon reliability. Without accurate weaponeering analysis, forces risk mission failure (not causing the desired effect on the target) or unnecessary collateral damage. Accurate weaponeering results in efficient target-weapon pairing, optimizing the number of weapons required to provide the desired effect on a target. CDE provides the ability to estimate the potential for collateral damage resulting from target engagement. Without CDE, forces risk unforeseen or unnecessary collateral damage.

**Table C4.T6. Targeting Infrastructure Requirements by Munition Type**

Munition Guidance Type	TCM	Weaponeering	CDE	Additional Weapon-Specific Requirements
Coordinate-seeking	X	X	X	

Munition Guidance Type	TCM	Weaponneering	CDE	Additional Weapon-Specific Requirements
Laser		X	X	
Infrared		X	X	
Radar-seeking		X	X	X
Stand-Off	X	X	X	X
Unguided		X	X	

**C4.4.18.5.** The Implementing Agencies (IAs) shall develop weapon-specific checklists for every A/S or S/S indirect fire munition or category of munitions that account, at a minimum, for the requirements in Table C4.T6. While IAs may tailor targeting solutions as necessary based on the needs and existing capabilities of the partner, the presumptive, default total package for transfers of qualifying munitions or their delivery systems shall consist of the following:

- Default Targeting Solution – Software: Digital Imagery Exploitation Engine (DIEE) TCM (as applicable), DIEE Quick Weaponneering, and DIEE CDE, consistent with the U.S. standard.
- Default Weaponneering Data: The default approach will be to provide a list of unclassified representative targets for loading into the Probability of Kill Look Up Tool (PkLUT) to support DIEE Quick Weaponneering. DIA has approved the release of these target names and associated data in the development of baseline weaponneering capabilities for any partner for whom relevant Category 2 data has been approved. JTCG/ME will update this list and seek a renewal of the DIA approval whenever required.
- Default Training Requirements: DoD will provide training in TCM, weaponneering, and CDE that is comparable to that provided to U.S. personnel. National Geospatial-Intelligence Agency (NGA) accreditation of the partner’s targeting program and/or certification of the partner’s TCM analysts is generally not necessary to satisfy the Total Package Approach, unless the partner seeks full interoperability with the United States. Partners wishing to achieve full interoperability with the United States will be provided additional training.
- Applicable Publications: DoD will provide applicable instructions and methodologies in support of TCM, weaponneering, and CDE.

**C4.4.18.6.** The above default may not be appropriate for unguided indirect fire surface-to-surface munitions. Where the default is not appropriate for a particular system, the IA will incorporate an alternate default into its system-specific checklist.

**C4.4.18.7.** Full interoperability for the purposes of this policy includes any of the below:

- Shared Joint Desired Point of Impact (JDPI) production or production of JDPIs for

use by the United States;

- Shared Basic, Intermediate, and Advanced Target Development; and/or
- Machine-to-Machine database and intelligence-level coordination.

**C4.4.18.8.** If the partner has the ability to conduct some but not all aspects of targeting required under Table C4.T6., the IA may determine that a partial U.S targeting solution is required.

**C4.4.18.9.** If at any time in the process it becomes clear that the Purchaser is unwilling to accept, or the IA is unable to offer, the targeting infrastructure required for responsible and effective employment of the munition, the lead IA will submit a Targeting Infrastructure Deficiency Advisory to DSCA Weapons. To best inform policy decision-makers, the advisory shall, at a minimum, identify the targeting deficiency, the cause of the deficiency, risks of delivering the munition or platform without the targeting infrastructure, and any rationale for otherwise offering the munition or platform despite the deficiency (e.g., partner plans to employ weapon only in coalition operations, partner tactics support alternative employment method, etc.). DSCA will provide a DoD-coordinated risk assessment to State/PM. DSCA, with the concurrence of State/PM, will provide guidance to the IA on how to proceed.

**3. Revise Table C5.T1h as follows:**

**Table C5.T1h. Additional CTA Elements for Air-to-Surface and Indirect Fire Surface-to-Surface Munitions and their Delivery Systems**

#	Required Element
13	Has the partner previously demonstrated an ability and willingness to employ weapons in a manner that minimizes collateral damage?
14	Does the partner conduct weaponeering? If so, what tools and methods/methodology does the country use? Identify whether the existing capabilities could support the munition/delivery system requested, and whether such support would require upgrade/modification.
15	Does the partner conduct target coordinate mensuration (TCM)? If so, what tools and methods/methodology does the country use? What geographic data? Can the partner reliably generate Target Location Error Category I coordinates under Joint Publication 3-09.3? Identify whether the existing capabilities could support the munition/delivery system requested, and whether such support would require upgrade/modification.
16	Does the partner conduct Collateral Damage Estimation (CDE)? If so, what tools and methods/methodology does the country use? Identify whether the existing capabilities could support the munition/delivery system requested, and whether

#	Required Element
	such support would require upgrade/modification.
17	<p>The SCO must secure combatant command endorsement of the CTA prior to submission. The CTA and the combatant command endorsement should include the following endorsement:</p> <p>“In order to promote CDE practices and help partners mitigate the risk of civilian harm arising from the use of U.S.-origin munitions, the geographic combatant command approves the release of the munition’s associated CDE table. Further, the geographic combatant commands approve the release of the unclassified portions of the U.S. CDE methodology within the Chairman of the Joint Chiefs of Staff Instruction 3160.01.”</p>

**4. Revise the final line of Table C5.T4. to:**

Item	Requirement	Notes
Air-to-Surface and Indirect Fire Surface-to-Surface Munitions and their Delivery Systems	Advisory Letter C5.F1b.	Unique review Section C4.4.18.

**5. Add a new Figure C5.F1b.:**

**Figure C5.F1b. Air-to-Surface or Indirect Fire Surface-to-Surface Munitions and their Delivery Systems Letter of Request (LOR) Advisory Format**

<p>NOTE: Memorandum is classified if applicable.</p> <p>MEMORANDUM FOR:</p> <p style="padding-left: 40px;">DIRECTOR, DSCA Weapons Division (DSCA/DSA/WPN)</p> <p>SUBJECT: Letter of Request (LOR) Advisory - [Insert Country or International Organization Name]</p> <p>The [Implementing Agency] has received a request from [insert Country or International Organization Name] for Air-to-Surface or Indirect Fire Surface-to-Surface Munitions and their Delivery Systems.</p> <p>[The LOR Advisory should include an initial recommendation on whether a U.S. targeting</p>
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capability should accompany the munition or delivery platform case and should also include the following information, if available:

- a. Whether the IA supports release of the munition, delivery platform, warhead, and/or fuse to the country;
- b. Whether the requested transfer would be the first for the specified munition/platform to the country, or whether the country already has the requested munition/platform in its inventory;
- c. For munitions requests, on what platform the munition will be integrated;
- d. For delivery platforms, what munition(s) the IA reasonably expects the country to employ using the platform;
- e. Quantity of munition(s) requested, if applicable;
- f. Whether mission planning and/or targeting capabilities are included in the request;
- g. Whether the country has targeting tools currently in their inventory, if known;
- h. Any other relevant comments.

If any of this information is not available within 14 calendar days of receipt of the LOR, the IA may proceed with the Advisory without it.]

The purpose of this memorandum is to advise you of this request and provide you with a copy for your use and information. If you have any questions or desire additional information regarding this potential sale, please contact [insert name, office symbol, phone number, and e-mail address.

Attachment:

[Insert Purchaser Request Information]

NOTE: Memorandum is classified if applicable.

## 6. Add a new Standard Note to Appendix 6:

### Precision Guided Munitions with Target Coordinate Mensuration (TCM) Capability

Note Usage
FMS: Yes
BPC: No
Mandatory for every LOA or Amendment for Precision Guided Munitions that includes a Target Coordinate Mensuration capability



**References**

See Section C4.4.18.

**Note Input Responsibility**

IA

**Note Text**

“Effective Target Coordinate Mensuration (TCM) requires certain geo-intelligence data, including Enhanced Targeting Data (ETD), for the area(s) of operation. Should the Purchaser need or desire additional ETD beyond the geographic scope of the discrete ETD components provided on this line, the Purchaser must submit a Letter of Request that details the specific geographic scope of the additional requested ETD.”