

# Department of Defense INSTRUCTION

NUMBER 4140.61

December 14, 2000

USD (AT&L)

SUBJECT: Customer Wait Time and Time Definite Delivery

- References: (a) <u>DoD Directive 4140.1</u>, "Materiel Management Policy," January 4, 1993
  - (b) "FY 2000 DoD Logistics Strategic Plan," August 19991
  - (c) DoD Reform Initiative Directive #54, "Logistics Transformation Plans," March 23, 2000<sup>2</sup>
  - (d) <u>DoD 8910.1-M</u>, "DoD Procedures for Management of Information Requirements, June 30, 1998

#### 1. PURPOSE

This Instruction:

1.1. Implements policy, assigns responsibilities, and prescribes procedures under reference (a) to establish a means of measuring and improving the responsiveness of the DoD logistics system to customer requirements.

1.2. Implements reference (b) for the purpose of establishing a DoD-wide performance for customer wait time.

1.3. Implements reference (c) for the purpose of establishing a DoD-wide approach to the development of a standard of performance for the DoD logistics system to respond to customer requirements for materiel.

<sup>1</sup> Available at http;//gravity.lmi.org/logisticsplan

<sup>&</sup>lt;sup>2</sup> Available at http://www.acq.osd.mil/log/sci/exinfo/drid\_54.pdf

#### 2. <u>APPLICABILITY</u>

This Instruction applies to the Office of the Secretary of Defense, the Military Departments (including the Coast Guard, when it is operating as a Military Service of the Department of the Navy and, by agreement with the Department of Transportation, when it is operating as a Military Service of that Department), the Chairman of the Joint Chiefs of Staff, the Combatant Commands, and all other organizational entities in the Department of Defense (hereafter referred to collectively as "the DoD Components"). The term "Military Services," as used herein, refers to the Army, the Navy, the Air Force, the Marine Corps, and the Coast Guard.

#### 3. DEFINITIONS

3.1. <u>Customer</u>. For customer wait time and/or time definite delivery, the individual or activity requesting or ordering a material asset at any organizational level.

3.2. <u>Customer Wait Time</u>. A measurement of the total elapsed time between the issuance of a customer order and satisfaction of that order.

3.3. <u>Time Definite Delivery</u>. The concept that, within a specified degree of probability (e.g., 95 percent), the logistics system is capable of delivering required materiel to the customer within a given period of time.

#### 4. <u>POLICY</u>

It is DoD policy that all organizations in the supply chain recognize and emphasize the importance of time in accomplishing their respective functions. Timely receipt of items ordered by customers of the logistics system contributes to increased customer confidence in that system. All organizations in the supply chain must accomplish their-respective functions in an efficient and cost-effective manner.

#### 5. <u>RESPONSIBILITIES</u>

5.1. The <u>Deputy Under Secretary of Defense for Logistics and Materiel Readiness</u> shall:

5.1.1. Monitor compliance with this Instruction.

5.1.2. Establish a DoD Customer Wait Time Committee, made up entirely of full-time employees of the Federal Government, that shall;

5.1.2.1. Develop and maintain uniform business rules for the measurement and reporting of customer wait time in a variance-based format.

5.1.2.2. Serve as the principal group responsible for developing the customer wait time performance measure.

5.1.2.3. Apply time definite delivery standards to customer wait time measurement so that performance may be compared to applicable standards.

5.1.2.4. Ensure that senior leaders in the DoD Components are advised of all initiatives and plans as they are developed with respect to customer wait time and time definite delivery.

5.1.2.5. Document and retain DoD-level customer wait time calculation rules to support consistency of measurement across the Department of Defense, and to support auditing of individual Military Service customer wait time calculations.

5.1.2.6. Provide feedback to the Deputy Under Secretary of Defense for Logistics and Materiel Readiness and the Joint Staff, Director of Logistics concerning Military Service requirements to fully implement customer wait time and time definite delivery goals.

5.2. The Director, Defense Logistics Agency shall:

5.2.1. Assign a representative to the DoD Customer Wait Time Committee to develop a method of including retail transactions at the lowest level (e.g., immediate issues of materiel from installation or shipboard supply activities, Government purchase card acquisitions, etc.) with wholesale logistics response time measurement in order to produce a customer wait time performance measure.

5.2.2. Use the customer wait time measurement to assess the performance of the DoD supply chain.

5.2.3. Use the customer wait time measure and time definite delivery standards as a basis for process improvements.

5.2.4. Require and enable the Defense Automatic Addressing System Center to:

5.2.4.1. Display overall Customer Wait Time summaries for the Military Services and the Coast Guard, using the format at Enclosure 2, as well as other formats developed, and agreed upon, by the DoD Customer Wait Time Committee.

5.2.4.2. Capture data on transactions entering, and being processed through, the wholesale logistics pipeline and make that data available to the DoD Components in a web-based environment for their use in preparing customer wait time summaries as well as for the purpose of improving wholesale logistics functions and processes.

5.2.4.3. Coordinate with the Military Services (including the Coast Guard) to develop a system that includes retail transactions.

5.3. The <u>Secretaries of the Military Departments</u>, and the <u>Commandant of the</u> <u>United States Coast Guard</u>:

5.3.1. Work through their representatives on the DoD Customer Wait Tune Committee to develop a method of including retail transactions at the lowest level (e.g., immediate issues of materiel from installation or shipboard supply activities, Government purchase card acquisitions, etc.) with wholesale logistics response time measurement in order to produce a customer wait time performance measure.

5.3.2. Use the customer wait time measurement to assess the performance of the DoD supply chain.

5.3.3. Use the customer wait time measure and time definite delivery standards as a basis for process improvements.

5.3.4. Submit monthly reports to the Defense Automatic Addressing System Center covering completed orders originating from organizational maintenance activities in accordance with the input format and the instructions contained in Enclosure 1.

5.3.5. Retain records of customer wait time data and any calculations used for purposes of audit and oversight.

5.4. The Chairman of the Joint Chiefs of Staff:

5.4.1. Utilizes the Joint Logistics Warfighting Initiative to develop and test a set of proposed standards for time definite delivery in the area of responsibility for one Commander of a Combatant Command.

5.4.2. Validates the results of the test described in subparagraph 5.4.1., above, in areas of responsibility for two other Commanders of Combatant Commands.

5.4.3. Provides, based on the validated test results described in subparagraphs 5.4.1. and 5.4.2., above, the Deputy Under Secretary of Defense for Logistics and Materiel Readiness with a proposed set of time definite delivery standards that has been fully coordinated with the Military Services, the Defense Logistics Agency, and the United States Transportation Command for use throughout the Department of Defense. The proposed standards must be consistent with the warfighting needs, readiness goals, and logistics cost goals of the combatant commanders and the Military Services.

5.4.4. Assists the Commanders of the Combatant Commands and the Military Departments in their preparations and plans to capture retail data for inclusion in customer wait time performance measurement.

5.5. The Commander-in-Chief, United States Transportation Command:

5.5.1. Assigns a representative to the DoD Customer Wait Time Committee to develop a method of including retail transactions at the lowest level (e.g., immediate issues of materiel from installation or shipboard supply activities, Government purchase card acquisitions, etc.) with wholesale logistics response time measurement in order to produce a customer wait time performance measure.

5.5.2. Uses the customer wait time measurement to assess the performance of the DoD supply chain.

5.5.3. Uses the customer wait time measure and time definite delivery standards as a basis for process improvements.

#### 6. PROCEDURES

6.1. As indicated in the "FY 2000 DoD Logistics Strategic Plan" and the DRID #54 (references (b) and (c)), the Department of Defense is committed to the development of a customer wait tune performance measure that shall measure the

supply chain from end to end, including both its wholesale and retail components. Measurement begins with entries in automated systems. Initial efforts at measuring customer wait time are focused on spare and repair parts. As the measurement matures, it should be expanded to include other commodities.

6.2. The Department of Defense shall develop a set of time definite delivery standards designed to provide customers with the assurance that, in a specified level of probability (e.g., 95 percent), they shall receive the items that they order through the logistics system in a definite period of time, depending on the priority and geographic location of the customer.

6.3. The DoD Components are required to use the customer wait time measurement and shall apply time definite delivery standards to their respective logistics processes once they are developed.

#### 7. INFORMATION REQUIREMENTS

The monthly reporting of customer wait time described in paragraphs 5.3.4. and 5.2.4.1. of this Instruction has been assigned Report Control Symbol DD-AT&L(M)2105 in accordance with DoD 8910.1-M (reference (d)).

#### 8. EFFECTIVE DATE

This instruction is effective immediately.

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Principal Under Secretary of Defense Acquistion, Technology, and Logistics

Enclosures - 2

- E1. Instructions and Format for Customer Wait Time Report Inputs
- E2. Sample DD Form 2829, "Customer Wait Time Report"

#### E1. ENCLOSURE 1

#### INSTRUCTIONS AND FORMAT FOR CUSTOMER WAIT TIME REPORT INPUTS

E1.1.1. <u>Report Submission Requirement</u>. Reports for each month's customer wait time activity shall be submitted on electronic spreadsheets in accordance with the format described in paragraphs E1.1.2. through E1.1.8., below. A sample is provided in Table 1. Department of Defense Form 2829, "Customer Wait Time Report," is available on the Internet under "Defense Link," "Publications, Forms and Reports."

E1.1.2. <u>Report Identification Requirement</u>. Each report shall identify the submitting DoD Component as well as the month and year for which customer wait time data is being provided.

E1.1.3. <u>Completed Transactions</u>. The reports include only transactions that have been completed during the month (i.e., items received by the customer, regardless of whether they were ordered during that month or a previous time).

E1.1.4. <u>First Column</u>. The first column reflects the number of days from order to receipt. "Zero" is to be used for orders that are satisfied in a 24-hour period. The column should have as many rows as are required to identify the order received in that particular month that consumed the greatest number of days between order and receipt.

E1.1.5. <u>Second Column</u>. The second column reflects the volume of orders received by the customers that have an associated customer wait time shown in the first column. In Table 1, 28,452 of the orders received by Navy customers were filled within 0-24 hours, so that entry appears in the second column alongside the cell for "Day 0." Similarly, 8,224 of the orders received by Navy customers were filled in 48-72 hours, so that entry appears in column 2 alongside the cell from column 1 for "Day 2."

E1.1.6. <u>Third Column</u>. The third column is the product of the entry in the first column and the second column of each row. Specifically, to obtain the weighted factor for order volume, multiply the row entry in column 1 by the row entry in column 2. The result in column 3 is the weighted factor. Using the example in row 3 of the customer wait time report in Table 1, the weighted factor would be 2 (Number of Days) x 8,824 (Order Volume) = Weighted factor of 16,448.

E1.1.7. Fourth Column. The fourth column contains the percentile for each day, computed by dividing the volume in column 2 for that day by the total of all entries in column 2 for the month. To obtain the percentile of order volume for each day, divide the row entry for volume in column 2 by the total of all entries for the month in column 2. Using the example in row 3 of the customer wait time report in Table 1, the volume for the day in row 3 is 8,224 orders. Dividing 8,224 by the total number of transactions for the month (122,772) yields a result of 6.7 percent, which is then entered in the percentile column.

E1.1.8. <u>Fifth Column</u>. The fifth column is the cumulative percentage, which is derived by adding all percentiles in column 4 through the day identified in column 1. To obtain the cumulative percentage for a row entry in column 5, add all the percentile entries in column 4 from day 0 through the day of that particular row, and place the sum in column 5 for that row. For example, using the example in row 3, 23.17% + 12.6% + 6.7% = 42.47%.

Attachments - 1

E1.A1. Customer Wait Time, (Sample) Navy October 2000

#### E1.A1. ATTACHMENT 1 TO ENCLOSURE 1

		imple) Nav	y October	
1	2	3	4	5
Day	Volume	Weighted	Percentile	Cummulative
0	28452	0	23.17%	23.17%
1	15467	15467	12.60%	35.77%
2	8224	16448	6.70%	42.47%
3	6281	18843	5.12%	47.59%
4	4706	18824	3.83%	51.42%
5	4558	22790	3.71%	55.13%
6	5638	33828	4.59%	59.73%
71	4677	32739	3.81%	63.53%
81	3349	26792	2.73%	66.26%
91	2207	19863	1.80%	68.06%
10	2132	21320	1.74%	69.80%
11	1751	19261	1.43%	71.22%
12	1557	18694	1.27%	72.49%
13	1699	22087	1.38%	73.88%
14	1703	23842	1.39%	75.26%
15	1356	20340	1.10%	76.37%
16	963	15408	0.78%	77.15%
17	862	14654	0.70%	77.85%
18	888	15984	0.72%	78.58%
19	9051	15295	0.66%	79.23%
20	7991	15980	0.65%	79.88%
21	981	20601	0.80%	80.68%
22	765	16830	0.62%	81.31%
23	648	14904	0.53%	81.83%
24	603	14472	0.49%	82.32%
25	528	13200	0.43%	82.75%
INTEN	TIONAL O	MISSION		
101	48	4848	0.04%	94.97%
102	71	7242	0.06%	95.02%
103	57	5871	0.05%	95.07%
104	61	6344	0.05%	95.12%
105	45	4725	0.04%	95.16%

### Table 1. Customer Wait Time

	(Sample)	Navy Octobe	1 200000	Jillinueu
1	2	3	4	5
Day	Volume	Weighted	Percentile	Cummulative
INTEN	TIONAL OMIS	SION		
730	1	730	0.00%	99.99%
731	0	0	0.00%	99.99%
732	1	732	0.00%	99.99%
733	0	0	0.00%	99.99%
734	2	1468	0.00%	100.00%
735	0	0	0.00%	100.00%
736	0	0	0.00%	100.00%
737	3	2211	0.00%	100.00%
738	1	738	0.00%	100.00%
739	1	739	0.00%	100.00%
740	0	0	0.00%	100.00%
741	1	741	0.00%	100-00%
	122772	2586871		
	Mean CWT	21.07052911		

## Table 1. Customer Wait Time(Sample) Navy October 2000--Continued

#### E2. ENCLOSURE 2

#### Sample DD Form 2829, "CUSTOMER WAIT TIME REPORT"

	CUSTOMIER WART TIME REPORT	TIME REPORT		NEW DATE (Yes	REPORT CONTROL SYMBOL DO-AT &L (M/2105 DATE (Yearthard) October 1999
COMPONENT 5.	¥09	76%	168 16 16 16	MEAK	NUMBER OF TRANSACTIONS I.
1. ARMY					
Z. MAVY	4 days	14 days	102 days	21.07 days	211,772
3. AM FORCE	S	A Z			
4. MARINE CORPS					
B. COAST GUARD					
6. DOD					
DD FORM 2829, NOV 2000					