

Customer Wait Time Business Rules

Version 1.0 – 12/13/00

Customer Wait Time Version 1.0

1.0 Background:

1.1 Logistics Response Time (LRT) - The Department of Defense (DoD) determined in 1993 that measuring the time it took to deliver material to customers was a key performance measure to monitor supply chain effectiveness. Using data, which was readily available from the Defense Automatic Addressing System (DAAS), the Department captured transactions which were transmitted through the wholesale logistics system, and facilitated analysis of the wait time experienced in the various processes that contribute to the time customers spend awaiting material. Over time, additional categories of material, such as medical supplies and subsistence, were added to the Logistics Response Time Measure to reflect the impact of areas of supply that could not be measured from the transactions that were routed through DAAS. The LRT measurement did not, however, capture the impact of inventories of material that were pre-positioned by the Services at the retail level. The LRT measurement also combined information on wait time for material that was urgently required because it held down equipment with wait time for replenishment of retail shelf stock inventories. This combination of information produced wait time measurements that were not closely linked to readiness measurements.

1.2 Customer Wait Time - During the development of the FY 2000 DoD Logistics Strategic Plan, the senior DoD logistics leaders expressed their collective agreement that a new measurement must be developed. The new measurement should reflect the time from order to receipt when customer requirements are satisfied from wholesale and retail transactions as well as other arrangements. This new measure was included in the DoD Logistics Strategic Plan as Customer Wait Time (CWT).

On March 23, 2000, the Deputy Secretary of Defense issued Defense Reform Initiative Directive # 54 which called upon the DoD Components to accelerate the implementation of a Customer Wait Time performance measure, using variance-based computations.

To accomplish Department-wide implementation of this new logistics measure, the DoD Customer Wait Time Committee was commissioned by the Deputy Under Secretary of Defense (Logistics). That Committee developed a proposal to initiate the measurement of Customer Wait Time by focusing solely on order-to-receipt time for requirements for spare and repair parts that are submitted by organizational maintenance activities. That initial measurement should permit the DoD Components to tie Customer Wait Time to readiness indicators. The DoD Customer Wait Time Committee's proposal was subsequently endorsed by the senior DoD Logistics leaders at a meeting of the Logistics Reform Senior Steering Group.

2.0 Definitions:

2.1 Logistics Response Time (LRT) - The elapsed time (in days) from customer requisition to receipt of materiel ordered from the DoD wholesale system. Source: Secretary of Defense Annual Report to the President and the Congress, 2000.

2.2 DAAS - Defense Automatic Addressing System

Customer Wait Time Business Rules

Version 1.0 – 12/13/00

2.3 LMARS - Logistics Metrics Analysis Reporting System

2.4 Customer Wait Time - The total elapsed time between issuance of a customer order and satisfaction of that order. Source: DoD Logistics Strategic Plan, August 1999

2.5 Logistics Reform Senior Steering Group (LRSSG) - The Logistics Reform Senior Steering Group is comprised of the Deputy Chiefs of Staff for Logistics of the Services, the heads of the Defense Logistics Agency, U.S. TRANSCOM, DUSD (L&MR), and the Director for Logistics, Joint Staff.

2.6 Retail - Any requests for materiel that are not satisfied from wholesale or other arrangements.

2.7 Wholesale - A request for materiel that is routed to an Inventory Control Point and is not filled by means of an intra-Service lateral redistribution. (This definition applies only to the calculation of Customer Wait Time and is not intended to be a comprehensive description of the wholesale supply system.)

2.8 Other Arrangements - Non-traditional means of filling requests. Examples of other arrangements include, but are not limited to, lateral redistribution and credit card purchases.

2.9 Customer - The person or activity placing an order for materiel assets.

2.10 Supply Chain Management - The management of all internal and external processes or functions necessary to satisfy a customer's order (from product acquisition, to the conversion/manufacturing process, through shipment and delivery to the customer). Source: Council of Logistics Management, reprinted in Assistant Deputy Under Secretary of Defense (Supply Chain Integration) FY 2000 Business Plan.

2.11 Data - A complete set of information that is used to derive Customer Wait Time.

2.12 Record - An individual transaction, which when combined with all other customer transactions, creates the data necessary to calculate CWT.

2.13 Logic - The business rules and calculations which, when applied to the CWT data, are used to generate CWT reports.

2.14 Reports - The visual display of information created from the application of logic to CWT data.

3.0 Responsibilities:

3.1 Deputy Under Secretary of Defense (Logistics and Material Readiness):

- a) Provide direction and oversight to the DoD Customer Wait Time process
- b) Report overall DoD CWT number as required
- c) Brief senior leadership on CWT efforts

3.2 Military Services (includes U.S. Coast Guard):

Customer Wait Time Business Rules

Version 1.0 – 12/13/00

- a) Collect CWT data
- b) Apply logic to calculate Service CWT input
- c) Report CWT input to DAAS
- d) Retain records used to calculate CWT
- e) Retain logic used to calculate CWT
- f) Use data to improve processes that generate CWT

3.3 DAAS:

- a) Receive the Services' CWT input
- b) Display the Services' CWT input
- c) Calculate the DoD-wide CWT metrics
- d) Produce the DoD-wide CWT reports in accordance with business rules approved by the CWT committee
- e) Produce Wholesale Logistics Response Time (LRT) data and reports
- f) Maintain the current and past authoritative versions of the Customer Wait Time business rules

3.4 Defense Logistics Management Standards Office:

- a) Chair the DoD Customer Wait Time Committee as the representative of OSD
- b) Retain records of the minutes of the Customer Wait Time Committee meetings including records of votes
- c) Track taskings of the CWT committee

3.5 Defense Logistics Agency:

- a) Coordinate with the Services and other activities to improve Customer Wait Time
- b) Fund the display tool for CWT/TDD

3.6 U. S. Transportation Command:

- a) Coordinate with all agencies and the Services to improve both Customer Wait Time and Wholesale Logistics Response Time
- b) Provide reliable accurate transportation information to DAAS

3.7 Joint Staff, Director for Logistics:

- a) Liaison with the CINCS concerning the measurement of Customer Wait Time
- b) Ensure that CWT is integrated into Joint Chief of Staff initiatives

4.0 Calculation Methodology:

4.1 Standard Calculation Methodology of CWT for Maintenance-Related Material ordered in Services' Organizational Maintenance Systems:

4.1.1 Sources of Data:

In June 2000, the Logistics Reform Senior Steering Group (LRSSG) approved the proposal that Customer Wait Time measurement begin by capturing maintenance-related customer requests from Services' Organizational Maintenance systems. To that end, the Services will create CWT "0", by measuring the amount of time that customer's wait for maintenance related-material ordered in the Services' maintenance

Customer Wait Time Business Rules

Version 1.0 – 12/13/00

systems, and report that information as the DoD CWT measure.

To ensure that the data used to calculate wait time is from authoritative data sources, the Services should use data from the systems that are closest to the customer. Any deviation from this requirement should be recorded in the Service's business logic and reported to DAAS for each period that this methodology is not followed.

Each Service will document the authoritative lowest level systems that create requests for material and retain this documentation for review by outside activities.

4.1.2 Alternative Sources of Data:

Authorized alternative sources for Customer Wait Time data may be in systems that roll-up information from lower level sources into consolidated databases. The alternate rolled-up data sources should only be used if these alternate sources can be verified to capture virtually all of the data from the lower level.

If rolled-up systems are utilized to retrieve Customer Wait Time data, the Service using that data will retain documentation that describes the relationship between the lower-level system and the rolled-up system. Additionally, the Services will conduct periodic verification of the percentage of lower-level data contained in the rolled-up data source. Documentation of these analyses will be retained by the Service for review by outside activities.

4.1.3 Customer Wait Time Calculation Methodology:

Consistency in each Service's calculation of CWT is critical to ensure that reported CWT is comparable, and to facilitate calculation of a composite DoD-level CWT.

Calculation of CWT is to be accomplished at the document or request level. The measure of time that it takes from order or request to fulfillment is the amount of time that a customer waits. This is to be calculated by subtracting the request date/time from the receipt date/time on each request to measure the elapsed time. After each request has an associated calculated time, those times are to be summed into categories of wait time by day.

For example, for requests that are ordered and received on the same day, the customer wait time will be recorded as 0 (zero). For requests that are ordered one day and received the next, the customer wait time will be recorded as 1 (one). When all requests have an associated calculated time, a count will be made of the number of documents with 0 days wait time, 1 day wait time, 2 days wait time, etc. A detailed example of this methodology can be found in Appendix A.

4.2 Interim Alternate Methodology:

4.2.1 Rationale:

Due to the accelerated implementation of CWT as a primary

Customer Wait Time Business Rules

Version 1.0 – 12/13/00

logistics measure of DoD, some Services' systems may be inadequate to capture the entire universe of individual transactions necessary to support CWT calculations. To prevent the delay of CWT measurement reporting, the Services are authorized to report CWT via an alternate calculation methodology which is consistent with generally accepted statistical methods.

4.2.2 Calculation Methodology:

The CWT calculation will be made by calculating the number of customer-level requests submitted each month and applying customer wait times against each of those requests using statistical samples of customer wait time from each level of logistic support. The remainder of the calculation methodology follows the standard calculation methodology found in section 4.1.3.

4.2.3 Statistical Sampling Methodology:

4.2.3.1 Method:

The distribution of customer wait times generated at each level of logistics support (retail, intermediate repair, lateral support, wholesale, etc.) will be determined by taking a representative sample of the wait times generated at each such level. Representative samples will include various customer profiles and delivery locations.

4.2.3.2 Periodicity:

Distributions will be recalculated monthly to ensure that CWT calculations are consistent with the actual CWT experienced by that Service's customers during the month reported.

4.2.3.3 Application to individual records:

Services employing this calculation methodology will determine the proportion of total requests that were filled by the processes defined in each wait time distribution and randomly assign wait time values using the associated probabilities from those distributions. These results must be combined with the observed data for submission to DAAS. An example of this process is shown in Appendix B.

4.2.3.4 Documentation:

Logic and data sources used to develop these CWT distributions will be retained by Services employing these methods for review by outside activities. Use of the alternative method will be reported to DAAS in conjunction with the monthly Service CWT submission.

4.2.4 Alternate Calculation Justification Requirement:

Services employing the alternate calculation methodology

Customer Wait Time Business Rules

Version 1.0 – 12/13/00

will provide DUSD (L & MR) documentation that describes the reasons that the alternate methodology is being employed, as well as the projected date that the Service will begin use of the primary calculation methodology. A copy of the justification will be retained by the Service for review by outside activities.

4.3 DoD Combined Calculation Methodology:

4.3.1 Services' Submission:

Each Service will conduct CWT calculations following the procedures found in Sections 4.1 and 4.2, as applicable. Services will provide the data in the format found below to DAAS:

CWT Day	Volume of Requests	Weighted CWT	Percent	Cumulative Percent
0	Number of requests with CWT = CWT Day	(Day x Vol)	(Volume/ Sum of all requests)	(Percent + previous day's percent)

Calculated for each day through last day with a request

Each column will be calculated for each customer wait time day from zero through the last day that has a customer wait time observation for that Service for that month.

The Volume column and the Weighted column will be summed to calculate the total CWT. The formula for calculating the mean CWT will be the sum of the Weighted CWT Contribution Column divided by the sum of the Volume of Requests Column. The total volume of transactions; the calculated Mean CWT; as well as the days on which 50%, 75%, and 95% of all customer requests were received, will be provided separately to DAAS in the table format required below:

Component	50%	75%	95%	Mean	Number of Transactions
Army					
Navy					
USAF					
USMC					
Coast Guard					

The 50th, 75th, and 95th percentile will be determined by iterating through the cumulative percent column until arriving at the first entry in the cumulative percent column

Customer Wait Time Business Rules

Version 1.0 – 12/13/00

that is equal to or greater than each of the 3 respective percents and recording the associated CWT day for each of those rows.

4.3.2 DAAS' Combined DoD Calculation:

DAAS will collect Service inputs for CWT, combine them for DoD-level reporting, and provide the official DoD Customer Wait Time report to DUSD(L & MR), the Services, the Joint Staff/J4, and logistics activities. The DoD-level report will be calculated by using the same calculation methodology as the Service submissions. The only difference will be that the Volume of Requests column will be calculated by summing the individual Service level inputs into a single DoD sum for each day of CWT. All other calculations remain the same.

DAAS will also continue preparing the current Logistics Metric Analysis Reporting System Wholesale LRT reports in order to facilitate Service and DoD-level drilldown of performance of requests within the processes that provide material outside of Service retail systems.

4.3.3 Upon receipt of the DoD Customer Wait Time report from DAAS, DUSD(L & MR) will publish and/or report DoD-level Customer Wait Time statistics as required.

5.0 Data Forwarding Requirements:

5.1 Service Forwarding Requirements:

Reporting will be on a monthly basis. Each Service will submit its spreadsheet and summary table to DAAS by the 8th day of the second month after the conclusion of the reporting period. For example, submissions for the month of January are due at DAAS by the 8th of March.

5.2 DAAS Forwarding Requirements:

DAAS will transmit the DoD summary level spreadsheet and results to DUSD(L & MR), the Services, and logistics activities by the 15th of each month.

5.3 DUSD(L & MR) will publish the official DoD summary results as required by congressional and DoD mandates.

6.0 Data Retention Requirements:

6.1 Data Retention:

6.1.1 Services:

The Services will retain the raw data records used to calculate Customer Wait Time for a period of 3 years in a format that permits outside activities to conduct reviews or audits of Service calculations. These records should be

Customer Wait Time Business Rules

Version 1.0 – 12/13/00

retained in an electronic format.

6.1.2 DAAS:

DAAS will retain the Services' forwarded tables and calculations, as well as the DoD-level tables and calculations conducted by DAAS for a period of 3 years. The data should be retained in a format that permits outside activities to conduct reviews or audits of Service or DAAS calculations. These records should be retained in an electronic format.

6.2 Logic Retention:

The Services shall retain all of the logic used to retrieve, analyze and calculate their CWT input for a period of 3 years. The logic can be stored electronically with the CWT data, but must be in a plain language format that facilitates outside review of CWT logic and calculations by outside activities.

6.3 Records Availability:

Both the Services and DAAS will make the retained records of transactions and logic available to outside activities as required. Such activities might include other DoD Components; audit agencies, and Congressional oversight entities, as well as other government and commercial logistics research activities that have been granted proper DoD or DoT approval as appropriate.

7.0 CWT Relationship to Readiness:

7.1 Theoretical Relationship:

The theoretical underpinnings for relating customer wait time for maintenance-related items to material readiness are strong. The basic relationship of Operational Availability (A_o) to customer wait time is contained in the formulae below:

$$A_o = \text{Up Time} / \text{Total Time}$$

$$A_o = \text{Up Time} / (\text{Up Time} + \text{Down Time})$$

$$A_o = \frac{\text{Mean Time Between Failure}}{\text{Mean Time Between Failure} + \text{Mean Time to Repair}} \quad .$$

$$A_o = \frac{\text{MTBF}}{\text{MTBF} + \text{MTTR (less time awaiting parts)} + \text{MSRT}} \quad .$$

$$A_o = \frac{\text{MTBF}}{\text{MTBF} + \text{MTTR (less time awaiting parts)} + \text{CWT}} \quad .$$

MTBF = Mean Time Between Failure
MTTR = Mean Time to Repair
MSRT = Mean Supply Response Time
CWT = Customer Wait Time
(CWT and MSRT are equivalent.)

Customer Wait Time Business Rules

Version 1.0 – 12/13/00

7.2 Measured Relationship:

The real world relationship between measured Customer Wait Time and Operational Availability (A_o) has been shown to be closely linked to high priority requests for organizational-level material ordered in organizational-level maintenance systems. Other measures such as Intermediate and Depot Repair activities requests for material have lagged impacts on A_o that are also reflected in the Organizational level CWT measurement. For this reason, the CWT Committee has chosen to begin measuring CWT using the requests for maintenance-related material from within the Services' maintenance systems.

As a first step toward linking the CWT measure to readiness, the Services will collect applicable readiness rates and CWT measurements each month. The collected data will then be analyzed to measure the strength of the relationship between these two measures.

To ensure that adequate data is obtained to analyze, verify, and understand the relationship between Customer Wait Time and readiness, no reports will be required until the Services and the Committee have had a chance to discuss the Services' findings.

Customer Wait Time Business Rules

Version 1.0 – 12/13/00

Appendix A: CWT Calculation Example

	A	B	C	D	E
1	CWT Day	Volume	Weighted CWT	Percent	Cumulative Percent
2	0	28452	0	23.17%	23.17%
3	1	15467	15467	12.60%	35.77%
4	2	8224	16448	6.70%	42.47%
5	3	6281	18843	5.12%	47.59%
6	4	4706	18824	3.83%	51.42%
7	5	4558	22790	3.71%	55.13%
8	6	5638	33828	4.59%	59.73%
9	7	4677	32739	3.81%	63.53%
10	8	3349	26792	2.73%	66.26%
11	9	2207	19863	1.80%	68.06%
12	10	2132	21320	1.74%	69.80%
13	11	1751	19261	1.43%	71.22%
14	12	1557	18684	1.27%	72.49%
15	13	1699	22087	1.38%	73.88%
16	14	1703	23842	1.39%	75.26%
17	15	1356	20340	1.10%	76.37%
18	16	963	15408	0.78%	77.15%
19	17	862	14654	0.70%	77.85%
20	18	888	15984	0.72%	78.58%
21	19	805	15295	0.66%	79.23%
22	20	799	15980	0.65%	79.88%
23	21	981	20601	0.80%	80.68%
24	22	765	16830	0.62%	81.31%
25	23	648	14904	0.53%	81.83%

50th Percentile Day 4

75th Percentile Day 14

Days 24-98 left blank for illustration purposes

101	99	60	5940	0.05%	94.89%
102	100	50	5000	0.04%	94.93%
103	101	48	4848	0.04%	94.97%
104	102	71	7242	0.06%	95.02%
105	103	57	5871	0.05%	95.07%
106	104	61	6344	0.05%	95.12%

95th Percentile Day 102

Days 105-893 left blank for illustration purposes

896	894	0	0	0.00%	100.00%
897	895	0	0	0.00%	100.00%
898	896	0	0	0.00%	100.00%
899	897	0	0	0.00%	100.00%
900	898	0	0	0.00%	100.00%
901	899	0	0	0.00%	100.00%

902	Total	122,772	2,586,871		
903					
904	Mean CWT		21.07		

Mean CWT 21.07 Days

This example demonstrates the CWT calculations.

A row for CWT day is created for each day, whether or not there was a request that incurred a wait time of that length.

The volume column is the number of requests that experienced the wait time in the CWT day column.

The weighted CWT column reflects the total number of days of CWT that were generated by all of the requests in the volume column. The calculation is Volume x CWT day.

The percent column is the percent of the total number of requests that were filled on each CWT day. The formula is volume on that day divided by the sum of all of the requests.

The cumulative percent is the percent from the percent column for that day plus the cumulative percent from the day before.

The mean CWT is calculated by dividing the sum of the weighted CWT by the sum of the requests.

Additionally, you can see that by scanning the cumulative percent column, you can determine the days wait time associated with the 50th, 75th, and 95th percentiles that are required to be submitted on the Service input to DAAS.

An example spreadsheet with these calculations can be found on the CWT web site maintained by DAAS.

Customer Wait Time Business Rules

Version 1.0 – 12/13/00

Appendix B: Alternate CWT Calculation Methodology Example

Initially, a Service may not be able to capture all CWT observations of all of the systems that record CWT data. In that case, statistical sampling may be used as an interim calculation. Below is an example of how to calculate CWT using this approach.

	A	B	C	D	E	F	G	H	I
1	CWT Day	Sample from System A Volume	Sample percent of System A Volume	System A Extended Volume	System B Volume	Combined Service Volume	Weighted CWT	Percent	Cumulative Percent
2	0	59	10.87%	590	22547	23137	0	37.71%	37.71%
3	1	64	11.79%	640	9076	9716	9716	15.83%	53.54%
4	2	45	8.29%	450	3753	4203	8406	6.85%	60.39%
5	3	36	6.63%	360	2631	2991	8973	4.87%	65.26%
6	4	24	4.42%	240	2263	2503	10012	4.08%	69.34%
7	5	23	4.24%	230	2258	2488	12440	4.05%	73.40%
8	6	34	6.26%	340	2234	2574	15444	4.19%	77.59%
9	7	28	5.16%	280	1872	2152	15064	3.51%	81.10%
10	8	21	3.87%	210	1263	1473	11784	2.40%	83.50%
11	9	14	2.58%	140	811	951	8559	1.55%	85.05%
12	10	14	2.58%	140	719	859	8590	1.40%	86.45%
13	11	12	2.21%	120	568	688	7568	1.12%	87.57%
14	12	10	1.84%	100	550	650	7800	1.06%	88.63%
15	13	11	2.03%	110	581	691	8983	1.13%	89.76%
16	14	12	2.21%	120	535	655	9170	1.07%	90.82%
17	15	9	1.66%	90	395	485	7275	0.79%	91.61%
18	16	7	1.29%	70	240	310	4960	0.51%	92.12%
19	17	6	1.10%	60	243	303	5151	0.49%	92.61%
20	18	7	1.29%	70	207	277	4986	0.45%	93.06%
21	19	6	1.10%	60	221	281	5339	0.46%	93.52%
22	20	6	1.10%	60	223	283	5660	0.46%	93.98%
23	21	8	1.47%	80	224	304	6384	0.50%	94.48%
24	22	6	1.10%	60	152	212	4664	0.35%	94.82%
25	23	5	0.92%	50	127	177	4071	0.29%	95.11%
26	24	5	0.92%	50	134	184	4416	0.30%	95.41%
27	25	4	0.74%	40	92	132	3300	0.22%	95.63%
28	26	3	0.55%	30	136	166	4316	0.27%	95.90%

Days 27-38 left blank for illustration purposes

41	39	2	0.37%	20	63	83	3237	0.14%	98.48%
42	40	2	0.37%	20	45	65	2600	0.11%	98.59%
43	41	2	0.37%	20	80	100	4100	0.16%	98.75%
44	42	2	0.37%	20	77	97	4074	0.16%	98.91%
45	43	2	0.37%	20	67	87	3741	0.14%	99.05%
46	44	2	0.37%	20	48	68	2992	0.11%	99.16%
47	45	3	0.55%	30	63	93	4185	0.15%	99.31%
48	46	2	0.37%	20	54	74	3404	0.12%	99.43%
49	47	2	0.37%	20	46	66	3102	0.11%	99.54%
50	48	2	0.37%	20	66	86	4128	0.14%	99.68%
51	49	2	0.37%	20	70	90	4410	0.15%	99.83%
52	50	2	0.37%	20	85	105	5250	0.17%	100.00%
53	Total	543		5,430	55,932	61,362	296,235		

54									
55		Sample Size		Total Requests From System A	Total Requests From System B	Mean CWT	4.83		
56									

If a Service has two systems that collect CWT information, System A and System B, and not all of system A's transactions can be captured, the Service can compute the Service CWT input by sampling.

In this example, the Service takes a sample from System A, and calculates how much of the sample was represented at each day of CWT. Then that percentage is multiplied by the total volume of requests in System A to create the System A extended volume column.

The System A volume is then combined with the System B volume to create the combined Service volume. The rest of the CWT calculations remain the same as in the Standard CWT calculation methodology.

An example spreadsheet with these calculations can be found on the CWT web site maintained by DAAS.

Customer Wait Time Business Rules

Version 1.0 – 12/13/00

Appendix C: Related Instructions & Documents

Related Instructions & Documents:

- a. DoDI 4140.aa - The governing DoD instruction for Customer Wait Time.
- b. DUSD(L) letter dated 15 December 1999 - This letter re-designated the Logistics Metric Analysis Reporting System Committee as the DoD Customer Wait Time Committee.
- c. DUSD(L) letter dated 27 March 2000 - This letter reiterates the desire of DoD leadership to rapidly move forward on the implementation of Customer Wait Time as a primary measurement of DoD logistics performance.

Customer Wait Time Business Rules

Version 1.0 – 12/13/00

Appendix D: DoD CWT Committee Members Responsible For This Document

Point of Contact Information:

Army: Mr. Dave Arensdorf, HQ AMC, (703) 617-9272, DSN 767-9272,
darensdorf@hqamc.army.mil

Navy: CDR Jim Hoover, OPNAV N412H, (703) 604-9937, DSN 664-9937,
hoover.james@hq.navy.mil

Air Force: Mr. James K. Russelburg, HQ USAF/ILSP, (703) 695-4895, DSN 225-
4895, JamesR@pentagon.af.mil

Marine Corps: CAPT Tony Fabiano, HQMC Code: LPC-3, (703) 695-8926, DSN 225-
8926, FabianoAC@hqmc.usmc.mil

Coast Guard: Ms. Sherry Larkin, USCG (G-SLP), (202) 267-1601,
slarkin@comdt.uscg.mil

DLA: Mr. Jack Marshall, HQ DLA/J-332, (703) 767-3505, DSN 427-3505,
jack_marshall@hq.dla.mil

DLMSO: Mr. Jack Carter, J-673 DLMSO, (703) 767-0684, DSN 427-0684,
jackie_carter@hq.dla.mil

DAAS: Ms. Mary C. Maurer, DAASC-SLP, (937) 656-3750, DSN 986-3750,
mmaurer@daas.dla.mil

U.S. TRANSCOM: MAJ Dave Briggs, TCJ4-BCA, (618) 229-1146, DSN 779-1146,
David.Briggs@hq.transcom.mil

DUSD(L & MR): Mr. Terry Trepal, ODUSD(L&MR)/SCI, (703) 697-4475, DSN 227-
4475, ttrepal@acq.osd.mil

Joint Staff/J-4: LtCol H. Brent Baker, Joint Staff/J-4, (703) 697-6849, DSN
227-6849, bakerhb@js.pentagon.mil

Customer Wait Time Business Rules

Version 1.0 – 12/13/00

Appendix E: Future CWT Measurement Categories

Future CWT Measurement Categories:

The CWT Committee is committed to measuring other aspects of the supply chain separately from CWT for Maintenance-Related Material ordered in Services' Organizational Maintenance Systems. The Committee's planned priorities for these additional CWT measures are as follows:

1. CWT for Intermediate / Field Repair Activities' requests for maintenance-related material
2. CWT for Depot-Level Repair Activities' requests for maintenance-related material
3. CWT for Wholesale Replenishment of retail-level inventory stock for maintenance-related material
4. CWT for Ammunition / Ordnance material
5. Other commodities of supply