

# ***CATEGORY 4***

## ***INFORMATION AND ANALYSIS***

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## 4.0 INFORMATION AND ANALYSIS

### 4.1 Measurement of Organizational Performance

The primary corporate data collection and analysis efforts focuses on our strategic concept of “buying response instead of inventory”- using electronic commerce techniques to purchase commercial items along with commercial distribution systems to the greatest extent possible. Our logistics strategy is directed towards changing from customer support (through depot stocking), where we buy for and distribute from government owned inventory, to supply chain management of direct vendor delivery, where DSCP electronically places the purchase orders with vendors who then deliver directly to our customers. This strategy includes prime vendor, where our customers place orders directly with a commercial distributor who is under contract to DSCP, for direct delivery from the distributor

to the customer. Our metrics are aligned to measure these changes, as well as, to assess the internal operations of the DSCP. Our quantitative measures, which directly correlate to our key business drivers, are categorized as: affordability (cost impact), responsiveness (cycle time), quality (of products), readiness (ability to surge and sustain military deployment), human resource development and financial performance factors.

Information and data needed to spearhead the improvement of our overall performance are selected and managed based on how they impact our ability to attain the goals outlined in our strategic plan. Those measures should reflect improved responsiveness; reduction in cost factors leading to overall best value and; benefits derived from our progress made in expanding partnerships. The chart below depicts different types of data, and examples of how it is gathered and used.

The chart that follows illustrates the corporate indicators, which form the basis for planning, analysis, and control of our business. It should also be noted that this chart fits in with the three key elements (goals) of the Philadelphia Solution (Tailored Logistics, Integrated Supply Chain, and Establish Strategic Partnerships) and the DLA goals

Key Business Categories	Type of Data	Method Gathering Examples	How Data is Used
Readiness	Customer Behavior	Customer Profiles	To forecast demand and times of surge, customize delivery of products and services
	Corporate/Govt. Agreements	Contracts with surge agreements	To adjust inventory levels
Quality	Customer Feedback Contractor defaults	Satisfaction ratings & surveys	To assess effectiveness of initiatives/ determine improvement opportunities, and sensitize employees to customer concerns
Responsiveness	Process Performance	Review and Analysis, Planning sessions	To analyze effectiveness of our efforts and identify breakthrough strategies
Human Resources	Level of performance and development	Awards, increased education	To asses employee needs and ensure employees are recognized for their efforts
Affordability	Financial Performance	Operational Performance Databases	To properly allocate resources, support decision making and spearhead improvement efforts

Chart 4.1-1 Data Collection & Analysis

**Readiness:**

Business Processes	Measurement of:	Reason Why?	Chart Reference
Overall Responsiveness	Supply Availability	To ensure what is ordered is supplied	7.5.2 7.5.3 7.5.4 7.5.5
Supporting Hard to Obtain Items	Backorders on Hand	To ensure all requested items are indeed supplied	7.5.6 7.5.7 7.7.8
Partnering with Industry	Joint Efforts Between DSCP and Industry	To gain a competitive edge by relying more on industry	Narrative Below

**Chart 4.1-2 Readiness**

Our acquisition strategy is a vital aspect of our readiness posture. Our goal is to have the peacetime process reflect the same business practice that we use in a wartime environment. Readiness indicators are included in our response time measurements. The key to readiness is to have a “warm” industrial base that stands ready to support us in a surge situation and a clear forecast of what is needed for surge requirements. “Partnering with industry” in long term, stable, best value relationships (all covered in specific metrics above) is our response to the challenge to ensure that industry stands ready to support us in the readiness area. Additionally, shared production, dual use technology, surge options and stock rotation initiatives, such as: Vendor Managed Inventory, allows us to effectively/efficiently gauge the level of support we can

expect in contingency situations. We also use “lessons learned” from recent surge situations such as Operation Desert Storm/Shield (Kuwait) and Operation Joint Endeavor (Bosnia), to fine tune our readiness strategies.

As our business processes change, through reengineering, our indicators also change. Approximately 60% of the current corporate indicators were not measured seven years ago. Indicators for our contracting initiatives - Long Term Contracts and Best Value (using factors other than just price to determine best overall value) along with our reengineering efforts (direct vendor delivery, electronic commerce and electronic data interchange) were created to gauge our progress during our planned strategic changes.

**Quality:**

Business Processes	Measurement of:	Reason Why?	Chart Reference
Tailored Solutions	Customer Satisfaction	To ensure improved performance via new business practices	7.1.1 7.1.2 7.1.3
Qualifying Manufacturers	Product Quality	To ensure supplier items match customer requirements	7.5.13 7.1.14
Best Value Acquisition	High Quality Contractors	To ensure we utilize only high quality vendors	7.5.10 7.5.11
Contractor Defaults	Supplier Performance	To ensure we utilize the most competent vendors	7.4.1

**Chart 4.1-3 Quality**

**Responsiveness:**

Business Processes	Measurement of:	Reason Why?	Chart Reference
Logistics Response Time / Order Ship Time	Prompt Delivery Performance	To provide prompt delivery comparable to the commercial markets	7.1.4
Electronic Commerce	Improved business practices	To gauge the percent of sales via electronic commerce	7.5.12
Electronic Invoicing and Funds Transfer	Commercial Vendor/DSCP Relationship	To endure better methods of communicating with vendors	7.4.2 7.4.3
Direct Vendor Delivery (DVD)	Cycle Time Reduction	To rely on "Just in time" delivery techniques	7.5.9

**Chart 4.1-4 Responsiveness**

**Human Resource Development:**

Business Processes	Measurement of:	Reason Why?	Chart Reference
Training our Workforce	Training Funds Expended	To ensure competent development of workforce	7.3.4
	DAWIA certification		7.3.3
	Overall education		7.3.1. 7.3.2.
Recognizing our Workforce	Corporate Responsibility	To ensure we value our employees	7.3.5 7.3.6

**Chart 4.1-5 Human Resource Development**

**Affordability:**

Business Processes	Measurement of:	Reason Why?	Chart Reference
Surcharge Reduction	ICP Markup	To ensure accurate computation of our cost to conduct business	7.2.8
Operations & Maintenance	Controllable Portion of Budget	To efficiently compare/contrast our labor and non-labor costs	7.2.9
Inventory Reduction	Inventory Level & Sales	To ensure we become more efficient in purchasing and storage of items	7.2.11
Employment Level	Cost of Workforce	To ensure we are competitive with both government and non-government entities	7.2.4 7.2.5 7.2.7

**Chart 4.1-6 Affordability**

**Financial Performance**

<b>Business Processes</b>	<b>Measurement of:</b>	<b>Reason Why?</b>	<b>Chart Reference</b>
Sales per Employee	Efficiency and Productivity	To ensure constant improvement	7.2.6
Sales to Inventory	Effective use of Inventory	To ensure proper use of our capitol investments	7.2.10
Unit Cost	Total Efficiency	To ensure economical improvements	7.2.9
Selling our Services	Gross Sales	To identify business growth or decline	7.2.1 7.2.2 7.2.7

**Chart 4.1-7 Financial Performance**

The above corporate DSCP information is collected monthly from a myriad of sources, both by mechanical and manual means. The data is then analyzed, charted and made available to all employees for comparison purpose through the Executive Information System (EIS) via the DSCP INTRANET. Included with the EIS data are historical data (up to 10 years), analytical charts, narrative analysis, a source and description for each indicator and a data dictionary. In the future the EIS will be updated in real-time from automated systems. We also plan to include in the EIS comparative data from our customer satisfaction surveys.

Each of the four DSCP commodities, Medical, Subsistence, Clothing & Textiles, and General Industrial hold internal monthly Review and Analysis briefings. While the corporate information above is used as the framework for these briefings, the information provided at the Commodity briefings is more detailed and tailored to the needs of the specific Commodity. (Because of the myriad of internal business unit indicators, only the corporate level Commodity indicators will be discussed in Category 7).

Information is derived mainly through our mechanical systems, known as the Standard Automated Materiel Management System (SAMMS) for General Industrial, Clothing & Textiles and Medical Directorates, while the Defense Integrated Subsistence Management System (DISMS) is used for the Subsistence Directorate. As our business processes evolved away from the depot stocked system towards direct vendor delivery, Prime Vendor and Quick Response (an electronic purchase and ordering technique used in the clothing industry) initiatives, new

methods of measurement needed to be developed. Presently systems analysts from all four commodities, in coordination with our Strategic Business Office, are developing new reports to handle our information requirements. We developed data warehouses (with Oracle query capabilities) to store information for historical purposes, for on-line real-time queries by DSCP users for data analysis and comparison, and to generate reports geared towards our internal customer needs. These new tools provide immediate access to information at the corporate, business unit, and detail levels.

With the advent of our marketing offices and the availability of various customer databases, we are now able to gather and distribute detailed information about and for our customers. For example, the Medical Directorate is committed to being the medical supplier of choice for all federally funded users and believes an informed customer is the key to attaining this vision. Therefore, the Directorate provides its customers with the necessary information to make informed buying decisions. The Directorate has an extensive program that collects data/information about the use and price of medical products, classifies the products to allow comparison, arrays the data/information in easy-to-understand formats and provides the information free of charge to its customers. This product comparison information is organized and displayed through a software package - the Universal Data Repository (UDR) - and is the only one of its kind in the federal sector. The data/information in the UDR is updated monthly and distributed to all Directorate customers allowing them to

compare the Directorate's prices with those of its competitors.

All four commodities have on-line customer comment/feedback capability via the Internet.

The Customer Demand Management Information Application (CDMIA) was implemented in the Medical Directorate. It is an on-line system that consolidates sales and gross margin data as it relates to customers, organizations and geographical constructs. CDMIA provides both canned and ad hoc queries. The inclusion of prime vendor performance data is anticipated within the next year. This addition will provide detailed information on order-ship times, availability and pricing for items procured through prime vendors in the Medical Directorate.

A major difficulty in assessing our business operations had been the lack of accessibility to much of the required data. Detailed statistics needed to track and evaluate our initiatives against past performance and expectations were often non-existent. We found that historical information required for comparison and trend analysis must be researched and prepared manually. We addressed these shortcomings in several ways:

We built data warehouses in Oracle on a Hewlett-Packard super-mini computer platform. To aid our users in viewing selected data from their available files, we provided them with a data browser, which has access to networked processors, to "point-and-click" on data for ad-hoc reports and Client/Server applications. It also provides access to a real-time database consisting of Medical, Clothing & Textiles, and General Industrial SAMMS data files. Similar universal access to Subsistence's system is also available. Subsistence DISMS will accept 300 concurrent real-time users worldwide with a response time of less than one second per transaction. In this real-time environment, DISMS processes approximately 75,000 transactions per day. This system is not only used by DSCP but also by select customers, as well as the Defense Finance and Accounting System (DFAS).

Also, under the subsistence umbrella, the Subsistence Prime Vendor Interpreter (SPVI) hardware and software has been installed at CONUS military bases. With the SPVI work completed we have now begun the dissemination of Subsistence Total Order and Receipt Electronic System (STORES). This system provides a platform for one-stop shopping. It shields the technical complexities of several unique systems from the

customer. Customers are able to place orders from a single terminal to either the Prime Vendor, the Defense Subsistence Office (DSO) (for produce), or other market-ready orders (milk and bread) with a vendor.

Additionally, we have enhanced data accessibility and analysis through the On-Line Reporting Systems (ORS) which eliminates paper reports and allows on-screen viewing of data sets. At this time over 2,000 reports have been transferred to ORS. These reports are periodically reviewed to determine their value and need.

The impetus for reinvention/reengineering was the realization that the current business environment demanded quicker responses to marketplace changes, greater efficiencies, and lower costs of doing business. Through extensive customer contact and surveys, we know that our customers want it faster, better, and cheaper.

In order to meet such demands we stepped out and benchmarked other organizations that were recognized as the best in the specific areas we wanted to improve. Our teams have conducted and continue to conduct benchmarking studies using the DPSC benchmarking model below.

DPSC Benchmarking Process Steps	
<b>Planning</b>	Identify what is to be benchmarked
	Determine data collection method/collect data
<b>Analysis</b>	Determine current performance "gap"
	Project future performance levels
<b>Integration</b>	Communicate benchmark findings/gain acceptance
	Establish functional goals
	Develop action plans
<b>Action</b>	Implement specific actions/monitor progress
	Recalibrate benchmarks

Chart 4.1-8 Benchmarking Process

The above process (Chart 4.1-8) was "benchmarked " in itself and represents an amalgamation of several sources on benchmarking.

Our criterion for seeking appropriate information and data from within and outside of DSCP includes:

Emerging business processes impacted (business development, supply chain, customer value, and research and development)

Traditional processes impacted (acquisition, supply management, and product services)

The most important aspect of the information that we seek is that it must be consistent with organization priorities and goals.

Comparative data was selected through industry identified “best in class” companies. Benchmarking Consortiums conducted by the American Productivity and Quality Center (APOC) were a major source of comparative data, along with other organizations identified in our research. Findings were evaluated by the process teams and subsequently integrated into the new process designs.

Benchmarking and comparative analysis Information is used to set stretch goals and encourage breakthrough strategies by looking at the results achieved by other organizations and implementing findings.

For example, we benchmarked the Electronic Bid Board at the Defense Electronics Supply Center in Dayton, Ohio. We looked at the Bid Board since it impacted our solicitation process, one of our high cost activities and one that impacts our Lead-Time. The Bid Board involves placing solicitations on a server (computer) which our contractors call-in electronically to receive these solicitations. The old process was paper, labor and time intensive. All have been reduced dramatically through automation.

Initial use of the Bid Board was in the steel Customer Business Unit where dramatic improvements in our measures were achieved. Administrative Lead-Time has gone from 65 days to 12 days. Backorders have been reduced considerably, and the average cost to make an award has decreased from \$140 to \$70. These goals were not thought possible using the manual system. We have now implemented the Bid Board in all our Customer Business Units and we anticipate improvements in all areas.

The selection of EDI/EC for benchmarking was a direct outcome of our focus on buying response. Within the electronic commerce processes of order management, purchasing, receiving, transportation, and financial transactions - we chose to initially reengineer our contracting and financial processes.

DSCP's pioneering efforts in the public sector application of EDI are recognized by Price Waterhouse Corporation in its benchmarking study on EDI business systems applications, which includes recognized leaders such as

Nabisco and Bell South, and in which DSCP was chosen as the only Government participant.

Although EC/EDI has enabled DSCP to buy responsiveness through Prime Vendor and Quick Response, we realized that there were still segments of our business that relied on the depot system. DSCP is active in developing innovative distribution processes. For depot stocked materiel this includes cross-docking and third party delivery services. Cross-docking involves transporting truck load shipments from numerous apparel vendors to the cross-docking facility for rapid breakdown and delivery to our customers (eliminating storage requirements). Rather than just benchmark against the commercial world, we decided to go with commercial world business practices. Initiatives such as Prime Vendor, Quick Response, Virtual Prime Vendor, Bill and Hold and Vendor Managed Inventory are all the results of benchmarking ourselves against commercial business practices.

During the period Winter 1995 through Winter 1996, the DLA Operations Research Office benchmarked current Subsistence customer support logistics against commercial food distribution systems (Prime Vendor). Two major findings resulted. First, overall DSCP provides competitively priced, better quality fresh fruits and vegetables to our military customers than commercial Prime Vendors. Second, excluding fresh fruits and vegetables, the Prime Vendor program provides our customers with faster and better service that should be

Business Processes	Benchmarked Organization	Findings Used
Business Development	DuPont, MCI, Exxon, MONY, Union Pacific	Knowledge Management Techniques, Electronic Mall, Intranet
Supply Chain Mgmt	Motorola, Honda, Bose, John Deere, Sun Microsystems, Defense Personnel Support Center	Supply Chain Management Concept, Prime Vendor
Customer Value	USAA, Lexus, Sony	Customer Management System, Automated Customer Profiles, Customer Survey Methods
Work force Development	Storage Tek, Disney, Picatinny Arsenal	Rewards and Recognition, People Management, Reverse Appraisals, 360o Feedback

Chart 4.1-9 Benchmarking Examples

overall less expensive to the military services. Based on these findings, DSCP Subsistence implemented a U.S. wide Prime Vendor program by the end of 1997.

Another example of our efforts in this category is the implementation of call centers in each of our commodities that feature a DSCP 1-800 number for our customers to contact us. Call centers have become a necessary feature for any well run firm that delivers goods or services.

We are looking to outside sources for information that we can use to analyze our customers, market situation and to benchmark against industry standards. We have used Dun and Bradstreet, the Federal Procurement Data Center, and Owens Healthcare (Medical).

Universal Products Number (UPN) is an industry wide Medical initiative championed by DSCP. Prior to UPN, a single medical/surgical item could have upwards of 100 part numbers, one for each Medical distributor. Our solution was one item = one number through the use of a standard bar code for each item. The UPN has not only impacted the DoD but the entire commercial industry that sells and uses these products.

**4.2 Organizational Performance**

The following address the combined category area criteria identified above

Our strategic plan considers impact on four core areas: People, Customers, Industry, and the Public. DSCP used a multi-stage process comprised of these four working groups to attach measurable outcomes to the goals and objectives of our Strategic Plan. These areas are directly related to our Key Processes through the next chart, which compares the processes versus the drivers. The drivers link the four core areas to the Processes that make up the Philadelphia solution.

Readiness, Quality, and Responsiveness must be meshed together in support of our customer, just as reciprocal agreements with industry keep a healthy supplier base so that these three requirements are met now and in the future. Human resources match directly with the core area, People (our workforce). The Public needs us to perform well in all areas but most often judges us through affordability.

Based on a scale of 0 through 5 (0 being least important and 5 being most important) a composite score was developed for the importance of each business driver in relationship to the key process it supports.

Business Drivers \ Key Processes	Acquisition	Management of Supplies	Integrated Support
Readiness	5	4	4.5
Quality	5	5	5
Responsiveness	3.8	4.6	5
Human Resources	4	3.8	3.4
Affordability	4	4.6	4.6

Chart 4.2.1 Key Processes/Business Drivers

In essence, the broad goals of our Strategic Plan were translated into workable measurements by using a corporate team approach allowing participation and ownership of all members of the organization. Our corporate EIS has 22 metrics. All of our corporate metrics, under the guidance of our Strategic Plan, are subject for review at the bimonthly meetings conducted by DSCP's Board of Directors and the center's Business Council. These metrics are also reviewed by the DLA Director in the Monthly Management Review (MMR) and Quarterly Management Review (QMR).

Using the above we have developed a Balanced Scorecard approach towards our business. Our analyses evaluate our success in the four areas by evaluating metrics associated with affordability, responsiveness, quality, readiness, financial well being, and human resource development.

**People:** In light of constantly shifting technology, the downsizing of the Federal government and the recent BRAC (Base Realignment and Closure) actions, we gauge the needs of our employees as well as the needs of the future organization. Using our personnel databases we have set up demographic analyses of our workforce and its change over time. We analyze skill losses against new process needs. We look for trends and workload backlogs before creating training plans.

The immediate objective is to ensure the workforce maintains an expected level of business analysis skills. The longer term objective is to identify the analytical skills required to keep pace with changing strategic goals.

Standard training is offered to Center personnel in Windows, Microsoft Word, Outlook, Excel, Access, Power Point, Netscape and Form Flow at the introductory, intermediate and advanced levels. Over 95% of DSCP

employees have received standard level computer and software training.

We are currently leading an Agency workforce development program to assess and improve quantitative analysis business skills at all levels.

Our technological platform is shifting from a host-based, centralized processing environment to Client Server (distributed processing), which facilitates successful systems integration, economies of scale, and allows a greater proportion of end user computing. The program approach and measures of success are currently under development.

We have also made the effort to look at our personnel resources as internal customers. These internal customers have provided feedback to improve the internal processes, as shown in Chart 4.2.1 below.

Function /Process Owner & Feedback	Result
Administrative Support – Resource Management Office: Provide CBUs with clerical and administrative support staff	Downsized and reorganized administrative support group
Systems Support – Systems Integration Office: Provide computer assistance	Established "Help Desk", Increased Hardware & Software training, Simplified ADP software acquisition procedures
Prototype CBU – Command: Provide full support all at once	Reorganization of 1993 -"Big Bang"

Chart 4.2.2 Internal Customer Feedback

**Customers:**

Data is gathered and analyzed on a recurring and systemic basis (as indicated by Chart 4.2.2) to encourage constant monitoring of performance to detect trends, assess progress towards goal attainment, and identify potential trouble spots.

Information is gathered, analyzed and reported, based on the value it adds to corporate decision making. At the highest level, data is reviewed by the CBU Chiefs and top executives to evaluate the business trends against customers' wants and needs and make adjustments to the strategic initiatives. For example, a traditional measure is supply availability. A measure of the depot stock available for customers, it was an indication of our ability to get the material to the customer in the fastest possible manner. Today, innovative solutions such as DVD (direct vendor delivery) and vendor-managed inventory deliver with speed and convenience to our customers. Although we still measure stock availability for the single item purchases, we now look at business growth information such as the number of items purchased through DVD contracts. Information is gathered on activities that drive our achievement or failure to achieve our strategic goals.

Measurement Vehicle	Goal	Results of Analysis	Forum	Sources of Data
Sales per DSCP Work Year	\$ 3 Billion Sales	New business growth gauged	Executive Teams	Database Reports (automated)
Productivity Worksheet	Reduce Costs 50%	Traditional Output Measured	Customer Business Units	Database Reports Functional Specialists
Shortfall/ Excess Model	\$3 Billion Sales	Human Resources Balanced with Workload	Senior Leadership and Union	Database Reports Functional Specialists
Inventory Excess	Reduce Costs 50%	Reduced Inventory & Low Turnover Rate	Customer Business Units	Database Reports
Supply Availability	100% Customer Satisfaction	Item Availability correlated with Customer Satisfaction	Senior Leadership	Database Reports (automated)
Backorder Index	100% Customer Satisfaction	Responsive to customer needs assessed	Customer Business Units	Database Reports Functional Specialists

Chart 4.2.3 Summary of Key Analysis

After performance reviews, operational performance and organizational capabilities are improved based on analysis. Typically, resources are reallocated based on shifts in workload and improvement initiatives are launched in areas where performance is lagging behind anticipated targets. This applies to all data reviewed.

Through the use of formal focus groups, we found out what was important to our customers and translated their needs into action plans. Each commodity publishes a yearly Marketing Plan. We have established commodity Marketing Offices to constantly "listen" to the customers and to use the feedback to improve the process. Our Subsistence commodity developed and distributed a prime vendor customer satisfaction survey based on focus groups with PV customers that determined the right questions to ask and how to ask them.

Outreach programs have provided early warning that many customers prize responsiveness over price. Our aim is to be as responsive as possible: shorter order-ship times, greater customer choice, and increased ease of ordering and billing. Subsistence Prime Vendor Interpreter (SPVI), Subsistence Total Order and Receipt Electronic System (STORES), Automated System for Cataloging and Ordering Textiles (ASCOT), and Medical Electronic Customer Assistance (MECA) are all systems that grew out of our need to promote responsiveness. Other top measures involve Best Value contracting and the spread of electronic commerce. While becoming more dependent upon direct vendor delivery, DSCP has not ignored the readiness mobilization component of our mission. We have planned future decision support systems under our planned Advanced Technology Logistics Support network as part of our logistics research and development umbrella. (Customer focus and satisfaction is addressed in detail in Section 7.1).

**Industry:**

We forged a partnership with industry that allows us to mutually profit from the best EC/EDI practices of both organizations. We actively pursue and note the growth in a number of trading partners to ensure that our Electronic Commerce initiative would succeed. Metrics are in place to measure the increase in EDI sales, the number of companies using electronic invoicing and electronic funds transfer and the associated dollar value of these transactions. We track the level of long term and best value contracting; we are seeking as many long-term relationships as possible. In the process of forging our partnership with industry, we have not ignored our

traditional suppliers, especially in the small business arena. We remain concerned with how well small business is faring under the new EC arrangements; our intent is to stay focused on these vital suppliers and keep them viable and in business.

**The Public:**

As a federal agency we realize that we must perform this mission as efficiently and effectively as we can, giving our stakeholders good value for their money. We measure the change in our Operations and Maintenance Costs (the controllable portion of our surcharge) in our role as cost conscious stewards of federal funds. We also have a corporate responsibility to our employees and community. We ensure our employees partake in the various wellness programs we provide. As corporate neighbors we are interested in the time and effort our employees give to community programs.

Metrics and indicators, however, are not the sole basis for making business decisions. We are users of management science (operations research) methods to perform analytical studies, which enable us to optimize logistics decisions, to minimize cost or maximize effectiveness for the resources employed.