
INTERNATIONAL LOGISTICS COMMUNICATION SYSTEM (ILCS) --
A REVOLUTION IN LOGISTICS SUPPORT OF PURCHASERS

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INTRODUCTION

The newest support system available to the FMS customer is the International Logistics Communication System (ILCS). This revolutionary improvement in FMS communication is redefining many aspects of logistics -- especially in the field.

The ILCS is redefining some duties within the overseas security assistance organization (SAO), primarily the SAO logistics officer; but this new system has also impacted upon the jobs of the SAO functional or military section chiefs in the SAO. In CONUS it is changing job emphasis of many military department (MILDEP) managers as well. Perhaps the greatest impact has been on the customer -- all at once his logistics people have the opportunity to move from an archaic manual system to a highly responsive communications system. Many of these changes have very positive effects on the entire system of support provided to the FMS customer and our own military services as well.

All logisticians and management personnel need to understand this new system in order to make use of this powerful tool. ILCS, when used properly, will assist them in making better use of their time in both supply and maintenance management.

Both the potential customer and current user of the ILCS should also be aware of the variety of ILCSs now available. Start-up costs can be as low as 25-35 thousand dollars for a simple system.

The customer must also understand the impact of ILCS upon the United States Government (USG) Department of Defense (DOD) logistic support systems, so that the customer will not misuse this new system -- to the detriment of both the USG and the customer.

In examining these issues, this article will review a short history, cover the current ILCS configurations, and discuss benefits, cautions, and future implications.

HISTORY

Since the thrust of this article is to explore current issues, this review will be very short. For a more complete history, the reader is directed to an article entitled "The Communications Revolution Comes to Foreign Military Sales Logistics," by Major David M. Rigsbee, USAF, in the Fall 1981 issue of the DISAM Newsletter (pages 60-63).

Briefly, the ILCS concept was developed in response to a 1975 Air Force Logistics Command (AFLC) study of logistics communications. This study showed that dependence on international mail resulted in extremely slow DOD response to customer needs. When 55 countries were surveyed, most requirements were taking an average of 65 days just to get from the customer country to the AFLC International Logistics Center (ILC). As a result of this horrendous problem, the USAF in 1976 authorized AFLC to design a new system to improve response time. What resulted was essentially two systems -- a Telex system developed by Wright-Patterson Air Force Base (WPAFB), OH in 1976 and the ILCS jointly developed by AFLC and the Defense Logistics Agency's Defense Automatic Addressing System Office (AFLC and DAASO) in 1979-80.

The Telex system was originally chosen for initial improvement of response time, since it used commercial equipment already operational in most FMS customer countries. However, due to the cost per line of transmission (then about \$1.00 or \$3.00 for 4-5 lines per minute), as volume increased, overall cost increased astronomically. In response to this new problem, the Joint Logistics Commanders formed a panel to again review the problem and come up with a faster, less-expensive, and more efficient system.

The result of their actions was the prototype ILCS. The first system went into operation in early 1980. This new system, using a 2400 Baud telephone modem device hooked to a Honeywell minicomputer system, achieved a data transfer rate 28 times faster than the existing Telex system. This immense speedup of data transfer resulted in a similar spectacular decrease in telephone costs. This new system used existing commercial telephone lines, unlike AUTODIN, and saved the foreign purchaser from having to purchase a dedicated satellite transmission channel. For example, the cost of a dedicated channel for transmission of information from Africa to the USA was \$11,000 per month in 1982, whereas a three-minute commercial telephone call was only \$15.

Since 1980, 13 countries have obtained 16 terminals connected worldwide via commercial telephone systems directly into DAASO. Additionally, in response to customer demand, DAASO now offers a variety of hookup systems. Start-up, turn-key systems costs range from \$25,000 for hookup to a micro-computer system to approximately \$65,000 for installation of a complete mini-computer system. Subsequently, recurring costs for telephone calls and DAASO service and maintenance can range from \$17,000 to \$25,000 per year, depending on frequency of calls and volume of transaction data.

THE SYSTEMS AND TYPES OF DATA TRANSFERRED

Essentially, ILCS configurations available are rapidly expanding in number and flexibility. The essence of all the different configurations is to

provide the purchasing country military organization with a flexible computer system capable of receiving requisition data from its own in-country customer units, storing that data for retrieval and transmission to the DAASO terminal on a regular basis, receiving supply/shipment status back from DAASO, and preparing that status for review and update of files by either purchaser personnel or automated stock management systems.

Examining the entire range of data now being communicated shows a number of potential new developments. Originally, ILCS was conceived as a better means to transmit requisitions to the DOD MILDEPs and receive status back. Then, a means to send management-by-exception data via message formats was added. Currently, several countries are also using this equipment to transmit financial data, catalog updates, and other narrative administrative messages. Several other countries have already integrated their freight forwarders into this system. Several US commercial suppliers of military material have also purchased system tie-ins. The impact of all these uses is as follows.

In the area of requisition processing a number of benefits are being realized. If the customer has an ILCS, he can achieve improvements in accuracy and speed of service for his supply requirements. Before the requisition leaves his country, he now has instant screen feedback for all his orders. This mechanism allows the purchaser to remove handwritten errors made under the old manual system. By the new method, requisitions are electronically "batched" and transmitted on a daily basis back to DAASO, thus removing the risk of misplacing some requests when it is mail-out time.

When the requisitions are transmitted as a batch, the system has the ability to check the entire transmission for accuracy, insuring that the entire batch is transmitted error-free. When DAASO receives the requisitions, its terminal has a screening mechanism or "gate" through which the requisitions must "pass." This gate checks a list of critical entries for accuracy. These entries include proper document identifier codes, routing identifier codes, requisition and supplementary address construction, and priority. Particular attention is now given to insure that the country code in the requisition number block and case identifier in the supplementary address block, match the correct DOD MILDEP. This step insures that the purchasing country's service requisitions go to the correct service, including cases that cross from the purchaser's service to a different service of the USG. As a result of these checks, it is expected that considerable routing errors, sometimes of large numbers of requisitions, stemming from one misrouted case lot, will be greatly reduced -- virtually eliminating confusion in the International Logistics Control Office (ILCO) as to what to do with unrecognized cross-service requisitions. Any requisitions not meeting these DAASO gate tests are rejected back to the country, while requisitions "passing the tests" are then sent on via the CONUS AUTODIN system to the applicable ILCO -- US Army Security Assistance Center (USASAC), Deputy for Operations (DRSAC-O), New Cumberland Army Depot, New Cumberland PA; Navy International Logistics Control Office (NAVILCO), Philadelphia PA; or AFLC-ILC at WPAFB OH.

Normally, the requisitions are received at the ILCO within minutes of the time the DAASO terminal received them from the purchaser country. The ILCO computer systems then review the country orders for additional key factors. The USASAC system, CISIL (Centralized Information System for

International Logistics), works by applying its Cooperative Logistics Supply Support Arrangement (CLSSA) "front end gate" mechanism. This mechanism checks each requisition to ensure: (1) it is for the US Army (card column 30); (2) it is for a legitimate CLSSA LOA (country code, card column 31-32, and LOA case designator in the supplementary address, card column 48-50); and, (3) the national stock number (NSN) in card column 8-22 matches the equity list of NSNs for that particular CLSSA case designator. Only if these three conditions are met will the requisition then be passed on to the appropriate item manager of that NSN at an Inventory Control Point (ICP). The quantity of the item is also closely checked. If the cumulative quantity ordered exceeds the CLSSA gate level, the excess quantity will be treated as a non-priority requirement. At any rate, this new system provides the ILCS user with immediate feedback of initial status on his new requirements. Usually the purchaser will have positive or negative acceptance of his requisitions by the DOD MILDEP supply systems within two to five working days -- a great improvement over the old 130-day average turn around from submission to status return (65-day average each way).

The Air Force Security Assistance Management Information System (SAMIS) and the Navy Management Information System for International Logistics (MISIL) have similar mechanisms. If the service "front-end screens" identify errors, the suspect request is "kicked out" to the appropriate desk officer for review at the ILCO. An appropriate rejection or acceptance decision is then made and status furnished back to the customer within 48 hours. Using ILCS, the customer can then update his records with this initial status. If his initial request has been rejected, he then can resubmit a new request for the proper item needed or rejustify his cancelled quantity. In essence, requisition errors can now be corrected within one week, instead of taking up to nine months to resolve.

Once a requisition has been accepted by the ILCO system, the AUTODIN-ILCS communications net also gives the customer a quantum improvement in speed and accuracy of status feedback. Instead of having to manually receive, sort, and post out-of-date status cards mailed via international mail, the customer can now make a daily printout of his status updates as they occur. If he has developed a system to electronically tie his ILCS terminal to his stock management computer, the latter system is then able to continuously update its records, keeping itself and its managers informed of all changes in stock status. This activity then reduces the number of hours the manager would have had to spend writing messages to manually recheck on-going supply actions.

All the above supply actions result in potential major savings in pipeline stock costs -- in effect allowing the purchase of the ILCS to pay for itself many times over. For example, if the customer is currently experiencing a two-year total order-ship time (OST) (average time it takes between date of requisition and date of physical receipt of the requested item), he must not only stock a safety level of items in his country but also must include a two-year OST in his overall stockage level. If his two-year OST is based on an average of three to four months to get a good requisition into the US DOD supply system and he can reduce that time to two days, he can then safely reduce his stockage by 4 months/24 months or 1/6th of the total amount. If he has \$20 million tied up in supporting stocks, he could then reduce his future procurements by 1/6th of \$20 million or about \$3 million. Even with

system start-up costs of approximately \$65-70 thousand, the customer purchasing and employing ILCS will realize major financial savings, not to mention 28 times faster and more accurate service -- and corresponding improvements in the operational readiness of his forces.

In addition to these improvements, ILCS can also be used for other error-reduction assistance.

Catalog updates can also be provided directly to the customer via ILCS-CONUS AUTODIN systems. Currently, one country is obtaining US Air Force Stock Number Users Directory (SNUD) catalog updates directly from the AFLC at WPAFB. This data is then electronically transferred to the in-country item management computer. These actions reduce problems of ordering obsolete items, incorrect stock numbers or wrong parts and also allow for more accurate cost accounting at stock management levels.

Reporting shipping, packing, billing or financial errors, via the Report of Discrepancy (ROD) for the first three error areas or via message to the Security Assistance Accounting Center (SAAC) at Lowry AFB, Denver CO for financial errors, is being done by at least one country. In this case, only ROD preparation is being done, and the RODs are still being mailed to the appropriate ILCO for action. Even so, use of the ILCS allows for better preparation and filing of discrepancies by the customer.

In the area of funds management, data transfers can also be made using the ILCS-CONUS AUTODIN systems. The customer can request direct communication between his terminal and SAAC. Once established, SAAC can directly transmit its DD Form 645 billing statement and attachments for that country to the country terminal. The customer can also request additional information/clarification from SAAC as necessary. This faster data transfer enables both the customer and SAAC to use the country's available funds more efficiently, and to avoid many misunderstandings or slow usage of funds.

It is already apparent that the combination of DLA-DAASO flexibility in the systems offered and the inherent flexibility in the use of the systems by customers are reaping or will soon reap enormous benefits to the entire security assistance (SA) logistics systems. These actions already have resulted in major cost reductions and improvements in efficiency and accuracy of service to both the customer and the USC in the provision of follow-on support. Money and management expertise thus freed can be used or is being used for additional vital defense needs of benefit to both partners in security assistance.

FUTURE IMPLICATIONS

The ILCS, like any new automated system, has brought to the surface some problem areas in the security assistance program, but this system has also provided a means to more quickly resolve these issues. Areas already manifested include redefinition of SAO logistician missions, erroneous requisition routing, handling planning and review (P&R) data and price and availability (P&A) data requests, computer "runs" on DOD stockages, and provision of hardware/software packages to link in-country ILCS terminals to customer item management computers.

One issue facing SAO management is the redefinition of the SAO logistician's job in those countries who already have ILCS and are rapidly gaining expertise in its use. In those countries with large SAOs and many logistics officers, one of their principal functions was to handle management-by-exception repair parts problems, similar to an Army Division Material Management Center. With the advent of an ILCS terminal, most of these exceptional supply problems can now be handled faster via country personnel using their terminal to deal directly with the ILCO concerned. Having to take these problems to the local SAO makes problem resolution slower -- once by adding additional processing and twice by depending on message traffic from the SAO to the ILCO. The resulting reduction in SAO management requirements enables better utilization of logistics personnel (see conclusions below).

The erroneous routing of requisition traffic due to customers not placing correct routing identifier codes on their requisitions has always been a major problem in cases where one purchasing country MILDEP is buying an article from a different service in the USG DOD. Often the purchaser MILDEP would code its same service in the USA and the requisitions would thus end up at an ILCO having no record of that LOA. The new DAASO "gate mechanism" described above, which compares a country and its LOAs with the respective DOD MILDEP ILCO concerned, should go a long way in resolving the misrouting of requisitions by the FMS customer.

Controlling P&R and P&A data requests has also been a problem. In some cases, countries having ILCS used its message routine system to send request for data on new purchases directly to the item managers, bypassing the MILDEP SA headquarters (HQ). New directives to customers and item managers concerned have now insured that these requests are first routed to the proper MILDEP SA office concerned (USASAC; HQ United States Air Force, Directorate of International Programs (USAF/PRI); and Office of the Chief of Naval Operations, Security Assistance Division (CNO/OP-63).

Past problems also were caused by uncontrolled runs on DOD MILDEP stockages. This problem is now being controlled by the institution of the "front-end gates," matching NSN requests to LOA equity lists preloaded into the ILCO computer systems. Thus requests for controlled items and/or large quantities are screened at ILCO level before the requests ever reach the item managers for supply action.

The final area needing resolution is the large number of requests from SA customer countries for linking hardware/software to connect ILCSs to their own inventory management computer systems. Although some software exists in several countries as a result of their own developmental work, no standard software package yet exists for sale along with the ILCS.

CONCLUSIONS

The various ILCS configurations now available to the customer countries offer a proven system that is cost effective, extremely fast, efficient, and highly accurate. These systems have greatly improved customer satisfaction in the USG Security Assistance Programs. With the new flexibility of systems now offered to the customer countries, 34 additional terminals are under

active consideration. Additionally, freight forwarder and commercial defense contractor interest is also increasing rapidly. If a country links its freight forwarder and commercial suppliers into the system as well as the DOD supply system, he has achieved visibility throughout all his order-ship cycles, which will significantly improve his ability to track supplies due in. With this enhanced ability, the customer will then be able to plan his support more accurately, enhancing combat readiness while improving cost effectiveness.

Cost benefits have already been proven for both customers and the DOD supply systems. Customers are benefiting from reduced pipeline costs, and DOD is benefiting from a more accurately prepared and even requisition flow, as customer "trust and belief" in this new system improves.

ILCS can be a major benefit to the SAO as well as the customer. Having an ILCS in country frees the SAO logistician from having to work daily detailed requisition problems for his counterparts. This freedom allows both the customer and SAO logisticians more time to work with CONUS counterparts in developing a more-complete and better-planned Total Package Approach (TPA) for new defense systems being selected for purchase or for older systems being upgraded or more fully supported in country. This shift of duty in effect enables the SAO case manager to spend more time as a planner and administrator rather than a "doer" -- which is precisely what he should be in the first place!

In all these areas the ILCS has a positive role to play. When used properly, it is a powerful tool in security assistance, providing service to the customer -- a major underpinning of our foreign policy effort overseas. This "satisfaction element" is a key foundation stone for our continued success worldwide. Good service and satisfied customers are essential factors in being able to defend the Free World's interests successfully.

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