

As you are no doubt aware, the business strategy seminar originally planned for the 24th July in London, had to be rescheduled owing to the limited response received to the proposed date and venue.

Realising that general work pressures make it difficult to find time to attend such seminars, it was therefore decided to defer debate on this topic until the next Cargo Services Users meeting in Hong Kong where the subject has been included as an agenda item.

At the time of notifying this change it was advised that a briefing paper would be issued to delegates which would provide an update and analysis on current industry developments.

The following therefore is intended to provide background information to the changes currently taking place in the cargo industry, the implications these changes will have on the way we currently process cargo information, and hopefully provide a platform for your views, recommendations and endorsement on the future activities you would like to see undertaken by LONDPC.

### *THE CHANGING MARKET*

Take a broad look at the cargo industry today and the first thing that strikes you when reading conference papers and analysing the trade press is the proliferation of "buzz words". The industry seems to be awash with new terminology and Figure 1 below details some of them - many of which you may recognise.

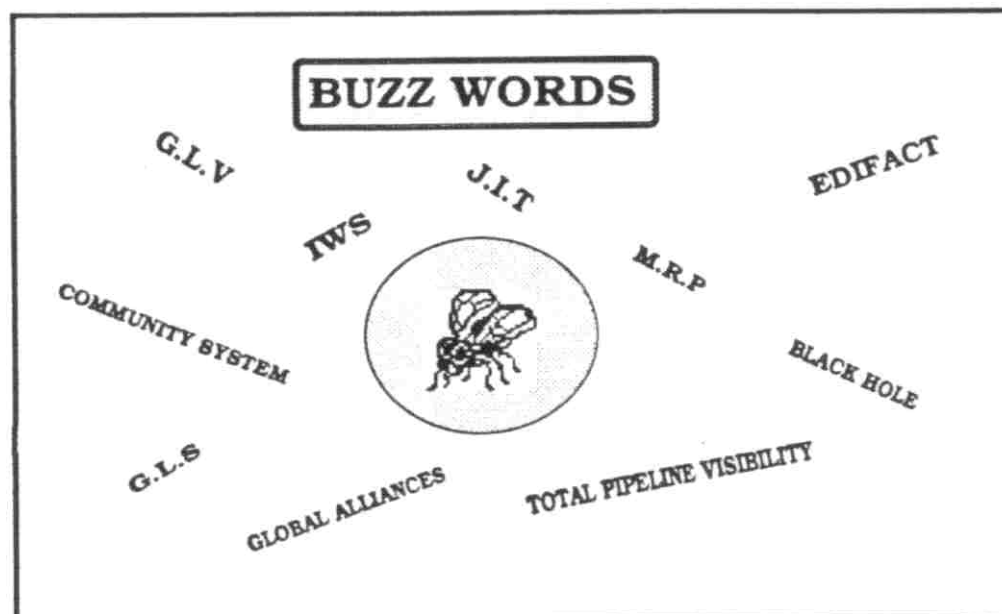


FIGURE 1 BUZZ WORDS

What do all these acronyms and new phrases represent? Are some of them paper tigers without substance? Or do they in the main signal a message that the long established methods used in the cargo industry are undergoing fundamental changes - many of which will significantly impact on the way we process cargo information? These questions can be best answered by looking at the underlying pressures for market changes.

If we were to take a snapshot I think we can categorise the pressures for change as follows:

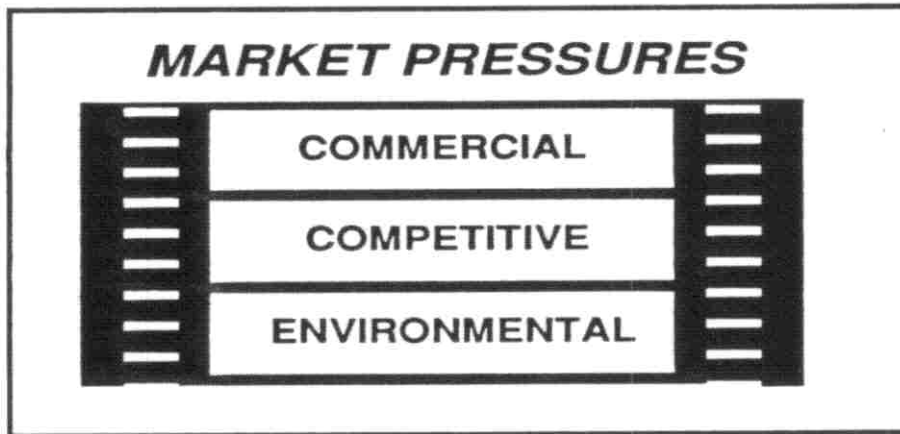


FIGURE 2 PRESSURES FOR CHANGE

Note that these three categories are not mutually exclusive - they do impact on each other. However the distinctions are useful for analysis and illustration. Let's start with the commercial pressures first.



FIGURE 3 COMMERCIAL PRESSURES

Over the years there has been an increasing trend to manage business more effectively. Obviously today's recession gives even more impetus to this issue. As with any industry the key areas of concern are pricing/revenues and costs.

I suppose one could argue that there has always been the need to manage business more effectively, but for many years cargo has led a relatively sheltered life, its pricing policies subject to strict international regulation and enforcement, and to a large extent, its costs absorbed by the passenger side of the business.

*This has now all changed.*

The international pricing structure has been eroded by the process of deregulation. Initiated in the USA in the late 1970's, deregulation is working its way into world-wide markets and I think most of us are now aware of the pressure this has placed on cargo yields. In simple terms this means that cargo managers are now under increasing pressure to maximise revenues in a market where stable rates are rapidly becoming a feature of the past.

However this is only one part of the equation.

Also in the commercial area there is a twin pressure - one that we are all familiar with - the need to control costs.

Traditionally the combination carriers, those that carry passengers and freight, have been content to view cargo as a by-product. Costs of operation have been totally allocated to the passenger side and all cargo revenue seen as profit.

That view is now changing, particularly with the recognition that such a philosophy leads to "dumping" of cargo rates and obvious revenue dilution.

Cargo is now more under the spotlight and there is an increasing trend at present, whereby cargo operations are being turned into separate profit centres with costs being more fully allocated.

There is a plus side to this commercial gloom and doom picture I am painting though. The traditional low profile of cargo - where average freight yields are less than 40% of passengers, and where traditionally the average product generates approximately 10% of revenues is changing.

For many carriers now the contribution to an airline's profits made by cargo revenues is the difference between profit or loss to that organisation. The cargo profile is now much more to the fore and which obviously begs the question - Are we not too far away from the day when we see passengers offloaded to make room for cargo?

So what are the implications of these commercial pressures on cargo information processing? Obviously today's cargo manager must have real-time access to quality information on which to make effective decisions. Instability in the rate structure requires up to date information on flight

booking profiles that must be integrated with an effective yield management system. Operationally based systems must therefore be made commercially focussed as the distinction between sales and services information becomes more blurred. Access to this quality information also enables today's cargo manager to effectively judge performance in terms of profit and loss.

Lets now look at the second category of pressure for change that I identified earlier - Competitive Pressures.



**FIGURE 4 COMPETITIVE PRESSURES**

As illustrated above, this category is sub-divided into two elements, INTEGRATED OPERATORS and GLOBAL AUTOMATION ALLIANCES.

Let us start with what some commentators describe as the traditional cargo carrying airlines bogeymen - The Integrators. The term Integrators is used to mean the express parcels carriers such as Federal Express, UPS, DHL, TNT etc. Since the 1980's these operators have expanded their services internationally and through offering a combination of inclusive Door-to-Door services backed up by sophisticated, proactive information technology systems, have captured a major share of the traditional cargo carrying airlines high-yield, premium traffic.

<b>INTEGRATED OPERATORS</b>									
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1980	<table style="width: 100%; border: none;"> <tr> <td style="padding-right: 20px;">SMALL SHIPPERS &amp; AGENTS</td> <td style="text-align: right;">45%</td> </tr> <tr> <td>MAJOR CONSOLIDATORS</td> <td style="text-align: right;">35%</td> </tr> <tr> <td>MULTINATIONAL SHIPPERS</td> <td style="text-align: right;">15%</td> </tr> <tr> <td>INTEGRATED OPERATIONS</td> <td style="text-align: right;">5%</td> </tr> </table>	SMALL SHIPPERS & AGENTS	45%	MAJOR CONSOLIDATORS	35%	MULTINATIONAL SHIPPERS	15%	INTEGRATED OPERATIONS	5%
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1986 - 90 D2D MOVEMENTS INCREASED 38% P.A. A2A MOVEMENTS INCREASED 7% P.A.									

**FIGURE 5 INTEGRATED OPERATORS**

These figures clearly show the changing face of the air cargo market and illustrates how over the last few years the growth rate of Door-to-Door shipments has outstripped that of traditional Airport-to-Airport Shipments. At the time of writing, this growth has slowed somewhat and arguments can be made that the tremendous economies of scale achieved by the Integrators are beginning to reach saturation level and further incursions into the larger freight market are increasingly more difficult to achieve. Applying and reading a bar code on a small package being infinitely more simple to achieve than on a 4 tonne Generator. Several traditional carriers have tried to respond to this threat by offering similar services - albeit in most cases with limited success. The general industry wisdom seems to be moving towards greater cooperation with the airlines traditional alliance - the freight forwarders.

This greater cooperation will take the form of extending cargo information into the forwarders offices in order to provide the total pipeline visibility required by today's shippers. In this way it is hoped that the cargo process will no longer be the "Black Hole" (remember the buzz words) in which freight starts its transportation cycle and fingers are kept crossed in the hope that it appears at the other side.

Partially in response to the integrated Carriers growth and to counter some of the reasons for their success, there has also been some competitive responses in the field of cargo automation. For purposes of analysis these have been given the broad heading of global alliances.

This second competitive thrust has parallels with the passenger side of the industry. Commercial emphasis is being placed not only on the carriage of traffic but also on the information related to that traffic. It is the recognition that handling information can be a commercial business in itself, very much in the manner of airline passenger reservation CRS systems such as Apollo, Sabre, Galileo etc.

This has resulted in the formation of several consortia; alliances that have been formed to manage this new approach to handling cargo information.

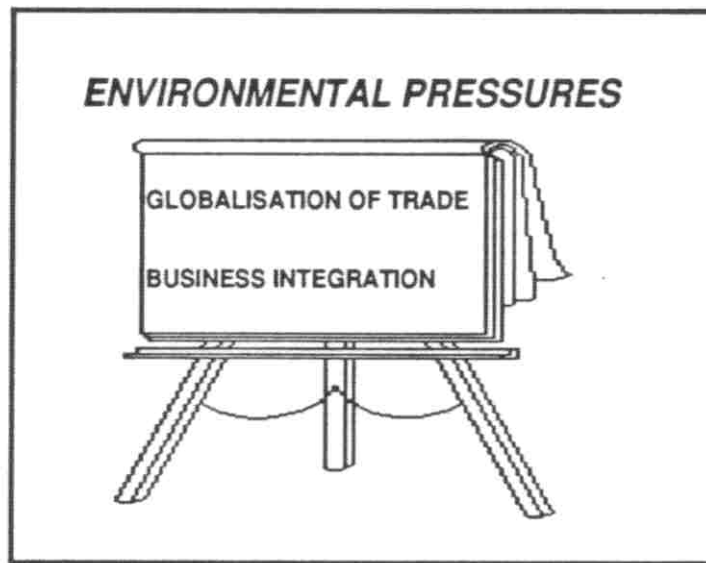
Probably the most focussed development to date was the formation of the Global Logistics System (GLS) in 1989.

This consortium which consists of LH/AF/CX/JL represents a multi million dollar project whose stated aim is to improve the exchange of data links between the four partners (incidentally, something that the SITA Air Cargo System has already achieved); then expand the traditional Airport to Airport limits of cargo automation to include all parties involved in Door to Door operations; and then finally switch focus to the Logistics component of cargo processing with existing systems being augmented by more dynamic planning capabilities.

In response to this project other developments are also taking place e.g. American airlines has an initiative called the Global Logistics Venture (GLV); Alitalia and SAS are cooperating on a joint venture - COLUMBUS - Cargo On Line Universal Modular Business Units System; and in a less formal way, other carriers are grouping together in loose alliances as a response to these developments.

What effect does this have on cargo information processing? Well obviously, the integrators

have set new service standards and changed shippers perceptions with the demand now for increased access to and information from the air freight process. Global alliances are responding in part to these changes by extending their applications to the wider cargo community; attempting to globally extend their coverage; and planning to create more active systems to match expectations from changing business practices which we will now look at in the third category identified in pressures for change - ENVIRONMENTAL.



**FIGURE 6 ENVIRONMENTAL PRESSURES**

As figure 6 above shows, two elements have been identified under the heading of Environmental Pressures.

The rate of growth and globalisation of world trade that has occurred over recent years becomes very apparent when reviewing the average annual increases in international and domestic movement of freight by air carriers over the last decade. Through the period 1979/1989, international averaged 7% per annum (1984/1989, 9%); domestic 4% (6%); and combined 6% (7%).

These averages indicate that over the ten year period the market for international air cargo has almost doubled in size, whilst the domestic markets have increased by less than 50%.

Despite the current recession, there is no doubt that over the last 10 years, air cargo has become a major factor in enabling the world's industries to speedily and reliably distribute materials and products to support their global manufacturing and retailing operations.

At the same time air cargo has become critical to the successful application of such innovative methods as Just in Time (JIT), Manufacturing Resources Planning (MRP) etc. However, such new business integration methods which attempt to cut costs by reducing inventory levels require shorter lead times and comprehensive tracking/tracing systems.



Electronic Data Interchange (EDI) which is the computer to computer exchange of inter and intra company business helps to facilitate these new practices.

Today many companies are exchanging electronic data on invoices, orders, shipping details, and funds transfer. These companies have created EDI trading links to reduce their paper flows, to remove postal and processing delays, transcription errors and manual re-entry of data.

Many more businesses are now recognising that accurate data on market trends, cash flow, performance quality and productivity will be vital for success in the increasingly competitive markets of the 90's. Initial applications have concentrated on corporate efficiency by improving data flow and error reduction but there are now strong indications that the greatest value of EDI will emerge in strategic areas, with increasing industrial use of intra/inter company computing. Each new technology change has gone from concept to critical mass in an ever shorter time. EDI is expected to follow this pattern, giving a powerful tool to facilitate the delivery of commercial data to maintain competitiveness.

It is perceived by all players in the air freight business that EDI and in particular its application of the EDIFACT language will fundamentally reshape the world of air cargo. After many years of background work, the airline community stands on the brink of an era when paper will be eliminated for corporate transactions.

The implications of these pressures are obvious. Cargo automation must be ready to accept the challenge of being a vital link in world-trade information technology.

It is sincerely hoped that this brief overview of industry developments and trends and their impact on cargo information processing, provides food for thought. More importantly we hope it also provides a platform for your views and recommendations.

The London Data Processing Centre (LONDPC) recognises that changes are necessary to meet tomorrow's challenges and has put into place several developments to meet these new demands.

No longer can automation be considered just an operational tool, increasingly it must be viewed as a commercial necessity. LONDPC needs to progress its products to meet your needs and expectations. However to reach that goal it needs your support and commitment.

We hope you will endorse the new directions taken and look forward to your views and comments. Please help us to maintain our leadership in the world of cargo automation.

Enjoy your meeting in Hong Kong.

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