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Analysis of Airport and Airline Relationship

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1. Introduction

The relationship between airports and airlines is often compared to that of a husband and wife. Working for an airport operator, we keep being reminded of this metaphor. In this paper, the author attempts to confirm his personal perceptions and discover new ways for developing and expanding such relationship between airports and airlines. In the analysis of this relationship, it is, perhaps, in order to begin by looking at how the two sides view each other.

2. Relationship between Airports and Airlines

What is an airline from the airport's perspective? The airport business model is such that the facilities are designed, funded and constructed, for which the users – the airlines and passengers – pay appropriate user charges. From that perspective, what is an ideal airline to the airport? The answer to that is an airline that brings a large number of passengers to the airport, fully understands that the facilities are built, provided and charged for by the airport in a fair and equitable manner, contently uses those facilities and willingly pays its fair share of charges. Conversely, what is an ideal airport to the airline(s)? No doubt, it is an airport that responds flexibly and promptly to the airline's business needs in terms of facilities, operations and charges and one which may be called a business partner with impartial policies and measures.

There is one unique characteristic to the relationship. It is the fact that this relationship is usually based on the ratio of one to many. Airlines' needs are diverse and, while the airport operation and management have a long-term perspective of 10 to 20 years, airline business is often concerned with the next few years. More often than not, airlines' requests are intended to focus on their own individual needs rather than those of other airlines. On the other hand, an airport must provide its services to meet the largest common denominator. For an airport, it is difficult to accommodate airlines' requests as they are presented. Ensuring impartiality is a common but difficult obligation that we struggle to honor on a day-to-day basis.

This leaves us with one question: What happens if we pursue to be an ideal airport as envisaged by ourselves, an airport company? Perhaps it is possible to achieve a certain level of customer satisfaction by presenting an airport that benefits and pleases specific users. However, if our airport facilities fail to satisfy the needs of the airlines at large that carry passengers, they will not serve their full purpose. Conversely, what would be the result if we were to attain the level of an ideal airport as perceived by the airlines, to build all the facilities in the airport for the unfettered use of the airlines? Funding issue aside, that would be essentially the same as the airlines constructing the passenger terminals by themselves, as seen at some airports in the US. This method would require a vast area of land and would be difficult to adopt in a small country like Japan or by simply modifying an already existing and operating airport.

As such, the two sides fundamentally need each other in this relationship but, in reality, have many conflicts of interest. To lean too heavily to either's perspective would mean that the users are not always

given the best service they need or want. However, even in a situation like this, the two sides may be able to build an ideal or, at least, workable relationship by searching for areas where both interests are satisfied.

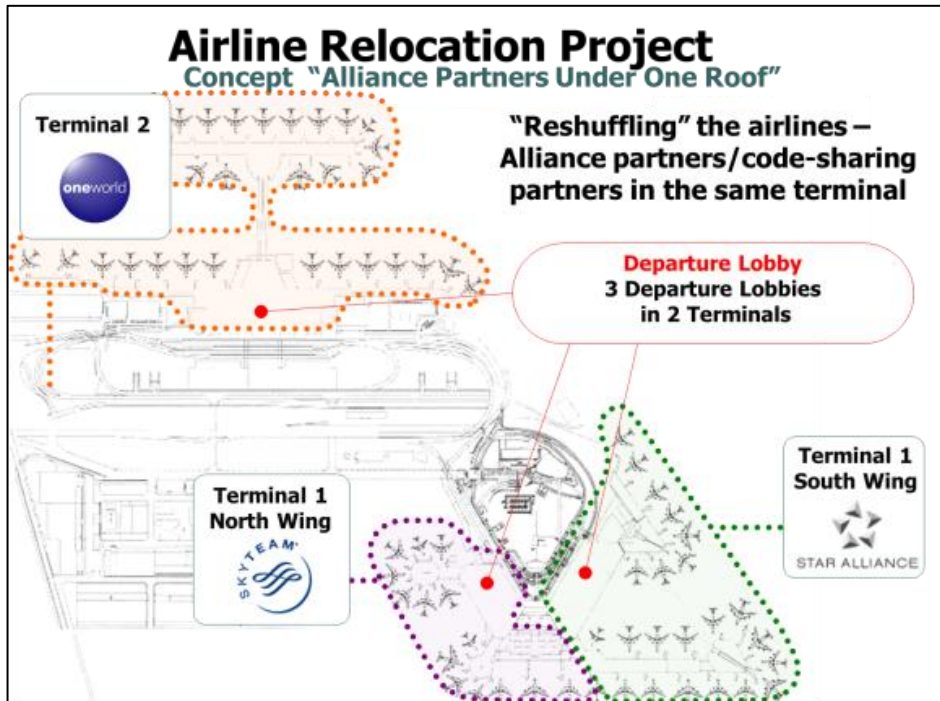
The idea of providing optimum services to passengers is an important consideration in such effort. Airports are essentially a service industry. Providing services to passengers who, in turn, pay for the services (in the form of Passenger Service Charge) is the airport's obligation. The airport company's notion that beyond the airlines are the passengers is, perhaps, a step towards finding a common interest. That is to say, by providing services to the airlines we, the airport, are indirectly providing services to passengers who use the airport. What, then, are some specific ways of finding common ground that serves the interests of both the airport and the airlines? In 2006, Narita Airport was the first in the world to relocate the airlines in the terminals and consolidate them into alliance groups. This will be dealt with in the next chapter.

3. Achievements and Experiences at Narita Airport

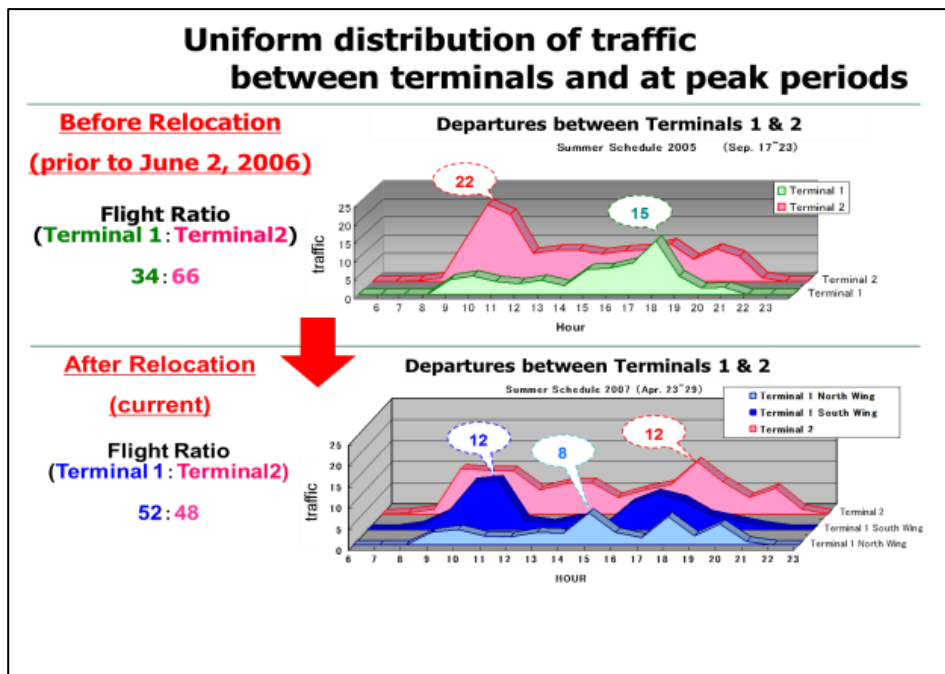
3.1 Circumstances

In the first experiment of its kind in the world, Narita Airport relocated airlines by their alliance groups in the three terminals in 2006. As the air transport industry entered the 21st century, airlines' attention shifted beyond code-sharing to the concept of alliance and they were looking at the possibilities of expanding the airline business around alliance groups rather than individual companies. In the meantime, Narita had opened its interim second runway in 2002, being aware of the need to expand its terminals to meet and deal with the growing demand. At the same time, we were also concerned about the increased costs to the airlines associated with the expansion of the terminals at the time. (The ratio of passenger numbers in the terminals then was 34% in Terminal 1 to 66% in Terminal 2.) Japan's two national flag carriers and their customer airlines used Terminal 2 while the other airlines used Terminal 1. Further compounding the issue was the fact that a number of airlines in the same terminal were operating flights in the same time frames, resulting in a very inefficient use of the facilities. In addition to this, around 40% of the passenger flights at Narita Airport at the time were code-shared, of which almost 90% used different terminals, much to the inconvenience of passengers using those flights.

►Diagram of Terminal Layout



►Peak Hours in Terminals



3.2 Objectives

Under such circumstances, we set out three objectives for a workable relocation plan.

- ① To alleviate congestion in the terminals by adjusting the imbalance in the volume of passengers and the peak traffic hours in the individual terminals and improving passenger service level as well as the usage ratio of check-in counters and fixed gates, etc.;
- ② To provide an easy transit environment by consolidating alliance and code-share partners in the same terminal; and
- ③ To reduce the overall cost of investment in the construction of passenger terminals by improving utilization rate, and to reduce operating costs through common use of facilities by alliance and code-share partners.

① to ③ above seemed to present advantages to both the airport and the airlines in terms of facilities, operations and investment.

3.3 Result of Relocation

As a result of this relocation of the airlines, passenger convenience was dramatically improved. The frequent sight of buses shuttling international transit passengers between terminals and late-shows due to code-share passengers arriving at the wrong terminals sharply dissipated and we were able to drastically reduce minimum connecting times (MCT) at our airport. Shorter connection times gave transit passengers more time so that they could relax or go shopping.

For the airlines, too, they no longer needed to have splinter offices and staff in different terminals for handling their customer airlines and they were able to centralize and consolidate their resources. With centralized resources, new-entrant airlines had fewer concerns about their ground handling. In terms of operations, by sharing check-in counters with the same alliance group member airlines rather than with airlines belonging to a different alliance, individual airlines were able to save expenses and operate more efficiently.

This relocation project was a measure that met the needs of the airport and the airlines by contributing to improved passenger services and achieving cost reductions and higher efficiency in terms of investment and operations.

►Achievements Accomplished



4. Issues that Emerged after Relocation

4.1 Advantages and Disadvantages

Narita's airline relocation that took place in 2006 to consolidate the airlines into alliance groups achieved its initial objectives at the time. Over a period of time, however, the following new issues emerged:

- Terminal capacities were not consistent with the size of the alliances;
- Although the airport's capacity was not overreached, some facilities were lacking in space;
- Airlines from time to time relocate between terminals regardless of the airport operator's wishes;
- As each alliance's intentions and desires became prominent, it became necessary for the airport to maintain a balance among alliances;
- In operations such as gate allocation in the terminals, alliance airlines took precedence over non-alliance airlines; and
- Because the relocation program was initiated by the airport, all expenses for the move for the purpose of alliance consolidation were borne by the airport.

Why did these issues arise? Continuing to enjoy benefits of the relocation was conditional on a certain precondition. That precondition was that the size of the individual alliances would be consistent with the size of the facilities and would remain unchanged. In other words, the balance of power between the three alliances was assumed to remain constant. In reality, the share and the size of the Star Alliance services grew beyond all original estimates and concentration of flights during peak hours became heavier and heavier for the alliance's network enhancement. Since then, the capacity in the South Wing of Terminal 1 has been exceeded. Consequently, the boarding bridges, BHS, CIQ, security and other facilities could not stay abreast of the increased number of flights and passengers during peak periods, and it now seems necessary for us to upgrade the facilities at immense cost over a long period. As the overall airport capacity increases, the concentration of flights during peak hours grows even heavier and more serious. Patchwork investment in facilities under such circumstances becomes inefficient and ineffective for the airport. Instead, Narita opted for a more realistic approach in Terminal 1 by converting its Gate #27 on the border between the North and South Wings into a swing (i.e. interchangeable) gate for more flexibility during peak periods between the two wings.

On the other hand, one of the better results that came out of the relocation program was the ease of forming consensus in each terminal building. Agreement of the resident airlines in each of the terminals is crucial in carrying out projects such as facility upgrades. When the majority of the airlines in each terminal belong to the same alliance, by tapping into the mood of the alliance, a consensus can be reached in far shorter time. In turn, it is easier for the airport operator to track and assess the wishes of the airlines. It is also easier for the individual alliances to offer their unique services and, as the competition among terminals becomes fierce, the services in the airport as a whole will improve.

▶ANA Suite Check In

▶Enables seamless process from check in to security screening



4.2 Non-Alliance Airlines

Another noteworthy change as we enter a new era coming out of the days when we undertook the relocation program in 2006 is the emergence of new non-alliance airlines as represented by LCCs and the way in which airports respond to this.

Viewed from a different angle, consolidating airlines into alliance groups has little advantage to non-alliance independent airlines. Finding a suitable ground handling company for flights at Narita is a key factor for non-alliance airlines in their determination to operate at Narita. In a congested terminal, it is not always easy to accommodate them since alliances naturally give preference to their own member airlines. Even in a terminal with adequate capacity, accommodation of independent non-alliance airlines must be coordinated with existing airlines, where airport leadership is essential.

As at other airports, Narita found it difficult to accommodate such LCCs, which began full-scale operations at our airport in summer 2012. To the airport business that has long operated on the basis of mutual trust with existing airlines, it was like the arrival of a new, younger family member at home. In responding to LCCs, each airport assesses the viability of having them move into the same house or meeting their needs for lower costs including rentals. Narita has positively responded to LCCs from the network expansion point of view. We have concluded that our existing terminal facilities would not be suitable to their business model but that a different type of facilities were needed. It has thus been decided to build a new low-cost terminal to suit their business requirements.

4.3 Evaluation of Relocation

If we look at the relocation project in retrospect, we may say that consolidating the alliances into terminals brings about a lot of advantages for the airport and the airlines but, because it is not possible to accurately predict or control airlines' business decisions, there will be a number of minor teething problems and, in some cases, very major issues like necessity to add significant modifications to the

existing facilities. Facilities issue aside, such relocation can be a very effective and sustainable way of maintaining good relations between the airport and the airlines.

The aforementioned problems and issues were appropriately pointed out in 2006 but, at the time, they were not seen as major risks in favor of improving benefits to passengers and airlines. One lesson we have learned in the past six years is that it is difficult to predict the future fortunes/misfortunes, business trends and needs of the airlines as these emerge gradually with the passage of time in conjunction with the occasional dramatic events such as bankruptcy of a company. If it works to the advantage of the airport to stay in sync with the airline trends and needs, perhaps the key is to satisfy those needs and strive to provide an airport that is easy for them to use.

However, the most important consideration for us is to find ways in which the airport can meet the needs of the airlines while minimizing labor and additional investment, and create business models with minimal risk factors that will also produce growth and expansion for the airlines. The single largest obstacle in meeting the needs of the airlines is facility capacity. Without it, the airlines will be unable to develop their business when they want, and the airport will need to upgrade the facilities at enormous cost in order to satisfy the airlines' needs. In other words, airports need to construct facilities that will not require major upgrades regardless of airline trends or needs. The problem at Narita Airport, for example, is that we have three separate, independent terminals: i.e. the North and South Wings of Terminal 1 and Terminal 2. It is this separation that is the cause of lack of space. In order to adapt swiftly to minor shifts in the balance of power in the form of terminal relocation brought about by consolidation of alliances in individual terminals, it might be a good idea to link the now autonomous North and South wings in Terminal 1, link Terminal 1 and Terminal 2 and then bring the different check-in systems into one integrated system for all terminals. It would also be possible to adapt flexibly to shifts in the balance of power between terminals by adopting solutions such as placing facilities so that essential core functions (security screening, CIQ inspection, baggage claim and other bottleneck facilities) can be shared in all terminals. Ideas such as this would have a positive benefit for CIQ with their limited human resources and enable them to adopt a flexible personnel deployment system for the peak periods in the individual terminals. This, in turn, would reduce waiting times at screening checkpoints and help to improve overall passenger experience.

Based on the assumption that our actions in 2006 generated more efficiency by consolidating the alliance member airlines, surely, Narita Airport may now capitalize on the scale merit for further efficiency by consolidating the terminals into one.

►Connected Terminals by additional construction (diagram)



5. Striving for an Ideal Airport-Airline Relationship

5.1 Future Air Transport Demand

At this point in the discussion, it is pertinent that we look at the positive aspects and growing future in the relations between the two parties.

According to the ACI Global Traffic Forecast 2012-2031, air passenger traffic will grow by an annual average of 4.1% globally until 2031 and growth will continue at a pace of 6.0% in the Asia-Pacific region. Growth in air transport demand in Asia, China and India in particular, is also predicted, underpinned by the domestic conditions in countries where economic growth and a ground transport infrastructure is not yet fully developed. Against this backdrop, Narita Airport must also think of ways to meet such demand.

As we look at the market trend of the full-service airlines (FSAs), we will need to pay attention to intra- and cross-alliance mergers of national flag carriers in the EU (AFR-KLM, BAW-IBE and DLH-AUA) and in the US (COA-UAL). Meanwhile, LCCs continue to increase their presence in Asia. Their business model is based on a basic principle of maintaining their competitive edge with FSAs by operating short-haul sectors at high frequency and reducing their unit costs per flight. Fundamentally, short-haul, high-frequency operation will continue to be the key for LCCs' success. Even if passengers eventually learn to accept lower level of service, there will be a minimum required level of service on long-haul flights which even LCCs must provide. Because they are unable to compete with FSAs on that level, LCCs are likely to continue operating point to point on short- to medium-haul destinations as is the case with AirAsia X, which now serves a number of Asian countries.

We may safely assume that there will be changes in the business models of both FSAs and LCCs. FSAs will review their own service levels after the LCC business model and either provide more value-added services or continue to provide high-standard services at lower fares, while LCCs will try to offer better services for the same price. We can also assume that open skies agreements will see the

arrival of new carriers. Airline business models of the future will range from high value-added services offered by FSAs at the top end and low-cost low-fare services offered by LCCs at the lower end, with the emergence of airlines using diverse business models in between. Based on the above hypotheses, let us now have a look at three areas – namely passenger service, facility planning and route development – where airlines and airports are closely associated.

5.2 Passenger Service

In examining passenger services at airports, we need to look carefully at the borderline of responsibilities with the airlines. This is because it leads to the question of how much of the costs the airports should bear in relation to passenger services. Because of the airports' public nature, it is generally accepted that airports should bear the costs that serve the public interest. But what is the public interest? The public interest is the needs of society. Since airports are an integral part of a nation's economy, it then means that airports should closely follow and understand economic and social changes. Holding roundtable conferences with participants from industry, business and academic circles in addition to airports and airlines, to gather information and exchange ideas would be significantly beneficial. Through such meetings, it should be possible to collect an extensive range of information from an airport perspective with which to decide on its own criteria and provide integrated and seamless services in collaboration with other companies. A tripartite conference – with airports, airlines and third party stakeholders – similar to a roundtable would provide a forum for contemplating ideal airport services in conjunction with airlines and provide a venue to enable deeper understanding of the needs of airports' key partners.

When considering passenger services at an airport, it is very important to remember that impressions and experiences of the time spent at an airport should not work to discourage passengers from traveling. We must try and eliminate reluctance to travel simply because airports are crowded, boring, and not friendly to the elderly or passengers with children. More specifically, airports should not become an obstruction to promotion of tourism.

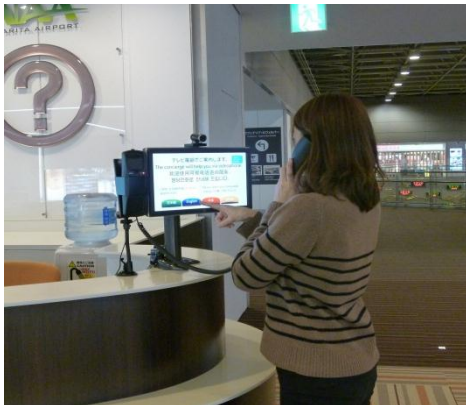
What, then, are the ultimate in passenger services? Are they not situations that allow passengers – users of our facilities – to feel completely stress-free, to the extent that they do not even notice that they are being served? Many of the services provided around the world today were special when first introduced but, because of their convenience and necessity, they are now taken for granted. Of course, people tend to demand a higher level of services because those services that were previously special are now commonplace everywhere. Airports must continually re-examine travelers' needs to ensure that their services stay abreast of people's expectations. In so doing, venues such as the previously mentioned roundtable conference to draw ideas from external organizations would serve a useful purpose.

Now, moving on to the future of the Asia-Pacific region, based on factors and trends such as the advent of the open skies environment and ageing of the society in Japan, prominent economic growth in China

and India, rapid growth in the LCC market in the South East Asia and advances in the IT technology seen around the world, we may anticipate that the future will see further ageing of the society in Japan and a dwindling population, improved income levels in the East and South East Asia and further advances in the IT technology.

Airports need to anticipate shifts in the passenger trend brought about by such social and economic changes. More specifically, this involves things like providing children's playrooms and barrier-free facilities to meet the demand in the growing family travel market in the South East Asia or further promotion of universal design concepts. Any growth in a multilingual, multicultural market sector should probably be supported by such services as introduction of non-textual information signage (or pictograms) at all airports in the Asia and Asia-Pacific regions. Another such example is the recent introduction at Narita Airport of multi-lingual passenger information service via video-phones installed at information counters.

▶Multilingual passenger information via video-phone ▶Display screen (diagram)



Accommodating cultural diversity requires a preemptive approach based on understanding that cultural differences should be respected rather than dismissed. We need to respect and maximize common values (e.g. provide worship/meditation rooms, maintain clean restrooms, etc.) and create a framework of preparing for anticipated future demand. As the IT technology advances, we need to consider utilizing this technology for passenger services, to provide more free Wi-Fi and free battery chargers throughout the terminal areas and offer information/guidance service on tablet terminals, etc. Furthermore, airports may also need to consider how far they can or should meet individual needs of the airlines as they change their business models as mentioned earlier. At present, the level of services available is determined by the facilities provided. When airlines with different business models use the same terminal, we will need to make decisions carefully.

Considering why it is necessary rather than what is necessary may be the key to staying ahead of passenger satisfaction and, thereby, offering the ultimate in passenger services.

▶Passenger Information using Tablet Computers



5.3 Facility Planning

Facility planning strategies at Narita were mentioned in the previous chapter but let us now talk about the future. By nature of our business, airports cannot simply move their operation to a new location when business is not running well. It is an enterprise that needs to grow and develop based on a long-term perspective. When we consider the issues observed from our experience of the relocation program at Narita Airport and visions for the future based on future circumstances of the air transport industry, perhaps two of the most important elements for being selected by the airlines are minimization of risks and communization of facilities.

Risk minimization here relates to facility design with room for expansion to accommodate business growth, terminal relocation and mergers at the airlines' call, while minimizing the need for additional investment as much as possible. Communization means planning efficient use of available resources, avoiding inefficient duplication of identical functions at multiple locations for each alliance and, instead, locating such functions at a strategically appointed central location. To be more specific, greater efficiency will be achieved by application of automation in the facilities from check-in through to CIQ and by implementing CUTE (common user terminal equipment) systems for use by all airlines, and airports will be able to minimize their investment even in the event of cross-alliance mergers of airlines.

In short, the ideal airport from the airline perspective is one that includes in its facility planning the scope for expansion through common use of facilities and equipment, to enable at any time a possibility of airlines deciding to expand their business at will.

5.4 Route Development

Unlike the two subjects discussed so far, route development is ultimately a matter of decision by the airlines, and therefore the results are difficult for an airport to control. However, this may be a subject with which the airport and the airlines can most likely share a common goal. The important point here is how much the airport can provide of the key information required by the airlines in their decision to operate to a new destination.

For an airline, essential information will include the airport's catchment area (size, demographics and scale of commercial activities) and trend in the high-yield business passenger market. It is not always easy for a foreign carrier to obtain such information on its potential new destination, and therefore it is an effective tool for the airport to take the initiative to collect and provide this kind of information. Airports at origins and destinations could work together to provide business and commercial information on their respective market zones. This would benefit the airlines as well as both of the origin/destination airports. Such information may be collected from trading firms and consultants. The previously mentioned roundtable conferences may also be a useful source of such information.

The concept of intermodality may be a useful means of enhancing the commercial value of the market zone. It means that airlines, airports, railways and roadways can work together on expanding the market zone and upgrading the market value, with an objective to find ways of streamlining the flow of people and goods in highly energized and rationalized economic and commercial activities. To put it in another way, an airport can place itself between the airlines and the railways and look at ways of improving the passenger connectivity between aircraft and trains or look at ways to expand the market zone by developing and improving access to the airport. Building further on this concept, domestic infrastructure industries such as rail and road service providers, who conduct business in Japan's domestic market facing a declining population, may find new business opportunities.

What is known as Market Support Program at Narita is a part of our support scheme for our airline customers. As there are difficulties in providing incentives in terms of user charges, other forms of assistance is offered to the airlines at Narita. New services can be advertised in tie-ups between the airport and the airlines, often involving railways and other companies. We often post advertisements on our own media as such new services help to expand the airport-to-airport network. At Narita, we mostly provide free advertising space within the airport for incumbent airline customers and this is beginning to prove popular. This type of support during pre- and post-launch periods is welcomed by the airlines because it enhances their market recognition and publicizes their new routes. This we believe is another way of forging a reliable working relationship.

▶Free advertising space



▶Free airline advertising slots on BIDS



6. Conclusion

The author's impression through these observations is that the relationship between the airport and airlines resembles that between a working couple in which both the husband and wife go to work. The two sides may not always see each other face to face, but the crucial point is that they ask little of each other in a shared environment but maintain amicable communication and work for the benefit of each other. Having shared interests in children and pastime will be important for building a smooth running home without long-term difficulties. In the air transport industry, the common interests may be passenger service and route development. Neighborhood association may be also necessary for seeing how your ideas, budgets and reputation compare with other households. Again, it comes back to the subject of roundtable conferences. Divorcing from your partner is not a viable option because of the children (passengers) and so, the trick of maintaining a harmonious marriage is to ask little from your partner, to have common interests and to work hard for each other.

In conclusion, in order to build an ideal relationship between an airport and its airline customers, what the airport can do is to maintain a close communication with the airlines as well as third-party stakeholders and to share in the prevailing issues. As we have seen so far, airports alone cannot deliver 100% of customer satisfaction. The airlines' support and assistance will be an essential element. So, some will question us as to how much we can do to accommodate the wishes of the airlines. The answer to that seems to lie in developing and expanding our airport business with minimum of risks in order to flexibly and adequately adapt to the growth of the airline business. To achieve this, it is important for the airport to remain alert in collecting information, make its own projections for the future, and adopt a comprehensive perspective in its decision-making. An optimum mix of these efforts will form a foundation upon which an ideal relationship can be built between the two parties. With the advent of open skies and the increasing competition among airports at home and abroad, the author remains committed to his daily routine work in a firm belief that it contributes to Narita Airport remaining the airlines' and passengers' first choice.