

7.3 Review of Kazakhstan "Auje Zholy"

The following is a review of the financial, operational, marketing and service practices driving Kaz Air's management and performance. The observations and conclusions of this review will be used to develop recommendations relating to the organization and management of "Air Kazakhstan".

7.3.1 Financial

The airline's financial reporting system is based on state set accounts, lacking the detail to discretely isolate operating costs for many functions and expenses. The profit and productivity of the airline is also distorted because it includes labor and expenses related to airport operations and non core subsidiaries. Actual expenditures appear to consistently overrun budgets and are not reconciled on a timely basis. The airline does not measure route Profit & Loss. Each of these factors adversely affects management's ability to establish accountability and evaluate performance.

(1) Accounting Practices

The accounting practices used by Kaz Air are based on state established standards and accounts. This limits the choice of suitable accounting practices and procedures. In addition, the airline's financial statements are primarily used for purposes of calculating state established tax obligations. Often, this information is not relevant to the financial and accounting needs of an owner, management, analyst or investor. Major issues or implications associated with the airline's accounting practices are summarized as follows:

a) Conservatism

Kaz Air's accounting rules do not recognize the concept of accounting conservatism. There is no provision for bad debts, except in cases where liquidation of the company can be proven. In addition, the practice of materials obsolescence and deterioration is not recognized and investments are not based on market value.

- i. Because of the accounting procedures used and the absence of reliable data, it is difficult for Kaz Air to establish the value of past due accounts receivable. Analyzing the age of accounts is useful in estimating the allowance for bad debts.
- ii. With respect to inventory levels, low turnover or low material prices may be indicate that the airline carries inventories of old or obsolete materials with little residual value. In addition, there may be inventories of unused materials due to changes in technology, for example. Management should either write off or dispose of these items.
- iii. The same comments can be made for fixed assets. Current fixed assets accounts for 59% of total assets, indicating an essential need for the airline to exercise management and control over its fixed assets. For example, a significant portion of fixed assets are surplus aircraft destined for disposal, sale or lease. There are also aircraft which are not utilized because of a lack of spare parts or the overall aircraft surplus. In each of these instances, the assets should undergo a valuation with an appropriate level of depreciation established. The depreciation rates for

fixed assets are set by the state and tend to be lower than those used in western accounting. As a result, reported depreciation expense does not correspond with the actual fixed assets in production. Comparison to western depreciation rates may serve as a guide for the fair depreciation of fixed assets.

b) Cost accounting

Kaz Air's use of accounting to assist management with a timely and reliable understanding of expenses is limited. Furthermore, the reliability of cost data is suspect and is believed to distort expenses charged. For example, the balance of work in process may include only direct materials and direct labor, but production overhead is assigned to the profit and loss account as periodic cost, i.e. quarterly or at year end. The expenses for the airline operation and airport operation are combined. As a result, a separate profit and loss statement for each operation is not produced. This distorts management's understanding of profitability by location and activity, and is considered inappropriate cost accounting.

Although Kaz Air is the largest user of the airport facilities, the airline is neither assigned an internal cross charge nor makes a cash payment for use of airport facilities. Because of this practice, expenses to reflect the cost of services provided by internal sources have not been developed. This leads to a lack of understanding by management of the true level of profitability of the various operations. This practice should be changed when the airline and airport operations separate. Rental expense should be established and charged based on prevailing market rates.

c) Financial expenses not charged on profit and loss statement

For tax reasons, certain expenses (such as insurance, a portion of interest, research and development, and entertainment) are not charged to the profit and loss statement. They are written off to the reserve or fund in equity section of the balance sheet. Such treatment of these expenses distorts financial results, as compared with western style financial statements.

(2) Accounting Systems and Financial Management

a) Time frame for preparation of the financial statements

Kaz Air's consolidated financial report is prepared, based upon financial data submitted by 28 subsidiaries on a quarterly basis. The data is not provided by the subsidiaries until at least 60 days after the end of the quarter and consolidated financial statements are not available until three months after the end of the reporting period. The delay in reporting affects management's ability to make timely decisions, and evaluate the performance of the airline and its subsidiaries.

b) Insufficient financial information

The financial data produced by Kaz Air is insufficient. Greater detail is required for management to establish accountability and evaluate performance.

(3) Financial Statements

a) Cash Flow Analysis

Kaz Air's cash flow was positive in 1994, but turned negative in 1995, resulting in a decrease in net cash balance. The airline's cash flow in the first quarter of 1996 deteriorated further. The airline's cash position is negative and working capital is required to maintain operations.

Both accounts receivable and accounts payable increased in 1995. The airline allocates the collection of accounts receivable to the payment of accounts payable. The increase in accounts receivable is primarily due to payments in arrears from the State and other public institutions. Because of this, the airline has been forced to delay payments to creditors because of a cash shortage.

The principles of cash management and cash flow analysis were not well understood in the Finance or Planning departments at Kaz Air. Management does not forecast cash flow on either a short or long-term basis. Kaz Air's 1995 Cash Flow is contained in Table 7.3.1.1.

Table 7.3.1.1 - 1995 Cash Flow Statement - Kaz Air

Millions of Tenge

Cash receipts:	
Operating revenues	11,412
Non-operating revenues	1,315
Total revenues	12,727
Increase in accounts receivable	(2,092)
Increase in inventories	(767)
Total cash receipts	9,868
Cash payments:	
Operating expenses	11,713
Non-operating expenses	1,724
Total expenses	13,437
Depreciation	(518)
Increase in accounts payable	(5,406)
Purchase of fixed assets	1,630
Payment from special fund	970
Payment for taxes, etc.	339
Total cash payments	10,452
Net cash flow	(584)
Cash balance at December 31, 1994	827
Cash balance at December 31, 1995	243

b) Profit and Loss Statement

Although operating revenues increased 77% in 1995 from 1994, operating expenses increased 131%. This contributed to an operating loss of 301 million tenge in 1995 against a profit of 1,367 million tenge in 1994. The before tax loss in profit was 710 million tenge in 1995, largely due to a non operating loss of 409 million tenge. The increases in both operating revenues and operating expenses from 1994 to 1995 were primarily caused by higher selling prices and purchasing costs due to inflation.

During the first six months of 1996, the financial position of the national air carrier deteriorated sharply. The airline's profit and loss statement for 1994, 1995 and the first six months 1996 is contained in Table 7.3.1.2.

The deterioration in 1996 is attributed to a number of revenue and expense related factors. Passenger revenues were affected by a loss of share, especially on international routes, and reduced passenger demand because of reports of the airline's reorganization. Non operating expenses increased primarily because of exchange rate losses and substantial penalties on unpaid debt. As of 1996, consolidated statements now include expenses charged to the airline for navigation fees and exclude revenues from Almaty Airport, including the sale of fuel.

Table 7.3.1.2 Profit and Loss Statement

Account	Millions of Tenge		
	1994	1995	YTD 1996
Operating revenues	6,444	11,412	5,129
Operating expenses	<u>5,077</u>	<u>11,713</u>	<u>5,495</u>
Operating profit (loss)	1,367	(301)	(366)
Non-operating revenue	587	1,315	509
Non-operating expenses	<u>56</u>	<u>1,724</u>	<u>1,059</u>
Profit (loss) before taxes	1,898	(710)	(916)

c) Balance Sheet

Table 7.3.1.3 Comparative Balance Sheet

	Millions of Tenge	
	1994	1995
Cash	866	352
Accounts receivable	3,482	5,574
Inventories	468	1,235
Other current assets	147	257
Fixed assets	13,901	10,920
Other non-current assets	664	22
Total assets	19,528	18,360
Accounts payable	2,430	5,861
Other current liabilities	1,243	4,270
Non-current liabilities	667	111
Equity	15,188	8,118
Total liabilities & equity	19,528	18,360

d) Fixed Assets

At the end of 1995, the airline's fixed assets accounted for 59% of total assets. The current ratio is the ratio of current assets to current liabilities. By the end of 1995, this ratio had declined to 72%, suggesting that the airline's current liabilities can not be readily met by current assets. When the current ratio falls below 100% threshold, fixed assets are partially being financed by current liabilities, outstanding obligations which have to be repaid in a short period of time. When fixed assets are financed with current liabilities, an entity is unable to meet obligations to repay current liabilities. This creates an extremely unhealthy financial position. The ratio of fixed assets to equity indicates the percentage of fixed assets which are financed by equity. Since investments in fixed assets are not expected to be collected in a short time, investment funds must be met by either equity or long-term liabilities. In 1995, Kaz Air's fixed assets to equity ratio deteriorated to 135%, because the airline's equity decreased more than its fixed asset base. See Table 7.3.1.4 and Table 7.3.1.5.

Table 7.3.1.4 Current Ratio and Fixed Assets to Equity

	1994	1995
Current ratio	135%	72%
Ratio of fixed assets to equity	92%	135%

At the end of 1995, fixed assets accounted for 59% of total assets and were the most important asset element for Kaz Air. Fixed assets are stated at original cost plus

ensuing revaluation, net of depreciation. Fixed assets are depreciated over the estimated useful years using the straight-line method. Average number of useful years for aircraft is 10 years.

Revaluation of fixed assets was performed three times in 1993, 1994 and 1995. The first was a 30% revaluation, the second, 30% and the last, 70%. The revaluation gains were reflected in a special purpose fund in the equity section of the balance sheet.

The decrease in fixed assets in 1995 is due to the transfer of the navigation equipment and facilities to Kaz Air Navigation upon separation from the airline in June 1995. Fixed assets include construction in progress in the amount of 418 million tenge in 1994 and 1,957 million tenge in 1995. This is for the construction of the Almaty Airport runway and Karaganda Airport facilities, the prime contractor of which was Kaz Avia Stroi, one of the airline's subsidiaries. For accounting purposes, the total number of aircraft included in fixed assets is approximately 400 agricultural airplanes (mainly AN-2) and 7 IL-86, 14-17 TU154, 12 TU134, 40 YAK40 and 40 AN24. About 50% of all agricultural airplanes and some passenger airplanes are to be disposed or sold to private companies in Kazakhstan as well as in Russia. As of spring 1996 Kaz Air had requested permission from the State Property Committee to write off these obsolete aircraft.

Table 7.3.1.5 Fixed Assets

	Millions of Tenge	
	1994	1995
Cost plus revaluation	19,913	15,561
Accumulated depreciation	6,012	4,641
Net fixed assets	<u>13,901</u>	<u>10,920</u>

e) Current Assets

Table 7.3.1.6 provides a detail of the accounts in current assets.

Table 7.3.1.6 - Current Assets by Account

Account	Millions of Tenge	
	December 31,	
	1994	1995
Cash	866	352
Accounts receivable	3,482	5,574
Inventories	468	1,235
Other current assets	147	257
Total current assets	4,963	7,418

Cash - Cash includes cash on hand, bank accounts, foreign currency accounts and other cash equivalents. The net balance of cash and short-term bank loans were reduced during 1995, primarily due to the extended term of accounts receivable.

	1994	1995	
	December 31	June 30	December 31
Cash	866	849	352
Short-term bank loans	(39)	(72)	(109)
Net cash	827	777	243

Accounts receivable - Based on information provided by the airline, the major debtors in accounts receivable as of December 31, 1995 were as follows:

	Millions of Tenge	Year Incurred
Head office of administration of the President for Escort Boeing, etc.	600	1994 - 95
Receivables locked in banks	36	1992
Ministry of agriculture	74	1992
Ministry of Industry and trade	19	1992
Military structures	26	1992
Government for gas supplies	319	1994
Government for reconstruction of BIVI in the Almaty Airport	964	1992
Other	3,536	
Total	5,574	

Inventories - Inventories as of December 31, 1994 and 1995 consisted of:

	Millions of Tenge	
	1994	1995
Materials	221	838
Low-value items	23	80
Production cost	206	261
Goods for resale	18	56
	468	1,235

f) Current Liabilities

The accounts contained in current liabilities are listed in Table 7.3.1.7.

Table 7.3.1.7 Current Liabilities by Account

Account	Millions of Tenge - December 31	
	1994	1995
Short-term bank loans	39	109
Short-term loan	10	5
Accounts payable	2,430	5,861
Accounts payable - other	418	2,393
Accrued taxes	506	727
Reserve	155	669
Consumption fund	-	255
Other current liabilities	115	112
Total current assets	3,673	10,131

Table 7.3.1.8 Accounts Payables

Air fuel (oil & gasoline)	720
(including "Gosmat reserve")	(648)
Spare parts & materials	80
Insurance	196
Air-navigation - internal	61
- external	231
Long distance telephone calls	70
Credit from Eximbank	111
Others	4,392
Total	5,861

Accounts payable - Other accounts payable as of December 31, 1994 and 1995 consisted of the following balances:

	Millions of Tenge	
	1994	1995
Payables on wages and salary	110	290
Payables on social insurance and security	79	533
Payables on property and personal insurance	3	91
Payables with other creditors	-	882
Others	226	597
	418	2393

g) Equity

A decrease in the special purpose fund is due to the separation of assets of Kaz Air Navigation. Equity consists of the funds set out in Table 7.3.1.9.

Table 7.3.1.9 Equity

Account	Millions of Tenge	
	December 31	
	<u>1994</u>	<u>1995</u>
Statutory fund	54	5
Reserve fund	10	29
Special purpose fund	14,747	8,595
Other surplus	334	199
Profit (loss)	1,899	(710)
Profit utilization	(1,856)	—
Total equity	15,188	8,118

h) Key Financial Ratios

Key financial ratios indicating the airline's level of stability, liquidity, profitability, and change in revenue and assets are provided in Table 7.3.1.10.

Table 7.3.1.10 Key Financial Ratios

	<u>1994</u>	<u>1995</u>
① Stability:		
Equity/Total assets	0.78	0.44
Fixed assets/Total assets	0.71	0.59
② Liquidity -		
Current assets/Current liabilities	1.35	0.73
③ Profitability:		
Operating profit/Revenue	21.2 %	(2.6) %
Profit/Equity	7.1 %	(8.7) %
④ Growth:		
1995 revenue/1994 revenue	-	1.77
1995 assets/1994 assets	-	0.94

Stability: The deterioration of profitability and sharp decrease in equity in 1995 weakened the airline's financial base.

Liquidity: The deterioration in current ratio in 1995 was due to increases in accounts payable and other current liabilities.

Profitability: Profitability drastically deteriorated in 1995 due operating losses.

Revenues and Assets: Revenues increased 77% in 1995 from 1994, primarily due to high inflation. Total assets, especially fixed assets, decreased in 1995 due to the transfer of assets to Kaz Air Navigation. The decrease in equity adversely affected the airline's ability to plan for necessary future financial requirements.

(4) Results of Operations

a) Operating Revenues

Operating revenues by item for 1994 and 1995 is listed in Table 7.3.1.11.

Table 7.3.1.11 Operating Revenues by Item

Revenue from:	1994		1995	
	Millions of Tenge	Pct (%)	Millions of Tenge	Pct (%)
Ton-kilometer of AN-28, L-410 and AN-2	1,908	30%	4,054	36%
Weight capacity of transportation	73	1	168	1
Take-offs except charter and international	1,571	24	1,506	13
International shipments	1,518	24	3,667	32
Charter flights	741	11	1,295	12
Services incurred in external airports	(40)	(1)	(38)	-
Service revenues related to main activities	109	2	281	2
Commission revenues	97	2	236	2
Other aviation service	467	7	243	2
Total revenues	6,444	100%	11,412	100%

b) Production

The airline's passenger and cargo load factor has steadily declined since 1994. The passenger load factor in the first six months of 1996 was 54% and the cargo load factor was 45%. Passenger and cargo production indicators and load factors are provided in Tables 7.3.1.12 and 7.3.1.13.

Table 7.3.1.12 Passenger Production and Load Factor

	1994	1995	YTD 1996
① Revenue Passenger Kilometer (RPK) in millions			
Domestic	2,967	2,417	1,166.9
International	1,327	1,624	400.6
Total	4,294	4,041	1,567.5
② Available Seat Kilometer (ASK) in millions			
Domestic	4,357	3,761	2,033.3
International	2,661	3,338	868.3
Total	7,018	7,099	1,567.5
③ Load Factor (%) ... ① ÷ ② × 100%			
Domestic	68%	64%	57.3%
International	50%	49%	46.1%
Total	61%	57%	54.0%

Table 7.3.1.13 Cargo Production and Load Factor

	1994	1995	YTD 1996
④ Revenue Ton-Kilometer (RTK) in thousands			
Domestic	283,701	228,356	123,095
International	146,050	205,066	53,547
Total	429,751	433,422	176,642
⑤ Available Ton-Kilometer (ATK) in thousand			
Domestic	497,631	425,150	234,430
International	361,870	447,045	118,231
Total	859,501	872,195	352,661
⑥ % of cargo capacity used ... ④ ÷ ⑤ 100%	50%	50%	45.3%
⑦ Amounts of hours flown (in hours)	170,586	131,199	NA

c) Operating Expenses

Operating expenses for 1994 and 1995 by item is provided in Table 7.3.1.14. Depreciation included expenses for repairs of 303 million tenge in 1994 and 899 million tenge in 1995. Airport operating expense is contained in Table 7.3.1.15.

Table 7.3.1.14 Operating Expense by Item

	1994		1995	
	Amount	%	Amount	%
Fuel & Oil	1,733	34%	3,509	30%
Depreciation	394	8	1,417	12
Salaries	885	17	2,461	21
Social insurance	248	5	643	5
Airport expenses	1,817	36	3,683	31
Total	<u>5,077</u>	<u>100%</u>	<u>11,713</u>	<u>100%</u>

Table 7.3.1.15 Airport Operating Expense

	Millions of Tenge	
	1994	1995
Expenses on buildings & equipment	416	517
Machine & transportation expenses	78	298
Communications	43	41
Other production expenses	722	1,404
Depreciation of fixed assets	59	150
Overhead expenses	580	1,075
Non-production expenses	3	198
Total	<u>1,901</u>	<u>3,683</u>

d) Expense Classification

The national air carrier classifies its operating expenses in categories which are different than those commonly used in the industry. Major variations by expense classification include the following:

- Expenses related to providing service to customers at the airport are included in airport expenses. The airline reports as airport expenses all costs which are incurred on the ground.
- Commissions paid to agencies are deducted from revenues. This practice distorts the airline's picture of revenues. Normally, airlines classify commissions as an expense.
- Expenses associated with maintenance are included in airport expenses.
- Operational expenses relating to flight and inflight operations are included in salaries. Salary expenses may also include salaries of some airport staff.
- Administration expenses are calculated on the basis of a formula as opposed to actual expense. The formula allocates 2% of all expenses, classified as an airport expense.

(5) Operating Performance

The production, traffic and capacity of the airline has declined significantly since Independence. Table 7.3.1.16 provides a comparison of operating performance during the years 1990, 1992 and 1995, and the first six months of 1996. Because traffic declines overall have been greater than the corresponding reduction in capacity, the load factor at the national air carrier has become progressively lower.

Table 7.3.1.16 Operating Performance Summary

Operating Summary	Unit	1990	1992	Change 92/90	1995	Change 95/90	Jan-Jun 1996
Departures	Actual	164,037	189,599	15.6%	40,196	-75.5%	16,658
Passengers km flown	Mins	13,291,174	8,843,437	-33.5%	4,040,653	-69.6%	1,567,469
Available seat km	Mins	14,510,005	11,860,255	-18.3%	7,099,338	-51.1%	2,901,573
Passenger load factor	%	91.6%	74.6%	-27 PTS	56.9%	-34.7 PTS	54.0%
Cargo tonne km flown	Mins	1,276,653	861,065	-32.6%	433,422	-66.1%	176,662
Available tonne km	Mins	1,647,333	1,353,448	-17.8%	872,195	-47.1%	352,661
Cargo & mail load	%	77.5%	63.6%	-13 PTS	49.7%	-27.8 PTS	50.1%
Passenger carried	Actual	8,222,107	5,301,732	-35.5%	1,831,878	-77.7%	NA
Cargo carried	Tons	32,843.80	25,210.60	-23.2%	20,828.6	-36.6%	NA
Mail carried	Tons	24,547.90	4,693.50	-80.9%	653.7	-97.3%	NA

Source: Kaz Air

(6) Productivity

Table 7.3.1.17 is a comparison of the national air carrier with a group of airlines ranked by revenue in 1995 as the top 100 to 125 in the world (Source: Airline Business, Top 100 Annual Survey). These carriers were chosen for comparison with Kaz Air, because they have fairly comparable levels of traffic and capacity. The table also provides a variety of employee productivity measures. Even taking into consideration that organizations are structured differently, and some carriers outsource airlines functions to third parties, it is clear that the national air carrier has a passenger fleet and employee base which far exceeds its needs. The airline also must increase its average revenue per passenger and productivity to be more in line with industry standards. The Top 100 airline data used in developing this comparison is contained in Appendix 7.3.1.

Table 7.3.1.17 Kaz Air - Productivity and Size Comparison

	Kaz Air 1995	Top 100-125 "1995 Average"
Sales (Million USD)	\$ 180.2	\$ 299.7
Fleet	198	23
Total Employees	21,000	2,589
Revenue	4,041.0	3,212.3
Passenger KM (Million)		
Available Seat KM (Million)	7,099.3	4,545.2
Passengers (Millions)	1.83	2.25
Passenger Load Factor	56.9%	70.7%
Revenue Per Passenger	\$ 98.47	\$133.20
Revenue Per Employee	\$ 8,581	\$ 115,752
RPK Per Employee	192,429	1,240,822
ASK Per Employee	338,062	1,755,679
Passengers Per Employee	87	1,199.5

7.3.2 Organization

(1) Historic Structure

During the former Soviet regime, many air transportation activities were centralized through Aeroflot in Moscow. These functions included, among others, planning, budgeting, marketing and administration. Air services in the former republics were provided by regional air carriers whose primary role was to provide day-to-day flight operations. Both Aeroflot and the regional air carriers provided commercial passenger and cargo flights, in addition to general aviation services such as agricultural, search and rescue flights, and aerial survey. Following the dissolution of the former Soviet Union, these regional airlines became the "national" carriers of their respective regions. Their infrastructure and organization largely mirrored the Aeroflot structure. There was a central administration and regional subsidiaries responsible for airline, navigational, and airport management activities. The new national carriers, including Kaz Air, had little management experience in areas relating to planning and marketing the services of the airline. The national air carrier in Kazakhstan was established and organized along this model.

(2) Existing Structure

Kaz Air has centralized planning functions, coexisting with a highly decentralized regional and subsidiary organization. Originally, there were 29 subsidiaries, each of which existed as a separate legal entity. In June of 1995, Kazakhstan Air Navigation Services were separated from Kaz Air. As of April 1996, the national air carrier consisted of 28 subsidiaries, many of which are joint common stock companies.

On April 30, 1996, the Civil Aviation Department (CAD) announced that airports would be separated from the airline operation and independently managed. Almaty Airport has already been separated. As prescribed in Decree No. 533 dated April 30, 1996, the balance of airport separations was scheduled for completion by year end. This mandate was superseded by Decree No. 1030 issued on August 20, 1996 with airport separation already carried out at number of locations.

(3) Headquarters Office

The headquarters of the national air carrier is in Almaty. Among the functions at this location are finance, accounting, planning, human resources, and marketing. No organization chart was provided, but written information indicated there were 39 senior level positions. These included one trustee manager, one executive vice president, five vice presidents, one chief of administration, and 31 other departmental heads. The total headquarters staff is approximately 500.

(4) Almaty Flying Technical Complex (ALTK)

The airline operation in Almaty is called the Almaty Flying Technical Complex. The aircraft based at Almaty Airport belong to the ALTK. The airline's central maintenance center is located at the ALTK.

(5) **Almaty Airport**

The organization and operation at Almaty Airport is large in comparison with other airports in Kazakhstan. In 1995, 858,000 passengers were transported at the airport, 300,000 of whom were international. Traffic volumes at Almaty represent 47% of the total scheduled passengers in the republic. In 1995, the airport dispatched 1200 departures per month broken down as follows: 750 domestic, 230 charter, 150 CIS, and 70 international. The number of cargo movements is limited.

As of May 1996, Kaz Air had approximately 2,950 employees at Almaty Airport who provided essentially all of the services for carriers operating there. Services included check-in, groundside, air side and baggage service handling. However, because of the dissatisfaction of other air carriers with Kaz Air's quality of services, handling functions were transferred to Lufthansa Airlines in August, 1996. Lufthansa has a handling agreement with the airport. The details of the contract were not provided, but it is believed a long term arrangement.

(6) **Regional Subsidiaries**

In addition to the Almaty Flying Technical Complex and Almaty Airport, as of May 1996, there were 20 regional entities, comprised of nineteen regional subsidiary airlines and twenty airports. Each regional airline had its own fleet and responsibility for scheduling of aircraft. Table 7.3.2.1 lists the subsidiaries of the national air carrier.

There are a total of 91 key management positions within the regional airlines and airports. These positions are identified as 29 commanders of air entities, 16 engineers in management and marketing, 17 economists and 29 accountants.

(7) **Other Subsidiaries**

Other subsidiaries included the Main Agency of Air Connections (GAVS), responsible for the selling of tickets; the Academy of Civil Aviation of the National Aviation Company, performing the majority of Kaz Air's technical training; Aktyubinsk Training Center, performing the training of some additional flight operations; KazAviaSnab, providing Kaz Air with purchasing, stores and materials management services; and KazAviaStroy, providing construction services.

Table 7.3.2.1 List of Subsidiaries of Kazakhstan Airlines

Name	Location	Business		
		Airline	Airport	Other
Almaty	Almaty		•	
Burundai	Burundai	•	•	
Uralsk(Ak-Zhol)	Uralsk	•	•	
Aktubinsk("Aktubinsk Airport")	Aktubinsk	•	•	
Karaganda("Karaganda Avia")	Karaganda	•	•	
Kostanai("Kostanai Avia")	Kostanai	•	•	
Atyrau("Atyrau Avia")	Atyrau	•	•	
Ust-Kamenogorsk("Vostok Avia")	Ust-Kamenogorsk	•	•	
Shimkent	Shimkent	•	•	
Zhambul("Zhambul Avia")	Zhambyl	•	•	
Akmola("Akmola Avia")	Akmola	•	•	
Semipalatinsk	Semipalatinsk	•	•	
Kokshetau("Kokshetau Avia")	Kokshetau	•	•	
Pavlodar("Irtys Avia")	Pavlodar	•	•	
Petropavlovsk ("Petropavlovsk" Avia)	Petropavlovsk	•	•	
Kzyl-Orda("Kzyl-Orda Avia")	Kzyl-Orda	•	•	
Balkhash airport	Balkhash		•	
Taldy-Kurgan("Taldy-Kurgan Avia")	Taldy-Kurgan	•	•	
Arkalyk("Arkalyk Avia")	Arkalyk	•	•	
Aktau	Aktau	•	•	
Zhezkazgan	Zhezkazgan	•	•	
Main Agency of Air Connection (GAVS)	Almaty			Ticket Sales & Reservations
Academy of Civil Aviation of the National Aviation Company	Almaty			Technical Training
Aktubinsk Training Center	Aktubinsk			Training
Head office	Almaty			Consolidating Dept
Almaty Flying Technical Complex(ALIK)	Almaty	•		
KazAviaSnab	Almaty			Purchasing Organization
KazAviaStroy	Almaty			Construction Organization

(8) Staff levels

As of June 1996, the national air carrier had approximately 21,000 employees. This number included staff at airports, regional avias, as well as approximately 1800 individuals engaged in a providing variety of social services. A breakdown of staff numbers by classification for Kaz Air and Almaty Airport is provided in Table 7.3.2.2. In most cases, the classifications are not meaningful, as they do not conform to generally recognized airline functions. The numbers detailing Kaz Air staff appear to be approximations, whereas the information provided for Almaty Airport appears more precise.

Through greater detail supplied by some airports and subsidiaries, it appears that staff levels have been selectively reduced in some locations. For example, the number of pilots in 1995 at three regional locations were 32% lower than those noted for 1990. At Almaty airport 30% of 100 managerial, staff-type positions were eliminated in 1995 and it was indicated that 10% more staff would be eliminated in 1996. The positions eliminated at Almaty airport were mostly held by individuals close to retirement age. During the field visits, it was repeatedly stated that staff could not be fired due to "legislation or labor agreements". It is not clear whether this is an actual condition, or an expectation of lifetime job security. Despite these reductions, the airline's number of employees far exceeds its needs.

Table 7.3.2.2 1996 Staff Levels of Kaz Air and Almaty Airport

Categories, Services and Types of Activities	Kaz Air Staff	Almaty Airport
TOTAL: Operations & Secondary Activities	21000	2954
1. Total: Operations	19000	2273
- Skilled & non-skilled workers	12000	1288
- Professional & support office employees	7000	985
- Managers (included in Prof. & Support)	1500	129
2. Total: Secondary Activities	2000	681
- Major repairs of buildings & structures	200	42
- Staff Cultural Services & Facilities	1000	281
- Medical Services & Kindergartens	800	358
Services (by functions)		
- Ground Handling Services	1500	469
- Special Services (Passengers, Fuel, etc.)	1700	334
- Engineering/Aviation Services	3300	-
- Air Services Agency	400	-
- Fuel & Oil Services	600	101

7.3.3 Management

(1) Skills

The airline managers interviewed during the study, generally, appeared to fall into two distinct categories. The majority appear to manage under the influence of a culture and set of processes which prevailed prior to separation in 1991. A more select group seemed to have a good understanding of factors contributing to the airline's current situation and recognize the need to change key managerial, operating and marketing policies. Major issues identified included a lack of leadership by previous management, critical issues not addressed in a timely manner, government policy which failed to adequately support the national air carrier, and limited management experience in international markets. There are no programs designed to develop or upgrade managerial skills. Airport staff are considered poorly trained and lacking in basic airline knowledge.

(2) Technical Training

Kaz Air technical staff appear to undergo rigorous and comprehensive training programs which, in some instances, are more lengthy than those of developed countries. Training is conducted by the airline at both the Civil Aviation Academy in Almaty and at a regional facility in Aktyubinsk. Training at the Academy in Almaty covers two broad areas, aeronautical engineering and professional development for flight operations and engineering. Training in Aktyubinsk covers pilots.

The Faculty of Aeronautical Engineering trains aircraft maintenance engineers in one of four disciplines: airframes, engines, electronic systems, and electrical systems. It is a five year course, with the first three and a half years spent in general training within the discipline, followed by a one and a half year period of specialization by system and aircraft type.

Basic, intermediate and advanced pilot training is conducted in Aktyubinsk for Yak 42, Yak 18 and Yak 40 aircraft over a four year period. Following this course, graduates are then eligible for type training on the TU-134, TU-154 and AN 24-30 fleet at the Academy in Almaty. Over the past several years, funding constraints in Aktyubinsk have resulted in the graduation of pilots with insufficient flying hours. These individuals are not qualified or accepted in Almaty. Overall, there appears to be little collaboration between the two centers. The trainees in Aktyubinsk are primarily from the military, while the reverse is true of Almaty. It is not known whether basic pilot training in Aktyubinsk is more oriented to military needs.

There is no basic pilot training conducted at Almaty. However, the Faculty of Professional Development provides courses in aviation English and conversion training to a variety of technical groups including pilots, navigators, flight engineers and aircraft maintenance engineers. This type of training ranges from one to two months and, during the September 1995 to May 1996 period, approximately 2000 of Kaz Air staff received such training. A basic flight attendants' course of three months duration is also offered. The Almaty complex is equipped with flight operations simulators for TU-134, TU-154 and AN24-30 fleet types. In addition, there are full simulators for navigators and flight attendants.

The Academy indicated it is prepared to conduct training in any areas required by the national air transportation community, provided there is sufficient demand. To date, training has been given to customer service agents in ticketing and to aviation security personnel in the use of electronic screening equipment. The Academy is fully dependent on revenues from client users for funding. Like many companies and institutions in Kazakhstan, it has experienced some payments in arrears. Accounts receivable now total about 33 million tenge, with some payments outstanding for up to three years.

There is some collaboration between the Almaty Academy and other CIS Civil Aviation Training Centers (CATC) in St. Petersburg, Ulyanovsk, Kiev and Siberia. The form of collaboration is generally in the sharing of equipment, training materials and exchange of faculty staff. There is potential for future collaboration with the Moscow Technical University in areas of Civil Aviation and with the International Civil Aviation Organization (ICAO) in establishing a central CATC for the Central Asian States. The latter prospect was discussed during the visit of an ICAO delegation to Kazakhstan in 1995.

Overall, the national air carrier appears to place substantial emphasis and importance in training staff who must meet certification standards. However, there is no evidence that airport staff responsible for customer service, aircraft handling, and weight and balance are trained at the Academy.

7.3.4 Planning

Historically, all planning activities for the CIS and regional airlines were highly centralized and carried out by Aeroflot in Moscow. As a result the CIS carriers, including Kaz Air, were not equipped with either the skills or systems to carry out this function. Based on discussions with management, there is indication that some planning functions are carried out within individual departmental areas, but there is no overall integrated airline plan.

7.3.5 Operations and Safety

(1) Integrity and On-time Performance

Management at Almaty Airport management indicated that average departure performance is 80%. Flights are considered on-time, if dispatched within five minutes of schedule. There is a "regular, periodic reporting system" which measures on time performance and tracks the reasons for flight delays. Delays are primarily due to maintenance issues and passenger handling delays in Customs and Immigration. The airline uses twelve different codes to identify the source of delays.

(2) Airport Handling

Up until August 1996, Kaz Air provided ground handling and other airport related

services to international carriers operating at Almaty Airport. The carriers complained of the poor condition of the ground equipment, poorly trained staff, and lack of English speaking capabilities. Lufthansa took over the handling responsibilities at the airport in August, 1996.

(3) Flight Operations and Crew Deployment

Flight operations standards at Kaz Air are based on those prevailing in the former Soviet Union and, therefore, should meet ICAO standards (International Civil Aviation Organization). Kaz Air currently employs 4,515 pilots to operate a fleet of some 600 aircraft, including general aviation. It is not known how many pilots are dedicated to the passenger fleet.

The national air carrier operated 40,976 aircraft departures in 1995. This was reduction of 75% from 1990, indicating a surplus in the pilot ranks. Pilot deployment is low relative to western standards. Kaz Air pilots typically fly an average of 15 to 25 hours per month, whereas their western counterparts generally log as much as 70 hours per month.

Kaz Air deploy aircraft designed and manufactured in Russia. These aircraft generally have a larger flight crew requirement than comparable aircraft manufactured in the west. The airline's complements for cockpit and cabin crews are detailed in Table 7.3.5.1.

Table 7.3.5.1 Kaz Air Crew Complement By Aircraft

Aircraft Type	Cockpit	Cabin
IL 86	4	12
TU 154B	4	5
TU 154 M	4	5
TU 134	4	3
YAK 42	3 *	2
YAK 40	3	1
L 410	2	0
AN 24	3	1
AN 26 Cargo	4	1 **
IL 76 Cargo	4	5 **
* 1 Flight Engineer		
** Loadmaster		

(4) Fleet

a) Composition

Based on general discussions with airline management, as well as a report developed by Seimen's Thompson in 1994, the airline's commercial fleet in 1995 numbered approximately 198 aircraft. The number of aircraft by fleet type and average age is

provided in Table 7.3.5.2. The number of total fleet is far greater when general aviation aircraft are included. The average age of the passenger fleet is now 24 years, which is also well beyond the industry average of ten to fifteen years. The B-747 aircraft which was utilized by the President of the Republic has been sold.

Table 7.3.5.2 Fleet by Aircraft Type and Average Age

Estimated Number Of Commercial Aircraft In Kaz Air's Fleet		
Aircraft Type	Number Aircraft	Average Age in 1994
IL 86	7	7
TU 154B	25	16
TU 154 M	3	2
TU 134	10	15
YAK 42	4	2
YAK 40	50	18
L 410	25	7
AN 24	50	24
AN 26	10	13
AN 30	10	18
IL 76	4	2
Total Estimate	198	22

Source: Seimen's Thompson 1994 Report

b) Suitability

In some respects, the airline's Russian manufactured fleet is actually more suitable to the terrain in Kazakhstan, if properly maintained. According to the Director, Safety and Kazakhstan Contract for Clinton Aviation, these aircraft are generally more rugged in construction with larger, underinflated tires which are more stable on runway and other aircraft movement surfaces in Kazakhstan. There are indications, however, that much of the fleet is in poor condition and not properly maintained. Furthermore, these fleet types are not competitive in design or efficiency with B-767, B-757, A-310 and a-300 operators.

Technical representatives offered the following observations as to the suitability and condition of the fleet:

- The gauge of the IL86 fleet is too large for the level of demand in most markets where the national air carrier operates. More than half of this fleet type needs to be re-engined.
- The IL76 cargo fleet is quite new and is expected to be in operation well into the next century.

- The TU154M aircraft is considered a reasonably good aircraft.
- The airline is currently retiring the TU154B fleet. This process commenced with two aircraft in 1996 and will continue at the rate of two to three aircraft per year until 2004.
- The TU134 fleet is also being phased out. One aircraft has already been retired. This process will continue through to 2004.
- The airline's largest fleet type is the AN24. The plane is considered very reliable, even though the age of most this fleet exceeds 25 years. According to the manufacturer's specifications, the life of this aircraft can be extended indefinitely if proper maintenance procedures are carried out. However, further extension will not be undertaken because of the poor economics associated with fuel consumption and extended maintenance.
- The L410 is a small aircraft which is now infrequently used due to its high unit costs. The total number of this fleet is 25 aircraft. The engines on nineteen planes are in need of heavy maintenance, D-checks.
- The YAK40 fleet was used extensively during the Soviet period when the price of fuel was state subsidized. While the airline still retains some 50 of these planes, only seven to ten aircraft are required.

c) Aircraft Utilization

Complete information regarding overall aircraft utilization was not available. However, utilizing information obtained for some aircraft types based in Almaty, the utilization for these aircraft was estimated at less than four hours daily. This is quite low by industry standards. In comparison, carriers in Europe and the United States generally fly similar range aircraft between 8 to 16 hours a day. It could not be determined if this level of utilization was representative for the fleet as a whole. It also appears that only 60% to 65% of the fleet is fully operational due to "low technical conditions" of the aircraft and improper use of maintenance parts. The combined impact of surplus planes and crew, and low fleet utilization is an operation at less than 15% of its full capability. The information used to derive these estimates is in Table 7.3.5.3.

Table 7.3.5.3 Daily Hours of Utilization by Aircraft Type

Fleet Type	Total Number of Aircraft	Aircraft in Service	Fleet Utilisation	Percentage in Service	Daily Hours of Aircraft Utilisation
IL86	7	7	3.5	50%	4.8
TU154B	25	15	9.6	63%	3.5
TU154M	3	4	3.3	83%	5.2
TU134	10	10	6.0	60%	3.5
Total	45	36	22.4	62%	3.8

d) Unit Operating Costs

Because of the lack of detail, unit operating costs for the airline's commercial fleet were not determined. However, it believed that unit costs are high due to old technology, fuel inefficient engines and high maintenance costs.

e) Maintenance

The Almaty Aero Technical Complex (ALTK) subsidiary performs the maintenance which would normally be done by the airline. The Chief Engineer of the facility is responsible for all recurring and routine maintenance in the airline (A,B,C & D checks). Each of the subsidiaries have their own maintenance functions which perform A,B & C checks. Heavy maintenance for the subsidiary airlines are performed outside of Kazakhstan by the manufacturer. There are a few exceptions to this scheme: D checks for the IL 86 fleet and some A, B, and C checks for Almaty based aircraft are done at the technical complex. Maintenance costs are high because of the work done outside and inventories required for an aged fleet. These costs have escalated excessively in recent years due to inflation. A summary of the airline's maintenance schedule is provided in Table 7.3.5.4.

Table 7.3.5.4 Maintenance Schedule

Aircraft	Fuel Ton Per Hour	Overhaul Hours	Cycle Hours
IL86	11.8	10,000	5,000
IL 76	7.8	5,000	2,500
TU 154M	5.4	9,000	N/A
TU 154B	6.0	9,000	N/A
TU 134	3.2	6,000	N/A
AN 24	0.8	5,000	N/A
AN 26	0.9	5,000	N/A
L-410	0.3	4,000	800
YAK 40	1.2	6,000	3,000
YAK 42	0.3	10,000	6,000

During a tour of the technical complex in Almaty, all hangars were empty except for one IL-86 aircraft undergoing a D check for 3 months. Three additional IL-86 were parked on the tarmac, each with missing engines. This represents more than half of the IL 86 fleet unserviceable at a given point in time, providing further evidence that a portion of the carrier's fleet is surplus or unserviceable.

(5) Fuel

During the former Soviet regime, fuel was centrally supplied at rates that were a fraction of actual world market prices. Following independence, the air carriers in the former republics were faced with fuel rates which gravitated to world prices and, in some cases, higher. There have also been reports of fuel shortages, particularly at Almaty airport. Because of uncertain supplies and higher prices, a number of foreign airlines tanker fuel on inbound services. In addition to a higher than average unit price of fuel, the airline is impacted by the fuel inefficiency of its fleet relative to

western manufactured models.

The issue of fuel prices was raised repeatedly in interviews with airline management, indicating that management was highly cognizant of the effect of fuel costs on the overall economics of the operation. The future planning and maintenance department undertook a study to determine whether it would be more cost effective to re-engine the IL86 fleet or acquire more fuel efficient aircraft manufactured in the west. The study results indicated that costs of purchasing a B-767, B-757 or A-310 would be covered within a six year period based on fuel savings.

Fuel management is considered a key lever in managing an airline's overall level of costs. In 1995, the fuel expense of the national air carrier was 3,509 million tenge, or 30% of total cost. While fuel as a percentage of total costs actually dropped from 34% in 1994, the airline's fuel bill doubled in 1995.

(6) Cargo

Cargo volumes during the 1990 to 1995 period have declined, but not to same degree as passenger volumes. Cargo revenue ton kilometers (RPKs) in 1995 were comparable to 1994. International RPK's in 1995 reached 47% of total, up from 33% in 1994. During the first six months of 1996, the airline derived approximately \$1 million USD from cargo revenues, or 1.4% total. The airline's revenue ton load factor during this period was 50%. There was little discussion regarding the airline's cargo operations and it is not known if there are staff dedicated to the cargo operation or product.

(7) Safety

General safety issues relate to management efforts to ensure compliance and adequate allocation of financial resources. Specific safety issues relate to competency of ground handling crews, use of proper weight and balance procedures, cabin safety and emergency procedures, and the appropriate use of maintenance parts. Safety is discussed in greater detail in Chapter 8.

a) Weight and Balance

Weight and balance entails a process that ensures baggage and freight are properly and securely, loaded and distributed. Strict adherence to proper weight and balance is an essential preflight safety procedure. There have been widespread media reports that overloading of flights is becoming more common on Kaz Air flights. Airport and maintenance staff indicated that most overloading occurs on charter flights which are the responsibility of the party chartering the aircraft.

b) In-Flight

While assured that all flight attendants are technically competent and cabin checks routinely performed, there are public reports of a lack of on-board safety procedures and emergency announcements.

c) Technical Training and Certification

A discussion on the airline's technical training and certification programs is

covered in Section 7.3.2.(6).

7.3.6 Customer Service

(1) Transportation to/from the Airport

With the exception of Almaty, it is believed that the only generally available transportation to and from the airports is via public bus. Taxis, limousines, and private car services are limited and quite expensive. At the airport, parking facilities are limited and often congested.

(2) Airports - Pre-Flight

Airport check-in is regarded as a cumbersome and lengthy process which involves numerous check points and much time in queues. In general, all of the procedures are carried out manually and may involve issuing a visa, purchasing the ticket, checking baggage, exchanging currency, passing through security and passport control with hand baggage, and proceeding to the holdroom area at the gate.

Seating in the holdroom is often inadequate and crowded. Jetways or air bridges are not used. Passengers board the aircraft from the ramp. Amenities regularly available at western airports such as shops, concessions, and restaurants are less prevalent at airports in Kazakhstan.

(3) In-Flight/On-Board Service

Inflight and on board service on the national air carrier and in most of the former Soviet Union is below the standards of other areas in the world. Services and amenities are limited and, generally, there is no meal service. Aircraft interiors are worn and much of the equipment is in need of repair. The English speaking capabilities of cabin crews are inadequate and customer satisfaction is considered low. Kaz Air has an all economy configuration on all aircraft. The airline's inflight service and environment is particularly non competitive on international scheduled routes

Catering is available at Almaty, Akmola, and Karaganda. Yak40 and AN24 aircraft do not have hot meal capability. Foreign carriers regularly provision on inbound flights due concerns relating to meal availability and quality.

(4) Airports - Post-Flight

CIS nationals do not require visas to enter or leave Kazakhstan. Citizens of non CIS countries require an entry visa available for inspection upon arrival. Applications should be filed at least two months in advance and be accompanied by the invitation and sponsorship of a Kazak national or a legally operating entity.

Passengers arriving with incomplete documentation can expect lengthy delays and even be refused entry. Mishaps are common because the visa documentation is not automated and records are often misplaced. A copy or facsimile of the sponsoring document is advisable. Officers generally have either no or poor foreign language

capabilities.

Security for arriving baggage security is well below western standards and baggage claim checks are often not reconciled.

7.3.7 Sales and Distribution

(1) GAVS

An airline's sales and distribution practices can have a significant impact on revenue generation. The Main Agency of Air Connection GAVS is a subsidiary of the national air carrier and responsible for the airline's sales representation, reservations and ticketing. The agency is located next to the airline's main offices in Almaty. During the second field visit, representatives of both GAVS and the national air carrier were interviewed for a better understanding of GAVS sales practices and policies. The perception and information varied substantially by source. Both perspectives are provided.

In addition to the main Almaty office, GAVS has branch offices in Akmola and Aktau. In cities where there is no GAVS representative, tickets are sold by the local regional airline on behalf of the national air carrier. When payment for the ticket is received, the airline is then credited by means of a cross charge. Outside Kazakhstan, there are agreements with other CIS carriers to provide reciprocal selling, but this does not take place in practice. Internationally, a passenger cannot obtain a ticket to fly on the national air carrier except in cities where the carrier flies. This means that a ticket on Kaz Air cannot be purchased in New York or London, for example. This creates a serious disadvantage for the national air carrier, especially since it has stopped flying to a number of points internationally.

The GAVS representative indicated that the Agency was the only "profitable" center within the national air carrier. Because of this, other departments would like to control and manage the Agency. Although GAVS is a subsidiary and acts as the general sales agent for the national air carrier, the agency also has agreements with and sells on behalf of other airlines and general sales agents. Otan and Glav Travel are two large agencies which have agreements to distribute Kaz Air's tickets. Other airlines prefer to sell their product directly or through general sales agents with whom they have agreements.

According to the GAVS representative, commission rates vary by route, from as low as 3% to as high as 19%. The higher rates of commission might be paid, for example, on routes with lower load factors as a means of shifting traffic and increasing market share. Airline representatives advised that commissions averaged 5% to 7% of the total ticket price. The airline pays GAVS a commission to distribute and sell its seats. There are three to five large agencies in Almaty and a few are IATA appointed. The balance of the agencies are small operators and considered to have "mom and pop" type operations.

(2) Reservations

There are twelve customer service agents in GAVS who handle reservations calls, in addition to other functions. It was further indicated that the Sirena II system was linked to the offices of the national air carrier. Discussions with the air carrier on these matters were contradictory. These sources indicated that there were no reservations sets located within the airline and the Sirena II system was not linked to airline offices.

There are limitations placed on the ability to purchase a round trip ticket. According to the travel trade, passengers are unable to book reservations for return flights more than fourteen days in advance. A passenger wishing a reservation for a return flight may only do so through a contact at the destination point. While the rationale for these limitations was unclear, a number of representatives from the national air carrier stated that return reservations were not being accepted because of a lack of certainty regarding future operations. Flights are increasingly being canceled because of cash constraints.

(3) Ticketing and Sales Offices

The city sales office for the national air carrier in Almaty is adjacent to the airline headquarters. It is located on the ground floor and provides walk-in sales services for Kaz Air and a number of other air carriers operating at Almaty. The facility has a total of 26 counter positions, as well as an information desk. Kaz Air has 19 positions, ten international and nine domestic. The remaining seven are assigned one each to administration, Asia Air Services, San, Chinese Airlines, Aerosweet, Transaero/Aeroflot, and Glav Tours/Ingush Airlines. While the lobby is somewhat shabby in appearance, there is ample waiting and seating space. There is a FIDS (Flight Information Display Screen) with integrated arrivals and departures information. In the back of the building, there are ten bus bays which transport passengers to and from the airport for domestic departures and arrivals.

(4) Product Distribution

As the Main Agency of Sales, GAVS is also responsible for the electronic and paper distribution of the national air carrier's product. During the first field visit, it was difficult to obtain schedule or fares from any sources within Kaz Air or GAVS. Fares and scheduling information was ultimately obtained from a local travel agency.

Kaz Air is reportedly a user-member of Sirena, a CRS system developed in the former Soviet Union. Sirena handles reservations for domestic and CIS travel. The international CRS system is Gabriel. The national air carrier does not distribute its product through a major global distribution system, a factor which places the airline at a serious disadvantage relative to international competitors such as Lufthansa and KLM. Appendix 7.3.7 provides a summary of listings in the September, 1996 OAG for international flights from Almaty. Kaz Air only listed direct non-stop flights, whereas competitors displayed more than 100 online and interline connections via Frankfurt and Amsterdam to destinations in Europe, North and South America, and Africa. The lack of an effective distribution channel will become increasingly problematic as Kaz Air extends its operations internationally.

7.3.8 Marketing

(1) Market Segmentation and Product Planning

Airlines traditionally segment traffic according to the passenger's purpose of trip. Identification and segmentation of traffic is useful to an airline in defining its product and allocating resources. Passengers with the same purpose of trip generally have similar preferences, buying habits and responses to changes in service and price. The two major market segments are business and leisure travel. The latter is further segmented by those traveling for vacation and those visiting friends and relatives (VFR).

Business travelers usually place a high priority on schedule frequency and service levels, but are much less sensitive to the price of air travel. Leisure travelers, on the other hand, can be extremely price sensitive. Because of the general economic climate in Kazakhstan, the demand for vacation travel and visiting friends and relatives is assumed as much lower than in Soviet times. Furthermore, representatives of foreign airlines operating into Almaty indicate that none of the inbound traffic is tourist related.

The national air carrier has no marketing department per se and does not segment or differentiate its product. The airline piloted a business class product in 1994 which was later abandoned. The national air carrier only offers an Economy Class product with lower standards of quality and service in-flight, an observation readily offered by several of the airline's senior managers during the second field visit. To offset this disparity, the airline actually sells its international product at tariff rates which are as much as 75% below scheduled competition. In recent years, the airline has placed increasingly more capacity into charter operations.

(2) Scheduling

It does not appear that the airline uses scheduling as a lever in attracting business or optimizing the use of its resources. In many cases, the airline only offers one flight a day and, in some cases, at inconsistent departure times. Some of the smaller markets within the region have direct service that is not routed over the main hub at Almaty. In the case of Moscow, flights are routed to the domestic airport, thereby undermining the potential for international connections to a greater number of destinations than presently served out of Kazakhstan. The airline also offers both scheduled and charter services, when these services could be consolidated on scheduled services. An examination of the airline's operation for the first six months of 1996 is characterized as follows:

- A number of airlines serving the same destination, often with a variety of routings.
- Many flights have low load factors because there is no consolidation of traffic over a central hub.
- Many flights are infrequently and erratically scheduled.
- Many flights are operated with multiple sectors, bearing no relationship to traffic

flows or market demand.

- There is duplication of schedules between the Almaty based airline and the airlines in the regions.

Scheduling aircraft in this manner is inefficient, has little passenger appeal and is cost ineffective.

(3) Pricing

The national air carrier indicated that it had changed the methodology used in developing its tariff rates. Rates were previously established based on an average cost per flying hour, but the airline now used actual costs to develop fare levels. The same fare level is charged regardless of the aircraft type. The airlines in the regions have a different cost structure and develop prices independently. The resultant yield on all sectors is considerably below those for comparable distances in Europe and North America.

The rate structures offered between points in Kazakhstan for domestic, CIS and international destinations are relatively simple. Prices are developed on two levels, with lower fares being offered to Kazak and CIS citizens. Historically, non CIS citizens paid the normal fare, while CIS citizens were offered discounts off these levels. Over time this fare relationship has altered, as the airline attempted to establish price levels more directly related to the costs of the operation. CIS nationals now pay the normal fare while foreigners are charged a premium. While the surcharge was indicated in the range of 25% to 33%, it is actually much greater. The two tier structure applies to both domestic and international air travel. Fares are generally published in hard currency (USD), but in some instances the fares available to CIS nationals is presented in Rubles or Tenge.

a) Domestic

All travel within Kazakhstan or between Kazakhstan and a point in the CIS/former Soviet Union is considered as domestic for the purposes of establishing the rate structure. Only one basic one-way fare is available, with return travel at twice the one-way rate. The premium charge for foreigners ranges from 20% to 200% with prevailing surcharges of 50% to 100%. There are no discount fares available. The rationale provided for the lack of discounts is the airline does not want to encourage return reservations far in advance, given the uncertainty of future operations. Table 7.3.8.1 provides domestic tariffs as of March 1, 1996.

Table 7.3.8.1 Domestic Airfares Effective March 1, 1996

To:	CIS Nationals USD/Ruble	Foreigners USD		To:	CIS Nationals USD/Ruble	Foreigners USD
Moscow (D)	135.00	195.00		Kokchetau	79.00	118.00
Moscow (S)	165.00	300.00	(1)	Kostanai	94.00	132.00
Moscow (S)	125.00	206.00		Kostanai	Rbl. 400,000	134.00
Moscow (V)	135.00	195.00		Krasnodar	151.00	194.00
Akmola	62.00	104.00		Krasnojarsk	Rbl. 351,300	218.00
Aktau	96.00	151.00		Kzyl-Orda	75.00	104.00
Aktyubinsk	80.00	140.00		Minsk	Rbl. 780,000	220.00
Arkalyk	68.00	119.00		Min. Vody	132.00	161.00
Ashkhabad	83.00	139.00	(2)	Min. Vody	132.00	189.00
Ashkhabad	160.00	160.00		Novosibirsk	65.00	123.00
Atyrau	102.00	154.00		Novosibirsk	74.00	128.00
Baku	135.00	169.00		Omsk	96.00	123.00
Balkhasch	31.00	78.00		Omsk	82.00	
Chelijabinsk	Rbl. 420,000	142.00	(3)	Osch	Rbl. 190,000	91.00
Chimkent	33.00	88.00		Pavlodar	66.00	110.00
Dushanbe	81.00	130.00		Petropavlovsk	78.00	123.00
Dzayrem	50.00	104.00		Rostov on Don	Rbl. 869,000	198.00
Dzyskazgan	50.00	107.00		Samara	118.00	169.00
Dzhambul	36.00	85.00		Samara	Rbl. 550,000	164.00
Ekaterinburg	130.00	148.00	(3)	Semipalatinsk	59.00	100.00
Ekibastuz	58.00	106.00		Semipalatinsk	59.00	113.00
Erevan	185.00	250.00		St. Petersburg	150.00	215.00
Fergana	42.00	88.00		Stepnogorsk	68.00	111.00
Irkutsk	106.00	171.00		Tashkent	50.00	70.00
Kaliningrad	Rbl. 740,000	238.00	(2) (3)	Tashkent	50.00	95.00
Kaliningrad	186.00		(5)	Tashkent		150.00
Karaganda	55.00	95.00		Tomk	Rbl. 400,000	137.00
Karakol	Rbl. 98,000	81.00		Uralsk	100.00	159.00
Khudjent	80.00	130.00		Urdgar	35.00	88.00
Kiev	191.00	216.00		Ust-Kamenogorsk	59.00	84.00
Kiev	158.00	200.00	(4)	Ust-Kamenogorsk	59.00	101.00
Kokchetau	79.00	118.00				
To:	Business Class					
Moscow (D)	270.00					
Moscow (S)	475.00					
Akmola	163.00					
Aktyubinsk	220.00					
Kiev	300.00					
Kostanai	207.00					
Rostov on Don	311.00					

Note: (1) Transacro
 (2) Kaz Air
 (3) Aeroflot
 (4) Aerosweet
 (5) Turkish Airlines

b) International

Based on tariffs received from the Pricing department, it appears that the national air carrier only publishes international fares to and from online points in its network. In most cases, the round trip normal fares is less than twice the one way fare. The level does not seem to be based on a set percentage but varies from 130% to 160% of the one way fare. As is the case domestically, there is a two tier structure with higher

rates for non-CIS citizens. In addition to the regular normal fares, a variety of excursion fares are offered. The fare basis codes suggest that excursions are offered for individual, student, and group travel and that there are conditions relating to purchase and length of stay. Kaz Air's international tariffs are provided in Appendix 7.3.8.

- c) As discussed in Section 7.3.5, the national air carrier offers charter flights to compete with "shop tourist operators". The airline's charter prices are the same as scheduled prices and well above rates offered by the charter competition. The airline indicated that its charter pricing policy is based on the fact that it does not want to undermine its scheduled tariffs. It also establishes charter rates based on less than a 100% load factor. Therefore the rate per seat is higher than the charter operators. Charter operators are also leasing aircraft from airlines in other countries such as Tajikistan with lower overall costs.

d) **Joint Fares and Prorates**

The national air carrier publishes only a few joint fares. It currently has joint fare agreements with Aeroflot and Transaero. Marketing representatives indicate that the national air carrier has discussed, without success, the possibility of joint fares with a number of carriers in central Europe. It is possible that other carriers are not interested in participating in joint fares with the national air carrier, because it has a poor market image and does not participate in a major bank settlement plan. Because the airline does not publish fares to and from points outside its network, it is assumed that fares for travel beyond the international gateway are constructed on the basis of the "sum of the sector" fares. This practice and the airline's lack of participation in an industry Bank Settlement Plan may be seriously undermining the generation of potential interline revenue, which can account for as much as 7% to 15% of an airline's total revenue. The lack of through fares may also be affecting passenger demand.

e) **Tariff Filings**

The national air carrier indicated that it is free to set price levels without economic justification. Domestically, tariffs are not subject to government approval. Internationally, fare levels are established bilaterally with the concurrence of the other designated carrier. To date, all bilaterals require the approval of both governments, i.e. dual disapproval. Charter air fares are not regulated.

(4) **BSP**

The national air carrier is a member of IATA, but does not participate in the IATA BSP (Bank Settlement Plan), or sell on behalf of other airlines. Because of its deteriorating financial performance, the airline believes that processing revenues through the IATA BSP would exacerbate its cash flow crisis. Internationally, the airline's representative has a local bank account. Revenue from ticket sales are deposited directly into the account and disbursed locally to pay expenses associated with the local operation.

Within the past year, a clearing house was set up in Moscow which is available for

CIS carriers. The national air carrier is a member of this BSP which facilitates sale of tickets in points throughout the CIS. Prior to the establishment of the CIS BSP, the airline had little means of effective distribution of its product outside of Kazakhstan, except in cities where there were local representatives.

7.3.9 Revenue Management

The national air carrier does not appear to have a revenue accounting system or isolate yield or revenue information by market or route. A summary of revenue generated by the airline during the first six months of 1996 is provided in Table 7.3.9. The data suggests that less than two thirds of the entity's revenues are derived from the airline operation and that charter operations accounts for almost 17% of the airline portion of revenue. It also highlights that the carrier only generated 1.4% of its revenue from cargo sales. The lack of detailed revenue data does not permit management to adequately plan, market and monitor the airline product.

7.3.10 Management Information Systems and Automation

While a few computers were observed in individual offices during the site visits, much of the information in the airline is handwritten or manually produced. Inconsistencies in the information suggest a limited availability of data bases and management information reports.

The most in depth understanding of management information issues was through a review of the financial accounting system. If similar issues carry over into other areas of the airline, it appears that new information systems and greater computer automation would greatly assist airline management.

Table 7.3.9 Revenue by Transportation Source - January to June, 1996

Revenue in Million of Tenge January to June, 1996		
	Tenge	Percentage
Passenger (Scheduled)		
Domestic	1,199	23.4%
International	1,460	28.5%
Passenger (Charter)	540	10.5%
Cargo Transport	70	1.4%
Landing and Departure	1,027	20.0%
Terminal fees, etc.	129	2.5%
Commission	127	2.5%
Other	577	11.2%
Total	5,129	100.0%

7.3.11 Market and Route Structure

(1) General

The size of Kazakhstan's domestic and international air travel markets are small, relative to other world markets. As previously indicated, the substantial distances between market centers and an underdeveloped rail and roadway system, create a need for vital air transportation links. Almaty, the most populous region of the country, is situated in the southeast of the Republic whereas, a number of commercial centers are located to the west and north.

Each of these inherent factors impacts the route network of the national air carrier. The situation is further compounded by the airlines organizational and management structure, which permits the ALTK and each of the regional airlines to independently develop and operate flight schedules. Table 7.3.11.1 provides a summary of routes operated by the Almaty based and regional air carriers during the first half of 1996.

Table 7.3.11.1 Summary of Routes

Regional	Regional & ALTK	Regional	ALTK	Regional & ALTK	Regional	ALTK	Regional & ALTK
Almaty	Almaty	Ashgabat	Bishkek	Mural Vody	Dubai	Athens*	Düsseldorf
Arkylyk	Aktyubinsk	Astrakhan	Kaliningrad	Moscow		Beijing	Frankfurt
Bulldzhak	Almaty	Brno	Kiev	Novosibirsk		Birmingham*	Hannover*
Ekibastuz	Aymau	Bolsheoyim	St.Petersburg	Orsk		Bucharest	Istanbul*
Karaganda	Uralsk	Dushanbe*		Samra		Delhi	Sharjah*
Kokchetau		Ekaterinburg		Tashkent		Karachi	
Kostani		Irkutsk				London*	
KyzylOrda		Kirzhim				Seoul*	
Pavlodar		Mihailkala				Tehran	
Rudnyy		Vologad				Tel Aviv	
Semipalatinsk						Ummaj	
Shinkart						Varna	
Taldy-Kurgan						Warsaw*	
Udhar							
Ust-Kamenogorsk							
Zaysn							
Zhambul							
Zhelezogin		* Indicates charter operations			* Indicates charter operations		
18	5	10	3	6	1	13	5

(2) International Services

During the course of the second field study, data was received from the Almaty based carrier which detailed a 100% sampling of loads on international scheduled and charter flights during the second quarter of 1996. An analysis of this data indicates:

- Flights were operated to a total of 21 destinations.
- Twelve destinations were served on a scheduled basis.
- Fourteen destinations were served with charters.
- Using a criteria of at least one flight per week, only twelve of these destinations were served with any degree of regularity.
- The average load factor on all flights was 46%.
- Charters accounted for 49% of the flights, 58% of the seats and 62% of the passengers.

- Four destinations account for 72% of all international traffic. These are Istanbul, Sharjah, Hanover, and Frankfurt. With the exception of Frankfurt, all are served with both scheduled and charter flights.
- The load factor on flights to Frankfurt was less than 32%, the lowest of any destination served.

As of September 1996, Kaz Air had withdrawn scheduled services to Frankfurt. This data is summarized in Table 7.3.11.2.

**Table 7.3.11.2 International Traffic - Schedule and Charter
Quarter II, 1996**

Type of Service	Market	Flights	Seats	Passengers		Load Factor
				Actual	% of Total	
S/C	Istanbul	149	38,124	18,462	31.1%	48.4%
S/C	Sharjah	74	22,666	11,179	18.9%	49.3%
S/C	Hanover	77	18,312	8,131	13.7%	44.4%
S	Frankfurt	46	16,100	5,109	8.6%	31.7%
S	Beijing	42	5,866	2,196	3.7%	37.4%
S/C	Delhi	45	6,066	1,961	3.3%	32.3%
S/C	Tel Aviv	27	3,502	1,860	3.1%	53.1%
S	Urumqi	26	2,444	1,844	3.1%	75.5%
C	Karachi	34	2,558	1,843	3.1%	72.0%
C	Seoul	28	3,770	1,699	2.9%	45.1%
S	Budapest	23	2,244	1,337	2.3%	59.6%
S	Birmingham	12	1,868	749	1.3%	40.1%
C	Athens	10	1,564	712	1.2%	45.5%
S	Vienna	10	760	530	0.9%	69.7%
C	Jeddah	4	1,400	525	0.9%	37.5%
C	Antalia	3	1,050	454	0.8%	43.2%
C	Aleppo	6	568	337	0.6%	59.3%
C	Baku	4	296	113	0.2%	38.2%
C	Warsaw	4	404	89	0.2%	22.0%
C	London	1	166	87	0.1%	52.4%
S	Tehran	2	152	54	0.1%	35.5%
	Grand Total	627	129,880	59,271	100.0%	45.6%
	Schedule	320	54,958	22,490	51.0%	40.9%
	Charter	308	74,922	36,781	49.0%	49.1%
	Total	628	130,019	59,279	100.0%	45.6%

Note: S - Scheduled Flights
C - Charter Flights
S/C - Scheduled and Charter Flights

7.3.12 Conclusions

The size of national air carrier far exceeds its requirements, particularly given the depressed state of the air travel market in Kazakhstan. Although the airline has responded by reducing the level of operation, there has been no commensurate reduction in the staff levels or number of aircraft. The airline's productivity levels by industry standards are exceedingly low.

The organizational structure of the national air carrier creates a duplication of functions and includes a number of non core airline activities. Because of this structure, there is no centralized accountability or financial controls. The organizational structure, along with financial management practices, contributes to a situation where management lacks an adequate understanding of costs, revenues, productivity, and allocation of expenses by function or activity. Route profitability is not properly measured and it appears that the airline's pricing practices are not compensatory. Another serious implication of the entity's organizational structure is a lack of control by airline management of the sale and distribution of the airline product.

The cash flow situation at the airline is extremely serious and has begun to affect the airline's ability to pay international airport fees, aircraft insurance and fuel. Day-to-day operations are being adversely impacted as well as, potentially, maintenance and safety. Because of public perception of financial insolvency and safety, traffic levels in the first six months of 1996 deteriorated further.

The business and management skills at the national air carrier are weak and there is limited experience in operating in international markets. The latter may partially explain the airline's deteriorating share in international markets. A major factor, however, is that the airline has not developed a business product or its business markets. Since 1995, Kaz Air has put increasing amounts of capacity into charter services, in many cases, in markets where it also operates on a scheduled basis. This strategy, along with its pricing policies, has been ineffective and caused the airline to reduce the number of international destinations from 15 in 1995 to nine in 1996. The airline's service levels and fleet are also not competitive.

In addition to adversely affecting its marketing and financial position, the airline's response to shop tourism has created a high degree of market fragmentation. The independent and inefficient scheduling of the Almaty based airline and the subsidiary airlines also contributes to this market fragmentation, as the services on many routes are duplicated.

Kaz Air's fleet is old and in need of repair. Fleet utilization, crew deployment and overall productivity are well below industry standards.

7.4 Recommendations for a Modernization of the National Air Carrier

7.4.1 General

Decree No 1030 took an important step in establishing what is considered an appropriate framework for a new national air carrier in Kazakhstan. Along with prior government directives, it divested a number of non core subsidiaries and separated the airports from the airline companies. Most importantly, it has created a single airline entity, which is assumed as free of debt. Now, it will be incumbent upon the management of the airline to create an effective internal organization and strong management team with the prerequisite skills.

The new airline should expect considerable challenges and recognize that the time frame for successfully achieving its goals will probably take longer than anticipated. The general economic climate in the republic is still well below 1991 production levels. Although the rate of economic decline lessened in 1996, air traffic is not projected to return to pre-Independence levels until after 2005. Unemployment remains high, and wage levels are low relative to the price of essential goods and services. Although the price of air travel in the Republic is below North America and Europe, the majority of the Republic's citizens cannot afford to travel for discretionary purposes.

Both the results of the interim audit and the analysis of Air Kazakhstan's current condition indicate that existing tariffs and demand levels did not produce a profit given the entity's overall cost structure. This is despite increases in tariff levels to offset rising costs. The new national air carrier will have to establish unit costs well below, and productivity levels well above, that of its predecessor airline. These objectives must be achieved in conjunction with an improvement in quality of service and product. The new airline must also develop more suitable financial and management controls, and adopt more conventional, industry accepted practices of planning, marketing, distributing and operating its product.

Another serious matter is the public's current perception of the national air carrier. Kaz Air has a reputation for poor service and safety, and publicly perceived as financially insolvent. The November, 1996 mid air collision of an IL76 charter have placed these perceptions at a global level. Notwithstanding new management and operating policies, the new national carrier will inherit and have to manage the legacy of its predecessor for some time to come.

7.4.2 Airline Simulation

One of the major factors effecting Kaz Air's performance was an operation, organization, and staff levels which far exceeded the airline's requirements. An airline simulation was undertaken to establish an appropriate sizing for the new national air carrier based on prevailing economic and market conditions, and project revenue levels and yields that the airline could expect to achieve over time with suitable marketing, product and pricing strategies.

(1) Proposed Route Network and Fleet Plan

The proposed route network was developed based on an evaluation of Kaz Air's load factor by route and aircraft during the first six months of 1996. This information was supplemented with data from a sample of loads by flight for the Almaty based carrier during the second quarter of 1996. The analysis indicated that much of the airline's operation is ineffectively and inefficiently scheduled. Many flights only operated a few times and many had low load factors. The result is a high degree of unproductive flying and added expense. The goal of the simulation was a higher frequency schedule operating at a minimum 65% load factor. The following criteria were used in establishing a potential route network:

- Route demand of five passengers per day or greater for regularly scheduled services. This equates to one frequency per week with an AN-24 aircraft operating at a 70% load factor.
- Flights consolidated from a variety of points over a central point. This is particularly the case for international destinations.
- Unless predicated on clear market needs, the stopover point for flights to CIS and International destinations would be in Kazakhstan, due to handling rates at these destinations some ten to twenty times higher than at domestic locations.
- Aircraft gauge and range suitable to the size and distance of the route. In some instances, lower load factor flights result due directional imbalances in traffic demand.

Based on this criteria the simulation projected the need for 32 passenger aircraft, including three operational spares. Aircraft operated at 8.8 hours per day (based on a five day flying cycle) with an average load factor of 69%. The route network derived from this simulation is set out in Table 7.4.2.1.

In addition to the above criteria, additional fleet assumptions included:

- Many of the routes now operated with YaK-40 equipment would be served by the smaller independent regional air companies.
- The IL-86 fleet should be disposed for several reasons. Less than half of the fleet is currently serviceable. The size of the aircraft far exceeds demand in the markets where it is generally flown. The average load factor on the IL-86 fleet during the first six months of 1996 was only 43.5%. Only three of the airline's seven fleet are serviceable due to lack of engines and auxiliary power units. The aircraft's operating costs are believed to be excessively high due to maintenance, fuel and crew requirements. The fleet type is not competitive with other operators.

Table 7.4.2.1 Summary of Route Network

Simulation Route Network		
Domestic	CIS	International
Akmola-Almaty	Aktau-Astrahan	Almaty-Urumqi-Beijing
Aktau-Almaty	Aktau-Mineral-vody	Atyrau-Almaty-Delhi
Aktau-Aktyubinsk-Kokchetau	Almaty-Akmola-Moscow	Almaty/Aktau-Hanover
Aktau-Atyrau	Almaty-Aktyubinsk-St.Petersburg	Almaty-Frankfurt
Aktau-Uralsk	Almaty-Kokchetau-Ekaterinburg	Almaty/Aktau-Istanbul
Almaty-Arkalyk	Almaty-Moscow	Almaty-Karachi
AktyubinskAlmaty	Almaty-Onsk	Almaty-Sharjah
Almaty-Atyrau	Almaty-Tashkent	
Almaty-Ekibastuz	Almaty-Uralsk-Kiev	
Almaty-Karaganda	Ashgabad-Almaty	
Almaty-Kokchetau	Atyrau-Dushanbe	
Almaty-Kostanai	Dushanbe-Shimkent	
Almaty-Kzyl-Orda	Ekaterinburg-Kokcheau-Almaty	
Almaty-Pavlodar	Karaganda-Moscow	
Almaty-Petropavlovsk	Kostanai-Uralsk-Moscow	
Almaty-Semipalatinsk	Shimkent-Dushanbe	
Almaty-Shimkent		
Almaty-Uralsk		
Almaty-Ust-Kamenogorsk		
Almaty-Zhambul		
Kostanai-Shimkent		

- The new national air carrier should acquire two western manufactured aircraft of suitable gauge and range. The planes should be wet-leased, complete with flight operations crews, maintenance and insurance. This will permit the air carrier to quickly establish a competitive presence in key international markets. Wet leasing will also enable the airline to acquire aircraft with a two class business configuration, as well as eliminate time consuming and expensive training of flight operations crews and maintenance workers. Wet-leasing of aircraft has been used quite successfully by Viet Nam Airlines on its international routes.

For the purposes of this exercise, the wet lease of a B-757 aircraft has been assumed. The aircraft has a long range capability of up to 7,250 kilometers and would permit non-stop service between Almaty and London. The B-757 also has good operating economics and could be acquired at rates lower than comparable extended range B-767 and A-300 aircraft. The new national air carrier should expect to incur wet-lease costs of approximately \$18 million per annum for two aircraft. This estimate is based on the simulated block hours and a wet lease rate of \$2,650 USD per block hour (Source: Avmark). The fleet by aircraft type is detailed in Table 7.4.2.2.

Table 7.4.2.2 Summary of Fleet

Aircraft Type	Kaz Air	Per Decree to Air Kazakhstan	Simulation
IL - 86	7	7	0
B-757	0	0	2
TU - 154	26	18	6
TU - 134	10	7	6
IL - 76	4	4	4
YAK - 42	4	4	2
AN - 24	50	24	16
AN - 26	10	6	0
AN-30	10	0	0
YAK - 40	52	0	0
L-410	25	0	0
Total	198	70	36

Because of the priority placed on developing a high frequency passenger schedule with suitable gauge, there is a considerable reduction in the cargo capacity available on the passenger fleet. In addition, the belly capacity on the B-757 aircraft is less than larger gauge, more expensive equipment. To offset the shortfall in cargo capacity on the passenger fleet, "Air Kazakhstan" should develop a cargo strategy to increase the productivity and load factor of the IL-76 cargo fleet. This fleet type operated at a 53.6% load factor during the first six months of 1996.

(2) Passenger and Cargo Traffic and Revenue

Utilizing the traffic demands derived in the simulation, revenues were developed based on the yields in Appendix 6.7.5.(2).C. Internationally, it was assumed that there would be a business class product on scheduled routes where the competition offers business class, in this instance, Frankfurt, Hanover and Istanbul. Revenue projections assumed fifteen business class passengers per flight, at fares priced midway between Kaz Air's existing air tariffs and those of Lufthansa. In the case of Istanbul, it was assumed that new national air carrier would offer the same business class fares as Turkish Airlines, if it operates with B-757 equipment. Table 7.4.2.3 provides a summary of traffic and revenue by major route group. Appendix 7.4.2 provides detail by route.

(3) Staff Levels

The overall staff level for the new airline was projected based on the number of flight operation and cabin attendant crews required to fly the proposed schedule. In establishing these levels, flying hours were established by route using actual distances and flying block times by fleet type. The crew complements by aircraft were assigned based on the data in Table 7.3.5.1.

Table 7.4.2.3 Summary of Traffic and Revenue by Route Group

Route Group	Passengers (Weekly)	Seats (Weekly)	Frequencies (Weekly)	Load Factor	Revenue (Weekly USD)	Average Revenue (USD/psgr)
CIS	395,707	562,432	6,032	70.4%	50,204,613	\$ 127
Domestic	518,801	817,232	13,208	63.5%	42,583,624	\$ 82
International	323,752	401,440	2,080	80.6%	94,571,758	\$ 292
Grand Total	1,238,260	1,781,104	21,320	69.5%	187,359,995	\$ 151

It was assumed that crews would be deployed 48 hours a month and time in-flight represented two-thirds of the overall work cycle. The remaining one-third of the work cycle would account for training, vacation, sickness and travel time. The 48 hours per month of flying is well above levels at Kaz Air, but will be necessary to achieve over time if the new national air carrier is to have productivity levels more in line with industry competitors. Based on this analysis, it was determined that the new national air carrier would need approximately 606 flight operations crew and 644 flight attendants to operate the schedule. Using the assumption that operational crews are generally account for 26% of an airline's overall employee base, a staff of 4,800 employees is considered appropriate for the new national air carrier (Source: Air Transport Association, 1996 Annual Report). Table 7.4.2.4 provides a summary of the flying hours and crew complements derived in the airline simulation.

Table 7.4.2.4 Summary of Flying Hours by Aircraft and Crew

Aircraft	Weekly Flights	Weekly Flight Hours	Crew Per Aircraft		Weekly Crew Hours		Crew Number by Aircraft	
			Flight	Cabin	Flight	Cabin	Flight	Cabin
AN24	216	632.1	3.0	1.0	1,896.3	632.1	235.9	78.6
B-757	22	173.6	Wetlease	10.0	0.0	1,736.0	0.0	215.9
TU134	92	356.8	4.0	3.0	1,427.2	1,070.4	177.5	133.1
TU154	46	301.3	4.0	5.0	1,205.2	1,506.5	149.9	187.4
YaK42	34	115.3	3.0	2.0	345.9	230.6	43.0	28.7
Weekly	410	1,579.1			4,874.6	5,175.6	606.3	643.7

(4) Operating Performance

Table 7.4.2.5 compares Kaz Air's 1995 operating performance with the results of the simulation. The airline simulation produces a smaller airline and traffic base, operating with far less employees, much fewer aircraft and at higher overall load

factors. Aircraft utilization is assumed to be far greater than at Kaz Air. Airline revenues increase over time as the airline attracts more high yielding business traffic. Productivity is also considerably higher, but still below the performance measures of the Top 100 to 125 airlines compared in Table 7.3.1.17.

Table 7.4.2.5 Summary of Operating Performance

	Kaz Air 1995	Model Simulation	Variance
Flights	40,196	21,320	-47%
Revenue Passenger Kilometers (Millions)	4,040,653	2,562,006	-37%
Available Seat Kilometers (Millions)	7,099,338	3,721,680	-48%
Passenger Load Factor	56.9%	68.8%	+12
Passengers	1,831,878	1,226,113	-33%
Aircraft	198	36	-82%
Employees	21,000	4,800	-77%
Revenue (Million USD)	\$ 175.6	\$ 187.3	7%
Average Revenue Per Passenger	\$ 95.9	\$ 152.8	59%
Passengers Per Employee	87	255	193%
Revenue Per Employee	\$ 8,362	\$ 39,021	367%

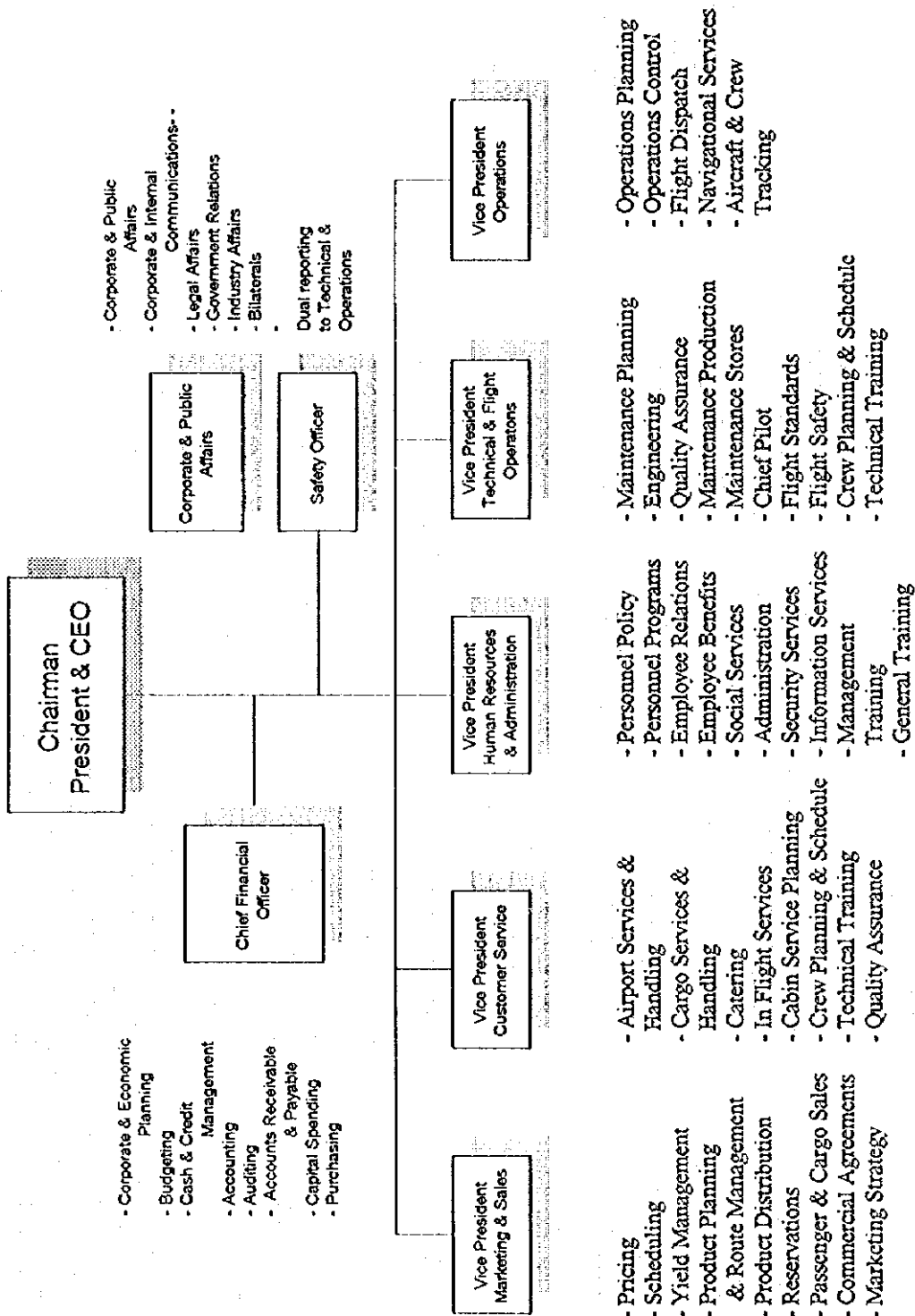
7.4.3 Management

A major factor determining the success of the new national carrier will be the strength, skills and experience of management. The objective of the new airline should be to streamline management, and establish accountability and initiative. Managers should also understand the key processes and interrelationships between departments. Direct controls and channels of communication should be established and productivity levels should be brought more in line with industry standards. The new airline should also focus on hiring, training, and creating incentives for management, operations, and customer service staff.

7.4.4 Organization

“Air Kazakhstan” should develop and implement an organization with centralized and internal control of all core airline related activities, including sales, distribution, planning and flight activities. Key functional activities should be organized in a market oriented manner more in line with industry standards. Particular emphasis should be placed on financial controls, safety, customer service and marketing. The organization should be kept simple with as few layers as possible. Table 7.4.4 sets out a proposed executive level organization for “Air Kazakhstan”.

Table 7.4.4 Proposed Organization - "Air Kazakhstan"



7.4.5 Training

Most of the team members assembled to develop the new national air carrier are not experienced airline managers. Because of the highly complex and technical nature of the airline industry, it is strongly recommended that these managers undergo a formal airline management training program. There are a number of industry associations and firms which offer such programs. The International Air Transport Association offers airline management training programs and the International Airline Management Training Institute is another organization which specializes in training senior airline managers, particularly those in developing market economies. The organization offers training in five languages, including Russian, and will consider training locally.

Recommended areas of management training include both basic business management and airline management. The latter should cover strategic business planning, airline economics, marketing, marketing strategy, pricing, product and route strategy, financial strategies, route profitability, aircraft scheduling, and fleet strategy. More advanced training should include managing change, quality management, external and airline negotiations.

7.4.6 Financial

As a business entity, "Air Kazakhstan" must develop an integrated means of financial management and exercise strong management control of its financial situation. Specific emphasis should be placed on cash management and budgeting controls. The airline must develop an annual budget for all locations which is monitored on a timely basis each month. The airline must also develop or acquire both an expense and revenue accounting system, which will permit it to isolate costs by location and activity, and revenues by route, fare type and source of sale. The new airline should also correct some of deficiencies in financial management discussed in detail in Sections 7.3.1.1 to 7.3.1.3.

7.4.7 Customer Service

Customer service is a major component of an airline's product and service offer. "Air Kazakhstan" should undertake an extensive training program with all staff engaged in providing service to the customer. The training should emphasize a customer service ethic, accountability and initiative, and English language skills. The new national air carrier should also place a priority on hiring and training English speaking cabin crews, with a particular emphasis on international routes. In the case of wet-leased aircraft, it will be mandatory for cabin crews to effectively communicate with flight operations crews in matters relating to the operation and safety of the aircraft.

The airline must also evaluate its product and in-flight service standards relative to the competition. This examination should include the level of in-flight cabin

service, product offer and amenities, service delivery, English speaking capabilities and safety. A comparable assessment should be made of services provided at the airport and city sales offices.

7.4.8 Sales and Distribution

(1) Sales

The national air carrier did not control the sales of its seats. This inhibited proper management of the airline product and resulted in commission expenses which would not have been incurred, if sales were made directly through the air carrier. "Air Kazakhstan" should internally control its sales function. Seats should be allocated in accordance with a yield management system. The airline should regularly distribute schedule and fare information to the travel trade. A dedicated and appropriately trained sales staff should be assigned to selling the airline product.

(2) Distribution

The new national air carrier should establish an internal reservations center, staffed with well trained, knowledgeable, service oriented employees. While many smaller airlines outsource reservations to third parties, this is not recommended for "Air Kazakhstan" at this time. Given the problems of Kaz Air with the separation of its ticket selling arm, the new airline should fully control the distribution of its product. Properly maintained reservations sets should be available at city sales office and airport check-in and gate locations. A suitable number of reservations sets should also be installed at the airline headquarters and available to management in key, commercial planning positions. The airline should also provide more listings of services beyond its international gateways.

(3) Computer Reservations Systems

"Air Kazakhstan" should fully understand the functionality, costs and effectiveness of the Sirena/Gabriel system in distributing its product. If the airline is seriously committed to developing international scheduled services, it must also determine the cost effectiveness of participating in a global distribution system. Participation in multi carrier or global systems is usually fee based. The national air carrier should expect to pay a fee between \$5 to \$10 for each passenger booked through a global system.

7.4.9 Marketing

(1) Market Segmentation

The new national air carrier must define its various target market segments and develop specific products designed to meet the needs of these market groups. The airline must also understand the overall "quality" of its traffic and the content of high and low yield traffic in each market. For example, some of the more sizable

international markets which could support frequent, regularly scheduled services are Sharjah, Dushanbe, Delhi and Karachi. These are also major "shop tourist" destinations and may have a low content of business traffic. Kaz Air carried a significant amount of traffic to Hanover. However, this traffic may be primarily traveling for purposes of ethnic migration and not for business or commercial reasons.

Kaz Air's charter flights operated with less than a 50% load factor, because of the airline's policy not to undercut the prices charged on scheduled flights. The new national air carrier should determine whether it can profitably operate with essentially all low yield traffic in these markets if offers charter competitive prices. The load factor objective for flights with this type of traffic should be in the range of 80% to 90%, or higher.

In those markets with a business traffic content, the new national air carrier should focus on attracting higher yield business traffic. The airline should develop a higher frequency schedule with a business class product and offer elevated levels of service at business class fares. The airline should also offer a portion of its seats priced to meet charter competition, enabling it to fill seats on scheduled services which would otherwise be empty.

(2) Route Profitability

A major strength of any airline is its route structure. "Air Kazakhstan" must review its potential route structure and determine which routes are profitable or, alternatively, are of significant importance with potential for development. The airline should understand the costs of operating each route on a fully allocated basis, what load factor is required to achieve a break-even operation, and how route profitability can be affected by using different aircraft types. Based on this understanding, the airline should develop a plan to restore losing routes back to profitability. To support this understanding, the airline should adopt a system of reporting and measuring route profitability on a regular basis.

(3) Scheduling

"Air Kazakhstan" should rationalize its route network, and schedule operations in a more efficient and cost effective manner. Flights schedules should be centrally developed, eliminating much of the duplicate, "point-to-point" flying prevalent at Kaz Air. Other recommendations to improve the overall operational effectiveness and passenger attractiveness of the schedule include:

- Optimizing the route network by flowing as much traffic as possible over natural hubs.
- Developing a high level of flight frequency with traffic support from other flights feeding into the hub.
- Eliminating operations on thinly traveled sectors, which can be serviced more efficiently by the new domestic airlines utilizing smaller gauge equipment.
- Scheduling flights at appropriate and consistent departure times.

- Building schedules out of the hubs in "banks" and scheduling arrivals to meet as many banks as possible. Given the relatively small size of the air travel markets in Kazakhstan, this is currently only feasible at Almaty and Atyrau.
- Utilizing equipment with gauge appropriate to market demand and time of day.
- Eliminating multiple sector flights which do not reflect traffic demand and market flows.
- Minimizing aircraft turn-a-round times.
- Increasing aircraft utilization to at least ten hours a day.
- Establishing same day morning and evening services in higher density business markets within Kazakhstan and between the CIS, as market levels warrant. Currently, the only routes which would support this level of schedule using an AN24 aircraft are Almaty to Shymkent, Karaganda and Akmola.
- Basing aircraft outside of the home base in the evening to accommodate early morning demand in key markets, e.g. Moscow.

(4) Pricing

As indicated above, Air Kazakhstan should have a true understanding of the costs and profitability of all routes operated. Fare levels should be developed which reflect these costs realities. The airline should utilize more conventional market segmentation to develop the air travel market and price levels. This should include price offers at both the high and low end of the market. In addition to normal regular economy fares, it is recommended that the airline:

- Bring fare levels more in line with its cost structure over time.
- Develop Business Class fares for competitive CIS and international markets.
- Experiment with discount pricing as a means of stimulating air travel demand, including the use of discounts in off peak periods.
- Offer a limited allocation of charter competitive fares on scheduled flights in markets with both scheduled and charter competition.
- Rationalize price levels over time and eliminate the two tier price system which differentiates between fares offered to CIS nationals and foreigners.

The above recommendations are based on the assumption that "Air Kazakhstan" will acquire a yield management system to manage the seat inventories of various fare classes.

(5) Cargo

During the first six months of 1996, Kaz Air derived only 1.4% of total revenue from cargo operations and operated at less than a 50% load factor. Given the underdeveloped nature of surface and rail transportation in Kazakhstan, new links

forged through foreign investment interests, as well as the propensity for shop tourism, cargo represents an incremental and untapped source of revenue for the new national air carrier. The management of the new airline should analyze the potential for this market segment, and develop a marketing and sales plan.

(6) **Commercial Relationships**

The national air carrier currently has no commercial agreements in place with other carriers. Commercial agreements in the airline industry are increasingly used by airlines to extend their market base to locations which are not directly served. The new national air carrier could potentially enter into commercial arrangements in conjunction with mandatory agreements as a part of its bilateral agreements. The timing of such initiatives should be after the airline completed an upgrade of fleet, service and image.

7.4.10 Operations

(1) **Fleet**

Of the aircraft transferred to Air Kazakhstan, 55 out of 70 are listed as in good condition. However, ten of those are held in locations outside the country. Many of the fleet in "good condition" are close to the end of the current flying cycle. It is expected that these aircraft will require time consuming and expensive maintenance overhauls to extend the flying life. A number of the aircraft also require engines and power units. Some are also in need of parts or have been held in various maintenance centers for six to eighteen months.

Because of the age, condition, and low passenger appeal of these aircraft, "Air Kazakhstan" must invest in its fleet. However, due to the number of significant investment decisions facing the airline at start-up, the new national air carrier should consider phasing in the renewal of fleet over time. The first priority of the new national air carrier should be in acquiring fleet for higher yielding international routes such as Frankfurt. The immediate focus should be routes where its competitors operate western aircraft and offer business class services. Moscow is potentially another market where the airline could benefit from using western aircraft. The market is comparatively large, has the potential for a higher level of business traffic and Transaero currently operates with B-757 equipment.

As of September, 1996, Kaz Air had lost a significant share of international traffic and substantially reduced its flight operation on international scheduled routes. None of the airline's flight operations and technical staff are trained or certified to operate western aircraft. The time required to hire, train and certify staff will take years based on existing requirements. It is, therefore, recommended that "Air Kazakhstan" wet lease western aircraft. Wet leasing entails leasing not only the aircraft, but also the crew, maintenance and insurance from an existing operator. While this method is more expensive than "dry leasing", it may be preferable from a cash flow perspective and will permit "Air Kazakhstan" to commence competitive international operations in relatively short time frame.

At the outset, "Air Kazakhstan" must fully understand the economics associated with bringing unserviceable aircraft back into service and determine the implications for the balance of the fleet in the current flying cycle. Because the fleet transferred to the new national air carrier exceeds the fleet projection in the model simulation, there may be enough aircraft in serviceable condition to meet the airline's initial operating needs. If this is the case, the airline should attempt to lease or sell the excess fleet. Given public concerns related to safety, as well as the worn condition of the fleet, the airline should refurbish the exteriors and interiors of all aircraft.

(2) Maintenance

The new national air carrier should carry out a review of its overall maintenance needs, including heavy maintenance requirements and engine overhauls. In addition, the airline should determine those locations where its maintenance needs can be best met. Because of the organizational structure at Kaz Air, the airline had maintenance staff and facilities at the Almaty based airline, as well as the regional airline subsidiaries. Given the fleet size, an ideal situation would be the consolidation of all maintenance work at one center. This may be impractical, however, given the large market distances and less than daily frequency between most points. A potential scenario is two or three maintenance centers where the operation is largest such as Almaty, Atyrau and Karaganda, for example.

7.4.11 Other

(1) Systems

The new national air carrier must invest in management systems which will provide it with the capability of understanding and controlling key airline and business management processes. At a minimum, the airline should acquire and implement a management accounting, revenue accounting, route profitability and yield management system. Other considerations include evaluative tools to assist management in analyzing investment type decisions and monitor overall airline performance. The new national air carrier should also invest in computer and office equipment, and ensure that staff are adequately trained in the use of this equipment.

(2) Labor Relations

Although Decree No. 1030 which established "Air Kazakhstan" as the new national air carrier did not address the matter of labor, it is obvious that the new airline must be a much smaller version of its predecessor, if it is to survive as a viable entity. The proposed simulation established a target employee base of 4,800 employees. This could mean the new airline's staff may be 50% or less than those working in airline related activities at Kaz Air. In fact, concern over job security surfaced in October, 1996 when there were vocal demonstrations of Kaz Air pilots at Almaty Airport.

"Air Kazakhstan" and the government will have to proactively address this sensitive issue, including what financial and policy measures may be required to

accommodate displaced staff. In the United States, the Department of Transportation has the power to deal with the effect of airline mergers on employees through the use of "labor protective provisions," or LLPs. LLPs guarantee adequate severance and relocation allowances to affected employees. These provisions also establish procedures for merging the seniority of employees covered under collective agreements. In recent years, the DOT has not had to impose the powers of this mechanism, because these matters have been resolved through the collective bargaining process.

(3) Public and Corporate Image

As discussed in **Section 7.4.1**, the new national air carrier will carry for some time the poor public image and perceptions of its predecessor. Organizational and structural changes will have little affect with the public, particularly outside of Kazakhstan and the CIS. The senior executives of the new national air carrier should launch a new corporate identity and publicity campaign designed to restore the image of the "national carrier". The corporate identity program should include new livery, logo and employee uniforms, which will distinguish the new national air carrier as a different entity.

(4) Outsourcing

Airlines with low critical mass and flight activity often outsource to third parties as a means of reducing costs and improving productivity levels. LOT Polish Airlines has been quite successful in this regard. The airline has doubled its airline ton kilometers per employee from 120,000 in 1991 to 240,000 in 1995. Staff was reduced from 7,000 in 1990 to 3,900 in February 1996. A part of these productivity improvements were achieved through the outsourcing of non core activities, including catering, ground services, and the car pool. Some aspects of maintenance and fueling are also being reviewed. Other areas where airlines typically outsource include airport passenger handling at the check-in and gate areas, airport security, aircraft handling, baggage and cargo loading, fueling, cabin grooming, and commissary. "Air Kazakhstan" should review such options.

7.5 Some Potential Areas of Government Policy Development

Even within the framework of an open market regime, there are areas where policy and regulation play a key role. Instances where such intervention is considered useful are:

- Correcting structural imbalances
- Stimulating competition and economic development
- Stabilizing industry or sector conditions
- Protecting national interests
- Protecting public interests

With this objective in mind, the following have been identified as potential areas where further policy development and implementation could strengthen both the air transportation market and the national air carrier.

(1) Bilateral air services agreements

The Republic has adopted a liberal policy of permitting foreign airlines to operate into Kazakhstan. However, it has not utilized any number of commonly accepted practices which would not stifle competition, but serve to protect and promote national interests, including those of the national air carrier.

In future bilaterals, the government should develop and pursue a range of mechanisms that would permit the national air carrier to develop international services over time, as it makes a transition to a market based economy. A recent example of transitional mechanisms with precisely this intent was the "Open Skies" agreement ratified between Canada and the United States in February 1995. The bilateral negotiation took five years, because of Canadian concerns that its air carriers would be unable to compete against much larger, dominant US carriers at major US hubs, feeding into vast domestic route networks. The Canadians contended that the US carriers had access to 90% of the Canadian market, whereas Canadian carriers could only access 51% of the US market. As a means of giving the Canadian air carriers a period to adjust to the more liberal open market regime, the United States agreed to a three year moratorium for its carriers at the three largest Canadian airports (Toronto, Montreal and Vancouver).

The best time to gain concessions is during actual bilateral negotiation. However, there have been numerous instances of bilaterals being reopened, or even abrogated, when one party is dissatisfied. In 1996, the Philippine Government made the pending US Open Skies agreement established two years earlier a domestic political issue, because of the deteriorating financial position of its air carrier. While the new agreement is the subject of much debate and still perceived by some as more in favor of US interests, the Philippine side achieved a seven year deferral on the introduction of Open Skies, access to five more gateway and 24 more interior points in the US, and a specification of the number of frequencies which can be phased in during the next seven years.

Other balancing mechanisms which have been commonly used within the industry and should be pursued in future bilateral negotiations include:

- Limiting the amount of capacity, frequency and number of passengers of the foreign carrier.
- Permitting the new national air carrier single track designation for a specified period of time.
- Requiring new competitors to phase increases in capacity over time as the market develops and matures.
- Limiting third country rights.
- Delaying the timing of new foreign services until the national air carrier is ready

to operate.

- Implementing royalty and block seat arrangements in instances where the national air carrier is not currently operating.
- Including mandatory computer reservations listings as a bilateral requirement.
- Pooling of expenses and revenues (This should only be considered where economically feasible and should take into account relative shares of capacity).

(2) Debt repayment of the national air carrier

The interim audit estimated that as of mid 1996, the national air carrier had international debts of \$11.3 M USD as follows:

<u>Agency</u>	<u>Amount (Million USD)</u>
• Non EEC Countries	\$ 4.7
• EEC Countries	0.5
• Alexander Hauden Insurance	2.6
• Insurance for Government Fleet	0.6
• International Airports	2.9

These debts should not be assigned to "Air Kazakhstan" when it commences operation, as it would place an unfair financial burden on the new national air carrier. More appropriately, they should be considered as debt of Kaz Air's owner. The government must develop a plan to repay these obligations to external agencies. If these obligations are not fully resolved, it is unlikely that authorities will permit "Air Kazakhstan" to operate or that insurers will insure the new air carrier's fleet.

(3) Carrier Certification

To ensure the future viability of the air transportation industry and to protect both public and national interests, the government of Kazakhstan should develop and regulate the financial and management fitness, and safety compliance of its air carriers. Fitness tests should apply to all carriers and include demonstration of adequate insurance liability coverage. The following models should be considered.

In the United States, a new air carrier must present the qualifications of proposed management to ensure that managers in key areas have adequate prior experience in managing and operating an airline. It must also file a detailed business and financial plan with Department of Transportation, substantiating that there is sufficient working capital on hand during the start up period. The airline must also satisfy authorities that its operating plan is realistic and feasible.

Under recently adopted liberalization policy in Europe, the policy and requirements are quite clear and comprehensive. The airline must demonstrate nationality which indicates ownership and control by European nationals. The issue of probity must be established; management must have no prior record of bankruptcy. A minimum

insurance of \$80 million is generally required to operate into major airports. The airline must have a valid aircraft operating certificate. In the case of wet-leased aircraft, there must be evidence of safety compliance. Financially, the airline demonstrate that it can meet all operational and fixed obligations for a three month period and that it is able to meet financial obligations for a period of 24 months.

(4) Charter Policy

The lack of an integrated air transportation policy and the fact that air carriers have been loosely licensed to perform charter services has created a very serious situation. Charter operations in some markets well outnumber scheduled services, undermining rights granted through the bilateral process and creating a high degree of market fragmentation. However, the greatest concern relates to the financial solvency of some operators and organizers, as well as the safety of these operations.

A number of actions could be undertaken by civil aviation authorities to stabilize this situation. Charter operators could be required to file charter programs with authorities. This measure was used by the French Government in the mid 1980's when the level of charter operations between France and Canada became so great that Air France was forced to reduce the number of scheduled frequencies in key markets. The French Government then limited the level of charter capacity to a portion of the overall market capacity. In addition, the governments of both countries permitted the national air carriers' to offer blocks of seats on scheduled services at charter competitive rates. The Canadian government also required that charter operators file and economically justify the wholesale charter tariff as a means of restraining predatory pricing.

With respect to financial solvency, the authorities should develop certification requirements along the lines discussed in Section 7.5.3 and subject charter operators to the same fitness and safety criteria. Regarding foreign operators, the terms and conditions under which charters may be operated could be included in the air services agreements, a practice which has been followed in other areas of the world. Foreign operators could also be required to file charter programs with regulatory authorities. Charter organizers could also be required to place funds in trust or escrow accounts as a means of guaranteeing payment. This practice was used in the United States during the 1970's not only to protect the carrier supplying the charter aircraft, but also the public from possible fraud.

(5) Essential services and regional air policy

When the US airline industry was deregulated in 1978, the process was carried out over a period of five years. To address concerns about the potential loss of air services to small communities, the Department of Transportation established the Essential Air Service program as a means of ensuring the continuation of air services on lightly traveled routes which otherwise could not be profitably served. The program provided subsidies to air carriers willing to provide air services. Bids were solicited from the air carriers and the DOT determined the level of subsidy based on a case by case review.

(6) Safety

While the subject of safety is covered in detail in Chapter 8, regulation and compliance of safety matters in accordance with industry accepted practices is considered of vital importance, given the high number of serious safety incidents.

(7) Social Services

Kaz Air currently has some 1800 individuals engaged in providing various social services which are not core to the airline operation. While the implications of providing these services are unnecessary staff levels and expense, it may be necessary to retain these benefits due to social and economic considerations. Should this be the case, the new national air carrier and the government should mutually discuss who should be responsible for providing these services, including the possibility of state takeover or subsidy of costs.

(8) Goods and Services at Just and Reasonable Prices

There are a wide variety of goods and services which air carriers must purchase to operate. These may be supplied by third parties or designated authorities and include handling services, landing fees, navigation fees, fuel, airport security, customs and immigration services. The appropriate government agency should monitor the price and availability of these services, particularly in monopoly cases, to ensure the prices charged to all air carriers are just and reasonable.

(9) Privatization

Privatization should be viewed as a long term desirable goal because it would permit the national air carrier to access equity and give management a higher degree of control over assets and resources. The timing of this initiative, however, is highly important and should only be considered if, and when, the national air carrier becomes a self sustaining entity. Given the current economic climate in Kazakhstan and the state of the air travel market, this process will probably take a considerable period of time. In other countries where the national air carrier has been privatized, a longer time frame has produced the greatest success. In the case of British Airways, the period was three years, during which time the airline shed tens of thousands of staff, significantly restructured its route network, and embarked on a total upgrade of its product offer and delivery of service. Prior to this, the airline was losing as much as a billion dollars US annually. The British government also absorbed all of the carrier's debt load.

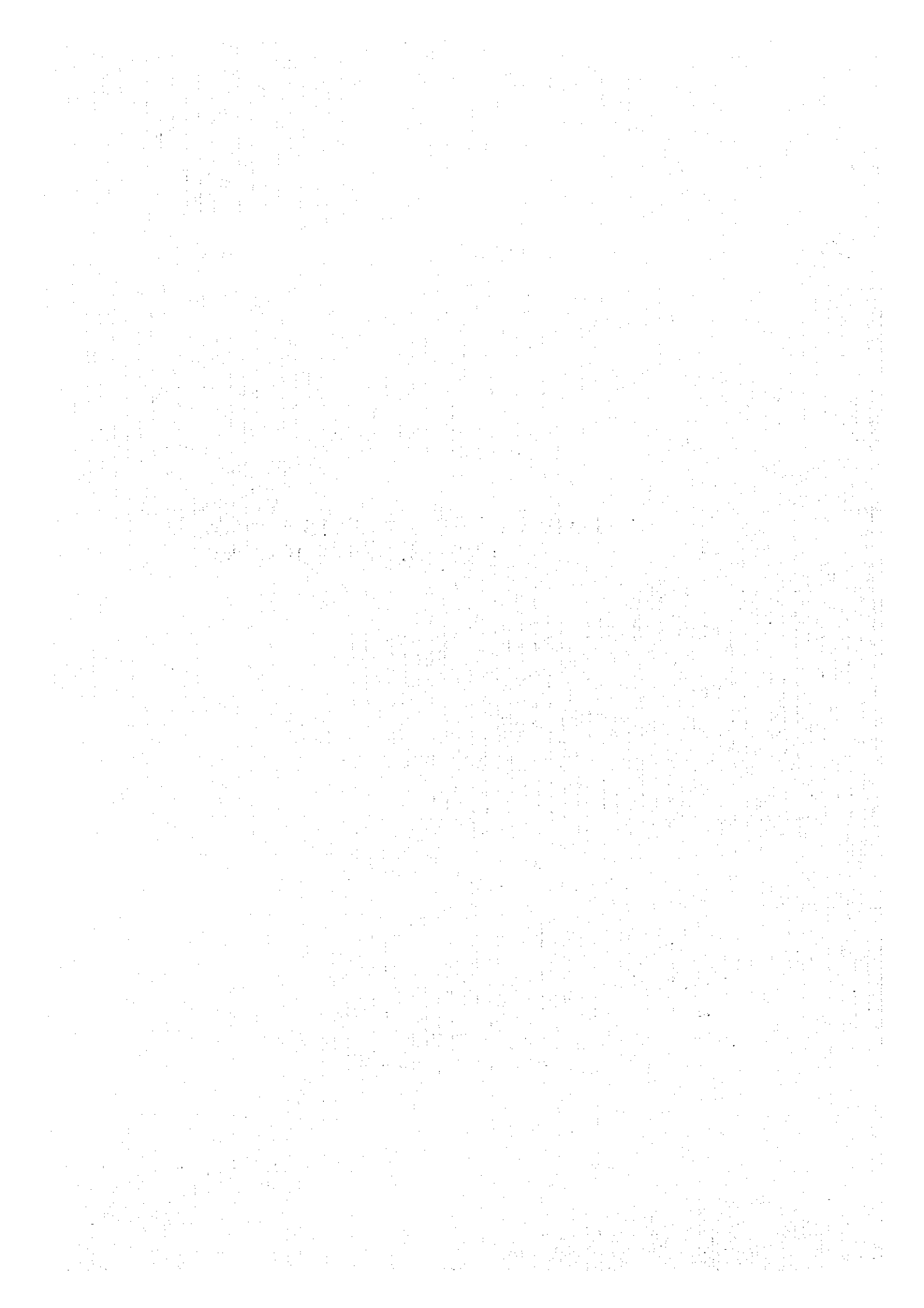
Privatization could be considered on a fully or partial basis. For example, if the government decides that it is important to maintain some control or stake in the new national air carrier, it could be partially privatized as a means of providing the airline with access to equity funds. Alternatively, it could be completed in stages, partial privatization for a prescribed period of time, followed by full government divestiture.

Other ownership issues which should be reviewed include whether employee and foreign ownership should be allowed. Foreign ownership in air carriers is generally limited to less than 50% based on a desire to maintain a national controlling

interest. In terms of employee ownership, some employee ownership is usually beneficial and has worked particularly well as a motivating force in the service industry.

CHAPTER 8

NATIONAL AIR TRANSPORT REGULATORY REGIME DEVELOPMENT



CHAPTER 8 NATIONAL AIR TRANSPORT REGULATORY REGIME DEVELOPMENT

8.1 The Air Transport Regulatory Regime

The Regulatory Regime is one of the 5 major constituent components of the Air Transport System; the others being: Air Carriers, Airports, Air Navigation System and Planning/Policy. The air carriers, airports, air navigation system are all part of the process for producing air transport capacity. Planning/Policy and Regulation provide the framework for that process.

Regulation, within any sector of economic or social sector, exists to protect the interests and well-being of groups of persons or individuals in circumstances where it is difficult for them to adequately protect themselves. It does this by controlling or influencing the conduct of certain sectoral activities to limit any potentially harmful side effects. Regulation is considered a natural role of government, but is frequently performed by non-governmental organizations and individuals within governmental mandates. While

regulation is often conducted on the basis of legal rules and standards, the degree of control and influence required in certain situations can be achieved outside of legal frameworks, e.g. by public advocacy campaigns.

The Air Transportation Regulatory Regime has two main components: Safety and Economic.

8.1.1 Air Safety Regulation

Air safety regulation protects:

- users (passengers & cargo shippers);
- civil aviation employees; and
- third parties such as people living close to airports.
- Air safety regulation involves:
 - developing, amending and canceling regulations and standards, pursuant to national civil aviation laws;
 - personnel licensing (flight crews, aircraft maintenance engineers, air traffic controllers, etc.);
 - type approvals of aircraft and components;
 - aircraft registration;
 - continuing airworthiness certification;
 - licensing of air transportation entities (air carriers, flying schools, aircraft maintenance bases, airports, etc.);

- facility licensing (navigational aids and communications systems);
- compliance inspection & monitoring; and
- enforcement in instances of infractions of air safety regulations.

Air safety regulation can be conducted in three main geographical domains:

- internationally, through the International Civil Aviation Organization;
- regionally, through such organizations as the Joint Aviation Authorities of Europe and the Interstate Aviation Committee of the Commonwealth of Independent States; and
- domestically, through the legal and other instruments of a government.

8.1.2 Economic Regulation

Economic regulation can be applied to air carriers, airports and air navigation services. In the case of the latter two, it is almost primarily confined to the regulation of fees charged for the provision of capacity generating aeronautical services, and the allocation of arrival and departure slots at airports.

Historically, the economic regulation of air carriers has been far more complex and pervasive. It has involved the control of all or some of the following:

- designation of carriers;
- points to be served;
- service frequencies;
- volumes of passengers and freight;
- aircraft types;
- revenue sharing between carriers;
- fees and tariffs; and
- withdrawals of services.

The original rationales behind economic regulation were to:

- safeguard the commercial health of carriers in a cyclical and capital intensive industry by limiting the number of carriers serving specific markets, and by setting the levels of prices to ensure a reasonable return on investment;
- ensure the designated carriers did not abuse their monopoly positions by charging unreasonably high prices; and
- provide air services to communities where these would not normally be viable in

a free market environment.

Economic regulation of air carriers needs to be considered in two domains: domestic and international.

(1) Domestic

The deregulation of the domestic airline industry in the USA in 1978 started a continuing global trend for the deregulation of domestic airline services in many states.

Numerous studies conducted in the USA indicated that many of the original reasons for the economic regulation were no longer valid given advances in air transportation technology and a maturing industry.

Starting with the USA, the general pattern has been to remove all economic regulatory controls on domestic air carrier operations other than requiring new entrants to demonstrate their commercial viability to meet their intended service levels, within the framework of the air safety regulatory regime. Deregulation has usually been phased in over a 3 to 5 year transition period to allow both the carriers and communities served to adjust to changes to service and price levels.

(2) International

International economic regulation has and continues to be based on Bilateral Air Service Agreements between states. Such agreements not only make provisions for the items listed earlier but can also cover:

- reciprocal recognition of personnel licenses and airworthiness certifications;
- non-discriminatory practices regarding airport and air navigation services;
- compliance with regulations regarding air traffic clearances, immigration, customs, and public health; and
- special provisions for aviation security.

The pace of international economic deregulation has been much slower than for domestic markets. Again, the main driving force has been the USA because of the dominant size of the US airline industry. So far, the USA has concluded "Open Sky" agreements with Canada, the Netherlands and Germany, and a similar agreement has long been under negotiation with the Great Britain.

Another significant international issue are the levels of foreign ownership that states allow in their domestically registered carriers. Currently, the most common maximum level is 25% of all common shares with voting rights. This is the current level for US registered carriers, although both the US government and airline industry have suggested a willingness to adjust this level upwards, conditional

upon the easing of access restrictions to the airports of the state of registry of the prospective purchaser.

(3) Airports and Air Navigation Services

As mentioned earlier, the economic regulation of airports and air navigation services primarily relates to the prices charged for aeronautical services and to airport slot allocations.

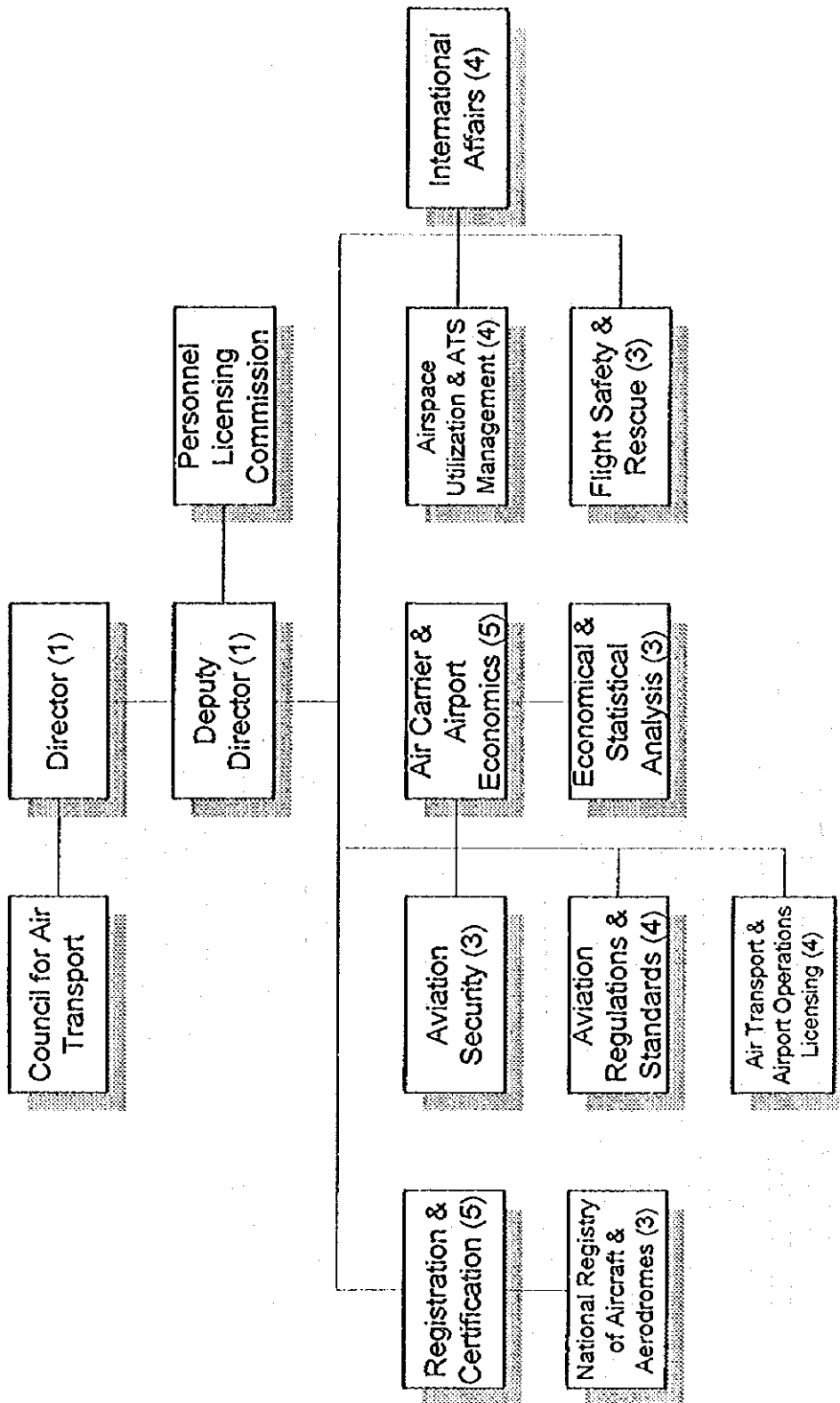
At airports it is common practice to regulate prices for airside services because these are frequently provided on a monopolistic basis either by: the airport corporation, the dominant air carrier, or by contractors to the corporation or dominant carrier. These always include landing, parking and terminal usage services, and may include ground handling and refueling services. The prices of commercial groundside services, such as retailing, hotel accommodation and car parking, are usually not regulated.

Air navigation services can be either terminal (around airports) or enroute (between airports). ANS providers are always natural monopolies because, for reasons of both safety and efficiency, any single portion of airspace can only be managed by one authority at any time. ANS charges are, therefore, invariably regulated. Sometimes, this is done on a regional basis as in the case of Eurocontrol Treaty which covers enroute fees that contracting states agree to provide on a not-for-profit basis.

8.2 Commentary on the Air Transport Regulatory Regime in Kazakhstan

8.2.1 Background

The current condition of the National Air Transport Regulatory System of, Kazakhstan has already been described in 2.3.11. It is evident that the system has been virtually ineffective with regards to both safety and economic regulation. Some marginal improvements have been achieved. These started with the promulgation of a decree which established a de facto National Civil Aviation Law (NCAL) on 20 December 1995. The authorized strength of a reorganized Civil Aviation Department (CAD) was then doubled on 1 June 1996 with a concurrent provision for a possible further expansion and transformation of the CAD into a Committee for Airspace Utilization and Civil Aviation (CAUCA). The new organizational structure for the CAD appears in Figure 8.2.1. The organizational structure for the proposed CAUCA appears in Figure 8.2.2.



Total staffing level 40 persons. Section staff levels appear in brackets

Approved by Prime Ministerial decree of 30 April, 1996

Figure 8.2.1 Organization of the Civil Aviation Department as of June 1996

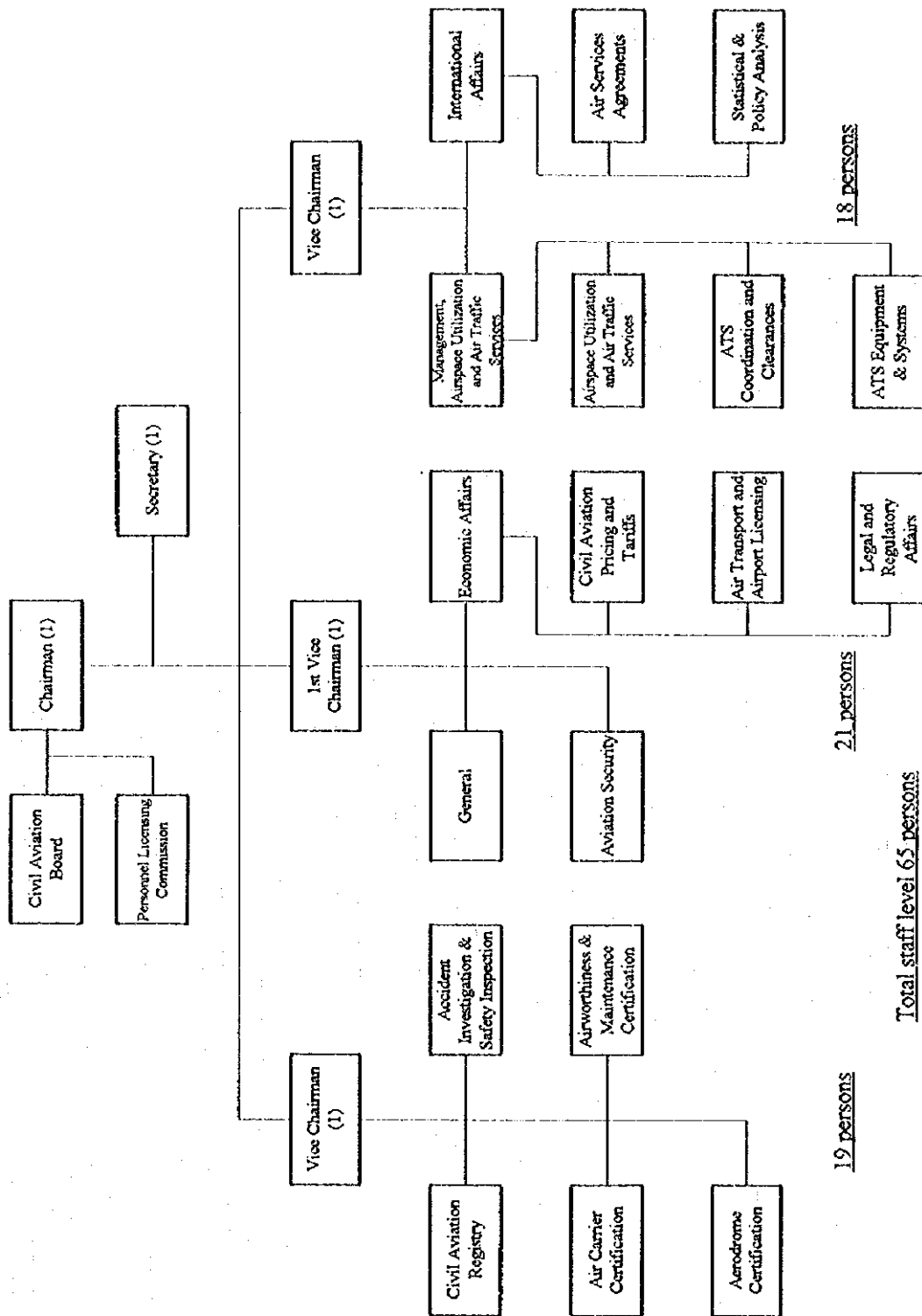


Figure 8.2.2 Proposed Committee on Airspace Utilization and Civil Aviation

8.2.2 General Commentary on the Regulatory Regime

(1) The General Lack of All Resources

The National Air Transportation Regulatory Regime of Kazakhstan is not currently providing the protection described in 8.1 to even minimal standards. This is because it lacks the necessary resources in terms of:

- qualified staff;
- work instruments such as regulations, standards, procedures and guidance material;
- suitable office space, equipment and supplies; and
- a complete and current data base covering the personnel, equipment, facilities, institutions and enterprises that collectively comprise the National Air Transportation System.

The situation has been made worse by the limited effectiveness of the Interstate Aviation Committee which was created in late 1991 and given broad safety regulatory powers over participating CIS states. This body faces similar resource problems as the CAD. These are attributable to the sudden need for 12 former republics of the USSR to establish the complex apparatus of statehood and market economies in conditions of extensive economic, administrative and social disruption.

(2) The Impact of Continued Regulatory Ineffectiveness

While a market economy involves the production and sale of goods primarily by the private sector, this does not mean that government still does not have an important role to play in economic activities. A major prerequisite for an efficient market economy is the existence of a stable, respected, and cost-effective regulatory regimes. Many of the problems afflicting the Air Transport sub-sector of Kazakhstan can be attributed to the lack of such a regime. As will be shown later, an effective regime can and should be small in relation to the universe of personnel, equipment, facilities, institutions and activities being regulated; however, it needs to exist and that is why the Government of Kazakhstan should make its establishment a top priority.

(3) The Value of the Interstate Agreement On Civil Aviation and Airspace Utilization

As described in 2.3.11, this agreement was hastily established between the 12 CIS states at the time of the sudden demise of the USSR in December, 1991 to help ensure the continuance of a safe and orderly air transport activity. While its effectiveness has been inhibited by limited resources, it is basically a sound instrument which essentially fulfills the role of a regional version of the 1944 Chicago Convention, through which the International Civil Aviation Organization

was created.

It is desirable that the implementation of this Agreement should be progressively decentralized from the MAK committee to the regulatory organizations of the participating states. This should be done, however, within the framework of the Agreement to realize the efficiencies to be gained from regulatory harmonization. This issue is discussed in more detail in 8.3.1 (2).

8.2.3 Commentary on the Air Safety Regime

(1) Personnel Licensing Commission

It can be seen from both organizational charts that the Personnel Licensing Commission, by virtue of organizational positioning and/or reporting relationships, is considered relatively more important than other safety regulation functions. This is difficult to understand because a safety regulation regime can only be effective and efficient when all functions are accorded equal importance, and performed in a balanced and well coordinated manner.

(2) Accident Investigation

This function does not appear at all in Figure 8.2.1 and in Figure 8.2.2 it is combined with that of Safety Inspections. It is now widely accepted practice to make aviation accident investigation the responsibility of a completely separate body which is often also responsible for marine and rail accident investigations. This is to help ensure that any investigation will be free from the influence of any concerned parties, even the governmental air safety regulatory agency. Examples of this type of organization are the National Transportation Safety Board in the USA and the Canadian Transportation Safety Board. Both are independent agencies reporting directly to the legislative branches of their respective governments.

(3) Aviation Medicine

As indicated in 2.3.11, there is a huge aviation medicine establishment in Kazakhstan, with a large centre at Almaty and small units at each airport. The total staff strength (physicians, technicians, nurses and others) is estimated at 600 to 800 persons. The scope of medical certification is also very wide in terms of professions covered and frequency of examinations. By contrast, the Civil Aviation Authority of the United Kingdom employs 9 full-time physicians specializing in aviation medicine. These, together with a relatively small group of other professionals, support staff, and inputs from general practitioners, were responsible for a total of 25,402 medical examinations of professional flight crew and air traffic controllers in 1994. They also issued 15,715 certificates for private pilots.

(4) Staff Levels and Salaries

There are only a 13 engineering and flight operations specialists in the CAD to conduct all air safety regulatory functions. Their salaries are US\$ 74 per month or less (October 1996 exchange rates). Employees of Kazakhstan Airlines with similar qualifications and experience earn salaries which are 5 to 14 times higher. With such wide discrepancies in remuneration, any attempt by the CAD to recruit and retain sufficient qualified staff is unlikely to succeed.

8.2.4 Commentary on the Economic Regulatory Regime

(1) Appropriate Levels of Regulatory Intervention

Based on the limited information received to date, it appears that a more interventionist role is envisaged for the CAD regarding economic regulation than is now the case in countries with progressive air transportation sub-sectors. For example, it appears that it may license airport service companies involved in groundside activities such as catering, etc. Current recognized best practices indicate that groundside activities should not be regulated while airside activities, such as ground handling, should only be regulated if delivered by monopoly providers. CAD specialists have already been informally advised to adopt a careful and "minimal intervention" approach to these and other regulatory functions.

The need to very carefully consider the application of tests of public convenience and necessity to domestic air transport service licensing applications has also been brought to the attention of CAD specialists. Such tests have traditionally been applied in terms of frequencies, points served and capacities; however, these are being progressively discontinued by many states as part of the global trend of deregulating domestic air transport operations, which started in the 1978 in the USA. While domestic deregulation is a now a well established international trend, states which have so deregulated still usually require market entrants to demonstrate commercial viability, so-called "fitness tests".

(2) Protecting the National Carrier

Kazakhstan Airlines, the national flag carrier, is virtually bankrupt and has an unenviable reputation for poor service and lax safety practices. In these circumstances, its successor, Air Kazakhstan, will face many difficulties in achieving sustainable commercial viability if it faces unrestricted competition from large established international carriers. It would be appropriate, therefore, for the Government to afford Air Kazakhstan a reasonable degree of protection through the regulatory regime during its formative years. The type of protection, however, should be very carefully crafted. Waiving or allowing low airport and air navigation service charges is not recommended, because this will either adversely affect the economic viability of the providers of those services or result in correspondingly higher charges to foreign carriers. This practice is contrary to widely accepted ICAO principles as per ICAO document 9082/4 "Statements by the Council to

Contracting States on Charges for Airports and Air Navigation Services". The necessary protection should be achieved primarily through provisions in Air Service Agreements with other states by limiting the access, frequencies and payloads of foreign carriers, or requiring revenue sharing by those carriers. Such protection should, however, not be open-ended and be gradually reduced over a predetermined period. In determining its regulatory stance, the Government should balance the needs of:

- affording reasonable protection to Air Kazakhstan;
- encouraging Air Kazakhstan to use the period of protection to improve its competitiveness; and
- minimizing the adverse impacts on other areas of economic activity which may be caused by limiting the access of foreign carriers.

(3) Funding Public Policy Obligations

Kazakhstan Airlines currently operates two-tier airfare pricing system, such that foreigners pay higher fares for the same service than Kazakh nationals. This practice inhibits the carrier's economic efficiency and should be phased out. If the Government wishes the carriers, airports or Kaz Aeronavigation to provide services on an uneconomic basis for public policy reasons then this should be done by direct subsidies from general governmental revenues, rather than requiring the providers to subsidize profitable services from unprofitable services.

(4) Staff Experience

The authorized staff strength of the Air Transport Economics Section of the CAD is 8 persons and the actual strength, as of October 1996, was 7 persons. Of these, only the Section Head has any significant experience, although not within the environment of a market economy. The remaining staff members are mostly recent graduates from various institutes of higher education. As with other governmental employment, remuneration levels are very low making it virtually impossible to attract and retain qualified staff.

8.3 Strategy for Developing the Air Transport Regulatory Regime

8.3.1 Regulatory Trends

In developing an efficient and effective air transportation regulatory regime for Kazakhstan, it is necessary to be mindful of some of the major global trends in regulation generally and in air transportation specifically.

(1) Generic Trends

Many developed countries have embarked on extensive regulatory reform

programs for all economic and social sectors. This has been in recognition of the need to identify and correct any major impediments to improving productivity in terms of both costs, and product quality and quantity.

Major regulatory reform programs have concentrated on:

- identifying, amending or eliminating regulations which are outdated, contradictory or are otherwise serving no longer serving any useful purpose;
- involving industry, consumer groups, professional associations, trades unions and other interest groups in the process of reviewing, amending, terminating, developing and implementing governmental regulations;
- harmonizing regulation by different levels of government in the same sectors;
- finding ways other than legally based actions for controlling and influencing activities;
- applying strict cost benefit criteria when identifying the need for or developing new regulations;
- the use of risk assessment techniques for the most cost effective allocation of regulatory resources; and
- greater use of new technology in regulation, particularly relating to information systems.

All of these initiatives have and continued to be applied by many states in air transportation regulation.

(2) Air Safety Regulation

The most significant trend in Air Safety Regulation is "harmonization". This is the term applied to the collective efforts of a number of states to bring about a greater degree of compatibility in terms of regulatory philosophies, the actual regulations and the application of those regulations. There are considerable efficiency benefits to be gained from harmonization although it requires a considerable will and effort among the participants. This is because many of the established regulatory systems:

- have evolved separately over many years;
- are based on different societal norms;
- are based on different basic legal systems (e.g. common and statute law in the U.S.A, and Great Britain, and the Napoleonic Civil Code in mainland Europe); and
- because none of the participants wish to make any changes that would put their own air transport subsectors at a competitive disadvantage versus those of the others.

The biggest single continuing harmonization effort involves the USA, the states of the European Union and Canada. The European Union states have been working together for some time in Joint Aviation Authorities (JAA) to produce Joint Aviation Requirements (JAR's). Most of these states have aviation manufacturing industries, so not surprisingly, their initial work has concentrated on harmonizing rules for aircraft type certifications and continuing airworthiness. There has been a progression into harmonizing aircraft operations' requirements and personnel licensing.

Other harmonization efforts involve Australia and New Zealand, and the island states of the South Pacific region.

A natural form of harmonization is also taking place within the global air transportation industry by virtue of the fact that many developing countries often adopt the air regulations of major developed states. In particular, the Federal Air Regulations of the USA have been widely adopted.

(3) Economic Regulation

For Economic Regulation, there is only one significant trend and that is deregulation. As already mentioned, this trend is well established for domestic markets but the pace is much slower internationally. There are also some early indications of relaxation's in foreign ownership rules. Within the context of the deregulation trend, states continue to take transitional regulatory measures to protect their national air carriers.

8.3.2 Key Elements of a General Regulatory Strategy

The recommended strategy for developing all Air Transportation Regulation should be based on the following elements:

- compatibility with other transportation modes in terms of regulatory principles and approaches;
- consultation with other sub-sector industry associations, consumer groups, professional associations and other sub-sector interest groups;
- strict application of predetermined cost benefit criteria when identifying the need for or developing new regulations;
- wherever possible, adoption of non-legal approaches for achieving regulatory objectives;
- funding regulatory activities from licensing and certification fees rather than from general governmental revenues derived from taxation; and
- surveying and selectively adopting regulatory methods from other states.

8.3.3 Key Elements of a Safety Regulatory Strategy

The recommended strategy the Safety Regulatory Regime should also include the following elements:

- wherever possible, harmonization and workload sharing with other members of the Interstate Committee on Aviation for the CIS;
- the use of risk analysis to focus monitoring and enforcement activities;
- carefully selected delegation of regulatory functions to industry and other interest groups, based on predetermined criteria for assessing capabilities and with provisions for appropriate monitoring;
- a thorough review of ICAO's SARP's to assess compliance and to file any differences with ICAO;
- establishment of an entity for aircraft accident investigation which is independent of the Civil Aviation Department; and
- adoption of available technology to collect, analyze and disseminate information on air safety incidents and issues.

8.3.4 Key Elements of an Economic Regulatory Strategy

The recommended strategy the Economic Regulatory Regime should also include the following elements:

- a commitment to the regulation of domestic air carrier operations based only on tests of commercial capability (except for transitional provisions to protect Air Kazakhstan);
- non-discriminatory pricing of all aeronautical charges for Airports and Air Navigation Services;
- setting all aeronautical charges for Airports and Air Navigation Services to cover relevant operating and development costs only;
- any cross subsidization of public policy obligations to be phased out and replaced by direct governmental subsidies; and
- any airport regulation limited to airside activities only;

8.3.5 Strategy Implementation - Major Considerations

As has already been mentioned, Kazakhstan has been without an effective air transportation regulatory regime since it became an independent state in late 1991. Many of the problems encountered by its air carriers can be attributed to this

situation and it can be reasonably be assumed that a viable and competitive air transport sub-sector cannot be developed until an effective regulatory regime is in place. Its establishment, therefore, is a matter of some urgency. This means that it is not desirable to allow the regime to evolve over time with the momentum haphazardly dependent on action taken following crises, such as major safety incidents or financial collapses. Not only must it be established quickly but it must become effective quickly. This requires adopting methods already proven elsewhere. Finally, given the dire financial straits of the Government of Kazakhstan and the air transportation sub-sector generally, funding for development of the regulatory regime should come through official development assistance programs.

8.3.6 A Sound Example - Overview of the Civil Aviation Authority of the United Kingdom of Great Britain and Northern Ireland

One of the best examples of a cost-effective air transportation regulatory regime is that operated by the Civil Aviation Authority for the United Kingdom. Most Western European states have regimes which are as effective in terms of service quality, but the UK's regime is the only one in Europe which is fully financed from fees received for those services rather than from general taxation revenues. While it is fully owned by the government it is required to operate using sound business principles.

The UKCAA was originally established in 1971 as a state owned-enterprise and is currently responsible for the following functions:

- the provision of Air Traffic Services in airspace for which the UK has responsibility;
- safety regulation;
- economic regulation; and
- strategic business services.

These functions are each performed by organizationally and financially independent groups within the CAA. In addition to being fully self-financing from fees for services provided, most groups are also required to generate sufficient income to meet targets set by the UK Government. From 1983 to 1988 this target was a return 7% on assets employed. From 1989, it was increased to 8%.

By virtue of their roles, both the Safety and Economic Groups are natural monopolies. To minimize the chances of any monopolistic abuses, such as applying overly stringent rules or charging excessive fees, these groups consult regularly with and receive advice from various air transportation interest groups.

Through its longstanding commitment to sound business practices and ethics, the CAA has been consistently able to:

- provide high quality services to the air transport community;

- contain and frequently reduce the fees levied for those services;
- be completely financially self-sufficient and avoid being a burden on the UK's taxpayers; and
- function with a relatively small but highly skilled, motivated and well remunerated workforce.

For the financial year ending 31 March, 1995, it is noteworthy that both the Safety and Economic Groups not only increased both their outputs and revenues from the previous year, but were also able to reduce their fees. The Safety Group made refunds totalling 9.5% of its revenues while the Economic Group reduced its charges to airlines by 20%.

More complete profiles of the UKCAA's Safety and Economic Groups appears as **Appendix 8.3.6 (1)** and **Appendix 8.3.6 (2)** respectively.

The range of services provided by both groups is greater than would be required for a state at the level of development of Kazakhstan, and the total UK's regulatory universe is also much larger in terms of personnel, equipment, facilities, institutions, enterprises and services. Many of the policies, standards and practices successfully used by the UKCAA could, however, be appropriately adopted when establishing Kazakhstan's regulatory regime.

8.4 Recommendations

The Government of the Republic of Kazakhstan should give the highest priority to establishing a viable Air Transportation Regulatory Regime and use the following approaches:

- emulate a sound model such as the regulatory regime operated by the United Kingdom's Civil Aviation Authority;
- seek outside assistance for expertise and funding, preferably through a program which is already active in regulatory reform in the transportation sub-sector, such as the European Union's TACIS (Technical Assistance to the CIS) program; and
- fully coordinate the establishment of the regulatory regime with the Interstate Council on Aviation and Airspace Usage.

Appearing as **Appendix 8.4 (1)** is a proposal to establish a viable national air transportation regulatory regime for Kazakhstan within a 2 year period, which could then be progressively developed to the highest international standards. The proposal has been prepared in the form of a technical cooperation project funded through an international official development program. It has been laid out so that it can be used as an attachment to a formal request for official development assistance from the Government of the republic of Kazakhstan.

