## **Chapter 3** Acquisition of Aircraft

## 3.1 Acquisition of aircraft by erstwhile Air India (AIL)

#### 3.1.1 Overview

On 30 December 2005, the erstwhile Air India Ltd. (AIL) signed purchase agreements with Boeing and General Electric (GE) for supply of 50 Boeing aircraft (with GE engines) at an estimated project cost of Rs. 33,197 crore:

- 8 B777-200LR ultra long range aircraft (ULR) with a seating capacity of 266;
- 15 B777-300 ER medium capacity long range aircraft (MCLR-A) with a seating capacity of 380; and
- 27 B787-8 (popularly known as "dreamliner") medium capacity long range (MCLR-B) aircraft with a seating capacity of 258.

In addition, Air India Charters Ltd. (AICL)<sup>1</sup> also signed purchase agreements with Boeing and CFM for supply of 18 short range B737 aircraft with CFM engines at an estimated project cost of Rs. 4,952 crore<sup>2</sup>.

## 3.1.2 Chronology of Events

The last fleet acquisition by the erstwhile AIL involved induction of two B747-400 aircraft in 1996. A brief chronology of events related to the current acquisition of aircraft by the erstwhile AIL is indicated below:

Table 3.1 - Chronology of events relating to aircraft acquisition by erstwhile AIL

Date/ Month	Brief Details
December 1996	AlL's proposal for acquisition of 3 A310-300 aircraft was not cleared by MoCA due to reasons like availability of excess A-320 type of aircraft with the erstwhile IAL.
January 2002	Expert committee was constituted by AIL to identify aircraft requirement and prepare fleet plan for 5 year timeframe.
November 2002	Techno Economic and Negotiation Committee (TENC) was constituted by MD, AlL for finalisation of requirement of aircraft.
April/ July 2003	<ul> <li>TENC submitted separate reports for acquisition of:</li> <li>17 (10 on firm basis + 7 on option basis) medium capacity long range aircraft (A340-300 / B777-200 ER); and</li> <li>18 short range aircraft (A320-200 / B737-800).</li> </ul>

<sup>&</sup>lt;sup>1</sup> AICL operates flights under the 'Air India Express' brand.

<sup>&</sup>lt;sup>2</sup> This has not been covered in this performance audit.

Date/ Month	Brief Details
November 2003	After review <sup>3</sup> , TENC submitted a revised report for 18 short range and 10 or 17 long range aircraft on the basis of revised pattern of operations, making NPV positive.  AlL Board approved proposal for acquisition of 10 medium capacity long range aircraft (A340-300) and 18 small capacity short range aircraft (B737-800).
January 2004	AIL submitted project report for acquisition of 28 aircraft to MoCA.
02 August 2004	In a meeting chaired by the then Minister, Civil Aviation it was decided that Air India should revisit the proposal for purchase of aircraft and submit a fresh project proposal to the Government at the earliest which could include the revised requirement.
13 September 2004	Based on the decision taken in the meeting of 2 <sup>nd</sup> August, 2004, as communicated in the Ministry's letter dated 5 <sup>th</sup> August, 2004, the Board of Directors of Air India in its 101 <sup>st</sup> meeting decided that the fleet plan could be revisited in its entirety.
24 November 2004	AIL Board approved a revised plan for acquisition of 50 aircraft for AIL, apart from 18 aircraft for its subsidiary AICL.
03 December 2004	Bids were invited from Boeing and Airbus.
24 December 2004	Technical bids were opened.
26 April 2005	TENC evaluated bids and submitted its report.
	On the same day, AIL Board approved the acquisition of 50 aircraft (35 firm + 15 on option) from Boeing with GE engines.
14 May 2005	Project Report for Gol approval for acquisition of aircraft was submitted to MoCA.
16 June 2005	Price Negotiation Committee was constituted by AIL, with 'in principle' approval of MoCA.
30 June 2005	Presentation was made by AIL to MoCA on aircraft acquisition.
18 August 2005	'Overseeing Committee' was constituted by MoCA to oversee the process of price negotiations with Boeing and GE for acquisition of

 $^{\rm 3}$  Since NPV of 17 long range aircraft was negative on stand-alone basis

Date/ Month	Brief Details
	aircraft; negotiations were held by Overseeing Committee between August 2005 and November 2005
31 August 2005	Pre- PIB (Public Investment Board) meeting was held.
13 October 2005	PIB cleared the aircraft acquisition at a cost not exceeding Rs. 33,197 <sup>4</sup> crore, indicating:
	<ul> <li>that MoCA may evaluate AIL's cost structure and productivity and fix benchmarks for achieving reduction in cost and enhancing productivity;</li> </ul>
	<ul> <li>purchase of 35 on firm basis, and 15 on optional basis, with the decision for exercising the option to be taken by AIL Board, depending on the market situation.</li> </ul>
15 December 2005	CCEA (Cabinet Committee on Economic Affairs) approved constitution of EGoM (Empowered Group of Ministers) for final round of negotiation with lowest bidder.
20 December 2005	Cabinet Secretariat communicated constitution of EGoM.
24 December 2005	EGoM held discussions with the representatives of Boeing <sup>5</sup> and GE.
30 December 2005	PMO (Prime Minister's Office) forwarded a copy of the note of the Chairman, EGoM to the PM on the action taken by the EGoM, where it approved acquisition of 50 aircraft by AIL on firm basis, in addition to acquisition of 18 aircraft by AICL;
30 December 2005	PMO returned the note indicating that the "Prime Minister has seen the note and directed that the Ministry of Civil Aviation may inform CCEA about the finalised transaction".
30 December 2005	MoCA conveyed Gol's approval to AIL.
30 December 2005	On the same day, AIL also signed purchase agreements.
12 January 2006	CCEA noted the contents of the MoCA note apprising them of the EGoM decision on acquisition.
July 2010	20 aircraft (8 B777-200LR + 12 B777-300ER) received; receipt of 3 B777-300ER aircraft deferred at AlL's instance.

<sup>&</sup>lt;sup>4</sup> US\$ 7402.72 million @ Rs.44/US\$ + Rs. 625 crore

<sup>&</sup>lt;sup>5</sup> Who also represented CFM in respect of engines for B737-800W aircraft (for AICL's acquisition)

Our main audit findings in respect of this aircraft acquisition are summarised below.

#### 3.1.3 Undue time taken for acquisition

There is no doubt that the erstwhile AIL desperately needed to acquire new aircraft. Due to lack of timely acquisition, AIL had to induct 13 additional aircraft on dry lease by January 2004. AIL's proposal of December 1996 for aircraft acquisition was not cleared, and a fresh process for acquisition was initiated only in January 2002. Thus, it took nearly eight years (December 1996 to January 2004) when AIL finally came before Government with a firm acquisition proposal. **Such an unduly delayed acquisition process is deleterious for the financial health of a commercial airline.** 

Interestingly, although the original proposal for acquisition of 18 + 10 aircraft took its own time for processing, the revised proposal for acquisition of 18 + 50 aircraft was processed considerably faster, with many activities (e.g. price negotiations) taking place concurrently with (or in anticipation/ advance of) approvals.

The Ministry explained (August 2011) that the delay referred to above, was due to the then prevailing circumstances, viz. shrunk market because of global events (9/11, SARS) and proposed disinvestment of the airline and later on the acquisition was done on priority to arrest the rapid decline of the airlines and the fact that other carriers were increasing capacity. The Ministry further stated that at no point was any activity required in the procurement process constituted in haste or in anticipation of any approval.

We do not agree with the Ministry's reply. While the acquisition took nearly eight years from the first proposal, the revised proposal for acquisition of 18 + 50 aircraft was processed faster.

Further, the Ministry's contention regarding lack of haste in the procurement proposal for 50 + 18 aircraft is not borne out by facts since, as brought out in the chronology of events above. From the approval for the constitution of EGoM by the CCEA, for final round of negotiation with lowest bidder, to the signing of purchase agreement, it took just 16 days.

## 3.1.4 Increase in requirements from 10 + 18 aircraft to 50 + 18 aircraft in 2004

#### 3.1.4.1 Change in number of aircraft to purchase

The erstwhile AIL's project report of January 2004 proposed acquisition of 10 medium capacity long range aircraft (A340-300) and 18 small capacity short range aircraft (B737-800). This, itself, had taken two years to mature.

However, by November 2004, the AIL Board changed their fleet acquisition plan and submitted a revised proposal for acquisition of 50 medium capacity long range/ ultra long range aircraft, in addition to 18 small capacity short range aircraft for its subsidiary, Air India Charters Ltd. (AICL). This analysis to enhance AIL's requirements took just four months (from August to November 2004), after MoCA advised them to "revisit" their proposal.

A chronology of events leading to the substantial change in requirements is summarised below:

Table 3.2 - Chronology of events leading to change in aircraft requirements of AIL

Date	Brief Details of Event
30 October/ 3 November 2003	Letter from 43 member delegation of US Congress regarding AIL's proposed aircraft acquisition forwarded by PMO to MoCA
27 January 2004	PMO forwarded two letters from Boeing (a letter of 17 November 2003 to Secretary, MoCA and a letter of 2 January 2004 to PMO) to MoCA, wherein Boeing indicated that the economics of the acquisition project were strongly dependent on the number of aircraft chosen, and that the technical evaluation could be easily influenced with the change in assumptions on number of aircraft.
19 February 2004	In response to contentions made by Boeing in these letters, AIL intimated MoCA that:
	• Equal opportunity had been given to both suppliers, and the number of long range aircraft had been reduced from 17 to 10 as it was not economically viable;
	• The evaluation was undertaken in conformity with AIL's requirements. The question of giving Boeing a revenue benefit of 7 additional seats (reduced by them to provide the mid cabin galley) did not arise; also, estimation of residual value after 17 years life of aircraft was fraught with risk and the percentage discount offered by Boeing for 10 aircraft was lower than that offered by Airbus;
3 March 2004	Director (S), MoCA intimated PMO that the in-house TENC had evaluated different aircraft types on the basis of identical ground rules, providing fair opportunity to all bidders.
	In addition to highlighting the issues raised by AIL to MoCA, he also stated that AIL had invited offers for 10 firm and 7 optional long range aircraft. Boeing had the opportunity for bringing in scale economics into their offer. After due consideration of economics, the AIL Board had recommended acquisition of only 10 A340-300 aircraft as it felt that acquisition of 17 long range aircraft would not be economically viable.
29 June 2004	Director (S), MoCA recorded on file that there had been some "important developments" as submitted by Secretary, MoCA to the Principal Secretary to PMO that many international carriers were planning direct operations to USA/Canada and the A340-300 aircraft was going out of production in near future. Therefore, AIL needed to

Date	Brief Details of Event	
	review its proposal and consider suitable long range aircraft for its fleet. Further, it was understood that "Minister, Civil Aviation (CA) also impressed upon AIL in a meeting at Mumbai to examine the feasibility of direct India-US/ Canada flights".	
5 July 2004	AS&FA (Additional Secretary and Financial Advisor), MoCA expressed ignorance about the purported note of Secretary, MoCA and stated that:	
	• "I am not aware of the A-340-300 going out of production in the near future, thus calling for a re-look at the choice. The fact that Air India chose to invite offers for this type of aircraft and the Company decided to quote for the same less than a year ago, leads one to think whether Air India chose the right type of aircraft while inviting offers. If the assumption that the aircraft is going out of production is true, Air India is guilty of not having done their homework and the Airbus Company is guilty of unethical business practice in offering an aircraft that is being phased outBut it would be worthwhile to get clarifications on these aspects from both Air India and Airbus Company".	
	• "Minister (CA) in a meeting at Mumbai impressed upon the need for Air India to examine the possibility of non-stop India-US operations. But he never suggested that the present fleet acquisition plan should be dropped and only that option should be examined. Hence, it would not be correct to presume that the new option that would be examined would be 'in lieu of' the existing plan. It could be 'in addition' as well. Of course, if Air India decides to go in for the option of non-stop India-America operations, this would call for a re-look at the present fleet acquisition proposal."	
	Consequently, AS&FA suggested that a meeting (like the one Minister, CA took in respect of IAL) would be in order, wherein the points of view of both AIL and MoCA could be considered, and a consensus arrived at on the future course of action.	
August 2004	<ul> <li>In a meeting on 2 August 2004 taken by the then Minister, Civil Aviation with Secretary, MoCA and CMD, AIL, it was decided that:</li> <li>Air India should revisit the proposal for purchase of aircraft and submit a fresh project proposal to the Government at the earliest, which could include the revised requirements.</li> <li>AI could examine whether the proposal for purchase of short range aircraft for the low cost airline is justified on a stand-alone basis and could be de-linked from the purchase of other types of</li> </ul>	

Date	Brief Details of Event
	medium range and long range aircraft for AI. While doing so, AI should examine whether economics of the proposal for acquisition would be favourable, keeping in view the low-cost and low fare operations envisaged through a separate company. If the proposal is found to be justified and viable, Air India should revert to the Government at the earliest.
	• At this meeting of 2 August 2004, the Chairman and Managing Director (CMD), AIL was of the view that although the present proposal did not fully cater to the requirement of AIL's fleet, the additional requirement of aircraft could be projected separately through a supplementary proposal after due evaluation. However, it was felt that it may not be advisable or prudent to go through the pre-PIB and PIB exercise in two separate stages with two different sets of proposals for such capital intensive projects. It would be desirable to take a total and comprehensive view on the fleet of AIL, keeping in mind its plan and growth for the next fifteen years or so.
	MoCA communicated the above mentioned decisions on 5 August 2004 to AIL and directed them to revisit the acquisition proposal and submit a fresh proposal, which would include revised requirements in view of:
	<ul> <li>New dimension in the competition on the India/USA route with the introduction of non-stop flights through ultra long range aircraft by competing airlines in South East Asia and the Gulf Region. Unless AIL was able to match this product and connectivity by adding suitable aircraft to its fleet (which was not a part of the present proposal), AIL's competitiveness, load factors and revenues were likely to be severely affected.</li> </ul>
	<ul> <li>AIL had decided (May 2004) to launch a 'no frill' airline called 'Air India Express' through a separate company (Air India Charters Limited) to destinations in South East Asia and the Gulf, which would offer lower fare to passengers. Therefore, the current project proposal may not have taken into account the economics of these types of aircraft if operated on low cost basis and with fares that would be 25 per cent lower than existing fares.</li> </ul>
October 2004	CMD, AIL indicated to MoCA that during the AIL Board meeting of 13 September 2004, some Board members indicated that in view of MoCA's advice, the fleet acquisition programme needed to be revisited in its entirety (including examination of other aircraft types, apart from B737-800, for small capacity short range aircraft). CMD, however, felt that the B737-800 project should be delinked and

Date	Brief Details of Event
	studied separately and was to be submitted under the banner of AICL. CMD sought MoCA's clarification in this regard.
	MoCA sought clarification from CMD, AIL as to whether the B737-800 aircraft was selected after carrying out the required comparative evaluation on stand-alone basis. AIL confirmed the selection of B737-800 aircraft after comparative evaluation on stand-alone basis.
18 November 2004	Director (S) noted that "strictly speaking, it is for the AI Board to take a view in the matter. As far as Ministry's advice is concerned, there is a suggestion that AI needs to take a total comprehensive view on its fleet, keeping in mind its plans and growth for the next 15 years or so".
	Consequently, a clarification was issued along these lines, with the approval of Minister, Civil Aviation, to AIL.
24 November 2004	AlL Board considered and approved a revised long term fleet plan for 50 aircraft (two thirds on firm basis and one-third on option basis), apart from 18 aircraft for its subsidiary, AICL. This process of revision took only four months!

The above sequence of events clearly demonstrates that the erstwhile Air India was advised to revisit its proposal by MoCA into expanding its requirement of aircraft. Whilst their earlier proposal for 28 aircraft had taken two years (from January 2002 to January 2004) to prepare and submit, the revised long-term fleet for 50 aircraft<sup>6</sup> plan was completed in four months (from August to November 2004)

The Ministry did not agree (August 2011). It stated that it never suggested to AIL to drop the present acquisition plan and to pursue a particular option. It was the Air India Board which resolved to acquire 35 aircraft, with 15 on optional basis. This position was reiterated by the Ministry during the exit conference (August 2011).

The Ministry's position is not tenable. The sequence of events brought out in Table 3.2 – "Chronology of events leading to change in aircraft requirements of AIL" clearly brings out the role played by the Ministry in the erstwhile AIL's proposal being revised from 10 long range aircraft to 50 long range aircraft.

A comparison of the underlying assumptions for the original and revised proposals reveals the following position:

<sup>&</sup>lt;sup>6</sup> In addition to 18 short range aircraft intended for its subsidiary, AICL

Table 3.3 - Comparison for 18 small capacity short range aircraft of AIL/
AICL

Assumption/ Parameter	Original proposal for 18 short range aircraft (AIL)	Revised proposal for 18 short range aircraft (AICL)
Seating	146 seats (138 economy + 8 executive class)	181 seats (all economy)
Frequencies (per week)	124	229
Aircraft utilisation (hours/ day)	8.2	12.7
Available Seat Kms (ASKMs) p.a.	5,379	10,158
Passenger Load Factor (%)	68.1	70.3
Deployment	India-Singapore, near Gulf	India-Gulf, India-SE Asia, domestic routes for AIL's hub and spoke
Net aircraft cost (US\$ million)	858.76	843.14

By contrast, there was a massive change in assumptions in respect of medium capacity long range aircraft, as summarised below:

Table 3.4 - Comparison of original and revised proposals for long range aircraft (10 versus 50)

Assumption/ Parameter	Original proposal for 10 medium capacity long range aircraft	Revised proposal for 50 long range aircraft
Aircraft	10 A340-300	ULR (B777-200LR) – 8 MCLR-A (B777-300ER) – 15 MCLR – B (B787-8) - 27
Seating	272	266/ 380/ 258
Frequencies (per week)	45	303
Aircraft utilisation (hours/ day)	14.0	14.6
Available Seat Kms (ASKMs) p.a.	10,780	62,667

Assumption/ Parameter	Original proposal for 10 medium capacity long range aircraft	Revised proposal for 50 long range aircraft
Passenger Load Factor (%)	79.6	62.7 – 76.3
Deployment	Chicago (via-London), Newark (via Paris), New York (via Frankfurt), India/ Saudi Arabia	ULR – Non-stop to USA MCLR- A – USA/Canada via intermediate points and terminator services to London MCLR-B – UK/ Europe, Saudi Arabia, Africa, East Asia, SE Asia, Australia, premium markets in Gulf/ SE Asia
Net aircraft cost (US\$ million)	1104	6149
Net cost/ aircraft (US\$ million)	110	ULR (B777-200LR) – 133 MCLR-A (B777-300ER) – 150 MCLR-B – (B787-8) 105

Clearly, there was a massive inflation of aircraft requirement (frequency, destinations, and types of aircraft) between January 2004 and August 2004, which is inexplicable (considering that such a dramatic shift in market requirements/ conditions could not reasonably have occurred in such a short period of time).

# 3.1.4.2 Flawed Assumptions underlying revised project report (50 long range aircraft)

In our opinion, many of the key assumptions underlying the revised project report for acquisition of 50 long range aircraft (as against 10 long range aircraft envisaged earlier) were flawed or unduly optimistic:

• As depicted in the preceding table, a massive increase in frequencies, ASKM and destinations were projected, without adequate justification for the increase in such a short period of time (between January and November 2004). Out of the 50 aircraft being acquired, 27 were intended as replacement and 23 as incremental. The logic being that expanding capacity faster than the market / competitors would enable AIL to grow and increase market share, since the market to/ from India was booming. The assumption that increase in capacity share would automatically lead to an increase in AIL's market share (projected increase from 19% to 30% by 2012-13) was not adequately validated.

This leads Audit to agree with the observation thus made by the Department of Expenditure that 'a purely supply side response would run into huge demand side risks' (Table 3.5). Department of Expenditure obviously had reservations and felt the PIB proposal was 'supply driven'.

- Revenue estimates were made on the basis of one-time yield increase, at constant costs, of 5 per cent on all classes<sup>7</sup>. Further, the core feature of the revised project report was acquisition of 8 Ultra Long Range (ULR) aircraft for providing non-stop services to Chicago/ New York; a further one-time yield increase of 10 per cent (at constant cost) for non-stop services to New York and Chicago was assumed, which, in our opinion, was unduly optimistic. In reality, even prior to this acquisition, the India-USA sector was historically a loss-making sector, and this trend of commercial unviability continued even with the introduction of non-stop India-USA flights.
- As per the original proposal (for 28 aircraft), the AIL Board reduced the requirement of long range aircraft from 17 to 10, as the NPV for 17 long range aircraft on stand-alone basis was negative. By contrast, the revised TENC Report (April 2005) for 50 aircraft had a negative NPV for the 15 B777-300ER aircraft. By the stage of the revised project report (May 2005), this became a positive NPV of Rs. 98 crore (mainly due to inclusion of "commonality benefit" through fleet acquisition of different variants of Boeing aircraft).
- Long term traffic growth rate of 7 to 8 per cent was assumed (although the average growth rate during 1998-2004 was only 6.5 per cent); this was also unduly optimistic.

Whatever chances AI had of increasing market share through increased capacity share were severely hampered by the MoCA's decision to liberalise bilateral entitlements from 2005 onwards, benefiting airlines/ countries with huge proportion of 6<sup>th</sup> freedom traffic and giving inadequate lead time for AI (after delivery of the aircraft) for gearing itself up for competition. This is brought out subsequently in the Report.

The Ministry in their reply (August 2011) stated that market share was not a complete index of an airline's performance. In 2004-05, Air India was in no position, with its existing complement of aircraft, to even hold on to its market size, leave alone market share.

The Ministry's reply, however, did not offer adequate explanations as to the flawed assumptions underlying the acquisition proposal, as pointed out by us.

#### 3.1.5 Comments/concerns of other stakeholders

At the pre-PIB Meeting (August 2005), the representatives of the Planning Commission and Department of Expenditure (DoE) expressed several concerns:

<sup>&</sup>lt;sup>7</sup> In the original project report (January 2004), a yield increase of 5 per cent in economy class and 20 per cent in first/ executive classes had been assumed.

Table 3.5 - Comments of appraising agencies

## Planning • Concerns Considering the past trends, the assumptions made by AIL Commission regarding traffic projections were risky and the upgradation appeared to be very ambitious, as statistics of the Directorate General of Civil Aviation (DGCA) did not suggest the kind of growth assumed in the Project Report. The Project Report assumed substantial increase in long haul traffic and the proposed increase in market share from 19 per cent to 30 per cent would only be possible, if 10 to 12 per cent rate of growth was achieved. It was not clear how the policies of the Government relating to this sector would fuel such growth. Internal rate of return with fuel cost at current prices was only 6.2 per cent. This was tantamount to skating on thin ice, especially when traffic growth was not guaranteed. Concerns of Department • The assumption that enhancement of capacity would of Expenditure necessarily lead to higher market share may not be tenable beyond a point. Consequently, a purely supply side response would run into huge demand side risks. The high traffic growth projections, therefore, needed careful consideration since project viability was highly sensitive to reduction in traffic yield.

However, citing shortage of time, the pre-PIB meeting (August 2005) could not discuss the response of AIL on the above concerns. MoCA decided to directly include the response of AIL on these observations in the draft note for the PIB meeting (October 2005). 'Shortage of time' is inexplicable.

AlL responded to the concerns of DoE by stating that market share could be increased by increasing capacity. In our view, this was surprising as the market share of AlL had, in fact, remained static from 19.5 *per cent* in 1999-00 to 19.4 *per cent* in 2003-04, despite increase in the fleet size from 23 aircraft to 35 aircraft during the same period.

## 3.1.6 PIB approval

Despite the concerns expressed by the Planning Commission and the DoE at the pre-PIB stage (August 2005), the PIB finally approved the purchase of 50 aircraft (35 on firm basis and 15 on option basis) for AIL at a price not exceeding Rs. 33,197 crore<sup>8</sup> (besides 18 aircraft for AICL at Rs. 4,952 crore). The decision for exercising the option for 15 aircraft was to be taken by the board of AIL depending on market situation.

<sup>&</sup>lt;sup>8</sup> Based on an exchange rate of Rs. 44 per US\$.

Further, MoCA was directed by PIB to evaluate AIL's cost structure and productivity and fix benchmarks for achieving reduction in cost and enhancing productivity. In fact, DoE also observed, in December 2005, that the steps proposed to be taken for cost reduction and enhancing productivity in AIL may be clearly indicated by MoCA in the final CCEA note. However, MoCA simply indicated in the CCEA note that a Committee would be set up by the Ministry to evaluate the cost structure and productivity. In response to audit, in February 2011, MoCA expressed apprehension to implement any reduction in employee cost on the ground of avoiding industrial unrest.

The Ministry's reply (August 2011) stated that the concerns of the Planning Commission were taken on board. With respect to the DoE which had similarly raised concerns about the market share, this was evaluated in the Project Report and only then did DoE officials recommend the proposal for acquisition of 35 aircraft on firm basis and 15 on option basis to the PIB.

#### 3.1.7 Negotiation Process

A multiplicity of negotiating procedures was adopted with regard to the acquisition process:

• With the 'in principle' approval of MoCA, CMD, AIL constituted a Price Negotiation Committee (PNC)<sup>9</sup> in June 2005 to hold price negotiations with the concerned airframe/engine manufacturer to negotiate the terms and conditions to be incorporated in the purchase agreement, without any commitment to the manufacturer till the receipt of GoI approval for the acquisition project.

The appointment of a price negotiating committee even before the pre-PIB meeting (let alone PIB approval) was surprising. The only possible explanation could be "expediting" the acquisition process. However, no such haste was shown till the aircraft requirements were revised upwards from 10 long range aircraft to 50 long range aircraft.

- In August 2005, MoCA constituted an Overseeing Committee<sup>10</sup> to oversee the process of price negotiations. The negotiations held between August 2005 and November 2005 resulted in reduction of Rs. 539 crore in the net project cost of 50 aircraft.
- After consideration of the proposal, CCEA approved constitution of an Empowered Group of Ministers (EGoM)<sup>11</sup> for "one final round of negotiations" with the manufacturers to finalise the transaction; this was based on a letter by the Minister, Civil Aviation to the Prime Minister on the lines of the EGoM set up earlier in respect of the IAL acquisition. These negotiations were held on 24 December 2005.

<sup>&</sup>lt;sup>9</sup> The members of the PNC were Director-Engineering, Director-Operations, Director-Finance, Director-Material Management and Director-Planning and International Relations of AlL.

<sup>&</sup>lt;sup>10</sup> Chaired by Late Shri CG Somiah and including Secretary, Civil Aviation and Secretary (Expenditure), MoF

<sup>&</sup>lt;sup>11</sup> Chaired by the then Finance Minister, and including the then Minister, Law & Justice, the then Minister, Statistics & Programme Implementation and the then Minister, Civil Aviation

Table 3.6 - Concessions obtained by EGoM in respect of AIL fleet acquisition

(Rs. in crore)

Particulars	AIL	AICL
Boeing additional cash concessions	198.11	17.50
GE additional cash concessions	19.69	NA
Boeing additional special financing credit	134.32	
Escalation capping	629.02	20.03
GE additional credit for purchase of tools/equipments	15.40	NA
Training Simulators	330.00	
Investment in MRO	440.00	
Investment in Training & other civil aviation matters	44.00	
Total value of concessions	1810.54	37.53

*NA*—*Not Applicable* 

In addition, the following conditions were also stipulated:

- Improved aircraft specifications of the B787-8 aircraft up to the date of certification and of B777-200 LR and B777-300 ER aircraft up to a period of 18 months after the signing of the purchase agreement to be provided by Boeing to AlL free of cost.
- Inclusion of "integrity" and "most favoured" clauses in the agreement for AIL by Boeing.
- Counter trade/off-set at 30 per cent of the net cost offered by both Boeing and CFM/GE

The Chairman of the EGoM submitted a note to the Prime Minister on the conclusions arrived at and concessions obtained by the EGoM based on its discussions with Boeing and GE on 24 December 2005. On 30 December 2005, the PMO enclosed the note of the chairman, EGoM to Secretary, MoCA indicating that the PM had seen the note and directed that MoCA may inform CCEA about the finalised transaction. Subsequently CCEA took note of these actions on 12 January 2006. On the same day (30 December 2005), MoCA conveyed approval of GoI to AIL for acquisition of 68 aircraft on firm basis (50 aircraft for AIL with GE engines and 18 aircraft with CFM engines for its subsidiary, AICL, on the basis of the terms and conditions negotiated by the EGoM), involving cash concessions and special financing concessions estimated at Rs. 1848.07 crore as summarised in table 3.6. above. This showed remarkable promptness in all Departments.

AIL and AICL signed the purchase agreements with Boeing and GE/ CFM on the same day (30 December 2005).

To enable effective price negotiations, it is normal (and was also necessary) to make an assessment through commercial intelligence gathered globally to assess a reasonable or threshold price (based on comparable prices paid by other buyers and other factors). However, no benchmarks for the cost of the aircraft were set by AIL/ MoCA before negotiations were initiated with the manufacturers at various levels. Consequently, in the absence of such benchmarks, the effectiveness and efficiency of negotiations and the price arrived at is difficult to ascertain.

The Ministry replied (August 2011) that the Overseeing Committee was constituted so as to comply with the requirement for commercial intelligence and having benchmarks. It also stated that the Purchase Agreements were signed on 30 December 2005, as the price offers were valid only upto 31 December 2005.

The reply is not tenable as we could not see evidence or documentation of the Overseeing Committee obtaining commercial intelligence regarding comparable acquisitions undertaken by other airlines during the same period. Nor did we find records of any benchmarks set for negotiations. As regards the Ministry's claim regarding expiry of offers on 31 December 2005, it is a globally accepted phenomenon that when approval processes are at an advanced stage, extension of 1-2 weeks is invariably sought for, and obtained.

## 3.1.8 Reconfiguration of seats in November 2005

During the negotiation process, the configuration of seats was revised in November 2005. This is certainly irregular.

- The proposed configuration of seats on the B777-200LR and B777-300ER was discussed at a meeting with the then Minister, Civil Aviation on 12 November 2005. It was decided that "in the context of the fiercely competitive aviation scenario, AIL should provide the best possible product in terms of seat comfort, in-flight entertainment systems and other passenger amenities on the new aircraft". Accordingly, the seating capacities of the B777-200LR and B777-300ER aircraft were reduced by 28 seats and 38 seats respectively.
- It was also noted that the then Commercial Director, AIL<sup>12</sup> had confirmed that in the Executive Class, AIL should be able to achieve a further yield increase of 5 per cent on both aircraft, provided that "there is no substantial increase in competitive pressures and all other aspects of the AI product offering meet prevailing global standards".
- The revised seat configurations were finalised and intimated by AIL to Boeing, and were only subsequently submitted for the AIL Board's information (not approval)<sup>13</sup>. Even the GoI/ EGoM was not informed (as per documents made available to us) of this change in seat configuration.

<sup>&</sup>lt;sup>12</sup> Shri VK Verma

<sup>&</sup>lt;sup>13</sup> It is not clear whether this revision of seat configuration was concurrent with the negotiations undertaken by the "Overseeing Committee" between August and November 2005.

In response to an audit enquiry, AI stated (August 2010) that two Joint Secretaries of MOCA were on the AIL Board and, therefore, only issues requiring approval of GOI were referred to the latter and further added (September 2010) that:

- Revision in seat configuration showed marginal improvement in profitability and, hence, the Project Report submitted to the GoI was not amended.
- The selection process involved pre-defined like-with-like comparison of competing aircraft and improvements were only made with respect to the selected product, *i.e.*, Boeing aircraft in this case. The revised seat configuration provided a possibility for an increase in the cargo carrying capability of the aircraft.
- Aircraft evaluation and selection followed the guidelines of MoCA and the Central Vigilance Commission (CVC) guidelines.

The Ministry endorsed (February 2011) the reply of Al.

In our view, this post-bid change in the seat configuration during the negotiation process was irregular, and adversely affected the transparency of the negotiation process. The assumption of further yield increase was also of doubtful reliability, considering the caveats attached by the then Commercial Director of AIL. These, in any case, are technoeconomic decisions which should be taken at the airline level and not at the Ministry's instance.

The Ministry in its reply (August 2011) stated that MoCA only suggested that AIL should have best product in terms of seat comfort, etc. in a competitive scenario and the decision was mainly taken by AIL, based on the increase in the revenue projected. It also added that the Government Director on AIL Board had suggested for a fresh look by the Chief Vigilance Officer (CVO).

The reply is not tenable as the post bid seat re-configuration (November 2005) lacked transparency. As regards projected increase in revenue, the preliminary analysis for the seat changes based on the methodology adopted in the Project Report indicated significant reduction in estimated passenger revenue and overall revenues, and the higher revenues were projected only by assuming additional 5 per cent yield increase in the Executive class. Further, no reference was made by AIL to CVO despite the Government Director's suggestion.

## 3.1.9 Option for 15 aircraft dispensed with

Till EGoM's recommendation, the fleet acquisition for AIL was premised on only 35 aircraft on firm basis, with 15 aircraft on option basis<sup>14</sup>:

<sup>&</sup>lt;sup>14</sup> In addition to acquisition of 18 small capacity short range aircraft by AICL.

- The PIB specifically recommended acquisition of 35 aircraft on firm basis, and 15 aircraft on optional basis, with the decision for exercising the option for 15 aircraft to be taken by the AIL Board depending on the market situation.
- This approach was also specifically recommended by both the Planning Commission and the Department of Expenditure at the pre-PIB stage.
- This was also highlighted specifically by the AS&FA, MoCA during the PIB meeting.
- The sensitivity analysis carried out on the recommendation of PIB (to estimate the impact of negative variation of 5 per cent in some important assumptions e.g. revenues, fuel prices, salaries and project cost) showed positive NPV with the option clause.

In response, MoCA stated (February 2011) that it had placed a note for consideration of the Cabinet of Ministers for acquisition of 35 aircraft on firm basis and 15 on option basis for AIL. However, the Cabinet decided to have price negotiations with the manufacturer, and accordingly, the EGoM was set up. The EGoM, after negotiations with the manufacturer, obtained cash concessions and other benefits for all the 68 aircraft, and decided to place a firm order, and this was communicated to the airline *in toto*.

## 3.1.10 Financing of acquisition

Due to delays of 117 to 331 days in provision of GoI guarantee, AIL and AICL had to avail of bridge loans as a stop-gap arrangement to make necessary pre-delivery payments. Since these bridge loans carried a higher rate of interest than that envisaged, AIL and AICL paid additional interest of Rs. 199.37 crore and Rs. 21.34 crore respectively.

In response, MoCA stated (February 2011) that the proposal for GoI guarantee was examined by the various Ministries, and the whole process involves examination/ checks at various levels. However, it endeavoured to finalise and extend the sovereign guarantee as quickly as possible. There should be accountability for such delay which cost the Company Rs 220 crore.

The Ministry accepted (August 2011) the delay and stated that it was on account of procedural formalities.

#### 3.1.11 Delayed delivery of aircraft

Against the 50 aircraft to be delivered only 20 aircraft (8 B777-200LR and 12 B777-300ER aircraft have so far (June 2011) been delivered; delivery of the remaining 3 B777-300ER aircraft has been deferred at the instance of Al. However, the delivery of all the 27 B787-8 (dreamliner) aircraft, scheduled between September 2008 and October 2011, is still to take place, and has been rescheduled from October 2011 onwards. As regards compensation for delayed deliveries, MoCA stated (February 2011) that after negotiations, Boeing had agreed for compensation, which works out to nearly \$ 500 million, and that the matter was further being discussed with Boeing.

## 3.2 Acquisition of aircraft by erstwhile IAL

#### 3.2.1 Overview

In February 2006<sup>15</sup>, the erstwhile Indian Airlines Limited (IAL) signed purchase agreements with Airbus/ CFM for supply of 43 Airbus aircraft (with CFM engines) at an estimated cost of Rs. 8399.60 crore<sup>16</sup>:

- 19 A319 aircraft (seating capacity of 122);
- 4 A320 aircraft (seating capacity of 140); and
- 20 A321 aircraft (seating capacity of 172).

## 3.2.2 Chronology of events

The last fleet expansion of IAL was completed in 1994, with the induction of 30 A320 aircraft over the period 1989-94. A brief chronology of events related to the current acquisition of aircraft by the erstwhile IAL is indicated below:

Table 3.7 - Chronology of events for Acquisition of 43 aircraft by IAL

Timeline	Brief Details	
October 1996	In-house task force (Aircraft Evaluation Committee) set up by IAL undertook evaluation of various types of aircraft for selection and purchase.	
April 1999	GoI decided to make an equity contribution of Rs. 325 crore to IAL in phases, linked to acquisition of aircraft and subject to improved productivity and better working results.	
April – June 1999	IA approached MoCA for acquisition of more technologically advanced and efficient aircraft for replacement of old/ leased aircraft and for capacity enhancement to regain market share.  Aircraft Evaluation Committee shortlisted 15 aircraft types (9 Boeing + 6 Airbus) of both narrow-bodied and wide-bodied types, and identified six types of aircraft for detailed technical, operational and financial analysis. Commercial offers were invited for these six aircraft types, but the offers were not opened due to General Elections.	
December 1999	IAL Board finally shortlisted 9 types of narrow-bodied aircraft <sup>17</sup> .	
July/ August 2000	Technical and financial bids were invited, and received, from Boeing and Airbus.	

<sup>&</sup>lt;sup>15</sup> Pursuant to Gol approval in September 2005, and issue of Letter of Intent in December 2005.

<sup>&</sup>lt;sup>16</sup> US\$ 1826 million at an exchange rate of 1 USD= Rs. 46

<sup>&</sup>lt;sup>17</sup> The IAL Board approved inclusion of 3 aircraft types, but decided to invite offers for all 9 narrow body types, to maintain an element of competitiveness.

Timeline	Brief Details			
March 2001	Aircraft Evaluation Committee completed techno-economic analysis of offers, and submitted its report to CMD, IAL.  Evaluation report was not processed further, due to ongoing process of disinvestment of IAL.			
December 2001	IAL invited revised financial bids, in view of the possibility of obtaining lower prices in the aftermath of the 9/11 incident in the United States.  IAL evaluated various combinations/ sets of Boeing and Airbus narrow-bodied aircrafts in the range of 95-200 seats.			
March- April 2002	IAL Board approved acquisition of 43 aircraft (fitted with CFM engines) comprising 19 A319 aircraft (122 seats), 4 A320 aircraft (145 seats) and 20 A321 aircraft (172 seats) for delivery between 2002-03 and 2007-08 at an estimated cost of Rs. 10,089 crore <sup>18</sup> , and submitted its project report to MoCA.			
June 2002	Draft PIB memo was submitted to MoCA.			
Up to April 2003	Matter was not processed further, as IAL was on the list of PSUs to be disinvested. In April 2003, Cabinet Committee on Disinvestments decided to take IAL out of the PSUs to be disinvested.			
April – June 2003	2 (two) pre-PIB meetings held.			
October 2003	MoCA forwarded draft PIB note for consideration of appraising agencies (DoE, Planning Commission, etc.)			
December 2003	Note for PIB forwarded by Planning Commission to MoCA.			
January 2004	PIB meeting scheduled did not take place, due to impending General Elections.			
June/ July 2004	MoCA sought CVC "clearance" for negotiation with L-1 bidder (Airbus). CVC informed MoCA that negotiations with L-1 bidder were permitted.			
July-October 2004	IAL (at the request/ direction of MoCA) reviewed the proposal due to lapse of time and requirement of wide-bodied aircraft for future international operations. However, it reiterated its existing proposal for 43 narrow-bodied Airbus aircraft.			
November 2004	PIB approved the acquisition proposal.			
December 6, 2004	IAL constituted an inter-disciplinary Negotiation Committee to take up "final" negotiations with the L-1 bidders (Airbus and CFM).			

<sup>18</sup> US\$ 2014 million plus Rs. 224 crore

Timeline	Brief Details			
December 14, 2004	'Overseeing Committee' was constituted by MoCA to oversee process of price negotiations and to 'guide' the Negotiat Committee; negotiations were held by Overseeing Commit between December 2004 to March 2005.			
August 2005	CCEA constituted EGoM for one final round of negotiations with L-1 bidders.			
September 6, 2005	EGoM held final negotiations with the representatives of Airbus and CFM.			
September 29, 2005	Government conveyed its approval to IAL for acquisition of 43 Airbus aircraft.			
December 16, 2005	Letter of Intent/ Term Sheets were signed between IAL and Airbus.			
February 2006	Purchase agreements were signed between IAL, Airbus and CFM.			
October 2006 to April 2010	All 43 Airbus aircraft were received in time (against the stipulated delivery schedule of November 2006 to April 2010).			

## 3.2.3 Undue time taken for acquisition

IAL's aircraft acquisition process took almost ten years from October 1996 (when an inhouse aircraft evaluation committee was constituted) to February 2006 (when the purchase agreements were finally signed). This enormous timeline spanned two General Elections (1999 and 2004) as well as an extended delay, when IAL was considered for disinvestment.

The Ministry noted the position (August 2011), but referred to a "two-faced" argument by audit regarding delayed acquisition process on the one hand, and nudging the airline to expedite the process on the other hand. The Ministry's claims regarding audit's arguments are not relevant, as our comments pertained to the AIL acquisition and not the IAL acquisition.

## 3.2.4 Flawed underlying assumptions

IAL had initially (1999) shortlisted 9 narrow-bodied aircraft, divided into small (95-125 seats), medium (125-150 seats) and large (150-200 seats) categories, which were taken up for detailed evaluation. A total of 54 possible combinations/ sets were evaluated on the basis of traffic forecast on each route (113 routes as per winter 2001 schedule) over a period of five years (2003-08). The project cost, cash flows, NPV (Net Present Value) and weightage were computed for each combination. Ranking of various sets of aircraft was done on a 100 point scale, with 95 points for NPV of funds flow and 5 points for non-quantifiable parameters.

NPV of fund flows of all 54 sets of aircraft at a discount rate of 8 per cent over the economic life of the project of 15 years was negative, assuming constant cost and revenue yield at 2001-02 levels. NPV of the selected set (L-1) was also (-) Rs. 2,632 crore.

Consequently, in March 2002, IAL projected an increase of 6 per cent in domestic fares in the first year (2003-04) and further increases of 2 per cent per annum for 4 years (2004-05 to 2007-08), evidently to make the negative NPV positive. The NPV of the selected set (at a discount rate of 8 per cent) became (+) Rs. 1,539 crore. This unrealistic assumption of dramatic increases in yield at constant costs (i.e. while assuming costs – fuel, staff, interest and other costs etc. to be constant throughout the project life) was critical to projecting an optimistic picture of positive project cash flows on NPV basis, and to the approval of the acquisition project. In fact, even obtaining constant yield at constant costs would have been a major challenge for IAL, given the cost profiles/ trends of the organisation and future uncertainties<sup>19</sup>.

While clearly IAL desperately needed to acquire new aircraft to replace its ageing fleet and reduce its dependence on leased aircraft if it was to continue its operations as a "going concern", a limited acquisition of aircraft, while acknowledging its negative cash flows, would have been more appropriate. Such a limited acquisition, with options for additional aircraft, was also suggested by the Planning Commission and Department of Expenditure in the initial stages of appraisal, but not pursued further.

In practice, IAL was obviously unable to achieve such dramatic increases in yield at constant costs:

- Besides dramatic increases in fuel and staff costs, the actual increase during 2007-08<sup>20</sup> on 10 domestic routes test checked by us was only due to fuel surcharge, and not due to any increase in the basic fare.
- The percentage of cost to revenue increased from 99 per cent in 2004-05 to 152 per cent in 2009-10.
- During the period from 2006-07 (when aircraft delivery commenced) to 2009-10, the total revenue declined by 25 per cent from Rs. 7,196 crore to Rs. 5,372 crore. In fact, when IAL increased the basic fare in 2008-09 by 21 per cent, PLF dropped by 8.65 per cent and revenue declined from Rs. 7,196 crore to Rs. 5,564 crore.

Thus, IAL could not even achieve constant revenues at constant costs, let alone increased yields at constant costs; this was to be expected, considering the wholly unrealistic nature of the assumption. This factor, though overstated by the airline, should have been questioned by the Government.

<sup>&</sup>lt;sup>19</sup> ATF fuel prices had increased from Rs. 13,540/ KL in November 2001 to Rs. 30,608/ KL by April 2005.

<sup>&</sup>lt;sup>20</sup> The first full year after commencement of delivery of new aircraft (October 2006).

Even the discount rate of 8 per cent adopted for calculating NPV was optimistic (coupled with the assumed increases in yield). IAL was forced to borrow funds from IDBI at effective rates ranging from 11.25 to 11.75 per cent.

In response (February 2011), AI stated that:

- Its expansion plan was completely reasonable, as otherwise the airline would have, by this time, become an irrelevant player in the market, as globally an airline's capacity share dictates its market share.
- 'Air India' had reversed the trend of continuous decline in domestic market share, and recorded domestic passenger market share of 17.7 *per cent* in 2009-10 against 16.9 *per cent* achieved in 2008-09; further, the market share of erstwhile IAL had been gradually increasing since 2004-05 in line with increase in the domestic market.

## MoCA stated (February 2011) that:

- There was requirement for more aircraft (over and above 43 aircraft) to meet the traffic demand.
- The older aircraft were not preferred by the passengers, and they had higher maintenance cost. Also, it was difficult to compete with other airlines without newer aircraft.
- Most of the 43 aircraft purchased were in the nature of replacements, and were purchased in one lot to avail of concessions.

We do not subscribe to this viewpoint, for the following reasons:

- Despite an increase in fleet strength from 67 aircraft (March 2005) to 97 aircraft (March 2009), IAL's market share declined precipitously from 37 per cent in 2004-05 to 16.9 per cent in 2008-09, and only increased marginally to 17.7 per cent in 2009-10.
- During 2004-10, the increase in Available Seat Kilometres (ASKM) was only a marginal 10 per cent, despite increase in available seats by 59 per cent. Consequently, the increase in Passenger Load Factor (PLF) from 64.4 per cent in 2004-05 to 68.5 per cent in 2009-10 was based on a much lower level of ASKMs, and, therefore, did not indicate a dramatic improvement in commercial performance.

In the exit conference (August 2011), the Secretary MOCA admitted that it was the conscious policy decision of the Government, even while they knew fully well that the Net Present Values (NPV) was negative.

If indeed, GoI/ MoCA was keen on, or agreeable to, a full-scale aircraft acquisition by IAL in the public/ national interest, it should have acknowledged that such an acquisition would involve substantially negative cash flows, based on realistic and reasonable assumptions and considered and approved appropriate arrangement for funding the resulting cash deficit. The "footprint" of IAL, and the corresponding fleet acquisition plans,

should have been appropriately tailored in line with the deficits/ funding that GoI, as the ultimate owner of IAL, was willing to bear.

#### 3.2.5 Concerns within MoCA

In fact, concerns regarding potential difficulties of IAL in successfully funding the acquisition with a positive NPV had been raised within MoCA. In 2003, Director (R), MoCA had highlighted several key issues before the pre-PIB meeting, including:

- IAL would not be in a position to fully meet the requirements of internal resources, and would require GoI assistance to meet advance payment obligations as well as to increase its equity base;
- Attention was drawn to the need for fare increases (keeping input costs current) so as to
  ensure positive NPV, also casting doubts on the feasibility of such fare increase;
- Use of a discount rate of only 8 per cent rather than the stipulated 12 per cent; and
- The high risks in proposing purchase of all 43 aircraft on firm basis (instead of firm + option basis) etc.

Director(R)'s note concluded that ..."buying new aircraft is not the solution which shall do wonders for IAL but a restructuring exercise to reduce costs, specially staff costs, improve service standards and operational efficiency matching global norms...".

However, the then AS&FA<sup>21</sup>, MoCA, took a contrary view. In his reference to Director (R)'s note, he indicated that "almost all these issues were addressed in the pre-PIB meeting, except those relating to fleet selection strategy and declining prices of aircraft. The items that were not brought up for discussion relate to commercial decisions of IAL. Pre-PIB and PIB, that have been set up to consider investment decisions, do not have the charter and competence to go into such commercial issues on selection of fleet, price issues etc.

If IAL had chosen to draw up their project report based on a different make and capacity of aircraft, the proposal would have been discussed only from the point of view of investment decision, and not on the choice and price of aircraft.

I am of the view that Director(R) is under a mistaken notion about the investment decision-making process in the Government." AS&FA further commented that "the Ministry representatives were at liberty to express their own reservations, though they would be embarrassed if they had been asked as to why they chose to bring the proposal up for discussions...".

On the notings of AS&FA, JS(M) further noted that "... the note of Dir (R)... is neither clear nor procedurally correct. As pointed out by AS&FA, it is also not factually correct.... I agree with his (AS&FA's) observations, since pre-PIB process cannot be initiated unless the Ministry supports the proposal. Orders by Secretary ... are very clear."

<sup>&</sup>lt;sup>21</sup> Shri V Subramanian

The arguments of MoCA officials regarding the nature of the "investment decision making process in Government" and the "commercial issues" falling within the jurisdiction of IA are incorrect. The notings indicate a haste to push through the pre-PIB meeting. Such haste evidently rendered it difficult for MoCA officials to express their concerns or reservations.

By contrast, the subsequent AS&FA<sup>22</sup>, MoCA, clearly noted his serious reservations at the PIB Meeting (November 2004) on the acquisition proposal:

- The basic study for induction of aircraft was done in the late 1990's, and subsequent increase in the capacity by the private operators had increased the competition significantly, thereby undermining the basis of the study.
- In the airline industry, it was a standard practice to keep a few options, which may or may not be exercised.
- While there could be an increase in the international and domestic traffic, the share of IAL in such traffic may not be of the same order, leaving the aircraft sub optimally utilised.
- Both direct and indirect operating costs of IAL were phenomenally high. Unless efforts
  were taken to reduce cost, all revenue and cost calculations would go awry, thus,
  undermining the entire exercise of acquisition.

Subsequently, in March 2005, he reiterated that "As regards the financial viability of the acquisition, it appears... that in all probability, this project is not going to be financially viable. The project has assumed Aviation Turbine Fuel (ATF) rate of 2001, whereas the present rate is much higher. If we take into account the present ATF rate, there will be much less returns as compared to those reflected in the Cabinet note".

These concerns of the AS&FA were serious. However, no attempt was made to address them and re-assess the proposal.

AS&FA's note also made two other important points

- There were only two major players Airbus and Boeing, but negotiations with only L-1
  were permissible under CVC guidelines (hence not much concession could be obtained
  from Airbus); hence, there was a need to evolve new procedures with limited players in
  the field, so that maximum benefit could be obtained for Government;
- It was difficult to obtain information regarding sale of aircraft to other airlines in India due to confidential contractual arrangements, and hence, it was desirable to strengthen economic intelligence by GoI.

Ν	o concrete action	ı was takeı	en on these	suggestions of	of AS&FA.
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<sup>&</sup>lt;sup>22</sup> Shri PK Mishra

The Ministry replied (August 2011) that it was incorrect to say that the Ministry approached PIB without the concurrence of AS&FA. In fact, we had not commented on the concurrence (or otherwise) of the AS&FA, but had stated that the concerns of the AS&FA were not adequately addressed in the PIB meeting.

## 3.2.6 Concerns of appraising agencies gradually "faded" over time

The Planning Commission and the DoE raised concerns on several key and critical issues at different stages (initial stage, pre-PIB meetings, and PIB meetings) but finally concurred with the acquisition proposal at the time of the submission of the CCEA note.

The main concerns of the Planning Commission at different points of time are summarised below:

- In the pre-PIB meetings, IAL clarified that the increase in capacity would be around 30 per cent, and 70 per cent of the capacity was towards replacement. The Planning Commission representative indicated that new accretion to capacity had to be viewed with great circumspection, and suggested that IAL should consider purchasing only 28 aircraft at this stage, and the rest in Phase-II, after reviewing the situation, depending on the growth of traffic.
- The aircraft requirement, at least for international routes, could be reduced, as it would be appropriate for IAL and AIL to chalk out a common strategy for their international operations, as they were competing with each other along with other international airlines on some international routes. Further, although IAL was envisaging expansion of international operations to increase its market share (currently 10 per cent), private airlines were also being permitted to operate to neighbouring countries.
- The company was incurring losses in the last three years<sup>23</sup>, and it was necessary to evolve a suitable strategy for funding the proposal to avoid time and cost overrun. Further, operating more aircraft to compete with the private sector might lead to further deterioration of IAL's financial position.

The main concerns of the Department of Expenditure (DoE) at different stages are summarised below:

- It would be prudent to go in for some options, rather than placing orders for all 43 aircraft on a firm basis, as the projected fare hikes and load factors on international sectors might not materialize in the competitive market scenario.
- The acquisition project had negative NPV at constant price for all combinations. Further,
  the project envisaged 6 per cent increase in fares during the first year of induction, and 2
  per cent p.a. thereafter for four years. Since these projections were made in March 2002
  and fares upwardly revised since then, further hikes might not be possible in the present
  market scenario.

<sup>&</sup>lt;sup>23</sup> Rs.159 crore in 2000-01, Rs.250 crore in 2001-02 and Rs.197 crore in 2002-03.

The pressure of competition was much more intense on international sectors than in the
domestic sector, with more bilateral rights being granted in these sectors and the
possibility of other domestic scheduled operators being granted international rights.
Consequently, the projections of load factors on international sectors may not
materialize in the long run.

In the PIB meeting of November 2004, MoCA and IAL justified the projections in the Project Report on the following grounds:

- Adoption of 8 per cent IRR was appropriate, as the earlier rate of 12 per cent was a very old historical figure when the interest rates were very high.
- Fare increase may not be really difficult in the present scenario.
- The capacity addition was justifiable, as the market was growing at a rate of 7.8 *per cent* p.a. over the 2000-01 level, and the annual growth projection of 5 per cent in the X Plan was on a conservative side.
- Market share of IAL would be directly related to its capacity share.
- The proposal to permit domestic carriers to fly on domestic and international routes had been duly considered.

The representatives of the Planning Commission and Department of Expenditure chose not to press their concerns expressed earlier (after taking note of MOCA/ IAL's response), and finally agreed to the MoCA proposal for acquisition of 43 aircraft by IAL.

IAL's claim that capacity share dictates market share and that an increase in capacity would automatically result in a proportionate market share was not adequately validated, and was also not borne out.

The Ministry replied (August 2011) that the audit observations that the Ministry had not evaluated the proposal were incorrect. However, our comment was on the concerns expressed by the appraising agencies and their final approval to the proposal.

## 3.2.7 PIB approval

On November 10, 2004, PIB recommended the proposal for acquisition of 43 aircraft at a total revised cost of Rs. 9474.95 crore, assuming a lower exchange rate of @1US\$=Rs.46, and estimating a shift in the period of induction to 2006-11. Based on the revised price cost, the revised exchange rate, and all other assumptions remaining the same, and factoring the fare increase of 6 *per cent* in the first year of induction and 2 *per cent* per annum thereafter for the next four years, the NPV worked out to Rs. 1539.08 crore at a discount factor of 8 per cent, which corresponded to an IRR of 12 *per cent* for the project.

Further, the PIB decided that MoCA would approach the Cabinet Committee on Economic Affairs (CCEA) for approval with the following additional information:

- The likely impact of changes in the civil aviation policy on permitting domestic airlines to fly on the international route;
- Economic viability of the project at a discount rate of 12 *per cent* as well as without the increase in fares i.e. at constant prices with constant revenue, with sensitivity analysis under various scenarios;
- Proposed financing pattern, including the mix of domestic and foreign borrowings; and
- Rationale for not inviting fresh price bids at this stage.

As regards changes in the civil aviation policy, MoCA indicated that the Union Cabinet had, in December 2004, reserved the Gulf sector for IAL/ AIL for the next three years.

Subsequently in March 2005, a revised project cost of Rs. 10,237 crore (with all other factors remaining the same) resulted in a negative NPV of (-) Rs. 308 crore. Further, sensitivity analysis assuming a discount rate of 12 per cent and no fare increase indicated a substantially negative NPV of (-) Rs. 2976 crore. This, however, did not affect the decision of GoI to proceed ahead with the aircraft acquisition.

It was also decided that MoCA would decide the benchmark for further negotiations with the L-1 bidders (Airbus and CFM) and take a decision regarding the stage at which such negotiations should be held. This was not done.

#### 3.2.8 **Negotiation Process**

As in the case of AIL, a multiplicity of negotiating procedures was adopted with regard to the acquisition process:

- On December 6, 2004, an inter-disciplinary Negotiation Committee was constituted by IAL to take up "final negotiations" with the L-1 bidders.
- On December 14, 2004 (just 8 days later), MoCA constituted an Overseeing Committee<sup>24</sup> to oversee the process of price negotiations, and to "guide" the Negotiation Committee.
- In August 2005, CCEA approved constitution of an Empowered Group of Ministers (EGoM)<sup>25</sup> for "one final round of negotiations" with the manufacturers (lowest bidder) to finalise the transaction.
- In September 2005, MoCA conveyed approval of GoI to IAL for acquisition of 43 aircraft on the basis of the terms and conditions negotiated by the EGoM (involving cash concessions and special financing concessions) as summarised below:
  - Cash concession of US\$ 25.9 million on January 2004 economic conditions by Airbus, and cash concession of US\$ 5.2 million at January 2004 economic conditions by CFM.

<sup>&</sup>lt;sup>24</sup> Same composition as in respect of AIL acquisition.

<sup>&</sup>lt;sup>25</sup> Same composition as in respect of AIL acquisition.

- ❖ Escalation from January 2004 onwards to be calculated at a fixed rate of 3 per cent per annum on yearly basis by Airbus and CFM.
- ❖ Improved aircraft specifications by Airbus, free of cost, and counter-trade/ offset to be increased from 30 per cent to 40 per cent by both Airbus and CFM; the completion of such counter-trade/ offset offered within 12 years after the last delivery of the aircraft.
- Insertion of "integrity" and "most favoured" clauses in the purchase agreement.
- Even though Airbus was not the leading company, it would assist the creation of MRO facilities in India in association with promoters. The estimated investment was of the order of US\$ 100 million for MRO<sup>26</sup> facilities, and US\$ 75 million for setting up of training centres in India.

Despite the PIB's decision that MoCA would decide the benchmark for further negotiations with the L-1 bidders, no such benchmarks were set by MoCA before negotiations. Consequently, in the absence of such benchmarks, the effectiveness and efficiency of negotiations is open to question.

The Ministry replied (August 2011) that:

- The difficulty in obtaining comparison with other deals of the same manufacturer and
  consequent difficulty in fixing clear benchmark for negotiation was stated by MoCA in
  Para 9.3.2 of the note for CCEA dated 17 August 2005. CCEA was informed that the issue
  of comparison between prices offered by Airbus to IAL vis-à-vis other airlines was taken
  up by the Oversight Committee.
- EGoM had directed that the most favoured clause and integrity clauses would be inserted in the purchase agreement. Further, during negotiations, EGOM extracted further concessions from supplier.

We do not agree. Inclusion of most favoured and integrity clauses does not detract from the need for fixing benchmarks for negotiations. In the absence of such benchmarks, the potential scope for financial benefits/ reductions and the actual achievement thereagainst could not be ascertained.

## 3.2.9 Manufacturer commitments for MRO/ Training Centre not fulfilled

## 3.2.9.1 Manufacturer commitments for aircraft acquisition

The EGoM minutes for the IAL aircraft acquisition from Airbus reflected the following commitments:

• A training centre would be established by Airbus in India at an approximate investment of US\$ 75 million.

<sup>&</sup>lt;sup>26</sup> MRO: Maintenance, Repair and Overhaul

- A warehouse for spares would be established in India (cost not quantified in monetary terms as it depended on the types of spares stock-out).
- Even though Airbus was not the leading company, it would assist the creation of MRO facilities in India in association with promoters. The estimated investment was of the order of US\$ 100 million.

In our view, the commitments made by Airbus regarding creation of MRO and training facilities were quite open-ended:

- Unlike the other clauses, there was no mention of a timeframe by which such facilities will be created.
- The wording committed by Airbus Industries was "... agreed to make or facilitate the following investments". It was not clear who or what combination of promoters (Airbus and/ or other entities) would together make up the required investment.
- In respect of the MRO, the wording "facilitate creation of MRO facilities in India in association with the promoters" did not give any indication of a binding commitment.
- There was no mention anywhere that the training and MRO facilities would be exclusive for IAL's use or would be meant for all users of Airbus aircraft (public and private) in India and nearby.

The commitments obtained from Boeing in respect of the AIL aircraft acquisition, as reflected in Chairman, EGoM's note to the PM, were similar (without exact costs, timeframes etc.):

- Boeing would provide training simulators costing upto US\$ 75 million.
- Boeing would invest upto US\$ 100 million for creation of MRO facilities for Boeing aircraft in India.
- Boeing would invest US\$ 10 million in training and other civil aviation requirements.

The directions of the EGoMs were communicated to both IAL and AIL.

While these commitments were included in AIL's purchase agreements, these commitments were, however, not included in IAL's purchase agreements.

## 3.2.9.2 Non-fulfilment of manufacturer commitments in respect of MRO and warehouse facilities by Airbus (IAL fleet acquisition)

After a delay of two years, IAL entered into a JV agreement in October 2008 with EADS (the parent company of Airbus Industrie) for setting up the MRO facility. There had, however, been no tangible progress towards setting up the facility. The warehouse facility for aircraft spares had also not been established. However, the flight training at Bengaluru and full flight simulator for A320 and ATR had commenced from November 2007.

In response (February 2011), MoCA and AI stated that the issue of establishment of MRO was discussed between IAL and EADS, as well as between MoCA and EADS; an independent consultant had been engaged in July 2010 for deciding valuation of land, other assets and contribution by AI to the proposed JV company, and the matter would be processed further on acceptance of the valuation report by both EADS and AI. Subsequently, EADS and Airbus Industrie had informed MoCA that two initiatives regarding MRO were underway. Instead of a fresh investment, an MoU signed by EADS with Skil Infrastructure Ltd was, in our opinion, injudiciously included towards discharging of the investment commitment by Airbus.

The Ministry stated (August 2011) that the matter of non fulfilment had been referred to law ministry. In the mean time, a letter dated 18 April 2011 had been received from Airbus, confirming their commitment to facilitate investments required for training facilities and MRO.

However, the Ministry's reply does not address why these clauses were not included in the purchase agreement. In the absence of a firm commitment flowing through an agreement, the enforceability of the agreed concessions (obtained by EGOM) remains questionable.

# 3.3 Synergy between AIL and IAL network not considered during acquisition process

As brought out subsequently in the chapter on "Merger", a key driving factor behind the merger of AIL and IAL was route rationalisation and network integration through proper synergy. However, even prior to the merger, MoCA had commissioned, in 2004, a study by AT Kearney to suggest measures for achieving better operational integration between AIL and IAL. The study had recommended freeing up of capacity by leveraging the AIL and IAL networks for international short haul markets and consolidation of frequencies on overlap routes and redeployment of freed up capacity on under serviced routes.

Inexplicably, synergised / integrated operation between AIL and IAL (even though this was recommended / recognised before the finalisation of the fleet acquisition process and specifically referred to in the December 2004 MoCA note for liberalisation of bilateral agreements) was not factored in as part of the acquisition project analysis either for AIL or IAL. In fact, the projected fleet deployment of a part of the B787-8 aircraft capacity of AIL for domestic routes (to increase capacity utilisation) evidently ignores such synergistic operations. Further, the suggestions (during the evaluation/ approval process for IAL aircraft) for consideration of wide-bodied aircraft for international operations by IAL indicated that let alone an AIL-IAL merger, even synergy between their operations was not considered, and IAL was expected to compete with AIL on some international routes.

As pointed out elsewhere, inexplicably, the need for such synergy/ integration/ merger was accepted only after expensive fleet acquisition processes were carried out independently by both airlines.

The Ministry stated (August 2011) that the fleet acquisition was on stand alone basis by the respective airlines and had no link with the merger, and that the synergy between AIL and IAL were kept in mind at the time of acquisition.

We do not agree with the Ministry's response. The fact that there was no link between the fleet acquisitions by the two airlines and the merger, despite the 2004 study on synergy between AIL and IAL, is precisely our point. The claim regarding synergy at the time of acquisition is clearly an after-thought, as the projected operations underlying the acquisition proposals indicated no such synergy. Further, the projections regarding deployment of AIL aircraft on domestic sectors for their own hub and spoke operations clearly indicated that integration between IAL's domestic flights and AIL's international flights was not envisaged.

## 3.4 Risks of Debt Funded Acquisition - Very high Debt Equity Ratio

Even as of 2005-06 (when the decision on acquisition of 50 + 43 aircraft by AIL and IAL was taken), the debt-equity ratios of AIL was very high at 4.6:1 and negative in case of IAL.

The fleet acquisition cost for both AIL and IAL was to be funded entirely through debt (except for a marginal equity infusion of Rs. 325 crore in respect of IAL). With additional borrowings of Rs. 32,274 crore and Rs. 8,335 crore towards acquisition of aircraft by AIL and IAL, the debt equity ratio of both AIL and IAL would be further adversely affected (as against prudent project financing ratios of upto 4:1). As stated elsewhere, the projected cash flows for repayment of loans were based on unduly optimistic assumptions, and could not have been relied on to reduce the serious risks associated with debt-funded acquisitions.

The adverse impact of debt-funded acquisition (with extraordinarily high Debt-Equity ratios) and interest/ principal repayment was felt by AI, essentially from 2009-10 onwards., and will continue for the foreseeable future, unless there is substantial infusion of GoI equity (coupled with strong internal cash flows).

