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CAPA INDIA

CAPA's Civil Aviation Agenda for the new Indian administration

Time to take aviation seriously

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27 May 2014

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Published by

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Global Aviation Knowledge: CAPA was established almost 25 years ago with a mission to become a leader in global aviation knowledge. Since then we have established a worldwide presence and an enviable reputation for independence, insight and integrity. Today our market analysis and data is used to support strategic decision making at hundreds of the most recognised organisations in the industry.

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- Share prices;
- Fare tracking;
- Route maps;
- Forward travel searches;
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CAPA's Civil Aviation Agenda for the new Indian administration

Time to take aviation seriously in India

India's new Prime Minister, who was sworn-in yesterday, will lead a government with the first parliamentary majority by a single party in 30 years. The Bharatiya Janata Party (BJP) has secured a mandate to pursue a reformist agenda and the aviation industry is eagerly looking forward to hearing its plans for the sector.

"The previous administration pursued a transformational approach to aviation between 2004 and 2007/08, but subsequently lost its way."

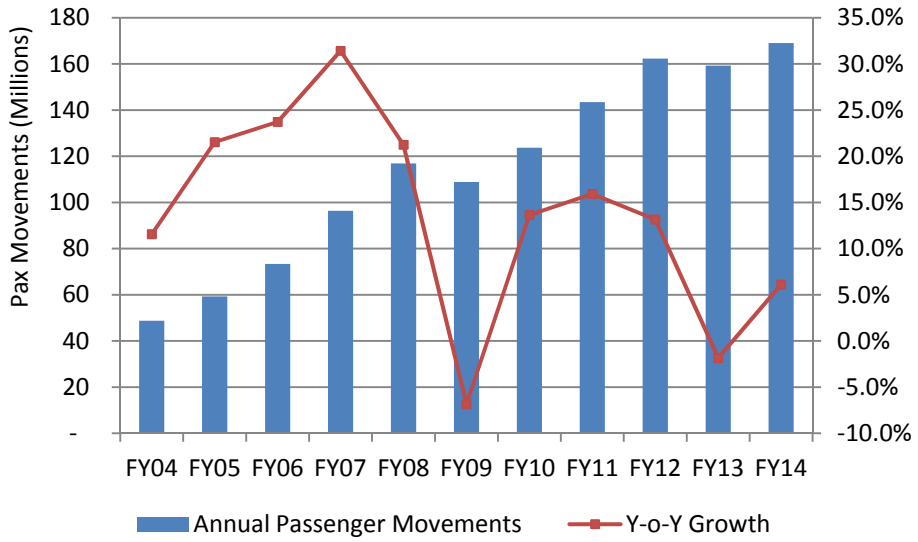
The previous administration pursued a transformational approach to aviation between 2004 and 2007/08, but subsequently lost its way. Over the last six years the government pursued a couple of notable initiatives, namely allowing foreign airline investment and encouraging certain state governments to reduce sales taxation on fuel. However, these were the exception rather than the rule and by and large the Ministry of Civil Aviation appeared to be either unwilling or unable to establish a clear direction and to assist the industry through a difficult period. Consequently the sector has languished in recent times.

Liberalisation of the aviation sector started in FY2004, during the final year of the last BJP-led government. Notably a number of taxes and charges on airline operations were reduced. This momentum was continued by the UPA administration which succeeded it in May-2004. Indian aviation was transformed as a result of this reformist period. However, whilst there was euphoria about growth there has been no focus on strengthening institutional capabilities since 2004.

"Whilst there was euphoria about growth there has been no focus on strengthening institutional capabilities since 2004."

Between FY2004 and FY2014, domestic traffic grew at a CAGR of 14.3%, while international expanded at 10.8%. The total number of annual passengers handled by Indian airports more than tripled during this period, from 49 million to 169 million. Cargo volumes have grown at approximately 8% per annum.

Passenger Traffic at Indian Airports FY04 to FY14



"The increase in annual domestic traffic over the last 10 years was three times greater than over the previous 50 years."

Source: CAPA, AAI

This growth has been accompanied by close to USD30 billion of investment in the sector including aircraft equipment, airport modernisation and development, and ancillary sectors such as ground handling, maintenance and general aviation.

"Growth has been accompanied by close to USD30 billion of investment and approximately 40,000-50,000 new jobs have been created directly in the aviation industry".

Airlines have on average been offering fares below cost, stimulating traffic above the levels that would ordinarily have resulted at sustainable pricing levels. This has delivered a massive consumer surplus and provided a boost to tourism and trade.

Approximately 40,000-50,000 new jobs have been created directly in the aviation industry. And the economic multiplier impact on other businesses, hotels and tourism operators is estimated to have generated indirect employment for a further 250,000 people.

"Below-cost pricing by airlines created a huge consumer surplus and provided a boost to business, hotels and tourism operators."

Airport infrastructure has also improved dramatically as a result of the UPA government's airport modernisation programme. Six metros and 35 non-metros now have world class airports. As a result airports which were described by the Naresh Chandra Committee in 2003 as being "for the most part an embarrassment" are now winning international awards.

"The airport upgrade and modernisation programme has delivered world class airports at 41 cities across India."

And despite the challenges experienced in the airline sector there are bright spots such as IndiGo's success in establishing itself as a sustainably profitable airline with a strong reputation for reliability and service. The carrier has grown to a fleet of almost 80 aircraft in just under 8 years and has close to 200 further aircraft on order.

"Airline bright spots include IndiGo having established itself as a sustainably profitable airline with a strong reputation for reliability and service."

However these economic, tourism and consumer benefits have come almost entirely at the cost of the airlines' balance sheets

"With USD10 billion of accumulated losses over the last few years and close to USD20 billion of debt, the economic, tourism and consumer benefits have come at the cost of airline balance sheets."

Over the last few years the combination of a high cost environment, a sluggish economy, regulatory constraints and excess capacity have seen Indian airlines post accumulated losses of USD10 billion and increase their debt to close to USD20 billion.

India's carriers combined have cash on hand of approximately USD500 million on annual industry revenue of close to USD10 billion. Some carriers are in a precarious state, with cash balances equivalent to less than one day's revenue.

CAPA estimates that Indian airlines will need to raise USD1.3 billion of capital in FY2015 just to stabilise their operations.

Airlines are at the core of the aviation value chain and as a result the situation across the industry is quite dismal. Most airports, other than PPP airports, are

losing money; MROs are struggling; ground handlers are challenged; general aviation is chronically sick; cargo and express has stagnated; and the training sector is dysfunctional. The conditions have been deteriorating for some time and have reached threatening proportions.

"The industry has average cash balances equivalent to just over two weeks revenue; some carriers have less than one day's revenue."

Independent reviews into the state of the industry are urgently required to understand the deep structural fault lines and to identify solutions

The Indian aviation industry is clearly in dire straits. There is an urgent need for a deep and comprehensive systemic review of the sector to identify the root causes of the current situation and to recommend solutions.

"Indian carriers will need to raise USD1.3 billion of capital this year just to stabilise their operations. Combined with the challenges faced throughout the aviation value chain this paints a grim picture of the state of the industry."

CAPA proposes that a special committee be established - along the lines of the Naresh Chandra Committee of 2003 – to oversee the preparation of a comprehensive set of White Papers analysing critical issues. The Committee must be given a mandate to probe these issues in-depth, and to consider them in the context of a holistic vision for the industry through to 2040.

These White Papers must be practical and actionable, with a sense of mission. They are not intended to be academic papers that gather dust. Similarly the approach must focus on fixing problems and not finding faults or apportioning blame. White Papers are required on the following aspects of the sector:

- Directorate General of Civil Aviation;
- Airports Authority of India (including its treasury and HR issues);
- Air India (including its treasury and HR issues);
- Pawan Hans;
- Status of airport operations;
- Functioning of PPP airports;
- Economic regulation of PPP airports;
- Bilateral aviation policy;
- Skills and training;
- Ground handling
- Maintenance;
- Security.

"The White Papers' findings should be used to shape the appropriate institutional requirements and to develop a new Cabinet-approved Civil Aviation Policy."

"The White Papers are intended to be practical and actionable, not academic. They should focus on fixing problems and not finding faults."

The reviews should critically analyse the key issues within each sector and identify strategic flaws in the planning and decision-making process. Extensive industry consultation will be essential. The Committee must report to MOCA and the Prime Minister's Office within a time-bound period of 6-9 month, preferably at the earlier end of that range.

The objective should be to use the White Papers' findings to identify the appropriate institutional requirements and to develop a new Cabinet-approved Civil Aviation Policy which is aligned with the industry's requirements; ensures safety; is equitable; promotes transparency; supports competitiveness; and is aligned with India's national interests. An appropriate regulatory regime will also need to emerge.

"The new policy should be developed in the context of a realistic long term vision for Indian aviation in 2050."

The policy should include prioritised short, medium and long term objectives and actions in the context of a long term vision and plan which is realistic and measurable. This strategic plan should take into account the fact that by 2040

India could have a market of in excess of 1 billion domestic passengers per annum. An industry of this size will contribute hundreds of billions of dollars to the economy and sustain a direct and indirect workforce of millions of people. Solutions need to be developed to ensure that can sustain an industry more than 15-20 times its current size by 2050.

This is not a time to gloss over the cracks in the industry, or to implement superficial solutions, the situation is too acute for that. If this administration is serious about aviation it needs to examine the issues in detail.

"The proposed committee's recommendations, and more importantly solutions, must establish the base for a long term strategic plan for the revival of the sector."

Quick wins will inspire confidence and signal intent while solutions to deeper-rooted problems are developed

While certain problems will take time to address, there are some fixes which could be implemented without too much deliberation to inspire confidence:

- Notifying ATF as a declared good, thereby reducing sales taxation on fuel to 4% from an average of 24% today, would be the single greatest confidence boost that the government could provide to the industry. This was not possible in the past because of the nature of coalition governments; however the BJP's clear majority may make this more feasible now especially given the priority attached to tourism in its manifesto. Such a move would deliver an immediate reduction of 10-12% in airline operating costs, a significant benefit in such a low margin industry.
- Abolition of the 5 year/20 aircraft rule should not be delayed further; there is no justification for persisting with a regulation which discriminates against Indian carriers.
- Restrictions on the ability for airlines to generate ancillary revenue should be lifted completely;
- The proposed new Route Dispersal Guidelines should be shelved until a thorough review of the policy on remote and regional connectivity is completed;
- A clear signal from MOCA of its willingness to be partners with the industry, working collaboratively and equitably towards a common goal, as opposed to the more obstructionist relationship that has evolved in recent years.

And although other solutions may take longer, if the government and industry can work with renewed vigour and a resolve to deliver positive change there is no reason why significant progress cannot be achieved.

"Notifying ATF as a declared good is possible and would be the single biggest confidence booster the government could provide to the industry."

"The proposed new Route Dispersal Guidelines should be put on hold pending a thorough review of the policy on remote and regional connectivity."

"MOCA must signal a clear intent to work with the industry within a collaborative and equitable framework."

The weakness of the institutional framework is one of the core underlying problems

India's weak institutional framework in aviation has led to poor policy and regulatory decisions which have been key contributors to the current challenges as it. Some of the major shortcomings include:

- The absence of a comprehensive Civil Aviation Policy;

- The weakness of the regulator, characterised by a lack of resources and expertise to conduct appropriate oversight, such that safety is compromised;
- The absence of domain expertise at the Ministry of Civil Aviation to deal with the complexity of challenges which it faces.
- The industry remains over-regulated with no clear desire at the Ministry level for enabling reforms and liberalisation;
- The challenges between the Ministry and the Airports Economic Regulatory Authority over the appropriate model for the economic regulation of airport tariffs which is unnecessary;
- The uncertainty about the future of the public sector units in the aviation sector – most notably Air India and the Airports Authority of India – and the fact that the presence of the government as an operator in the industry clouds policy-making;
- The very high cost structure in the sector as a result of taxation, currency weakness as well as base charges;
- Absence of defined criteria and process for the award of new airline licences with regular changing of the goal posts. It has on occasion proven to be easier for under-capitalised promoters with limited experience to secure a licence compared with proven, well-funded investors.
- The lack of transparency and predictability in the decision-making criteria with respect to the negotiation and allocation of bilateral seat entitlements.

"The industry remains over-regulated with no clear desire at the Ministry level for enabling reforms and liberalisation."

India requires a comprehensive Civil Aviation Policy which has support across relevant ministries and is designed to last beyond just the current administration

CAPA has advocated for the last 11 years the need to create a long term sectoral policy and one that should be viewed as a Government of India policy not just a MOCA policy. That is, to recognise that many issues that affect aviation are in fact beyond the purview of MOCA alone, they touch upon the Ministries of Finance, Commerce, Petroleum and Tourism, the Planning Commission, state agencies such as immigration, customs and excise, and State Governments.

"It is time to develop a new Civil Aviation Policy which is Cabinet-approved and intended to be relevant for a generation or more and not just the tenure of the current administration."

In order to develop an effective policy MOCA must therefore seek and coordinate inputs from across this diverse group. Broad-based agreement is necessary to break the ad hoc decision making that has increased the structural challenges in the industry in order to attract the necessary investment in the aviation sector.

There should be a consistency of vision that extends out a generation or more rather than simply the tenure of the current administration. In recent years we have seen ad hoc developments that prevent the industry from being able to plan ahead. In such an environment it is very difficult to attract private sector funding.

The ultimate objective must be a policy that promotes a safe, viable and sustainable industry; the policy must be practical and implementable

Combined with an open and competitive framework a safe and sustainable aviation industry will play a key role in supporting national economic development and will benefit the consumer. If India is to achieve its target of double digit GDP growth, a vibrant aviation sector will be essential.

However, a new policy must be practical and implementable, with agreed milestones towards achieving a viable industry. There are so many dysfunctionalities in Indian aviation today that moving directly to this new order is not feasible. CAPA therefore proposes a staged approach with an initial period during which the industry must be set in order, followed by the introduction of a new liberal policy from 2016/17 providing all stakeholders – including government - with 2 years to prepare for a new open environment.

"In order to meet the requirements of a large and modern aviation industry, there must be a clear separation of the regulatory and policy functions."

- Stage 1, between now and 2016/17, marks a period during which the government removes the distortions in the sector to create a level playing field, by establishing new regulatory, legal and fiscal frameworks, and strengthening institutional capacity by creating competencies at the government level.
- Stage 2, post 2016/17, will be characterised by an open, efficient and liberal aviation sector, which is supported by a clear, formalised long-term plan, is professionally regulated and where competitive dynamics will determine market outcomes.

There should be separation of regulatory and policy functions

CAPA believes that in order to meet the requirements of a large and modern aviation industry, there must be a clear separation of the regulatory and policy functions, which should be independent of each other. A separate accident investigation and safety board should also be established. All of this must be concluded during Stage 1.

"The FAA's downgrade of India to Category 2 status is a clear reflection of India's regulatory shortcomings."

Moves are already underway to establish the Indian Civil Aviation Authority (CAA) along the lines of the UK CAA, however it is critical that such a development goes far deeper than simply changing the name of the DGCA to the Indian CAA.

The DGCA's technical regulatory functions (such as airworthiness, safety and licensing) will form only one part of the CAA, which will also need divisions responsible for issues such as airspace, competition, consumer protection and the environment. The DGCA is already under-resourced and cannot take on additional responsibilities. This is an issue that cannot be ignored. The FAA's downgrade of India to Category 2 status is a clear reflection of India's regulatory shortcomings.

MOCA must be revamped to allow it to lead, develop and implement. A renewed sense of mission should be established.

Relieved of its regulatory responsibilities, MOCA's focus should be directed to macro-issues, namely long-term planning towards achieving a stated vision for how aviation can provide connectivity and support national economic development.

MOCA should develop a long term plan for the sector through to 2050 and beyond with milestone objectives for 5, 10, 20 and 40 years. This plan should not be developed in isolation but should link with India's national transport policy within a multi-modal framework as well as support India's tourism strategy.

An interim council of full-time aviation experts should be appointed to support Joint Secretaries

The CAA will eventually become the adviser to the government on aviation issues, however for the first couple of years it will need to focus on building competencies. Given the rapid pace of change in global aviation, having access to high quality intellectual capital with an understanding of the latest issues is critical.

"Aviation is vital to India's economic mission. It must be linked with India's national transport policy as well as support India's tourism strategy."

CAPA proposes that a council of aviation experts should be appointed to support MOCA with policy formulation and execution. These experts should be drawn from across disciplines related to airline operations; airport management; aviation law; general aviation; cargo; maintenance; ground handling; consumer affairs; environmental issues; economic regulation etc.

This would not be an Advisory Committee; these Council members would be engaged on 3-5 year full-time contracts on regular commercial terms and empowered appropriately. Enhanced competencies in strategic planning and economic advisory functions are also required. These steps are necessary to enhance MOCA's capabilities prior to embarking upon any major changes. The Ministry cannot succeed in its duties when intellectual capital is outsourced, and this approach has yielded poor results.

"A council of aviation experts, drawn from across disciplines should be appointed to support MOCA with policy formulation and execution."

Joint Secretaries appointed in future should be reformist and modern in their outlook in line with the new culture that is to be created. A Joint Secretary position should be created with specific responsibility for general aviation as this segment has been sorely neglected.

"The Ministry cannot succeed in its duties when intellectual capital is outsourced and this approach has yielded poor results."

The other vital task for the government is to clarify the future role of the public sector entities, namely Air India and the Airports Authority of India. Joint Secretaries should be appointed with specific responsibility for each of these entities. With strong private sector interest in aviation there is no reason for the government to continue to operate an airline and airports, particularly when they are a huge drain on government funds. Furthermore, government participation in the industry has influenced policy in a manner that has been negative for the entire sector.

The structural decline of the DGCA commenced from 2004. Strengthening of the organisation must commence immediately

Given the historical context of decades of inertia it is not surprising that the regulator struggled at first to keep pace with the sudden growth in the market from 2004. However, even once growth had become the new norm insufficient attention was given to strengthening safety oversight.

The DGCA was severely neglected and was not equipped with the resources to handle the demands placed upon it. And succession planning was poorly implemented to ensure that IP remained within the organisation when

experienced staff retired. Without the requisite manpower, and more importantly without the technical skills and expertise, the regulator became weak and over-burdened. It has fallen particularly far behind in terms of its understanding of the evolution of technology in the aviation industry. And the interventionist role of the MOCA has further hampered its efficacy. It was during this period that the seeds of systemic weakness were planted.

"Without the requisite manpower, and more importantly without the technical skills and expertise, the regulator has become weak and over-burdened. Poor succession planning and limited training has exacerbated the situation. Intervention by MOCA has not helped."

With the aviation industry becoming ever more complex across the spectrum from technology through to consumer issues, there is a critical need for a specialist, independent regulator, staffed by experts. The regulator must be aligned with global standards not only on paper but in execution, with no compromise on governance. It is surprising that successive regimes neglected such a critical area which has resulted in a situation where safety risks have been heightened.

For the now the proposed CAA is just the DGCA by another name. A failure to take safety oversight seriously is not only an aviation risk but a country risk.

"The DGCA has fallen particularly far behind in terms of its understanding of the evolution of technology in the aviation industry."

Indian aviation could witness transformational growth over the next decade. CAPA projects that total airport passenger traffic could increase from approximately 169 million in FY2014 to 472 million in FY2023, making India the third largest aviation market in the world behind the US and China. But if this is to occur, and occur safely, the establishment of a strong and independent regulator is an essential foundation.

Of great concern is the fact that any strengthening of the DGCA appears to have been put off pending the establishment of the CAA. However the CAA will in due course absorb the DGCA and inherit its weaknesses. Addressing shortcomings today will ultimately benefit the CAA.

"The regulator must be aligned with global standards not only on paper but in execution, and must be staffed by experts and not by retired bureaucrats."

1. The ambit of the DGCA should be redefined to focus solely on safety; it should be unburdened from the current broad range of responsibilities that also encompass commercial matters which distract from the core mission.
2. Safety is a matter in which politics has no place. If India is to achieve its safety objectives, technical regulation of the aviation sector must be independent, transparent and skilled. There must be a common purpose between the Ministry and the DGCA which has not always been the case, creating an environment which facilitates collaboration with industry;
3. Significant investment is required in personnel, training and skills development to ensure strong domain expertise. This professionalism must extend to the very top. Institutions must be run professionally by experts in their field, in a manner that is scalable to support the expected growth in passenger and cargo traffic.
4. The Chairman, Board and CEO of the new Civil Aviation Authority should be staffed by experienced professionals. Manning these posts with bureaucrats would be a strategic blunder. Tenures of 3-5 years will provide greater stability, rather than the more frequent turnover that we have seen in recent times. In several instances, the Director General held the position as an additional charge, limiting the attention which they could provide to the role.

"It is of great concern that strengthening of the DGCA has been put off pending the establishment of the CAA. This will simply serve to start the CAA off on a weak footing."

India's legislative framework dates from the 1930s and is not appropriate for an industry in the 21st century

A modern aviation industry requires a legislative framework that is reflective of the current environment. Indian aviation is presently governed by the Aircraft Act of 1934 and the Aircraft Rules of 1937, albeit with subsequent amendments. This legislation should be revamped and brought up to date prior to the establishment of the CAA and subsequently supported by comprehensive modernisation of the legislation related to the sector, particularly the Airports Authority of India and civil aviation security.

Summary of civil aviation objectives to be achieved by 2016/17:

- A new liberal Civil Aviation Policy should come into force, based on wide consultation with stakeholders and with inter-ministerial support. The new policy should be developed in the context of a realistic 2050 plan for Indian aviation;
- Aviation policy-making and regulatory functions should be separated, and a unified and professional regulator should be established in the form of the Indian Civil Aviation Authority;
- Both MOCA and the DGCA/CAA should be subject to institutional strengthening with a particular focus on the development of skills and expertise, and a separate accident and safety board should be established;
- The negative fiscal framework (e.g. excessive taxation on aviation turbine fuel, and unhelpful tax on third party maintenance and aircraft lease payments) together with regulatory distortions which act as a barrier to efficient operations (e.g. 5 year/20 aircraft rule for international services; route dispersal guidelines, restrictions on commercial decisions) should be dismantled;
- MOCA and the Central government should engage with the states to demonstrate the benefits that could be generated by categorising aviation turbine fuel as a declared good with a flat sales tax rate of 4% (compared with an average of 24% today). MOCA and the state governments should formalise a structured framework for engagement by establishing a committee which meets every quarter to discuss aviation-related matters. State governments must play a much more active role in the aviation sector given the critical contribution which it can make to economic development and tourism.
- Aviation and tourism must increasingly collaborate both at a centre and state level. Issues related to connectivity from key source markets; availability of bilateral seat entitlements to destination cities in India; domestic capacity; and joint marketing and promotion initiatives are examples of areas where the two portfolios are inextricably linked and where better cooperation can drive significant economic benefits.

- A new regional airline policy should be established which better supports the desirable objective of enhancing connectivity to Tier 2 and Tier 3 cities;
- Air navigation services should be established as a separate entity from the AAI, remaining as a government responsibility but managed independently along commercial principles;
- AAI's airport operations divisions should pursue a clear commercial objective and establish a cycle of developing value in its airport assets, privatising them to generate lease income and then re-investing in new projects. However, all capital expenditure should be within the framework of a defined business plan which is based on developing and operating viable airports which have been cleared by CAPA's proposed Airports Approval Commission. State governments should be involved to provide viability gap funding where required;
- AAI and Air India must be managed independently from MOCA with a profit objective and be prepared for privatisation;
- An Aviation Finance Corporation should be established to provide dedicated capital for the industry;
- The Bureau of Civil Aviation Security must be recast with a new focus on upgrading management, technology, training and intelligence, conforming to international standards;
- A new legal framework should be established to replace the archaic Aircraft Acts which date from the 1930s and are increasingly unsuited to a modern aviation system.

"After privatisation of its most profitable airports and corporatisation of ANS, the AAI will largely be left with loss-making and unused airports. The most appropriate strategy for the AAI going forward may be to focus on rehabilitating its idle airports, and turning around its loss making airports to at least break-even, and then transferring them to a PPP structure from which it earns a revenue share."

Airports Authority of India requires a new business model and perhaps a new role given its changing priorities

The AAI manages 125 airports across the country. Four of the largest airports in the country have already been leased out to private operators. A further 15 airports, including virtually every profitable AAI airport, are expected to be privatised.

The AAI is also responsible for air navigation services across Indian airspace. However this activity too, which accounts for a significant proportion of the authority's profitability is expected to be hived-off as a separate entity and corporatised.

As a result, after the privatisation of the 15 airports and the corporatisation of air navigation services, the AAI will be left with a portfolio of around 110 airports, virtually all loss-making, with almost half of them lying idle.

The AAI has demonstrated an excellent ability to develop and upgrade airport terminals on a cost effective basis, having successfully completed almost 40 major modernisation projects over the last few years. But with most of these projects completed or approaching completion there is not expected to be a significant call for such activity over the next few years. And most greenfield construction will in future be carried out on a PPP basis.

"Revenue share from PPP airports will increase. These funds should not be squandered. We would caution against rushing to commit capital to the development of LCC airports. With so many existing idle airports it is not clear that constructing additional infrastructure should be the priority."

As the landlord of 19 PPP airports the AAI is expected to generate strong income as a result of the revenue share agreements entered into with the private operators. In fact it will most probably earn more income than it does currently. It is critical that these funds are used carefully and not squandered.

"Building airports is easy, making them viable is the challenge. New projects should be subject to review by an Airport Approval Committee that assesses viability before valuable capital is committed."

CAPA suggested five years ago that the most appropriate strategy for the AAI going forward may be to focus on rehabilitating its idle airports, and turning around its loss making airports to at least break-even, and then transferring them to a PPP structure from which it earns a revenue share.

However the AAI has limited management or commercial capability which means that it is not well-equipped to achieve this. It should look at establishing a separate airport management company and bringing in an Indian or international JV partner to support this activity, which will maximise the returns from subsequent privatisation.

"India does not need more ghost airports. Analysis must be conducted into why larger non-metros such as Kanpur, Mysore and Pondicherry have not been able to attract airline services."

The government had asked the AAI to prepare a plan to develop 50-100 low cost airports across India to encourage regional connectivity. This is in-principle a good idea but the reality is more complex and we would caution against rushing to commit capital to such an exercise. With 50 idle airports and a further 60 loss-making operational airports in its portfolio it is not clear that constructing additional infrastructure should be the priority. Especially as we have seen investment in high profile airport rehabilitation in recent years at locations such as Mysore, Pondicherry and Kanpur which have failed to attract airline services. A private greenfield airport at Durgapur has similarly struggled to secure the interest of airlines, and Reliance was unable to operationalise its regional airports in Maharashtra.

"AAI should focus on enhancing airside efficiency at its operational airports."

New airport infrastructure should be supported by realistic business plans and be linked to the regional airline strategy. Building airports is easy; making them viable is the challenge. New projects should be subject to review by an Airport Approval Committee that assesses viability before capital is committed.

With its changing structure the authority needs to develop a fresh business model which leverages its strengths and establishes new revenue stream. The core activities could include:

"A possible new role for the AAI could include becoming the custodian of aviation education and training in India – this is a critical segment and the current training capacity is very poor and limited in scale."

- Airport management, for which a JV partner should be inducted;
- Airport engineering and maintenance – enhancing the airside efficiency of AAI airports should be a key priority, along with rehabilitation of existing airports, with a view to eventual privatisation;
- Commercialisation of land for non-aeronautical activities, for which a partner should be brought in with expertise in real estate development;
- Positioning itself to become the nodal agency responsible for aviation training and education, including the development of the National Aviation University.

"The ability of air navigation services to keep pace with the expected growth in the market will be critical for ensuring the availability of air capacity."

Corporatisation of Air Navigation Services should be fast-tracked to support the capital requirements and the need for a new culture

To support India's air navigation services requirements over the coming decade the AAI will need to make significant investment in technology, people and

training for which the capital requirements will be massive. The AAI has performed its responsibilities as the air navigation services provider with great care and commitment. However, given the expected future direction of the sector, and in line with international trends, perhaps the time is now approaching to develop a new model rather than ad hoc revisions to the existing structure. The ability of air navigation services to keep pace with the expected growth in the market will be critical for ensuring the availability of air capacity.

"A long term plan for air navigation services is required which identifies requirements for personnel, training, airspace design and safety management systems."

The air navigation services arm of the AAI should be hived off as a separate entity and corporatised with a separate balance sheet and organisation structure. This is in line with government thinking however execution has been delayed due to concerns about the impact on the AAI's revenue. The corporatised entity should be headed by a domain expert and not a bureaucrat.

In addition there is a need to implement a new culture focused on performance, efficiency, service and environmental sustainability whilst maintaining safety as the primary objective.

Technology and procedural initiatives will be critical to long term development. This will include for example leveraging the benefits of GAGAN and the flexible use of airspace. Future requirements over the next couple of decades in terms of personnel, training, airspace design and the implementation of safety management systems will also need to be addressed.

The Air Navigation Services division may need to appoint a global technical advisor for a period of 3-5 years during the transition from its current insular environment to a more customer-focused, service-driven and accountable organisation."

AAI may need to appoint a global technical advisor for a period of 3-5 years during the transition from its current insular environment to a more customer-focused, service-driven and accountable organisation.

The CAPA India ATM Report 2014, to be released in Jun-14, will be the first detailed study of the air navigation services sector in India covering demand and capacity, institutional issues, infrastructure, human resources, safety and technology. For more information contact Vishal Bhadola on capaindia@centreforaviation.com

Other airport-related objectives

Airports Master Plan: India needs to develop a 30-40 year Master Plan for airports, with national and regional perspectives. Investments in new airports must be carefully considered based on viability principles and with greater goal orientation than in the past. Private and PPP models will be the way forward rather than relying on purely government funded projects, but in order to attract private capital, a transparent and equitable economic regulatory framework must be defined. A long term planning horizon must be adopted with respect to securing land for the development of future airports through to 2050.

"In order to determine when the existing infrastructure will saturate a detailed assessment of the realistic structural capacity of the current airports must be conducted. Our understanding is that the stated design capacity of many airports is at variance from the practical achievable limit. As a result some airports may saturate earlier than expected, representing a major risk."

In addition to developing airports in smaller regional centres it is also necessary to consider the requirement for second and possibly third airports in metros and non-metros with existing facilities. In order to determine when the existing infrastructure will saturate a detailed assessment of the structural capacity of the current facilities must be conducted. Our understanding is that the stated design capacity of many airports is at variance from the practical achievable limit. As a result some airports may saturate earlier than expected, representing a major risk.

Airport viability: Some new airport projects which have been announced have overlapping or insufficient catchment areas and without regard for airspace issues or the potential for airlines to operate there. Ultimately a series of unviable airports will deter future investment in viable ones.

CAPA proposes the establishment of an Airports Approval Commission within MOCA to review the business plans of proposed airports prior to granting clearance. At present the thresholds for clearance are largely technical in nature and do not take viability into consideration. The Airport Approval Commission should also determine what kind of airports India requires and the level of capex that should be invested. If PPP airport operators are simply able to levy whatever charges are required to be able to achieve a certain rate of return there is a risk of gold-plating which will increase charges and limit the interest of airlines in operating there. The Commission should assess whether the plans for a proposed airport are over-capitalised.

"State governments must play a much more active role in the airport sector since aviation is a key enabler of local economic development. Indeed the Centre should gradually withdraw from airport operations. However this requires a process of education to make state governments understand the impact of airports on local economies."

Approved airports could then be referred to the Aviation Finance Corporation if additional funding is required by the promoters.

State governments: State governments must play a much more active role in the airport sector since aviation is a key enabler of local economic development. Indeed the Centre should gradually withdraw from airport operations. However this requires a process of education to make state governments understand the impact of airports on local economies.

State governments will also need to become more involved with strategies to promote hub development. This will require a change in mindset to accept that it is permissible for a state government to pursue initiatives which might benefit a private airport operator but where the benefits for the local economy are far greater. Unnecessary politicisation of such issues prevents us from seeing the bigger picture.

"Several non-metro AAI airports expected to be included among the 15 airports to be privatised on a PPP basis are already approaching saturation. In some cases securing land for expansion at the current site will be extremely challenging either because 1) land is simply not available, or 2) the costs of acquisition would be prohibitive and destroy the viability of the airport. The long term strategy for such airports will need a complete re-think."

Land use and planning: There must be greater transparency on the use of land for non-aeronautical purposes at airports. It is counterproductive to develop residential and commercial communities on land adjacent to airports if the outcome is activism from residents seeking to curtail airport operations because of noise pollution. There must be careful master planning to ensure that different land uses can co-exist.

Furthermore, a long term perspective must be taken with respect to land requirements for airport infrastructure. The projected rate of growth of aviation will require metro cities to develop second, and in some cases third airports within the next 20 years. Land scarcity in India means that there is likely to be significant politics around this issue and it is necessary to take a very long term view, looking ahead 30-40 years to plan for land requirements for future airports from now.

Economic regulation: India's airport infrastructure requirements can only be met by attracting private capital. However, in order to attract investors there must be a predictable environment with respect to potential revenue streams.

The award of concessions at Delhi and Mumbai was conducted in the absence of a defined economic regulatory framework and hence there is a continuing debate between the airport operators and AERA on whether a single, hybrid or dual till should be applied.

The till structure should have been made known at the time of the tender so that consortia could have bid accordingly and the appropriate level of investment could have been expended on airport development. AERA's stated position is to apply a single-till approach, however the Ministry had subsequently indicated that it planned to introduce a policy specifying a hybrid till. Up until the time that the Model Code of Conduct came into force in Mar-2014, the PPP airport operators were expecting a hybrid till policy to be announced, but this did not happen. The lack of conviction on the part of the Ministry in following through with this has resulted in confusion.

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Whatever the final decision on the regulatory framework the critical points are that it should consider the impact on the consumer and perhaps more importantly on the airlines which lie at the heart of the system; it should ensure competitiveness within the sector; and extensive stakeholder consultation should be conducted by independent experts on the implications of different approaches. The decision should be transparent and bring certainty to all stakeholders after which the independence of AERA should be respected.

PPP Airports: A monitoring group should be set-up to review the performance of the PPP airports for the purposes of identifying learnings that can be built-in to future projects. This would include an assessment of performance in areas including pricing, slot coordination, infrastructure development, stakeholder engagement, environmental initiatives, slot coordination and land use. Clarity is required in terms of the policy with respect to the permissible subleasing of land by PPP airports.

"The economic regulatory framework for airports should consider the impact on consumers and airlines; it should ensure competitiveness within the sector; and extensive stakeholder consultation should be conducted by independent experts on the implications of different approaches. The framework should be transparent and bring certainty to all stakeholders. Once established, the independence of AERA should be respected."

Efficiency: Low productivity of India's strategic infrastructure assets such as runways and airspace has a major impact on airline efficiency. Mumbai Airport is only able to achieve 37 movements per hour and is targeting an eventual maximum of 46, compared with Gatwick's 60 movements from a single runway.

Meanwhile, airports such as Mumbai and Pune are approaching their capacities and will be virtually choked and unable to handle additional services for several years before new airports are opened.

Congestion, holding patterns and extended turnaround times all serve to increase costs which will ultimately be passed on to the airlines and passengers.

Airspace coordination: There is a need for greater coordination between civil and defence entities with respect to the flexible use of airspace as occurs in most markets.

Slot allocation: Slot allocation at airports must also be conducted transparently by an independent slot coordination committee with clearly defined and published criteria for allocating slots; otherwise distortions are created that impact competition between airlines.

CAPA has successfully completed numerous and diverse airport-related engagements in India, including hub development strategies, airport charges reviews, benchmarking of operational efficiency, traffic forecasting, bid consortium partner searches, airport marketing strategies, Board advisory papers and retail and duty free analysis. For more information contact Vishal Bhadola on capaindia@centreforaviation.com

Air India can no longer remain under government ownership; the carrier must privatised, with a strategic airline partner to participate

Despite significant recent improvements in its operating and financial performance, the likelihood is that despite the best intentions of Air India's management the carrier faces almost insurmountable challenges. Due to the intensifying competition on both the domestic and international fronts performance may once again start to deteriorate from FY2016 onwards.

The carrier is faced with almost unthinkable funding requirements. Fleet modernisation alone could require USD12-14 billion over ten years, let alone operating losses. If the status quo continues, from FY2016 onwards the airline will drain up to USD1 billion per annum from the public exchequer over the next decade with no meaningful improvement in the carrier's situation. The government is already having trouble committing to the funding required.

A dramatically different approach is required to that which has been pursued in the past. The change of government is an appropriate time for bold, decisive action on the ownership of Air India. The carrier should be restructured and privatised with the freedom to seek a viable airline partner as part of the privatisation.

CAPA recommends that a Council for the Future of Air India be set-up with the objective of establishing a plan within 6-9 months which outlines the circumstances under which the privatisation would be possible and the structure of the privatisation model.

For example, labour rationalisation should proceed on the basis of an attractive government-sponsored 'platinum handshake' retrenchment programme. A new labour agreement should be prepared for remaining employees, structured in line with the requirements of the new business model.

Air India's real estate assets could be transferred into a separate entity along with non-aircraft related debt. This would effectively provide the airline operating entity with a one-time write-off of non-aircraft debts, after which it should become self-funding. Value generated from the real estate assets could be used to pay down or service the debt and fund the retrenchment programme.

Value in the ground handling, MRO and frequent flyer subsidiaries should be unlocked by securing 74% strategic partners in these businesses.

A strong foreign airline should be inducted as a 26% and eventually 49% strategic partner. The partner should be carefully selected for strategic fit and ability to provide resources and expertise to make Air India competitive. Over time, as Air India is turned around and emerges as a viable and competitive airline, the government can further divest its stake down to 26%, with the balance 25% to be held by private Indian interests or other stakeholder public sector units.

In the meantime revenue improvements and cost reduction strategies should be fast-tracked. Air India's fleet strategy needs an overhaul to ensure that it is better aligned with the carrier's network and commercial capabilities.

Despite recent improvements in performance Air India continues to incur significant losses on its three US routes. With Gulf carriers rapidly expanding

"Air India has achieved significant improvements in its operational and financial performance over the last couple of years. Losses are estimated to have declined from INR7,500 crores in FY12 to INR4,200-4,500 crores or less in FY14. Further improvements may be possible in FY15 however this may be as good as it gets."

"Due to intensifying competition on both the domestic and international fronts performance may once again start to deteriorate from FY2016 onwards."

"Air India continues to face deep structural challenges in terms of its business model, people, skills, access to capital, fleet composition, ownership and governance."

"The national carrier requires a clean slate in order to prepare for privatisation. An independent committee should be set-up to examine the future of Air India including a possible structure for privatisation."

"CAPA recommends hiving-off real estate assets into a special purpose vehicle and using the funds that can be generated to pay down INR18,000 crores of non-aircraft related debt and to fund the retrenchment programme."

capacity into North America competition is set to increase, and given Air India's inability to generate significant premium traffic the carrier may no longer have a viable business case for its US operations. A fleet of a dozen 777-300ERs, with three more on order, is difficult to justify to support a service to London and three heavily loss-making routes to the US.

"Air India's fleet strategy needs an overhaul to ensure that it is better aligned with the carrier's network and commercial capabilities. This includes replacing A319s with A320/321 aircraft and transitioning to an all-787 wide body fleet. Long haul services to North America may not be viable."

Over time Air India may be best to transition the 15 777-300ERs to 787-9s eventualy operating an all-Dreamliner wide body fleet of just over 40 aircraft that would deliver a fleet and network platform that would support restructuring. On the domestic front the airline needs to replace its A319s with A320/321 aircraft to provide it with a more competitive unit cost structure.

Other airline-related objectives

Taxation: The highly punitive fiscal regime in India is the primary problem for the aviation sector. The cost of Aviation Turbine Fuel in India is almost 60% higher than international benchmarks. Combined with a high base price, fuel now represents up to 50% of a carrier's operating costs. The volatility of such a significant cost input on this scale makes it extremely difficult to plan cashflow and working capital requirements.

At present states are clinging on to sales tax revenue on fuel of around USD600-700 million per annum which is stifling the airline industry. The potential economic contribution of a viable aviation sector is manifold greater in a USD1.8 trillion economy, however state governments are jeopardising much greater returns due to a misplaced focus on revenue at hand.

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Airlines face a challenge with ATF not only in relation to the level of taxation, but also the base price, the cost of logistics and availability of fuel at smaller airports. Increased private competition could improve the situation with respect to pricing as well as supply. The Petroleum Ministry could potentially be appointed to regulate the pricing of ATF.

In additional to the high cost of ATF there are several other fiscal imposts including service tax and withholding tax. The negative fiscal environment must be addressed to provide a structure which keeps viability in mind. Rationalisation of sales taxation on fuel to a flat rate of 4% would immediately result in a cost saving of US$700-800 million. If the government is prepared to allow direct importation of fuel, it would appear to be far more logical to instead seek consensus on sales taxation with state governments

Cost of Operations: Aside from fuel, Indian aviation is facing an increasing cost environment. With almost USD10 billion of investment in airports over the last 5 years, airport charges are increasing, particularly at the major metros. Delhi and Mumbai Airports, which together account for 40% of traffic in India, will completely pass through USD5 billion of expenditure to passengers. Other airports have followed suit. The passenger fees that have been levied have increased fares and impacted demand and traffic volumes. The need to upgrade ATM infrastructure is also expected to result in higher charges. The question of airport and airspace viability needs to be addressed in a manner which does not further destabilise the airline sector. And the new ground handling policy may also result in an increase in costs due as airlines will no longer be permitted to self-handle.

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The high cost structure and punitive fiscal environment make it difficult for Indian carriers to compete and limit the potential to establish India as a global hub. Addressing these issues could positively transform India's role in international aviation.

Route Dispersal Guidelines: The requirement to operate social obligation routes creates a distortion for the airlines and at the same time does not appear to be achieving the ultimate objective of delivering greater connectivity to remote and less developed regions.

"The Route Dispersal Guidelines result in over-capacity on some routes and leave other remote areas unconnected. Forcing airlines to operate routes where there is no demand is of limited benefit."

The proposed new guidelines which would require airlines to operate 6% of their capacity to remote regions are even more distortionary than the current regulation and need to be revisited. The implementation of the new guidelines should be put on hold pending the formulation of a more appropriate plan.

A new model should be practical and implementable. The government must first clearly identify which areas need connectivity and why. The Route Dispersal Guidelines should be structured in a manner that better aligns demand and capacity. At present the guidelines result in over-capacity on some routes and leave other remote areas unconnected. Forcing airlines to operate routes where there is no demand is of limited benefit.

"In many remote areas per capita incomes are very low and direct subsidies may be a more appropriate model to deliver connectivity objectives in a more targeted manner. "

Realistic demand in such locations should be assessed, including the ability to pay for air travel. In many remote areas per capita incomes are very low and direct subsidies may be a more appropriate model to attract an airline to operate and to deliver connectivity objectives in a more targeted manner.

Regional Connectivity: The regional airline industry requires careful assessment. Locations which require connectivity must first be identified. Where possible, unused existing airports should be rehabilitated but if suitable options are not available then a greenfield airport should be considered only after careful evaluation against strict criteria. India does not require white elephant airports which will only service to dissuade future investors.

Industry with interests in such locations that may be prepared to invest in regional airports or airlines should also be approached and be given the ability to apply such investments as tax write-offs. Per capita income in these regional locations is likely to be low and subsidies may need to be offered in certain cases to make the route viable.

"The viability of regional airlines is challenging as notable from the fact that since the new regional airline licence category was introduced in 2007 there has been no successful, standalone regional airline. This is a cause for concern."

The viability of regional airlines is challenging as notable from the fact that since the new regional airline licence category was introduced in 2007 there has been no successful, standalone regional airline. This is a cause for concern. Earlier attempts such as Paramount and MDLR have failed and most recently Mantra has also suspended operations. Intra-state air taxi operators such as Ventura in Madhya Pradesh are struggling while Captain Gopinath's Deccan Shuttles in Gujarat closed within months of starting. There is clearly a fundamental issue with the viability of regional operations due to the cost structure, airport infrastructure limitations and the overall policy environment.

A key weakness is the nature of regional equipment. The category spans a wide range, from 20 seater air taxis to 50-80 seat turboprops and regional jets and these have very different business models and requirements. To subsidise operators in the 50-80 seat category would be too expense while there are no modern 20 seater aircraft available and by their very nature the per seat mile cost

on small aircraft is relatively high. And monitoring small operators and their use of public subsidies adds another layer of bureaucracy and costs.

5 Year / 20 Aircraft Rule: There is no logic for this discriminatory regulation which requires Indian carriers – but not foreign airlines – to have operated domestically for five years and to have a fleet of at least 20 aircraft, before being permitted to fly overseas. It has prevented Indian carriers from claiming their rightful share of international traffic. This unnecessary regulation presents an obstacle to the establishment of potentially viable start-up airline models such as a low cost long haul operation.

"There is no logic to the discriminatory 5 year/20 aircraft rule. It should be abolished without further delay."

Bilateral Aviation Policy: India's bilateral policy has evolved on an ad hoc basis which has been damaging for all stakeholders. Over the last decade the position on bilaterals has oscillated between rapid liberalisation and freezing access. Such decisions have been made in an arbitrary manner, taken in the absence of a clear plan and without being communicated to the industry. A White Paper should review recent decisions, not with the objective of raking up the past, some of which has been controversial, but to identify the key learnings.

Going forward the government must establish a rule based regime for awarding bilaterals. The market should open but it should be done in a predictable manner that is linked to India's national interests and provides airlines with the predictability to be able to plan.

"The government must establish a rule-based regime for awarding bilaterals. The market should open but it should be done in a predictable manner that is linked to India's national interests and provides airlines with the predictability to be able to plan."

The grant of bilaterals should be based on extensive research which takes into consideration the drivers of traffic, the markets with which India's trade, tourism and social links exist; and detailed market-wise forecasts.

Market Expansion and Entry: Oversight of the industry must take into account an in-depth structured analysis of airline financials. Airlines should not be permitted to expand if they are burdened with huge debts, negative net worth and limited cash. In addition, it is a concern that airlines that have previously closed have been able to obtain an NOC to re-launch even though previous debts to banks and suppliers have not been cleared.

New airlines should be permitted to enter, in fact it should be actively considered for operators with strong business plans and which are well capitalised. The award and renewal of licences should be based on capital adequacy for the proposed business plan rather than a fixed paid-up capital threshold. MOCA must develop the capability to critically evaluate business plans and monitor the health of the industry for which it must remain at the cutting edge of airline strategic thinking. Given the financial weakness of incumbent operators, the market should not be reliant upon them to deliver additional capacity. However in recent times there have been no clearly defined criteria against which airline licence applications are assessed and the application process itself has been subject to change without prior notice.

"The award and renewal of licences should be based on capital adequacy for the proposed business plan rather than a fixed paid-up capital threshold. MOCA must develop the capability to critically evaluate business plans and monitor the health of the industry."

Aircraft Leasing: Indian carriers have over 400 aircraft on order and further large orders are expected to be placed this fiscal year. However, financing of this equipment may be challenging for some carriers. Given the ongoing difficulties in the operating environment and with the Kingfisher experience still fresh, some banks and lessors remain concerned about the level of risk in the Indian market, especially as the provisions of the Cape Town Convention are yet to be formally incorporated into the Indian Civil Aviation Regulations.

Commercial Flexibility: The restriction on airlines being able to adjust their forward schedules in response to market demand limits their commercial flexibility. As does micro-intervention on issues such as the ability to charge additional fees for seat selection. Since these ancillary charges allows passengers to benefit from lower base fares and to customise the product to better suit their requirements and budget, whilst allowing airlines to develop a more sustainable operation in an environment of wafer thin margins, there appears to be no rationale for regulating them. While the government did announce some liberalisation on ancillaries last year, it subsequently back-tracked and applied quotas in some areas. These should be lifted.

CAPA has extensive experience in advising airline-related projects, from start-up business and financial planning to route development studies, risk analysis, competitive reviews, marketing and distribution studies and strategic planning. We have advised flag carriers, LCCs, foreign airlines, start-ups, investors and governments. For more information contact Vishal Bhadola on: capaindia@centreforaviation.com

Security

India needs a new Civil Aviation Security Act to provide a statutory under-pinning to what is a critical but low profile element of the aviation industry. A dedicated aviation security force also needs to be established as was proposed earlier.

A strategic review of the operational capability of aviation security agencies needs to be conducted which addresses preparedness to meet requirements over the next 10 years with respect to people, training, equipment and technology, intelligence capabilities and expertise in countering new forms of threats such as cyber-security, while maintaining cost discipline. In addition, addressing customer service issues is becoming more important – at many airports security processing is frequently cited as letting down the overall airport experience.

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Freight

An efficient air cargo and logistics sector is vital for competitive trade and investment. In many ways it is already more liberal than passenger services (India follows an open skies policy with respect to all-cargo operations), however this has not been fully leveraged.

The fact that air cargo is lower profile than passenger operations means that there should be fewer political obstacles to reform in this area. Successful air cargo operations are based on global transport and logistics networks. If India is to integrate into the global supply chains leading global operators must be allowed to establish their operations in the country either in terms of all-cargo air services or the establishment of infrastructure such as warehousing and high volume throughput systems.

However, if such infrastructure is to be developed it will require the support of dedicated air cargo capacity. The opportunity should therefore be taken to unilaterally dismantle barriers to entry, including 100% foreign direct investment. The cooperation of other government agencies is also required. Some of the most significant challenges for air cargo in India include inefficient customer processing and long dwell times; archaic regulations; limited infrastructure; poor logistics infrastructure; lack of automation and security issues. Ultimately an efficient air

"Some of the most significant challenges for air cargo in India include inefficient customer processing and long dwell times; archaic regulations; limited infrastructure; poor logistics infrastructure; lack of automation and security issues."

cargo environment will support inward investment in manufacturing in India due to the ability to seamlessly integrate with global supply chains.

CAPA India Air Cargo & Express Report 2014 scheduled for release in Aug-14, provides comprehensive analysis of air cargo and express operators, traffic performance, India's trading patterns, infrastructure, supply chains, facilitation issues, policy and regulation and a roadmap for the sector going forward. For more information contact Vishal Bhadola on capaindia@centreforaviation.com

"GA is a sector which has massive growth potential but has no dedicated policy or regulatory framework nor infrastructure or services to support it."

General Aviation (GA)

With a clear vision, general aviation could emerge as a key driver of regional connectivity and economic development. The paradox of Indian GA is that this sector which has massive growth potential but has no dedicated policy or regulatory framework nor infrastructure or services to support it.

"The Ministry of Civil Aviation must appoint a Joint Secretary for GA so that there is a dedicated bureaucrat responsible at a policy level for addressing the wider infrastructure, fiscal or technical problems faced by the GA industry.

There needs to be a realisation that the GA sector is already large with close to 750 economically active aircraft (larger than the scheduled fleet). Failure to pay attention to GA could impede the development of an important component of the aviation value chain and have worrying safety and security implications.

At a policy level GA has largely been ignored and operates in the shadow of commercial airlines. There has been limited consideration for GA requirements in air traffic management planning, or in the development of dedicated infrastructure at airports other than Delhi and Mumbai. The sales tax concession on fuel available to schedule aircraft operations with less than 80 seats should be extended to GA.

"The highly fragmented nature of the industry, which is dominated by small operators, most of whom have no more than a couple of aircraft, has impacted the advocacy strength of the sector."

CAPA India Business & General Aviation Report 2014 scheduled for release in Jun-14, presents the most detailed review of the sector in India based on primary research with key stakeholders, analysis of fleet and orders data, assessment of government policy proposals, and a study of traffic trends to arrive at an accurate picture of this often neglected sector. For more information contact Vishal Bhadola on capaindia@centreforaviation.com

"By privatising Pawan Hans, the largest GA company, the government has the opportunity to both unlock value as well as create a commercially-driven leader for the sector."

A national airport master plan should seek ways to increase capacity and flexibility for GA. This will include ensuring adequate parking and hangar space, allowing MRO/FBO activities on the airport, and developing ATC procedures capable of accommodating increased small aircraft movements. Serious consideration should be given to the development of disused or low traffic secondary airports for GA.

Access to airspace should be equitable and ensure that GA can operate effectively. There also needs to be recognition that not all airspace needs to be controlled, and with appropriate regulations and facilities this in itself could facilitate GA movements.

Scant regard is paid to GA in the current regulations. The multiplicity of aircraft types, fragmentation of operators and evolving technology will undoubtedly create headaches for the regulator. There is a shortage of personnel to develop, monitor and enforce regulations in GA. Quality and safety audit systems are seen as deficient. The Ministry of Civil Aviation must appoint a Joint Secretary for GA so

that there is a dedicated bureaucrat responsible at a policy level for addressing the wider infrastructure, fiscal or technical problems faced by the GA industry.

The highly fragmented nature of the industry, which is dominated by small operators, most of whom have no more than a couple of aircraft, has impacted the advocacy strength of the sector. There is a need for a strong organisation that can drive policy changes. The largest general aviation company is the state-owned Pawan Hans. By privatising Pawan Hans the government has the opportunity to both unlock value as well as create a commercially-driven leader for the sector.

"The government needs to conduct its own independent due diligence into the structure and operations of the ground handling sector in India to ensure that a new policy not only achieves its security and safety objectives, but is consistent with an efficient and competitive aviation sector."

Ground Handling

The ground handling policy which the Indian government first wanted to introduce in 2007, and which would restrict carriers from self-handling, was legally challenged by the airlines arguing that they would face higher costs and a loss of control over critical customer service functions. The matter has been in dispute for several years – unnecessarily so by CAPA's estimate.

Both the government and the airlines were under-prepared. They adopted positions based on a poor understanding of the realities of ground handling. The government has to take responsibility for introducing a policy without appropriate industry consultation. But the airlines too reacted in a manner which was not constructive. Their key concerns could have been addressed through effective and considered negotiation.

Fundamental practical issues were not considered in-depth at the time of proposing the new ground handling policy. As a result, closer analysis reveals that even if the Supreme Court orders the implementation of the policy, the reality is that it may not be possible to operationalise the order because there are insufficient ground handlers able and willing to scale-up and invest in delivering the required services on acceptable terms. This may be an even greater hurdle than costs and customer service issues.

The government needs to conduct its own independent due diligence into the structure and operations of the ground handling sector in India to ensure that a new policy not only achieves its security and safety objectives, but is consistent with an efficient and competitive aviation sector.

The complexity of the transition from self-handling to third party handling should not be under-estimated. It will require extensive planning and take longer than expected to implement. As a result, it would be appropriate that should the court rule in favour of the policy, all parties be provided with 12-18 months to prepare for its implementation.

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The CAPA India Ground Handling Report, released in May-14, is an indispensable guide for any business with a stake in the sector, as the industry prepares for a new policy that will transform the business. For more information contact Vishal Bhadola on capaindia@centreforaviation.com

"Addressing costs is a necessary aspect of improving the competitiveness of Indian MROs, but it is only part of the story. A more holistic perspective indicates that quality is the other key issue and this requires a focus on people, skills and training, which is largely neglected."

Maintenance, Repair & Overhaul (MRO)

India has limited in-country third party MRO facilities. With a couple of exceptions, Indian carriers do not have in-house capabilities beyond line maintenance, which means that they rely on offshore providers for MRO services.

With its relatively low labour costs and large pool of basic science and engineering graduates, with investment in skills and training India in theory has the potential to emerge as a competitive MRO destination. However, it is hampered by a fiscal environment that imposes multiple additional taxes on third party operations. Expensive infrastructure is also a key challenge.

Much of the industry discussion about the challenges faced by MROs centres around taxation and costs. Addressing costs is a necessary aspect of improving the competitiveness of Indian MROs, but it is only part of the story. A more holistic perspective indicates that quality is the other key issue and this requires a focus on people, skills and training, which is largely neglected.

Until these issues are resolved Indian airlines will continue to send aircraft overseas for maintenance, representing a loss of foreign exchange for the country. Neighbouring countries are benefiting from India's failure to grasp this opportunity. IndiGo alone recently completed its 100th C-check in Sri Lanka, representing in excess of USD25 million foregone revenue for Indian MROs due to the absence of an enabling operating environment. The government of Sri Lanka is investing further in establishing a world class MRO facility, with Indian carriers its primary target customers.

In fact the competition from other countries in the region is brought into sharp focus when an India-based MRO reportedly plans to establish a facility in Dubai to service Indian clients. In the meantime in-country MROs continue to lose money.

The MRO sector requires a supportive regulatory environment, an appropriate tax regime, enhanced skills development and training, allocation of space and infrastructure at airports and the streamlining of procedures associated with conducting maintenance in-country.

The CAPA India MRO Report, to be released in Aug-14 will provide unique insights into the size, direction and prospects for the market for MRO providers to the Indian airline industry. For more information contact Vishal Bhadola on capaindia@centreforaviation.com

"In the absence of a competitive in-country MRO sector Indian airlines will continue to send aircraft overseas for maintenance, representing a loss of foreign exchange for the country. Neighbouring countries are benefiting from India's failure to grasp this opportunity."

"Competition from other countries in the region is brought into sharp focus when an India-based MRO reportedly plans to establish a facility in Dubai to service Indian clients."

"The MRO sector requires a supportive regulatory environment, an appropriate tax regime, enhanced skills development and training, allocation of space and infrastructure at airports and the streamlining of procedures associated with conducting maintenance in-country."

Education & Training

The ability to bring India in line with the global aviation community will hinge upon the skills and competency of the workforce. However, education and training has virtually been an afterthought in Indian aviation. The industry has muddled through by deploying ad hoc measures to fight fires. Neither is attention given to the training of new entrants into the industry nor up-skilling of existing employees. The latter is particularly important given the pace of change within the industry. The industry is making minimal effort to engage with the youth of the country to promote careers in aviation and to attract the brightest minds to the industry.

This approach must change if India is to deliver a professional, sustainable and safe industry. CAPA estimates that an additional 300,000-350,000 skilled staff will need to be trained over the next decade to support the projected growth of Indian aviation; however there appears to be little attention given to forward planning within the industry itself in terms of assessing training requirements and training capacity.

"Education and training has virtually been an afterthought in Indian aviation. Attention is given neither to the training of new entrants into the industry nor up-skilling of existing employees."

The low priority allocated to skills development means that education and training providers have not been able to develop a viable business model and consequently there is no serious investment taking place in capacity building in terms of training infrastructure. This may require financial incentives to be provided to investors in the form of soft interest rates, viability gap funding or tax concessions.

"The industry is making minimal effort to engage with the youth of the country to promote careers in aviation and to attract the brightest minds to the industry".

Meanwhile the quality of most of the training institutions in the country is below par, and CAPA research indicates that the regulation of the sector raises some significant cause for concern.

There is a need for a fundamental overhaul of the quality of training in India and it must happen quickly and in a cost effective manner. The industry itself must also take a more proactive role in shaping the nature of aviation education in the country. At present there is limited collaboration between aviation businesses and training institutes. In future, aircraft and engine manufacturers should be required to support the development of training to support fleet orders. Offset agreements are a condition of government airline orders but could be extended to private airlines as well.

But if India succeeds in this mission, it will in the process create a massive export opportunity. There exists the potential for India to become a low cost, outsourced aviation education and training centre for the world, provided that international quality standards can be established.

"The low priority allocated to skills development means that education and training providers have not been able to develop a viable business model and consequently there is no serious investment taking place in capacity building in terms of training infrastructure."

The government took a positive step in January 2008 when the foreign direct investment cap in flying schools and training institutes was increased to 100%. However, international training providers still report frustration with very slow and ambiguous approval processes. The government must adopt a more pro-active, fast-tracked and encouraging stance with respect to the establishment of new institutes. Furthermore, although the foreign university bill is beyond the purview of MOCA, an initiative could be taken to convince the Ministry of Human Resource Development that aviation is a new and specialist discipline of national interest which warrants exemptions for the participation of foreign universities as there are no established Indian centres of excellence in the subject.

The CAPA India Aviation Skills & Training Report combines extensive qualitative research amongst operators, trainers and government with rigorous data compilation and analysis to deliver an accurate picture of the training requirements and the competitive landscape. For more information contact Vishal Bhadola on capaindia@centreforaviation.com

Environment

Sustainability issues are increasingly prominent in the global aviation industry. India needs to develop a roadmap for addressing issues such as carbon emissions in line with IATA's targets. India also needs to establish targets of its own that are appropriate for the market. This requires a detailed assessment of current CO2 emissions and how much is contributed by each airline. Understanding noise footprints at each airport and by aircraft type is also key. And for both emissions and noise it is necessary to develop forecasts for how these are expected to grow over time, together with a credible mitigation strategy. Airlines and airports must appoint an Environmental Officer and similarly a senior level officer should be appointed within MOCA with responsibility for environmental issues.

Investment in new technologies and enhancing the efficiency of airports and airspace will make an important contribution. The industry needs to be prepared as CAPA expects a significant increase in activism in relation to emissions and noise. As stated earlier, careful planning with respect to land use can mitigate potential noise pollution before it arises. However greater consumer awareness could be leveraged positively by seeking the cooperation of passengers to contribute to carbon neutral growth by purchasing credits along with their ticket.

"For both emissions and noise it is necessary to develop forecasts for how these are expected to grow over time, together with a credible mitigation strategy."

As an emerging aviation power, which is likely to be the third largest market in the world by the end of this decade, India needs to be seen to be responsible and to be taking a leadership role in the challenges that face the industry.

CAPA India is the leading aviation advisory, research and knowledge practice in South Asia. Our capabilities combine local knowledge and international experience. We have completed almost 70 consulting engagements in South Asia, delivering bespoke strategic, commercial and operational advisory services to airlines, airports, investors, governments, ground handlers, MROs, general aviation operators and travel distribution companies. Our global portfolio of work exceeds 600 projects.

Our advisory services are supported by the first and largest dedicated aviation research practice in India, which has completed more than 30 studies. Our in-depth research reports on topics such as the industry outlook, business aviation, MRO, ground handling, ancillary revenues and cargo & express are acclaimed for having provided new perspectives on issues of strategic importance.

For more information please contact Vishal Bhadola on capaindia@centreforaviation.com

"CAPA expects a significant increase in activism in relation to emissions and noise. Careful planning with respect to land use can mitigate potential noise pollution before it arises."

Conclusion

Once the bottlenecks have been removed the industry can be left to itself. At present the reason that the government is faced with the current crisis is because it has not created an environment which supports viable operations. Furthermore, planning is of vital importance and is a feature that Indian aviation has lacked. MOCA must set out the vision for the sector, create a level playing field and then let market forces decide the outcome. The focus should then be on policy, safety, environmental issues, competition and viability and placing the consumer at the centre.

CAPA does not wish to be alarmist but the current situation is dismal. And these concerns need to be considered within the context of the fact that India needs to be preparing for an aviation industry that could be 15-20 times the current size by 2050. A failure to set-up the long-term structural competitiveness and viability of the industry will have serious repercussions for economic growth and employment generation.

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About CAPA India Aviation Outlook 2014/15

This report highlights one of the issues that will be explored in greater detail in the 2014/15 edition of CAPA India's flagship report, the annual India Aviation Outlook. The full 300+ page report is keenly anticipated by the industry each year as the leading analysis of the direction of one of the world's most important emerging markets.

CAPA India Aviation Outlook 2014/15 will cover:

- **Strategy:** review of business models and strategic plans of all Indian airlines;
- **Financial and operating analysis:** comprehensive data for every carrier e.g. traffic; load factors; market shares; fares; unit revenues and costs; utilisation; P&L and balance sheet analysis;
- **International operations:** detailed assessment of network strategies, market access and competition;
- **Forecasts:** for traffic, capacity and yields; airline profit and loss projections for FY15;
- **Fleets:** induction plans and expected new orders;
- **Funding:** capital raising plans, IPOs and likelihood of foreign airline investment;
- **Risk assessments:** for each Indian carrier;
- **Start-ups:** evaluation of the prospects for new entrants, particularly in the regional sector;
- **Policy & regulation:** expected reforms under the new government which could impact aviation;
- **Privatisation:** latest status of PPP and greenfield airport projects;
- **Ancillary sectors:** outlook for ground handling, maintenance, training and general aviation.

For more information, or to order the full 300+ page report to be released on 15 June 2014, contact Vishal Bhadola on +91 11 4692 1052 or capaindia@centreforaviation.com