

## IAC&S Project Sheets

### PROJECTS COMPLETED

<b>Project Name</b> Airport Consultants for the Development of an International Airport at Kushinagar in PPP Mode on DBFOT basis by Govt. of Uttar Pradesh	
<b>Location within country:</b> Uttar Pradesh, India	<b>Duration of assignment (months)</b> <b>12</b>
<b>Name of Client with Address</b> ILF&S Infrastructure Development Corporation Ltd. 2 <sup>nd</sup> Floor, Ambience Corporate Tower Ambience Mall, Gurgaon -122001	<b>Total No of person months of the assignment</b> <b>15 man months</b>
<b>Start date (month/year):</b> March 2009	<b>Completion date (month/year):</b> March 2010
<b>Estimated Cost of the Project:-</b> INR 350 crores	
<b>Narrative description of the Project</b>  Govt. of Uttar Pradesh has retained ILF&S IDC to carry out Feasibility Study for Integrated Development of Buddhist circuit around Kushinagar along with Development of an International Airport at the location where a 6000 ft airstrip exists.  India Aviation Consulting & Support (IAC&S) has been retained by ILF&S as Aviation Consultants / Aviation experts for the development of the International Airport at Kushinagar including preparation of the Traffic forecast and the TEFR ( Techno Economic Feasibility Study) and assist in the entire process of selection of a developer under the PPP process of the DOE / Planning Commission/ MOCA	
<b>Description of actual services provided in the Project</b>  India Aviation Consulting & Support in association with ILF&S IDC and the State Govt. Authorities of U.P, took up activities required for the preparation of Techno-Economic Feasibility Report such as <ol style="list-style-type: none"> <li>1. Field Surveys for Assessment of Traffic Potential for the Proposed Project</li> <li>2. Traffic Survey and Traffic Forecast for the Project</li> <li>3. Assessment of the Land required for the Project</li> <li>4. Development of Land Use Plan for the entire infrastructure required for the Project</li> <li>5. Lay out Plan for the Proposed Airport Terminal Building and other Ancillary Services.</li> <li>6. Soil Tests ( CBR and K value) for design of pavements</li> <li>7. Assessment of Capital Cost and Revenue Streams</li> </ol> Preparation of the techno Economic Feasibility Study etc	

<b>Project Name</b> State Perspective Civil Aviation Plan for growth of Aviation Sector in the State of Chhattisgarh in the next Ten (10) years	
<b>Location within country:</b> INDIA	<b>Duration of assignment (months)</b> 6
<b>Name of Client with Address</b> Government of Chhattisgarh Directorate of Aviation, State Hangar, Raipur	<b>Total No of person months of the assignment</b> <b>22 months</b>
<b>Start date (month/year):</b> 29 March 2012	<b>Completion date (month/year):</b> 27 Sep 2012
<b>Estimated Cost of the Project:-</b> INR 545 crores	
<b>Narrative description of the Project</b> IAC&S was appointed by M/s Directorate of Aviation, Govt. of Chhattisgarh to prepare the “State Perspective Civil Aviation Plan” for growth of Aviation Sector in the State of Chhattisgarh in the next Ten (10) years.	
IAC&S Scope of Work for the Assignment: <ol style="list-style-type: none"> <li>1. Required Infrastructure to be developed for growth of interstate and intrastate air connectivity. <ul style="list-style-type: none"> <li>• Forecast Projected Air Traffic for the State of Chhattisgarh - 10 years ( PAX &amp; CARGO) airport wise for all 7 state owned airports</li> <li>• Recommend the required infrastructure on the airside / city side along with expected types of aircraft likely to operate on different sectors.</li> <li>• Collection of Metrological Data of the airfield and propose the VFR or IFR type of operation at the airport</li> <li>• Prepare a Land use plan for each of the seven state owned airports keeping phased infrastructure development in view</li> <li>• List out infrastructure available such as ( Total land, Runway Length and Breadth, Runway Strip, Taxiways , Apron, Terminal Building, Aerodrome Control Tower, Fire Station etc)</li> <li>• Assess whether the additional land is available and can be acquired and prepare Land Use Plan of each of the 7 airports</li> <li>• Organize Soil Tests for Pavement Design for all seven airports</li> <li>• Organized Obstruction Survey to assess safety of aircraft operation all airports</li> <li>• Assess requirements for Rain Water harvesting and airport Drainage System</li> <li>• Assess Electrical Power Requirements and the nearest source of power</li> <li>• Propose the Navigational Aids Necessary for operations etc.</li> </ul> </li> <li>2. Perspective plan and budgetary requirement to implement related infrastructure in the State. <ul style="list-style-type: none"> <li>• Work out Capital Cost to create the infrastructure as assessed</li> <li>• Work out Revenue Expenditure for Operation / Maintenance of Airfields</li> </ul> </li> </ol>	

- Work out Revenue Generation from Aeronautical and Non-Aeronautical Activities.
3. Incentive required to be provided by the State Govt. to improve intrastate connectivity.
    - Identify / Prioritize and aerodrome for Base station for likely type of aircraft operation
    - Calculate the Operating Cost of aircraft in consider to various factors ( Block Time, Flight Frequencies, Aircraft Type, Varying Passenger Numbers and Fleet Size etc)
    - Calculate the revenue likely to be generated from Passengers / Cargo etc.
    - Identify Commercially Viable routes for sustained Operation
    - Compute Viability of the operation and suggest the incentive required to be provided by the Govt. to make it viable
  4. Related Human Resource development and employment creation by capital investment in the sector.
    - Study the impact of capital investment in generating Direct and In-Direct Employment
    - Assess the need of Training Manpower in the various sector for optimum use of the resources and for the hospitality / travel industry etc.
    - Asses Viability Gap and Analyze / Propose Viability Gap Funding (VGP) by the State Govt.

<b>Project Name</b> Development of Aerodromes in Chhattisgarh	
<b>Location within country:</b> INDIA	<b>Duration of assignment (months)</b> 6
<b>Name of Client with Address</b> Government of Chhattisgarh Directorate of Aviation, State Hangar, Raipur	<b>Total No of person months of the assignment</b> <b>20</b>
<b>Start date (month/year):</b> 29 March 2012	<b>Completion date (month/year):</b> 27 Sep 2012
<b>Estimated Cost of the Project:-</b> INR 545 crores	
<b>Narrative description of the Project</b> IAC&S was appointed by M/s Directorate of Aviation, Govt. of Chhattisgarh to prepare the required documents for Aerodrome License and Air Services for the Six (6) Airstrips in the State of Chhattisgarh.	
<b>Description of actual services provided in the Project</b> IAC&S Scope of Work for the Assignment: <ol style="list-style-type: none"> <li>1. Prepare Aerodrome Manuals</li> <li>2. Safety Management Manuals</li> <li>3. Compliance / non- compliance check list as per CAR section 4 Series B Part 1</li> <li>4. Latest Survey Map for all the Seven Airstrips</li> <li>5. Type A Obstacle Chart, showing all obstacles highlighted / marked.</li> <li>6. Lighting plan for runway lighting system</li> <li>7. Details of runway lighting control panel system</li> <li>8. Marking plan of runway</li> <li>9. Document of proof of ARP and Aerodrome Elevation</li> <li>10. Latest PAPI calibration certificate</li> <li>11. Friction Value Certificate of runway / taxiway</li> <li>12. ACN / PCN certificate for runway / taxiway, apron and runway threshold</li> <li>13. Drawing of Aerodrome showing runway, taxiway, apron, runway threshold etc</li> <li>14. Process of obtaining Aerodrome License for the six (6) aerodromes</li> </ol>	

<b>Project Name</b> Aviation Expert / Technical Consultants for up-gradation and modernization of Dr. Babasaheb Ambedkar International Airport, Nagpur through Public Private Participation.	
<b>Location within country:</b> Nagpur, India	<b>Duration of assignment (months)</b> 1
<b>Name of Client with Address</b> Ernest & Young Pvt. Ltd 6 <sup>th</sup> Floor, HT House, Kasturba Gandhi Marg, New Delhi - 110001	<b>Total No of person months of the assignment</b> 1
<b>Start date (month/year):</b> 22 Dec 2011	<b>Completion date (month/year):</b> 15 Jan 2012
<b>Estimated Cost of the Project:-</b> INR 606 crores	
<b>Narrative description of the Project</b> IAC&S was appointed by Ernest and Young Pvt. Ltd. as sub-consultant to provide Consultancy Services in relation to the Upgradation and Modernization of Dr. Babasaheb Ambedkar International Airport, Nagpur through Public Private Participation. The assignment requires review of all cost estimates as applicable for project construction to start in 2012 ( last revision in 2001 / 2009 and to hand hold MIHAN during the implementation	
<b>Description of actual services provided in the Project</b> IAC&S Scope of Work for the Assignment: <ol style="list-style-type: none"> <li>1. Estimation of Project Capital Cost including Civil, Electro-Mechanical and Special Equipments etc.</li> <li>2. Phasing of Project Cost</li> <li>3. Estimation of Operation and Maintenance ( O &amp; M ) cost.</li> <li>4. Estimation of Aero and Non-Aero revenue</li> <li>5. Assistance in preparation of all Technical schedules and specifications</li> </ol>	

<b>Project Name</b> Feasibility Study on possible Commercial Helicopter Operations in the North East Region of India	
<b>Location within country:</b> India	<b>Duration of assignment (months)</b> 6
<b>Name of Client with Address</b> M/s Gati Infrastructure Limited ( TCI FINANCE), M G Road, Secunderabad	<b>Total No of person months of the assignment</b> 14
<b>Start date (month/year):</b> December 2007	<b>Completion date (month/year):</b> June 2008
<b>Estimated Cost of the Project:-</b>	
<b>Narrative description of the Project</b>  IAC&S was appointed by M/s Gati Infrastructure Limited to prepare the Feasibility Study Report for the Helicopter Operations in North East Region of India.	
<b>Description of actual services provided in the Project</b>  M/s Gati Infr ( under the subsidiary TCI Finance) awards a contract to IAC&S to conduct a Feasibility study for Starting up a Helicopter Services in the North East Region of India and the Scope of the work shall include  <ol style="list-style-type: none"> <li>1. Assessment of Potential Regional Traffic ( North Easter Region)</li> <li>2. Identifying Commercial Viable routes for sustained operation</li> <li>3. Identify the type of aircraft ( helicopter) for proposed operation</li> <li>4. Commercial / Financial Viability as a project</li> <li>5. Study on adequacy of facilities at required Aerodromes.</li> <li>6. Identifying an Aerodrome for Base station &amp; MRO facilities</li> <li>7. Listing issues concerning compliance with the Regulatory Framework.</li> </ol>	

<b>Project Name</b> Technical Consultancy Services for Risk Assessment and Risk Mitigation study for Common User Fuel Farm Facility at the Mumbai International Airport	
<b>Location within country:</b> Mumbai , India	<b>Duration of assignment (months)</b> 12
<b>Name of Client with Address</b> Mumbai International Airport Pvt Ltd. Terminal 1B, Santacruz (E), Mumbai 400 099	<b>Total No of person months of the assignment</b> - 05 months
<b>Start date (month/year):</b> August 2010	<b>Completion date (month/year):</b> August 2011
<b>Estimated Cost of the Project:-</b> NA	
<b>Narrative description of the Project</b>  The Mumbai Airport has two independent Fuel Facilities with large tank ages, one at International operations and one at Domestic operations. It was later decided to consolidate the fuel facilities as “Common User Fuel Facility” at Santacruz, which can feed the entire airport. India Aviation Consulting & Support was appointed by Mumbai International Airport Pvt Ltd to conduct a Risk Analysis and Risk Mitigation Study for the “ Common User Fuel Tank Farm”	
<b>Description of actual services provided in the Project</b>  IAC&S Scope of work for the assignment: <ol style="list-style-type: none"> <li>1. Aircraft operation from the two runways during approach and take-off with reference to the fuel farm location.</li> <li>2. Location of the fuel farm with reference to Navigation and other Electromagnetic signals.</li> <li>3. Viability for control from ATC Tower, etc.</li> <li>4. Location of the Fuel Farm any other air safety angle and hazards to the Airport and its consequences if any</li> <li>5. Assisting MIAL in necessary Government Approvals.</li> </ol>	

<b>Project Name</b> Professional Consultancy Services for Construction of Rooftop Helipad at Delhi 1, Sector 16 B, Noida	
<b>Location within country:</b> India	<b>Duration of assignment (months)</b> 30 months
<b>Name of Client with Address</b> M/s Boulevard Projects Private Limited , 66, Devika Chambers, RDC Raj Nagar, Ghaziabad (UP)	<b>Total No of person months of the assignment</b> 06
<b>Start date (month/year):</b> August 2012	<b>Completion date (month/year):</b> Technical Design – Jan 2013 Construction Monitoring & Commissioning March 2014 or when building completion takes place
<b>Estimated Cost of the Project:-</b> 2 crore as the cost of the heliport - over all project cost more than Rs 4000 Crores	
<b>Narrative description of the Project</b>  IAC&S was appointed by M/s Boulevard Projects Private Limited for the professional consultancy services for the Construction of Rooftop Helipad at Delhi One, Sector 16 B , Noida, India	
<b>Description of actual services provided in the Project</b> M/s Boulevard Projects Private Limited awards a contract to IAC&S for the professional consultancy services for the Construction of Rooftop Helipad at Delhi One, Sector 16 B , Noida, India and the Scope of the work shall include  <ol style="list-style-type: none"> <li><b>1. Feasibility Study &amp; Report and Regulatory Compliances Advisory &amp; Assistance</b> <ul style="list-style-type: none"> <li>- Visual Site inspection for possible restriction,</li> <li>- Google Earth study from point of view of ATC</li> <li>- Prepare and submit application for Technical site clearance from DGCA and all authorities.</li> </ul> </li> <li><b>2. Design and Technical Feasibility Report</b> <ul style="list-style-type: none"> <li>- Organize obstruction survey within 10 Km radius</li> <li>- Collection of MET (Meteorological) Data</li> <li>- Prepare layout plan for the helipad based on the helicopter size, type of the helipad structure</li> <li>- Preparation of Technical Feasibility Report including Safety Services &amp; Design</li> <li>- Submit Application for commencing the construction of the helipad</li> </ul> </li> <li><b>3. Preparation of Manuals, Checklists &amp; License submission</b> <ul style="list-style-type: none"> <li>- Provide detailed equipment requirements to the client for the project including all installations of Fire Safety Services, Communication Equipment if any, Wind Sock, Lighting Facility required etc. all this for arranging Procurement etc</li> <li>- Preparation of Heliport Operational Manual with adequate reflection on Safety &amp; Security</li> <li>- Installation of Helipad &amp; Fire Safety Services Etc.</li> </ul> </li> </ol> Preparation of Checklist of all Facilities made available and Facilities expected for issuing license for the Heliport and Submission of Application for License & the checklist to the DGCA with all the clearances for the inspection	



<b>Project Name –</b> Obstacle Limitation Surface Survey for Cargo Airport at Bhiwadi Proposed by Delhi Mumbai Industrial Corridor Development Corporation (DMICDC)	
<b>Location within country:</b> Bhiwadi, India	<b>Duration of assignment (months)</b> 23 days
<b>Name of Client with Address</b> CREDAI, BHIWADI, 5, 3 <sup>rd</sup> Floor, City Mart, Sohna Road, Gurgaon (Haryana)	<b>Total No of person months of the assignment</b>
<b>Start date (month/year):</b> 29 <sup>th</sup> April 2013	<b>Completion date (month/year):</b> 21 <sup>st</sup> May 2013
<b>Consultancy Cost of the Project:-</b> 16.25 lacs	
<b>Narrative description of the Project</b>	
India Aviation Consulting & Support LLP was retained by M/s CREDAI, Bhiwadi for conducting the Obstacle Limitation Surface Survey for Cargo Airport at Bhiwadi Proposed by DMICDC.	
<b>Description of actual services provided in the Project</b>	
The scope of work shall include:	
<ol style="list-style-type: none"> <li>1. Establishment of baseline and suitable grid system for defining the coordinates of the various areas covered by survey work.</li> <li>2. Topographical and Obstacle Limitation Surface survey of the area and spot elevation for all areas having undulation of 10 m and above.</li> <li>3. Geographical coordinates AMSL height and object height for the objects located within the 20 kms all around.</li> <li>4. Preparation of Aeronautical charts like- Grid Map, Approach &amp; Take off charts, OLS charts etc.</li> <li>5. Assessment of obstruction in respect to AGA surfaces of the airport with the related elevation of the ARP or to the Centre of the Runway Identification of all man-made as well as natural structures / features (Roads, buildings, high ground, electric/telephone lines, towers / chimneys, nallahs / water streams / rivers, hills etc.)</li> </ol>	

## PROJECTS IN HAND

<b>Project Name</b>  TECHNO ECONOMIC FEASIBILITY STUDY AND ENVIRONMENTAL IMPACT ASSESSMENT for the Development of Feeder Airport at Idukki, Kerela State.	
<b>Location within country:</b> Kerela, India	<b>Duration of assignment (months)</b> <b>3 month – DPR</b> <b>6 month - EIA</b>
<b>Name of Client with Address</b> Kerala State Industrial Development Corporation Ltd (KSIDC) Keston Road, Kowdiar P.O Thiruvananthapuram-695003, Kerala	<b>Total No of person months of the assignment</b>
<b>Start date (month/year):</b> March 2013	<b>Completion date (month/year):</b> The further development in the project are held up pending acquisition of land ( resistance from locals – under discussions between the Govt. and the Land owners)
<b>Estimated Cost of the Project:-</b>	
<b>Narrative description of the Project</b>  India Aviation Consulting & Support LLP as a part of three member consortium has just been awarded the contract for “Preparation of Techno Economic Feasibility Study and Environmental Impact Assessment “for the development of Feeder Airport at Idukki, Kerala State by Kerela State Industrial Development Corporation Ltd.	
<b>Description of actual services provided in the Project</b>  India Aviation Consulting & Support in association with IFCI and IMACS took up activities required for the preparation of Techno-Economic Feasibility Report and EIA study such as <ol style="list-style-type: none"> <li>1. To review the present law and rule for the development of Greenfield airport in India.</li> <li>2. Field Surveys for Assessment of Traffic Potential for the Proposed Project</li> <li>3. Traffic Survey and Traffic Forecast for the Project</li> <li>4. Assessment of the Land required for the Project</li> <li>5. Development of Land Use Plan for the entire infrastructure required for the Project</li> <li>6. Lay out Plan for the Proposed Airport Terminal Building and other Ancillary Services.</li> <li>7. Assessment of Capital Cost and Revenue Streams</li> <li>8. Preparation of the techno Economic Feasibility Studies</li> <li>9. EIA Study and Clearance etc</li> </ol>	

<b>Project Name</b>	
Preparation of Detailed Project Report for the Development of New Greenfield International Airport at Dholera (Gujarat)	
<b>Location within country:</b> Gujarat, India	<b>Duration of assignment (months)</b> 6 months
<b>Name of Client with Address</b> Airports Authority of India, Rajiv Gandhi Bhavan , Safdarjung Airport, New Delhi	<b>Total No of person months of the assignment</b>
<b>Start date (month/year):</b> To be start in September 2013	<b>Completion date (month/year):</b>
<b>Estimated Cost of the Project:-</b>	
<b>Narrative description of the Project</b>	
India Aviation Consulting & Support LLP has just been awarded the contract for “Preparation of Detailed Project Report “ for the development of Feeder Airport at Idukki, Kerala State by Kerela State Industrial Development Corporation Ltd.	
<b>Description of actual services provided in the Project</b>	
<p><b>Greenfield International airport is proposed at Dholera, Gujarat as development plans for Ahmadabad-Dholera Special Investment Region.</b></p> <p>IAC&amp;S Scope of work for the assignment:</p> <ol style="list-style-type: none"> <li>1. Traffic Forecast and Growth of Air Traffic</li> <li>2. Soil Investigation – Identifying CBR value / K Value and Modulus of Sub-grade</li> <li>3. Collection and Study of Meteorological data for the airport</li> <li>4. Topography and Obstacles Limitations Surface Survey for the proposed site.</li> <li>5. Development of Master Plan / Land-use plan</li> <li>6. Communication Navigation Surveillances facilities and Air Traffic Management aspects</li> <li>7. Fire Services of CAT-IX</li> <li>8. Cargo Facility based on assessment of Cargo potential</li> <li>9. CAPEX for the entire project, Revenue Streams and Revenue Assessment, Financial analysis of the Airport Finances.</li> <li>10. Recommendations for Development by PPP mode for sustained operations</li> </ol> <p>All this would involve comprehensive knowledge of the Greenfield Airport Policy, Model PPP construction agreement etc. besides licensing of airport.</p>	