



Review Paper

Explore the Factors Affecting the Project of Arfa Software Technology Park (ASTP) Lahore-Pakistan while it's Execution

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Abstract

This Review Paper is aimed to explain the development process of Arfa Software Technology Park in Lahore. It explains the barriers faced during implementation of execution plan. This article contains the factors which effect the implementation of project. It also describes how security laps, energy crisis and political conditions effect on different projects in Pakistan. To collect whole information we conduct different interviews; attend meetings and seminars which eventually will assist to different researcher about Project management in Pakistan. Arfa Software Technology Park in Lahore, Pakistan has been developed for the country's Information Technology (IT) industry initiatives by providing a world-class high tech facility for the New Economy. It is constructed to provide a favorable environment of international standards to attract knowledge-based industries such as Information Technology (IT), Infocomm Technology (ICT), Research and Development (RandD) and Multi-national Corporations (MNCs) as well as to attract and retain local and foreign intellectual talent. The potential economic benefits of this project is the generation of revenues from Call Centers, software houses, Telecommunication and IT enabled services companies.

Keywords: Essence of operations, project management, political instability, lack of commitment, security laps.

Introduction

The Punjab Information Technology Board (PITB) (Figure 1) and the Punjab Government have the common objectives of the promotion and development of Information Technology Industry, Business Process Outsourcing (BPO), Call Centers and other IT enabled businesses in order to compete in the international market. Stable political environment, law and order situation, proper planning and Security situation, Less Employee Turnover, Availability of Resources, Proper Execution and Coordination are essential for successful completion of this project¹.

The Arfa Software Technology Park (ASTP) was PITB's flagship project in the provincial capital, Lahore. The main objective is the generation of revenue and development of IT Sector. The approximate value of export revenue and Foreign Direct Investment (FDI) that can be realized from the project over a period of five years would be more than Rs. 50 billion.

A favorable environment created by infrastructures like Arfa Software Technology Park of International Standard is essential for flourishing of knowledge-based fields such as Information Technology (IT), Research and Development (R and D), IT education, Telecommunication and Multi-National Corporations (MNCs).

The purpose of ASTP is to provide a conducive environment to attract and retain local and foreign high tech expertise.

On July 3, 2006, it was decided that ASTP is being constructed on Ferozepur Road Lahore. The ASTP is a pioneering project and is of National importance. It is an icon not only for Punjab but Pakistan as well².

For the construction of Arfa Software Technology Park different No Objection Certificates (NOCs) were obtained in order to abide by the rules and regulations of different departments. e.g. Environmental Protection Department (EPD), Water and Sanitation Agency (WASA), Lahore Development Authority (LDA), Civil Aviation Authority (CAA), and Pakistan Air Force (PAF) etc. The detail is given in (table-1).

Arfa Software Technology Park (ASTP) Project consists of 17 Storey Tower Block and 6 storey Integrated Car-park/Auditorium Block for 325 cars and 640 motorcycles. The project was approved by Provincial Development Works Party (PDWP) on 5th September 2006.

The Punjab Government accorded administrative approval for "Arfa Software Technology Park" Project for a total cost of Rs.2194.080 million (Rupees two thousand one hundred ninety four million and eighty thousand only) on 16th October 2006.

Discussion

Main Building Contract: Main Building Contract consists of construction of ASTP Main Tower (exclusive of piles foundation work) and ASTP Auditorium Block. The tender documents and tender design including specifications and drawings for the main building contract were finalized on 17 February 2007.

Tender Documents: The tender documents including design, specifications and drawings for Arfa Software Technology Park prepared by project consultants M/s Jurong. It was approved by Project Implementation Sub Committee (PISC) (table-2) in its meeting held on 23rd February 2007. Hence, the Tender Documents for Main Building contract were issued on 26th February 2007.

Tender Award: Tenders for Main Building Contract were opened on 10th April 2007 under the supervision of Project Implementation Sub Committee (PISC) and in the presence of bidder's representatives, project consultants, Media and PITB staff. On recommendation by PISC, the Project Steering Committee (PSC) (table-3) headed by Chairman Planning and Development Board, Government of Punjab, approved the award of main building contract to lowest qualified responsive bidder M/S China State Construction Engineering Corporation (M/s CSCEC).

It was awarded for a lump sum contract price of 2,994,750,000/- in its meeting held on 8th June 2007. On directions from PSC, the letter of acceptance was issued to M/s CSCEC on 29th June 2007. As per break down cost of tender (BCT) submitted by CSCEC and approved by PSC in its meeting held on 26th November 2007.

Contract Agreement: The contract agreement for the construction of Arfa Software Technology Park (ASTP) was signed between PITB and M/s CSCEC in a meeting held on 31st August 2007.

Piling work Contract: The project consultants M/s Jurong and M/s Progressive (PCL) designed the detailed engineering of Pile foundations for 17 storey ASTP tower building. The piling work contract (ASTP-PWC-01) was awarded to lowest bidder M/s Condrill by Project Steering Committee (PSC) on 4th November, 2006 for total amount of Rs. 83,098,900. The construction work was commenced on 27th November 2006 with duration of 120 days to complete the entire work on 26th March 2007. The project with additional scope of work was completed at a total cost of 87.895 million. The project consultants Jurong Prime wide of Singapore provided resident supervisory services as "the Engineer" at site.

In April 2007, the Project PC-I was revised for Rs. 3.342 billion. Revised PC-II for PMO (PITB) was prepared for Rs. 99.460 million and Revised PC-II for Consultancy services for

95.458 million. The revision of PC-I and both PC-IIs were administratively approved by Provincial Development Working Party (PDWP) in its meeting held on 21st April 2007³.

The Home Department, Government of Punjab and relevant Agencies were contacted by the PITB to provide adequate security and safety to project staff especially Chinese. All the requisite details were provided to the concerned authorities. The authorities extended their support and made arrangements for the protection of the Chinese⁴.

The project was started in 29 June 2007. After the incident of assassination of Former Prime Minister of Pakistan (Mohtarma Benazir Bhutto) on 27th December 2007, the procurement of project Materials got disturbed. Countrywide transport remained suspended for few days which resulted in delay of materials delivery to ASTP site.

The steel mills remains closed for fifteen days (15) days by order of the Government on 5th January 2008 due to shortage of electricity and gas. The supply of steel restarted to ASTP site on 26th January 2008. Then fabrication and rebar fixing at level-5 of main tower as well Raft foundation of auditorium block was started. Magnesia cement for the fabrication of waffles slab moulds couldn't be delivered to site timely due to transport problems to carry it from the port of Karachi.

Due to unavoidable circumstances about 70% of the target was achieved, as approximately Rs.287 Million was utilized against a target of Rs. 412 Million on 31st January 2008. The former General Manager Finance and Admin PITB, Mr. Asad Rehman Gillani visited the ASTP site on 9th February 2008. The Chairman PITB inspected the ongoing construction activities at site on 15th and 16th February 2008⁵.

Elections held on 18th February 2008 in Pakistan. The pace of construction activities at site accelerated after elections. The Vice President of China State visited the ASTP site and PITB head office on 20th February 2008. The members of Project Implementation Sub Committee (PISC) and Consultants Selection Committee (CSC) inspected the construction work at ASTP site on 23rd

February 2008. Dr. M. Ashraf Chairman Civil Engineering Department U.E.T Lahore, Structure advisor for ASTP, along with Dr. Sohail Qureshi, Structures Expert for ASTP, visited ASTP site on 28th February 2008 and inspected the structure work. They expressed their satisfaction on design implementation status and quality of construction work at site⁶.

Due to power shortage about 67% of the target was achieved, and approximately Rs.357 Million was utilized against a target of Rs. 537 Million on 29th February 2008. The remaining 88% of project scope was to be completed in the remaining 10 months of the project duration. The calculated expected finish date of the project was now 11th April 2009 as against the target

date of 28th December 2008. So the expected delay at the end of February 2008 was about three and a half months.

The Contractor and consultants was asked to provide the catch up program and methodology to put the project back on track. The contractor M/s CSCEC applied for extension of time due to unavoidable circumstances faced during December 2007 and January 2008 which affected his progress.

The request of extension of time by M/s CSCEC was discussed in the Project Steering Committee (PSC) headed by Chairman PandD Board in its meeting held on January 16, 2008. After detailed deliberations, the PSC decided to grant an extension of 30 days to the contractor M/S CSCEC. The revised date of the project was 30th January 2009.

About 72% of the target was achieved, as approximately Rs.388 Million was utilized against a target of Rs. 536 Million on 31st March 2008.

The Design and Construction Management Consultants of the project M/s Jurong Prime wide (JPW) left the project site on 2nd April, 2008 without prior notice to and consent of the Client. In their notice on a later date 11th April M/s Jurong indicated suspension of services on account of Security situation. However, they have expressed willingness to continue with advisory services from Singapore up to six months. Suspension of said consultancy services, as invoked by M/s Jurong, was to accrue from 25th April 2008 – the termination date was however, extended to 11th May, 2008. Due to the sensitivity of the issue, a meeting of the Project Implementation Sub-Committee (PISC) was held on 17th April 2008 and it was decided to take the matter to the Project Steering Committee for an appropriate decision in this regard. As a result, meeting of Project Steering Committee was held on 29 April 2008. The meeting was chaired by the Chairman, P and D Board, and Government of the Punjab. The matter was discussed in detail and line of action was fixed to resolve this issue.

The Chairman PITB, Mr. Shahid Mehmood visited the site on 17th April 2008 to have an introduction of ASTP and JPW staff and to review the progress at site⁷.

About 61% of the target was achieved, as approximately Rs. 447 Million have been utilized against a target of Rs. 733 Million on 30th April 2008. The reason for this drop in target from 72% in March 2008 to 61% in April 2008 was slow progress on architectural and mechanical works of main tower block and super structure work. The progress on structure, electrical, IT and façade works of main tower block remained as per plan during the month. The calculated expected finish date of the project was now 29th March 2009 as against the target date of 27th January 2009. Hence the expected delay at the end of April 2008 is about two months if the remaining project proceeds as per plan.

The Contractor and consultants were asked to provide the catch up program and methodology to put the project back on track. But later on due to new developments of suspension of services by JPW, this issue remained pending.

Efforts were made to persuade JPW for resumption but from April 2008 to May 2009 PMO office took the responsibility of Construction supervision. During this period the construction remained slow. There were many delays due to unavailability of materials. There were delays in the payment of Salary to employees due to which many employees left the job.

In August 2008 the prices of material raised and currency of Pakistan devaluated due to the increase in dollar amount. CSCEC submitted performance report in August 2008 indicating a loss of PKR 1200 million in their ongoing Arfa Software Technology Park Project in Lahore due to escalation in the prices of materials and devaluation of Pak rupees.

The construction process remained slow due to the increase in prices of materials. This process remained under consideration for some time. After some time the Chief Minister approved the loss of CSCEC to be settled at PKR 1000 million. A Committee was constituted comprising of Secretary Finance, Secretary Construction and Works and Secretary ITD to devise cash flow mechanism for the payment of loss to CSCEC. The government of Pakistan had to bear a loss of 1000 million. So the revised contract cost was 3,994,750,000.00PKR.

The revised completion date of the project was initially 27th January 2009. But Jurong left in 11th April 2008. The construction remained slow in this period because of non-supervision. Also there was devaluation of currency in this time period. There were lots of delays in the project. So CSCEC claimed Extension of time of 14 months. This claim remained under consideration for some time.

Due to unforeseen incidents, EOT of 14 months was given to M/s CSCEC. The time for the completion of the project was further extended to 30th April, 2010.

There was no consultant till May 2009. In pursuance of the instructions by the Chief Minister, the contract agreement with M/s NESPAK was signed on 13th May 2009 at the cost of PKR 23.924 million. This contract was for 10 months for construction supervision of the remaining works as M/s Jurong left the site due to security concerns. M/s NESPAK (figure-2) mobilized on site on 25th May 2009.

M/s Jurong showed its inability for structural design issues and M/s NESPAK is limited to construction supervision; not withstanding any design responsibility therefore PITB needed to resort to the hiring of short term consultancy services in the light of approved consultant selection guidelines by Government of the Punjab and PITB rules and regulations.

Under the instructions by the Chief Minister, the Marketing plan of ASTP was assigned to Dr. Javed Ghani professor of LUMS with the necessary assistance of PITB staff. The plan is under preparation and necessary guidance is being sought from Dr. Javed Ghani in June 2009⁸.

In June 2009 meeting was held and various points were discussed regarding security, civil, electrical, architecture, mechanical and interior designing works.

M/s Pervaez Iqbal has been hired as an Interior Designer (ID) Consultant on 25th July 2009 for the interior designer works at ASTP. The scope of their works includes designing and supervision of the Auditorium including pre-functioned breakout area and Seminar rooms⁹.

Chief Minister Punjab visited the Project on 24th of September, 2009 and formed the Committee headed by Additional Chief Secretary, Punjab to resolve the issues pertaining to completion of the project.

Additional Chief Secretary visited the ASTP on 11th of December. A special meeting of the Committee formed to examine the issues pertaining to construction and usage of Arfa Software Technology Park (ASTP) was also held. The New Chairman PITB visited the site on 19th of December. PD-ASTP gave him presentation about the project and its progress.

Departments namely Lahore Electricity Supply Corporation (LESCO), Water and Sanitation Agency (WASA) and Sui Northern Gas, have been liaised at different levels, for execution of their respective works in December 2009.

The progress in January 2010 was satisfactory. At this rate of work a potential delay of four months from 30th April 2010 is envisaged. The CSECE project Director visited the project to finalize different items of M and E and Electrical works.

Progress review Committee held two meetings in the month, first on 2nd January at PITB head office and second on 12th January at ASTP, issues about slow progress of work were discussed. ID Consultants M/s Parvez Iqbal and Associates gave his plan about Interior Decoration works on 21st January.

PITB intended to launch its first boot camp in summer 2010. The program was aimed at graduates of four year Computer Science programs. The objective of the boot camp program is to address the gap between 'what industry is looking for' and 'what academia is producing'. For this purpose PITB has taken an initiative to collaborate with academia and industry.

On 2nd March 2010, a meeting for the first such boot camp was held at the PITB head office. 20 companies participated representing the entire spectrum of Punjab IT. Some of the participants (CEOs and other executives) from the IT industry were from: SAP, Techlogix, Netsol, Oracle, Cisco, TkXel, Brainstorm, PASHA (Pakistan Software Houses Association),

CTO247, Confiz, Getronics, Autosoft, Infotech and others. Computer science professors from LUMS, FAST and PUCIT also attended the meeting.

During March 2010 the overall progress of work little appreciated but still it considerably lagging behind from the schedule progress of work envisaged in the construction schedule of remaining work (October, 2009). This substantial delay clearly indicates that the contractor work program (October, 2009) is totally frustrated and jeopardized the final completion date i.e. April 30, 2010. The grave concern of delay has been communicated by the PMO to M/S CSCEC head office in China. In replay M/S CSCEC head office china sent a delegation comprising of their higher management on March 22, 2010 to discuss the delay reasons and remedial measures to be taken by them to complete the project in minimum possible time. M/S CSCEC higher management during meeting with client admitted that the project completion i.e. April 30, 2010 will be delayed about 180 days due to delay in procurement and lead time of the major MandE equipment. In this regard CSCEC informed the PITB that the necessary steps to gear up the progress and to ensure in time delivery of the major MandE equipment have already been taken. M/S CSCEC further emphasized and assured the client (PITB) that by taking all these remedial measures the project will be completed by October 31, 2010¹⁰.

In this connection, M/S CSCEC has been asked to submit schedule prepared on primavera with respect to their new commitment ,comprising of all details about the material procurement i.e. procurement order, LC opening, pre shipment inspection, shipmen date, delivery date at project and execution accordingly for its precise monitoring, which is awaited.

The revision of schedule with new completion date is under preparation with M/S CSCEC.

Conclusion

Hence it is concluded that a project implementation process may be affected by political instability, lack of commitment, security threats, as happened in case of ASTP. Therefore smooth working environment is very important to avoid any inconvenience while completing a project. In Pakistan a project cannot be commence without considering above mention factors like M/s Jurong Consultant did which eventually leads him to leave this project without completion and also increase the cost of the Project. After that M/s NESPAK which is a local Company, take over this project and successfully completed it because they were much aware about Pakistani conditions and known about above mentioned factors. Before starting a project, we should analyze the other factors rather just cost and technicalities.

Questions for Discussion

Question No.1: Where is the actual problem in this project?

Question No.2: What are the main reasons of delays in this Project?
 Question No.3: As a Project Manager, what actions will you take to minimize the delays in the project?

Question No.4: Do you think they can meet the revise date October 31, 2010? Give Reason?

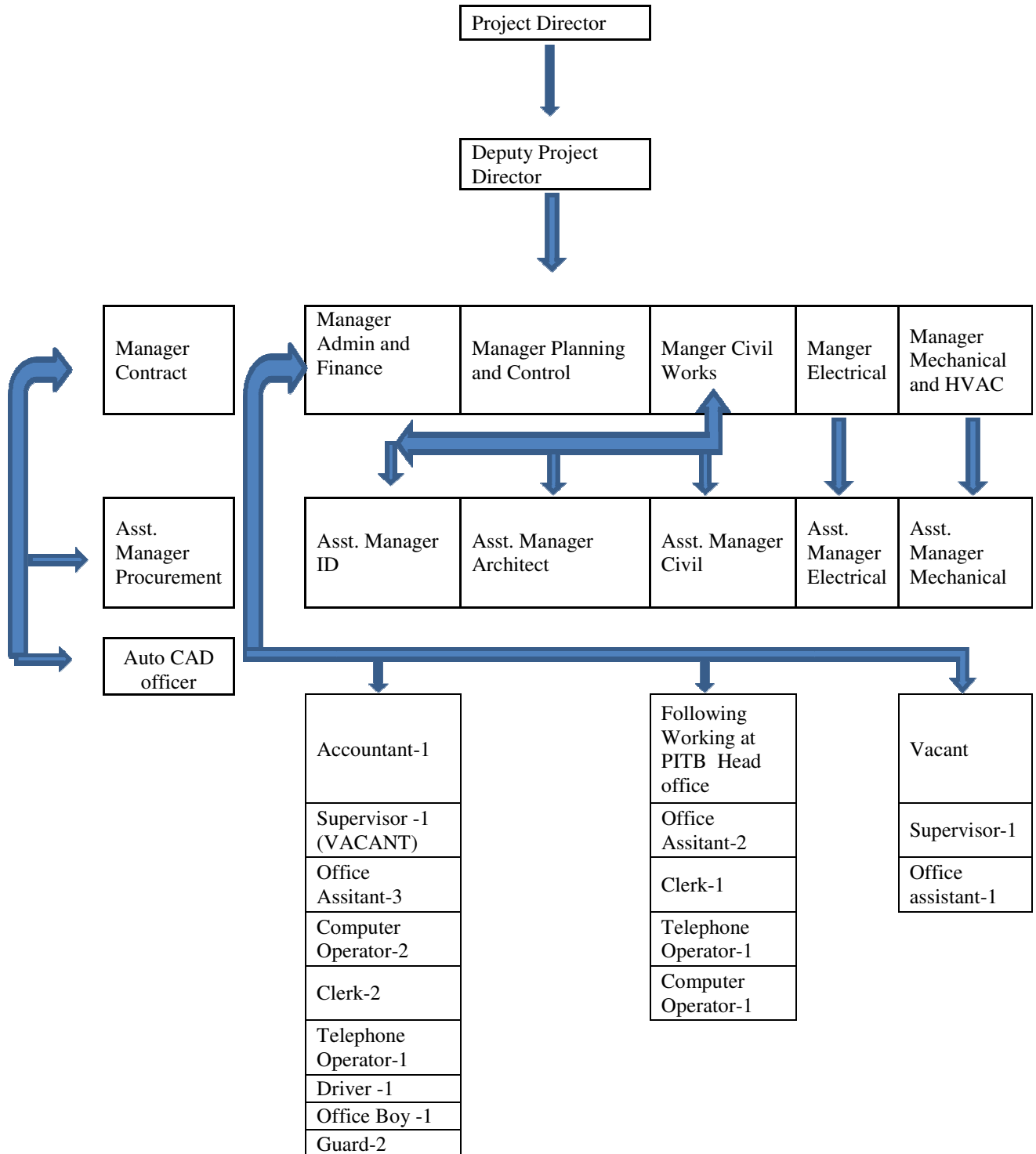


Figure-1
PMO for ASTP

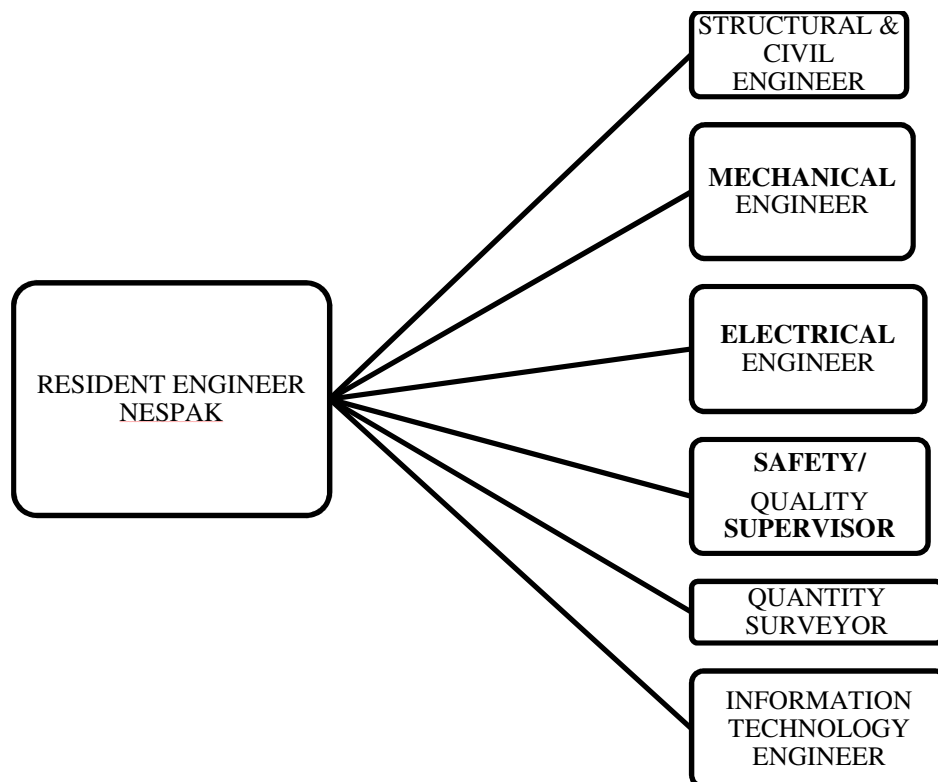


Figure 2
Astp consultant team

Table-1
Issuance Details of No Objection Certificates (NOCs)

Sr. No	Description	Date of Issue
1	Environmental Protection Department (EPD)	06-Jan-07
2	Water and Sanitation Agency (WASA) Permission to Install Tube well 16-01-07 Sewerage and Drainage Connection	16-01-07 22-05-07
3	Lahore Development Authority (LDA) Approval by High level Design Committee Building Plan Sanctioned NOC to construct 348 feet high ASTP Conversion of ASTP plot from Industrial to Commercial status	28-Feb-07 14-Apr-07 27-Jun-07 20-Sep-07
4	Civil Aviation Authority (CAA)	17-Mar-07
5	Pakistan Air Force (PAF)	08-May-07
6	Vetting of Fire Fighting design from Civil Defense	07-Jun-07
7	High Rise Building Commission	18-Jun-07
8	Traffic Engg. and Transport Planning Agency (TEPA)	05-Dec-07

Table-2
Project Implementation Sub Committee (Pisc)

Chairperson PITB	Chairperson
Head PMU P and D	Member
General Manager PITB	Member
Project Director ASTP	Member
Representative of Finance Department	Member
Technical Representative of Construction and Works Department	Member
Representative of Planning and Development Department	Member

Table 3
Project Steering Committee (PSC)

Chairman P and D Board	Chairperson
Chairperson PITB	Member
Secretary Finance	Member
Secretary C and W	Member
Secretary P and D	Member
DG M and E, P and D	Member
General Manager, PITB	Member
Project Director, ASTP	

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