Development of an Office Complex for the Planning Commission

Project Brief

Construction of an Office Complex ("Plan House") & Commercial Utilization of Land on a Public Private Partnership Basis

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1. Introduction & Background

The Ministry of Planning, Development & Special Initiatives (MOPDSI)[1], under which the Planning Commission (PC) sits, is the apex body responsible for devising overall development plans and setting the Government of Pakistan's investment priorities for building economic and social infrastructure. Furthermore, MOPDSI oversees the Public Sector Development Program ("PSDP"), that channels funding through public budget and local sources, as well as foreign funds / aid, to implement those development programs and projects approved and prepared by federal, provincial and local agencies.

The main offices of MOPDSI (including those of the PC) are currently located in the Pakistan Secretariat Complex located in the 'Red Zone'[2] of Islamabad. However, while the majority of employees are located

[1] MOPDSI and PC are used interchangeably here

[2] The Red Zone is an area in Islamabad, where Government and executive buildings with the highest national authority are located. These buildings include: Parliament of Pakistan, Pakistan Secretariat, Prime Minister Secretariat, President House, Supreme Court of Pakistan, National Library of Pakistan, Election Commission of Pakistan, Federal Ministries and Departments etc. It will need to be thoroughly vetted whether buildings and land in the area can actually be sold / mortgaged to a private party. This area is also traditionally used for Government offices and while corporate & private offices can rent space in the Red Zone, it cannot be used for commercial activities such as retail shops or restaurants. 3

in the Pakistan Secretariat office block, some employees are also scattered around a number of smaller offices elsewhere in the city, such as in sector H-8 and the Blue Area[3] Islamabad.

The Pakistan Secretariat Complex buildings were developed in the 1960s and are increasingly in need of refurbishment due to lack of budget for proper maintenance. As a result, the buildings need to be upgraded to improve energy efficiency, amenities, security, use of space and technology.

However, it will be expensive and time consuming to try and upgrade and retrofit the existing office buildings given their age and condition. In addition, MOPDSI has identified the need for a more modern and efficient office space, arising from its expanding needs and increasing headcount[3], to ensure that it can carry out its work effectively.

Therefore, MOPDSI intends to address its need for up-to-date office space for its staff, by building a modern office complex (the Project) on a 5-acre plot available to it in the Red-Zone on a Public Private Partnership basis.

MOPDSI has accordingly approached the Public-Private Partnership Authority (P3A) to help devise an appropriate way-forward for developing and procuring the Project on a PPP basis.

Global Context for Social Infrastructure

PPPs have been used to build public offices, hospitals, and schools in Australia and United Kingdom, courthouses in the Netherlands; educational facilities in Nigeria, offices, hospitals and health care facilities in South Africa; social housing in Bahrain and sports facilities in Singapore etc. Depending on the type of project, contracts typically last for 25 to 30 years. Under the contract, the private party provides services on a "no service, no fee" performance basis. Typically, social infrastructure projects do not directly generate revenues and, as such, these types of projects are generally structured on an availability payment basis, with the availability payments being funded through the general budget.

Overview and trends in PPPs for Public Buildings

Data indicates that buildings account for 40% of global energy requirements and are the cause of 21% of greenhouse emissions.[4] In this context, the construction and operation of 'smart' or 'green' buildings have the potential to provide significant PPP investment opportunities for the private sector. The International

The Blue Area is a large commercial area in Islamabad which houses corporate & private offices, gyms, restaurants, and retail outlets etc.

[3] Expected to rise to about 1,000 employees as per the P3A working paper.

[4] https://www.globaltimes.cn/content/1071983.shtml

Finance Corporation (IFC) estimates that by 2030, the green buildings sector will represent a significant low-carbon investment opportunity in emerging markets with a market value of over $20 trillion.[5]

China currently leads the world in terms of residential and commercial building development, accounting for nearly 50% of all the high-rise buildings in the world.[6] As high-rise buildings in China utilize 10% of all energy produced in the country, it has been extremely important for China to develop smart infrastructure and digital connectivity to ensure efficient utilization of energy and maximum use of automation for all requirements within both commercial and residential buildings. As a result, China has recently led the way in developing smart buildings, to both improve the sustainability of the infrastructure and improve the experience for tenants.

Various digital technologies are being used by companies to provide insights into helping make buildings more efficient. These data-driven insights enable better planning, design, construction and management of the building infrastructure. Smart / green buildings can reduce water and wastage and utilize energy more efficiently. Technology improvements in infrastructure and building management are the key driving forces in the development of smart buildings. For example, automation of technology allows for centralized control of a building's heating, ventilation & air conditioning, lighting and other systems through an automatic building management system. The main kinds of technology used in smart buildings are (i) Internet of Things ("IoT"), (ii) Artificial Intelligence ("AI"), and (iii) Building Information Modeling ("BIM")[7]

The Internet of Things (IoT) is defined as "the interconnection via the internet of computing devices embedded in everyday objects, enabling them to send and receive data". Incorporation of this technology allows for real-time monitoring, such as temperature sensors, climate monitoring tools, air pollution levels, and security and surveillance systems. With IoT, companies can enhance safety mechanisms and reduce operational costs. These systems can also be controlled via specialized applications that are available to the building operators for easier management and monitoring capability.

Systems that incorporate Artificial Intelligence (AI) can become 'smarter' over time, as they start to detect patterns and achieve a level of cognitive awareness. AI can develop a recognition of patterns by monitoring human behaviors, climate patterns, traffic etc. and through correlating those patterns, computers can recommend conditions for improvement and maintenance for the building. AI apps are being used to collect massive amounts of data through the processing of data collected from IoT tools. AI

[5] https://www.ifc.org/wps/wcm/connect/a6e06449-0819-4814-8e75-903d4f564731/59988-IFC-GreenBuildings-report_FINAL_1-30-20.pdf?MOD=AJPERES&CVID=m.TZbMU

[6] https://energyinformatics.springeropen.com/track/pdf/10.1007/s42162-018-0011-9.pdf

[7] https://daxueconsulting.com/china-smart-city-implementation

systems learn from any patterns present and use those patterns to make decisions for the building to

Building Information Modeling (BIM) is the modern way of designing buildings to enable efficiencies and plan operations to be economical and cost -effective. This is a superior way of designing buildings than traditional Computer Aided Design (CAD) models that are still being used in most countries. It opens up the ability to collect a wide range of data ranging from the environment to the habits of tenants. This data-driven approach allows for superior planning and risk mitigation strategies andhas been used across China for smart buildings development.

improve efficiency, such as air conditioning usage and lighting based on timings of the day or day of the year.

2. Institutional Capability & Preparedness

2.1 Institutional Mandate to Proceed with the Project

MOPDSI (being the apex planning institution of the Government and the "parent" ministry of P3A) should not face any impediments or restrictions to developing this Project under a PPP modality. Accordingly, it is assumed that the Project, if and when approved for implementation, will be planned and developed under the direct supervision of P3A and MOPDSI.

2.2 Status of the Project

The Project is in the initial conceptualization stage, wherein MOPDSI has requested P3A to evaluate the Project implementation on a PPP basis. P3A has developed an initial working paper for this Project to be developed on a Build, Operate & Transfer (BOT) basis. The case for further proceeding with the Project has to be considered by the Board of P3A. Once approved by the Board of Directors of P3A, pre-feasibility and feasibility studies will need to be undertaken by a reputable transaction advisory consortium. Thereafter, the Project needs to be structured with the assistance of transaction advisors. Accordingly, comprehensive terms of reference will need to be developed to appoint potential transaction advisors to assist MOPDSI and P3A in undertaking the Project.

2.3 Project Budget and Tentative Financing Plan

The budget and financing plan for the Project can only be decided after a commercial feasibility study has been undertaken which, inter alia, i) assesses the current demand / supply gaps for commercial office space in Islamabad, ii) assesses the likely rental yields of the Project, and iii) takes into account feedback from stakeholder consultations, including from financial institutions, to understand (a) the level of market interest in investing in the Project, (b) the willingness of financial institutions to lend to the Project and the level of financing available and (c) the possible requirements for any financial guarantees or collateral for the Project etc.

As with all projects, it is important to evaluate if a PPP option is the most optimal solution for undertaking this Project. Therefore, a feasibility study should be undertaken to list and evaluate all possible options (such as PPPs, MOPDSI building the project itself using traditional procurement, entering into a standard commercial lease with a property developer, use of real estate investment trusts etc.). The study should evaluate the advantages and disadvantages of each option (together with its risks, benefits and potential impacts), assess which options are likely to attract private sector investment, and recommend the preferred option. To ensure that the Project is viable and sustainable, it will be necessary to optimize revenue generation to make sure this Project is attractive to the private sector.

In this context, and to minimize the Government's immediate financial burden, MOPDSI has indicated its willingness to evaluate the possibility of selling one of its existing properties located in the commercial

area of Blue Area in Islamabad. However, to the extent that it can sell the property and use the proceeds, the amount raised is likely to be insufficient to materially reduce MOPDSI's financial burden.

2.4 Project Execution Capability of Implementing Agency

While MOPDSI has remained in the forefront for public sector development projects through the PSDP program, it has also developed a list of projects deemed as PSDP+, which is a list of Federal and Provincial projects to be considered on a PPP basis. Further, the Board of Directors of P3A is headed by the Minister of Planning, Development & Special Initiatives (MOPDSI) and comprises other officials of the ministry such as the Secretary, MOPDSI. In addition, as indicated above, it is expected that P3A will likely be actively engaged in the supervision and oversight of the project on behalf of MOPDSI. Given that P3A is the main agency for the promotion and development of PPP projects at the federal level, it will almost certainly be able to access the requisite expertise and resources to help develop and implement the Project.

3. Project Background

3.1 Development of Project Scope

P3A has submitted an initial working paper for the Project, which broadly defines the Project to be a state-of-the-art commercial building on five acres land, comprising of two high rise buildings with ten floors each with a total constructed area of 1,089,000 sq. foot. Of this space, 40% is expected to be used by MOPDSI, 40% leased out to other tenants (which could include corporate offices, auditoriums / meeting halls & facilitation centers etc.), and 20% allocated for general amenities and public areas. Additionally, the paper briefly mentions that MOPDSI may be willing to consider contributing equity in the Project from the proceeds from the possible sale of a piece of real estate in its possession in the 'Blue Area' commercial zone of Islamabad.

The Project structure being proposed by P3A envisages the private sector being responsible for designing (based on an initial concept developed by MOPDSI), financing, building, operating, and maintaining the building. At the end of the contract period (that will be long enough for the private party to be able to fully recover its costs and earn a return) the facility would revert back to MOPDSI.

To evaluate the possibility of developing the Project under a PPP modality, further studies and analysis will need to be carried out, including but not limited to i) technical review and development of use-case as per the requirements of MOPDSI (taking into account that the design and structure of the Project will need to be refined as the Project moves forward during this process), ii) evaluation of the risk appetite of a probable concessionaire, and iii) evaluating the overall bankability of the Project.

As part of the full commercial feasibility study, the building by laws/zoning laws will have to be reviewed and the concerns of relevant government agencies will also need to be considered to ensure that the Project scope is designed in accordance with the land use and zoning laws requirements of the area. An options analysis that considers both rental models and other revenue generation models, along with a demand-supply analysis,[8] will also need to be undertaken.

The objective of developing the Project scope, will be to propose an appropriate transaction structure for the development of this building on public sector land, including a payment structure that keeps the financial burden on MOPDSI to a minimum. This would require developing a high level master plan / infrastructure plan for the Project premises, identifying different options / models that could be adopted for construction of this facility, preparing financial models, determining legal requirements and implications of these models, performing legal due diligence, preparing legal contracts, recommending the final management model, developing the documentation (including but not limited to drafting Request for Proposals for selection of the developer, full suite of legal documents, financial transaction

[8] One study in 2013 estimated that Islamabad had office space demand of 3mn sq foot. However, the corresponding supply of office spaces was much higher at 5mn sq foot.[9] As more recent estimates show that the supply of commercial office space stands at 7mn sq foot[9], it will be important to undertake a robust market demand/supply analysis.

structure, contract negotiation, legal and financial close etc.), advising on the tender process, evaluating bids, appointing the preferred bidder and undertaking contract negotiations etc.

It is envisaged that the development of a full Project scope would require the appointment of an advisory consortium consisting of legal, financial & technical consultants, who would provide MOPDSI with all the assistance it will need to take the Project from the conceptual level, all the way through to financial close[9].

3.2 Strategic Fit within Sector and the Overall Economy

The real estate sector remains a key investment sector in Pakistan. Land development is essential to support economic growth, as well as generate employment opportunities. However, the role of the formal real estate investment market in supporting economic development remains poorly understood in Pakistan, with an absence of reliable information on real estate values, yields and total returns. Therefore, the fundamentals of the real estate sector in Pakistan can potentially be enhanced significantly through the use of PPPs in this sector, since PPP projects typically provide more transparency to bidders and the strong participation of the Government during the bidding process and concession term will provide an extra layer of comfort to investors/lenders about the robustness of the Project. Therefore, this Project has the potential to become a flagship real estate PPP project in Pakistan.

3.3 Sectoral & Institutional Context

Developments in real estate, specifically housing societies and commercial buildings, have been the catalyst for a very large number of investments in the real estate sector in Pakistan. Unfortunately, a lack of effective regulation and enforcement has led to unscrupulous developers exploiting the situation by "fleecing" the public in unapproved developments. Indeed, a lack of effective regulation has allowed many developers to amass much wealth, often at the expense of smaller investors.

Nevertheless, real estate projects are often seen as one of the few viable investment vehicles available in a country with insufficient investment opportunities, especially for smaller investors who see such projects as an inflation hedge and opportunities for capital gains. This sector also provides employment / earning opportunities for several direct and indirect construction related businesses, skilled and unskilled labor, real estate agents and marketing companies. Thus, the real estate sector is an important driver of economic growth in Pakistan. Indeed, the real estate sector has led to the development of some of the largest companies in the country, such as "Bahria Town Pvt. Ltd"., "Habib Rafique Limited" and Defense Housing Authorities.

The housing finance and mortgage industry in Pakistan is still in the nascent stages of development due to various issues, including (i) lack of effective regulations; (ii) issues with land registry and records (where

[9] Of course, the necessary approvals from the relevant government departments and the implementation of the procurement plan will be the responsibility of the Government and will be outside the scope of this assignment.

problems with respect to titles often disqualifies projects from mortgage financing); (iii) courts not having the capacity to deal with the case load; and (iv) lack of affordability, based on income levels and the size of mortgage payments.

Due to lack of effective regulations and credit availability, the construction sector formally only accounts for about PKR 380 Bn of GDP, which is effectively only 1% of the total GDP[10].

Although the real estate sector remains largely unregulated in Pakistan, with no central authority, the Federal Government is in the process of forming the Real Estate Regulatory Authority ("RERA") for the federal territory[11]. Under this regime, it will be mandatory for developers to seek approval from the RERA before starting any sort of development work on a project under the federal jurisdiction. To get approval from the regulatory body, developers are required to submit all details pertaining to their current and past real estate projects, along with any future plans. In cases of non-adherence to the laws, RERA will have the power to cancel the licenses of any promoter / marketer. The Real Estate Regulatory Authority will also protect the rights of both real estate agents and the individuals to whom the property is allotted to. Civil courts will not take on cases related to real estate disputes that fall within the purview of the RERA or appellate tribunal.

Pakistan has also not seen much development in terms of regulations for Real Estate Investment Trusts ("REITs"), as vehicles for developers to raise financing. A REIT is a company that makes investments in income-producing real estate. Developers can utilize REITs to funnel funds from pools of smaller investors into the REIT. Investors who want to access real estate can buy shares of a REIT and, through this share ownership, effectively add the underlying real estate property owned by the REIT to their investment portfolios.

To date, only one REIT scheme has been successful in Pakistan i.e., the Dolmen City REIT, with over five years of successful operations. As of December 31, 2020, the fund size of the REIT was PKR 54.4 billion.[12] The number of companies licensed to undertake REIT Management Services currently stands at eight. However, these have not seen any major developments thus far.

The Securities and Exchange Commission of Pakistan ("SECP") conducted various stakeholder sessions in 2020 and, after exhaustive consultations with relevant stakeholders for adding growth and vibrancy into the REITs sector, allowed public private partnership infrastructure projects in Pakistan to be developed as REITs.

[10] https://invest.gov.pk/housing-and-construction
[11] https://www.pacra.com/sector_research/PACRA%20Research%20-%20Real%20Estate%20-%20May21.pdf
[12] https://www.pc.gov.pk/uploads/cpec/PES_2020_21.pdf

4. Project Viability Assessment

4.1 Technical Review of Project

The Project has the potential to become a leading 'smart' infrastructure building and pave the way for future, similar real estate PPP projects in the country. Some of the key aspects that need to be considered when developing the detailed project scope are as follows:

1. Land use: It needs to be ascertained what sort of commercial activity can be undertaken in the Red Zone, i.e., the area where the new building is anticipated. The design and planning of the Project infrastructure would need to incorporate a review of all relevant bylaws that govern the use of commercial space in this area of the capital. Further, it needs to be examined whether there could be legal / technical challenges with respect to any part of the Red Zone area being sold / collateralized by the private party for the purpose of the Project.

2. Smart building infrastructure: The incorporation of smart technology is essential for smart building development. This includes the use of technology such as IoT, AI and BIM to plan and develop automated central controls, including heating, lighting, ventilation, air conditioning and green areas, using best global practices and data insights. Accordingly, the technical evaluation criteria for bidders should give weight to those bidders with prior experience in developing smart infrastructure buildings.

3. Innovative energy solutions: Commercial roof top solar solutions are an ideal way to not only reduce the carbon footprint of an infrastructure building, but also reduce associated operational energy costs. In addition, smart buildings can intelligently predict, control, diagnose and adjust their energy systems to achieve higher reliability and energy efficiency. The National Electric Power Regulatory Authority ("NEPRA") has introduced guidelines for net metering in Pakistan that allows the sale of excess electricity generated back to the Electricity Distribution Companies ("DISCOs")[13] for up to one megawatt of captive generation. This allows for lower net operational electricity bills (in some cases down to nil), as long as sufficient excess electricity is produced inhouse compared with usage. The average payback period for these solutions is typically between three to five years.

4. Demand-supply gap analysis: As noted in section 3.1, sufficient demand for modern premium office space will be critical to attract private sector investors to this Project on a PPP basis. Therefore, a robust demand-supply office market gap analysis needs to be undertaken, including stakeholder consultations, as well as a detailed review of the commercial real estate market in

[13] https://www.aedb.org/images/NetmeteringGuidlinesforConsumers.pdf

Islamabad - particularly focusing on supply and demand in the Red Zone area. This analysis should also study current rents and the market's willingness to pay higher rents for premium office space.

5. Effective marketing prior to launch of the Project: It will be important to pre-let as much office space as possible before construction begins to ensure that the Project can cover its costs. Therefore, a robust marketing plan needs to be prepared to introduce the Project to the market.

6. Site analysis: Various factors for site analysis need to be kept in mind prior to developing the Project design, including site location, orientation, size, topography, zoning and traffic conditions. Any future developments or changes in the area of the site will also need to be considered. These include change of roads designations, changing cultural patterns, or other significant building developments within the Red Zone area.

7. Project architectural design: Since MOPDSI is a direct beneficiary of the Project (which is not a typical role for an implementing agency), they will likely benefit from involvement at the design stage to ensure that the layout of the building is fit for purpose. However, a mechanism needs to be developed as part of the bidding process, to agree on the level and extent of MOPDSI's participation in this process, that enables them to achieve their design requirements, while at the same time not unnecessarily hindering the private party or giving rise to any potential liabilities to MOPDSI.

8. Loan collateralization: It will need to be assessed whether MOPDSI is able to give collateralization of the land / building to investors / lenders, as a project finance loan will be unlikely to be given by banks without some form of collateralization. As a first of its kind case, the newly established InfraZamin Pakistan could be approached to provide credit guarantees for the Project that may i) increase the pool of lenders, ii) reduce pricing and iii) extend tenors beyond the standard 5-7 years.

4.2 Environmental & Social Review

The Global Climate Risk Index places Pakistan as the 7th most impacted country from climate change between 2000-2019.[14] Therefore, it is important that all projects that the Government is intending to develop are assessed to ensure that they are sustainable and resilient, and that any adverse environmental and social impacts are properly managed and mitigated. Although a preliminary review suggests that the Project is likely to be carbon neutral during its operation phase, there are aspects that should be looked into, such as increase in traffic pollution and use of building materials that cause

[14] https://germanwatch.org/en/cri

emissions of greenhouse gases (e.g., cement and steel, noise and dust). However, during the operations phase, if effective captive energy solutions are utilized (including roof top solar), the Project can potentially have a positive environmental impact. From a social perspective, the impact of the Project should be positive in terms of i) job creation, ii) innovation in the use of smart building technology that will generate goodwill for MOPDSI and the Government by showcasing the government's commitment towards smart buildings, energy efficiency, and iii) provision of better working environments for office workers.

It is recommended that an initial Environmental and Social Impact Analysis is undertaken to identify potential red flags and areas of concerns to consider before the final Project scope and structure are defined.

4.3 Commercial & Financial Analysis

The commercial analysis is generally undertaken from the perspective of the government, with a focus on the provision of the best possible service at commercially viable terms. One of the methods used to ascertain commercial viability (cost-benefit approach) is through the modelling of the Economic IRR (EIRR). EIRR attempts to assess the incremental benefits of a project to the government and whether society as whole can reap direct and indirect benefits from a project. As such, the EIRR analysis is often prone to subjectivity. For this reason, the government may adopt certain standardized benchmarks for its review of a project and compare the EIRR calculation to the benchmark.

The EIRR for this Project will attempt to quantify various incremental benefits such as:

1. Reduction in carbon footprint: Development of captive energy solutions that have a net positive impact on the environment and aids in the reduction of overall electricity needs of the country through net metering.
2. Skilled labor participation: Development of smart infrastructure requires skilled technical labor during construction and operation / maintenance of the Project.
3. Development of new industries utilizing smart infrastructure solutions: As the Project comes into its operations phase, it can influence local contractors and developers to utilize technology driven approaches for projects such as smart heating and lighting solutions. This can be a catalyst to start new manufacturing units in the country focusing on these technologies.

The financial analysis needs to be refined constantly, starting from the working paper stage, which is based on rough estimates and timelines, up until the post-bidding stage when negotiations are ongoing with a potential concessionaire. Since this Project is in the very early stages of development, it is advisable that the commercial feasibility study examines all the technical options for the Project, to ensure that an optimal PPP structure can be realized. The case for developing the building on a green/ smart basis must be explored, since IFC estimates that such buildings can generate (i) savings in operational costs of up to

37%, (ii) higher sale premiums of up to 31%, and (iii) higher rental yield by 8% compared to traditional buildings.[15]

The commercial feasibility study should also consider traditional return metrics such as project NPV and project IRR, which measure the overall benefit of the Project to both equity and debt investors, and the equity NPV and equity IRR, which measure the benefit of the Project to the concessionaire.

The P3A working paper assumes that the total tentative costs of the project are PKR 6.64 bn, with a construction period of 3.5 years and a total concession period of 20 years.

In the initial working paper prepared by MOPDSI / P3A, the rental revenue on rentable portion of the Project is assumed to be between PKR 200 per sq foot (for "normal" quality commercial office space) to PKR 400 per sq foot (for "high" quality commercial space), which is assumed to be split equally in the Project. Based on the assumptions above, the equity IRR for the concessionaire has been calculated to be above 25%, which will likely be attractive to investors. However, since this is a preliminary analysis, this will need to be further reviewed through a robust commercial feasibility study.

MOPDSI has indicated that it is willing to consider selling one of property currently in its possession in the Blue Area of Islamabad for this Project. However, the legal and administrative aspects of this will have to be evaluated first in view of this presumably being a government owned property. Notwithstanding the foregoing, and presuming that this property can be sold, it is not certain that MOPDSI will be able to use these sale proceeds for the proposed Project or even if these proceeds would be sufficient to materially reduce the envisaged costs of the Project[17].

In terms of government support, the concessionaire may also require financial support in the early years of the Project's operations, if occupancy of the facility is expected to take time to ramp up. The P3A has estimated 70% occupancy in the first year of operations for the analysis, which stabilizes to 90% for the rest of the concession period by the third year of operations. These assumptions will need to be confirmed after a comprehensive demand-supply gap analysis is undertaken.

The final feasibility studies need to be of very high quality to accurately assess the key assumptions of the Project. These assumptions include occupancy rates, rental rates (preliminary analysis of Blue Area office space shows between PKR 110 to PKR 180 per sq foot existing rentals), alternative revenue modalities, availability of financing and collateral required, as well as the VfM for MOPDSI to conduct the Project via a PPP arrangement.

This Project may also have competition from the newly developed "Kohsar" secretariat block in the Red Zone of Islamabad, as well as from some older existing buildings that may not be at full occupancy yet. However, if the Project provides a higher level of service in terms of quality of the facility, then it may shift potential occupants towards this Project. The commercial feasibility will need to have a willingnessto-pay

[15] https://www.ifc.org/wps/wcm/connect/a6e06449-0819-4814-8e75-903d4f564731/59988-IFC-GreenBuildingsreport_FINAL_1-30-20.pdf?MOD=AJPERES&CVID=m.TZbMU

assessment, which attempts to highlight this aspect, as well as the overall current and future competitive landscape.

[17] In case, sale of Blue Area property is deemed to be viable, various options need to be explored to best leverage this, including:

(i) selling it and using the proceeds via a capital contribution to reduce the size of any future availability payments, or

(ii) selling it and depositing the proceeds to an escrow account that can be used to pay / backstop any availability payments to the private investor.;

4.4 PPP Structuring Options Review

PPPs involve the private sector providing public assets and/or services through the provision of money, technology and management. Some of the commonly adopted forms of PPPs include build-operatetransfer (BOT) and its variants, build-lease-transfer (BLT), design-build-operate-transfer (DBFOT), and operate-maintain-transfer (OMT) etc. These models differ based on level of investment, ownership control, risk sharing, technical collaboration, duration of the project, financing mode, tax treatment, management of cash flows etc.

The main models of PPPs are set out below:

- Build Operate and Transfer (BOT): This is generally regarded as the most conventional of the PPP models, whereby the private partner is responsible for designing, financing, building, operating (during the contracted period) and transferring the facility back to the public sector at the end of the concession period, in return for the right to collect revenues from end users.
- Build-Own-Operate (BOO): In this model, the private party assumes the entire responsibility for the design, construction, finance, and operations of the project for the period of concession. This is a variant of the BOT with the main difference being that the ownership of the newly built facility will remain with the private party after the concession ends. The public sector partner agrees to 'purchase' the goods and services produced by the project on mutually agreed terms and conditions.

- Build-Own-Operate-Transfer (BOOT): This is also a variation of a BOT. After the negotiated period of time, the infrastructure asset is transferred back to the government by the private operator.
- Build- Lease-Transfer (BLT): In this approach, the government gives a concession to a private entity to build a facility (and possibly design it as well), own the facility, lease the facility to the public sector and then at the end of the lease period transfer the ownership of the facility to the government.

Lease-Develop-Operate (LDO): The LDO model can be used when the government wants to retain ownership of existing infrastructure and receives payments under a lease agreement with a private lessee, who in turn finances and oversees operation of the facility/utility. The P3A paper has indicated the Build-Operate-Transfer (BOT) model as one of the options for its implementation, together with a BuildOwn-Operate (BOO) structure. However, apart from BOT and BOO, other PPP models may also be evaluated such as Design and Build, Build-Lease-Transfer (BLT) and Build Transfer Lease (BTL) etc. models.

Under a Design & Build model, investors undertake to design, finance and construct the infrastructure, and after completion of construction, the investor will transfer the infrastructure to the relevant authority. The investor will be paid under a fixed amortization schedule or "annuity" that is specified in the contract document.

In a BLT / Availability Payment model, the selected investor undertakes to finance and construct the infrastructure and then leases the infrastructure asset to the government and the government provides lease payments to the investor for a specified period. At the end of the period, the asset is transferred to the government.

In a BTL model, the selected investor undertakes to finance and construct the infrastructure and then on completion transfers the asset to the government. The government then enters into a lease with the investor to operate and maintain the asset and will make lease payments to the investor.

Accordingly, the commercial feasibility study to be conducted for the Project should list and evaluate all possible options and evaluate the advantages and disadvantages of each option, together with its risks, benefits and potential impacts, assess which options are likely to attract private sector investment, and recommend the preferred option. Notwithstanding the above, since the initial working paper has identified BOT and BOO as two possible options, a brief assessment of these options, as well as some additional options is provided below by way of illustration:[16]

1. Build, Operate and Transfer (BOT): Under a BOT, the private party may be responsible to design, build, finance and operate the Project. The concessionaire may itself be the project operator or may

[16] The BOO modality has the significant challenge of the ownership of the land / facility remaining with the concessionaire and not being transferred back to the government at the end of concession period. Therefore, a strategic decision needs to be undertaken by the PC to determine whether it wants or needs to keep the facility under its own control, in which case, the BOO modality may not be appropriate. From a private party perspective, a BOO may be a more suitable transaction structure since it allows flexibility both in terms of selling the building and collateralizing the debt obligation.

outsource operations to a suitable operator. Under a BOT, the payments to the concessionaire can come from either User Fees paid by end users or Availability Payments from the government. Availability payments (if any) will be contingent upon meeting the services as per the Service Level Agreement agreed between the private sector and public sector entity.

If the Project is to be structured on a user fees basis, then significant demand and revenue risks will lie with the private party. Therefore, in case the bidders are not comfortable with expectations of occupancy, some operational support may need to be offered by the government during the initial years while occupancy is being ramped up (e.g., through a minimum revenue guarantee (MRG). A MRG may be considered as a kind of annuity structure, whereby the private party receives payments from the government equivalent to the shortfall from those rental revenues needed during operations to cover costs such as debt repayment, taxes, operations & maintenance expenses and related costs).

This structure can also allow the government to participate in any upside of the project via revenue sharing arrangements. These could be structured such that the government receives a percentage of the revenues when the Project yields a level of return to the private party which is beyond the agreed return on equity.

2. Build-Own-Operate (BOO): In a BOO modality, the key challenge to the government and benefit to the private party is that there shall be no transfer of assets at the end of the concession and the facility remains under the control and ownership of the private party until the end of the useful life of the asset.

   Given that the higher potential risk of the Project in the early years to the private party, is offset by the fact that there is a longer rental collection opportunity, a BOO structure can be used if the government wants to limit the amount of support it needs to provide over the life of the project and to transfer as much risk to the private sector as possible. However, the risk with a BOO structure is that the government will have less "control" over the asset (e.g., use of the building, rental levels, quality of O&M) and that the private investor may earn too much money over the life of the asset.

   Other hybrid structures can also be evaluated from a legal and administrative perspective, such as where either sale or collateralization of land is considered to be allowed if possible (only the portion of land given to the private party can be considered for collateralization to facilitate / enable financing from the market.

Importance of collateralization: The private party may face challenges to raise financing for the Project, since collateralization of the Project assets may not be possible as the land and building will be under the control of the government. Therefore, the government will need to be willing to collateralize the loans through the

Project assets and ensure no regulatory issues arise as a result of such arrangement. Generally, financiers seek full collateralization of the assets prior to loan disbursement. Alternative collateral arrangements may need to be looked at if the land and buildings can't be collateralized.

3. BOT with phased construction: The Project may be undertaken in phases to reduce the capital requirements of the private party, as well as lower revenue risks. For example, the project may be divided into two to three phases as follows:

    - Phase 1 being the office building to be partially occupied by MOPDSI and remainder to be leased out on rental basis by the private party;
    - Phase 2 being the second office building to be developed by the private party at a later date and;
    - Phase 3 the ancillary facilities (e.g., retail and public spaces).

    Phases 2 and 3 would only start when a certain level of space based on agreed thresholds has been pre-let. This will reduce revenue risk for the party being exposed to this risk - depending on the specific PPP modality finalized for the concession term. Further, due to the lower capital requirements, this can also support a wider range of private parties to participate in the bidding process of the Project.

    Such a phased structure may also benefit MOPDSI through appropriately structured revenue sharing arrangements from Phases 2 and 3.

4. Build-Lease-Transfer (BLT) or Availability Payment (AP): Public buildings developed on a PPP basis are often undertaken on an Availability Payment basis, as such buildings typically do not generate any underlying revenues that can then be used to make payments to the private sector partner. As with "User Pays" PPPs, Availability Payment PPPs (AP) are structured to i) help ensure that projects are more likely to be completed on time and within budget, ii) transfer certain risks to the private sector (e.g., design, construction, and O&M) and iii) reduce the upfront financial costs to the government of delivering the project. In addition, as with all PPPs, APs are envisaged as being a way to help bring about innovation, creativity, and technology in the delivery of services.

    However, while on the one hand, upfront costs are minimized for the government under an availability payment PPP, on the other hand, an availability-based contract means that the government is committed to providing monthly / periodic payments to the private sector, as long as the private sector is delivering services in accordance with the Key Performance Indicators (KPIs) set out in the concession agreement. This long-term commitment needs to be properly accounted and budgeted for. In addition, under such a payment structure, it is critical that the implementing agency properly manages the project, to ensure that the KPIs are being met and to apply penalties to the extent that the service performance falls below the minimum levels agreed in the contract. This requires the

implementing agency to have the resources and experience to actively manage such contracts, but unfortunately many implementing agencies don't have the necessary experience and resources to manage these availability-based contracts effectively.

Under this PPP modality, there is a lower level of risk to the private party, since the demand risk has essentially been taken by the government, and the private party is entitled to a guaranteed level of return as long as it meets the KPIs. This modality should only be undertaken by the government if other options are not viable due to lack of interest of the private sector, or difficulty in determining cash flows (demand and revenues) during the project lifecycle.

A comparison of the key features of the proposed modalities is illustrated below using traffic light color coding[17]:

Modality	BOT	BOO	BOT with phases	BLT	Remark
Raising Financing	🟡	🟢	🟢	🟢	Much easier in BLT, BOO and BOT with phases due to higher levels of security during operations, and lower cost in BOT with phases
Construction & Procurement	🟢	🟢	🟢	🟡	BLT modality needs diligence in setting up KPIs during construction. No difference in expectation of quality in other modalities.
Time to completion / efficiency	🟢	🟢	🟢	🟡	BLT modality needs diligence in setting up KPIs to ensure efficiency. No difference in expectation of quality in other modalities.
Innovative solution and design	🟢	🟢	🟢	🟡	BLT modality needs diligence in setting up KPIs to ensure innovation. No difference in expectation of quality in other modalities, since private sector is incentivized to offer innovative design
Level of project returns	🟢🟡	🟢	🟢🟡	🟢	If operational support is offered in BOT models, then all modalities will result in similar project returns. In case no operational support is envisioned, BOO/BLT will provide optimized returns potential
Ease of implementation	🟢	🟢	🟢	🟢	If land is unencumbered, no difference in modalities
Interest from private sector	🟡	🟢	🟡	🟢	BOO modality will have higher levels of engagement from the private sector due to flexibility in project returns/ easier road to arrangement of financing. BLT will have high engagement due to no risk during operations
Risks for Government	🟢🟡	🟢	🟢	🔴	In case operational support is offered in BOT models, a higher level of risk will be retained by the Government to ensure payments are made in case of low occupancy. BLT has the highest risk due to guaranteed payments to the private sector and operations as government responsibility

4.5 Evaluation of Financing Structure and Government Contribution

The objective of the feasibility study is to (a) identify all possible options available for the development of an office complex such as lease, real estate investment trusts etc. and PPPs, (b) evaluate the advantages and disadvantages of each option, together with its risks, benefits and potential impacts, (c) assess which options are likely to attract private sector investment, and(d) recommend the preferred option.

For each of the PPP options listed, the following tasks will need to be performed: (i) Prepare a viable transaction structure for implementation of the Project; (ii) Cost Benefits Analysis (CBA) outlining economic efficiencies of the Project and a Value for Money (VfM) analysis (iii) Impact on the financial and commercial viability, financial model and transaction structuring; (iv) Identify possible government

[17] Color codes show the expected level of difficulty for each factor in the first column. Green implies least level of difficulty; yellow implies moderate level of difficulty and red implies the highest level of difficulty

support that may be required by the developer and lenders and (v). Identify the project risks and develop risk matrix.

5. Market Sounding

5.1 Identifying Market Participants

There are four key categories of market participants that need to be approached by the government to gauge interest in this Project. These can broadly be defined as follows:

1. Real Estate Developers / Operators

This list should ideally include a mix of experienced foreign property developers, as well as local real estate developers. Local investors include "Habib Rafique Limited" (HRL), "Bahria Town", "Arif Habib" Group, "Lucky" Group etc. Since Arif Habib group already has a successful Real Estate Investment Trust ("REIT") in Pakistan (Dolmen Mall in Karachi), they are among the key players to be approached for this Project.

Strategic technical players include specialized Chinese companies that have a track record of developing smart infrastructure. Some of the players include Glumac Shanghai and Johnsons Controls Shanghai[18] that have successfully developed smart infrastructure, both as individual buildings and as part of overall urban development in smart cities. Among entities with a local footprint in Pakistan, Huawei has been developing smart infrastructure in China in collaboration with Honeywell; both share their mutual expertise with Huawei contributing Information and Communications Technology ("ICT") infrastructure and Honeywell providing IoT services[21]. Generally, China has dominated the world in terms of development of smart buildings and smart cities, hence these and similar companies should be approached for the development of this Project.

2. Potential Tenants (including existing occupants in Red Zone)

Federal ministries, government agencies, educational institutions, private corporate tenants, development agencies etc. should be contacted to learn more about the existing challenges faced by these tenants and under what conditions would they be willing to move into a new development in the Red Zone.

Existing occupants in the Red Zone (including those in the potential competing projects such as "Kohsar Block", and "Arfa Karim" software park), as well as occupants of Pakistan Secretariat buildings (which are in poor condition) should be interviewed to sound out their thoughts on the Project and whether they would have an interest in the Project.

[18] https://daxueconsulting.com/smart-buildings-in-china-creating-a-smart-city-ecosystem/

[21] https://www.asmag.com/showpost/26647.aspx

Other competing projects should also be approached to determine the potential challenges to be faced, especially in terms of occupancy levels, financing challenges, rental arrangements etc.

3. Private Sector Financiers

Due to high levels of liquidity in the local market, together with the fact that real estate lending is very familiar to local banks and financial institutions, it is likely that only local financial institutions would need to be approached for this Project. Therefore, local tier 1 and some tier 2 local banks should be approached to assess their appetite for lending to the Project and to understand their key concerns, especially regarding collateral or other support to be provided by the government. Banks with the largest potential ticket size include Habib Bank Limited (HBL), National Bank of Pakistan, Meezan Bank, Bank Alfalah, MCB Bank and United Bank Limited.

Additionally, InfraZamin Pakistan could be approached, if some form of guarantee is required, as InfraZamin can issue credit guarantees for infrastructure loans / debt instruments, as long as Pakistan Credit Rating Agency ("PACRA") provides a favorable local currency credit rating for the Project.

Other existing investors in REITs may also be approached to better understand the potential for raising private financing via a REIT. Historically, there has only been one successful case in Pakistan i.e. Dolmen Mall, Karachi. However, recently the Securities and Exchange Commission Pakistan ("SECP") has extended existing REIT regulations to include PPP projects to assist in raising financing from the private sector[22].

4. Green Financing Providers

The Pakistan Government has recently taken an interest in green financing, given the high degree of potential negative impacts to Pakistan due to climate change. The Water and Power Development Authority (WAPDA) launched Pakistan's first-ever US dollar-denominated green Eurobonds, raising US$500 million for environment friendly projects to enhance the clean energy share in the country's power generation mix. There was a lot of investment interest in the bond which was oversubscribed six times.[23]

IFC has demonstrated a willingness to explore financing for various environmentally friendly initiatives including green buildings, via the issuance of a US$100 million green bond in Egypt[24] and cites the advantages of green buildings as "besides lowering energy consumption, and therefore operational costs, greener buildings typically achieve higher sale premiums and attract and retain more tenants, ensuring a more continuous revenue stream. In addition, green buildings can help investors and owners manage the risks associated with a transition to a lower carbon economy." [25]

[22] https://www.thenews.com.pk/print/846581-secp-eases-reit-rules-to-boost-construction-projects

[23] https://www.dawn.com/news/1627427

[23] https://www.egypttoday.com/Article/3/106593/IFC-invests-in-Egypt%E2%80%99s-1st-private-sector-green-bond-by

[24]https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/climate+business/resources/green+buildings+report

5.2 Market Feedback on Project Financing Structures

The private sector generally prefers options with the least risk transferred to them, while the public sector ideally wants to transfer as much risk as possible without compromising the quality and ensuring that the VfM is still positive. Some of the key metrics to be discussed with stakeholders during the early stages of Project definition include, but are not limited to:

1. Required returns to investors, including Project NPV, Project IRR, Equity NPV, Equity IRR and payback periods.
2. Security structure & collateralization, and credit enhancement requirements. This will be especially important since MOPDSI may not be willing or able to collateralize the Project site.
3. Level of service required in the new Project, including provision of smart technologies.
4. Average ticket size and maturity of debt.
5. Environmental & Social standards expected by international investors.
6. Transaction structures as discussed in section 4.4 of this document, and alternatives to be proposed by private parties.
7. Acceptability of the project cost, as well as associated funding required.
8. Debt to equity ratios which are acceptable to local banks.
9. Capability of the private sector to undertake such a project.
10. Acceptable ratios to lenders such as DSCR, PLCR and current ratio.
11. Discussion with MDIs to discuss whether they would have an interest in supporting the development of a green building.
12. High level risk allocation (see below).

Initial Feedback received from consultation with some private sector participants such as United Bank Limited ("UBL") and National Bank of Pakistan ("NBP") indicates that to ensure the success of the Project on a PPP basis, the following would be some key aspects that would provide comfort to lenders:

- Reputation of concessionaire: Initial market sounding reveals that there are many reputable local entities that have not stepped into the PPP space. However, if these entities did show an interest in this Project, then lenders would have more appetite to lend to the Project. While banks are always interested in lending to the real estate sector, they typically base their lending decision on the quality of the sponsor.

- Adequate security: Project financing will be challenging if lenders are not able to collateralize the Project's assets; hence it is extremely important that the Project site / assets are available for collateralization. The State Bank of Pakistan ("SBP") has recently made it difficult to secure a loan against assets other than the underlying project itself, hence alternative methods of collateralization may also prove to be challenging.

- Private party interest: Private parties will be more interested and willing to invest in the Project if they have flexibility on the use of the Project's assets, e.g., via sale rather than having to solely rely on rental income. Relying on rental income only is very risky, particularly in situations where tenants may be unwilling / unable to pay rents on time. Therefore, private parties would be more interested in the Project if they have an early exit option by sale of the Project's assets rather than through long concession terms where they have to collect rental and operate the facility for a long concession period.

- Effective transaction structure and quality of feasibility: The transaction to be structured will need to provide a reasonable level of returns to investors with adequate cash flows / future prospects, and the analysis will need to be based on a robust commercial feasibility study. The transaction structure will need to be bankable with adequate collateral, insurances, or financial instruments to back-stop the return of investment in case of material deviations from forecasts.

- Demand-Supply Gap: For a leasing / rental commercial office project, a detailed demand-supply gap assessment needs to be undertaken. Banks would generally vet these studies or conduct their own independent studies prior to loan disbursement Consequently, these will need to be of the highest quality to ensure private sector participation and bank financing availability.

6. Risk Assessment

6.1 Roles and Responsibilities of Public and Private Parties

Role	Responsibility		
	Public	Private	Hybrid
Transaction structuring & bidding process	✓		
Feedback from private parties	✓		
Ensuring land possession and right-of-way	✓		
Design and Construction of the Project		✓	
Marketing activity for commercial utilization of the buildings		✓	
Operations and Maintenance		✓	
Financing and achievement of Financial close		✓	
VGF during construction (or operations of the project if required as per feasibility)	✓		
Provision of financing instruments to financial institutions			✓

6.2 Risk Identification and Risk Allocation Matrix

Sr. No	RISK	Description	Allocation			Likelihood
			Public	Private	Hybrid	
1	Site Risk / Right-of-way Risk	Project land will be unavailable, or unable to be used at the required time, or in the manner or the cost anticipated. The land is already under ownership of MOPDSI, hence no to very little additional land acquisition will be required, and this risk is expected to be low. Need to ensure possession of land is available and with MOPDSI.	✓			Low
2	Design and construction risk	Design, construction, or commissioning being carried out in a way that results in adverse consequences on cost and/or service delivery. While the basic specifications of the Project may be straightforward, i.e., designing and construction of an office building, the use of innovative technologies to develop a smart building and / or captive energy solutions can have additional challenges due to lack of familiarity with the technology by local developers. Hence an ideal private party would include an expert technical developer already familiar with incorporating smart infrastructure solutions in prior projects.		✓		Moderate
3	Variation risk	Any aspects not envisioned in the initial technical design / commercial feasibility either during the transaction structuring phase by the government, or during the bid submitted by private party (based on initial due diligence) may have an adverse impact on the project costs.			✓	Low

		Depending on whether this variation is required by the government or private party to achieve the desired outcomes as per the bidding documents, this risk may be allocated to either party. The Project is in sufficiently early stage and a comprehensive feasibility study can adequately reduce this type of risk.				
4	Time / cost over-runs	Any delays in CPs prior to financial close, or delays by the private party in design or construction of physical infrastructure may cause delays in project execution timeline and hence increase costs to the private party. Depending on the complexity of the design and level of experience of the contractor, there is the potential for delays and cost overruns.		✓		Moderate to High
5	Relocation of Utilities	This is the risk that during project construction, some utilities need to be relocated due to construction that would overtake the existing installed utilities. Any delays caused by government counterparts for relocation of utilities tends to delay the project. Since the land is expected to be relatively free from encumbrance, this risk is expected to be low.	✓			Low
6	Financing risk	Raising private finance may be challenging if the Project itself is not available to be collateralized. Adequate collaterals / financial guarantees may need to be provided to financiers to ensure financial close is achieved for the Project. Commercial real estate is a sector commonly developed by the private sector in Pakistan. However, bank l financing is often not undertaken by large developers who typically use initial equity and advance payments from sales to finance these projects during construction. Hence, stakeholder consultations will be important to understand the requirements of financiers.		✓		Moderate

7	Interest rate risk	If the borrowing rate changes, whether it is KIBOR for local financing or LIBOR / some other rate in case of foreign financing, this directly impacts the level of returns for the concessionaire. If the Project structure has an interest rate linked government payment to the concessionaire, then this risk may be shared between public and private sector.			✓	Moderate to High
8	Demand risk	The transaction structure will be significantly impacted by the level of demand in the market for office complexes / smart buildings in Islamabad. Initial market analysis indicates that there may be some space still vacant in the nearby vicinity, hence a thorough demand/supply gap analysis will need to be undertaken to ensure private party participation in the bidding process. Depending on the transaction structure, this risk can be allocated either completely to the concessionaire or to the government. Similarly, in hybrid BOT modalities as discussed in section 4.4, with inclusion of government support during operational period, this risk may be shared between both parties Being a greenfield project with existing demand / revenues not visible to the private party, estimation of the exact level of demand risk will always remain challenging.			✓	Moderate to High
9	Change in Law	In case there is a change in law which impacts returns for the concessionaire, traditionally concession agreements give leverage to the concessionaire and the government bears this risk.	✓			Moderate
10	Enforcement	Enforcement of rental income from occupants is not expected to be challenging. The tenants of large commercial spaces tend to be high net worth entities for whom affordability of rents is not expected to be difficult.		✓		Low

11	Political	In case there is a major political event which impacts returns for the concessionaire, traditionally concession agreements give leverage to the concessionaire and the government bears this risk.	✓			Moderate
12	Performance, Operating and Maintenance risk	Obligations as per concession agreement are not being met by the concessionaire such as standards of quality of the service. This risk is expected to be moderate only in case there is significant use of smart technology in the building solution, and in the initial years the operator may not have familiarity with use of this technology. Therefore, an ideal concessionaire would have prior experience in development / operations of smart infrastructure		✓		Low to Moderate
13	Force Majeure	Any natural disasters, fires, epidemics / pandemics that impact the Project either during construction or operation stage. Since this risk is uncontrollable, it is usually shared between the public and private party. Adequate insurances must always be undertaken, and hence made part of the project bidding documents			✓	Low to Moderate
14	Project Marketing	Responsibility of marketing and sales of the Project lies completely with the private party. Often real estate developers outsource this activity to professional marketing agencies; therefore, an ideal partner would have prior in-house experience or relationships with leading real estate marketing agencies in Pakistan		✓		Low

7. Value for Money (VfM) analysis

7.1 Qualitative VfM Analysis of PPP Procurement

The value for money (VfM) analysis in a PPP project is divided into qualitative and quantitative VfM. To conduct an effective VfM analysis, the public sector must identify all or as many qualitative issues as possible that could impact the Project.

Some of the key areas required to be assessed are as follows:

1. Project viability as a PPP: Examining how strategic and regulatory issues may affect private participation in terms of project implementation, e.g., are there significant benefits for the government to develop the project via traditional procurement or to tender the Project on a PPP basis.

2. How a PPP will bring efficiency and innovation, accountability of service or infrastructure provision, operational flexibility, measurable and definable outputs: For MOPDSI, the private sector can bring financing and investment, expertise of real estate development and smart infrastructure using IoT, and data-driven planning for the provision of a high-quality level of service.

3. Desirability: Analyzing the benefits and costs of developing the Project as a PPP, considering incentives and risk transfer, and assuming a whole-of-life costing approach. Analysis to determine whether developing the Project via a PPP will bring in a larger share of outside tenants or buyers due to higher levels of service in comparison to the MOPDSI developing the Project on their own via traditional procurement.

4. Capacity: Verification of the market interest and public sector capacity in developing and managing the PPP Project. Local and international developers to be approached on both BOT and BOO modalities to gauge the level of interest in the different types of transaction structure.

Certain general qualitative factors could materially impact the overall VfM decision making process:

1. Cash flow analysis may indicate that the PPP option is more expensive, but this could be due to the design of a smart building requiring higher CAPEX. However, incorporation of smart features could provide a better experience for end-users and lower operation costs.

2. Although developing the Project on a BOO basis may mean that the government will lose control over the asset and may have a negative net cash impact for the government, the Project will likely be developed for the government in a timely manner and with fewer risks, since all design, construction and demand and revenue risks will be borne by the concessionaire.

7.2 Quantitative VfM Analysis of PPP Procurement

For the most useful quantitative VfM analysis, it is best to wait for a high-quality commercial feasibility study and financial model to be completed. The purpose of conducting a quantitative assessment is to calculate the difference between undertaking this Project through traditional procurement or through PPP and see which procurement method provides the least cost to the government. This considers the

complete life-cycle cost of the Project, not only including any initial up-front costs, but also costs that the government is expected to bear throughout the project life cycle. The difference between these two methods will estimate which option provides the most cost-effective solution to the government.

7.3 Fiscal Affordability

Fiscal affordability is the assessment of the affordability of the Project from the government's perspective, based on the extent and nature of fiscal support and its quantification. This includes a thorough Fiscal Commitments & Contingent Liabilities (FCCL) analysis, which can only be effectively undertaken after the development of a quality commercial feasibility study and associated financial model.

Based on the analysis to be undertaken in detailed feasibility studies, MOPDSI and its advisors should try to ensure an optimal transaction structure which assesses all options to try and minimize the level of government support required, while ensuring that the Project is bankable and attractive to private sector investors. These may include changing various factors such as the length of the concession period in case of BOT modality and adjustments in the sharing proportion of the Project's assets.

When assessing the actual quantitative elements of government support, key factors for consideration include:

1. The forecasted annual amount paid to the private party (if any), must fall within the available budget envelope, and ideally the budget should be a function of the forecasted government support. In case of rental modality, this amount would be the cash flow difference in expected occupancy vs actual for initial years.

2. In case of a termination event or triggering of a guarantee arrangement, the expected payout should fall within the assumed range for government budgetary limits. Both direct and contingent liabilities must be well within these limits and approved by the government during the structuring phase.

3. The government and its advisors must plan to ensure minimal fiscal risks emerge from the Project by ensuring a clear risk mitigation strategy. Some of these risks are detailed in section 6.2 of this document.

8 Way Forward

8.1 Conclusion and Next Steps

It is recommended that a detailed feasibility study be carried out to determine the ideal PPP modality for this Project. Some of the key issues that need to be reviewed as part of such a study include:

1. Initial due diligence including demand -supply analysis of commercial property in Islamabad generally, and in the Red Zone in particular, together with a technical options analysis.
2. Assessment of land use, zoning regulations and construction bylaws in the Red Zone area
3. Stakeholder consultati ons including but not limited to local developers, potential tenants, international smart infrastructure technology providersand key financial institutions.
4. Finalization of TORs for transaction advisors.
5. Appointment of transaction advisors.
6. Initiation of commercial feasibility studies.
7. Undertaking of initial Environmental and Social Impact Assessment
8. Development of a business model and transaction structure
9. Implementation of approved transaction ona PPP mode.

Annex-I

Reference Outline Terms of Reference of Transaction Advisor (the "Advisor")

The Transaction Advisory team (consisting of financial, legal and technical expertise) will help MOPDSI in structuring the best PPP option. The best option will be one that provides 'value for money' to MOPDSI, is affordable to the MOPDSI and can likely be successfully implemented. The Project will be developed in a manner whereby the private sector will be responsible for Designing (based on a concept developed by MOPDSI), Financing, Building, Operating, and Maintaining the Building.

At the end of the contract period the building complex would revert back to MOPDSI.

2. Scope of Work

The scope of work is divided into the following two phases:

Phase 1: Undertake a feasibility study, which builds on the preparatory work / due diligence conducted on the Project to date and recommends optimal solutions / structures for the Project after careful review and in-depth investigation of various solution options / structures.

Phase 2: Provide advisory services for the appropriate procurement of a qualified investor/ contractor/ operator, reflective of the recommended structure.

The first phase will essentially consist of transaction structuring. In this phase, various options with respect to the public and private sector co-operation will be investigated, taking into consideration the views of the various stakeholders and the particular dynamics and resource requirements of MOPDSI. At the end of this phase, the Advisor will provide the Financial Model, along with a Feasibility Study setting out the rationale and details on the best-suited options along with the recommended structure.

The second phase will start after the assessment of the report and approval of the final transaction structure by MOPDSI and the P3A board. After requisite approvals are in place, the Advisor will assist MOPDSI in marketing the Project and interfacing and coordinating with potential investors. The second phase will also entail assisting MOPDSI in preparing documentation for competitive bidding, arranging any pre-bid meetings, finalization of documentation, and bidding and closing of the Project.

Phase 1 – Transaction Structuring

- Review of the MOPDSI design concept and requirements for the Project.
- Initial Due Diligence & Options Analysis: The Transaction Advisor will conduct initial due diligence of the Project and analyze the options available and recommend the best option/solution. The Terms of Reference in the first phase would include conducting a thorough Due Diligence, Market Analysis and Demand & Supply gap analysis of office space in Islamabad, together with a review of all relevant laws for development of real estate projects in the 'Red Zone' and suggestions/recommendation in this regard.

  While in the working paper, the Project is initially conceptualized to be implemented under BOT mode, various PPP options are possible, and these options need to be evaluated to come up with the range of possible solutions / options under which the Project can be implemented. The possible solutions / options will be further refined based on feedback from the private sector and the constraints and resources of the MOPDSI. Views will be taken on the final few options from the different stakeholders involved before recommending the best suited structure for Project implementation, which would be attractive to the private parties and meet the needs of MOPDSI.

Legal Component:

This will identify and analyse the legal framework that would govern the Project and will focus on the following: -

- Determine the usage of the land and relevant zoning laws in view of the expected commercialization of the site.
- Determine whether the legal framework provides for an adequate basis for private participation in the infrastructure sector.
- Whether the legal framework provides an adequate basis for grant of a license or concession to the private developer for implementation of the Project.
- The changes (if any) required to provide for a suitable legal framework for the implementation of the Project.
- The risks from implementing the Project under the governing legal framework.
- Define the management and operations structure of the facility to be built. This will identify and analyze the legal framework that would govern the project.
- To draft policies, rules and regulations for proper management of the facility.
- To prepare agreements. This will include the development of the Concession Agreement and any other agreements which may be needed within the scope of the Project.
- To assist in negotiation and award of the work to the developer. The entire range of activity relating to the development of the Project framework until the signing of the Concession Agreement (before actual commencement of construction of the infrastructure facility takes place), ranging from bidding process, RFP process short listing, final selection and award, negotiation, incorporation of Project Company to financial closure.
- The Legal Consultants would work under the coordination and supervision of the Advisor. The Terms of Reference of the Legal Consultants would include reviewing laws and regulations and identifying any impediments/constraints, providing input for the Information Memorandum, Pre-qualification criteria for bidders, preparing bidding & contractual documents, assisting in pre-qualification of bidders and assisting in transaction closure.

Technical Component (Concept Master Planning and Design):

- Based on discussions with MOPDSI and the available necessary data and information, a Master Plan / Layout Plan will be developed covering the overall site layout and planning considerations, space requirements for the facilities such as appropriate and flexible office space, services for employees, common areas, conference rooms installed with videoconferencing facility etc., other services and utilities required , including water supply, sewerage, drainage, solid waste disposal etc., facilities such as high speed internet connectivity with satellite backup, provision of 24 hour electricity and airconditioning facility. It is to be noted

here that this is just the concept master planning and does not bear any influence on the Bidder design which may be in much more detail.

- Technical component to consider developing the Project in phases. This could reduce the demand risk for the party depending on the recommended PPP modality. Once a critical mass of lessees has been confirmed, construction may be undertaken for subsequent phases. If the transaction is structured with phasing options as part of the tendering documents, more private sector participation may be expected due to reduced quantum of work and lower demand risk.

- The land use plan shall be of prime importance in preparing the master plan. Care should be exercised to make sure that the whole exercise is carried out in harmony with its context, function, efficiency and according to the latest international standards adopted to the local needs. The functional relationship of different facilities, are also important, keeping the purpose of use for facilities and other amenities. The land/space plan will need to be analysed in detail, to earmark the area for different activities as mentioned above, for their location, accessibility and future expansion. The land use plan will form the basis for developing the master plan for the whole Project on an appropriate scale. The master plan will lay out the arrangement of building(s) and facilities, future needs on infrastructure and services.

- Buildings are to be designed so that they should be pleasing and should be in harmony with their surroundings, while still having their own identity.

- Architectural details to be given meticulous thought, such as the materials, technology available for efficient building and low maintenance requirements.

- Natural light and ventilation to be made use of to produce pleasant environment and working conditions with less energy consumption.

- Planning and design to take into account environmental impact and adequate provision to be kept for future expansion.

- Aim shall be to provide safe, healthy, comfortable, attractive and stimulating environment while taking care of all the intended security measures necessary for the proposed building.

- Technical specifications for the items of work to be based on the latest standards to produce a longlasting facility.

- Material strength and workmanship standards to be stated in detail to facilitate testing, monitoring.

- In defining such rights, a careful balance needs to be struck between conferring on the grantor the ability to monitor and enforce the spirit of the concession in the interest of the users of the buildings and ensuring that the concessionaire has the scope and incentives to deliver services efficiently, without undue interference.

- Based on the initial layout and concept design, quantities of the items of work shall be worked out and cost estimates shall be determined encompassing all the items of the works involved. A Technical Feasibility will

be prepared to supplement the Business Plan being developed under the Financial Component, on the basis of the drawings and cost estimates prepared, describing all the parameters considered for planning and concept design, the approximate cost of land (for cost-benefit analysis only), the estimated capital cost of the project, maintenance cost etc. and estimates of the revenue generation to finalize contractual arrangements with the developers.

- Conducting initial due diligence of the overall commercial real estate market in Islamabad / Rawalpindi, demand / supply gap analysis, market analysis, capability & willingness to pay studies.

- Identification of key technical/ commercial issues, developing technical specifications (design, construction schedule, performance standards etc.), assessing economic impacts, including savings through use of smart buildings / green buildings, innovative energy solutions and associated savings, property gains, etc.

- The Project should not be viewed merely as a building project, but a service delivery project over the life of the concession period. Accordingly, it should incorporate the concept of whole life costing in line with the envisaged service levels associated with corporate office complexes.

Financial Component (Defining the Financial Transaction Structure):

Various options for the Transaction Structure need to be considered keeping in view the following:

- Project Funding requirements and available options: The consultants will identify the funding requirements and available options based on different debt: equity structures, taking into account applicable laws under prudential regulations. This activity will also be based on the results of the financial model and more specifically the project costs, revenue streams, tax benefits etc. Based on the stated assumptions, an optimum funding structure will be recommended, which will ensure successful implementation of the Project in a cost-effective manner.

- Comparison of options such as BOT, BOO, BLT/BTL and non-PPP options including Joint Venture with Private Parties and Government Funding / EPC: The intent is to find the most suitable and implementable structure for the Project.

For example, a structure can be developed whereby MOPDSI,s and any other party forms a J/V and MOPDSI, instead of putting cash in the J/V - provides the land, which will be valued at the prevailing market rates and the other party invests cash which will be utilized for the construction of the office complex along with some debt financing. The operations of the Project can be managed jointly, or one party can assign the responsibility to the other party. All such structures will be analyzed in detail and the most suitable option for MOPDSI will be recommended.

Based on the results of the financial model and suitable transaction structure, the funding mechanism will be finalized. Funding will depend upon the profitability of the Project, risks involved and selection of transaction structure. The finalized funding mechanism will be incorporated in the financial model and business plan.

The business plan should also include operational aspects such as:

Management of the Office complex; including aspects such as how will nonpayment be dealt with? What authority will the contractor have to collect delinquent payments and enforce user sanctions?

Responsibility of investments for construction and maintenance: including aspects such as who will decide on investments in maintenance, repair, and upgrading of the system and construction of new infrastructure, and who will be responsible for carrying them out? Who is responsible for planning, coordination, supervision, and implementation of capital expenditure? If MOPDSI pays for new construction, how will it disburse the funds? Mmonitoring mechanisms to ensure timely completion of the projects.

Preparation of Feasibility Study

The Advisor will be required to produce a comprehensive Feasibility Study, which thoroughly assesses the preferred implementation options and finalizes the transaction structure. The Feasibility Study must enable MOPDSI to determine:

- Full project cycle costs
- Affordability in terms of budget and prices
- Risks and their costs
- The Feasibility Study also needs to clearly demonstrate affordability for the full project life cycle and propose the optimal solution for MOPDSI to achieve its desired outcomes. The optimal solution option and the recommended structure must be genuinely reflective of the constraints and concerns of all the key stakeholders involved. The feasibility study should also include the conceptual design of the complex and the targeted service levels through KPIs.
- Along with the needs and options assessment, the Advisor will develop a detailed Financial Model for the Project to inform the Value for Money Assessment. The Financial Model will be based on dynamic links, so as to cater to the full range of possible transaction structures and options. The model will clearly identify the underlying assumptions on which the future projections are based on, with integrated associations. The Financial Model will result in the assessment of the financial viability of the Project under different structures and options, as well as identification of the key parameters / critical risk factors. The Financial Model will serve as an effective tool in analyzing the sustainability of the Project, on a stand-alone basis, and to assess the manner in which support (if any) would be required from MOPDSI.
- The Project options analysis should also address the design parameters that would also be incorporated in the financial model, keeping in view best industry practices relating to corporate and office complex developments, especially in the context of earthquake resistant structures and in compliance with all relevant building and zoning regulations.
- The feasibility study should especially cater to the following aspects:

- To define the optimum Financial Transaction Structure, this activity will analyze various options available under the laws and regulations of Pakistan, to establish a relationship between the private investor and MOPDSI through various structures to be developed, which ensure a cost effective and expeditious implementation of the Project.

- In order to ascertain the financial viability of the Project, detailed Financial Models will be developed.

- After the finalization of the financial model and transaction structure, a detailed business plan will be prepared. The business plan will include the modes of finance proposed to be used for raising the necessary financing. The business plan will be prepared in close coordination with MOPDSI and all assumptions will be duly agreed. The business plan will include the following:

    - Overview of the Project. ○ Details of the proposed Project. ○ Financial Results ○ Financial transaction Structure ○ Report on the formation of SPV ○ Detailed Financial Model with complete write up
    - Risks and risk allocation

Development of the Draft Concession Agreement

The consultant will develop the draft of the Concession Agreement for the implementation of the Project, based on the selected PPP mode / framework. Specific requirements of this particular Project and the recommended transaction structure and framework will be reflective in the draft Concession Agreement. The Concession Agreement should include the outputs required in terms of service delivery i.e. service level standards, availability and assurance mechanism.

Phase 2: Implementation and Procurement:

In the second stage, the Transaction Advisor will assist in finalizing and implementing all transaction structuring and legal/contractual issues which have been decided upon during the previous phase. In addition, the advisor will assist the implementing agency in marketing the transaction, pre-qualifying investors, due diligence by the bidders, preparing and finalizing the contractual documentations, preparing financial model, implementing the bidding process, and assisting with the closing of the transaction.

Marketing & Information Memorandum (IM)

The advisors will conduct a marketing process showcasing the Project. In this regard, they will also prepare an IM which will be a comprehensive marketing document, intended to assist pre-qualified potential bidders in evaluating the investment opportunity. The IM will contain concise information on the Project. The IM will also include information on the envisaged timeline for the Project.

Procurement Process

Based on the chosen structure, a competitive tendering process will need to be initiated to select the most appropriate private party, which could most effectively implement the Project, with the least assistance and financial support from MOPDSI. The process to be adopted will be transparent with clearly defined evaluation criteria and designed to encourage participation by the private sector. The Advisor will assist MOPDSI in the management of the bidding process including, but not limited to, the conduct of the bidding process, bid opening and evaluation, recommendations on award and seeking approvals from the relevant agencies, negotiations with successful bidder(s) and closing of the Project. The Advisor will at all times ensure compliance with the terms of the bidding.

Financial Closure

The Advisor will provide support to MOPDSI in setting-up the payment / settlement and monitoring mechanisms to ensure timely completion of the Project. The Transaction Advisor will assist in ensuring that all conditions precedent to the signing of the contract is fulfilled leading to financial close.