

# China

## 1. Noteworthy practices for project preparation



### EXISTING ENABLING ENVIRONMENT

#### Systematic institutional framework at the national and sub-national levels for project development

China's institutional framework for project preparation is designed to be complete and methodical at each tier of the government.

At the national level, the Ministry of Finance (MoF) leads the effort to organise and coordinate PPP projects by developing PPP-related policies and carrying out the planning and administration of PPP projects. Along with the sub-national finance departments, the MoF is responsible for PPP project identification and screening, budget management, value-for-money evaluation and fiscal affordability assessments.



### PUBLIC SECTOR CAPACITY FOR PROJECT PREPARATION

#### Using PPP pilot projects as examples to build local capacity and set benchmarks for preparation and procurement

As the apex body for PPP-related matters, the Ministry of Finance (MoF), with significant assistance from the China PPP Center, undertakes extensive PPP project development capacity building exercises and initiatives at the national and various sub-national levels. To demonstrate the PPP approach, the MoF has promoted PPP pilot projects that serve as a benchmark and reference for national and sub-national implementing agencies. These pilot projects are intended to function as 'path finders', forming replicable and scalable implementation examples. The China PPP Center encourages all local governments to improve on the implementation of these pilot projects and supervise the full project lifecycle, along with periodically disclosing relevant information on the project.



### PROJECT APPROVALS AND QUALITY ASSURANCE

#### Assessment of project proposals by government agencies and external experts

Project plans in China undergo comprehensive review by the National Development and Reform Commission (NDRC) and other relevant government agencies, depending on their primary roles in the institutional set-up. The site selection reports are reviewed by experts and the local planning departments. Further, environmental impact assessment (EIA) reports are evaluated by environment protection departments within the relevant level of government for their inputs and approval. Major projects at the national level may also undergo thorough due diligence by NDRC-authorized companies, like the China International Engineering Consulting Corporation (CIECC).

## 2. Snapshot of project preparation activities

**Towards the second half of the 1990s, China started investing immensely in their public infrastructure, to support the steady economic growth during the period. While it started using the PPP model to deliver public infrastructure in the nineties, the Chinese Government has, since 2014, largely and widely adopted the PPP concept.**

To support this level of infrastructure investment, project planning and preparation activities had to be thoroughly undertaken by the government and its supporting agencies at both the national and sub-national levels.

### INSTITUTIONAL FRAMEWORK

Project preparation activities in China are decentralised and are largely driven by the line ministries and their counterparty agencies at the sub-national levels. The State Council, the National Development and Reform Commission (NDRC), the Ministry of Finance (MoF) and the line ministries play a crucial role in public infrastructure project development at the national level. NDRC and its local counterparts are also tasked with approving or rejecting project proposals within their jurisdictions. At the sub-national level, the institutional set-up mirrors that of the national level, with a planning commission within each government supported by various departments such as finance, urban construction, environmental protection, and communications.

#### National Development and Reform Commission (NDRC)

NDRC is the national planning commission in China, housed under the State Council, the administrative body of the central government. It is primarily tasked with developing, executing and monitoring the five-year national plans, which provide a strategic foundation for the formulation of the regional plans and annual plans of ministries, which, in turn, drive infrastructure development in China. NDRC also organises and coordinates the implementation of these plans. The commission houses dozens of departments and offices that are responsible for various functions, ranging from adjusting the prices of key commodities to formulating large regional development plans. It extends its authority down to the provincial, prefectural and municipal levels through the local Development and Reform

Commissions. NDRC is also the apex approval body, under the supervision of the State Council and with the coordination of other governmental agencies, for large-scale infrastructure projects undertaken at the national and sub-national level.

#### Ministry of Finance (MoF)

The MoF is the national fiscal executive agency of the central government which administers fiscal policies and the central budget. It is tasked with handling fiscal policies, taxation regulations and government expenditure for the state. The MoF leads the effort to organise and coordinate PPP projects in China by developing PPP-related policies and carrying out the planning and administration of PPP projects in consultation with other government agencies, such as the NDRC and the line ministries. It also conducts PPP-related policy research, consultation and training. To support economic planning, the MoF formulates and supervises the implementation of medium-term and annual budget plans, and oversees the implementation of fiscal policies and central government expenditure.

The MoF, along with the sub-national finance departments, is responsible for PPP project identification and screening, budget management, value-for-money evaluation and fiscal affordability assessments.

As the apex body for PPPs in China, under the supervision of the State Council and with the coordination of other governmental agencies, MoF also undertakes various initiatives to build local government capacity for PPP project development. MoF is promoting PPP pilot projects to act as demonstration projects, which will serve as a basis to determine related benchmarks and references for PPP projects in China. So far, it has rolled out four batches of PPP demonstration projects. It also conducts training workshops on PPP policy interpretation, project management and risk control, and enhancing government capacity building. To augment international coordination and cooperation, it has collaborated with multilateral institutions, such as the World Bank and the Asian Development Bank (ADB), and government PPP agencies in advanced PPP markets such as the UK, Canada, the Republic of Korea and Australia, in order to replicate their best practices within China's PPP context.

### China PPP Center (CPPPC)

CPPPC, which is under the MoF, is primarily responsible for PPP-related policy research, consultancy and training, capacity building, financial support, information collection and other matters. Its responsibilities in project preparation include:

- Drafting of PPP operational and contract guidelines, and establishing standardised PPP project processes;
- Assisting the governments in screening suitable industries for PPPs, selecting appropriate PPP models, and carrying out the selection of PPP demonstration projects;
- Providing consultancy and training in technical support to the government in project identification, evaluation, bidding, procuring, and contract management with respect to PPP projects;
- Organising training sessions to improve the operational capacity of PPP personnel;
- Collecting PPP-related theories and case studies within China and abroad to help identify best practices; and
- Developing cooperation and communication with respect to PPP-related activities with international organisations and institutions.

### PROJECT PREPARATION LANDSCAPE

#### *Project identification and concept definition.*

Potential public infrastructure projects are identified by each tier of the government's relevant sectoral agencies, such as energy, transport (e.g. heavy rail, expressways, highways, seaports, airports, bridges, etc.), municipal works (e.g. tap-water plants and distribution, wastewater, solid waste, metro, light rail, etc.), environment protection, water conservation, agriculture, forestry, science and technology infrastructure, sports, tourism, affordable housing, healthcare, elderly care, education, culture, social security, and governmental infrastructure, etc. These agencies identify projects based on the national and sub-national plans.

*Project feasibility and structuring.* The approach to the planning of infrastructure projects is dominated by the agencies at the relevant level of government responsible for project identification, as they are responsible for infrastructure policy formulation and project planning. The project preparation steps involve a concept proposal, pre-feasibility study, feasibility study, detailed engineering design, appraisal and final approval. There are dedicated technical institutions to assist project preparation in China, typically the planning and engineering design institutes of individual line ministries or local governments.

The project feasibility study results in the preparation of a draft plan for project approval, which comprises the project proposal, site selection report, EIA and the feasibility study report.

The project proposal mainly consists of the preliminary judgement regarding the project's viability and it relies on the technical and economic appraisal of infrastructure projects and the preliminary analysis of the project site, size, investment estimates and fundraising.

As part of the Administrative Measures for Direct Investment Projects in the Central Budget, the project developer is mandated to submit a feasibility study report, along with the project proposal to the NDRC when applying for the central investment budget, to serve as the primary basis for making an investment decision. The feasibility study report should include field investigations to learn about the land use status in the project area and to gather local information related to natural, economic and social conditions, a detailed proposed project plan and design, including the site selection, land occupation, construction scale and other technical parameters, and predictions of the impact of the project construction on the economy, society and ecological environment.

For PPP projects, the relevant sectoral agencies at each tier of the government will prepare the project implementation program, which is similar to a business case document. This involves preparing a project overview, a basic framework for risk allocation, project operation methods, a transaction structure, a contract system, a supervision framework and the selection of procurement methods. Further, the governmental sectoral agency will then appoint an expert or a third-party professional organisation to prepare the value-for-money evaluation report for the proposed project. The relevant finance department, along with the governmental sectoral agency, will jointly review the value-for-money evaluation report in alignment with the project implementation program. If the project passes the value-for-money assessment, the finance department then prepares the fiscal affordability assessment for the project. The MoF's increasing focus on fiscal affordability has developed in the recent past, to ensure that all project proponents optimally incorporate and value the total costs of undertaking PPPs. Thereby, the fiscal affordability assessment mechanism for PPP projects was established to efficiently and effectively prevent and control fiscal risks arising from the implementation of PPPs. The mechanisms assist in identifying and measuring the financial expenditure of PPP projects, evaluating the effect of their implementation on annual financial expenditures in current and subsequent years, and providing the basis for the fiscal management of PPP projects.

After the PPP project passes the fiscal affordability assessment, the administrative body of the local government under whose jurisdiction the project sits will approve the implementation of the project and commence the procurement process.

***Project approvals and quality assurance.*** Approval on the feasibility study report from the NDRC, or the relevant DRC, forms the core activity of the final approval stage. NDRC, or the relevant DRC, provides the approval after the assessment of the draft plan and the completion of departmental reviews, based on project compliance with the relevant laws and regulations. The assessment of the draft project plans is undertaken by multiple agencies, depending on their scope and jurisdiction. The site selection report of the project plan must be assessed by the relevant local planning departments, who could, in turn, appoint experts for an independent review. The EIA report is evaluated by the relevant environmental protection department for their inputs on the EIA and its approval. Finally, the project developer submits the project plan to the NDRC, or the relevant DRC, for their inputs until the review of the EIA, land use and site selection is completed. The final approving authority for sub-national projects depends on the size of investment.

### 3. Guidance for project preparation

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| <b>Guidance</b>                  | <b>GUIDELINES FOR THE ADMINISTRATION OF FINANCE FOR PPP PROJECTS</b>  |
| <b>Owner</b>                     | Ministry of Finance   |
| <b>Project development stage</b> | Throughout the project lifecycle  |
| <b>Details</b>                   | <p>These guidelines, circulated by the MoF in September 2016, task the finance departments at all levels of government with arranging PPP project preparation, budgetary funding, procurement, budgetary expenditures and revenues, and performance management etc. For PPP project preparation, these guidelines put the responsibility of the preparation of the project implementation program, which is similar to a business case document, with the authorised project implementing agency, while the finance department is tasked with the responsibility to review the value-for-money evaluation, in collaboration with the relevant governmental implementing agency, and the fiscal affordability assessment. These guidelines provide the basis for evaluating a project for its PPP viability, procurement and fiscal budget management of projects.</p> <p><b>Link for further details:</b> <a href="http://www.cpppc.org/en/Guidelines/4699.jhtml">http://www.cpppc.org/en/Guidelines/4699.jhtml</a></p> |
| <b>Guidance</b>                  | <b>OPERATIONAL GUIDELINES FOR PPP MODE (FOR TRIAL IMPLEMENTATION)</b>   |
| <b>Owner</b>                     | Ministry of Finance   |
| <b>Project development stage</b> | Throughout the project lifecycle  |
| <b>Details</b>                   | <p>These guidelines were circulated by the MoF in November 2014 to promote and apply the private-public partnership (PPP) model in a standard manner. The guidelines apply to regulating activities, such as the identification, preparation, procurement, implementation and transfer of PPP projects conducted by the government agencies, private and/or commercial partners and other participants. They provide the government agency responsible with the basic steps to be performed for the above activities. They also provide the basic structure of the project implementation program that is to be prepared by the project implementing agency.</p> <p><b>Link for further details:</b> <a href="http://www.cpppc.org/en/Guidelines/4049.jhtml">http://www.cpppc.org/en/Guidelines/4049.jhtml</a></p>  |
| <b>Guidance</b>                  | <b>GUIDANCE FOR THE FISCAL AFFORDABILITY ASSESSMENT OF PPP PROJECTS</b>   |
| <b>Owner</b>                     | Ministry of Finance   |
| <b>Project development stage</b> | Project appraisal   |
| <b>Details</b>                   | <p>These guidelines, circulated by the MoF in April 2015, promote the orderly implementation of PPP projects by guaranteeing effective performance of contractual obligations by the government, and effectively preventing and controlling fiscal risks. The fiscal affordability assessment refers to activities to identify and measure the budgetary expenditure of PPP projects and evaluate the implementation of projects in the current and subsequent years, to provide the basis for the fiscal management of PPP projects. This, along with the value-for-money assessment, is a critical step in identifying whether the project can be implemented as a PPP. The finance departments at various levels of government are tasked with reviewing the fiscal affordability assessment.</p> <p><b>Link for further details:</b> <a href="http://www.cpppc.org/en/Guidelines/4050.jhtml">http://www.cpppc.org/en/Guidelines/4050.jhtml</a></p>  |

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| <b>Guidance</b>                  | <b>GUIDELINES ON REGULATING THE PROJECT DATABASE OF THE NATIONAL PPP INTEGRATED INFORMATION PLATFORM</b>  |
| <b>Owner</b>                     | Ministry of Finance   |
| <b>Project development stage</b> | Project disclosure and monitoring   |
| <b>Details</b>                   | <p>These guidelines, circulated by the MoF in November 2017, provide the necessary conditions to be satisfied by a PPP project in order to be included in the Project Management Database of the National PPP Integrated Information Platform. This platform improves the overall quality of project database management. The provincial finance departments are responsible for project database management at their level. To identify and eliminate unqualified projects that do not meet the specified criteria, the finance departments at various levels set up special working groups.</p> <p><b>Link for further details:</b> <a href="http://www.cpppc.org/en/Guidelines/6078.jhtml">http://www.cpppc.org/en/Guidelines/6078.jhtml</a></p> |

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| <b>Guidance</b>                  | <b>GUIDELINES FOR VALUE-FOR-MONEY (VFM) EVALUATIONS OF PPP PROJECTS</b>  |
| <b>Owner</b>                     | Ministry of Finance  |
| <b>Project development stage</b> | Project appraisal  |
| <b>Details</b>                   | <p>These guidelines, circulated by the MoF in December 2015, guide the project implementing agencies in the preparation of PPP VfM evaluations, and assist the finance departments at various levels in reviewing the PPP VfM evaluations in a well-regulated and orderly way. VfM evaluations are carried out during the project preparation stage to judge whether a project can be implemented through the PPP route or through traditional procurement. These guidelines provide basic information regarding the preparation of VfM evaluations, qualitative evaluations, quantitative evaluations, evaluation reports and public disclosures. They also provide the basic structure of the VfM evaluation report.</p> <p><b>Link for further details:</b> <a href="http://www.cpppc.org/en/Guidelines/4023.jhtml">http://www.cpppc.org/en/Guidelines/4023.jhtml</a></p> |

## 4. Project case example: Hangzhou International Airport (HGH)

### PROJECT BRIEF

Hangzhou International Airport (HGH) is situated in Xiaoshan in the Hangzhou municipality, the capital of Zhejiang Province.

The airport covered an area of 484 hectares (ha) in Phase I and was expanded to about 998 ha in Phase II. HGH is considered as one of the main international airports in the Yangzte River Delta region in Eastern China and is one of the top 10 busiest airports in the country. During the period 2007-2012, passenger traffic in HGH more than doubled, increasing with an annual average growth rate of 19.4% per annum in the decade 2003-2012.

The construction of HGH can be divided into three phases: Phase I was completely operational in December 2000, Phase II was completely operational in December 2012, and Phase III is scheduled to be operational in 2035.

Project preparation of HGH commenced in 1992 with an Environmental Impact Assessment (EIA), site selection and a feasibility study. After two years of planning, site selection was complete and Xiaoshan was selected as the final location for HGH. The EIA and feasibility study reports were approved in 1997. For Phase II of the project, a review was conducted by the environmental protection and land administration departments, and the expansion was approved by NDRC in 2007.

### QUICK FACTS



VALUE  
(IN US \$ BILLION)

1.6\*



STATUS

**Phase I and II Operational**



PROJECT OWNERSHIP

**JV between Airport Authority Hong Kong and Zhejiang Province Airport Administrative Co.**



SOURCE OF PROJECT  
PREPARATORY FINANCING

**National government budget**



SUPPORT AGENCIES

**DDRC, Departments of Planning, Land Administration and Environmental Protection**

\* Phase 2 expansion project cost; 1 CNY = US \$0.15, DDRC – Department of Development and Reform Commission of Zhejiang Province

## PROJECT TIMELINE

- 1992 Commission of project preparation for the airport. This involved an Environmental Impact Analysis (EIA), site selection and feasibility study report (FSR).
- 1994 Site selection was completed and Xiaoshan was chosen as the location for HGH.
- 1997 Approval for the EIA and Feasibility Study Report. Phase I of HGH was launched.
- 2000 Phase I of HGH was completely operational.
- 2005 Planning of Phase 2 started with a review conducted by the Environment Protection and Land Administration Departments
- 2007 NDRC provided its approval for the expansion of the airport and construction was commissioned
- 2012 Phase II of HGH was completely operational

## LEARNINGS FOR PROJECT PREPARATION

### 1. Simplified yet robust institutional framework led to extensive project preparation

The planning and decision-making are the responsibility of the Department of Decision and Reform Commission (DDRC) of Zhejiang Province, with assistance from other government departments, such as the Department of Planning, Land Administration and Environmental Protection. The project preparation involved the preparation of a project proposal, which mainly established whether the project was a viable investment. Further, technical and economic assessments were performed, along with a preliminary analysis of the project, site, size, investment estimates and fundraising. In addition to the project proposal, a project site selection and environmental impact assessment (EIA) were completed as a part of the preparation stage. Further, the project developer submitted a Feasibility Study Report (FSR) to the DDRC as the preliminary basis on which the project investment decision was made. This fast-tracked the project's preparation and led to its completion within the specified time and budget.

### 2. Strong quality assurance mechanism to ensure that the streamlined project preparation activities were high quality

Project proposal, site selection, environmental impact assessment and the feasibility study report are the main project preparation deliverables that are undertaken by experts with professional qualifications from planning and design institutes. The project proposal underwent a stringent external review, which was then submitted to the DDRC for their inputs on the feasibility report and operability of the project. After the project proposal was approved by the DDRC, the draft plan was reviewed by the departments of planning, land administration and environmental protection. Similarly, the EIA report was reviewed by the environmental protection department. Also, the project developer received feedback from the urban and rural planning department for site selection before the project plan was approved by the DDRC. Further, the project developer submitted the feasibility study report to the DDRC for its approval until the review of the EIA, land use and site selection was completed. The FSR assessment is performed by reputable agencies with professional qualifications that also conduct the technical and economic assessments.



### **3. Encouraging capacity development for project planning and implementation through long-standing partnerships**

Given the size, complexity and duration of the project, it was critical for project proponents to build know-how on airport construction and management. To this end, HGH entered into a strategic partnership and joint venture with the Hong Kong International Airport prior to commencement of Phase II of its expansion. The aim of establishing the joint venture was to build the capacity of HGH and its staff in all areas of airport management and service concepts. The joint venture between HGH and Hong Kong Airport Authority was established in 2006, for a 30-year period, through the investment of equity capital in HGH's management institution – Hangzhou Xiaoshan International Airport Co. Ltd.