Foundations and generations: the evolution of Public-Private Partnerships towards the United Nations Sustainable Development Goals

Note by the Bureau

Background

The present document contains an overview of the different models of Public-Private Partnerships (PPPs) which are categorised by its author into three successive “generations”: money-first PPPs for efficiency of public funds expenditure, economy-first PPPs for regional economic development and People-first PPPs for sustainable development. The three categories (or generations) differ not only on the type of assets involved and the specific duties and functions that the private sector undertakes, but also on the impacts on the economy, the people and the environment.

1 This document is late submission because of a late reception of contributions from relevant parties.
2 At its meeting on 8 May 2018, the Bureau of the Working Party on PPPs decided that policy document from reputable sources, such as those submitted by the International PPP Specialist Centres of Excellence, could be submitted to the Working Party after being reviewed and finalised by the secretariat, with a recommendation for their endorsement if the Bureau thought that these documents added value and benefited the member States in implementing people-first PPPs. Once endorsed, these documents will become an output of the ECE International PPP Centre of Excellence for use in its capacity building activities and policy advisory services in countries.
I. Introduction

The cooperation between the public and private sectors for the development of public infrastructure projects has existed for a long time. The modern concept of Public-Private Partnerships (PPPs) arose to stimulate the respective advantages of both the public and the private sectors in providing better public services. PPP is an innovative approach to the provision of public services and has been evolving in its characteristics, scope and objectives. Its adoption has played a crucial role in promoting reforms and innovations in the investment, financing, and construction of public infrastructure facilities.

Promoted by the United Nations and other international or multilateral organizations, as well as in many developing countries, including the People’s Republic of China, PPP models are attracting great attention globally. However, countries and organizations have different definitions of PPPs (see Box 1). These distinctions and a lack of unified recommendations have been an obstacle to the successful evolution and development of PPPs in different countries.

This document aims to summarize the characteristics of the evolution of the PPP model with foundations and generations and provides recommendations for its successful evolution towards the Sustainable Development Goals (SDGs).

Box 1. Different definitions of Public-Private Partnerships

The United Kingdom (UK) Infrastructure and Projects Authority (IPA) defines Public Private Partnerships (PPPs), such as Private Finance Initiative (PFI) and Private Finance 2 (PF2), as a long-term contract between the public and private sectors for the design, construction, financing and operation of infrastructure projects. Specifically, PPP projects may include the construction or renovation of schools, hospitals, roads, residential housing, prisons, or military equipment. In the UK, PPP are predominantly implemented through projects involving government payments to the private sector.

In France, PPPs take the form of concessions (the user pays approach). This model has been developed and implemented for more than a century and in the second half of the 20th century, it developed significantly outside France, especially in the People's Republic of China and other developing countries.

For the World Bank, PPP models differ in three dimensions: the type of assets involved, the specific duties and responsibilities of the private sector, and the returns on investment for the private sector.

According to the European Union, the purpose of PPPs is the public procurement of services rather than assets. The emphasis is made on the outputs rather than the inputs of a PPP project. Payments in PPP projects may be made by the users (e.g. expressway tolls) or the government (e.g. availability pricing and shadow pricing), or a combination of both (e.g. a relatively low user fee plus a government subsidy).
The Organization for Economic Cooperation and Development (OECD) defines the scope of PPPs to both infrastructure assets (such as bridges and roads) and social assets (such as hospitals and prisons).

The United Nations Economic Commission for Europe (ECE) designed a new PPP approach, the People-first PPP model, to implement the United Nations 2030 Agenda for Sustainable Development and its Sustainable Development Goals. This concept places people at the foremost priority among all stakeholders and is oriented towards enhancing the quality of life of various communities, in particular those fighting poverty. The concept is made for delivering desirable and necessary outcomes from infrastructure investment that go beyond the narrow value for money criteria and focus PPPs on delivering “value for people”.

II. The scope of Public-Private Partnership models

1. Public-Private Partnership models are predominantly used in infrastructure projects

The function of public infrastructure is to provide public services and public services themselves could not operate without infrastructure facilities. Infrastructure covers a very broad area, such as transportation, urban utilities, information technology and energy facilities. All these play a key role in the existence and development of societies.

Infrastructure projects involve large amounts of investment, long term construction periods, a plurality of stakeholders and a complex coordination of activities throughout the whole project lifecycle. Usually a government chooses to adopt the PPP model when faced with financial constraints and a lack of expertise for the development of a specific project. In these cases, the participation of the private sector in PPP projects in infrastructure is crucial to address the lack of capital or technological skills.

2. Three approaches to develop and operate infrastructure projects

The following three approaches exist to develop and operate infrastructure projects:

(a) The first approach is when the government directly funds and operates an infrastructure project. This is the traditional model of infrastructure project investment and public services provision, in both developed and developing countries. In this model, the government finances the infrastructure project using tax revenues and government credit. With good governance, it can achieve cost efficiency and transparency, and in turn optimize the allocation of public funds. However, when the government directly participates in the investment and operation of infrastructure projects, problems of inefficiency sometimes emerge. This “government failure” may be resolved by reforms and innovations but this is not always the case. That is why the application of the traditional model for the provision of public service should not be always considered.

(b) The second approach is when the private sector funds and operates an infrastructure project solely. The provision of public services by the private sector is a widely applied approach in economies where the private sector possesses strong capital, specific knowledge and technologies. Under this model, the government can protect the public interest by different means, for example by developing strong legal and regulatory frameworks. However, conflicts between the public welfare and private interests frequently
occur and lead to “market failure”. Therefore, the scope of the market-oriented approach is limited as well.

(c) The third approach is the cooperation between the public and the private sectors for the development of public infrastructure projects to provide public services, or Public-Private Partnerships. These partnerships stimulate the respective advantages of both the public and private sectors to improve the quality and efficiency of public service provision. The different models of Public-Private Partnerships have played a crucial role in promoting reform and innovation in the investment, financing, and construction of infrastructure facilities.

3. Basic requirements for effective implementation of Public-Private Partnerships

PPPs for the provision of public services require complex organization, advanced knowledge and expertise and sophisticated operational processes to ensure the successful development of a project. The adoption of a PPP model for a project must be based on the premise that it will allow for a better provision of public services compared to the traditional and market-oriented approaches. For the effective implementation of a project under a PPP scheme, different dimensions should be assessed such as the allocation of funds, the benefit for regional economic development and the people, the sustainable use of natural resources and environmental sustainability. Governments should make rational decisions for the application of PPP models for public infrastructure projects, based on their own capacity and the local economic and social conditions. The success of the implementation of a PPP project depends on the following factors:

(a) Has appeal to both the public and private sectors. Projects operated under the PPP model should meet public interests and allow for a reasonable profit for the private sector. If a project does not meet the demands of the public and private sectors, the PPP model should not be applied.

(b) Focus on customization. The application of PPP models should be based on the social and economic needs, local institutional circumstances, and the viability, desirability and achievability of a public service provision.

(c) Legal and contractual protection. PPPs often rely on non-recourse or limited recourse project financing models. These are long-term partnerships which emphasize on long-term contracts. PPPs are therefore not recommended for complex projects that involve important investment, nor for projects of which the implementation requires constant adjustment to the external environment or for which forecasts are difficult to make.

(d) Market economy orientation. PPP is an infrastructure project operation model that emerged in European countries where the market economy system is fully developed. Only in such environments can the Special Purpose Vehicles be successfully implemented as part of a PPP. In countries where the legal systems and the market economy system are yet to be developed, the PPP model should not be applied.

(e) Strong private sector development. PPPs promote reforms and innovations and break the traditional monopoly of infrastructure sectors by State-Owned Enterprise and other public entities. Without a well-developed private sector, PPP models cannot be widely applied. However, in economies where the private sector is not developed, countries could adopt PPP models by involving the leading international private enterprises to lead reforms and innovations to stimulate the development of the local private sector.

(f) Fiscal budgeting. PPP belongs to the governmental off-balance financing. The debt of a PPP project is not directly counted into the government debt. PPPs become a means
for governments to avoid budgetary constraints but may in turn lead to irrational investments by governments, increasing the future fiscal burden. Therefore, PPP models should not be applied in great numbers in countries that have not yet established a sound fiscal system and medium and long-term public budgets.

(g) Good governance. In environments where the public governance system is not fully developed, PPP models should not be applied on a large-scale basis so as to avoid the development of weak and high-risk projects.

4. The scope of the Public-Private Partnership model should not be expanded unreasonably

The main objective of PPPs is to take advantage of the respective strengths of the public and private sectors, therefore, enhancing the quality and efficiency of a public service provision. But PPPs are not necessary in areas where the public sector is able to provide the public service efficiently or where the market-oriented approach is able to ensure the required quality and efficiency.

Governments should make rational decisions for the application of PPP models for public infrastructure projects, based on their own capacity and the local economic and social conditions. The scope of PPPs should not be expanded unreasonably to avoid the underlying risks of damaging public interests and jeopardizing sustainable development.

III. The evolution of the Public-Private Partnership model

1. The foundations of the Public-Private Partnership model

The PPP model originated from the practice of infrastructure concession in France and from the development of the Private Finance Initiative (PFI) model in the United Kingdom in the 1990s.

The model of concessions in France has its origin in the Roman Empire. It was not however until the end of the nineteenth century that the notion of concession was precisely defined as a concept of public service. Since the beginning of the 1980s, concessions were widely promoted and implemented in both developed and developing countries.

In 1992, the Private Finance Initiative was implemented for the first time as a guidance and a legal framework for concessions in the United Kingdom. In contrast to the concession model, the public authority generally pays the private sector for the provision of a public service under a PFI agreement.

During the last two decades, PPPs have been widely promoted by the international community as a model for the development of infrastructure projects. Since then, continuous improvements and evolutions have taken place and different PPP models exist today, based on elements and principles of concession and PFI.

It is possible to classify the different PPP models into three successive “generations” or categories: money-first PPPs for efficiency of public funds expenditure; economy-first PPPs for regional economic development; and people-first PPPs for sustainable development.

They differ not only in the type of assets involved and the specific duties and functions that the private sector undertakes, but also on the impacts on the economy, the people and the environment.

2. **The first generation of Public-Private Partnerships as a tool for public procurement**

The first generation of PPPs is drawn from the Private Finance Initiative model and is mostly used in social infrastructure projects. The emergence of the concept of Private Finance Initiative is earlier than that of the recent terminology of PPP and its adoption by the central and local governments in the United Kingdom have allowed to fully exploit the knowledge and skills of the private sector to improve the country’s infrastructure without placing unnecessary strain on public funds.

Essentially, the Private Finance Initiative model is a delayed governmental payment model for the development of infrastructure to provide public services. For this reason, in its promotion and implementation, the government is mostly concerned with whether the model can reduce the cost of public services and increase its efficiency compared to traditional procurement.

The key contribution of the Private Finance Initiative model to the development of the modern PPP concept lies in its core principles of interest sharing, risk allocation, long-term cooperation and sustainable partnership between the public and private sectors. Its methodology and procedures for the comparison of costs with traditional procurement, i.e. the Public Sector Comparator, allow governments to decide whether to adopt the Private Finance Initiative model and ensure value for money for a project.

The first generation of PPPs, or “Money-first PPPs”, has been promoted and used in Australia, Canada and some Commonwealth countries as well as other countries around the world such as Japan. Other modern PPP models have then been developed based on the core principles of the Private Finance Initiative model.

3. **The second generation of Public-Private Partnerships as a tool for enhancing economic development**

The idea that countries could make a broader use of the private sector and market mechanisms for infrastructure financing and operation started to emerge after the development of the first generation of PPPs. Many believed that the scope of PPPs should not be limited to infrastructure projects based on availability payments but also in areas where the concession model based on the ‘user pays’ approach could be applied. This lead to the development of the second generation of PPPs formed with elements of concession and Private Finance Initiative, and with a much broader scope of application.

The key contribution of the concession model to the development of the second generation of PPPs is the financing model Build, Operate and Transfer (BOT) which widens the scope of returns on investment to the private sector. Under this second generation, the return on private investment is no longer constrained by governmental fiscal capacity and uses charging and pricing mechanisms –mostly based on ‘user pays’– for the provision of public services. In turn, the private sector bears most of the market demand and business risks of a project. Other forms of concession financing have also been developed and implemented under the second generation of PPPs, such as Build, Operate and Transfer (BOT), Build, Own, Operate and Transfer (BOOT), Rehabilitate, Operate and Transfer (ROT), and Design, Build, Financing, Operate and Transfer (DBFOT).
The second generation of PPPs is drawn from the traditional concept of concession and the core principles of the Private Finance Initiative model, i.e. interest sharing, risk allocation, long-term cooperation and partnership between the public and private sectors and value for money. It is designed to stimulate private sector participation in infrastructure projects by establishing different charging and pricing approaches and market-oriented return on investment mechanisms.

The second generation of PPPs puts priority on the local economic development and focuses on value for economy. It is named “Economy-first PPPs”.

4. **The third generation of Public-Private Partnerships as a tool for achieving the Sustainable Development Goals**

The different PPP models currently promoted and implemented in countries around the world are mostly driven by value for money and the appropriate use of public funds. Projects implemented under these models have little or no concerns for the three pillars of sustainable development – economic, social and environmental.

The third generation of PPP adapts the traditional models of PPPs to address the challenges of the 2030 Agenda for Sustainable Development and support the achievement of the United Nations Sustainable Development Goals. It places people at its core by focusing on “value for people” and has been advocated by the United Nations Economic Commission for Europe (ECE).

As a new generation of PPPs, People-first PPPs are formed with elements of the concession and Private Finance Initiative models and enhance rather than replace the first and second generations of PPPs.

The People-first PPP approach is defined and delimited by guiding principles4 to foster the implementation of transformative projects that delivers the following five outcomes:

(i). Increase access to essential services and lessen social inequality and injustice;

(ii). Enhance resilience and responsibility towards environmental sustainability;

(iii). Improve economic effectiveness and sustainability;

(iv). Promote replicability and the development of further projects; and

(v). Fully involve all stakeholders in the projects.

IV. **Focus on the innate driving force and constraints for the transformative development of Public-Private Partnerships**

These three successive generations of PPPs are closely associated and coexist today. However, as each generation continues to evolve, different challenges must be overcome to promote their successful development. The focus should be made on the key drivers and constraints for the development of the three successive generations of PPPs.

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1. **Focus on the key drivers for the development of the three successive generations of Public-Private Partnerships**

The first generation of PPPs emphasizes on the cooperation on an equal basis, sharing of interest, allocation of risks, and sustainable partnerships. These core principles not only promote the establishment of sustainable partnerships between the private and public sectors, but also improve the efficiency of public funds allocation, reduce the costs paid by the public sector for the provision of public services, promote fiscal and governance reforms, and resolve efficiency issues for the provision of public services. These advantages can be highly appealing to ministries of finance and the first generation of PPPs have been extensively promoted across the world by governments and international organizations.

The second generation of PPPs places the emphasis on return on investment mechanisms to exploit market potential in developing infrastructure projects with little dependence on fiscal resources. Its positive impact on the regional economy and more specifically on the infrastructure sector, have made it a good option in the less developed regions and developing countries. With these PPPs, governments have been able to promote infrastructure investments by establishing partnerships and consolidating the innovation of the private sector when lacking public funds.

Based on the first generation that places more emphasis on the efficiency of public funds’ allocation, and the second generation where the emphasis is on the efficiency of regional economic development, the third generation of PPPs is more inclined towards sustainable development. The driving force for the development of the third generation of PPPs is the concern for social responsibility and the Sustainable Development Goals. Although developing countries might have greater interests in efficient public funds’ allocation and leap-forward development of their economy, the People-first PPP approach offers better long-term perspectives and sustainable economic and social development.

The Belt and Road Initiative proposed by the Chinese government is providing the new driving forces for the application of the third generation of PPPs in participating countries. The key driving forces for development of the third generation of PPPs should therefore be enhanced through a transformation mindset and innovation of PPP principles to contribute to the achievement of the Sustainable Development Goals.

2. **Focus on the constraints on the development of the three successive generations of Public-Private Partnerships**

**Constraints on the development of the first generation of PPPs**

The effective application of the first generation of PPPs based on Private Finance Initiative requires a series of conditions that many countries, especially developing countries, do not have, which is why it is not implemented in a large-scale. There are three major constraints on the development of the first generation of PPPs that should be considered:

Firstly, the legal and regulatory frameworks must be developed and adapted to the Private Finance Initiative model when it is applied. This includes *inter alia* public fiscal governance, policy and legal context, and public participation and information disclosure mechanisms. In many developing countries, there is a need to carry out legal reforms to create the conditions for the application of the Private Finance Initiative model.

Secondly, the public fiscal and budgeting system must be well developed with a sound medium and long-term planning. A relatively mature and stable social and economic development is also a prerequisite.
Thirdly, the scope of application of the first generation of PPPs should be limited to social infrastructure projects financed by government payments. So far, many infrastructure projects are implemented under the “user pays” financing approach, and where most of the time the Private Finance Initiative model is not suitable.

**Constraints on the development of the second generation of PPPs**

The second generation of PPPs is being promoted and implemented in many countries to stimulate local and regional economic development. There are three resources for the development of the second generation of PPPs that can also act as constraints: the practice and experiences of the concession model adopted in France and other countries, the implementation of core principles applied in the Private Finance Initiative models, and the generalization of experiences hindering developing countries from using PPP models to promote local economic development.

The second generation of PPPs focuses on introducing market-based mechanisms of return on investment for the private sector, with an emphasis on the inherent economic value of a project. It therefore requires a greater expertise in project operation. The following should then be strengthened to improve business viability and governmental capacity for the application of the second generation of PPPs: research on the theoretical systems of the second generation of PPPs, development of legal and regulatory frameworks and pricing and payment mechanisms, and reform of investment and financing systems of local economies.

**Constraints on the development of the third generation of PPPs**

The third generation of PPPs is receiving increasing recognition and support from many countries and organizations around the world. This new approach puts the emphasis on the promotion of sustainable development, economic prosperity and social harmony. But of course, as the People-first concept is relatively new, the legal and regulatory frameworks need to be adapted.

People-first PPPs differ from the first and second generations of PPPs in terms of project identification and have mature evaluation criteria that prioritize the quality and efficiency of a project. The evaluation criteria for People-first PPPs are still being developed in line with the Sustainable Development Goals and the 2030 Agenda for Sustainable Development. This will in turn increase the difficulty of the performance evaluation and monitoring of third generation PPP projects.

### V. Recommendations for the evolution of the Public-Private Partnership model towards the Sustainable Development Goals

It is hoped that more and more second and third generation PPP projects will be implemented worldwide to stimulate social and economic development and achieve the Sustainable Development Goals. The recommended road-map for the successful development of PPPs among successive generations is detailed as follows.

1. **Promote the healthy development of the first generation of Public-Private Partnerships**

   The healthy development of the first generation of PPPs is of crucial importance for the successful evolution and development of the different models of PPPs. The introduction of the first generation of PPPs has been significant for the promotion of fiscal reforms, the
establishment of open and transparent procurement mechanisms and for the optimization of public funds allocation in infrastructure projects. The core principles of the first generation of PPPs also promote good governance among public entities for the development of modern PPP projects.

In promoting the development of the first generation of PPPs, attention should be given to the following aspects:

(a) The first generation of PPPs is only suitable for projects in healthcare, education, defence and other basic public services and infrastructures. The scope of allocation of public funds should be guaranteed and should not be expanded without justification.

(b) The first generation of PPPs puts the priority on improving public fund allocation. However, other dimensions should be considered when assessing the feasibility of PPP projects such as the economic feasibility, public acceptance and environmental sustainability.

(c) Budgetary reforms should be promoted to create the conditions for the provision of public services under the Private Finance Initiative model.

(d) Open and transparent evaluation and supervision of public service provision under availability payment should be improved.

(e) The procurement standards and output specification of public services should be clarified. The evaluation criteria of procurement pricing and fiscal feasibility should be improved, and the public sector comparator and value for money methodologies should be normalized.

(f) Legal and regulatory frameworks for the first generation of PPPs should be strengthened.

2. **Foster the development of the second generation of Public-Private Partnerships**

Many countries in the world, and particularly developing countries, would benefit from the introduction and development of the second generation of PPPs to foster the development of their economies. The second generation of PPPs can be developed by promoting the transformation of the conventional concession model to include the core principles of partnerships between the public and private sectors embodied in the first generation of PPPs.

In fostering the development of the second generation of PPPs, priority should be given to:

(a) Promote the application of the second generation of PPPs to a wider scope. This could be done by implementing second generation PPP projects with other payment mechanisms such as user pay, government pay, viability gap funding, or third-party payment.

(b) Ensure value for economy for public funds. The second generation of PPPs is not a replacement of the first generation but a significant transformation of the operating principles of infrastructure projects. In addition to following the requirements of the first generation of PPPs, the second generation should also enable the reasonable allocation of public funds to foster regional economic development.

(c) Diversify the returns on investment. The pricing mechanisms of public services should be further developed, and supportive policies formulated to build new investment return mechanisms in PPP projects. This would in turn attract the private sector to invest in more infrastructure projects.
(d) Improve asset liquidity in PPPs by Asset-Backed Securities, Real Estate Investment Trust and by other means to release the vitality of existing assets.

(e) Promote good governance by fostering reforms of investment and financing systems of infrastructure projects and improving the capacity of government to implement such projects.

3. **Guide the transition to the third generation of Public-Private Partnerships**

For more people-first PPP projects to be implemented worldwide and more infrastructure projects to meet the people-first criteria, the policy framework of the third generation of PPPs needs to be perfected.

At present, guiding principles5 of people-first PPPs are being finalised, best practices of new generation PPPs collected, and people-first PPP standards developed. All of this will allow for the creation of strong foundations for the successful development of the third generation of PPPs.

Additionally, Member States of the United Nations should reach wider consensus in the promotion and application of the People-first PPP model, and propose requirements for projects to meet the Sustainable Development Goals. This will in turn facilitate the development and implementation of the third generation of PPPs.

In this sense, the Belt and Road initiative brings new opportunities for the implementation of the third generation of PPPs, or People-first PPPs. To that end, the relationship between the ECE and the Chinese government should be strengthened to promote the application of People-first projects in the participating countries of the Belt and Road initiative.

VI. **Conclusion**

In the context of drastic transformations of societies and economies, countries could adopt the operating principles of the different models of PPPs to establish sustainable partnerships and leverage the skills of both the public and private sectors for the provision of public services.

On one hand, efforts should be made to promote the healthy development of the first generation of PPPs to enhance the efficiency of public fund allocations. On the other hand, the development of the second generation of PPPs would stimulate the vitality of local and regional economies. Based on the successful development of the first and second generations of PPPs and the adoption of people-first criteria and sustainable development principles, the development of the third generation of PPPs should be fostered.

Different organizations and countries promote different models of PPPs for different objectives, thus the three generations of PPPs should exist in parallel. The second and third generation of PPPs share the common elements of Private Finance Initiative and concessions as their pillars. The development of PPP projects stimulating social and economic

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development for the achievement of the Sustainable Development Goals should be promoted rather than projects solely driven by the value for money objective.

The “One UN” approach should be encouraged for the promotion of the People-first PPP model within the United Nations system. In addition, a better coordination is needed between international and multilateral organizations to tackle the practical hurdles to the implementation of the three successive generations of PPPs in both developing and developed countries.

Further work is needed to standardize and unify PPP definitions and scope for the successful evolution of PPPs among successive generations that will lay the foundations for the achievement of the Sustainable Development Goals by 2030.