

PIDA-PAP 2

PIDA-PAP 2 PPP Training Programs Program Design Annex

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ACRONYMS AND ABBREVIATIONS

\$ All dollar amounts are in U.S. dollars unless otherwise indicated.

AfDB African Development Bank

AUDA-NEPAP Africa Union Development Agency - New Partnership for Africa's

Development

AU African Union

AUC African Union Commission
CAPP Central African Power Pool

COMELEC Maghreb Committee for Electricity

COMESA Common Market for Eastern and Southern Africa

EAC East African Community
EAPP East African Power Pool

ECCAS Economic Community of Central African States
ECOWAS Economic Community for West African States

ICA Infrastructure Consortium for Africa

ICT information and communication technology
IGAD Intergovernmental Authority for Development

IXP Internet exchange point LLC landlocked country

L/RBOs lake/river basin organisations

NBI Nile Basin Initiative

OECD Organisation for Economic Co-operation and Development

OMVS Organisation pour la Mise en Valeur du Fleuve Sénégal

PAP Priority Action Plan

PIDA Programme for Infrastructure Development in Africa

PPP Public-Private partnership
RBO River Basin Organisation

REC Regional Economic Community

SADC Southern African Development Community

SAPP Southern African Power Pool

TAH Trans-African Highway
TEU 20-foot equivalent unit

TWR Transboundary Water Resources



PIDA-PAP 2 | PIDA-PAP 2 PPP Training Program

TWRM Transboundary Water Resources Management
UEMOA Union Economique et Monétaire Ouest Africaine

UMA Arab Maghreb Union

UN United Nations

UNECA United Nations Economic Commission for Africa

VoIP Voice over Internet Protocol
WAPP West African Power Pool



1

Why customised PPP training?

1.1 Why to use PPP structures?

Public-private partnerships (PPP), as a new project delivery approach, have gained popularity in infrastructure development in the past two decades. This project delivery approach requires practitioners to have a good command of the new project management body of knowledge.

Based on current estimates from the Africa Infrastructure Country Diagnostic (AICD), Africa needs \$93 billion annually to close its current infrastructure deficit. Private financing is essential to diminish the continent's gap of about \$50 billion in this respect. Africa now spends around \$45 billion per year on infrastructure, two-thirds of which come from the public sector and tax revenues. Of this funding, only one third is used to finance new projects. This is not enough to adequately address the needs of African citizens.

Other challenges of boosting Africa's infrastructure include weak policy frameworks to improve the investment climate for infrastructure in Africa. Public finance alone is not sufficient to cover the investment requirements. Hence there is a need to broaden domestic resource mobilisation by increasing private sector participation through public-private partnerships (PPPs). In addition to increasing access to private finance, PPPs increase efficiency, improve management and enhance the long-term sustainability of infrastructure projects. By allowing the private sector to contribute its knowledge, techniques and funding, PPPs enable the public sector to address the infrastructure gap on the continent. Also, PPPs require more stringent policy legal framework than other projects to attract private financiers.

Private investors are wary of tying up funds on African infrastructure projects that may not guarantee a return. Funds are mostly inadequate in sectors that don't ensure a steady revenue flow such as water, energy and transport. Private investment is there, but it has usually gone to telecommunication projects. This issue has proved to be a significant constraint for the continent's development, given that these sectors represent most of its infrastructure needs.

Some countries, like South Africa and Namibia, have created focused PPP units in the administration to accumulate the proper expertise to procure and manage PPP transaction.

PPP, especially in the post-COVID-19 economies are and will be critical to reaching the infrastructure goals that Africa needs. Therefore, AUDA-NEPAD employees must have a least a common denominator knowledge of how PPP transactions are structured and managed.

1.2 Why a Training Needs Questionnaire?

The training needs questionnaire was created to assess the knowledge needs of AUDA-NEPAD practitioners by conducting a survey, for which a PPP project management body of knowledge framework can be developed.

A lack of expertise and capacity in the public sector hinder the development of projects featuring an adequate level of knowledge. This issue leads to the presentation of vague concepts to private



investors, thus creating viability/bankability challenges and limited or non-existent funding opportunities. In response to these issues, a widespread consensus has emerged that technical assistance and capacity building is needed, mainly as it refers to the development and design of infrastructure projects through public, private partnership schemes.

One central bottleneck, as emphasised by financing institutes and investors, is that generally, project finance capital is available however what is missing to match this capital, are well prepared and bankable projects that are ready for investment. Likewise, the second bottleneck highlights that the public sector in Africa does not have the necessary competences and expertise for the planning, preparation and structuring of big infrastructure projects. In that respect, feasibility and design studies are often managed by the public sector but with a lack of sufficient consideration of the project's bankability.

Unfortunately, it is quite common that private-sector employees enrolled in the PPP negotiations are exceptionally skilled in the different knowledge areas of PPP transactions. At the same time, their counterparts in the administration have not had the exposure and focus of their private sector counterparts. This information asymmetry that may lead to poor negotiations either by requesting to the public sector deliveries that are not possible or by leaving too much value on the negotiation table in detriment of public finances.

The result of the questionnaire has been to propose a training curriculum designed according to the needs of the different African regions. In particular, the results concluded that PPP training needs vary depending on the underlying anglophone or francophone education of stakeholders.



Conclusions of the PPP Training Questionnaire

2.1 Pragmatic Approach

One of the objectives of using a questionnaire before proposing a curriculum has been to assure a pragmatic approach to PPP capacity building: Making sure that the program answers to the needs of PIDA-PAP2 stakeholders. The training should be sensitive to the corridor approach and cross border infrastructure projects in general.

During previous PPP training modules, it was clear that most case studies were not taken from African PPP infrastructure projects, simply because the research literature about PPP infrastructure projects in Africa is limited. Therefore, the PPP training should include reviewing African PPP case studies, and if possible, comparing them with similar PPP projects in other emerging markets, like Latin America.

The training should not only be based on expert presentations but also on showcasing best practices and practice through problem-solving based mostly on African and other emerging markets PPP case studies. After the training program, participants should complete an exam, and the results will be shared so that participants can learn from their mistakes.

2.2 Francophone areas

Training needs for French-speaking seem higher in all areas, but especially in Project Finance concepts, and engineering concepts needed for PPP contract design. It seems training needs on the procurement process, and contracts are fewer for the French-speaking respondents.

Only about 50% report any PPP training received before.

2.3 Anglophone areas

Training needs for English speaking seem to be higher in the contracting and procurement aspects, while they seem to be more familiar with Project Finance concepts.

About 55% of English respondents have got some kind of PPP training before. A little higher than in francophone areas, but still low.



PPP Curriculum Design Anglophone regions

After 4 intensive modules of PPP Foundation (6 hours each module), the training for the Anglophone regions will focus more on the contractual and procurement aspects of PPP structures (4 intensive modules of 6 hours), leaving project finance issues for the last modules as a review (4 less intensive modules of 4 hours). In total, it is a 64-hour course.

| PPP Foundation (I) | | |
|---|---|--|
| Module I: PPP Foundation I | Definition and main characteristics of a PPP Alternatives for infrastructure finance and procurement Types of PPP and other terminology applied | |
| Module II: PPP Foundation II | Where PPPs are used Motivations for using PPPs Typical structure of a PPP | |
| Module III: PPP Foundation III | How PPPs are financed Reasons for project failure Overview of the PPP process Glossary of PPP terms | |
| Module IV: PPP Foundation Exam Training | PPP APMG Foundation Exam Training sessions | |



| PPP Project Identification, screening, procurement, and management (II) | | |
|---|--|--|
| Module I: Identification and screening of PPP Projects | Identification of PPP projects as part of sustainable development planning Prefeasibility planning and analysis for cross-border projects Creating a standardised process (checklist) for PPP project screening Feasibility study requirements: economic, financial, social, legal and regulatory, environmental and technical criteria Value for Money methodology to decide if a project should be procured exclusively as public procurement or follow a PPP structure Developing a feasibility index and ranking opportunities for investment decisions | |
| Module II: Risk Identification, Mitigation, and Allocation Programming | Techniques to identify project risks, in particular for cross-border PPP projects Analysis of risks and applicable allocation strategies to the most suitable party Developing security packages (legal agreements) to mitigate project risks: Insurance, guarantees, and risk mitigation in PPPs | |
| Module III: Tender Process and Procurement | Key elements of the PPP contract. Choosing the right contract for successful PPP procurement International best practices for PPP procurement Procurement strategy and marketing the PPP Qualifying bidders, Proposal evaluation, Negotiations and award, Commercial close | |
| Module IV: Unsolicited Proposals and Contract Monitoring | Benefits/Pitfalls Creating competitive tension Dealing with intellectual property Best practices of PPP contract management Monitoring and evaluating the PPP contract: key issues and institutional challenges Role of project implementation units and PPP units in the public sector | |



| Project Finance Review (III) | |
|---|--|
| Module I: Introduction to Financial Modelling | Financial Modelling Fundamentals Cash Waterfall Construction Period Cash Flows Cost of Capital and Sensitivity Analysis Taxes and depreciation |
| Module II: Structuring the SPV (Project Company) and Ownership Agreements | Understanding the Special Purpose Vehicle Project Company Ownership structures Liabilities and Legal structures of SPV Free carry of shares to compensate development cost EPC contracts fundamentals |
| Module III: Financing Agreements in P3 Transactions and Project Finance | Key Project Finance agreements Lender technical advisors and their cost Conditions precedent and suspensive conditions Issues associated with multiple lenders to a project. Fundamental concepts in inter-creditor agreements. |
| Module IV: Credit Enhancements and Syndication | Guarantees and Warranties in Project Finance Role of Government Guarantees and Subsidies in PPPs Credit Supports for P/F Transactions Credit enhancement instruments available in Africa The success of trusts in Latin America as Credit Enhancement instruments for public administrations Syndication fundamentals |



4 Curriculum Design Francophone Regions

After 4 intensive modules on PPP Foundation (of 6 hours each), the training for the Francophone regions will focus more on project finance issues (4 intensive modules of 6 hours), leaving for the last modules, the contractual and procurement aspects of PPP structures as a review (4 less intensive modules of 4 hours). In total, it is a 64 hours course.

| PPP Foundation (I) | | |
|---|---|--|
| Module I: PPP Foundation I | Definition and main characteristics of a PPP Alternatives for infrastructure finance and procurement Types of PPP and other terminology applied | |
| Module II: PPP Foundation II | Where PPPs are used Motivations for using PPPs Typical structure of a PPP | |
| Module III: PPP Foundation III | How PPPs are financed Reasons for project failure Overview of the PPP process Glossary of PPP terms | |
| Module IV: PPP Foundation Exam Training | PPP APMG Foundation Exam Training sessions | |



| Project Finance Conc | Project Finance Concepts (II) | |
|---|---|--|
| Module I: Introduction to Financial Modelling | Role of the Financial Model in PPPs Financial Modelling Fundamentals Overview of Key Concepts Objectives of Financial Modelling Financial Model Structure Cash Waterfall Multiple Period Analysis Construction Period Cash Flows Cost of Capital and Sensitivity Analysis Taxes and depreciation | |
| Module II: Structuring the SPV (Project Company) and Ownership Agreements | Understanding the Special Purpose Vehicle (SPV) Project Company Ownership structures Liabilities and Legal structures of SPV Free carry of shares to compensate development cost EPC contracts fundamentals Joint Ventures versus Consortiums | |
| Module III: Financing Agreements in P3 Transactions and Project Finance | Lender technical advisors and their cost Conditions precedent and suspensive conditions Collaterals in Project Finance Issues associated with multiple lenders to a project. Fundamental concepts in inter-creditor agreements. | |
| Module IV: Credit Enhancements and Syndication | Guarantees and Warranties in Project Finance Role of Government Guarantees and Subsidies in PPPs Credit Supports for P/F Transactions Credit enhancement instruments available in Africa The success of trusts in Latin America as Credit Enhancement instruments for public administrations Syndication fundamentals | |



| PPP Project Identification, screening, procurement and management (III) | | |
|---|---|--|
| Module I: Identification and screening of PPP Projects | Prefeasibility planning and analysis for cross-border projects Creating a standardised process (checklist) for PPP project screening Feasibility study requirements: economic, financial, social, legal and regulatory, environmental and technical criteria Value for Money methodology to decide if a project should be procured exclusively as public procurement or follow a PPP structure | |
| Module II: Risk Identification, Mitigation, and Allocation Programming | Techniques to identify project risks, in particular for cross-border PPP projects Analysis of risks and applicable allocation strategies to the most suitable party Developing security packages (legal agreements) to mitigate project risks: Insurance, guarantees, and risk mitigation in PPPs | |
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PPP Curriculum Design for APGM Certification

The training will use best practices from the World Bank PPPLRC, as well as European Investment Bank PPP Expertise Centre, but one of the requests from the stakeholders is to provide at least the basic APGM PPP track so they can be prepared to get certified by APGM. Therefore, the first modules will be using APGM methodology. The training track will be the same for francophone and anglophone regions assuming that all participants have reached a similar level of understanding.

The curriculum will serve the following objectives:

- 1. Expand the understanding of PPP structures mostly by working on cases studies
- 2. Cover the necessary material to obtain the APGM PPP Preparation and Execution certifications
- 3. Map African PPP experience (e.g. Ivory Coast water sector PPP since 1963)

5.1 The APMG Public-Private Partnerships Certification Program

The APMG PPP Certification Program is an innovation of the Asian Development Bank (ADB), the European Bank for Reconstruction and Development (EBRD), the Inter-American Development Bank (IDB), the Islamic Development Bank (IsDB), the World Bank Group (WBG) and partly funded by the Public-Private Infrastructure Advisory Facility (PPIAF) with a shared vision of enhancing PPP performance globally.

The Certification Program aims to foster a common minimum denominator level of knowledge and understanding amongst individuals working on PPPs or those interested in learning about PPPs, regardless of discipline or sector.

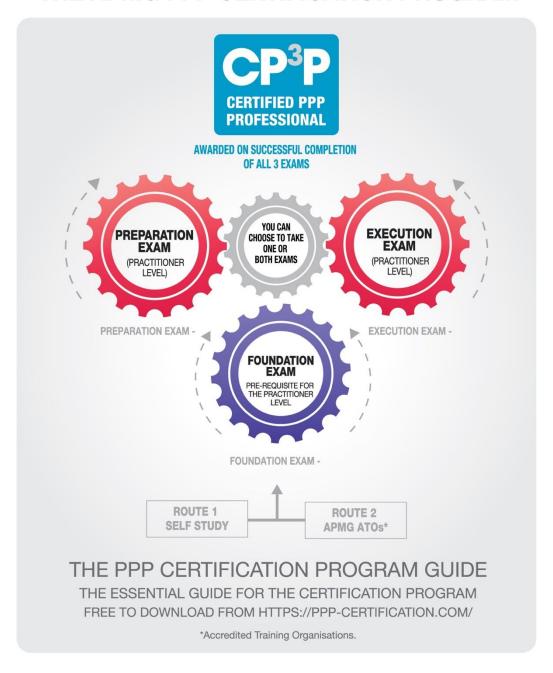
It has been designed to create a consistency of terms used in PPPs and to standardise the process for the delivery of PPP projects worldwide.

Authored by a team of international experts, the PPP Certification Program Guide is at the core of the Certification Program. It includes extensive regional and sectoral knowledge and comprises PPP best practices from around the world. The Guide will therefore be applicable to many markets, however due to the current disparity in global practices, and it may not be relevant to every market. All candidates, whatever their level of experience, will need to study the Guide before taking the exam. Answers should be based on the Guide content as opposed to a candidate's previous experience – these answers may often be the same but in some cases might be different.

The PPP Guide covers the following chapters that form part of the process to attaining the credential.



THE APMG PPP CERTIFICATION PROGRAM





6 Training Delivery Format

6.1 Delivery formats evaluation

Previous NEPAD PPP training modules have been delivered in several one weeklong presential workshops in several cities in the continent.

The advantages of organising these workshops in a presential format were among others:

- 1. Participants are isolated from the office and therefore may focus on the matters to be studied
- 2. Personal interaction of the participants is not limited to the sessions but can continue during meals and free time
- 3. Instructors and participants get clear and immediate feedback
- 4. No telecommunications issues to connect through a teleconferencing platform

On the other hand, there were several disadvantages:

- 1. International travel implies expensive flights and expensive lodging expenses
- 2. VISA issues may limit the participation of some stakeholders
- 3. Life in-person sessions do not allow flexibility, while teleconferencing platform meetings may be rescheduled quickly and recorded for future viewing.
- 4. To stay out of work and family for one full week may be practically impossible for some participants.

The current COVID19 pandemic makes international travel and presential classes risky and sometimes totally impossible.

6.2 Solution: Combination of online-presential courses by region

To maximise the benefits of remote learning, the future PPP training modules should not be presential but delivered through teleconferencing platforms.

To maximise the number of stakeholders that can participate, the trainings will not be delivered in blocks of one week, but in one day blocks (preferably on Thursdays or Fridays) distributed in several weeks.

Optional workshops:

Finally, to maximise the benefit of personal interaction, an optional 2 days' workshop sharing case studies and best practices would be offered in several African cities at the end of the program.



Researching African Infrastructure PPP case studies

7.1 African Infrastructure PPP case studies

Minimum of 4 cases, one per target sector. Ideally, cases for the different African regions and if possible, corridor approach cases:

SADC,

Eastern Africa
Western Africa
Central Africa

North Africa

7.2 ISM support to research case studies

If current research literature does include enough cases ISM EU support through Jose Luis Bobes or a NKE will prepare more African cases.

7.3 Benchmark with other emerging markets (Latin America)

Suppose there were not enough successful cases from a particular sector or region. In that case, cases from other emerging economies should be included, especially from other emerging regions: Latin America and Asia, where PPP infrastructure has been working very well for both national and regional, corridor approach projects.





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