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USAID INDONESIA URBAN WATER SANITATION AND HYGIENE ASSESSMENT OF EXISTING AND POTENTIAL SOURCES OF CAPITAL FOR WATER UTILITIES



AUGUST 2014

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Cover Photo:

The installation of main pipes as part of the distribution network improvement at the Water Utility of Takalar District to expand its coverage service to Galesong Subdistrict, Takalar, South Sulawesi.

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USAID INDONESIA URBAN WATER SANITATION AND HYGIENE

ASSESSMENT OF EXISTING AND POTENTIAL SOURCES OF CAPITAL FOR WATER UTILITIES

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EXECUTIVE SUMMARY

The USAID Indonesia Urban Water, Sanitation and Hygiene (IUWASH) project is a five-year effort, launched in March 2011, to support the Government of Indonesia in making progress towards its Millennium Development Goal (MDG) targets by increasing access to safe water supply and improved sanitation services. IUWASH implements activities that contribute to the achievement of three distinct types of intermediate results, namely:

- Demand mobilization for improved services;
- Capacity improvement of service providers; and
- Development of a supporting enabling environment.

Within the framework of developing a supporting enabling environment for water supply services, capital expenditure (capex) financing is especially important. The overall objective of this study is to facilitate longer-term, strategic thinking on water supply sector capex financing in Indonesia by undertaking a review and analysis which identifies and assesses both existing and potential sources of capital for PDAMs and efforts to facilitate co-operation with the private sector.

A. Planned Initiatives for Urban Water Supply at December 2009

At the end of USAID's Environmental Services Programme (ESP) in March 2010, three (3) initiatives had been launched by the GOI and were underway to resolve the longstanding problem of financing investment in urban water supply. These were: (i) a restructuring of non-performing loans (NPL) from the MOF to PDAMs which would make them creditworthy, (ii) a novel financing mechanism which would encourage domestic commercial banks to lend to creditworthy PDAMs with the support of government partial credit guarantees (PCG) and interest rate subsidies, and (iii) development of financial instruments and the establishment of non-bank financing institutions to support the PPP framework by encouraging and giving comfort and security to potential private sector investors, not only in urban water supply but across the whole range of infrastructure service deliveries. In the case of urban water supply, the second and third initiatives were also aimed at reducing the burden on the state budget (APBN) in view of the funding requirements needed to meet MDG goals of access to improved water supply.

B. Outcomes of Initiatives for Urban Water Supply at Mid-2014

At this point in time, the conclusion of this report is that all these initiatives have failed to produce the results hoped for by a very substantial margin.

B1. Restructuring of PDAM Non-Performing Loans (NPL) from the MOF

On 6 July 2013, the window closed on PDAM business plan submissions for debt restructuring proposals as per PMK No 120/ 2008. Proposals submitted by that date are still being processed, but submissions after that date are not being entertained. The situation at the end of 2013 was that, out of a 2008 total of 195 PDAMs with arrears:

- 76 PDAMs had already restructured as per PMK No 120/2008 and had received conditional write-offs of their non-principal arrears. 40 of these have followed their business plans to the point where the MOF has made these write-offs permanent
- An additional ten (10) PDAMs did not need to restructure.
- 81 PDAMs had presented proposals which were either being processed at MOF or needed revisions for which DGHS and BPPSPAM are providing assistance.

28 PDAMs had not delivered restructuring proposals to the MPW by the due date. The status of the unresolved NPLs of these PDAMs has been referred to the Committee for the Settlement of State Credits (PUPN). Unless there is a valid reason for non-participation in the restructuring process, The MOF could, theoretically, bankrupt these PDAMs and seize the assets purchased with the loan funds. However, the GOI would then be tasked with the management and care of these assets, which thus become state-owned. The picture is further complicated by the fact that regional governments are legally required to provide a piped water supply service as part of their responsibilities under decentralisation. The MOF has asked Cipta Karya and BPPSPAM to provide mediation.

30 PDAMs have accumulated new arrears on their restructured loans. The major cause for this relapse is the failure of heads of regional government to provide a full cost recovery tariff, although it is also likely that these PDAMs have not met other key performance targets in their restructuring agreements such as non-revenue water and service coverage. On the other hand, some PDAMs may have been obliged by the MOF to accept a shorter repayment period than they had originally proposed. The MOF probably only cares about one issue and that is getting loan repayment. These cases could also be referred to the PUPN, but the MOF has again asked Cipta Karya and BPPSPAM to intervene.

Given the complications which bankruptcy would cause, the likelihood is that some sort of compromise will be reached, but with the eventual settlement with the MOF being at least in accordance with PMK No 120/2008. This issue and the restructuring of PDAM NPLs still in process at the MOF will grind on until completion. It would be unwise to speculate when this might be.

B2. Borrowing for Water Supply Investment through Perpres No 29/2009

Perpres No 29/2009 has proved to be a major disappointment. As of April 2014, out of 74 PDAMs with business plans prepared, only five (5) umbrella agreements and letters of central government partial credit guarantee had been issued, three (3) of which had been fully disbursed. No umbrella agreements have been signed since March 2013.

Although state and regional government banks gave funding cooperation pledges of Rp 4.325 trillion, only Rp 205 billion out of a total debt/equity investment of Rp 566 billion have been committed in loans, less than 5% of the pledged amount. The final yield of incremental connections from the five (5) loans is expected to be about 105,000.

A major part of the problem lies in the extremely complicated procedures required by the implementing decree for Perpres 29 in order to process and approve the umbrella agreement between all parties and to issue the PCG. The number of days required for the issue of the PCG for the first three (3) loans was:

- PDAM Kabupaten Bogor – 411 days
- PDAM Kabupaten Ciamis – 594 days
- PDAM Kabupaten Lombok Timur – 561 days

A further six (6) PDAMs have been waiting since late July 2012 for the MOF to finalise the umbrella agreement/PCG process. The MOF claims that business plans forwarded by the MPW were incomplete and that there were deficiencies in due diligence practice was lacking. The MPW blames the MOF for the delays. One may reasonably say that the MPW and the MOF have different agendas, with the MPW pursuing MDG goals, whilst the MOF is principally with its accountability for the commitment of public funds, Therefore it is probable that some business plans did require revision, but this should not have held up progress to the extent it has. Furthermore the business plan of

PDAM Lombok Timur was prepared by an international accounting firm, whilst the other two (2) PDAMs are perfectly capable of preparing sound submissions. In addition, if banks were willing to lend, the question remains as to why the MOF was so unwilling to endorse the transaction by signing the umbrella agreements and issuing the PCGs within a reasonable time.

Lengthy approval times at the MOF are not the only problem. Others include the slow pace of NPL restructuring, which has delayed many potential PDAM candidates in preparing submissions, and, in particular, the reluctance of regional government heads to approve borrowing with a 30% PCG back-to-back agreement with the MOF. Information from Cipta Karya shows that 42 submissions are blocked at the regional government stage, some clearly having been in limbo for considerable periods of time.

The Perpres is due to expire at the end of 2014. MOF staff and other agencies indicate that it will either not be renewed or will be renewed but without the central government PCG, leaving 70% of the guarantee with regional governments. The second is considered to be the more likely route. This is likely to produce the same result as not renewing it at all. In any event, banks which have pledged loan funds for the Perpres are by now dissatisfied with the cumbersomeness of the procedures for relatively low-value loans. Their experience with the Perpres is likely to redirect their preferences back to high rates of return from consumer, retail and other commercial lending rather than the far more demanding requirements and much less remunerative returns of funding water supply infrastructure service deliveries.

The consequence of the likely demise of this positively conceived initiative will be that, more than 15 years after the economic crisis and the subsequent proliferation of NPLs, the GOI will still be without an effective mechanism of lending to creditworthy PDAMs, especially for distribution systems which can represent a significant proportion of total project costs. If GOI is unable to devise a more viable, sustainable alternative, this problem could also have serious effects on MPW programmes to finance bulk water supplies to PDAMs through the APBN, as well as on PPP and B2B BOT activities.

B3. Public-Private Participation (PPP)

The 2010-14 medium-term national development plan (RPJMN) has three (3) infrastructure development targets: (i) the improvement of infrastructure provision based on minimum service standards, (ii) the strengthening of infrastructure sector competitiveness and (iii) support of investment in infrastructure through PPPs, including the implementation of the 2011 Master Plan for Acceleration and Expansion of Indonesia's Economic Development (MP3EI).

Perpres No 67/2005 was always seen as the legal umbrella for PPPs which, in view of its innovativeness within the Indonesian context, would need periodic amending as experience with the process developed. Three (3) amendments to the Perpres have been issued since 2009 to make solicited PPP projects more attractive to investors. Inter alia, these provide for (i) GOI financial support in the form of viability gap funding (VGF) to support projects which would otherwise not yield an FIRR acceptable to investors - especially important for water supply PPP with the sector's sensitivities to high tariffs, and (ii) a GOI-backed guarantee to mitigate risk and provide comfort to potential private sector participants.

To guide PPP initiatives in all approved sectors, the GOI has established two state-owned non-bank financial enterprises (PT Sarana Multi Infrastruktur, PT SMI, and the Indonesia Infrastructure Guarantee Fund, PT IIGF) and has taken a 35% stake with international partners in the Indonesia Infrastructure Fund (PT IIF). In addition to its co-ordinating role for PPP, BAPPENAS has formed a dedicated programme development facility under the IRSDP programme to prepare TOR and business cases for potential PPP projects in a number of sectors, including water supply.

Notwithstanding these efforts, only one PPP for water supply has reached closure – a concession in Kabupaten Tangerang signed in 2008. The main problem is the difficulty to get innovative initiatives through the bureaucratic machinery at the MOF. For example, it took 15 months for the MOF to issue the decree implementing the Perpres on VGF and a further 10 months to release the operationalising decree. A major PPP project, due to be tendered in early March, has been delayed because the MOF is now having second thoughts about the VGF release mechanism as currently defined in its own decree.

Regional governments, which are the contracting agency for PPP in urban infrastructure service deliveries, are also responsible for delays in agreeing to terms with the IIGF on risk mitigation, partly due to a poor understanding of the concept of risk assignment and partly because of a preference for accepting no risk at all.

Nevertheless, despite these setbacks, the GOI will persist with its efforts to make PPP a success. BAPPENAS feels that a more focused approach is needed to develop smaller projects, especially those which involve regional governments with tariff and service charge social implications, e.g. water supply. These might include varying the VGF limits and IIGF rigidities for social sector service deliveries. BAPPENAS is also very concerned about the future for the financing of distribution systems, given the lack of success of the Perpres 29 arrangement.

C. Grant Financing for Urban Water Supply

The mechanisms for central government grant financing of water supply remain the same as at the end of ESP, namely: (i) Co-Administered Task Grants (*Tugas Pembantuan* - TP) managed by Cipta Karya through the APBN, (ii) the Special Allocation Fund (Dana Alokasi Umum – DAK) which provides small non-discretionary entitlement grants for eligible sectors, of which water supply is one, and (iii) the *hibah* grant a demand-driven, bottom-up, output-based assistance system, to date limited to on-granting of donor proceeds. The DAK and *hibah* are approved by the responsible technical ministries and channelled directly to regional governments by the MOF.

A major development during IUWASH has been the very sharp increase in the value of the grants for water supply, especially for TP, driven by the MPW's role as the technical ministry responsible for water supply and consequently for reaching MDG goals for the sector by 2015 and 100% safe water coverage by 2019; as well as a recognition of the lack of a workable GOI financing mechanism for water supply and the reluctance of regional government generally to take ownership of the sector as regards willingness-to-borrow, provision of grants on the APBN and approval of cost recovery tariffs.

In addition, regional governments may make equity grants to PDAMs through the APBD, using its own revenues (PAD) and fiscal transfers through the DAU and DBH.

CI. Co-Administered Task Grants (TP)

PP No 16/2005 states that, in the event of a regional government being unable to implement the development of a water supply system, central government may provide financial support until the fulfilment of minimum service standards has been achieved. This has enabled the MPW (Cipta Karya) to intervene in the construction of "lumpy investment", i.e. intakes, treatment works and bulk transmission mains; the theory being that PDAMs would borrow from commercial banks through Perpres No 29/2009 for the related distribution systems.

The MPW's water supply budget on the APBN has risen from Rp 1.75 trillion in 2010 to Rp 5.30 trillion in FY 2014. It is now 8 times the value of the DAK for water supply.

One initiative of Cipta Karya to combat the problems of water supply finance is to build bulk water supply infrastructure (SPAM) to be managed by a provincial government water supply enterprise (PDAB) to provide water on a take-or-pay basis. The arrangement is governed by an umbrella agreement between the MPW, the provincial governor, heads of the participating *kotakabupaten* regional governments and the managing directors of their PDAMs. The Central Java Province PDAB is the first to implement the scheme. This approach is ostensibly designed to overcome the lack of adequate sources of raw water in some cities and regencies, whilst there is availability in other areas within the same province. However, it is also seen as the MPW's response to the unwillingness of some regional governments to assign priority to the water supply sector and the failure at central government level to devise any workable loan finance strategy.

Within certain quarters of the GOI, there are questions as to whether the TP mechanism assists decentralisation and there are moves behind the 2015-2019 RPJMN to scale up the scope of the DAK. This will be likely be strongly resisted by the MPW on the grounds of the paramount importance of achieving 2015 MDG goals and 100% coverage by 2019.

C2. Special Allocation Fund (DAK)

The DAK's eligibility criteria are intended to focus funding for national development priorities towards regional governments with low fiscal capacities in 14 of their sectors, of which four (4) relate to infrastructure, including water supply. Allocations for infrastructure are supposed to be directed at funding activities with long economic lifetimes which fulfil basic public services needs. Some reports claim that the existing fiscal capacity indicator is flawed, and that the only "special" nature of the DAK is that it is a grant which all regional governments receive. Other issues are that its annual allocations are unpredictable, that monitoring and evaluation measure inputs and outputs instead of outcomes and the impact on national priorities, and that accountability is weak.

Water supply accounts for about 6% of total DAK, which grew from Rp 357 billion in 2010 to Rp 610 billion in 2013, an average annual increase of 43%. It includes grants for village community-based organization (CBO) water supply, as well as for PDAMs.

An activity is being planned by Indll for introducing a performance-based disbursement mechanism into the DAK. Pilot projects, limited to the water and sanitation sectors, would be prepared for implementation in 2016. BAPPENAS would be the EA.

C3. Hibah Grant

To support GOI endeavours to meet MDG targets, Indll has developed an innovative pilot application of the MOF on-granting mechanism by providing incentives to regional government to invest in their PDAMs in order to accelerate the connection rate of new households, with a particular focus on low-income groups. Under this scheme, Indll provides a fixed lump-sum grant of Rp 2 million for each new connection through the MOF to regional governments which must agree to invest an amount equal to at least 50% of the amount of the grant, depending on fiscal capacity. Central government funds are released to the regional government following a technical audit by Cipta Karya.

The first phase of the *hibah* between July 2010 and June 2011 was rated a conspicuous success, with 79,500 household connections installed in 35 PDAMs through an allocation of some Rp 206 billion. In 2011, the design of a second phase commenced, incorporating lessons learned from and recommendations of an independent evaluation report on the first phase, including improved monitoring and evaluation strategies, additional capacity building for participating regional governments and PDAMs, and increased attention to be paid to community education activities and mitigating environmental impacts. This second phase, which consists of donor funding participation

from DFAT (formerly AusAID) and USAID, targets the provision of more than 251,000 connections in 121 PDAMs for a total value of Rp 636 billion. The activity is again being managed by Indll.

Indll has disbursement planning problems for implementing the *hibah* because the GOI's annual budgeting process is inconvenient for synchronisation with Indll's four-year rolling programme. To date, only 70% of the second phase *hibah* has been allocated. There are also transparency issues in the selection by Cipta Karya of PDAM candidate recipients of the grants, which seems to be based on PDAM compliance with its APBN co-administered task (TP) programme.

To date, *hibah* has been sourced from donor proceeds only. It is understood that the draft revision to UU No 33/2004 may provide for mainstreaming through the use of GOI own-source funding on the APBN as well. If mainstreaming is introduced, regulatory and institutional arrangements will be required to make the *hibah* a complementary mechanism to the DAK for transferring APBN funds to regional governments.

D. Business-to-Business (B2B) Involvement in Water Supply

Private sector participation (PSP) in water supply seems to have commenced in 1993. By 2005, 12 such agreements had been signed, the term of which was usually 20-25 years. It seems likely that all were the result of negotiated contracts between PDAMs and private sector parties. Following the issue of Perpres No 67/2005 on PPP, PSP agreements between PDAMs and the private sector became known as Business-to-Business (B2B) arrangements. B2B was essentially not regulated until 2010, by which time it was generally recognised that, in the absence of viable financing mechanisms from the MOF passed through regional governments and the lengthy requirements of the PPP process, B2B represented the best option to inject badly needed investment into the water supply sector within a reasonable time frame.

The B2B arrangement does not require an open tender, as is the case with PPP. The process begins with PDAM identifying a specific investment need and preparing a pre-FS. The PDAM then issues a list of qualifying criteria and invites at least three (3) private sector entities to make a presentation to a PDAM procurement committee on what each would offer to meet PDAM requirements (a "beauty contest"). PDAM then selects one candidate to prepare a full FS, on the basis of which a negotiated contract is prepared for approval by the PDAM Supervisory Board, which then presents it to the head of regional government for an opinion from the legal department.

In 2011, BAPPENAS advised PDAMs that it was acceptable to arrange B2B contracts as per the MPW decree as an alternative to using PPP through Perpres No 67/2005.

Because B2B projects are not tendered, business partners are not eligible for VGF or IIGF guarantees. Without these, the implicit comfort of national government support, and the role of the PDAM as the contracting agency, and not the regional government, the credit risk is perceived by lenders to be greater than with PPP. Loan finance is therefore priced higher. As a result, investors look for higher FIRRs, which result in higher tariff levels. Small B2B investors are particularly disadvantaged by short loan tenors and high interest rates on offer from domestic banks. This problem provides a window of opportunity for socialising the USAID DCA, in which contractors have already expressed much interest.

There are now at least 60 B2B projects for bulk water supply, ranging from 50 to 3,000 lps, involving construction of WTPs, or their rehabilitation and up-rating. It may be reasonably concluded that B2B has now become the generally accepted method of non-grant financing of treated bulk water supplies.

Both before and since the issue of the MPW decree, problems have arisen in some B2B arrangements due to adverse comments made by BPKP auditors in the annual PDAM performance audits. These relate to perceptions that the basis for arrangements is either not clear or is unfavourable to PDAMs and may cause future losses. Particular problems involve details of the calculation of the capex, and therefore the contractor's computation of the take-or-pay tariff, as well as risk allocation between the parties.

BPPSPAM regards the umbrella decree as a regulatory instrument to be modified from time to time by amendment on the basis of experience gained and problems identified. An amendment is being drafted, to include a requirement for having the opinion of BPKP before any B2B agreement becomes effective and guidance for equitable risk allocation. However, because of its inherently less transparent process, B2B will continue to encounter problems until a satisfactory regulatory framework is completely worked out to the satisfaction of all parties; therefore central government involvement and support to the process are essential.

E. The Indonesia Water Supply and Sanitation Fund

A recent development is a GOI co-operation with the World Bank to develop an Indonesia Water Supply and Sanitation Fund (IWSSF). For water supply, the concept of the IWSSF is to provide credit through regional governments for non-creditworthy PDAMs. The funds would be lent for items such as distribution systems, NRW reduction and WTP rehabilitation and up-rating, whilst the more "lumpy" investments in new WTPs, raw and bulk water transmission mains and reservoirs would, in principle, continue to be grant-funded by Cipta Karya at the MPW on the APBN.

Institutional arrangements planned are for the formation of an IWSSF operating team consisting of two (2) units. The first is an IWSSF management unit (IMU), responsible for overall sector performance and development and for monitoring and evaluation. The skills required for the IMU are housed in MPW BAPPENAS. Therefore it has been agreed that the unit should be located in Cipta Karya.

The second is a project finance management unit. The required skills for this are already available in the Indonesia Investment Agency (PIP), a public service agency (BLU) in the MOF. The PIP has already been involved in pre-financing land acquisition for toll roads construction and in lending to regional governments for infrastructure. By the end of 2013, it had a portfolio of 21 such loans with a value more than Rp 2 trillion for projects such as hospitals, bus terminals, markets, roads and bridges, but not yet water supply. A further 23 loan applications are in the pipeline. Standard lending terms are usually for a period of five (5) years at the Bank Indonesia (BI) base rate plus 200 basis points. The PIP has its own mandate and does not have to seek loan approvals from directorates-general in the MOF. As a BLU, it is not limited by the GOI annual budget cycle and can carry forward any unused funds into the following fiscal year. The PIP has an SOP that all loan submissions must be processed to a decision on whether or not to loan, or whether to seek additional information within 20 working days.

Current thinking is that terms of the loans would be determined on the basis of the fiscal capacity of both the PDAMs and their regional government owners. The options are that: (i) regional governments with a low fiscal capacity would borrow at a concessional rate of interest, say, BI rate minus 200 basis points, (ii) those with a medium fiscal capacity at BI rate only, and (iii) those with a high fiscal capacity at BI rate plus 200 basis points.

Investment funds for the PIP would be provided through a blend of APBN provisions and donor loans and grants. The grants would be for capacity building.

It is planned that the IWSSF will become operational at the end of 2014 or the beginning of 2015. As ever, the major potential hurdle will be regional government and DPRD unwillingness to borrow and reluctance to commit to the intercept. In the event that the administrative procedures for implementing Perpres 29 are not improved or the Perpres is not renewed, then it would be logical for the responsibility for channelling investment funds from the GOI to creditworthy PDAMs to be transferred to the IWSSF. Otherwise, it is entirely possible that, quite soon, the GOI may find itself in the somewhat anomalous position of having a credit facility in place for non-creditworthy PDAMs, but not for those which are creditworthy.

F. IUWASH Partner PDAM Performance

While this assessment was intended to include a detailed analysis of the flow of investment funds to the 50+ PDAMs partnering with the IUWASH Project, such an analysis proved difficult to implement given the limited availability of clear and accurate data. Disaggregation of APBN grants for specific IUWASH PDAMs was not possible. DAK grants and APBD investment in water supply include subventions for community-based organizations (CBOs) as well as PDAMs, and the GOI accounting system for regional governments does not provide capital investment data on a sector basis. Finally, PDAMs do not have the same 5-year cycles for their business plans. If the SOW for the follow-on activity contains this requirement, then it should be a task throughout the five-year period.

Given these challenges, an analysis was instead carried out on trends related to the development of PDAM's gross fixed assets. Values were deflated to the base year of data collection. Then, based on historical trends, it was assumed that average annual depreciation in times of low investment was 6% and this was the proxy used for adequacy of asset replacement. The results showed that about 55% of PDAMs had negative present values at the end of 2013, compared with the situation in the base year, and were therefore recovering hardly any depreciation at all, as well as receiving very little investment (the majority of PDAMs in North Sumatra and Central Java Provinces fell into this category) ; 20% were covering a part of but not all depreciation; whilst 25% were fully recovering depreciation while likely expanding or improving services through the addition of new assets.

A second exercise was carried out on the basis of PDAM sustainability as a business operation, using cost recovery of annual O&M and depreciation as the key indicator. The results obtained yielded some correspondence with the first exercise, in that about 50% of PDAMs in the IUWASH performance index could be considered as unsustainable business entities based on their tariff levels, with good regional correlations on the whole. However, only 10% could be regarded as fully sustainable, compared with 25% in the first exercise, with the other 40% being partly sustainable.

It is concluded that most of the incremental investment in water supply is coming through the APBN. Most PDAMs do not have the financial capacity to either replace or significantly increase their fixed assets, principally because of the insufficiency of the tariff, (but also due to the acute lack of affordable financing). Many regional governments do not invest significant funds in water supply, irrespective of whether the beneficiaries are PDAMs or CBOs. There have been some exceptions, however, particularly in locales where IUWASH has been able to work closely with the regional government and its PDAM and advocate for specific investments as well as equity transfers. The City of Bogor, for example, executed a Perda which included, among other terms, a scheduled transfer of investment capital for the near term.

Nevertheless, given that more than 60% of IUWASH PDAM partners are located in Java, it would be optimistic indeed to expect that the financial condition of most PDAMs in other areas of Indonesia is any better.

Finally, it is worthy of note that, at the time that this assessment was being concluded, the World Bank was in the midst of implementing a public expenditure review of the water and sanitation sectors at both national and regional levels. This study is due to be completed towards the end of 2014, and will perhaps shed additional light on funding trends in the sector.

G. GOI Stakeholders

The current unsatisfactory situation regarding urban water supply finance must be a matter of some considerable embarrassment for the MPW as the technical ministry. Although Indonesia will probably meet its MDG goals for access to improved water supply, the growth of households with a piped connection has actually declined as a percentage of total units. Yet the MPW emerges with credit for its activities in the sector through Cipta Karya's substantial grant programmes, including the establishment of regional bulk water SPAM, allied to the IndII *hibah* initiative and various technical assistance programmes, together with BPPSPAM's PDAM capacity building activities and its encouragement of B2B. BAPPENAS also has supported the MPW and has devoted great efforts to developing PPP in urban water supply, notwithstanding bureaucratic impediments.

The involvement of other key stakeholders has been somewhat less encouraging. The inward-looking, risk-averse stance of the line directorates-general in the MOF has been particularly obstructive to progress. However, in mitigation, it has to be said that the approach adopted is heavily conditioned by the increasingly blurred distinction between human error and corruption. Nevertheless, under these circumstances, it is difficult to see how current obstacles to progressing PPP development or establishing other viable water supply financing mechanisms are going to be removed. One of the advantages of the IWSIF is that financial management by the PIP sidesteps the involvement of the line directorates-general of the MOF; a transfer of the Perpres 29 programme to the IMU and PIP joint control would be a major benefit for financing creditworthy PDAMs.

The Ministry of Home Affairs (MOHA), which is the central government agency responsible for PDAM organization, financial management, tariff procedures and accounting systems, as well as regional government, seems to have been largely anonymous. No-one at PDAMs surveyed in the course of this assignment could recall any visit by a MOHA official.

By and large, heads of regional government consider the main priority in water supply to be the maintenance of a social tariff for political reasons. Most PDAMs have tariffs which do not deliver full cost recovery and some do not even cover operational costs. It is therefore likely that the level of O&M is not adequate, leading to higher NRW and other problems. Consequently, the substantial grants for water supply through the APBN and APBD risk being wasted.

Most PDAMs are treated by their regional government owners not as business enterprises but as a social service whilst being charged with input costs, such as electricity, at full industrial rates. The biggest problem is the inadequacy of the tariff, as it has always been. The practice of regional governments being able to exercise power without responsibility over their PDAMs should not be allowed to continue. However, a change of approach on the part of heads of regional government will be difficult to achieve without regulation from the central government. Water supply is a regional government responsibility as per UU No 32/2004 and will remain so under the revision of the law now in progress. The current regulatory route for an annual evaluation of a regional government's performance and its ability to manage its own regional autonomy does not seem to offer a pathway to solving the tariff problem.

The practice of large amounts of GOI grant-funding to business enterprises is clearly a flawed policy. It is also likely that much of this funding is purchasing assets which many of the recipients are unable to operate and maintain properly. A possible solution is for the GOI to issue a regulation requiring

heads of regional government and their DPRD's to make a choice as to whether urban water supply should be managed by the PDAM or a regional government public service agency (BLUD). Selection of the first option would require, again by regulation, the provision of a full cost recovery tariff in accordance with PP No 16/2005; the alternative of choosing a BLUD would involve a PSO being supplied through the APBD as a subsidy to enable the unit to operate a social service. This would put an end to the exercise by regional government of power without responsibility by regulating the tariff at a low level but without providing a compensating subsidy to the operator. It is noted that, as the originator of regional government legislation, such a regulation would have to be prepared by the MOHA, which has not always shown its willingness in the past to support radical change in regional government affairs.

Otherwise, notwithstanding the improvements already made through IUWASH assistance, it is clear that, for the foreseeable future, most PDAMs will be unable to set aside funds as equity towards capital investment and will continue to need APBN/APBD assistance without major policy changes being introduced. It may well be that regional governments are making over equity grants to their PDAMs as a quid pro quo for determining tariff levels on politically motivated grounds. If so, it is likely to prove to be a mistaken approach: APBN/APBD investment assistance will not solve PDAMs' financial problems unless regional governments provide for full cost recovery tariffs or approve compensating PSOs in the APBD which will allow PDAMs to operate and maintain their fixed assets properly.

H. MDG Goals

Target No 10 of MDG Focus 7 involves halving the number of people without sustainable access to safe drinking water (and basic sanitation) by 2015. In the case of Indonesia, the target is 68.87%. There are several versions of the state of Indonesia's progress towards this target at the end of 2013. The generally accepted statistic is 61.83%, given by the MPW.

There are no criteria for defining sustainable access. However, there are several definitions for improved water sources. In Indonesia, the following three (3) are used:

- The number of households with a piped water supply connection. This is clearly the most reliable definition and the one closest to meeting health standards.
- The percentage of the population using water from improved water sources at least ten (10) metres distant from a wastewater disposal site. Improved water sources include piped water, pumped water, bottled mineral water, water from a protected well or spring, and harvested rain water.
- The percentage of the population using water from improved sources irrespective of distance from the nearest waste water disposal site. This definition may well include people using contaminated water.

The details of the methodology used by the MPW to calculate the number of people with improved access to safe drinking water are not known

The 2014 target is 65.61%. To achieve this objective, the MPW is allocating Rp 1.3 trillion from its FY 2014 APBN budget of Rp 5.7 trillion.

In the RPJMN for 2015-19, the MPW aims to meet a target of 100% coverage. The MPW estimates the amount required for this over the five-year period at Rp 270 trillion in 2014 prices, of which Rp 33 trillion (12%) is expected to come from PDAMs. However, unless there is a radical and immediate change to the attitude of regional governments towards the sustainability of the urban

water supply business, together with improved managerial and operational capability at PDAMs and a workable financing mechanism for water supply capital investment, the prospects of PDAMs being able to generate Rp 33 trillion of equity and loan finance are exceedingly slim.

GLOSSARY OF ABBREVIATIONS AND ACRONYMS

| | |
|----------|--|
| ADB | Asian Development Bank |
| AIPD | Australia-Indonesia Partnership for Decentralisation |
| AMDAL | <i>Analisis Dampak Lingkungan</i> (Environmental impact analysis) |
| APBD | <i>Anggaran Pendapatan dan Belanja Daerah</i> (Regional government budget) |
| APBN | <i>Anggaran Pendapatan dan Belanja Nasional</i> (National government budget) |
| AusAID | Australian Agency for International Development |
| BAPPENAS | <i>Badan Perencanaan dan Pembangunan Nasional</i> (State Ministry for National Development Planning) |
| BI | Bank Indonesia |
| BKP | <i>Badan Kebijakan Fiskal</i> (Fiscal Policy Unit, MOF) |
| BLT | Build-lease-transfer |
| BLU | <i>Badan Layanan Umum</i> (Public service agency) |
| BLU-D | <i>Badan Layanan Umum - Daerah</i> (Regional government public service agency) |
| BNI | <i>Bank Nasional Indonesia</i> – (Indonesia National Bank) |
| BOO | Build-Own-Operate |
| BOT | Build-Operate-Transfer |
| BPAM | <i>Badan Pengelola Air Minum</i> (Potable Water Management Board) |
| BPJT | Toll Road Authority |
| BPK | <i>Badan Pemeriksa Keuangan</i> (State Audit Agency) |
| BPKP | <i>Badan Pengawasan Keuangan dan Pembangunan</i> (Finance and Development Supervisory Agency) |
| BPPSPAM | <i>Badan Pendukung Pengembangan Sistem Penyediaan Air Minum</i> (Development Support Agency for Water Supply Systems, MPW) |
| BPS | <i>Biro Pusat Statistik</i> (National Statistics Office) |
| BRI | <i>Bank Rakyat Indonesia</i> – (Indonesia Peoples Bank) |
| BUMD | <i>Badan Umum Milik Daerah</i> (Regional government-owned enterprise) |
| BUMN | <i>Badan Umum Milik Nasional</i> (Central government-owned enterprise) |
| BUPI | <i>Badan Usaha Penjaminan Infrastruktur</i> (Infrastructure guarantee business entity) |
| BUS | <i>Badan Usaha Swasta</i> (Private sector business entity) |
| B2B | Business-to-business |
| CA | Contracting agency |
| Capex | Capital expenditure |
| CBO | Community-based organization |
| CMEA | Coordinating Ministry for Economic Affairs |
| DAK | <i>Dana Alokasi Khusus</i> (Special Allocation Fund) |
| DAU | <i>Dana Alokasi Umum</i> (General Allocation Fund) |
| DBH | <i>Dana Bagi Hasil</i> (Royalties Fund) |
| DCA | Development credit authority |
| DEG | Deutsche Investitions und Endwicklungs GmbH (German Investment Corporation) |
| DER | Debt-to-equity ratio |
| DFAT | Australian Government Department for Foreign Affairs and Trade |
| DGHS | Directorate General of Human Settlements at MPW (also known as <i>Cipta Karya</i>) |
| DJA | <i>Direktorat Jenderal Anggaran</i> (Directorate General of Budget, MOF) |
| DJKN | <i>Direktorat Jenderal Kekayaan Negara</i> (Directorate General of State Assets, MOF) |
| DJPb | <i>Direktorat Jenderal Perbendaharaan</i> (Directorate General of Treasury, MOF) |
| DJPK | <i>Direktorat Jenderal Perimbangan Keuangan</i> (Directorate General of Fiscal Balance, MOF) |
| DJPU | <i>Direktorat Jenderal Pengelolaan Utang</i> (Directorate General of Debt Management, MOF) |
| DJSDA | <i>Direktorat Jenderal Sumber Daya Air</i> (Directorate General, Water Resources, MPW) |
| DKI | Daerah Khusus Istimewa (Special district) |
| DPR | <i>Dewan Perwakilan Rakyat</i> (National government legislature) |
| DPRD | <i>Dewan Perwakilan Rakyat Daerah</i> (City/regency government legislature) |
| DSCR | Debt service coverage ratio |
| EA | Executing agency |
| EIRR | Economic internal rate of return |

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| EJPDAB | East Java Provincial Government Water Enterprise |
| EPC | Engineering, procurement and construction |
| ESP | Environmental Services Program (USAID) |
| FCR | Full cost recovery |
| FIRR | Financial internal rate of return |
| FS | Feasibility study |
| GCA | Government contracting agency |
| GIS | Geographic information systems |
| GOI | Government of Indonesia |
| Hibah | GOI grant |
| IDC | Interest during construction |
| IFC | International Finance Corporation |
| IIF | PT Indonesia Infrastructure Fund |
| IIGF | PT Perjaminan Infrastruktur Indonesia (Indonesia Infrastructure Guarantee Fund) |
| IKK | <i>Ibukota Kecamatan</i> (Regency capital, also a peri-urban water supply system) |
| IndII | Indonesia Infrastructure Facility |
| Inpres | Instruksi Presiden (presidential instruction) |
| ISO | International Organization for Standardisation |
| ISP | Institutional Support Programme |
| IRSDP | Infrastructure Reform Sector Development Project |
| IUIDP | Integrated Urban Infrastructure Development Plan |
| IUWASH | Indonesia Urban Water, Sanitation and Hygiene (USAID) |
| IWSSF | Indonesia Water Supply & Sanitation Fund |
| JICA | Japan International Cooperation Agency |
| JV | Joint venture |
| KD | <i>Kepala Daerah</i> (Head of city/regency government) |
| KfW | <i>Kreditanstalt für Wiederaufbau</i> (Reconstruction Grant Institute) |
| KI | <i>Kawasan Industri</i> (Industrial estate) |
| KKPPI | <i>Komite Kebijakan Percepatan Penyediaan Infrastruktur</i> (Committee for the Acceleration of Infrastructure Provision) |
| KPA | <i>Kuasa Pengguna Anggaran</i> (Budget user) |
| KPI | Key performance indicator |
| KPS | <i>Kerjasama Pemerintah Swasta</i> (Public-private participation) |
| LGDP | Local Government Decentralisation Project |
| LGDP-AF | Local Government Decentralisation Project – Additional Financing |
| LIBOR | London inter-bank offered rate |
| lps | Litres per second |
| MDG | Millennium development goal(s) |
| MFF | Multi-tranche financing facility |
| MIS | Management information systems |
| MOC | Ministry of Communications |
| MOF | Ministry of Finance |
| MOU | Memorandum of understanding |
| MPW | Ministry of Public Works |
| MP3EI | Master Plan for the Acceleration and Expansion of Indonesia's Economic Development |
| MSS | Minimum service standards |
| MTER | IUWASH mid-term evaluation review |
| MW | Megawatt |
| NBFI | Non-bank financial institutions |
| NPL | Non-performing loan |
| NRW | Non-revenue water |
| NTB | Nusa Tenggara Barat (West Nusa Tenggara Province) |
| NTT | Nusa Tenggara Timur (East Nusa Tenggara Province) |
| OBA | Output-based assistance |
| O&M | Operation and maintenance |
| Opex | Operating expenditure |
| Otsus | <i>Otonomi khusus</i> (Special autonomy) |
| PC | Project company |

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| PCG | Partial credit guarantee |
| PDAB | <i>Perusahaan Daerah Air Bersih</i> (Provincial government water enterprise) |
| PDAM | <i>Perusahaan Daerah Air Minum</i> (Regional government drinking water enterprise) |
| Pemda | <i>Pemerintah Daerah</i> (Regional Government) |
| Perda | <i>Peraturan Daerah</i> (Regional government decree) |
| Permendagri | Minister of Home Affairs decree |
| Permen PU | Minister of Public Works decree |
| Perpres | <i>Peraturan Presiden</i> , successor to <i>keputusan presiden</i> (presidential decree) |
| Perpu | <i>Peraturan Pemerintah Pengganti Undang-undang</i> (Central government regulation in lieu of a law) |
| Persero | <i>Perusahaan perseroan</i> (State equity participation in business enterprises) |
| PIP | <i>Pusat Investasi Pemerintah</i> (Indonesia Investment Agency) |
| PJPK | <i>Penanggung Jawab Proyek Kerjasama</i> (Project Cooperation Sponsor) |
| PJT2 | <i>Perum Jasa Tirta II</i> (Water Service Public Corporation No 2, an SOE) |
| PK | <i>Perjanjian Kredit</i> (Credit agreement) |
| PKP | <i>Perjanjian Kerjasama Pendanaan</i> (Funding cooperation pledge) |
| PMK | <i>Peraturan Menteri Keuangan</i> (Minister of Finance decree) |
| PMU | Project management unit |
| Pokja | <i>Kelompok Kerja</i> (Group work unit) |
| PP | <i>Peraturan Pemerintah</i> (Central government regulation) |
| PPP | Public-private participation |
| PQ | Pre-qualification |
| PSO | Public service obligation |
| PSP | Private sector participation |
| PT IIF | PT Indonesia Infrastructure Finance |
| PT SMI | PT Sarana Multi Infrastruktur |
| PUPN | <i>Panitia Urusan Piutang Negara</i> (Committee for the Settlement of State Credits) |
| RDA | Regional Development Account (MOF Treasury) |
| RENSTRA | <i>Rencana Strategis</i> (Strategic Plan) |
| ROT | Rehabilitate-operate-transfer |
| Rp | Rupiah |
| RPJMD | <i>Rencana Pembangunan Jangka Menengah Daerah</i> (Regional government medium-term development plan) |
| RPJPD | <i>Rencana Pembangunan Jangka Panjang Daerah</i> (Regional government long-term development plan) |
| RPJMN | <i>Rencana Pembangunan Jangka Menengah Nasional</i> (Central government medium-term development plan) |
| RPJPN | <i>Rencana Pembangunan Jangka Panjang Nasional</i> (Central government long-term development plan) |
| RSUD | Rumah Sakit Umum Daerah (Regional government general hospital) |
| RUOT | Rehabilitate-upgrade-operate-transfer |
| Satker | <i>Satuan Kerja</i> (Work unit) |
| SCADA | Supervisory control and data acquisition |
| SIPA | <i>Surat Ijin Pengambilan Air</i> (Water extraction permit) |
| SJPP | <i>Surat Jaminan Pemerintah Pusat</i> (Central government letter of guarantee) |
| SLA | Subsidiary loan agreement |
| SMBC | Sumitomo Mitsubishi Bank Corporation |
| SMI | <i>Sistem Manajemen Investasi</i> (Directorate of Investment Systems Management, Directorate General of Treasury, MOF) |
| SMI | <i>PT Sarana Multi Infrastruktur</i> |
| SOE | State-owned enterprise |
| SOP | Standard operating procedure |
| SOW | Scope of work |
| SPAM | <i>Sistem Penyediaan Air Minum</i> (Process for the provision of drinking water) |
| SPM | Surat Perintah Membayar (Request for payment) |
| SPV | Special purpose vehicle |
| TP | <i>Tugas Pembantuan</i> (Co-administered task grant) |
| UPTD | <i>Unit Pelaksanaan Teknis Daerah</i> (Regional Government Technical Service Unit) |
| USAID | United States Government Agency for International Development |

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| USD | United States Dollars |
| UU | <i>Undang-Undang</i> (Law) |
| UWSSP | Urban Water Supply and Sanitation Project (World Bank co-financed) |
| VGf | Viability gap funding |
| WB | World Bank |
| WSI | Water and Sanitation Initiative |
| WTP | Water Treatment Plant |

I. OBJECTIVES OF THE STUDY

The USAID Indonesia Urban Water, Sanitation and Hygiene (IUWASH) project is a five-year effort, launched in March 2011, to support the Government of Indonesia in making progress towards its Millennium Development Goal (MDG) targets by increasing access to safe water supply and improved sanitation services. IUWASH implements activities that contribute to the achievement of three distinct types of intermediate results, namely:

- Demand mobilization for improved services;
- Capacity improvement of service providers; and
- Development of a supporting enabling environment.

Within the framework of developing a supporting enabling environment for water supply services, capital expenditure (capex) financing is especially important. The overall objective of this study is to facilitate longer-term, strategic thinking on water supply sector capex financing in Indonesia by undertaking a review and analysis which identifies and assesses both existing and potential sources of capital for PDAMs and efforts to facilitate co-operation with the private sector.

Specific tasks in the Scope of Work (SOW) are summarised below:

- A review of the current legal and regulatory framework relevant to capex financing in the water supply sector, in terms of central government lending and investment grants, as well as public-private participation (PPP) and business-to-business arrangements (B2B) between PDAMs and the private sector and government support for PPP and B2B initiatives;
- An evaluation of the results and issues proceeding from implementation of the legal and regulatory framework, and proposals for new or remedial initiatives;
- Examination of financing trends with regard to changes in PDAM fixed assets;
- A review of the activities of non-bank finance institutions and of the donors; and
- Recommendations for the future course of USAID assistance in terms of the balance of this IUWASH programme and for the follow-on stage. Comments from the Mid-Term Evaluation Review (MTER) are relevant to this exercise.

Desk reviews of the legal and regulatory framework were undertaken, as well as relevant documentation produced by government and donor programmes (including IUWASH), supplemented by meetings and discussions with a wide range of national and international stakeholders and participants. These included, more or less in the following order: (i) consultants, (ii) donors, (iii) national commercial banks and non-bank financing institutions, (iv) water supply development companies involved in PPP and B2B activities, (v) central, provincial and regional (city and regency) government stakeholders, and (vi) IUWASH PDAMs. A list of people met and their affiliations met is given in Appendix I2.

Most of these stakeholder discussions were carried out in Jakarta, but visits were also made to PDAMs in West Java/Banten, Central Java and East Java Provinces, especially those with PPP/B2B activities in progress.

The results of this process are presented in this report which, following this introductory section, is structured as follows:

- Section 2 presents a summary of the GOI legal and regulatory framework relating to financing for water supply, including GOI loan/domestic market bond issue/PPP financing mechanisms and GOI grant channels, and the status quo under these arrangements at the end of 2009 when the prior USAID-funded ESP programme terminated, at which time a similar assignment was prepared.
- Section 3 reviews developments of the GOI legal and regulatory framework since the end of 2009 and their impact upon the water supply sector. PPP and B2B progress and issues are a special focus in this section. Potential opportunities for utilising USAID's Development Credit Authority (DCA) to support loans for PPP/B2B activities in the water supply sector are also discussed here.
- Section 4 provides a summary of non-bank financing institutions which have become fully operational since 2009 and have begun to play a role in PPP infrastructure investment, including water supply finance.
- Section 5 reviews activities of those international donors which are active in the water supply sector.
- Section 6 assesses the role of provincial government water enterprises (PDAB), especially their activities as authorised operators for regional water supply systems across cities and regencies in their provinces.
- Section 7 analyses recent financing trends for water supply in IUWASH-assisted PDAMs by examining the development of net fixed assets, contributions of regional governments and PDAM financial capability of providing equity finance support.
- Section 8 provides conclusions from the body of the report.
- Section 9 makes recommendations for the future course of USAID assistance through IUWASH activities, as required by the SOW.

2. SITUATION AT THE CONCLUSION OF THE ENVIRONMENTAL SERVICES PROGRAM (ESP)

In late 2009, towards the end of the ESP, a comprehensive paper was produced on the status of PDAM water supply finance in terms of issues and developments which had occurred during the currency of that project and of prospects in the medium-term thereafter, especially the National Medium-Term Development Plan (RPJMN) covering the period 2010-14. This section of the report recapitulates that status, with much of the legal and regulatory framework reviewed at that time still being valid today.

2.1 BORROWING FOR WATER SUPPLY INVESTMENT THROUGH MOF TREASURY

Much of this paper for the ESP was devoted to a review of the longstanding problem of designing a sustainable channel for providing loan finance for investment in PDAMs through the GOI. This issue goes back to the Indonesian economic crisis in 1998, when many PDAMs (and some of their regional government owners) defaulted on their loans from the Ministry of Finance (MOF). The GOI had no recourse to means of enforcement because of badly drafted loan agreements and the absence of a supporting legal and regulatory framework to permit loan re-structuring and write-offs. This framework was not, in fact, finally put in place until 2005¹.

As a consequence, investment in water supply and other infrastructure steadily declined, as proceeds from existing multilateral loan agreements wound down, and came to an almost total halt by 2003. Lending procedures to PDAMs were subsequently revised to eliminate direct MOF lending to PDAMs, and to allow this only through their regional government owners which would then make their own arrangements with their PDAMs². Lending was to be conditional on regional government creditworthiness (including regularity of current maturities on existing loans from the MOF) and also on their consent to their central government annual fiscal transfers being intercepted in the event of default³. Recourse to the intercept was the prime reason for channelling MOF lending for PDAMs through regional governments, since it was the only means of ensuring repayment. The reluctance of regional governments and of their legislatures (DPRD) to sign up to this mechanism continued to discourage further borrowing from the MOF for water supply and other urban infrastructure investment, and hence multilateral donor lending for water supply and urban infrastructure generally virtually dried up⁴.

Following a number of false starts, the MOF issued a decree in 2008 to provide restructuring of non-performing loans (NPLs) to 196 PDAMs⁵ with total arrears of about Rp 4.6 trillion, of which some Rp 1.5 trillion was represented by unpaid principal and Rp 3.1 trillion in non-principal (unpaid interest, service charges and penalties). In summary, the decree allowed for:

¹ By means of UU (Law) No 17/2003 on State Finances, UU No 01/2004 on the State Treasury, and PP (Government Regulation) No 14/2005 on the Write-Off of State Credits

² UU No 33/2004 on the Fiscal Equilibrium between Central and Regional Governments, PP No 54/2005 on Regional Government Borrowing, PMK (MOF Decree) No 53/2006 on Arrangements for On-Lending from External Loan Proceeds to Regional Governments and PP No 02/2006 on Arrangements for Acquiring External Loans and /or Grants and their Channelling

³ PMK No 129/2008 on the Intercept of Central Government Fiscal Transfers to Regional Governments in the Event of Non-Performing Loans

⁴ The only MOF loans for water supply since 2003 have been for PDAMs Kota Bogor, Kabupaten Muara Enim and Kabupaten Kapuas made through their regional government owners (as per PP No 54/2005 et al) and co-funded by the World Bank Urban Water Supply and Sanitation Project (UWSSP)

⁵ PMK No 120/2008 on the Settlement of State Credits to PDAMs

(i) recapitalization and rescheduling of principal arrears and (ii) write-offs of non-principal arrears. Inter alia, the pre-conditions for requesting restructuring of loans required: (i) a full cost recovery tariff in place, (ii) submission of a five-year business plan to improve service coverage and reduce non-revenue water (NRW), and (iii) a letter of agreement from the head of regional government, co-signed by the DPRD, pledging financial support in the event of its PDAM being unable to meet its re-scheduled loan payments⁶. The issue of this decree was followed shortly thereafter by a companion regulation from the MOF for the restructuring of NPLs taken out by regional governments⁷.

With the subsidiary loan agreement (SLA) for channelling external loan proceeds restricted to just three new loans⁸ and the lending window from GOI own-source funds (*rupiah murni*) by the RDA to regional governments, whether for water supply or other eligible urban infrastructure sectors, about to be closed, a new loan finance vehicle for urban water supply was established through Presidential Decree (*Perpres*) No 29/2009⁹. Its purpose was to involve domestic state-owned banks - whose previous track record in lending for urban infrastructure had been dismal both in terms of volume lent and appropriateness of loan tenor and interest rate - in making credits directly to creditworthy PDAMs, by offering government-sourced interest rate subsidies and partial principal guarantees to participating banks against the risk of PDAM default.

The principal features of the *Perpres* are: (i) the MOF to subsidise an interest rate of up to 500 basis points (5%) above the Bank Indonesia (BI) rate (bank rate); (ii) the MOF to provide a partial credit guarantee (PCG) of 70% of the loan, leaving the banks with a 30% credit risk; (iii) of the 70% PCG, the MOF to bear a 40% risk and the regional government owner of the PDAM the 30% balance; (iv) the 30% regional government risk to be guaranteed to the MOF by means of the intercept in the event of a PDAM default and the failure of its regional government owner to make good¹⁰; and (v) a maximum loan tenor of 20 years. Procedures for implementing the *Perpres* were subsequently regulated by means of PMK No 229/2009¹¹. These regulations remain in place.

ESP assisted some PDAMs in the preliminary stages of preparing business plans and pre-feasibility studies prior to closure at the end of 2009.

2.2 GRANT FUNDING FOR WATER SUPPLY THROUGH GOI

Grants for regional governments (and, through them, their PDAMs) are provided for by UU No 33/2004. There are various typologies. All are financed on the APBN from *rupiah murni*, except the *hibah* grant which at that time was being sourced only from donor proceeds (as is still the case today).

Entitlement grants to regional governments are specified in PP No 55/2005¹². They consist of the General Allocation Fund (*Dana Alokasi Umum* – DAU), the Revenue Sharing Fund (*Dana Bagi Hasil* – DBH) sourced from taxes and receipts from natural resources exploitation by the GOI in the territories administered by regional government, and the Special Allocation Fund (*Dana Alokasi*

⁶ Such a letter would seem to have only moral force (letter of comfort), since the legal and regulatory framework at that time and even today prohibits regional government from giving guarantees to third parties. Ref Section 55 of UU No 33/04 on the Fiscal Balance and Section 4.1 of PP No 54/2005 on Regional Government Borrowing

⁷ PMK No 153/08 on the Settlement of State Credits to Regional Governments

⁸ Ref Footnote 4

⁹ *Perpres* (Presidential Decree) No 29/2009 on the Provision of Guarantees and Interest Rate Subsidies in order to Accelerate Access to Potable Water Supplies

¹⁰ Ref Footnotes 3 and 6. This provision seems to be in contradiction of UU No 33/2004 and PP No 54/05, as revised by PP No 30/2011, Section 5 Sub-Section 1.

¹¹ PMK No 229/2009 on Implementation Arrangements for Issuing Guarantees and Interest Rate Subsidies by GOI for the Acceleration of Drinking Water Provision

¹² PP No 55/2005 on the Balancing Fund

Khusus – DAK). All are formula driven, with allocations to each regional government stipulated in a series of annual MOF decrees, and all are based on top-down processes.

In accordance with UU No 33/2004, regional governments get 26% of the national net revenue as their DAU. The DBH accounts for a further 7%, the DAK 2% and other adjustment transfers 5%¹³.

2.2.1 General Allocation Fund (DAU) and Revenue Sharing Fund (DBH)

The DAU and DBH are general purpose (i.e. discretionary) grants, intended primarily to meet regional government salaries, the DPRD apparatus, and related recurrent operating expenses, with any balance to be used, at the discretion of each regional government, towards funding development, including urban water supply. The amount allocated in this manner to urban water supply during the ESP period is not known, but it was probably very little. However, there have been exceptions to the rule: Kota Palembang has been very generous in its provisions of grants for water supply to its PDAM, and some Central and East Java Province regional governments paid off the balance of MOF loans to their PDAMs in full in 2005 and 2006.

2.2.2 De-concentrated (*Dekonsentrasi*) & Co-Administered Task (*Tugas Pembantuan - TP*) Grants

These grants are provided for in UU No 33/2004 and regulated by PP No 07/2008¹⁴. The provisions of both are still valid.

De-concentration refers to non-physical activities, such as capacity building or a public awareness campaign, which are the responsibility of central government but which can be more conveniently carried out by regional governments. The funds (*dana dekon*) are carried on the APBN of the technical ministry concerned, such as Public Works, Transport and Communications, Health, Education, Agriculture etc.

Co-administered tasks are physical activities, whereby the technical ministry hires a contractor to construct or supply a regional government physical asset to assist the regional government move towards attainment of minimum service standards (MSS) in accordance with PP No 65/2006¹⁵ and lower-level regulations. As in the case of de-concentration, co-administered task (TP) funds are also placed on the APBN of the responsible technical ministry. Upon completion of the project, the assets thus created are handed over to the technical ministry which should, but does not always transfer them to the regional government beneficiary (or its enterprise)¹⁶. Co-administration tasks are also claimed by technical ministries in accordance with the division of responsibilities between the various levels of government as stipulated in PP No 38/2007.¹⁷ The appendix to this regulation which allocates these responsibilities is very complex and is thus open to specious interpretation by the technical ministries. However, the amounts involved are significant, accounting for about 12% of the APBN.

In the case of urban water supply, the DGHS (*Cipta Karya*) at the MPW has an extra claim to the financing of co-administered tasks through PP No 16/2005¹⁸ (i.e. before the issue of PP No 38/2007) which states that, in the event of a regional government being unable to implement the development of a water supply system, the central government may provide financial support, in a

¹³ These are principally the Special Autonomy Fund (*Dana Otonomi Khusus – Otsus*), which is restricted to Papua, West Papua and Aceh provinces, and the Adjustment Fund (*Dana Penyesuaian*). All these are not specifically referenced in PP No 55/2005, but come under the heading of “other transfers”.

¹⁴ PP No 07/2008 on De-Concentrated Funds and Co-Administered Tasks

¹⁵ PP No 65/2005 on Minimum Service Standards

¹⁶ See Section 7.3.2

¹⁷ PP No 38/2007 on the Allocation of Responsibilities between Central, Provincial and *Kota/Kabupaten* Governments

¹⁸ PP No 16/2005 on Access to Potable Water Supply Systems

step-by-step process, until the fulfilment of minimum service standards has been achieved. This enables the DGHS to intervene in the finding and implementation of construction of “lumpy investment”, i.e. intakes, treatment works and bulk transmission mains in the case of water supply; the theory being that PDAMs would borrow through Perpres No 29/2009 for the related distribution systems or that they or their regional government owners would provide equity.

Whether these grant arrangements are in the spirit of decentralization is open to question. It would seem that the drafters of UU No 33/2004 did not think so, as the law refers to a gradual transition of this form of grant financing to the DAK¹⁹, i.e. through a process of decentralization. However, the annual budget for co-administered tasks has more than maintained its value in nominal terms and, in the case of Cipta Karya for water supply, significantly so²⁰.

2.2.3 Special Allocation Fund (DAK)

The DAK is a non-discretionary, supply-driven purpose grant for physical investment, whose formula is based on general, specific and technical criteria intended to focus funding for national development priorities towards those regional governments with low fiscal capacity. The overall objective of DAK allocations was to help finance special activities in 14 regional development government sectors, of which four (4) relate to infrastructure (roads, irrigation, water supply and sanitation). DAK allocations for infrastructure are intended to fund activities which would fulfil needs for basic public services and would have a long economic lifetime²¹. However, the value of each grant is usually small and passed down to lower levels of regional government (e.g. district, sub-district, or village). DAK water supply grants are provided for systems operated by community-based organizations (CBO), as well as to PDAMs.

Following sectoral division of the total annual DAK budget by means of agreement between BAPPENAS and the technical ministries, the MOF allocates each regional government’s entitlement by sector through an annual MOF decree. Technical ministries (e.g. the MPW in the case water supply and the other urban infrastructure sectors) issue guidelines for implementation, monitoring and evaluation. Regional governments have discretion over the sub-projects which they wish to implement with DAK funds for each sector.

Regional governments must provide a minimum level of matching funds (*dana pendamping*) for each sector, currently 10%. Unsurprisingly, the minimum has almost invariably become the maximum²². These matching funds must appear on the regional government budget (APBD). Financial reporting of expenditure accountability to MOF has improved since MOF began employing sanctions against DAK allocations for failure to submit proper accounts. However, monitoring and evaluation are still weak, mainly because of inadequate or non-existing budgeting for such activities on both the APBN and APBD.

2.2.4 Hibah

UU No 33/2004 does not refer specifically to *hibah* but simply requires the GOI to issue a regulation relating to granting and on-granting to regional governments. The government regulation subsequently issued²³ stated that grants to regional government could be provided from both external donor proceeds and GOI *rupiah murni* own-source funds. The MOF operationalising decree²⁴ differentiated between the eligibility requirements and channelling

¹⁹ Section 108 of UU No 33/2004

²⁰ Section 3.2.1

²¹ This paragraph summarises Section 1 and the clarifications of Section 51 of PP No 55/2005

²² Indeed, Section 61, Sub-Section 3 of PP No 55/2005 removes the need even for this level of matching funds if a regional government has a demonstrable lack of financial capacity.

²³ Subsequently Government PP No 57/2005

²⁴ PMK No 168/2008 on *Hibah* Grants, replacing PMK No 52/2006. PMK No 169/2008 provides the channelling procedures for the *hibah*.

mechanisms for *rupiah murni* and on-granted *hibah* funds, although the former source has yet to appear on the APBN as a source of funds for the *hibah*.

Conceptually, the way in which *hibah* is on-granted from donor proceeds (loan or grant) is very different in process and application from the entitlement grants in that it is founded on a demand-driven, bottom-up, performance-based system (output-based assistance – OBA). The use and process of the donor proceeds are governed by an agreement between donor and the GOI which focuses on objectives as agreed upon during negotiations. Regional governments then make proposals to the MOF, via a review and approval process conducted by the technical ministries, within the parameters of the agreed objectives of the external grant. If accepted by a technical ministry, the purpose and amount of each grant, and its related conditions, are made formal by means of a grant agreement (grant award) between the Directorate General of Fiscal Balance (DJPK) at the MOF and the regional government beneficiary. The regional government must provide matching funds based on a fiscal capacity index (which is issued and periodically revised by means of an MOF decree). The regional government implements its project with up-front financing, and the GOI *hibah* funds are released to the regional government following approval of payment authorizations (SPM) by the work unit (*satker*).

In 2009, IndII²⁵ developed an innovative pilot application of the on-granting mechanism regulated by PMK No 168/2008 by means of incentives for regional governments to invest in their PDAMs in order to accelerate the connection rate of new households, with a particular focus on low-income households. Whilst the initiative was developed for water supply with a view to supporting the GOI in its endeavours to meet its MDG targets for improved access to water supply, the output-based nature of the application could be equally valid for sanitation and other sectors.

Under this mechanism, IndII provided a fixed lump-sum grant of Rp two (2) million for each new connection which was channelled through the MOF to regional governments. The regional governments had to agree to invest an amount equal to at least 50% of the amount of the grant stated in the grant agreement, depending on fiscal capacity, of the agreed project value as equity in its PDAM. Households were required to pay the installation cost of connecting to the distribution system, plus some portion of the regional government matching funds, the amount varying from one regional government to another. To qualify for entry to the programme, each PDAM had to: (i) be in a healthy financial condition or, if it is have non-performing loans, have been accepted into the MOF loan restructuring programme²⁶, (ii) have spare production capacity, and (iii) have a sustainable business plan. The PDAM implemented the programme, either by itself or through a contractor. Central government funds were released to the regional government in accordance with the agreed unit rate per installed connection (the “output”), following a technical audit conducted by Cipta Karya which verified that the connection: (i) had actually been installed, (ii) was operating satisfactorily and (iii) had been fully operational for at least the previous three (3) months, as evidenced by payment of water bills by the user.²⁷

The scheme was proposed to and endorsed by BAPPENAS, MPW and MOF, with funding to be managed by the MOF. Since the roll-out of the programme took place post-ESP, the *hibah* grant for water supply is discussed further in Section 3.

²⁵ The Indonesia Infrastructure Initiative, an Australian Government funded project (initially supervised by AusAID, but since late 2013 by the Australian Government Department of Foreign Affairs and Trade (DFAT) to assist GOI in improving infrastructure investment

²⁶Ref PMK No 120/2008. Footnote 5

²⁷ The initiative is fully explained in the IndII paper: “Design Summary and Implementation Document of the Water and Sanitation Initiative (VSI)” – 2009)

2.3 PRIVATE SECTOR FINANCING FOR WATER SUPPLY

2.3.1 Private Sector Participation

Appendix I shows that private sector participation (PSP) in water supply commenced in 1993. By 2005, twelve (12) PSP agreements had been signed²⁸. The term of these agreements was usually between 20 and 25 years. It seems likely that nearly all of these were the result of negotiated contracts between PDAMs and private sector parties, there being no comprehensive framework for government procurement until 2003²⁹.

Perpres No 67/2005³⁰ established the framework for the GOI's formal co-operation on infrastructure development with private sector investors, known as Public-Private Partnerships (PPP). The Perpres appointed BAPPENAS as the central government agency responsible for the coordination of PPP activities, with the various technical ministries to liaise with BAPPENAS in determining which of the proposed projects should be put forward for procurement as PPPs. Responsibility for risk allocation was assigned to the MOF. The Perpres also provided for private investors to make unsolicited proposals for sectors outside of those put forward by the GOI. A high-level policy committee (KKPPI) was established³¹ under the chairmanship of the Coordinating Ministry for Economic Affairs (CMEA). Responsibilities for some PPP infrastructure sectors were hived off to technical ministries or state-owned enterprises (BUMN) for liaison with, assistance to and evaluation of prospective PPP partners, e.g. power to the State Electricity Company (PLN), toll roads to the Toll Road Authority (BPJT) at the MPW, and railways and airports to the responsible directorates-general in the Ministry of Communications (MOC).

Eight (8) infrastructure sectors where PPP arrangements might be considered for procurement, including piped water supply, were listed in the Perpres. The intention of the Perpres was to provide the PPP process with fairness, openness, transparency and competitiveness through tender processes and, subsequently, by means of partnerships, to be regulated in individual co-operation agreements for each project³². These partnership agreements would be between the investor, through a PPP project company (PC) and the government, whether at central, provincial or city/regency levels, and including state-owned or regional government enterprises (in the case of government in accordance with the allocation of responsibilities as per PP No 38/2007), with the government partner being referred to as the Government Contracting Agency (GCA) or, more simply, the Contracting Agency (CA).

In support of these principles, the Perpres provided for: (i) selection by GOI of projects, including supporting information, (ii) material issues to be agreed in subsequent cooperation agreements, and (iii) details of the tendering process. It also dealt, in general terms, with risk management and its allocation between the GOI and the private sector, and with other areas of government support, such as land acquisition.

The MOF subsequently issued a clarification of government intentions to support PPP infrastructure projects through PMK No 38/2006³³, offering compensation for political, project

²⁸ Four (4) concessions, of which two (2) in DKI Jakarta, each with a capacity of more than 6,000 litres per second (lps); four (4) Build-Operate-Transfer (BOT) arrangements for water treatment plants (WTP), the largest of which was 500 lps; two (2) Build-Operate-Own (BOO) arrangements for WTPs; two (2) Rehabilitate-Upgrade-Operate-Transfer (RUOT) arrangements for WTPs; and two (2) WTP Operation and Maintenance (O&M) contracts.

²⁹ Keppres No 80/2003 on Guidance for the Implementation of Procurement of Supplies for Government

³⁰ Perpres No 67/2005 on Cooperation between Government and Business Entities for the Provision of Infrastructure, replacing Keppres No 07/1998

³¹ Ref Perpres No 42/2005 on the KKPPI, as amended by Perpres No 12/2011

³² According to Perpres No 67/2005, a cooperation agreement should contain as a minimum: (i) scope of work, (ii) duration, (iii) tariff levels and adjustment provisions, (iv) risk allocation, and (v) service standards, plus the usual clauses relating to dispute, ownership of assets, performance bond, etc

³³ PMK No 38/2006 on Technical Directives for Managing and Controlling the Risks of Infrastructure Development

performance and demand risk, with the provision that such guarantees would be provided on a case-by-case basis.

At the Indonesia Infrastructure Conference of November 2006, the GOI offered ten (10) infrastructure projects worth an estimated USD 4.5 billion equivalent, of which three (3) were for water supply³⁴ valued at an estimated USD 100 million. Only one of these was subsequently taken up: a concession area in Kabupaten Tangerang³⁵ currently operated by PT Aetra Tangerang (a special purpose vehicle), which is owned through PT Aetra by Acuatico Pte Ltd, a closed stock company based in Singapore.

In addition to its co-ordinating role, BAPPENAS established a dedicated Programme Development Facility (PDF)³⁶ under the Infrastructure Reform Sector Development Programme (ISDRP), one of whose components was a Technical Advisory Service (TAS) to prepare terms of reference (TOR) and business cases for potential PPP projects in a number of sectors, including water supply. Of 13 such cases, none had achieved closure by the end of 2009 but some³⁷ were carried into the post-ESP/IUWASH phase. PPP problems in the water supply sector were identified in a final report³⁸ as follows:

- Projects needed better coordination between the city/regency and provincial government counterparts and the Directorate of Water Supply at Cipta Karya in the MPW.
- Improved screening of projects was deemed to be necessary. In particular, the small size of regional and city/regency water supply projects posed a considerable challenge in developing such transactions under a PPP model and in getting interest from investors. Concessions in the water sector were considered difficult to implement and it was concluded that experience so far had generally not been good.
- Low tariff levels for water supply at the retail level had significantly undermined the financial standing of PDAMs, with the result that transactions structured to include off-takes by PDAMs from BOTs would not be bankable without a GOI guarantee against the PDAMs' obligations.
- Water supply project financial analyses invariably produced financial internal rates of return below (often well below) levels expected by PPP investors. It was clear that some form of viability gap funding (VGF) from the GOI was required.

Between 2006 and the end of 2009, a further nine (9) PSP contracts³⁹ in water supply were negotiated⁴⁰, of which three (3) were concessions and six (6) were variants of the BOT model. The concession in Kabupaten Tangerang was a 900 litres per second (lps) solicited PPP project, which has been successful and is still ongoing⁴¹, the concession in Kota Pekanbaru failed because of a dispute between the two joint operating partners, whilst the third was a small 50 lps concession in Kota Tangerang which is still operating.

³⁴ Kota Dumai (Riau Province), Kabupaten Tangerang (Banten Province), and Kota Bandung (West Java Province)

³⁵ This PPP concession did not become operational until 2012 and is discussed in Section 3.4.1

³⁶ Co-financed by ADB Loan No 2264-INO, a Government of the Netherlands (GON) grant and the GOI through the APBN

³⁷ Tukad Anda (Bali Province), Lamongan and Krabayakan, (East Java Province), Pondok Gede (West Java Province), Serang (Banten Province), and Palu (Central Sulawesi Province)

³⁸ By the IRSDP Technical Advisory Services Status Report

³⁹ Ref Appendix I

⁴⁰ Three (3) concessions, two (2) ROT/O&M, one (1) BOO, one (1) ROT and one (1) ROT

⁴¹ Ref Appendix 7.4

2.3.2 PDAM Corporate Bonds

Efforts were made between 2005 and 2008 through ESP and KfW-funded activities to promote corporate bonds for investment in creditworthy PDAMs. The initiatives by ESP involved, firstly, a revolving fund to pool bonds for smaller PDAMs⁴² and, secondly and in parallel, a single corporate bond issue for a substantial PDAM to be underwritten by a government-owned investment house and supported by a USAID partial credit guarantee. Both initiatives raised initial enthusiasm. However, the first failed because the MOF “champion” was transferred at a critical point in the activity and his successor was not interested in furthering it (it may also have been a financial engineering step too far at the time), whilst the second was ultimately unsuccessful because of the risk-averse attitude of the PDAM Supervisory Board (*badan pengawas*). The KfW activity also made significant progress, but eventually came to nothing because of central government failure or unwillingness to understand the process. Finally, the onset of the global financial crisis in late 2007 drove up interest rates rapidly, thereby further dampening earlier enthusiasm for PDAM corporate bond issuances.

2.3.3 Municipal Bonds

As part of regional government borrowing arrangements authorised under UU No 33/2004 and PP No 54/2005, the MOF issued a decree concerning municipal bonds in 2006⁴³. This decree permitted regional governments to issue such bonds for urban infrastructure projects which are both revenue generating (but not necessarily full cost recovery) and confer economic benefits on the community. A two-step process is involved, the first of which is stipulated by the decree, namely the requirement for a submission by regional government to the MOF to obtain authorization to proceed to the domestic capital markets (this being the second step). The submission procedures include the preparation of pre-feasibility studies for each infrastructure project to be financed by the bond, and an authorization in principle from the DPRD to the bond issue. A specific DPRD authorization by means of a regional government decree (*peraturan daerah – perda*) to make provisions in the APBD for interest payments and notional annual principal, the latter to be lodged in an escrow account until bond redemption, is also part of the second step. Municipal bonds could be used as a mechanism for raising finance for water supply, with the regional government making its own arrangements with its PDAM.

At the time of closure of ESP, the World Bank was providing technical assistance to DKI Jakarta with the ultimate objective of supporting the first municipal bond issue in Indonesia with a face value of at least Rp 1 trillion.

2.4 GOI NON-BANK FINANCE INSTITUTIONS

In the late stages of the ESP activity, the MOF established three (3) non-bank institutions for financing infrastructure:

- PT Sarana Multi Infrastruktur (PT SMI), an MOF-owned state enterprise (BUMN), for providing finance by itself or in syndication with partners (bank and non-bank)⁴⁴ to the private sector, and to state-owned (BUMN) and regional government-owned (BUMD) enterprises.

⁴² The rationale for this arrangement was that the face value of a bond needs to be high to absorb the fixed costs of issuing and thus to take advantage of the lower interest rates which bonds offer over commercial bank loans.

⁴³ PMK 147/2006 on Municipal Bond, with USAID providing TA through ESP

⁴⁴ In accordance with PP No 66/2007, as amended by PP 75/2008 on State Equity Participation in Companies (*Persero*) Involved in Infrastructure Financing and PMK No 100/2009 on Infrastructure Finance Companies

- PT Indonesia Infrastructure Finance (PT IIF)⁴⁵, at the outset a \$200 million capital joint venture, with 60% of the capital subscribed by donors, 30% by PT SMI and 10% unallocated. ADB and the International Finance Corporation (IFC) each provided a loan of USD 100 million. PT IIF was primarily established as a supplier of finance to the private sector.
- The Indonesia Investment Agency (Pusat Investasi Pemerintah - PIP)⁴⁶, located within the MOF, invests in infrastructure, clean technology, and any other sectors which provide economic, social and/or other benefits which lead to the improvement of social welfare. Its long-term objective is to become a fully-fledged domestic sovereign wealth fund. The PIP is not a line organization within the Ministry of Finance, but a public service agency (BLU⁴⁷) reporting directly to the Minister through the Secretary General.

None of these institutions was fully operational by the end of 2009; consequently their activities are discussed in the next section on developments in the post-ESP/IUWASH era.

⁴⁵ Established under the same regulatory framework as PT SMI

⁴⁶ Authorised under Section 41 of UJ No 01/2004 on the State Treasury and established through PP No 01/2008

⁴⁷ In accordance with PP No 23/2005 on Public Service Agencies

3. DEVELOPMENTS POST-ESP AND DURING IUWASH

3.1 BORROWING FOR WATER SUPPLY THROUGH THE MOF

3.1.1 Restructuring of PDAM Loans from MOF Treasury

On 6 July 2013, the window closed on PDAM submissions for debt restructuring proposals in accordance with PMK No 120/2008 and its amendment on debt restructuring⁴⁸. Proposals submitted by that date are still being processed, but any submissions after that date will not be entertained. The situation at the end of 2013 was that, out of a 2008 total of 195 PDAMs with arrears:

- 76 PDAMs had already restructured in accordance with PMK No 120/2008. Depending on the value of write-offs proposed⁴⁹, 47 of these were authorised by the Minister of the MOF, 24 by the President and five (5) by both the President and the National Legislature (DPR).
- An additional ten (10) PDAMs did not need to be restructured.
- 81 PDAMs had presented restructuring proposals in accordance with the facilitating amendments to PMK No 120/2008 of PMK No 114/2012, of which 62 fulfilled documentary requirements and 19 did not; these latter are being completed by PDAMs with the assistance of the DGHS and BPPSPAM.

28 PDAMs with a total of Rp 523 billion in arrears⁵⁰ had not delivered restructuring proposals by the due date. Some of these were unable to do so because the regional government administrative territory served by the PDAM borrower had been subsequently sub-divided (*pemakaran*), and ownership of and repayment responsibilities for the assets purchased with loans from MOF had still not been determined⁵¹. Other PDAMs were unable to produce a business plan for the restructuring proposal, notwithstanding seminars provided by the MOF and MPW to instruct them on how to do so, whilst yet others could not do so because their regional government owners refused to provide the necessary letters of comfort to the MOF or to approve the required cost recovery tariffs in the PDAM restructuring proposals. It is assumed that the NPLs of these PDAMs are continuing to accumulate penalties on overdue principal and interest payments.

Irrespective of the above considerations, the status of these 28 PDAMs has been referred to the Committee for the Settlement of State Credits (*Panitia Urusan Piutang Negara – PUPN*)⁵². It is understood that the provincial PUPN offices have already summoned PDAM managing directors to explain how the outstanding debts will be settled.

⁴⁸ Ref Footnote 5. PMK No 120/2008 was subsequently amended by PMK No 114/2012 whose objective was to simplify the process of making debt restructuring proposals to MOF

⁴⁹ In accordance with PP No 14/2005 on Procedures for State/Regional Government Credit Write-Offs

⁵⁰ Ref Appendix 2.1

⁵¹ Kabupatens Asahan, South Bengkulu, Central and North Lampung, Tanggamus and Bolaang Mongondow fall within this category.

⁵² The organization of PUPN is regulated by PP No 89/2006 on the Committee for the Settlement of State Credits, the legal basis being Perpu (a central government regulation in lieu of a law) No 49/1960 with the same title. Operating on part-time basis, the committee is lodged in the Directorate General for State Assets (DJKN). The members of the committee are representatives from the MOF, the State Police and the Office of the Attorney General. There are PUPN operations in MOF offices in each province, with representatives from the provincial offices of the national committee, plus an additional representative from the regional government with the unsettled credit. The operational procedures for settling state credits are covered by PMK No 128/2007

Without a negotiated settlement, the issue of what will happen in the case of these 28 PDAMs moves into uncharted territory. The MOF could, theoretically, bankrupt them⁵³ and seize the assets purchased with the loan funds. However, the GOI would then be tasked with the management and care of these assets, which thus become state-owned. It is unclear which organization would be responsible – possibly the MPW or a delegation of responsibility from the Directorate General of State Assets (DJKN) at the MOF to the provincial or city/regency public works departments. The picture is further complicated by the fact that regional governments are legally required to provide a piped water supply service as part of their responsibilities under decentralisation⁵⁴.

This uncertainty has prompted the MOF to ask Cipta Karya and BPPSPAM to intervene⁵⁵. Cipta Karya recently stated⁵⁶ that the number of PDAMs not yet participating in the debt restructuring programme had been reduced from 28 to nine (9), and outstanding arrears from Rp 523 billion to Rp 467 billion. Of these nine (9), four (4)⁵⁷ could not do so because they have agreements with private sector operators and their arrears are therefore not eligible for restructuring with write-offs⁵⁸. Whether the 19 entering or re-entering the restructuring programme will be allowed to have their non-principal arrears cancelled is not clear – from a regulatory point of view, probably not, now that PMK No 120/2008 has already expired.

The status of the 76 restructured loans at December 2013 is given in Appendix 2.2. Setting aside arrangements with PAM Jaya (DKI Jakarta), which was not allowed write-offs because of its two (2) concession arrangements⁵⁹, the situation at December 2013 was as follows:

- 40 restructured PDAMs have had their non-principal write-offs made unconditional; 31 of these because the outstanding debt had been completely paid off, probably by their regional government owners because of the discount offered in PMK No 120/2008 for such, and nine (9) because they had followed their business plans for two (2) years following their restructuring agreements, again as provided for in the PMK.
- Five (5) had not completed the two (2) year probationary period, but had regular debt service on their current maturities. These were in the process of revising their business plans with BPPSPAM assistance, so as to achieve self-management (*swakelola*) status.
- 30 PDAMs had again accumulated arrears on their restructured loans. PMK No 120/2008 allows business plan revisions, provided that the obstacles to keeping to the plan are outside the control of PDAM management or their regional government owners. In these 30 examples, the MOF clearly considers that this is not the case. The major issue here is almost certainly the failure of the head of regional government to provide a full cost recovery tariff, although it is also likely that PDAMs have not met other key performance in the restructuring agreement such as non-revenue water (NRW) and service coverage, these latter probably being a matter of indifference to the MOF which simply wants the return of its loan principal and interest. On the other hand, there is a concern that many PDAMs were obliged by the MOF to accept a shorter repayment period of their restructured loans than they had originally proposed.

MOF requires that 24 of these settle their arrears or else their cases will be sent to the PUPN, with their write-offs provided for in the restructuring agreements being cancelled. The other six (6) are simply called upon to restore their loan positions to a regular status. It

⁵³ Bankruptcy of regional governments and state and regional government-owned enterprises is outside the scope of UU No 37/2004 on Bankruptcy. The process is carried out by PUPN under PMK No 128/2007.

⁵⁴ Section 10 of UU 32/2004 on Regional Government

⁵⁵ Source: Investor Daily, 29 April 2014

⁵⁶ Source: Investor Daily, 9 May, 2014

⁵⁷ PDAMs Kabupaten Biak, Pati and Sorong and Kota Manado

⁵⁸ As per PMK No 114/2012

⁵⁹ Ref Section 3.5

is understood that failure to meet three (3) consecutive semi-annual payments or having an NPL position where arrears are greater than the non-principal write-offs call for the stricter requirement of the MOF.

Four (4) of these PDAMs are being assisted by IUWASH⁶⁰. Three (3) were visited in the course of this assignment. Some do not have a strategy for resolving these problems, chiefly due to a reluctance on the part of PDAM management to confront the head of regional government with the option of providing a full cost recovery tariff and making available a public service obligation (PSO) so as to enable these PDAMs to pay off their new arrears. Clearly, both measures are required so that these PDAMs do not fall into arrears once more.

Given the difficulties involved in putting the PDAM into bankruptcy, dealing with the regional owners and having to take care of the assets, it is likely that the MOF and other central government stakeholders will somehow find a way to compromise and settle the unstructured loans and the recurring arrears on loans already restructured. Nevertheless, whatever the means to achieve such a compromise, the end result will be that, as a minimum, the outstanding loan principal and the interest thereon will have to be repaid to MOF.

All defaulting city/regency governments have settled their NPLs with the MOF with the exception of Kabupaten Jeneponto (in process) in South Sulawesi Province and Kabupaten Bau Bau Baru in South-East Sulawesi Province. This regency was established by sub-division out of Kabupaten Bau Bau. It is in dispute over the loan which was originally taken out by Bau Bau, whilst the assets from the loan are in Kabupaten Bau Bau Baru. In the meantime, three (3) regional governments have fallen behind with their restructured debt repayments, including Kabupaten Bengkulu Selatan and Kota Medan. Kota Medan has restored its current maturities position after being notified by the MOF of an impending intercept of their DAU, and it is expected that the MOF will use the force of the intercept in future such cases.

3.1.2 Borrowing for Water Supply Investment through Perpres No 29/2009

Perpres No 29/2009 has proved to be a major disappointment. Appendix 3.1 shows that, at April 2014, out of 74 PDAMs with business plans prepared, only five (5) umbrella agreements and letters of central government partial credit guarantee (*surat jaminan pemerintah pusat* – SJPP) had been issued, three (3) of which had been fully disbursed. No umbrella agreements, and consequently no partial credit guarantees (PCG), have been issued since March 2013.

Prior to the implementation of the activity, beginning with the preparation of business plans, the Perpres was extensively disseminated by the MOF and MPW. Workshops were held at four (4) locations in mid-2010, attended by 65 regional governments, PDAMs and representatives from DPRD. In March 2011 a further workshop was held with 38 heads of BAPPEDA and 69 PDAMs, and a final one in March 2012 with 28 regional government secretaries and 48 PDAMs. State and regional government banks were also canvassed, and by late 2011, funding cooperation pledges (*perjanjian kerjasama pendanaan* - PKP) had been obtained from two (2) national and three (3) regional government banks in a total amount of Rp 4.325 trillion⁶¹.

The five (5) umbrella agreements which have already been reached cover 70%⁶² of a total loan amount of Rp 205 billion and a total debt/equity investment value by the various participants of Rp 566 billion. Thus actual committed credits are less than 5% of commercial bank pledges. The final yield of incremental connections from these five (5) is expected to be about 105,000.

⁶⁰ PDAMs Kota Semarang and Surakarta, and Kabupaten Tanjung Balai and Gresik

⁶¹ Bank Nasional Indonesia (BNI) Rp 1.8 trillion, Bank Rakyat Indonesia (BRI) Rp 1.8 trillion, Bank of West Java and Banten Rp 150 billion, Bank of Central Java Rp 25 billion, Bank of South Kalimantan Rp 150 billion and Bank Mandiri Rp 400 billion.

⁶² Of which 30% is covered in back-to-back agreements with regional government owners of PDAMs

A major part of the problem lies in the extremely lengthy and complicated implementing procedures required by the MOF in PMK No 229/09⁶³ in order to process and approve the umbrella agreement between all parties and to issue the partial credit guarantee (PCG). Figure 3.1 illustrates the stages, whilst Appendix 3.2 provides the chronology, after completing the review of business plans and obtaining agreement in principal from a bank willing to lend, for signing the umbrella agreements and issuing the PCGs for the three (3) PDAMs which have now fully drawn down their Perpres loans and have completed the implementation of their projects. The number of days required by the MOF for the issue of these PCGs was:

- PDAM Kabupaten Bogor – 411 days
- PDAM Kabupaten Ciamis – 594 days
- PDAM Kabupaten Lombok Timur – 561 days

Appendix 3.1 demonstrates that the initial learning curve for issuing umbrella agreements and PCGs has in no way facilitated faster processing times. This appendix⁶⁴ shows that six (6) PDAMs have been waiting since late July 2012 for the MOF to finalise the process. It has not been possible to obtain a reasonable explanation for the elapsed time. However, it is noted from Figure 3.1 that, within the MOF, four directorates-general⁶⁵ and the fiscal policy agency have inputs to the approval procedure, all of which require the involvement the four (4) echelons in the GOI supervisory chain, i.e. twenty (20) steps⁶⁶, before the PCG can be issued by the Directorate-General of Debt Management at the MOF.

The table below summarises the detail of Appendix 3.1 for 74 PDAMs whose business plans have been approved as ready for processing by regional governments and the MOF as of April 2014. Those 11 PDAMs whose loan submission proposals have already been approved by the DPRDs are now at MOF; however, Appendix 3.2 shows that none of the umbrella agreements between the lending bank, the MOF (representing the GOI), the regional government and the PDAM have yet been signed.

There are also 17 additional PDAMs which are still proceeding with pre-FS preparation and evaluation.

Summary of Perpres 29 Progress at April 2014

| Stage Reached | No Pre-FS 2010 | No Pre-FS 2011 | No Pre-FS 2012 |
|--|-------------------|-------------------|-------------------|
| Partial Credit Guarantee Issued | 4 | 1 | - |
| Verification of Completeness of Documentation Requirements in Process at MOF | - | 1 | - |
| PDAM Revising or Completing Documentation Requirements | 1 | 4 | - |
| Approved by DPRD | - | 6 | 5 |
| Approved by Head of Regional Government | 1 | 2 | 1 |
| Awaiting Approval by Head of Regional Government | 1 | 17 | 24 |
| Withdrawal from Perpres 29 Process by PDAM | - | 5 | 1 |
| Total | 7 | 36 | 31 |

Source: Cipta Karya

⁶³ As amended by PMK No 91/2011 which, however, introduced no new measures to facilitate the processing time

⁶⁴ The steps for the PCG approval process shown in Figure 3.1 correspond approximately to those shown in Appendix 3.1

⁶⁵ The Directorates-General of Budget, Fiscal Balance, Debt Management and Treasury

⁶⁶ The best case outcome, as it assumes that no revisions or additional referrals will be required

Those 11 PDAMs whose loan submission proposals have already been approved by the DPRDs are now at MOF; however, Appendix C shows that none of the umbrella agreements between lending bank, GOI, the regional government and borrowing PDAM have yet been signed.

Nevertheless, Appendix 3.1 demonstrates that lengthy approval times for completing the umbrella agreement and issuing the PCG are not the only problem for the unsatisfactory performance of this borrowing mechanism. Others include the slow process of NPL restructuring, which has delayed many potential PDAM candidates in preparing Perpres 29 submissions, and the reluctance of regional government heads to approve borrowing with a 30% PCG back-to-back agreement with the MOF. The table above shows that 42 submissions are blocked at this stage in the process, with some clearly having been in limbo for considerable periods of time.

A presidential instruction (Inpres) has been raised with the objective of reducing the processing time of Perpres 29 submissions to 90 days. It is understood that this has been initiated at the instance of the MPW, which has been criticised, perhaps unjustifiably, for its failure to disburse the interest subsidy funds which are on its budget. The MPW and the Ministry of Home Affairs (MOHA) have already signed the Inpres, but the MOF has not done so. It contends that the business plans are not adequate or that the necessary due diligence on these plans has not yet been performed.

In this regard, it is noted the MPW issued a decree concerning the preparation of PDAM business plans in accordance with the Perpres, supported by three (3) detailed manuals⁶⁷. IUWASH and consultants appointed by Indll to assist PDAMs in the preparation of business plans and feasibility studies for Perpres 29 submissions took account of these guidelines and manuals, and it is understood that consultants engaged by Cipta Karya did so too. It is entirely possible that the MOF did not accept some business plans for quite valid reasons, but any shortcomings could have been corrected by Cipta Karya as the budget user. However, the MOF's contention does not explain why the processing of the umbrella agreement and PCG for PDAM Kabupaten Lombok Timur took more than 500 days, when the business plan was prepared by an international accounting firm and was acknowledged by the MOF to be perfectly satisfactory. Similar lengths of time to process the necessary documents for PDAMs Kabupaten Bogor and Kota Malang, both of which have considerable experience in preparing good business plans. In addition, if a bank was ready to lend, the question remains as to why the MOF would not endorse the transaction with the issue of a PCG.

In the meantime, the Perpres is due to expire at the end of 2014. Meetings with MOF staff and other agencies indicate that it will either not be renewed or will be renewed but without the central government PCG, leaving 70% of the guarantee with regional governments. The second is considered to be the more likely route, with the MOF claiming that this will resolve the PCG processing issue. However, this is likely to produce the same result as not renewing it at all.

In any event, state and regional government-owned banks which have pledged loan funds for the Perpres are by now dissatisfied with the cumbersomeness of the procedures for relatively low-value, low-yield loans, the difficulties of scaling-up, and the amount of time and cost required for monitoring and evaluation, and are unlikely to be enthusiastic about further co-operation unless instructed to do so. The banks are also concerned about their exposure to 30% of the risk. In the event of bankruptcy, commercial law is not applicable and the process must go through the MOF⁶⁸.

⁶⁷ Permen PU No 21/2009 concerning a Technical Guideline for Feasible Investments in the Context of Development for the Provision of Potable Water Systems (SPAM), together with three (3) attachments: (i) Manual for the Preparation of Investment Loan Submissions to Banks, (ii) Manual for the Evaluation of the Feasibility of Investment Proposals for SPAM, and (iii) Unit Prices for SPAM Investment

⁶⁸ Ref Footnote 53

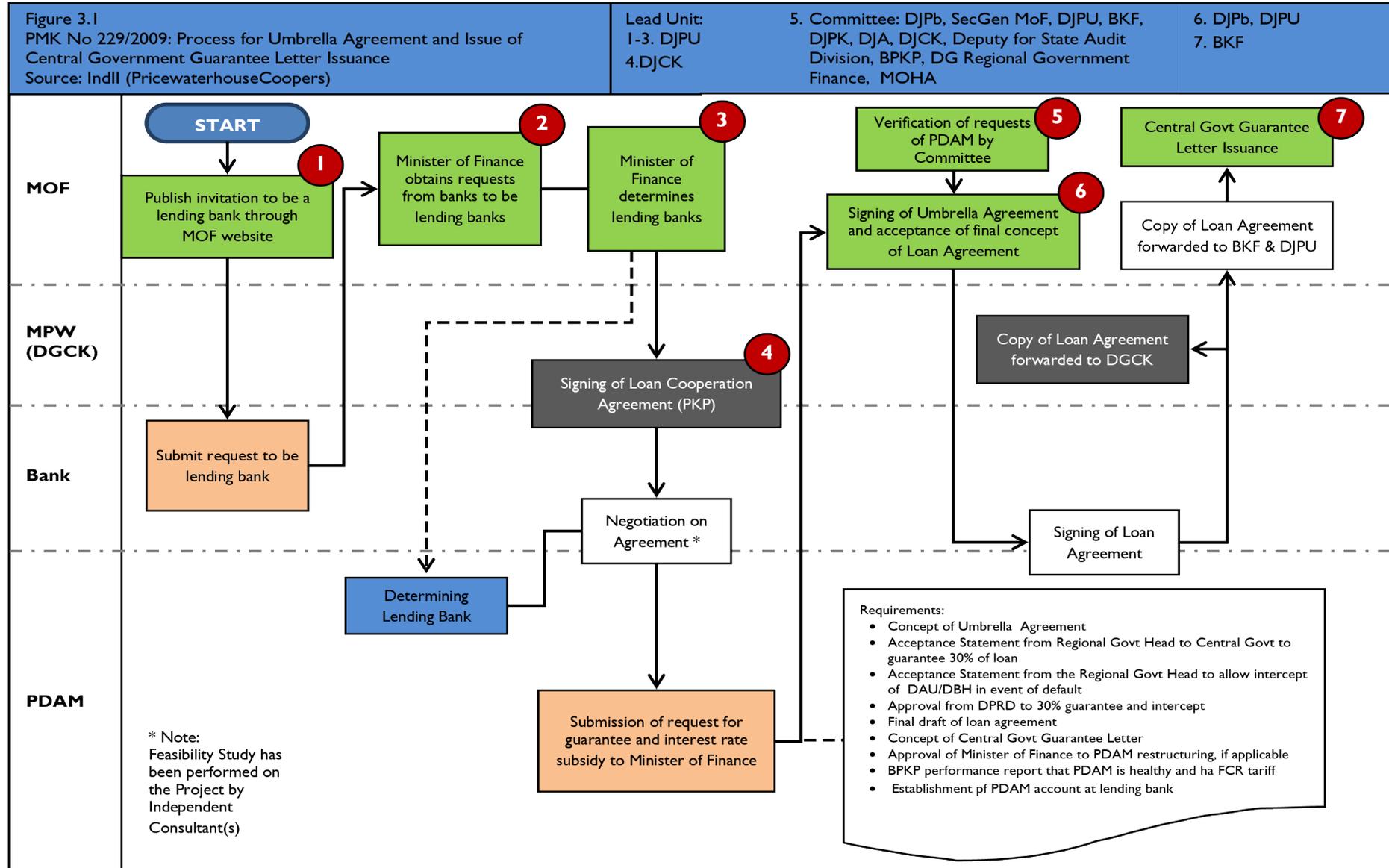


Figure 3.1: Process for Umbrella Agreement and Issuance of Partial Credit Guarantee

Meanwhile, there are unanswered questions as to whether the MOF will process any more PCGs before the Perpres expires at the end of the year and what will be the fate of outstanding submissions, if there is no renewal of or other suitable ongoing arrangement. It is also a moot point as to whether the MPW will accept interest rate subsidies on its 2015 APBN, should the Perpres be renewed, given the criticism this ministry has already received for failure to disburse. At any rate, decisions on the future of Perpres 29 are unlikely to be taken before the presidential election.

The conclusion is that Perpres No 29/2009 was a positively conceived initiative to involve domestic commercial state-owned banks in providing credits on a significant scale towards achieving MDG goals for safe water supply coverage. It is accepted that there may have been an inconsistency of objectives between the MPW and MOF, with the former focused on promoting increased access to piped water supplies and the latter concerned about its accountability for the use of public funds. However, the initiative appears to have been stifled by the risk-averse approach usually adopted by the MOF to the introduction of any innovation, as exemplified by the very detailed procedures required to comply with PMK No 229/2009. Other contributory issues have been NPL loan restructuring and (especially) regional government reluctance to borrow due to the attachment of the intercept, but these obstacles could reasonably have been expected; the complexities and protracted processing of the MOF's implementing regulation could not. A more constructive approach to these problems should have been taken, but there seems to have been no urgency or willingness on the part of the MOF to do so.

In the event that the Perpres is not renewed, or is renewed in such a way that it is still unworkable or unacceptable to regional governments, the consequence will be that, more than 15 years after the economic crisis and the subsequent proliferation of PDAM NPL, the GOI will still be without an effective mechanism of lending funds to creditworthy PDAMs. The hoped-for revival of the process of on-lending donor funds from the MOF to PDAMs through regional governments has not proved to be a mechanism for resolving the problems of investment finance for PDAMs, as shown by the very limited success of the World Bank-financed UWSSP⁶⁹.

An alternative might be to let the Perpres and PMK 229/09 run their courses to become dead letters and then later transfer lending to creditworthy PDAMs through their regional government owners to the embryonic Indonesia Water and Sanitation Investment Facility (IWSIF). This possibility is discussed later in this report⁷⁰.

The implications of the above for IUWASH is that a decision by the GOI not to renew the Perpres, or to revise it in such a way that it becomes unworkable, would make its contractual target EE 2 of 15 PDAMs obtaining access to long-term finance for water investment plans not capable of achievement unless an alternative mechanism is found rapidly. In any case, declining interest at banks, PDAMs and regional governments because of the problems may themselves resolve matters. IUWASH should alert USAID to these issues.

3.1.3 Other Developments in Regional Government Borrowing Regulations post-ESP

The major change since the end of 2009 has been the synchronization and consolidation of the regulations regarding offshore borrowings for regional government infrastructure and regional government borrowing⁷¹ which had previously been out of phase in terms of their issue dates⁷².

⁶⁹ Ref Footnote 4

⁷⁰ Sections 4.5 and 4.6

⁷¹ PP No 54/05 on Regional Government Borrowing and PP No 02/2006 on Arrangements for Acquiring External Loans and /or Grants and their Channelling

⁷² Also PP No 57/2005 on Grants

The new regulation on offshore borrowings⁷³ has been amended to ensure that regional government readiness criteria for projects are complete before GOI acceptance of offshore loans, the absence of which had caused the GOI significant losses in previous years in the form of service charges on undisbursed loans. A new government regulation on regional government borrowing⁷⁴ has been issued to reflect these changes. The most notable innovation here was a decision to allow regional governments to borrow – from any domestic source - for projects which would generate revenues indirectly⁷⁵, whereas the previous regulation permitted this only in the case of direct revenue generation.

UU No 33/2004 is in the process of being amended, although the revision is not expected to pass into law before the end of 2014. In terms of regional government borrowing, the latest draft now permits regional governments to pledge their discretionary revenues⁷⁶, which is currently prohibited. This may attract the interest of domestic commercial banks, although whether it will have any impact on regional government reluctance to borrow is another matter. The bar on guaranteeing loans to third parties (e.g. PDAMs)⁷⁷ and on pledging regional government fixed assets as loan collateral continues. The debt service coverage ratio (DSCR) rises from a conservative 2.5 to an even more cautious 3.0. It is also understood that the initiative referred to in the preceding paragraph to allow borrowing for projects generating only indirect revenues will now be withdrawn and that the existing PP will be re-drafted to reflect the status ante quo – a retrograde step.

3.2 GRANT FUNDING FOR WATER SUPPLY THROUGH GOI

3.2.1 De-concentrated (*Dekonsentrasi*) & Co-Administered Task (*Tugas Pembantuan - TP*) Grants

There has been no progress in the original decentralisation target of gradually reallocating co-administered tasks (TP) funding to the DAK⁷⁸. This may be due to the persistently weak accountability of the DAK, a situation which may now begin to be gradually changed as the GOI attempts to introduce performance-based practices into the DAK mechanism and to mainstream the *hibah* as discussed in the paragraphs following. These changes are planned for introduction during the 2015-2019 Medium-Term National Development Plan (RPJMN). One of the principal objectives is to transform these inter-governmental transfer instruments into mechanisms which would become suitable for larger infrastructure investment activities which have until now been funded through the TP channel.

The proposed changes would lead to a further consolidation of the decentralisation process and to a progressively greater ownership of infrastructure by regional governments instead of a continuation of the practice of adding to central government line ministry asset registers⁷⁹. They are likely to be resisted by large budget users (SKPD) of TP funds such as the MPW, and there may have to be off-setting arrangements to compensate line ministries in the event of such changes. There are also questions as to whether all regional governments (and their PDAMs) have the technical capability to implement large-scale investment projects, although the line ministries could provide the necessary technical assistance.

⁷³ PP No 10/2011, replacing PP No 02/2006

⁷⁴ PP No 30/2011, replacing PP No 54/2005

⁷⁵ For example, from property taxes

⁷⁶ Regional government own-source revenues (PAD, DAU and DBH)

⁷⁷ Ref Footnotes 6 and 10

⁷⁸ Ref Footnote 19

⁷⁹ A longstanding issue which is discussed in Section 7.3.2

TP annual grants for water supply in recent years are shown below. It is noted that the value of these grants are now greater by a factor of about eight (8) than DAK transfers for water supply, which reinforces the likelihood of MPW objections to significant changes to the present system.

MPW APBN (TP) Grants for Water Supply (2010-14)

| (Rp Billion) | | | | |
|--------------|-------|-------|-------|-------|
| 2010 | 2011 | 2012 | 2013 | 2014 |
| 1,749 | 3,128 | 3,756 | 5,543 | 5,300 |

Source: Cipta Karya

The draft revision to UU No 33/2004 refers only to TP and makes no mention of de-concentration grants. This may be because TP funding is many times greater than for de-concentration activities. However, there may be a connection with the proposed change of allowing DAK to be used for non-capital, such as training, capacity building and O&M, as well as capital expenditure.

3.2.2 Special Allocation Fund (DAK)

Two reports, both of which are highly critical of the existing DAK process, have been issued since the end of the ESP⁸⁰. Both argue that it has limited effectiveness in terms of allocation, utilisation and efficiency of monitoring and evaluation. The existing fiscal capacity indicator is considered to be flawed, to the extent that all regional governments, irrespective of their fiscal capacity, have been accessing the DAK since 2006, thus negating its original purpose as an instrument for financing national priorities, such as basic public service delivery infrastructure with long asset lives in those regional governments with low fiscal capacity⁸¹. In particular, it appears perversely to favour regional governments which have emerged over the last 15 years from administrative sub-divisions (*pemekaran*), a practice which the GOI has repeatedly stated it wants to discourage. Other issues are that its annual allocations are unpredictable, that monitoring and evaluation procedures measure inputs and outputs instead of outcomes and the possible impacts on national priorities, and that its accountability is weak. Furthermore, there are similar intergovernmental transfer funds which are intended to support GOI decentralisation policies and to accelerate regional development: these are the Special Autonomy Fund and, more particularly, the DPR-controlled Adjustment Fund (*dana penyesuaian*).

It is understood that the draft revision to UU No 33/2004 retains the general, specific and technical criteria employed to determine DAK allocations. This suggests that the existing fiscal capacity indicator will continue to be used, and that the “special” nature of the DAK will remain as a grant which all regional governments receive. Draft changes include (i) the elimination of the regional government matching component, (ii) a focus on MSS and national priorities, and (iii) authorisation for DAK grants to be used for non-capital as well as capital expenditure. The last proposal will presumably allow regional governments to use the DAK grants for O&M, which may encourage them to source their own discretionary funds for other routine expenditure instead of increasing the amount spent on O&M. The two planned activities described below will have to take account of such changes to the DAK, as finally determined when the revised law is promulgated.

In 2010, the GOI and the World Bank signed a loan agreement for the financing of the Local Government Decentralization Project (LGDP). The objective of the project was to improve the accountability of city/regency governments in five (5) pilot provinces in the use of DAK for the

⁸⁰ (i) Maurice Gervais: “Institutionalizing *Hibah* Grants in Indonesia”, IndII, August 2010 and (ii) “Proposals for Reform of the Special Allocation Fund (DAK)”: ADB-INO: TA 7184 – Regional Government Finance and Governance Reform

⁸¹ Ref Footnote 20

approved infrastructure sectors of roads, irrigation, water supply and sanitation. Under the terms of the loan agreement, city/regency governments participating in LGDP have been entitled to receive a financial incentive in the form of an additional Special Purpose Grant of up to 10% of their original DAK allocation since 2011. The incentives are payable from the World Bank loan⁸² upon externally verified achievement of eligible reimbursements. The GOI has recently requested the World Bank to provide additional financing (LGDP-AF) of USD 500 million to fund: (i) the continuation of the project's activities in city/regency governments in the five (5) provinces that are currently participating in LGDP, and (ii) the expansion of the project to regional governments in 25 more provinces. This additional financing would be implemented over a four-year period from 1 July 2014 until 30 June 2018. The Executing Agency (EA) of LGDP is the Directorate-General of Fiscal Balance (DJPK) in the MOF.

At the request of the DJPK, the World Bank is currently preparing an Institutional Support Programme (ISP) for LGDP-AF. An outline of the ISP has been approved by DGFB and the Australia-Indonesia Partnership for Decentralization (AIPD), which would provide a grant to finance a major portion of the cost of the ISP (estimated at about US\$50 million), to be administered by the World Bank.

An additional but much smaller activity in terms of scope is being planned by IndII for introducing a performance-based disbursement mechanism into the DAK. Pilot projects, limited to the water and sanitation sectors, would be prepared for implementation on the 2016 APBN. BAPPENAS would be the EA. It is not clear at this point in time how this initiative dovetails with the larger LGDP-AP and the ISP.

Up until this time, the DAK has usually funded small items of infrastructure, often being passed on to lower levels of regional government administration⁸³. It would seem from the degree of technical assistance being proposed that a more significant role is now being envisaged.

This sub-section refers to the DAK grant in general terms. Recent allocations of DAK for water supply are shown in the table below, and they demonstrate that central government support for the sector has increased substantially over the 4-year period presented – an average annual increase of more than 43%. This may be due to a sustained effort by the GOI to reach its MDG target for improved access to safe water supply.

Special Allocation Funds (DAK) Grants for Water Supply (2010-13)
(Rp Billion)

| 2010 | 2011 | 2012 | 2013 ⁸⁴ |
|------|------|------|--------------------|
| 357 | 420 | 502 | 610 |

Source: Cipta Karya

3.2.3 Hibah

The first phase of the *hibah* was implemented between July 2010 and June 2011, and was rated a conspicuous success, with 79,500 new household connections installed in 35 PDAMs⁸⁵ through a *hibah* grant allocation of about Rp 206 billion provided by IndII through the DJPK. In 2011, the design of a second phase commenced, incorporating lessons learned and recommendations in an

⁸² Also known as the DAK Reimbursement Loan

⁸³ As noted in Section 2.2.3

⁸⁴ 2013 Cipta Karya APBN Budget

⁸⁵ Nine (9) of which are IUWASH PDAMs, ref Appendix 5

independent evaluation report on the first phase, including improved monitoring and evaluation strategies, additional capacity building for participating regional governments and PDAMs, with increased attention to be paid to community education activities and mitigating environmental impacts⁸⁶. The design was also adjusted to conform to the minor changes made to GOI related regulations⁸⁷.

This second phase, which consists of donor funding participation from the Australian Government Department of Foreign Affairs and Trade (DFAT replacing AusAID) and USAID, targets the provision of more than 251,000 incremental connections in 121 PDAMs for a total value of Rp 636 billion⁸⁸. The activity is again being managed by Indll.

Matching funds from regional governments will be related to their fiscal capacity⁸⁹. Additional *hibah* is being made available for regional governments to pass on to their PDAMs if they also participate in the Perpres 29 activity. However, it seems that many regional governments prefer a higher leveraged equity contribution to the concept of a bonus by borrowing through the Perpres.

Indll has disbursement planning problems because the GOI's annual budgeting process is inconvenient for synchronisation with Indll's four-year rolling programme. To date, only 70% of the second phase *hibah* has been allocated. There are also transparency issues in the selection by Cipta Karya of PDAM candidate recipients of the grants, which seems to be based on the degree of PDAM compliance with its APBN co-administered task (TP) programme, as well as the Perpres 29 activity.

The draft revision to UU No 33/2004 does not provide for mainstreaming the *hibah* through use of own-source funding on the APBN, as well as donor funds. It is understood that this matter is now being re-considered. If mainstreaming is introduced, then appropriate regulatory and institutional arrangements will be required to make the *hibah* a complementary mechanism to the DAK for transferring APBN funds to regional governments.

3.3 PRIVATE SECTOR PARTICIPATION FOR WATER SUPPLY

3.3.1 Regulatory Framework Developments

Public-Private Participation

The 2010-14 RPJMN has three (3) infrastructure development targets⁹⁰: (i) the improvement of infrastructure provision based on minimum service standards (MSS)⁹¹, (ii) the strengthening of infrastructure sector competitiveness and (iii) support of investment in infrastructure through PPPs, including the implementation of the 2011 Master Plan for Acceleration and Expansion of Indonesia's Economic Development (MP3EI).

Perpres No 67/2005 was always seen as the legal umbrella for PPPs which, in view of its innovativeness, would need amending as experience with the process and the problems involved developed. The major problems between 2005 and 2009 are discussed in Section 2.3.1 above. To

⁸⁶ Ref the "Independent Evaluation of the Water and Sanitation *Hibah*", March 2012

⁸⁷ PP No 02/2012 on Regional Government Grants, replacing PP No 57/2005, and PMK No 188/2012 on Grants from Central Government to Regional Governments, replacing PMK Nos 168 and 169/2008

⁸⁸ USAID is expected fund more than 34,000 connections in 27 PDAMs at an estimated value of nearly Rp 77 billion. Ref Appendix 5

⁸⁹ As currently determined by PMK No 226/2012 on the Regional Government Fiscal Capacity Map

⁹⁰ Source: BAPPENAS: Public-Private Partnerships (infrastructure Projects Plan in Indonesia – 2013)

⁹¹ Ref Footnote 15

address these issues, three (3) amendments to the umbrella Perpres have been promulgated since 2009⁹²:

In particular, these successive amendments have imposed stricter requirements for a private sector investor to develop an unsolicited project⁹³, including a condition that such projects do not qualify for GOI financial support, although non-financial support might be given in the form of licenses. They also describe the substance and conditions for GOI financial support and guarantees for solicited PPP projects through the MOF, and have been subsequently supplemented by additional Perpres and implementing decrees. These have included the establishment of: (i) PT Indonesia Infrastructure Guarantee Fund (PT PII), (ii) PT Sarana Multi Infrastruktur, (PT SMI) and (iii) PT Indonesia Infrastructure Fund (PT IIF) to develop PPP in infrastructure through the provision of financial support guided by transaction advice. The first two are state-owned enterprises whilst the third is majority-owned by external agencies, with the MOF having a 35% shareholding. They complement the previously (2008) established Indonesia Investment Agency (*Pusat Investasi Pemerintah*), a public service agency (BLU) which, inter alia, provides credit to regional governments for infrastructure, as well as pre-financing for land acquisition in support of PPP projects. These non-bank financial institutions are described in Section 4. A financial instrument in the form of viability gap funding⁹⁴ has also been provided to support projects which would otherwise not yield the rate of financial return required by a private investor.

In addition, the amendments have paved the way for BAPPENAS to establish cross-sector operational guidelines for the implementation of PPP infrastructure projects⁹⁵, as well as the preparation and issue of an annual PPP Book which lists potential, priority and ready-to-tender projects. The regulations⁹⁶ are designed to ensure that all projects are properly designed and analysed before they are allowed to be entered into the PPP Book.

A law and implementing regulation have been issued to facilitate the long-standing problem of land acquisition for infrastructure⁹⁷. These will primarily accelerate the toll-road building programme, but may also be directed at supporting the construction of raw water transmission mains over distance.

PT SMI is reported to have recommended the promulgation of an additional law on PPP infrastructure development projects which would bind central and regional governments in the event of electoral change in order to provide greater certainty to prospective investors.

Business-to-Business (B2B)

Following the issue of Perpres No 67/2005 on PPP and prior to 2010, the PSP agreements between PDAMs and private sector business entities (*badan usaha swasta* – BUS) referred to in Section 2.3 and itemised in Appendix I became known as business-to-business (B2B) arrangements. These arrangements were not regulated until 2010.

The process begins with PDAM identifying a specific investment need and preparing a pre-feasibility study (pre-FS), usually with external consultancy assistance paid for by the PDAM. The PDAM uses the pre-FS to issue a list of qualifying criteria for participation (e.g. water supply sector experience, financial capability, etc) and invites at least three (3), but usually no more than five (5) private sector entities to make a presentation to a PDAM procurement committee on

⁹² Perpres Nos 13/2010, 56/2011 and 66/2013 respectively

⁹³ i.e. a project submitted by a private sector investor and not solicited by the Government

⁹⁴ Ref Section 3.4.1

⁹⁵ BAPPENAS Decree Nos 03 and 04/2012 on General Guidelines for Implementation of Cooperation between Government and Business for the Provision of Infrastructure

⁹⁶ BAPPENAS Decree No 06/2012, as well as No 03/2012

⁹⁷ UU 02/2012 and Perpres No 71/2012 on Procedures for the Acquisition of Land Required for Development in the Public Interest

what each would be prepared to offer to meet PDAM pre-FS requirements⁹⁸. PDAM then selects one candidate to prepare a full FS, based on which a negotiated contract is prepared for approval by the PDAM Supervisory Board (*Dewan Pengawas*), with the supporting advice of an independent expert. The PDAM Supervisory Board then presents this to the head of regional government, as the PDAM's owner, for an opinion from the regional government legal department.

It became generally recognised that, in the absence of viable financing mechanisms for water supply investment from the MOF through regional governments and the lengthy requirements of the PPP process, B2B represented the best option to inject badly needed investment into the water supply sector within a reasonable time frame. Consequently, in 2010, BPPSPAM at the MPW issued Permen PU 12/2010⁹⁹ in order to regulate B2B arrangements between PDAMs and the private sector. Under this decree, PDAM management (not the regional government) is nominated as the accountable party for project cooperation (PJPK), and must issue a specific decree for each arrangement with a business entity, to be ratified in turn by the PDAM Supervisory Board (*Dewan Pengawas*). It is likely that the Supervisory Board also consults the head of regional government informally. Each proposal must be accompanied by a pre-FS, an outline of the proposed agreement, and a financing plan.

In 2011, BAPPENAS advised PDAMs that it would be acceptable for them to arrange B2B contracts in accordance with the Permen PU as an alternative to using PPP through Perpres No 67/2005. It is important to note, however, that the Permen PU is, from a legal and regulatory perspective, a guideline, meaning that it is subsidiary to a Presidential Decree.

Attached to the PERMEN PU decree is a very detailed attachment of the contents of the pre-FS, proposed agreement and financing plan. In particular, the proposed agreement must specify compliance with the regional government's spatial plan, and the national and regional governments' medium and long-term development plans.

The regional government may signify its support for such initiatives by agreeing to issue the necessary permits and licenses for project implementation provide financial support for some of the construction through the APBD, and such other actions which would give comfort to the private sector entity¹⁰⁰ prior to undertaking implementation activities.

BPPSPAM regards the Permen PU as an umbrella decree, which will be progressively modified by amendment on the basis of experience gained and problems identified which require resolution. One such amendment is currently being drafted. It is understood that new requirements will include the necessity of having the opinion of BPKP before any B2B agreement becomes effective, as well as a recommendation for equitable allocation of risk.

⁹⁸ Informally referred to as a "beauty contest"

⁹⁹ Permen PU No 12/2010 on Guidelines for Cooperation for Management of the Development of Potable Water Supply Systems, the legal basis being UU No 07/2004 on Water Resources and PP No 16/2005 on the Development of Potable Water Supply Systems.

¹⁰⁰ The private sector entity constructs and operates its project in its own name or forms a dedicated company (special purpose vehicle – SPV). Sometimes the PDAM or a regional government enterprise takes a small shareholding in the SPV.

3.4 OTHER DEVELOPMENTS IN PRIVATE SECTOR PARTICIPATION FOR WATER SUPPLY SINCE 2009

3.4.1 Public-Private Participation

Viability Gap Funding

Perpres No 56/2011, the second amendment to Perpres No 67/2005, introduced the concept of GOI support for a qualified PPP revenue-generating project to receive project feasibility support in the form of a direct financial contribution. Subsequently, under PMK No 223/2012¹⁰¹, the MOF provided procedures for obtaining this GOI financial support, the aim of which is to raise the financial internal rate of return (FIRR) of a project to a level acceptable to potential investors. This GOI contribution, known as viability gap funding (VGF), is granted to cover a portion of the total construction (EPC) cost, including costs for engineering, construction materials, equipment procurement and installation, interest during construction (IDC) and other related costs, but excludes those associated with land acquisition and taxes. As currently drafted, the value of the VGF may not exceed 50% of the total EPC cost.

The VGF scheme is seen as particularly important for supporting PPP projects in the water supply sector, where regional governments perceive tariff levels to be socially and politically sensitive subjects.

To qualify for VGF, projects must meet the following criteria: (i) be economically feasible, even if not financially feasible without VGF, (ii) be revenue-generating, (iii) have a minimum EPC value of Rp 100 billion, (iv) will be operated by a project company established by the business entity appointed to undertake the project through the tender procurement process described in Perpres No 67/2005 and subsequent amendments thereto, and (v) make provision in the cooperation agreement for the transfer of project assets to the CA at the end of the PPP agreement.

In addition, the pre-FS must: (i) state optimal risk allocation, and (ii) demonstrate that the project can be financially viable, as well as economically feasible, with the provision of financial support through the FIRR calculation. The resulting FIRR with the VGF is expected to be at least 15% to provide the necessary attraction for investors.

In order to obtain VGF, a series of prior approvals must be granted by the MOF, including: (i) an in-principle endorsement of the pre-FS, (ii) consent to the amount of VGF which is to be declared following the pre-qualification (PQ) process, (iii) final approval, to be issued after the successful tenderer has been appointed by the CA, (iv) a letter expressing feasibility support, to be issued by the CA after obtaining final approval from the MOF; and (v) a final feasibility support letter, describing the VGF release mechanism, to be issued by the MOF when the project company has been established by the successful tenderer.

If the MOF agrees to grant feasibility support, then the amount required as tendered by the bidder in its proposal is the only financial parameter for consideration by the CA in its evaluation process.

Disbursement of the VGF is made upon achievement of agreed milestones, as specified in the feasibility support letter issued by the MOF. VGF can be disbursed during the construction period, provided that the first disbursement can only be made if: (i) at least 20% of the equity portion has been used by the project company, (ii) the first drawdown of the debt portion from the lender has been made, and (iii) the sum of each VGF drawdown is proportionate to the debt

¹⁰¹ PMK No 223/2012 on the Provision of Appropriate Financial Support towards the Construction Costs of Cooperation Projects between Government and Business for the Provision of Infrastructure

portion drawdown. Alternatively, the disbursement of feasibility support may be made after the date of commercial operation (as defined in the Cooperation Agreement) and the milestones for disbursements are specified in the feasibility support letter. All feasibility support disbursement requests by the project company must be certified by the CA.

The process for reviewing and approving VGF submissions is guided by PMK No 143/2013¹⁰². It is noted that PMK No 223/2012 was issued fifteen (15) months after Perpres No 56/2011, and PMK No 143/2013 ten (10) months after PMK No 223/2012¹⁰³, further examples of how difficult and time-consuming it is to process regulations for innovative initiatives through the MOF bureaucratic machinery.

The MOF has announced¹⁰⁴ that it plans to establish a PPP centre within the ministry in order to speed up the approvals of government financial support. The activities currently being undertaken in this regard by the MOF's Fiscal Policy Unit (BKF) will be transferred to the Directorate General of Debt Management by the end of 2014.

Water Supply PPP Project Activities since 2009

As noted earlier¹⁰⁵, the first and still the only PPP project for water supply is a concession in Kabupaten Tangerang. The 25-year agreement with Acuatico for a 900 lps WTP, plus reservoirs and distribution system, at an estimated cost of Rp 520 billion, was signed in 2008 and became operational in 2012. It is managed and operated by an SPV – PT Aetra Tangerang. The project is reported to be highly successful. It provides potable water to its customers – the only utility to do so in Indonesia - in four (4) districts in the kabupaten, and is expected to supply more than 70,000 connections by the end of 2016. Further details are provided in Appendix 7.4

The two (2) largest potential PPP projects in the water supply sector are the Umbulan Springs BOT, with an estimated value of USD 200 million equivalent for delivering treated water to five (5) PDAMs (including PDAM Kota Surabaya) in East Java Province, and the Bandar Lampung partial concession worth about USD 80 million¹⁰⁶.

Uncertainties about the future of Perpres No 29/2009 have raised concerns about the financing arrangements for the PDAMs to provide the distribution systems required to absorb water from the bulk purchase agreements to be signed with the successful project company for Umbulan, although it is understood that the MPW, the provincial government and the five (5) city/regency regional governments and PDAMs involved are discussing contingency plans. There are also issues between the East Java Provincial Government and the IIGF concerning risk allocation which have yet to be determined. Another factor is that the Umbulan Springs tender cannot be issued until a decree (*perda*) has been issued to ratify agreement between the provincial government as the CA and the five *kota/kabupaten* governments and their PDAMs.

As for the Bandar Lampung concession, agreement has been reached on the IIGF guarantee with the city government CA. The VGF was due to be announced towards the end of February in order to allow the tender to be issued in early March, but this was postponed. It is understood that the delay is due to the refusal of one of the Echelon I members of the VGF Endorsement Committee within the MOF to sign off on the recommended level of VGF support¹⁰⁷, apparently due to some issues with the VGF disbursement mechanism. This matter is still unresolved. The

¹⁰² PMK No 143/2013 on the Provision of Appropriate Financial Support towards the Construction Costs of Cooperation Projects between Government and Business for the Provision of Infrastructure

¹⁰³ Perpres No 56/2011 was signed off on 09 September 2011, PMK No 223/2012 on 21 December 2012, and PMK No 143/2013 on 21 October 2013

¹⁰⁴ Source: Bisnis Indonesia, 22 November 2013

¹⁰⁵ Ref Section 2.3.1

¹⁰⁶ Profiles of these two impending projects are to be found at Appendices 6.1 and 6.2

¹⁰⁷ As required by Section 9 of PMK No 223/2012. The membership of the committee is specified in KMK No 340/2013.

Minister MOF cannot approve the VGF without this approval from the committee and, without the VGF having been formally approved by the MOF, the IIGF is unable to release the guarantee because the VGF is required to make the project financially feasible.

This problem, in addition to other issues described above, is a further obstacle which is delaying the release of the tender for Umbulan. It is likely that, pending a resolution, other PPP infrastructure service delivery projects involving politically sensitive tariff issues for regional governments will also be stalled.

These delays have led to a number of pre-qualified contractors deciding not to continue further with the tender process.

Faced with these problems, BAPPENAS feels that a more focused approach is needed to develop projects which involve regional governments with tariff and service charge social implications, e.g. water supply. These might include varying the VGF limits and IIGF rigidities for social sector service deliveries. BAPPENAS also plans to take a more prominent role to support BPPSPAM in the promotion of B2B in the water supply sector. It has expressed concern over the likely demise of the Perpres 29 programme and the lack of a credit mechanism for PDAMs to fund distribution systems. These intentions indicate that, whatever the difficulties, the GOI will persist in its attempts to involve the private sector in the water supply and other infrastructure sector delivery services for which regional governments are responsible.

The IRSDP project office in BAPPENAS¹⁰⁸ is also providing technical assistance to a number of provincial and city/regency regional governments for water supply PPP projects, including those shown in the table below. The IRSDP is scheduled to close at the end of August 2014, but BAPPENAS intends to request an extension from ADB through the MOF to the end of December 2015, as there are still funds remaining in the ADB loan.

PPP Water Supply Projects under Preparation by IRSDP

| Project | Value | Status |
|--|--------------|--|
| Pondok Gede, Kota Bekasi, concession, 300 lps, 30,000 connections | USD 30 mill | Capacity building carried out at PDAM and city government. IUWASH B2B pre-FS being converted to PPP type. |
| South Bali BOT, 1,000 lps, bulk treated water for Kota Denpasar plus 3 kabupaten, | USD 220 mill | Unsolicited proposal, therefore IIGF guarantee available but no VGF. Provincial governor agreement on guarantee awaited so that pre-qualification can begin. |
| West Semarang BOT plus, 1,050 lps, 1km transmission and 380 km distribution pipes, 30,000 connections in first 10 years | USD 75 mill | Draft <i>perda</i> awaiting signature of steering committee, mayor and procurement committee. DPRD must endorse CA commitment to project. |
| Kabupaten Lamongan, East Java Province, green fields concession, Service area of 4 <i>kecamatan</i> , 200 lps, 15 km transmission main | USD 17 mill | 3 contractors pre-qualified and tender documents to be issued mid-July |

Source: BAPPENAS

Profiles for the Umbulan BOT, the Bandar Lampung partial concession, and some of the other water supply PPP projects for which IRSDP is providing TA are given in Appendices 6.1 – 6.6.

¹⁰⁸ Ref Section 2.3.1

3.4.2 Business-to-Business (B2B)

Since 2009, at least 13 B2B contracts have been signed¹⁰⁹, all of them either WTP BOT, ROT, RUOT or a mix of these arrangements and with a duration of at least 20 years. Two (2) each of this total have been signed respectively with PT Moya Indonesia, whose parent company is based in Bahrein, and PT Drupadi Lestari, a 100% Indonesian-owned company. Investment levels are substantial, with treated water deliveries ranging from 420 to 1,500 lps.

Because B2B projects are not tendered, private sector business partners are not eligible for VGF support or guarantees from the IIGF. Without these financial instruments, the implicit comfort of national government support, and the position of the PDAM as the contracting agency, as opposed to the regional government in PPP projects, the credit risk is perceived by lenders to be greater, and loan finance is therefore priced higher. As a result, investors look for concomitantly higher returns, e.g. FIRR at 17-18%, which produces a need for higher tariff levels. Progressive strengthening of Permen PU No 12/2010 may help to provide improved credit conditions.

Small B2B investors are particularly disadvantaged by the lack of appropriate loan tenors and interest rates. One such investor is currently carrying a six-year loan, including a one-year grace period, at 14% interest¹¹⁰. Since the maximum FIRR B2B medium-sized investors (say, 200 lps) are looking for is in the order of 18%, this suggests that they are paying at least 12% interest on ten (10) year loans, which is likely to be the longest tenor available.

The Development Credit Authority (DCA) partial credit guarantee offered by USAID through the US Treasury seems appropriately tailored to ease this problem. As a prerequisite to eligibility for the DCA, the guarantee is made available only to a private entity borrowing from a private commercial bank. The DCA will cover up to 50% of the project credit and may extend loan tenors for the guaranteed portion of the credit up to at 15 years at least. The cost of the DCA depends on the assessment of country risk and the specifics of the project to be financed, but it is understood that, in the case of present country risk in Indonesia, the up-front cost ranges between 0.5% and 1% of the full amount of credit guaranteed, plus an annual fee in the same range levied on the principal outstanding in the amount of loan guaranteed. This cost structure seems to be more competitive than what is currently available on the domestic market¹¹¹. The maximum DCA exposure to a single country is currently USD 200 million, with the average guarantee about USD 15 million. It is recommended that IUWASH/USAID approaches BPPSPAM with a view to the agency disseminating this financial instrument to small-to-medium B2B investors.

Problems have arisen in some B2B arrangements as a result of adverse comments made by BPKP in the annual PDAM performance audits (*laporan kinerja*). These relate to auditor perceptions that the basis for contractual arrangements is either not clear or is unfavourable to PDAMs and may cause losses to PDAMs in the future. Particular problems involve the calculation of the project capital expenditure, and therefore the take-or-pay tariff, and risk allocation between the parties. BPPSPAM has included a requirement in the draft amendment to the Permen that B2B contracts will not become effective until they have been reviewed and approved by BPKP; a guideline on risk allocation will also be provided.

Profiles of some B2B water supply contractors' arrangements can be found in Appendices 7.1 – 7.4.

¹⁰⁹ Ref Appendix I

¹¹⁰ Bank Indonesia base rate is currently 7.75%

¹¹¹ For example, PDAM Kota Bogor, perhaps the most creditworthy PDAM in Indonesia, has paid an up-front fee of Rp 300 million on a loan from Bank Jabar (West Java Bank) on a ten-year loan of Rp 25 billion – a premium of 1.2%. After discounting the cash flow, the DCA is considerably cheaper.

3.5 DKI JAKARTA WATER SUPPLY CONCESSIONS

In 1997, prior to the decentralisation era, negotiated concession agreements were signed for West and East Jakarta water supply with Lyonnaise des Eaux and Thames Water International respectively. These concessions have never been well received. In 2011, PT Palyja (PAM Lyonnaise Jaya, the Indonesian company formed to manage the West Jakarta concession) entered negotiations to sell its shares to Manila Water, but the latter did not wish to relinquish the rate of return of 22% contained in the original concession agreement and the provincial government of DKI refused to approve the sale. At the beginning of 2012, DKI Jakarta began exploring alternative means of negotiating a termination agreement with PT Palyja. Following an audit of the concessionaire, the conclusion reached was that a buy-out by DKI Jakarta would be the best solution.

The current situation is that an agreement in principle has been reached between DKI Jakarta and PT Palyja whereby the former will buy out the shares¹¹² of PT Palyja for an amount believed to be in the region of Rp one (1) trillion through two DKI Jakarta-owned BUMD: (i) PT Jakarta Propertindo which is 100% owned by the provincial government, and (ii) PT Pembangunan Jasa¹¹³, 80% owned by the provincial and 20% by PT Ciputra. DKI Jakarta has provided Rp 600 billion through the 2014 APBD to PT Jakarta Propertindo to facilitate the transaction. However, it is not yet clear whether the management and operation of the East Jakarta water supply activity will be assigned back to the pre-1997 operator – PAM Jaya – or to another entity.

The other 1997 concessionaire, Thames Water International, also formed an Indonesian company – PT Thames Pam Jaya (TPJ). TPJ sold out to Acuatico in 2006 which then established its own SPV, PT Aetra Air Jakarta. This company continues to manage and operate the East Jakarta concession which expires in 2022. There are more than 400,000 connections in its concession area. The company has financed its activities from a 10-year bond issue which still has four (4) more years to run, and a loan of Rp 250 billion from PT SMI. It also recently discussed a loan with the ADB of Rp 500 billion but withdrew because the ADB wanted to limit the loan to an 8-year loan tenor to end in 2019, three (3) years ahead of the termination of the concession period. Instead, Aetra obtained funds for a longer tenor from domestic banks. With an AA domestic credit rating from Fitch, it claims to have no trouble in meeting its financing needs.

It is understood that the provincial government intends to carry out a similar buy out of the shares of the East Jakarta concession from PT Aetra Air Jakarta, but not until the West Jakarta operation has been successfully established. This is likely to take some time.

3.6 PDAM CORPORATE AND MUNICIPAL BONDS

The proposed DKI Jakarta municipal bond discussed in Section 2.3.3 was approved, subject to market conditions, by the provincial government governor and the DPRD. Subsequent presentations to Indonesia banks and investment houses elicited considerable interest, chiefly because of DKI Jakarta's strong financial position relative to the bond's nominal issue value of Rp 1.2 trillion. A submission was then sent to MOF for approval and endorsement to proceed to the domestic capital markets, which was later obtained. However, following the 2013 provincial gubernatorial election, the incoming administration shelved the initiative.

The proposed bond was intended to finance four (4) infrastructure projects, including one for wastewater with the intention of DKI Jakarta channelling the funds as a grant to the wastewater

¹¹² PT Palyja is 51% owned by Suez International (owner of Lyonnaise des Eaux and 49% by PT Astratel Nusantara, a subsidiary of PT Astra International)

¹¹³ PT Pembangunan Jaya also has a 100 lps WTP BOO in Bintaro Jaya, Kabupaten South Tangerang

enterprise (PD-PAL). This mechanism could serve as a means for regional governments to use municipal bonds as an instrument to fund investment in water supply and make their own arrangements with their PDAMs.

It is estimated that a single bond issue of at least Rp 400 billion would be required to offset the fixed on-costs and thus to take advantage of the lower interest rates which bonds can offer compared with commercial bank loans. Bonds issued by creditworthy regional governments for water supply would have distinct advantages over PDAM corporate bonds because the credit risk would be lower on account of the annual principal escrow accounts required through the APBD in accordance with PMK No 111/2012¹¹⁴ and the fact that regional governments are not allowed to guarantee third party (e.g. PDAM) liabilities.

A major lesson learned during the course of this municipal bond exercise was the lack of understanding in DKI Jakarta's Finance Department of the various borrowing instruments available and their suitability for particular purposes. This is because there is no treasury function in regional governments, with the finance departments in reality being required to perform only an accounting role to satisfy MOHA regulations and the state audit agency (BPK). This is a problem which the MOHA and MOF need to address as soon as possible, as the problems posed by the situation at DKI Jakarta can only be magnified at other regional government finance departments which have lower financial capabilities. It is also noted that there is no treasury function in PDAMs, a factor which also compromises their capability to manage loans.

It is understood that Kabupaten Bengkalis in Riau Province and the Provincial Government of Riau itself are interested in municipal bond issues. These are resource-rich regional governments. However, they need capacity-building in project identification and prioritisation. The Directorate General of Spatial Planning at the MPW is assisting with the preparation of master plans.

In terms of the feasibility of the next IUWASH programme sponsoring a bond activity for water supply, consideration might be given to exploring such an initiative with DKI Jakarta once it completes its buy-out of the PT Palyja shares, as it is understood that the service area in West Jakarta is in need of a substantial investment. The provincial government would then make its own arrangements with its water supply management agency. This suggestion assumes that the DKI Jakarta administration has no intention of returning the West Jakarta concession to the private sector in the foreseeable future.

¹¹⁴ PMK No 111/2012 on Arrangements for Issuing and Accounting for Regional Government Bonds, replacing PMK No 147/2006

4. NON-BANK FINANCIAL INSTITUTIONS (NBFI)

There are four (4) non-bank institutions for financing infrastructure in Indonesia. The principal objective of three (3) of these – two (2) being state-owned enterprises and the third a joint-venture between one of the SOEs and international financial partners – is to provide financial support towards accelerating the development of infrastructure through PPPs at both national and regional government level. Summary information is provided below, since extensive coverage on their vision, mission, products and achievements is available on their web sites.

The fourth institution is the *Pusat Investasi Pemerintah* (PIP), a government domestic sovereign wealth public service agency (BLU), established in 1998. The PIP is located within the MOF, but outside of the framework of the line directorates-general and reporting to the Secretary-General and the Minister of Finance.

4.1 PT SARANA MULTI INFRASTRUKTUR (SMI)

PT SMI was established in February 2009, and was thus the first of the NBFI SOEs activated for financing infrastructure, with its mandate prescribed in PMK No 100/2009¹¹⁵ which defines its areas of infrastructure financing to be transportation, roads, irrigation, water supply, wastewater, telecommunications, electricity and oil and gas infrastructure. Its principal functions are to: (i) act as a catalyst for the acceleration of infrastructure financing in Indonesia (as per MP3EI), (ii) provide alternative sources of project financing by working with stakeholders to obtain financing solutions, (iii) promote PPPs as a model for financing infrastructure, and (iv) increase its size and capacity through partnerships with third parties¹¹⁶. The primary function of this SOE, therefore, is not necessarily the maximisation of profits, but the delivery of national and regional infrastructure through finance, investment and other services.

PT SMI was initially capitalised with Rp 1 trillion provided through the APBN and has since received a further three (3) capitalisations from the GOI of Rp one (1) trillion each. It has also raised finance through a USD 400 million bond issue. In order to further leverage its equity for lending purposes, the company has recently engaged underwriters to prepare two (2) more bond issues with three (3) and five (5) year tenors respectively in an aggregate amount of Rp one (1) trillion. It has an international rating from Fitch of BBB- (stable) and a domestic rating of AA+.

Its three business activities are:

- Infrastructure finance and investment: this is PT SMI's core business activity. Commercial financing schemes offered include: long-term loans either directly or, usually, as part of a syndication, equity investment, mezzanine and subordinated loans, working capital financing;
- Project preparation services for PPP: the SOE assists PPP central and regional government contracting agencies (GCA/CA) through feasibility studies, market soundings, contract negotiations, tenders and their evaluation, and capacity-building; and
- Advisory services: provision of assistance in the preparation of business plans, project management, transactions, project structure, financial planning, fund-raising, investment/divestment, merger and acquisition advice.

¹¹⁵ Ref Footnote 44

¹¹⁶ As per PT SMI publications and statements

PT SMI's long-time development is staged across three 5-year development plans:

- 2009-2013: building a strong corporate foundation;
- 2014-2018: developing the company's business in the infrastructure sector through a multi-services platform; and
- 2019-2023: becoming a total financial solution company in Indonesia's infrastructure development.

PT SMI's total outstanding loan commitments, for both investment and working capital, stood at nearly Rp 4.5 trillion at the end of 2013, with more than 84% of this amount in the form of investment loans. Details are shown below.

PT SMI Total Loan Commitments at 31 December, 2013, by Infrastructure Sector

| Sector | Commitment (Rp Billion) | % Total Commitment |
|------------------------|-------------------------|--------------------|
| Investment | | |
| Electricity | 1,756.48 | 39.24% |
| Oil & Gas | 572.58 | 12.79% |
| Transportation | 507.50 | 11.34% |
| Potable Water | 440.00 | 9.83% |
| Roads | 300.00 | 6.70% |
| Telecommunications | 200.00 | 4.47% |
| Sub-Total | 3776.54 | 84.36% |
| Working Capital | | |
| Telecommunications | 350.00 | 7.82% |
| Roads | 196.92 | 4.40% |
| Irrigation | 127.90 | 2.86% |
| Transportation | 25.18 | 0.56% |
| Sub-Total | 700.00 | 15.64% |
| Total | 4,476.54 | 100.00% |

Source: PT SMI 2013 Annual Report

To date, PT SMI has invested in about 50 infrastructure projects, assisted in six (6) PPP project preparations and is providing advisory services for a further three (3) PPP projects¹¹⁷. In 2013, it made financing commitments of Rp 2.25 trillion in ten (10) infrastructure projects, equivalent to more than 14% of aggregate project values, with the balance coming from either its partners in syndicated loan arrangements or project company equity¹¹⁸.

PT SMI has lent approximately Rp 250 billion to PT Moya as part of an Rp 750 syndicated loan with the International Finance Corporation (IFC) and PT IIF (see Sections 4.2 and 5.3 below) for the construction of incremental water supply facilities in Kota Tangerang¹¹⁹. The contract is a B2B arrangement. It has also lent a similar amount to PT Aetra Jakarta.

The company is providing advisory services for the Umbulan Water Supply Project, including: (i) advice to the CA (East Java Provincial Government), (ii) assistance with preparation of the pre-FS to PPP guidelines, (iii) market sounding activities, (iv) assistance with the preparation of tender documents to PPP guidelines, (v) assistance to the tender process and (vi) support towards achieving financial closure. PT SMI will probably also become a lender to the successful project tenderer.

¹¹⁷ Appendix 8

¹¹⁸ Ibidem

¹¹⁹ Ref Appendix 7.3 for a summary of PT Moya operations in Indonesia

4.2 PT INDONESIA INFRASTRUCTURE FINANCE (IIF)

PT IIF is a private business entity, also established in January 2010 under PMK No 100/2009¹²⁰, with the scope of providing long-term finance for infrastructure provision in Indonesia. Its founding shareholders were: (i) the GOI through PT SMI and (ii) a group of international partners consisting of the Asian Development Bank (ADB), Deutsche Investitions und Endwicklungs GmbH (DEG)¹²¹ and the International Finance Corporation (IFC). The ADB and the World Bank also provided loan capital of USD 100 million each. In March 2012, Sumitomo Mitsubishi Bank Corporation (SMBC) became an investor by means of an additional shares issue. PT IIF has a board of commissioners and a board of directors, as required by Indonesian law and the PMK, but is majority-owned by international shareholders.

Its independent audit report for FY 2013 shows the shareholding position of PT IIF to be as follows:

PT IIF Shareholding Position, FY 2013

| Shareholder | No Shares | % Holding | Value (Rp) |
|--------------|-------------------|----------------|--------------------------|
| PT SMI | 600,000 | 33.88% | 600 billion |
| ADB | 350,000 | 19.99% | 354 billion |
| DEG | 199,000 | 11.24% | 199 billion |
| IFC | 350,000 | 19.99% | 354 billion |
| SMBC | 263,780 | 14.90% | 264 billion |
| Total | 1,770, 868 | 100.00% | 1,770,868 billion |

Source: PT IIF

PT IIF showed an audited profit of Rp 31.5 billion on turnover of Rp 125 billion in FY 2013, mostly in the form of investment income.

In many ways, PT IIF and PT SMI offer similar services of finance and investment, advisory services and project preparation. The main difference between them is that PT SMI is 100% owned by the MOF on behalf of the GOI and consequently has limited discretion in the type of activities it undertakes. PT SMI is also the majority shareholder in PT IIF but, with 65% of shares owned by international investors, its policy towards and selection of investments can be more flexible.

Following a slow start to operations, mainly due to establishment and institutional issues between the original set of shareholders, PT IIF now has a portfolio which includes loans for PPP projects in the toll roads, coal, hydro and gas-fired power plant and telecommunications sectors. Its advisory and project preparation services are remunerated by the private sector, and through the APBN when provided for GOI assignments. In the case of the latter, it almost certainly has an informal, although unstated, understanding with PT SMI.

In the water supply sector, PT IIF has led a syndicated loan of Rp 750 billion to PT Moya for a series of BOT projects in Kabupaten Tangerang¹²². The agreement was signed in June 2013, with the contribution of PT IIF being approximately Rp 280 billion. The terms are for a 12 -year tenor including a grace period of five (5) years. The interest rate is understood to be in the order of 10%. The debt to equity ratio (DER) is 55:45, although PT IIF would be willing to accept a DER of

¹²⁰ Ref Footnotes 40 and 109

¹²¹ German Investment Corporation, a subsidiary of KfW

¹²² Ref Appendix 7.3

70:30 and, in particular circumstances, as high as 80:20. The arrangement, which was signed in June 2013, took about six (6) months to close; since the MOU was signed in February 2012, this means that it took PT Moya about ten (10) months to find a basis for negotiating a loan. The commitment fee¹²³ has been paid but no drawdowns have been made as yet, reportedly because of the need for an AMDAL (environmental impact analysis) due to the change of location of a WTP. However, some sources state that the real reason for the loan not disbursing is because of alleged irregularities.

PT IIF is also the transaction adviser for one of the two remaining pre-qualified project companies for the Bandar Lampung water supply concession¹²⁴, and will become a lender if its client is successful in the forthcoming tender. It has also been appointed as the transaction adviser to the regional government CA for the planned West Semarang water supply concession¹²⁵.

4.3 PT PEMJAMINAN INFRASTRUKTUR INDONESIA (INDONESIA INFRASTRUCTURE GUARANTEE FUND (IIGF))

PT IIGF was established in 2009 as an SOE infrastructure guarantee business entity (*badan usaha penjaminan infrastruktur* – BUPI) by PP No 35/2009¹²⁶ with an equity capital of Rp one (1) trillion provided through the APBN to process and issue infrastructure guarantees.

The formation of PT IIGF resulted from a provision of Perpres No 13/2010¹²⁷ for the issue of GOI-backed guarantees to enhance PPP project bankability and provide the necessary degree of comfort for investors. The processes for issuing such guarantees are governed by PP No 78/2010¹²⁸ and PMK No 260/2010¹²⁹. Subsequently, the IIGF has issued a guideline¹³⁰ providing a step-by-step procedure of the infrastructure guarantee provision process for interested parties, but particularly for the benefit of Government Contracting Agencies (GCA or CA). Much of the balance of this sub-section is a summary of this guideline.

As the financial intermediary for the provision of GOI guarantees for PPP infrastructure projects, the objectives of the IIGF are to: (i) improve the creditworthiness and bankability of such projects, (ii) provide a transparent and accountable process in the provision of the guarantee, and (iii) contain the exposure of the GOI's contingent liabilities and thus minimise risks to the APBN.

Each project proposed for a guarantee from the IIGF must: (i) be a PPP project in accordance with Perpres No 67/2005 and subsequent amendments thereto, (ii) comply with relevant sector regulations¹³¹, (iii) be procured through a transparent and competitive tender process, (iv) be technically, economically, financially, socially and environmentally viable, and (v) be subject to an agreement which contains provisions for binding arbitration.

The IIGF charges fees for its operations. Its fees for the guarantee to project companies are payable in the form of an up-front fee and on the outstanding balance in the contract. These range between 75 and 150 basis points of the project costs, with the income being used to pay

¹²³ Understood to be 2% of the loan value

¹²⁴ Ref Appendix 6.2

¹²⁵ Ref Appendix 6.4

¹²⁶ PP No 35/2009 on Central Government Equity Participation concerning the Establishment of a State-Owned Enterprise for the Issuance of Infrastructure Guarantees

¹²⁷ The first amendment to Perpres No 67/2005

¹²⁸ Perpres No 78/2010 on Infrastructure Guarantees for PPP Projects to be Provided by an Infrastructure Guarantee Business Entity

¹²⁹ PMK No 260/2010 on Administrative Procedures for the Provision of Infrastructure Guarantees for PPP Projects

¹³⁰ Infrastructure Guarantee Provision Guideline, now in its 2nd Edition, March 2012

¹³¹ Regulations for all PPP sectors were issued between 2005-09; that for water supply is PP No 16/2005

for IIGF monitoring and evaluation of projects. The IIGF is expected to make a profit on its business operations.

Four (4) stages are required for the issue of an IIGF guarantee, namely:

- Consultation/Guidance: the IIGF provides information to the applicant on guarantee criteria and process required to obtain the guarantee, e.g. PPP agreement;
- Screening: the CA completes the screening form for evaluation by the IIGF to determine the eligibility of the PPP project to obtain the guarantee;
- Appraisal: the IIGF makes a detailed appraisal of project feasibility in terms of legal, technical, financial, economic, environmental and social aspects, as well as the CA's ability to fulfil its financial obligations under the draft PPP agreement. Appendix 10.1 summarises these criteria; and
- Structuring: the IIGF prepares the structure of the guarantee and its tenor, risk coverage and financial obligations.

In accordance with Perpres No 78/2010, the terms and conditions of the draft PPP agreement must satisfy the IIGF in terms of the following requirements:

- Allocation of risk between the CA and the project company in accordance with standard principles; and
- Mitigation measures by both parties to avoid risk and to mitigate the impact should a risk event occur.

The IIGF has identified risk allocation between public and private sector parties and recommendations for risk mitigation measures for risk categories and events in each of the eight (8) PPP sectors in the form of a guideline. The water supply sector risk allocation matrices shown in Appendices 10.2 and 10.3 are not rigid, and may be varied in accordance with the specific requirements of each project.

Some of the risks identified are applicable to all sectors, whilst others are sector-specific. The structures for water supply BOT and concession projects are presented in the pages following as Figures 4.1 and 4.2

The BOT structure is applicable to production and transmission, O&M or distribution projects or any combination of these. The sector specific risks include those related to unabsorbed treated water production, raw water input in terms of quality, quantity and continuity, and a breach of off-taker's contractual obligations.

A concession is a BOT plus the retailing of water and involves a significantly higher investment. It is the preferred structure for a "green fields" project. The matrix of Appendix 10.3 for concession projects shows only those risk events which are additional or with a different risk allocation to those in the BOT matrix. For example, since a concession activity involves the full set of water supply services, the Project Company (PC) usually bears the demand and output risks, whereas a BOT PC does not. The concession PC is also more exposed to political risk, as opposed to commercial risk, when the tariff adjustment mechanism is due for implementation.

In addition to risk allocation and mitigation measures, the other requirements in the draft PPP agreement which must be satisfied before the IIGF will issue the guarantee are as follows:

- The estimated value of the financial obligations or a formula for determining the value of the risks which the CA will bear;
- The estimated time required for the CA to fulfil its obligations, including a grace period;

- A procedure to determine the condition when the CA is unable to fulfil its financial obligations under the PPP agreement;
- A disputes procedure defining the dispute resolution mechanism and/or arbitration procedures;
- The governing law of the PPP agreement to be that of Indonesia.

IIGF guarantees are intended to apply during all stages of a PPP project, from its commencement until the end of the BOT/concession tenor. The value of the guarantee is recorded as a liability in the IIGF balance sheet and the funds placed in a reserve account. The value of the guarantee is progressively written down and funds released to equity as the amount outstanding on the contract reduces annually.

The company has its own skills to evaluate and process requests for guarantees, but uses consultants as required to review IIGF evaluations and recommendations. This particularly applies to technical reviews.

To date, the IIGF has issued only one guarantee – for the 2,000 MW coal-fired power plant to be constructed in Kabupaten Batang, Central Java Province. It expects to close a second guarantee for an oil refinery in the near future.

The IIGF is also involved in providing guarantees for the proposed Bandar Lampung partial concession and the Umbulan Springs BOT. In the case of the Bandar Lampung project, the risk allocation of the guarantee has been agreed with the parties but cannot be issued until the VGF has been agreed by the MOF¹³² because, without the VGF, the project is not financially viable. For Umbulan, the issue is somewhat more complex, with the relevant risk being borne by the East Java Provincial Government whilst the beneficiaries are located in the five (5) regional government areas. In addition, there are issues with Kota and Kabupaten Pasuruan regional governments still outstanding, whilst arrangements for the funding of the distribution systems are not yet clear due to implementation issues with the umbrella agreement and credit guarantee arrangements in Perpres No 29/2009¹³³.

4.4 RELATIONSHIPS BETWEEN PT SMI, PT IIF AND PT IIGF FOR PROVISION OF LONG-TERM INFRASTRUCTURE FINANCE FOR PPP

In summary, it is evident that the scope of the above three (3) institutions is to provide a synergistic approach to the financing of increased infrastructure development, especially through the PPP process as follows:

- PT IIGF provides a menu of guarantees against specified investment risks in order to enhance project feasibility and provide comfort to investors; and
- PT SMI and IIGF make available co-financing towards feasible infrastructure projects.

All three (3) institutions combine towards promoting infrastructure development through:

- Advisory services such as feasibility studies and financing structures;
- Advice to the GOI based on what are perceived to be real and potential problem areas in increasing PPP involvement in infrastructure and on possible solutions such as: (i) support in the form of financial incentives, (ii) policy facilitation and (iii) regulatory reform; and
- Socialisation through national and international investment and infrastructure forums.

¹³² Ref Section 3.4.1 and Appendix 7.2

¹³³ Ref Section 3.1.2 and Appendix 7.1

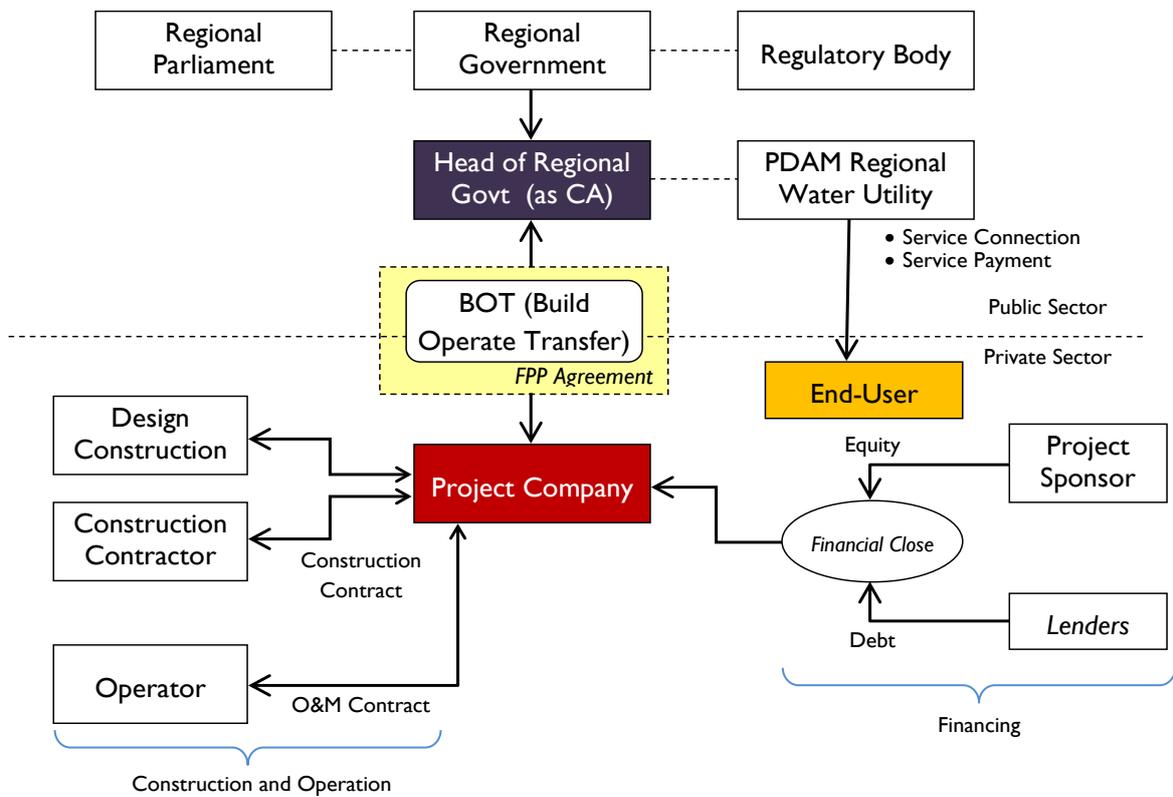


Figure 4.1: BOT Concession Structure
(Source: IIGF)

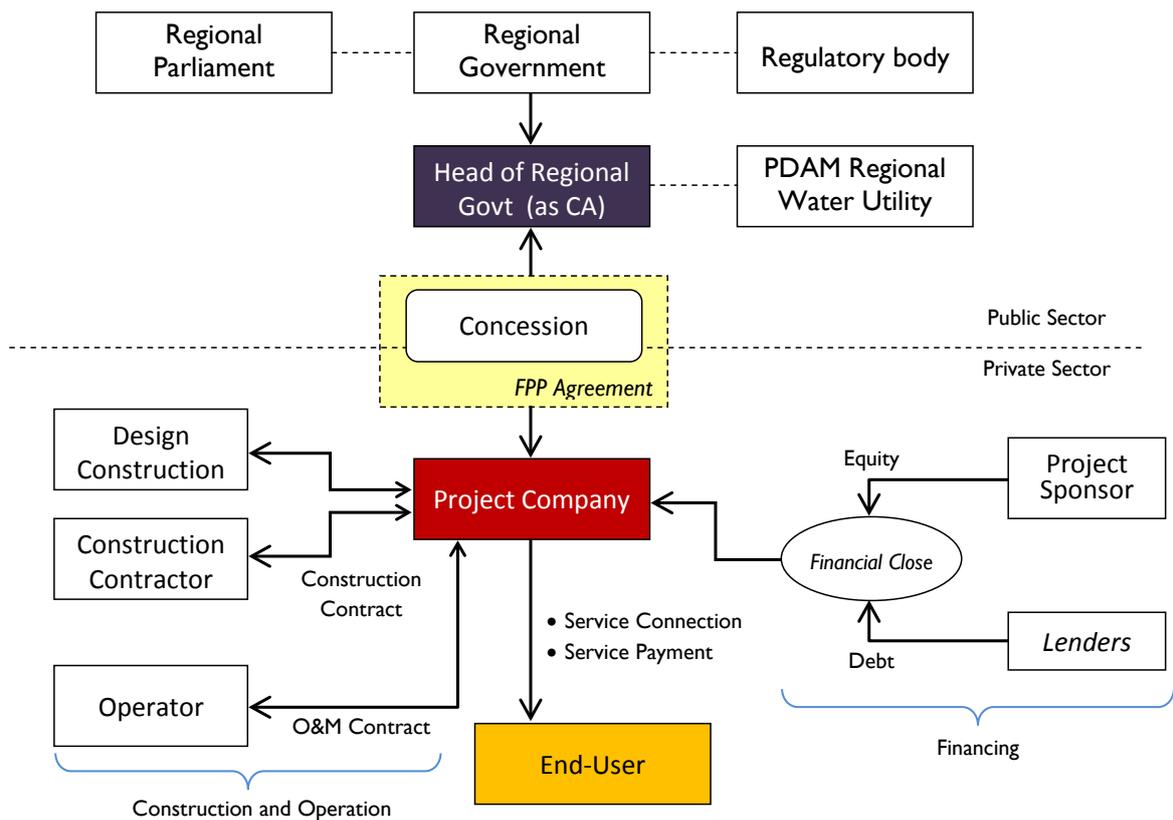


Figure 4.2: Water Concession Structure
(Source: IIGF)

4.5 PT PUSAT INVESTASI PEMERINTAH (PIP) (INDONESIA INVESTMENT AGENCY)

The sources of funds for the PIP are derived from: (i) the state budget (APBN); (ii) returns on investment; (iii) mandates from other parties or trust funds, and (iv) other authorized sources, which could also include external loans.

The current scope of the PIP is two-fold: (i) investing in marketable securities through purchase of shares or debt securities, and (ii) direct investment through equity participation in PPP, and loans to non-PPP entities such as: state-owned enterprises, businesses, central and regional government public service agencies (BLU and BLU-D) and regional governments. At December 2013, its total investment portfolio amounted to Rp 26.4 trillion.

In terms of infrastructure, the PIP has been mainly involved to date in pre-financing land acquisition for toll roads construction and in lending to regional governments for urban service deliveries. By the end of 2013, it had a portfolio of 21 loans with a value more than Rp two (2) trillion¹³⁴ provided to regional governments for direct revenue-generating projects such as general hospitals, bus terminals and markets, and for non-revenue generating projects such as roads and bridges which provide economic benefits and indirect revenues. A further 23 loan applications from regional governments are in the pipeline. Standard lending terms are usually for a period of five (5) years at an interest rate composed of Bank Indonesia (BI) base rate plus 200 basis points. The PIP does not have to seek loan approvals from other directorates-general in the MOF. As a BLU, it is not limited by the GOI annual budget cycle and it can carry forward any unused funds into the following fiscal year. The PIP has an SOP that all loan submissions must be processed to a decision on whether or not to loan, or whether to seek additional information within 20 working days.

The PIP has not as yet been involved in the Perpres 29 activity or in any form of lending for water supply. It has been approached by the Sumitomo Mitsubishi Bank Corporation with a proposal to assist in the preparation of municipal bonds for financing urban infrastructure, including water supply; however, the PIP has declined because it already has sufficient capital investment equity for loans through its original five-year allocation on the APBN, without the need for recourse to bond financing to boost its funding provisions.

A recent development is a co-operation with the World Bank to develop an Indonesia Water and Sanitation Investment Facility (IWSIF). The concept of the IWSIF is to provide credit through regional governments for non-creditworthy PDAMs, i.e. notionally to complement the Perpres 29 programme which lends through regional governments only for creditworthy PDAMs. In other words, for the water supply sector, the funds would be lent for items such as distribution systems, NRW reduction and WTP rehabilitation and up-rating, whilst the more “lumpy” investments of new WTPs, raw and bulk water transmission mains and reservoirs would, in principle, continue to be grant-funded by Cipta Karya at the MPW through the APBN as TP.

The original idea was to house the facility in PT SMI, but the PIP was eventually selected and approved by the MOF following TA assistance funded by a bilateral grant administered by the World Bank. However, recent developments suggest that the IWSIF will be managed under a cooperative institutional arrangement, between technical ministries and the PIP, with the PIP being the project finance management unit. This is discussed in Section 4.6 below.

Of related interest is an ongoing discussion within the MOF, led by the DJPK, to change the remit of the PIP into that of a development lending agency in the form of a regional infrastructure development fund. In such case, the PIP’s other functions as a domestic sovereign investment

¹³⁴ Ref Appendix 4

fund would likely be transferred to others, e.g. PT SMI, and the PIP would remain as a BLU instead of being translated into a BUMN (SOE). This would clearly require a change to the PIP's PP mandate.

4.6 INDONESIA WATER AND SANITATION INVESTMENT FACILITY (IWSIF)

The design of the IWSIF proposes a three-phase process to accessing credit:

- Application phase, during which both PDAMs and their regional government owners would register with the PIP and submit all relevant documentation (yet to be defined) for evaluation;
- Capacity building and technical assistance, wherein the PDAM and its regional government owner would be assessed: the PDAM for technical, financial, management and governance capability and the regional government in terms of fiscal capacity. A performance agreement would then be drawn up to determine eligibility for further assistance; and
- Project financing phase, in which those PDAMs and regional governments meeting the eligibility criteria may apply for loans and grants.

Earlier in the IWSIF formulation stage, it was proposed that all its functions, i.e. sector performance monitoring and development and project finance management would be housed within the PIP, which would be responsible to an executive committee of Echelon I staff from the MOF, BAPPENAS, MOHA and MPW which would be responsible for providing policy and overall guidance. However, subsequent discussions between GOI stakeholders concluded that, although the PIP has demonstrated capability of working with regional governments, it does not, as yet, have the experience of working with PDAMs; nor does it possess resources with in-depth knowledge of the water (and sanitation) sector(s). Furthermore, it was considered that placing all of the IWSIF functions under the PIP might compromise the primacy for overall sector performance and development; and that there should be a balance between the sector's need for investment, which can be provided by the PIP, and for performance improvement in general which could only be provided by the technical ministries. In addition, the PIP does not have the resources to provide capacity building and technical assistance, which is one of the main products to be offered by the IWSIF.

It is now being proposed that the executive committee should be retained, but that an IWSIF operating team should be established, consisting of two (2) units: (i) an IWSIF management unit (IMU) which would be responsible for overall sector performance and development, and (ii) a project finance management unit. The skills required for the IMU are housed in Cipta Karya and BPPSPAM at the MPW and at BAPPENAS. Therefore it has been proposed that the unit should be located in Cipta Karya under the Director of Bina Program. The skills required for the project finance management unit are already available in the PIP through its existing activities. In addition, the need for performance monitoring and evaluation could be handled by BPKP (*Badan Pengawasan Keuangan dan Pembangunan* – the GOI Finance and Development Supervisory Agency) which already has the responsibility for conducting annual performance audits (*laporan kinerja*) on PDAMs.

The main advantage of the above arrangement is that it does not require any new institutions to be established and it takes advantage of skills which are already available. The main disadvantage is that it brings too many players into the game, a formula that has not always worked well in the past. However, it does side-step the time-consuming procedures of the line directorate-generals at the MOF.

Current thinking is that terms of the loans would be determined on the basis of the fiscal capacity of both the PDAMs and their regional government owners. The options are that: (i) regional governments with a low fiscal capacity would borrow at a concessional rate of interest, or example, BI rate minus 200 basis points, (ii) those with a medium fiscal capacity at BI rate only, and (iii) those with a high fiscal capacity at BI rate plus 200 basis points. The last of these is already authorised within the PIP's mandate¹³⁵, but the first two would probably require separate approval, either through a new decree or with the specific approval of the supervisory board (*dewan pengawas*) which all BLU are required to have. Regional government mapping is currently under way. The maximum single loan value being considered is Rp 100 billion. Loan tenors have not yet been determined, but would likely be longer than the current PIP practice of five (5) years and would be provided with a one-year grace period. PDAM performance indicators and performance contracts will probably be included as loan conditions. Loan evaluation will also likely take into account the potential economic benefits as well as financial parameters, i.e. a project may be acceptable for loan purposes even if the FIRR is below the interest rate, provided the economic internal rate of return (EIRR) is favourable.

A potential problem with the concept, in addition to the usual ones of regional government reluctance to borrow and face exposure to the intercept, is that heads of regional government may well decide to pass on the loan arrangements with the PIP directly to their PDAMs without taking into consideration the creditworthiness of the water utility. For example, a regional government with a high fiscal capacity might well pass on the same loan terms and conditions to a non-creditworthy PDAM. However, the concept is still at the formulation stage and there is still an opportunity for suitably accommodating measures to be taken.

Investment funds for the PIP would be provided through a blend of APBN provisions and donor loans and grants. Channelling mechanisms for TA grants need to be worked out, as the PIP does not have a mandate for grants at present. However, it is understood that this could be arranged through an amendment to PP No 01/2008.

The current plan is for PIP and World Bank-supplied TA staff to visit some 40 PDAMs and their regional government owners and assess willingness to participate. At mid-April 2014, 15-20 had been canvassed in Sumatra, Kalimantan and Sulawesi. The reaction has been mixed, even though the aversion to the intercept by the DPRD could be mitigated through the planned revision to UU No 33/2004 which would allow regional governments to guarantee loans by using their discretionary funds (PAD, DAU, DBH) as collateral, although not their fixed assets.

It is planned that the IVSIF will become operational at the end of 2014 or the beginning of 2015. As suggested in Section 3.2, in the event that the administrative procedures for implementing Perpres 29 are not improved or the Perpres is not renewed, then the likelihood is that the responsibility for channelling investment funds from the government to creditworthy PDAMs will eventually be transferred to the IVSIF; in which case the involvement of the domestic commercial banks will no longer exist. It is not possible to speculate how long this process will take, although much depends on whether the MOF will let the Perpres lapse at the end of 2014 or renew it but without the GOI guarantee. If the latter option is chosen, which would mean the the Perpres will expire later rather than sooner, it is entirely possible that the GOI may soon find itself in the somewhat anomalous position of having a credit facility in place for non-creditworthy PDAMs, but not for those which are creditworthy.

For IUWASH, at present, the interest in assisting the IVSIF should be through a transfer of credit evaluation tools (e.g. the creditworthiness ladder). In addition, the parties to the establishment of the IVSIF recognise that there may be a need for national and international consultants to provide TA to candidate PDAMs and regional governments in capacity building. It

¹³⁵ Under KMK No 238/2010

is likely that bilateral agencies will be asked to provide support. Clearly, this could be a useful entry point for the follow-on phase of IUWASH.

In addition, it has been determined that funds originally earmarked for an international study tour to expose GOI officials to options available for financing water supply would not necessarily represent the best value for money. As a result, IUWASH, with USAID approval, will now look for opportunities to deploy the funds with the World Bank as assistance towards the formation of the IWSIF.

5. OTHER DONOR ACTIVITIES IN THE WATER SUPPLY SECTOR AND RELATED ISSUES

5.1 WORLD BANK

During the term of the IUWASH project, the World Bank (WB) has undertaken the following activities in the water supply sector:

- Monitoring and evaluation of the ongoing implementation of three (3) subsidiary loans (SLA) on-lent to regional governments for investment in their PDAMs through the UWSSP¹³⁶ sovereign loan. Further demand has dried up because of the reluctance of heads of regional governments and their DPRD to accept the contingent liability of the intercept now attached to all loans from the MOF to regional governments in the event of default. The WB does not seem to be seriously promoting this window any more.
- A USD 100 million loan to PT IIF
- The IWSIF initiative described in Section 4.6 above.
- TA assistance for PPP institutional development, including guidance on viability gap funding, operationalising the IIGF and assisting with the preparation of a corporate strategy and business plan for the IIF.
- TA assistance for development of Umbulan Springs and Bandar Lampung PPP projects
- Some 26 urban areas in Surabaya have been equipped with zoned metering in a pilot project to reduce non-revenue water (NRW), also financed through a bilateral grant administered by the WB. A successful outcome may result in the WB proposing an NRW-related loan for other metropolitan and large secondary city urban water supply projects.
- Preparation with Cipta Karya of a water investment road map to assist the GOI in reaching its 2015 MDG goals¹³⁷.
- Currently preparing a public expenditure review of the water supply sector in Indonesia. This is expected to be completed in November 2014.

5.2 ASIAN DEVELOPMENT BANK

Like the WB, the ADB has had limited loan activity in recent years for GOI-funded physical investment in the water supply sector because of the collapse of the SLA lending channel of external loan proceeds through the MOF to PDAMs. The ADB now looks for loans where the funds can be on-granted. Future loans will be based on achievement by institutions of key performance indicators (KPIs) in the areas of technical, institutional, financial and good governance accomplishments.

¹³⁶ Ref Footnote 4

¹³⁷ Published in June 2011

Activities in the last four years include:

- The Integrated Citerum Water Resources Management Investment Project is a four-tranche loan to be disbursed over fifteen (15) years through the ADB's Multi-Tranche Financing Facility (MFF). The first tranche of USD 50 million was released in 2009. One benefit will be to improve bulk water supply to DKI Jakarta, which receives 80% of its raw water from the West Tarum Canal, by means of the rehabilitation of the 54 kilometre Curug- Bekasi stretch of the canal. Other beneficiaries will be inhabitants of Kota Bekasi and Kabupatens Bekasi and Karawang regional governments. One of the objectives of the second phase will be to improve bulk raw water supply to Kota Bandung.

There have been a number of civil society issues with this project, especially about the alleged lack of consultation with affected communities.

- Ongoing project preparation for a proposed USD 50 million loan for IKK peri-urban water supply systems, expected to yield about 200,000 connections. The systems will be managed and operated by BLU-D or community-based organizations (CBOs) and the loan will include provisions for institutional and financial capacity-building
- A 20% shareholding in PT IFF, together with a USD 100 million loan
- Preparation of a water supply and sanitation sector assessment, strategy and road map for Indonesia¹³⁸

5.3 INTERNATIONAL FINANCE CORPORATION

The IFC has a 20% shareholding in PT IIF and has committed USD 23 million equivalent towards the PT IIF-led loan to PT Moya Indonesia for the Kota Tangerang BOT water supply projects, as well as USD 8.7 million equivalent as an equity investment. It has also provided remunerated capacity-building services through PT Moya Indonesia to PDAM Kota Tangerang to assist the utility to manage the forecast increase in connections from 30,000 to 300,000. However, there are reports that the IFC has now withdrawn from the syndicate because of irregularities by the borrower, thus probably triggering a decision by the syndicate not to disburse.

The IFC has provided advisory services to PT SMI in connection with the Umbulan Springs BOT and also to Manila Water for the Bandar Lampung concession; it will lend to the PC to be led by Manila Water if the consortium is successful with its tender.

Since 2003 the IFC has had a rupiah facility for lending to regional government enterprises (BUMD), including PDAMs, without a sovereign guarantee, which could finance between 25% and 50% of water supply project costs, depending on the service area expansion content. The interest rate would be the normal international commercial rates for Indonesia, with loan tenors of 15-20 years. This facility does not appear to have been used as yet.

5.4 INDONESIA INFRASTRUCTURE INITIATIVE

The first phase of IndII was from 2008 to 2011. The second phase is well advanced and an extension to January 2016 is expected to see all planned activities completed. A third phase, the design for which has recently been awarded, should commence mobilisation immediately afterwards with a continuation of similar activities and the same objectives. The role and

¹³⁸ Issued in March 2012

responsibilities of IndII are totally different to those of IUWASH: IndII operates as a facility which designs activities, issues tenders and awards contracts for them, supervises their implementation and provides a contracts administration function.

Its activities in the water supply sector include the following”

- The water *hibah* programme. This extremely successful component delivered 79,500 connections in Phase I and is being scaled up to yield a further 250,000 in Phase II. Sections 2.2.4 and 3.2.3 provide more ample descriptions.
- Financial Reform of 20 PDAMs. The activity involved assistance to Cipta Karya through the preparation of business plans and pre-FS for presentation to commercial banks for obtaining credits in accordance with the guarantees and concessionary interest rates offered by Perpres No 29/2009. IndII participation has encountered the same difficulties as other players in this activity, as discussed in Section 3.1.2.
- NTT/NTB Water Supply Governance. The objective is the provision of improved levels of water supply service deliveries through the application of social contracts between PDAMs, regional governments and their communities which will facilitate better communications and trust between all three parties and thus the understanding of the need for full cost recovery tariffs. A first phase has already resulted in improved service hours and tariff revenues. A second phase is about to commence.
- Jatiluhur – Jakarta Pipeline and WTP Project: IndII has funded a technical business case and pre-FS for this very large and strategic project which is intended to resolve the critical water shortages in DKI Jakarta, Kota and Kabupaten Bekasi and Kabupaten Karawang. It will involve the construction of 15,000 lps water treatment plant facilities and triple 1.8 metre diameter 80 kilometre length transmission mains. A three-stage development approach has been proposed in order to maximise cost benefits.

BPPSPAM has announced a 2014 groundbreaking of the first phase of the project, with a capacity of 5,000 lps at an estimated cost of Rp 1.6 trillion, to take place as soon as the three (3) SPVs to manage the project have been formally established. These will belong to DKI Jakarta, the West Java Provincial Government, and PJT II¹³⁹ and PT Wijaya Karya¹⁴⁰. The MPW will be the majority shareholder, acting through PJT II. Consequently, there will be no private sector participation under these arrangements.

5.5 OTHER BILATERAL DONORS

Two (2) other major bilateral donors to Indonesia are *Kreditanstalt für Wiederaufbau* (KfW) and the Japan International Cooperation Agency (JICA). KfW withdrew from providing assistance to the water supply sector in Indonesia several years ago, whilst the JICA website for Indonesia does not show any loan-funded or TA activities in the sector.

¹³⁹ A Water Services Public Corporation owned by MPW

¹⁴⁰ A state-owned construction company (*persero*)

6. PROVINCIAL GOVERNMENT WATER SUPPLY ENTERPRISES (PDAB)

6.1 GENERAL

The legal basis for establishing Provincial Government Water Supply Enterprises (PDAB) is UU No 07/2004¹⁴¹, PP No 16/2005 and PP No 38/2007¹⁴². As a result of umbrella agreements between the MPW (represented by the Directorates General of Water Resources (DJSDA) and Human Settlements – or Cipta Karya), provincial governments and city/regency governments where the PDAM is located, investments in piped water can be coordinated to provide regional water supplies (SPAM) through implementation of dams (funded by the APBN-DJSDA), WTP, bulk water transmission mains and primary storage reservoirs (funded by the APBN-Cipta Karya and APBD Province) and distribution systems and connections (funded by the APBD City/Regency and PDAM). On behalf of the central and provincial governments, PDABs are mandated to act as authorised operators for SPAM across cities and regencies. In carrying out its regional mandate, a PDAB may also enter into partnerships with third parties (e.g. cooperatives, private sector business entities and communities under the above law and regulations, by means of authorisation through a provincial government decree (*perda*).

Among the requirements for establishing a SPAM are the availability of a master plan and pre-feasibility study, an environmental impact assessment and a preliminary design of the distribution network.

The SPAM initiative is ostensibly designed to overcome the lack of adequate sources of raw water in some cities and regencies through the sourcing of excess resources which are available in other regional government areas within the same province. However, it is also seen as the MPW's response to the inability of PDAMs to raise equity finance, the unwillingness or inability of some regional government to assign priority to the water supply sector and the failure at central government level to devise any workable loan finance strategy. The continued weakness of the Perpres 29 programme to deliver loan financing for secondary and tertiary distribution systems¹⁴³ may yet have a negative impact on the SPAM initiative.

However, it is recommended that the follow-on stage of IUWASH monitors these SPAM developments because, if successful, SPAM would provide a rich source of additional connections.

6.2 CENTRAL JAVA PROVINCE

In Central Java Province, a total of eight (8) regional SPAM umbrella agreements were signed in October 2011 between the MPW, the provincial government and the 23 participating city/regency regional governments in each SPAM. The total investment requirement in 2012 prices was estimated at Rp 4.5 trillion rupiah, of which:

- Rp 2.7 trillion from the APBN for raw water works and bulk transmission mains
- Rp 0.8 trillion from the APBN, APBD Province, banks and PSP for WTP and primary distribution systems
- Rp 1.1 trillion from the APBD, City/Regency, PDAM, banks and PSP for secondary and tertiary distribution systems and connections

¹⁴¹ UU No 07/2004 on Water Resources

¹⁴² PP No 16/2005 and PP No 38/2007, see Footnotes 18 and 17 respectively

¹⁴³ Ref Section 3.1.2

The investment is expected to provide 6,800 lps of potable water which would service 544,000 additional households. PDAB will sell treated water to each PDAM on a take-or-pay basis. Central Java is considered to be an ideal launching pad for the programme, because of its concentrated urban population clusters and, consequently, good economies of scale, as well as relatively well-performing regional governments and PDAMs.

To date, 75% of the Kabupaten Brebes and Kota/Kabupaten Tegal SPAM has been completed and 20% of the Kabupaten Kebumen and Purworejo SPAM. Implementation of the other six (6) SPAM has not yet commenced.

Details of all eight (8) planned regional SPAM are given in Appendix 11.

6.3 EAST JAVA PROVINCE

Through a license obtained from the MPW and an appointment by the East Java Provincial Government, the PDAB has been operating the water supply system in Pasuruan Industrial Estate Rembang since 1991. The system sources water from deep wells and serves approximately 80 industrial and commercial companies on the 250 hectare estate, with a total capacity of 120 lps. It will also access water from the Umbulan Spring BOT, commencing with a 100 lps offtake in the first year of operation and rising to 200 lps in the fifth year.

The PDAB will act as the provincial government's Project Management Unit (PMU) for the Umbulan Spring BOT and as the off-taker from the project company¹⁴⁴. There are plans for it to supply bulk water to the 90,000 barrels per day Cepu oil block in Kabupaten Bojonegoro and to develop regional SPAM throughout the province. It already has a 100 lps WTP constructed in 2012 and located in Kabupaten Mojokerto to supply treated water to adjoining areas in this kabupaten and Kabupatens Gresik and Lamongan. However, there are issues of asset ownership and the two (2) units have never operated.

6.4 OTHER SPAM PLANS

Cipta Karya plans to provide Rp 4.187 trillion in the 2015 APBN for extending SPAM in other provinces¹⁴⁵, as shown below

Year 2015 Cipta Karya Provincial SPAM Planned Investments

| Province | LPS | Rp Bill |
|-----------------------------|--------------|--------------|
| Bengkulu | 150 | 935 |
| South Kalimantan | 1,450 | 905 |
| North Sumatra | 1,200 | 796 |
| Central Java ¹⁴⁶ | 100 | 621 |
| D.I. Yogyakarta | 400 | 571 |
| Riau | 200 | 359 |
| Total | 3,600 | 4,187 |

¹⁴⁴ See Appendix 7.1

¹⁴⁵ Source: Bisnis Indonesia 17 March 2014

¹⁴⁶ Included in the Central Java SPAM estimates in Section 6.2 above

7. IDENTIFICATION OF INVESTMENT TRENDS IN IUWASH PARTNER PDAMS AND MDG GOALS

7.1 METHODOLOGY

The SOW statement requires:

- Collection of updated statistics regarding the amount of current investment in water supply infrastructure, the sources of this investment, and planned investment over the coming five (5) years, as well as amounts required to meet MDGs;
- Based on the above task, a quantification of capital investment in the water supply sector over the past five (5) years in IUWASH partner PDAMs, together with a disaggregation by funding source (i.e. PPP, commercial loan, GOI grant, regional government grant, PDAM equity, etc).

It has not been possible to meet these requirements in their entirety because:

- IUWASH PDAMs have different five-year business cycles in terms of their commencement and termination, and it has therefore not been possible to make any reasonable comparison on planned investments and their sources of funding;
- The amount of APBN through Cipta Karya at the MPW could not be obtained in a disaggregated form for individual IUWASH PDAMs;
- DAK grants, which are transferred by the MOF to regional governments, are usually provided for small value expenditures, often for CBO water supply systems which have no relationship with PDAMs;
- APBD development accounts for water supply also include investment in CBOs; and
- The regional government presentation of accounts is difficult to evaluate because of the SKPD (budget user by work unit) system.

This is a challenging exercise which needs to be consistently reviewed and updated over a full IUWASH cycle and it is therefore an activity which should be considered by USAID project designers for the next IUWASH programme.

Consequently, a different methodology is required to shadow developments in PDAM investment finance in recent years.

The first stage of the methodology used was to use official inflation statistics¹⁴⁷ to deflate gross fixed investment value to the base year (2008, 2009 or 2010) recorded by IUWASH to obtain present values. The final year PV of gross fixed assets was then compared with that of the base year and the results assembled in three (3) categories:

- Those PDAMs whose gross fixed assets values declined in base year constant prices over the period evaluated and were therefore barely recovering any depreciation at all through

¹⁴⁷ The Indonesia Central Statistics Office inflation figures are: 2009 – 2.79%, 2010 – 6.96%, 2011 – 3.79%, 2012 – 4.30% and 2013 8.38%

replacement. These constitute the first category. They are also receiving little, if any, grant assistance through the APBN and/or APBD;

- A review of previous financial projections (FINPROs) over periods with limited amounts of investment, as was generally the case between 1997 and 2008, suggests that an annual depreciation factor of 6% on fixed assets valued at historical cost is a conservative estimate and that using the same factor as a proxy for replacement cost at current prices is also reasonable. The second category consists of those PDAMs recovering at least a part of depreciation, but notionally unable to afford full replacement and to increase service coverage. They may be receiving some limited amounts of grant assistance through the APBN and/or APBD; and
- The third category is composed of those PDAMs which notionally fully cover depreciation, are able, to some extent, to improve services or expand service coverage to keep up with population growth and, possibly, to increase the actual area served. This situation is almost certainly being assisted through APBN/APBD grants, especially in the case of *kabupaten* PDAMs.

The second stage of the methodology was to use the IUWASH Performance Index for cost recovery factors of O&M plus depreciation. Interest is excluded because some PDAMs do not have any debt, whilst others have already restructured their debt but have again incurred arrears so that interest payments are not shown in the annual operating statements but instead transferred to current liabilities in the balance sheets. A factor of 1.2 for O&M plus depreciation is considered to be the minimum level for a sustainable water supply business¹⁴⁸.

A similar set of parameters was constructed for O&M plus depreciation in terms of sustainability, as follows:

- Those PDAMs with cost recovery factors of less than 100 for O&M plus depreciation are considered to be essentially unsustainable as business enterprises and are in urgent need of assistance;
- PDAMs with cost recovery factors of between 100 and 120 are partially sustainable but have issues of contributing significantly to investment through equity participation or through loans; and
- PDAMs with cost recovery factors greater than 120 are sustainable as business entities and should be capable, either through loan and/or loan finance, to contribute significantly to investment.

7.2 OUTPUTS AND CONCLUSIONS CONCERNING INVESTMENT TRENDS

Based on the first stage of the methodology described above, the table below shows to what extent the 49 IUWASH PDAMs which have been examined in this assignment may have been

¹⁴⁸ Taking into account that Section 25 of UU No 05/1962 on Regional Government Enterprises (BUMD) requires BUMD to pay 55% of their after-tax profits as a dividend to their regional government owners; the balance of 45% is retained by the BUMD but some is paid into pension and social/education funds. MOHA Decree No 690/2009 limits the dividend payment until the PDAM has achieved an 80% service area coverage which has been reached by very few PDAMs. However, many regional governments require PDAMs to make a contribution to regional government revenues (PAD), irrespective of the degree of service coverage and whether or not the PDAM makes a profit. The legal status of this is not clear. It is understood that the revision to UU NO 32/2004, currently in process, will replace UU No 05/1962 with a presidential regulation (PP) to be issued after passage of the revised law.

able to replace assets through depreciation coverage and grant assistance, and to improve service quality and/or coverage in terms of population and service area. It is presented below in summary form for each IUWASH region.

IUWASH PDAM Replacement of Fixed Assets

| IUWASH Region | Very Limited to Nil | Partial | Substantial | Total |
|-------------------------------|---------------------|-----------|-------------|-----------|
| West Java/Banten | 5 | 2 | 2 | 9 |
| Central Java | 6 | 0 | 4 | 10 |
| East Java | 3 | 7 | 1 | 11 |
| North Sumatra | 8 | 1 | 0 | 9 |
| South Sulawesi/East Indonesia | 5 | 0 | 5 | 10 |
| Total | 27 | 10 | 12 | 49 |

The results of this approach show that 55% of the PDAMs reviewed are unable to replace fixed assets through their depreciation allowance and therefore are unlikely to be capable of providing for future investment through accumulation of equity and are receiving only a limited amount of grant assistance. The situation is particularly acute for PDAMs in North Sumatra and Central Java Provinces. 25% are likely capable of substantially replacing fixed assets and probably of improving their service deliveries, but this may be due to significant APBN/APBD grant assistance.

The results in terms of PDAM operational sustainability, using cost recovery factors for O&M plus depreciation are shown below.

O&M and Depreciation Cost Recovery Factors

| IUWASH Region | Unsustainable | Partially Sustainable | Sustainable | Total |
|-----------------------------------|---------------|-----------------------|-------------|-----------|
| West Java/Banten | 5 | 3 | 1 | 9 |
| Central Java | 2 | 6 | 2 | 10 |
| East Java | 4 | 5 | 2 | 11 |
| North Sumatra | 7 | 2 | 0 | 9 |
| South Sulawesi/ East Indonesia | 4 | 2 | 0 | 6 |
| Total | 22 | 20 | 5 | 45 |

In this case, only 45 PDAMs partnering with IUWASH have been evaluated, as the performance data for four (4) of the South Sulawesi units are not complete. These PDAMs have actually received substantial amounts of investment over the period examined and, as they are *kabupaten* PDAMs, it is believed that much of this has come through grant assistance.

Otherwise, a comparison of the two methodologies shows a reasonable degree of correspondence in all IUWASH regions except for those PDAMs in Central Java Province. The reason for this may be that Central Java PDAMs are receiving only limited amounts of investment, but are managing operations comparatively well. The results for both approaches in the other four (4) IUWASH regions also show that investment and replacement are generally low and that at least 50% of PDAMs are unsustainable as going concerns.

Given that more than 60% of IUWASH PDAM partners are located in Java, it would be optimistic indeed to expect that the financial condition of most PDAMs in other areas of Indonesia is any better.

It is noted from the Performance Index that the difference in the ratios between O&M and O&M plus depreciation is often quite small and suggests that a high proportion of gross fixed assets has already been fully depreciated, another indication of the insufficiency of capital investment in the water supply sector.

Notwithstanding the improvements already made through IUWASH assistance, it is clear that, for the foreseeable future, most PDAMs will be unable to set aside funds as equity towards capital investment and will continue to need APBN/APBD assistance without major policy changes being introduced. Although it is recognised that PDAMs generally suffer from inadequate management and technical capacity, the biggest problem is the inadequacy of the tariff, as it has always been. It may well be that some regional governments are making over equity grants to their PDAMs as a quid pro quo for determining tariff levels on politically motivated grounds. If so, it is likely to prove to be a mistaken approach: APBN/APBD investment assistance will not solve PDAMs' financial problems unless regional governments provide for full cost recovery tariffs or approve compensating PSOs in the APBD which will allow PDAMs to operate and maintain their fixed assets properly.

7.3 INVESTMENT ACTIVITIES AND PLANS OF PDAMS VISITED

Brief summaries of investment activities from 2008-2012 and future plans of PDAMs visited during this assignment are given below. It is difficult to determine what financial support kabupaten PDAMs have received from their regional governments, as their water supply development account also includes investment in CBO operations. Where warranted, more extensive details are provided in the appendices.

- **PDAM Kota Surakarta:** The PDAM's gross fixed assets increased from Rp 126 to Rp 158 billion, an increase of Rp 32 billion of which Rp 18 billion was provided through the APBD. Applying the deflator to produce a PV in 2008 prices, the change in gross fixed assets at the end of 2013 was slightly negative with a factor of 0.97.

With IUWASH assistance, the PDAM is preparing a Perpres 29 submission for a 300 lps WTP in Pasar Semangi with a minimum potential of 6,000 new connections. However, the PDAM is not compliant with Perpres 29 qualifying criteria as it has arrears on its restructured loans. PDAM has requested IUWASH assistance to obtain alternative financing from a B2B partner. Since the tariff is below full cost recovery, this may prove difficult.

- **PDAM Kota Semarang:** Gross fixed assets have declined in nominal prices from Rp 394 billion in 2008 to Rp 367 billion in 2013.

There are two (2) B2B BOT operations totalling 450 lps, one (1) of which is discussed in Appendix 7.1. This BOT has had problems in the past with BPKP over the capex calculation and the tariff.

Appendix 6.4 provides details of a potential PPP BOT project in West Semarang involving a 1,050 lps BOT arrangement with a forecast of 80,000 new connections. The regional government would be the contracting agency. Approval to proceed is being sought from the DPRD. At a meeting with BAPPEDA, the regional government explained that it had sufficient resources to pay the contractor without any contribution from PDAM. This hardly seems to be the best way to improve management and good governance at the PDAM, especially given that NRW is currently in excess of 50%.

- **PDAM Kabupaten Gresik:** At the end of 2013, PDAM's gross fixed assets amounted to Rp 144 billion in nominal prices compared with Rp 97 billion in 2008. This yields a 2008 PV factor of 1.16. Most of the additional assets appear to have been funded through the APBN.

Two (2) WTP B2B projects in Kecamatan Krikilan and Legundi with a capacity of 300 lps are nearing completion, and IUWASH has assisted the PDAM to obtain a tariff increase to support the operations of this additional capacity.

Appendix 7.2 provides more details.

- **PDAM Kabupaten Lamongan:** PDAM's gross fixed assets increased from Rp 28 billion in 2008 to Rp 31 billion in 2013 in nominal process. This converts to a negative 2008 PV factor of 0.84.

The PDAM operates in low-income areas and has a weak financial capacity. The regional government also has a low fiscal capacity and can provide very limited grant support. Because of these problems, the regional government is preparing to offer a separate "green fields" PPP concession in a special economic zone on the coast with a 200 lps capacity at an estimated investment cost of USD 15 million. The revenue forecast is based on a distribution of 60% of water to household, government and social customers and 40% to industrial and commercial clients. VGF may not therefore be required. Tenders are expected to be issued later this year. The absence of MOF involvements suggests that this may be the first water supply PPP to achieve closure since that for Kabupaten Tangerang in 2008.

Appendix 6.6 provides more details.

- **PDAM Kabupaten Sidoarjo:** PDAM's gross fixed assets increased from Rp 131 billion in 2008 to Rp 188 billion in 2013 in nominal process. This converts to a positive 2008 PV factor of 1.16. APBD data are not available to assess the regional government's contribution.

PDAM has two (2) B2B BOT contracts in Kecamatan Rawen with a total capacity of 750 lps. An Indonesian SPV owned by a Malaysian company manages and operates both BOTs. Tariff negotiations are reported to be long and difficult, but relationships seem to be nonetheless cordial. There have been no issues to date with BPKP.

PDAM is relying on the next supply of treated bulk water to be provided from the Umbulan Springs BOT. It has prepared a Perpres 29 submission for co-financing of the distribution system requirement, which is presently with the head of regional government.

- **PDAM Kabupaten Mojokerto:** PDAM's gross fixed assets increased from Rp 12 billion in 2008 to Rp 21 billion in 2013 in nominal process. This converts to a healthy and positive 2008 PV factor of 1.32.

Section 6.3 notes that PDAB East Java has constructed two (2) lps WTPs in Kabupaten Mojokerto to serve this PDAM and PDAMs Kabupaten Gresik and Lamongan. However, they have never operated because of an assets ownership dispute between the MPW and the regent of Kabupaten Mojokerto.

- **PDAM Kota Bogor:** PDAM's gross fixed assets increased from Rp 177 billion in 2008 to Rp 258 billion in 2013 in nominal process. This converts to a positive 2008 PV factor of 1.13. However, this factor will be much healthier at the end of 2014 when PDAM expects to complete the implementation of a project co-financed by an Rp 84 billion SLA from World Bank loan proceeds. The loan is passed on to the PDAM through the regional government.

The PDAM is seeking finance towards a project costed at approximately Rp 400 billion for two (2) 400 lps new WTPs and the uprating of a third, plus transmission and distribution pipes. The regional government is unwilling to offer itself as a channel for either an SLA or a Perpres 29 loan because of the contingent liability of the intercept, not least because it has already agreed to such an arrangement for the SLA from the World Bank loan. PDAM is not interested in B2B cooperation arrangements.

Appendix 8.1 provides more information.

- **PDAM Kabupaten Serang:** PDAM's gross fixed assets increased by Rp 8 billion from Rp 38 billion in 2008 to Rp 46 billion in 2013 in nominal process. This converts to a negative 2008 PV factor of 0.92.

PDAM wishes to proceed with a new project to supply three (3) kecamatan. The design is based on a 200 lps WTP and distribution systems. It wants to apply for an Rp 40 billion Perpres 29 loan, but the DPRD will not agree because of the risk of the intercept. The FIRR of 9% means that conventional credit sources would be too expensive. However, since the total estimated value of the project is more than Rp 100 billion, it could possibly be promoted as a PPP and thus eligible for VGF.

There is already a 100 lps BOO unit operating in the kabupaten, serving an industrial estate. This is a private arrangement and not through the PDAM.

Further details are available in Appendix 8.2

- **PDAM Kota Bekasi Serang:** PDAM's gross fixed increased by Rp 44 billion from Rp 54 billion in 2008 to Rp 98 billion in 2013 in nominal process. This converts to a very healthy 2008 PV factor of 1.40. The TP channel through the APBN was the source of most of the investment.

PDAM has invited three (3) water supply contractors to tender for a 200 lps BOT WTP which is forecast to provide 15,000 new connections. Tenders are currently being evaluated. PDAM will issue a letter of intent to the successful bidder, but will not sign a contract until BPKP has given an opinion. It is preparing a second B2B arrangement with the assistance of IUWASH, again for a 200 lps BOT WTP with a yield of 15,000 connections, but will not proceed until the first B2B has been fully contracted.

A third future prospect is a 300 lps BOT for Kecamatan Pondok Gede through an offtake from the planned transmission main from Jatiluhur Dam. The vehicle for this project is planned to be a PPP. However, this project is some way in the future as it is not expected that ground breaking for the project will begin until late this year or early in 2015.

Appendices 6.3 and 8.3 provide more information.

7.4 CIPTA KARYA TECHNICAL ASSISTANCE TO IMPROVE PDAM FINANCIAL CAPACITY

7.4.1 Transfer of IKK Systems to Regional Government

Cipta Karya is in the early stages of implementing a change in the management and operation of peri-urban IKK water supply systems. The existing policy of kabupaten PDAMs being required both to operate commercially and to provide a water supply safety net via these small water supply systems to peri-urban populations is a failure. Many of them, particularly those outside

Java, are remote from kabupaten capitals, face severe managerial capacity problems and are inadequately funded for proper O&M. Cipta Karya is now examining how kabupaten PDAMs can be relieved of the burden of subsidising unprofitable IKKs so that they can operate their urban systems efficiently on a financially sustainable basis.

One option which is being actively considered, including its adoption for implementation under the proposed ADB loan for IKKs¹⁴⁹, is to transfer unprofitable IKK from kabupaten PDAMs to the public works departments in regional government. Technical service units (UPTD) could be established to manage and operate each IKK and subsidised as necessary. It is expected that some of this subsidy would be channelled through Cipta Karya on the APBN.

7.4.2 Rationalisation of Urban Water Supply Fixed Assets

Cipta Karya is also in the process of reconciling ownership of fixed assets. This issue dates back many years to the time when most water utilities were owned, financed (including O&M funding) and operated by the MPW through Potable Water Management Boards (BPAM). Once a BPAM was deemed to be financially sustainable, its assets were formally transferred to the regional government which, in turn, established a PDAM by decree to manage and operate these assets. By 1993, all BPAMs had been converted to PDAMs. Since then, the MPW (Cipta Karya) has continued to provide fixed assets to PDAMs, since 2005 in steadily increasing values, through the TP channel without formally transferring them. PDAMs accounts for these fixed assets as central government equity or as assets whose ownership status has not yet been determined.

Cipta Karya has now assembled all relevant data concerning these fixed assets and plans to transfer them to regional governments, the heads of which will then decide whether to retain them as equity investments on their own balance sheets or deliver them to their PDAMs by regional government decree.

Procedures governing fixed asset transfer between the levels of government and state and regional government-owned enterprises¹⁵⁰ are not simple. The authority for the asset transfer is the budget user (*kuasa pengguna anggaran* - KPA), the MPW in the case of assets funded through the TP channel. However, in the case of asset transfers of more than Rp 10 billion, approval is required through the Directorate General of State Assets at the MOF. The MOF has the right to approve or reject such transfers, but does not initiate requests for transfer, nor does the MPW, even though it has an assets management unit whose responsibilities are, however, limited to monitoring and evaluating transfers initiated by others.

PDAMs rarely request formal transfer of such assets because they already control their use. The MPW will have to disseminate the transfer initiation procedures to regional governments and their PDAMs. The MPW expects the entire process to take at least two (2) years more before the rationalisation is completed.

7.5 MDG GOALS

Target No 10 of MDG Focus 7 involves halving the number of people without sustainable access to safe drinking water (and basic sanitation) by 2015. In the case of Indonesia, the target is 68.87%. There are several versions of the status of Indonesia's progress towards this target at the end of 2013. The generally accepted statistic is 61.83%, as given by the MPW¹⁵¹.

¹⁴⁹ Ref Section 5.2

¹⁵⁰ PP No 06/2006, subsequently replaced by PP No 38/2006, on the Management of Central and Regional Government Property

¹⁵¹ Source: Investor Daily, 17 January 2014

There are no criteria for defining sustainable access. However, there are several definitions for improved water sources. In Indonesia, the following three (3) designations are used¹⁵²:

- The number of households with a piped water supply connection. This is clearly the most reliable definition and the one closest to meeting health standards;
- The percentage of the population using water from improved water sources at least ten (10) metres distant from a wastewater disposal site. Improved water sources include piped water, pumped water, bottled mineral water, water from a protected well or spring, and harvested rain water; and
- The percentage of the population using water from improved sources irrespective of distance from the nearest waste water disposal site. This definition may well include people using contaminated water.

The details of the methodology used by the MPW to calculate the number of people with access to safe drinking water are not known

The 2014 target is 65.61%. To achieve this objective, the MPW is allocating Rp 1.3 trillion from its FY 2014 APBN budget of Rp 5.7 trillion¹⁵³.

In the RPJMN for 2015-19, the MPW aims to meet a target of 100% coverage. The MPW estimates the amount required for this over the five-year period at Rp 270 trillion in 2014 prices, and has allocated the sources of funding as follows¹⁵⁴:

2015-19 Medium Term Development Plan Water Supply (RPJMN) Sector Investment and Proposed Funding Sources

| Source | Amount | % of Total |
|--------------------|--------------------------|-------------|
| APBN | Rp 90.7 trillion | 33% |
| DAK ¹⁵⁵ | Rp 24.7 trillion | 9% |
| APBD, CSR, PIP | Rp 98.9 trillion | 36% |
| KPS ¹⁵⁶ | Rp 27.5 trillion | 10% |
| PDAM | Rp 33.0 trillion | 12% |
| Total | Rp 274.8 trillion | 100% |

Unless there is a radical and immediate change to the attitude of regional governments towards the sustainability of the urban water supply business, together with improved managerial and operational capability at PDAMs and a workable financing mechanism for water supply capital investment, the prospects of PDAMs being able to generate Rp 33 trillion of equity and loan finance are exceedingly slim.

¹⁵² Ref: Global Environment Facility

¹⁵³ Source: Bisnis Indonesia, 17 March 2014

¹⁵⁴ Source: Bisnis Indonesia, 23 May 2014

¹⁵⁵ Mainstreaming of the DAK is discussed in Sections 3.2.1 and 3.2.3

¹⁵⁶ i.e. PPP, B2B

8. CONCLUSIONS

At the end of the ESP in December 2009, three (3) initiatives had been launched and were underway to resolve the longstanding problem of financing capital investment in urban water supply. These were: (i) a restructuring of non-performing loans from the MOF to PDAMs which would make them creditworthy, (ii) a novel financing mechanism via Perpres 29 which would encourage domestic commercial banks to lend to creditworthy PDAMs with the support of government partial credit guarantees and interest rate subsidies, and (iii) development of financial instruments and the establishment of non-bank financing institutions to support the PPP framework by encouraging and giving comfort and security to potential private sector investors, not only in urban water supply but across the whole range of infrastructure service deliveries. In the case of urban water supply, the second and third initiatives were also aimed at reducing the burden on the state budget (APBN) in view of the funding requirements needed to meet MDG goals of population access to improved water supply.

At this point in time, the conclusion of this report is that all these initiatives have failed to produce the results hoped for by a very substantial margin. One of the major reasons is the bureaucratic regulatory framework and the deeply embedded risk aversion within the line directorate generals at the MOF which has affected the progress of all the initiatives

The restructuring of PDAM NPLs is proceeding very slowly with less than half of PDAMs in default having reached agreement with the MOF, some of which have again fallen into arrears. Most of the remainder are still going through the restructuring process. The 2008 restructuring decree expired in mid-2013. Those PDAMs which did not submit restructuring proposals now face being made bankrupt by the MOF, although BPPSPAM is trying to mediate a solution. Because of the unwanted consequences of PDAM bankruptcy, it is expected that some sort of compromise will be reached, but almost certainly with the proviso that the MOF will be repaid its outstanding principal plus the interest thereon. The restructuring process will then grind on to a conclusion, but it is difficult to predict a timeline.

The Perpres 29 initiative, itself extremely innovative, has failed due to the unwillingness of regional governments to provide partial credit guarantees due to contingent liability of the intercept and the bureaucratic hurdles posed by the MOF implementing regulations. Unless renewed in a workable form at the end of 2014, the scheme will likely collapse, leaving GOI without a financing mechanism for creditworthy PDAMs. In any case, commercial banks are unlikely to be willing to continue with such time-consuming procedures for a low-value, low-yield loan portfolio.

GOI has reinforced the 2005 PPP legal framework with a new law on land acquisition, and regulations for risk mitigation guarantees and viability gap funding for private sector investors, the last of these being particularly relevant for water supply projects. However, the gestation period for preparing these measures has been long and, even now, there seems to be disagreement within the MOF on the VGF measures in its own regulation. It has also established state-owned non-bank finance institutions, staffed with experienced professionals, to support the PPP process; however, all major decisions by these institutions have to be referred back to their owners at the MOF.

As a result, none of the several PPP water supply activities initiated has reached a successful closure and some potential investors have lost interest and dropped out of proceedings. Nevertheless, led by BAPPENAS, the GOI is still determined to persist with PPP for water supply and is examining schemes to vary VGF limits and relax IIGF rigidities for projects involving social service deliveries.

B2B arrangements between PDAMs and private sector investors have been conducted since 1993. Because B2B does not involve an open tender process and since there was no regulation until 2010 by the MPW, contract arrangements prior to that year seem to have been somewhat opaque, and some contract issues have been questioned by BPKP, leading to delays in physical implementation and take-or-pay tariff reviews, and possibly some political interference from regional governments. As noted above, the MPW, through BPPSPAM, has issued a decree on B2B and is currently refining these procedures as experience is gained. As well as the MPW, BAPPENAS is planning to support B2B. The conclusion is that, because of its inherently less transparent process than PPP, B2B will continue to encounter problems until a satisfactory regulatory framework is worked out. This should include consultation with and participation of BPKP. Nevertheless, with at least 60 B2B projects now in operation, it may be reasonably concluded that, in the continued absence of any GOI viable credit mechanism, B2B has now become the generally accepted method of non-grant financing of treated bulk water supplies. Therefore continued central government involvement and support, are essential.

For PPP projects, the contracting agency is the regional government, whereas for B2B arrangements it is the PDAM. In view of the perceived higher risk attached to this, as well as the nature of the business process itself, it is more difficult for B2B contractors to raise finance at reasonable loan tenors and interest rates. This applies particularly to small B2B BOT activities (for example, 50 and 100 lps WTP projects) where terms offered by banks are incompatible with long-run contract arrangements and fixed asset lives. This situation provides a window of opportunity for socialising the USAID DCA, in which water supply contractors have already expressed much interest.

There have been no new multilateral loans during the period of the IUWASH assignment because of the continued lack of an on-lending mechanism for sovereign loan proceeds. A recent development has been a co-operation between the GOI and the World Bank to develop an Indonesia Water Supply and Sanitation Facility (IWSIF). The concept of the IWSIF is to provide credit through regional governments for non-creditworthy PDAMs on concessionary terms, matching Cipta Karya APBN grants for lumpy investment with loans for distribution systems. Current plans for institutional arrangements involve the establishment of an IWSIF management unit (IMU) in Cipta Karya which would be responsible for overall sector performance and development and (ii) a project finance management unit in the PIP. As a BLU within the MOF, the PIP already has its own mandate and SOPs for loan evaluation procedures which require an approval process of twenty (20) working days. This has proved successful for lending to regional governments, although whether they will be willing to borrow for water supply from the IWSIF and then make their own arrangements with their PDAMs is another matter. Nevertheless, it is an interesting development which, if successful, needs to be complemented by the incorporation of a financing mechanism for creditworthy PDAMs, if, as seems likely, the Perpres 29 approach remains unworkable or is terminated. Incorporation of this activity within the IWSIF on the IWSIF's terms and conditions would fulfil the need for a loan financing channel to PDAMs for distribution systems, not only for matching Cipta Karya grants, but also PPP and BOT projects for bulk treated water supply.

The current unsatisfactory situation regarding urban water supply finance must be a matter of some considerable embarrassment for the MPW as the responsible technical ministry. Although Indonesia will probably meet its MDG goals for access to improved water supply, the growth of households with a piped connection has actually declined as a percentage of urban family units. Yet the MPW emerges with credit for its activities in the sector through Cipta Karya's very substantial grant programmes, including the establishment of regional bulk water SPAM, allied to the Indll *hibah* initiative and various technical assistance programmes, together with BPPSPAM's PDAM capacity building activities and its encouragement of B2B. BAPPENAS also has supported the MPW and has devoted great efforts to developing PPP in urban water supply, notwithstanding bureaucratic impediments.

The involvement of other key stakeholders has been somewhat less encouraging. The inward-looking, risk-averse stance of the line directorates-general in the MOF has been particularly obstructive to progress. However, in mitigation, it has to be said that the position taken by the MOF is heavily influenced by the increasingly blurred distinction between human error and corruption. Under these circumstances, it is difficult to see how the current obstacles to progressing PPP development are going to be removed any time soon. Nevertheless, one of the advantages of the IWSIF is that financial management by the PIP sidesteps the line directorates-general of the MOF; a transfer of the Perpres 29 programme to the same arrangements of the IMU and PIP joint control would be a significant step in the right direction.

The MOHA, which is the central government agency responsible for PDAM organization, financial management, tariff procedures and accounting systems, as well as regional government, seems to have been largely anonymous. No-one at the PDAMs surveyed for this assignment could recall any visit by a MOHA official.

By and large, heads of regional government consider the main priority in water supply to be maintenance of a social tariff for political reasons. Most PDAMs have tariffs which do not deliver full cost recovery, whilst some do not even cover operational costs. Analysis of the financial condition of IUWASH PDAMs suggests that 50% are not replacing their fixed and assets and about the same percentage are not viable business concerns. It is likely that the level of O&M is often not adequate, leading to higher NRW, low pressure and other problems. Consequently, the substantial grants for water supply through the APBN and APBD risk being wasted.

Most PDAMs are treated by their regional government owners not as business enterprises but as social service agencies whilst being charged with input costs, such as electricity, at full industrial rates. A change of approach on the part of heads of regional government will be difficult to achieve without regulation from the central government. Water supply is a regional government responsibility as per UU No 32/2004 and will remain so under the revision of the law now in progress. The current regulatory route for an annual evaluation of a regional government's performance and its ability to manage its own regional autonomy¹⁵⁷ does not seem to offer a pathway.

It is understood that that the revision to UU No 32/2004 will cancel the 1962 law on regional government enterprises and provide for a PP to be issued instead. This would provide a good opportunity to give heads of regional government and their DPRD's to make a choice as to whether urban water supply should be managed by the PDAM or a BLUD. Selection of the first option would require, by regulation, the provision of a full cost recovery tariff in accordance with PP No 16/2005; the alternative of choosing a BLUD would involve a PSO being supplied through the APBD as a subsidy to enable the unit to operate a social service. This would put an end to regional government's power without responsibility of regulating the tariff at a low level but without providing a subsidy. However, as the originator of regional government legislation, such a regulation would have to be prepared by the MOHA, which has not always shown its willingness in the past to support radical change in regional government affairs.

¹⁵⁷ PP No 03/2007 concerning Reporting to Central Government on Regional Government Performance and PP No 06/2008 on Guidelines for Evaluating Regional Government Management

APPENDICES

APPENDIX I: PSP WATER SUPPLY AGREEMENTS

| No | Location | Modality | Capacity (lps) | PSP Partner | Period of Agreement | PSP Typology |
|----|-------------------------------|------------------------------------|----------------|--|---------------------|-----------------|
| 1 | Kab Badung, Bali | BOT, WTP | 300 | PT Tirta Artha Buana Mulia | 1993-2013 | JV 65%-35% PDAM |
| 2 | Kota Batam | Full Concession | 3,000 | PT Adhya Tirta Batam | 1995-2020 | 100% Partner |
| 3 | Kec Serang Utara | BOO, WTP/Pipes | 150 | PT Sauh Bahtera Samudera | 1996-2016 | 100% Partner |
| 4 | Kota Jakarta West | Full Concession | 6,200 | PT Palyja & Astratel | 1998-2023 | 100% Partners |
| 5 | Kota Jakarta East | Full Concession | 6,500 | PT Aetra Air Jakarta | 1998-2023 | 100% Partners |
| 6 | Kota Jambi | BOT, WTP | 200 | PT Noviantama Corporation | 1998-2013 | 100% Partner |
| 7 | Kab Tangerang | O&M, WTP | 3,000 | PT Tirta Cisadane | 1998-2013 | 100% Partner |
| 8 | Kec Taman, Kab Sidoarjo | BOT, WTP | 250 | PT Taman Tirta Sidoarjo (Gadang Sdn Bhd, Malaysia) | 1999-2029 | 100% Partner |
| 9 | Kota Medan | BOT, WTP | 500 | PT Tirta Lyonnaise Medan | 1999-2024 | JV 85%-15% PDAM |
| 10 | Kota Palembang | Full Concession | 200 | PT Adhya Tirta Sriwijaya | 2000-2025 | 100% Partner |
| 11 | KI Lippo Cikarang | BOO, WTP/Pipes | 250 | PT Lippo Cikarang | Start 2001 | 100% Partner |
| 12 | Kab Subang | O&M, WTP | 40 | PT Mitra Lingkungan Dutaconsult | 2002-2012 | 100% Partner |
| 13 | Kec Taman, Kab Sidoarjo | RUOT, WTP/pipes | 500 | PT Hanarida Tirta Birawa (Gadang Sdn Bhd, Malaysia) | 2004-2024 | 100% Partner |
| 14 | Kota Semarang | RUOT, WTP | 600 | PT Tirta Gajah Mungkur | 2005-2020 | 100% Partner |
| 15 | Kec Bawen, SKota emarang | BOT, WTP/Pipes | 250 | PT Sarana Tirta Ungaran | 2005-2024 | 100% Partner |
| 16 | Kab Gianyar, Bali | RUOT, WTP | 200 | PT Bali Bangun Tirta (Berjaya Sdn Berhad) | 2007-2027 | 100% Partner |
| 17 | Kec Panakukang, Kota Makassar | ROT, WTP | 1,000 | PT Traya Tirta Makassar | 2007-2021 | 100% Partner |
| 18 | Kab Serang | BOO, WTP/Pipes | 100 | PT Sarana Tirta Rejeki | 2008-2027 | 100% Partner |
| 19 | Kota Pekanbaru | Full Concession | 600 | PT KTDP & PT WFI (Netherlands) | Failed, 2008 | Joint Operation |
| 20 | Kab Tangerang | Full Concession (Solicited PPP) | 900 | PT Aetra Air Tangerang | 2008-2033 | 100% Partner |
| 21 | Kota Manado | ROT/O&M, WTP/Pipes | 250 | PT Water Laboratory Nusantara | 2008-2023 | JV 51%-49% PDAM |
| 22 | Kota Ambon | ROT/O&M, WTP/Pipes | 250 | PT Water Laboratory Nusantara | 2008-2023 | JV 51%-49% PDAM |

| No | Location | Modality | Capacity (lps) | PSP Partner | Period of Agreement | PSP Typology |
|----|--|----------------------|----------------|---------------------------------|---------------------|----------------------------|
| 23 | Kota Tangerang | Full Concession | 50 | PT Bintang Hetien Jaya | 2009-2028 | 100% Partner |
| 24 | Kota Serang | BOT, WTP/Pipes | 600 | PT Tirta Serang Madani | 2010-2024 | JV PT EPMB 90% 10% PDAM |
| 25 | Kec Macinni Sombala, Kota Makassar | ROT, WTP | 400 | PT Multi Enka Makassar | 2011-2030 | 100% Partner |
| 26 | Kec Somba Opu, Kota Makassar | ROT/BOT WTP/Pipes | 3,000 | PT Bahana Cipta | 2011-2030 | 100% Partner |
| 27 | Kec Patumbak, Kab Deli Serdang | BOT, WTP | 1,000 | PT Drupadi Agung Lestari | 2012-2032 | 100% Partner |
| 28 | Kec Mariendal, Kab Deli Serdang | BOT, WTP | 1,000 | PT Drupadi Agung Lestari | 2012-2032 | 100% Partner |
| 29 | Kota Maja, Kab Lebak | ROT, WTP/Pipes | 100 | PT Bangun Tirta Lebak | 2012-2031 | JV PT CRM 90% 10% PDAM |
| 30 | Kota Tangerang | ROT, WTP | 420 | Moya Asia, PT Moya Indonesia | 2012-2031 | 100% Partner |
| 31 | Kota Tangerang | BOT, WTP/Pipes | 1,500 | Moya Asia, PT Moya Indonesia | 2012-2031 | 100% Partner |
| 32 | Kota Tangerang | BOO, WTP/Pipes | 500 | Moya Asia, PT Moya Indonesia | 2012-2031 | 100% Partner |
| 33 | Kab Bekasi | BOT, WTP/Pipes | 200 | Moya Asia, PT Moya Indonesia | 2012-2031 | 100% Partner |
| 34 | Kec Legundi, Kab Gresik | BOT, WTP/Pipes | 200 | PT Dewata Bangun Tirta | 2012-2036 | 100% Partner |
| 35 | Kec Krikilan, Kab Gresik | ROT, WTP/Pipes | 100 | PT Drupadi Agung Lestari | 2012-2036 | 100% Partner |
| 36 | Kab Banjar Baru | BOT, WTP/Pipes | 500 | PT Drupadi Agung Lestari | 2013-2034 | 100% Partner |
| 37 | Kab Lubuk Pakam | ROT, WTP | 100 | PT Tirta Sumut | n/a | JV WFI 55% 45% PDAM |
| 38 | Kec Bintaro Jaya, DKI Jakarta | BOO, WTP/Pipes | 100 | PT Pembangunan Jaya | n/a | 100% Partner |
| 39 | BSD City | BOT, WTP/Pipes | 150 | PT Bumi Serpong Damai | n/a | 100% Partner |
| 40 | Kota Cilegon | BOO, WTP/Pipes | 600 | PT Krakatau Tirta Industri | n/a | 100% Partner |
| 41 | Kota Tangerang | BOO, WTP | 100 | PT Multi Agung Transco | n/a | 100% Partner |
| 42 | Kota Tangerang | BOO, WTP | 30 | PT Cilamaya Subur | n/a | 100% Partner |
| 43 | Kota Tangerang | RUOT/WTP | 1,500 | PT Tirta Kencana Cahaya Mandiri | n/a | 100% Partner |
| 44 | Lippo Estate, Kec Karawaci, Kota Tangerang | BOO, WTP/Pipes | 250 | PT Lippo Karawaci | n/a | 100% Partner |
| 45 | Kota Bekasi | BOO, WTP/Pipes | 50 | PT Kemang Pratama | n/a | 100% Partner |
| 46 | Kec Legenda, Kota Bekasi | BOO, WTP/Pipes | 25 | PT Cikarang Permai | n/a | 100% Partner |
| 47 | Kec Tambun Selatan | Full Concession | 20 | PT Putra Alvita Pratama | n/a | 100% Partner |
| 48 | KI MM 2100, Kec Cibitung | BOO, WTP/Pipes | 100 | PT MM 2100 Industrial Estate | n/a | 100% Partner |
| 49 | Bukit Indah, Kec Cikarang | BOO, WTP/Pipes | 150 | PT Bukit Indah | n/a | 100% Partner |
| 50 | Cikarang Barat | Full Concession | 30 | PT Watertech | n/a | 100% Partner |
| 51 | Kec Cikarang Utara | Full Concession | 20 | PT Sri Pertiwi Sejati | n/a | 100% Partner |

| No | Location | Modality | Capacity (lps) | PSP Partner | Period of Agreement | PSP Typology |
|----|---------------------------------|-----------------|----------------|-----------------------------|---------------------|--------------|
| 52 | KI Hyundai Kec Cikarang | BOO, WTP/Pipes | 50 | PT Hyundai Inti Development | n/a | 100% Partner |
| 53 | KI Jababeka Kec Cikarang | Full Concession | 300 | PT Jababeka Infrastruktur | n/a | 100% Partner |
| 54 | Kota Deltamas | Full Concession | 25 | PT Pembangunan Deltamas | n/a | 100% Partner |
| 55 | Kec Cikampek, Kab Karawang | Full Concession | 200 | PT WATS | n/a | 100% Partner |
| 56 | Kab Gresik/Kota Surabaya (Part) | Full Concession | 400 | PT Citraland | n/a | 100% Partner |
| 57 | Kota Surabaya (Part) | Full Concession | 300 | PT Pakuwon | n/a | 100% Partner |
| 58 | Kab Gresik/Kab Lamongan (Part) | BOO, WTP/Pipes | 600 | PT Semen Gresik | n/a | 100% Partner |
| 59 | Kota Banjarmasin | BLT | 500 | PT Adhi Karya | n/a | 100% Partner |
| 60 | Kota Samarinda | BOT, WTP | 400 | PT WATS | n/a | 100% Partner |

Source: BPPSPAM, 2013

Legend

| | |
|------|---|
| BLT | Build, Lease, Transfer |
| BOO | Build, Own, Operate |
| BOT | Build, Own, Transfer |
| ROT | Rehabilitate, Operate, Transfer |
| RUOT | Rehabilitate, Upgrade, Operate, Transfer |
| KI | Industrial Estate (<i>Kawasan Industri</i>) |

APPENDIX 2: PDAM LOAN RESTRUCTURING

APPENDIX 2.1: PDAMS with NPL not yet Participating in the Loan Restructuring Programme

| PDAM | PROVINCE | ARREARS (Rp Million) |
|-----------------------------|---------------------|-------------------------|
| Kabupaten East Aceh | Aceh Darussalam | 31,466 |
| Kabupaten South-East Aceh | Aceh Darussalam | 12,183 |
| Kabupaten Asahan | North Sumatra | 11,651 |
| Kabupaten Karo | North Sumatra | 27,017 |
| Kabupaten Langkat | North Sumatra | 32,948 |
| Kabupaten Agam | West Sumatra | 17,651 |
| Kabupaten Bungo | Jambi | 44,453 |
| Kabupaten Musi Rawas | South Sumatra | 214 |
| Kota Bengkulu | Bengkulu | 74,778 |
| Kabupaten South Bengkulu | Bengkulu | 24,347 |
| Kota Pangkal Pinang | Bangka-Belitung | 10,902 |
| Kabupaten Central Lampung | Lampung | 10,380 |
| Kabupaten North Lampung | Lampung | 15,047 |
| Kabupaten Tanggamus | Lampung | 2,758 |
| Kabupaten Pati | Central Java | 15,301 |
| Kabupaten Sumenep | East Java | 7,170 |
| Kabupaten Bangli | Bali | 8,775 |
| Kabupaten Kutai | East Kalimantan | 2,771 |
| Kabupaten Sumbawa | West Nusa Tenggara | 3,080 |
| Kabupaten Bulukumba | South Sulawesi | 2,185 |
| Kabupaten Pinrang | South Sulawesi | 12,182 |
| Kabupaten Tana Toraja | South Sulawesi | 23,390 |
| Kabupaten Kolaka | South-East Sulawesi | 5,392 |
| Kabupaten Bolaang Mongondow | North Sulawesi | 27,150 |
| Kota Manado | North Sulawesi | 57,215 |
| Kota Ambon | Maluku | 6,900 |
| Kabupaten Biak | Papua | 13,847 |
| Kabupaten Sorong | Papua | 22,061 |
| | | |
| Total | | 552,720 |

Source: Cipta Karya

APPENDIX 2.2: Status of PDAM Compliance with Restructured Loan Agreements December 2013

| NO. | PDAM | STATUS OF CURRENT MATURITIES | MOF RATING |
|-----|---------------------------|------------------------------|--------------------------|
| 1 | Kabupaten Ciamis | Regular | Unconditional write-off |
| 2 | Kota Palopo | Regular | Business plan revision |
| 3 | Kabupaten Cilacap | Regular | Unconditional write-off |
| 4 | Kabupaten Madiun | Regular | Unconditional write-off |
| 5 | Kabupaten Mojokerto (*) | Regular | Unconditional write-off |
| 6 | Kabupaten Intan Banjar | Regular | Unconditional write-off |
| 7 | Kota Banjarmasin | Fully redeemed | Unconditional write-off |
| 8 | Kabupaten Sleman | Fully redeemed | Unconditional write-off |
| 9 | Kabupaten Wonosobo | Fully redeemed | Unconditional write-off |
| 10 | Kabupaten Badung | Fully redeemed | Unconditional write-off |
| 11 | Kota Palangkarya | Arrears | Regular status or PUPN |
| 12 | Kota Ternate | Fully redeemed | Unconditional write-off |
| 13 | Kota Samarinda | Regular | Unconditional write-off |
| 14 | Kabupaten Jombang (*) | Fully redeemed | Unconditional write-off |
| 15 | Kabupaten Jayapura (*) | Arrears | Regular status or PUPN |
| 16 | Kabupaten Kuningan | Arrears | Regular status or PUPN |
| 17 | Kabupaten Tulungagung | Arrears | Regular status or PUPN |
| 18 | Kabupaten Blora | Fully redeemed | Unconditional write-off |
| 19 | Kota Pekalongan | Fully redeemed | Unconditional write-off |
| 20 | Kota Tanjung Balai (*) | Arrears | Regular status or PUPN |
| 21 | Kabupaten Bangkalan | Regular | Business plan revision |
| 22 | Kota Blitar | Arrears | Regular status or PUPN |
| 23 | Kabupaten Sukabumi | Arrears | Regular status or PUPN |
| 24 | Kota Tebing Tinggi (*) | Fully redeemed | Unconditional write-off |
| 25 | Kabupaten Pamekasan | Fully redeemed | Unconditional write-off |
| 26 | Kabupaten Gresik | Arrears | Regular status or PUPN |
| 27 | Kabupaten Karawang (*) | Fully redeemed | Unconditional write-off |
| 28 | Kota Sawahlunto | Fully redeemed | Unconditional write-off |
| 29 | Kota Padang Panjang | Fully redeemed | Unconditional write-off |
| 30 | Kabupaten Tanah Datar | Arrears | Regular status or PUPN |
| 31 | Kabupaten Jember | Fully redeemed | Unconditional write-off |
| 32 | Kabupaten Gowa | Fully redeemed | Unconditional write-off |
| 33 | Kabupaten Purbalingga | Arrears | Regular status or PUPN |
| 34 | Kabupaten Klungkung | Regular | Business plan revision |
| 35 | Kabupaten Kupang | Arrears | Return to regular status |
| 36 | Kabupaten Sragen | Fully redeemed | Unconditional write-off |
| 37 | Kabupaten Bojonegoro | Fully redeemed | Unconditional write-off |
| 38 | Kabupaten Mamuju | Fully redeemed | Unconditional write-off |
| 39 | Kabupaten Magetan | Fully redeemed | Unconditional write-off |
| 40 | Kabupaten Purwakarta (*) | Fully redeemed | Unconditional write-off |
| 41 | Kabupaten Garut | Arrears | Regular status or PUPN |
| 42 | Kota Sibolga (*) | Fully redeemed | Unconditional write-off |
| 43 | Kabupaten Subang | Arrears | Regular status or PUPN |
| 44 | Kabupaten Karangasam | Fully redeemed | Unconditional write-off |
| 45 | Kabupaten Gorontalo | Fully redeemed | Unconditional write-off |
| 46 | Kabupaten Pasaman | Fully redeemed | Unconditional write-off |
| 47 | Kabupaten Gianyar | Fully redeemed | Unconditional write-off |
| 48 | Kota Solok | Fully redeemed | Unconditional write-off |
| 49 | Kota Pematang Siantar (*) | Arrears | Regular status or PUPN |

| NO. | PDAM | STATUS OF CURRENT MATURITIES | MOF RATING |
|-----|------------------------|------------------------------|--------------------------|
| 50 | Kota Surakarta (*) | Arrears | Regular status or PUPN |
| 51 | Kabupaten Tabanan | Fully redeemed | Unconditional write-off |
| 52 | Kota Bandar Lampung | Arrears | Return to regular status |
| 53 | Kabupaten Grobogan | Fully redeemed | Unconditional write-off |
| 54 | Kabupaten Rembang (*) | Arrears | Regular status or PUPN |
| 55 | Kabupaten Semarang (*) | Arrears | Regular status or PUPN |
| 56 | Kota Pasuruan | Fully redeemed | Unconditional write-off |
| 57 | Kabupaten Blitar | Arrears | Regular status or PUPN |
| 58 | Kota Pontianak | Arrears | Return to regular status |
| 59 | Kota Denpasar | Regular | Unconditional write-off |
| 60 | Kota Banda Aceh | Arrears | Regular status or PUPN |
| 61 | Kota Padang | Arrears | Return to regular status |
| 62 | Kabupaten Bekasi (*) | Arrears | Return to regular status |
| 63 | Kabupaten Indramayu | Arrears | Return to regular status |
| 64 | Kota Badung | Regular | Business plan revision |
| 65 | Kabupaten Tangerang | Regular | Unconditional write-off |
| 66 | Kota Semarang (*) | Arrears | Regular status or PUPN |
| 67 | Kota Palembang | Regular | Unconditional write-off |
| 68 | Kota Makassar (*) | Arrears | Regular status or PUPN |
| 69 | DKI Jakarta | No Write-Offs ¹⁵⁸ | |
| 70 | Kabupaten Toli-Toli | Regular | Business plan revision |
| 71 | Kabupaten Cirebon | Arrears | Regular status or PUPN |
| 72 | Kabupaten Jembrana | Arrears | Regular status or PUPN |
| 73 | Kabupaten Bulungan | Fully redeemed | Unconditional write-off |
| 74 | Kabupaten Nganjuk | Fully redeemed | Unconditional write-off |
| 75 | Kabupaten Bone | Arrears | Regular status or PUPN |
| 76 | Kota Bitung | Arrears | Regular status or PUPN |

Source: BPPSPAM April 2014

¹⁵⁸ Presumably because of arrangements with private sector entities

APPENDIX 3: PERPRES 29 LOANS TO PDAMs

APPENDIX 3.1: Status of Perpres No 29/2009 Proposals as of April 2014

| No | PDAM | Year of Pre-FS | Preparation Process | | | | | | | Approval Process | | | | | | Implementation | | | | | Approval Details |
|---|--------------------------|----------------|---------------------|---|---|---|---|---|---|------------------|---|----|----|----|----|----------------|----|----|----|----|---------------------|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | |
| Group I - Partial Credit Guarantee Issued | | | | | | | | | | | | | | | | | | | | | |
| 1 | Kabupaten Bogor | 2010 | - | v | v | v | v | v | v | v | v | v | v | v | v | v | v | v | v | v | PCG (SJPP) 12.12.11 |
| 2 | Kabupaten Ciamis | 2010 | v | v | v | v | v | v | v | v | v | v | v | v | v | v | v | v | v | v | PCG (SJPP) 12.12.11 |
| 3 | Kabupaten Lombok Timur | 2010 | v | v | v | v | v | v | v | v | v | v | v | v | v | v | v | v | v | v | PCG (SJPP) 22.12.11 |
| 4 | Kota Malang | 2010 | v | v | v | v | v | v | v | v | v | v | v | v | v | | | | | | PCG (SJPP) 03.12.12 |
| 5 | Kota Banjarmasin | 2011 | v | v | v | v | v | v | v | v | v | v | v | v | v | v | v | v | v | | PCG (SJPP) 25.02.13 |
| Group II - Verification of Completeness of Documentation Requirements in Process | | | | | | | | | | | | | | | | | | | | | |
| 1 | Kota Denpasar | 2011 | v | v | v | v | v | v | v | v | v | v | | | | | | | | | DG SMI 26.07.12 |
| Group III - PDAM Revising or Completing Documentation Requirements | | | | | | | | | | | | | | | | | | | | | |
| 1 | Kabupaten Tasikmalaya | 2010 | v | v | v | v | v | v | v | v | v | | | | | | | | | | |
| 2 | Kabupaten Intan Banjar | 2011 | v | v | v | v | v | v | v | v | v | | | | | | | | | | |
| 3 | Kota Pekalongan | 2011 | v | v | v | v | v | v | v | v | v | | | | | | | | | | DG SMI 26.07.12 |
| 4 | Kabupaten Paser | 2011 | - | v | v | v | v | v | v | v | v | | | | | | | | | | DG SMI 26.07.12 |
| 5 | Kota Palopo | 2011 | v | v | v | v | v | v | v | v | v | | | | | | | | | | |
| Group IV - Approved by DPRD | | | | | | | | | | | | | | | | | | | | | |
| 1 | Kabupaten Toli-Toli | 2011 | v | v | v | | | | | | | | | | | | | | | | DPRD 16.07.12 |
| 2 | Kota Payakumbuh | 2011 | - | v | v | | | | | | | | | | | | | | | | DPRD 2012 |
| 3 | Kabupaten Kepahiang | 2011 | - | v | v | | | | | | | | | | | | | | | | DPRD 2013 |
| 4 | Kabupaten Banyumas | 2011 | - | v | v | | | | | | | | | | | | | | | | DPRD 2013 |
| 5 | Kabupaten Cilacap | 2011 | - | v | v | | | | | | | | | | | | | | | | DPRD 2013 |
| 6 | Kota Cirebon | 2011 | - | v | v | | | | | | | | | | | | | | | | DPRD 2014 |
| 7 | Kabupaten Menang Mataram | 2012 | - | v | v | | | | | | | | | | | | | | | | DPRD 15.10.12 |
| 8 | Kabupaten Tegal | 2012 | - | v | v | | | | | | | | | | | | | | | | DPRD 30.04.13 |
| 9 | Kabupaten Cianjur | 2012 | v | v | v | | | | | | | | | | | | | | | | DPRD 2013 |
| 10 | Kota Tegal | 2012 | - | v | v | | | | | | | | | | | | | | | | DPRD October 2013 |
| 11 | Kabupaten Barito Kuala | 2012 | - | v | v | | | | | | | | | | | | | | | | DPRD 2014 |
| Group V - Approved by Head of Regional Government | | | | | | | | | | | | | | | | | | | | | |
| 1 | Kabupaten Serang | 2010 | - | v | | | | | | | | | | | | | | | | | KD 24.04.12 |
| 2 | Kabupaten Purbalingga | 2011 | v | v | | | | | | | | | | | | | | | | | |
| 3 | Kabupaten Kendal | 2011 | v | v | | | | | | | | | | | | | | | | | KD 15.03.13 |
| 4 | Kabupaten Ngawi | 2012 | v | v | v | | | | | | | | | | | | | | | | Draft DPRD 15.01.13 |

Group VII – Withdrawal from Perpres 29 Process by PDAM

| | | | | | | | | | | | | | | | | | | | | |
|---|--------------------|------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 1 | Kota Tarakan | 2011 | - | | | | | | | | | | | | | | | | | |
| 2 | Kabupaten Pohuwato | 2011 | - | | | | | | | | | | | | | | | | | |
| 3 | Kabupaten Mamuju | 2011 | v | | | | | | | | | | | | | | | | | |
| 4 | Kabupaten Gowa | 2011 | v | | | | | | | | | | | | | | | | | |
| 5 | Kabupaten Bantul | 2011 | - | | | | | | | | | | | | | | | | | |
| 6 | Kota Surabaya | 2012 | - | | | | | | | | | | | | | | | | | |

Group VIII – TA Facilitation

| | | | | | | | | | | | | | | | | | | | | |
|----|--------------------------------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 1 | Tirtanadi Medan ¹⁵⁹ | 2013 | | | | | | | | | | | | | | | | | | |
| 2 | Kabupaten Pasaman | 2013 | | | | | | | | | | | | | | | | | | |
| 3 | Kota Padang | 2013 | | | | | | | | | | | | | | | | | | |
| 4 | Kota Palembang | 2013 | | | | | | | | | | | | | | | | | | |
| 5 | Kabupaten Majalengka | 2013 | | | | | | | | | | | | | | | | | | |
| 6 | Kota Banjar | 2013 | | | | | | | | | | | | | | | | | | |
| 7 | Kabupaten Garut | 2013 | | | | | | | | | | | | | | | | | | |
| 8 | Kabupaten Purwakarta | 2013 | | | | | | | | | | | | | | | | | | |
| 9 | Kabupaten Sukabumi | 2013 | | | | | | | | | | | | | | | | | | |
| 10 | Kabupaten Grobogan | 2013 | | | | | | | | | | | | | | | | | | |
| 11 | Kabupaten Buleleng | 2013 | | | | | | | | | | | | | | | | | | |
| 12 | Kabupaten Ginayar | 2013 | | | | | | | | | | | | | | | | | | |
| 13 | Kabupaten Karangasem | 2013 | | | | | | | | | | | | | | | | | | |
| 14 | Kota Pare-Pare | 2013 | | | | | | | | | | | | | | | | | | |
| 15 | Kabupaten Ende | 2013 | | | | | | | | | | | | | | | | | | |
| 16 | Kab Lombok Tengah | 2013 | | | | | | | | | | | | | | | | | | |
| 17 | Kota Pontianak | 2013 | | | | | | | | | | | | | | | | | | |

Source: Ministry of Public Works, March 2014

Legend

- V Already done, already agreed
X Not yet done, not yet agreed
- Not required (e.g. no need for debt restructuring)

Preparation Process

- Stage 1 Debt restructuring agreement with MOF
Stage 2 Declaration of head of regional government for:
(i) willingness to commit 30% PCG to GOI in APBD
(ii) willingness to accept intercept on PCG default
Stage 3 DPRD agreement on Stage 2
Stage 4 Completion of umbrella agreement concept

¹⁵⁹ Owned by the Provincial Government of North Sumatra

ASSESSMENT OF EXISTING AND POTENTIAL SOURCES OF CAPITAL FOR WATER UTILITIES

- Stage 5 Completion of credit agreement concept
- Stage 6 Completion of partial credit agreement concept
- Stage 7 Commitment of PDAM account to bank providing credit

Approvals Process

- Stage 8 Request to MOF
- Stage 9 Working group (*pokja*) meeting
- Stage 10 PDAM proposal revision (if required)
- Stage 11 Steering committee meeting
- Stage 12 Approval of credit agreement
- Stage 13 Issue of GOI PCG

Implementation

- Stage 14 Physical infrastructure construction by PDAM
- Stage 15 PDAM credit drawdown arrangements
- Stage 16 Drawdowns by bank
- Stage 17 Bank request for payment of interest rate subsidy
- Stage 18 Payment of interest rate subsidy by MPW as budget holder

- PCG Partial credit guarantee
- KD Head of regional government
- DPRD Regional government legislature
- SMI Investment Systems Management Directorate, MOF

APPENDIX 3.2: Chronology of PMK No 229/2009 Process for Issue of Umbrella Agreement and Partial Credit Guarantee for First Three (3) PDAM Perpres No 29/2009 Loans

| PDAM | Letter of Submission to MOF | Preliminary Verification by Pokja | Final Verification by Steering Committee | Umbrella Agreement | Credit Agreement (PK) with Lender | Copy of Credit Agreement to MOF | Issue of MOF Partial Credit Guarantee (SJPP) to Lender | Total Elapsed Time of Process |
|------------------|-----------------------------|-----------------------------------|--|-------------------------|-----------------------------------|---------------------------------|--|-------------------------------|
| Kab Bogor | 27.10.2010 | 23.02.2011 (119 days) | 02.08.2011 (160 days) | 30.09.2011 (59 days) | 11.10.2011 (11 days) | 31.10.2011 (20 days) | 12.12.2011 (42 days) | 411 days |
| Kab Ciamis | 27.04.2010 | 23.02.2011 (302 days) | 02.08.2011 (160 days) | 30.09.2011 (59 days) | 11.10.2011 (11 days) | 27.10.2011 (16 days) | 12.12.2011 (46 days) | 594 days |
| Kab Lombok Timur | 09.06.2010 | 23.02.2011 (259 days) | 02.08.2011 (160 days) | 07.10.2011 (66 days) | 11.10.2011 (4 days) | 11.11.2011 (31 days) | 22.12.2011 (41 days) | 561 days |

Source: Cipta Karya

APPENDIX 4: INDONESIA INVESTMENT AGENCY (PIP) LOAN PORTFOLIO

31 December 2013

| No | Borrower | Loan Amount Rp Billion | Loan Date | Loan Tenor | Interest Rate | Loan Purpose |
|----|------------------------------|---------------------------|--------------|------------------|------------------|--------------------------------|
| 1 | South-East Sulawesi Province | 190.000 | 28.01.2011 | 9 Yrs | 7.75% | General Hospital (RSUD) Type B |
| 2 | Kabupaten Muko-Muko | 53.670 | 03.05.2012 | 3 Years 2 Months | 7.75% | General Hospital (RSUD) Type C |
| 3 | Kabupaten Lombok Timur | 34.350 | 14.05.2013 | 5 Years | 7.75% | Market |
| 4 | Kabupaten Karangasem | 49.870 | 25.05.2012 | 5 Years | 7.75% | Market |
| 5 | Kota Bandar Lampung | 96.000 | 04.06.2012 | 5 Years | 7.75% | Roads & Bridges |
| 6 | Kabupaten Karangasem | 46.000 | 08.08.2012 | 5 Years | 7.75% | General Hospital (RSUD) Type C |
| 7 | Kota Medan | 77.454 | 06.09.2012 | 5 Years | 7.75% | Market |
| 8 | South-East Sulawesi Province | 130.000 | 21.10.2012 | 5 Years | 7.75% | Roads & Bridges |
| 9 | Kabupaten Lombok Tengah | 91.610 | 06.11.2012 | 5 Years | 7.75% | Roads |
| 10 | Kota Palu | 100.000 | 21.06.2012 | 5 Years | 7.75% | General Hospital (RSUD) Type B |
| 11 | Kota Gorontalo | 35.000 | 30.11.2012 | 5 Years | 7.75% | Bus Terminal Type C |
| 12 | South Sulawesi Province | 500.000 | 29.12.2012 | 5 Years | 7.75% | Roads & Bridges |
| 13 | Kabupaten Temanggung | 90.172 | 14.06.2013 | 5 Years | 7.75% | Market |
| 14 | Kabupaten Bulukumba | 83.502 | 20.09.2013 | 5 Years | 9.25% | General Hospital (RSUD) Type C |
| 15 | Kabupaten South Halmahera | 77.800 | 30.09.2013 | 5 Years | 9.25% | Roads |
| 16 | Kabupaten South Lampung | 90.982 | 05.10.2013 | 5 Years | 9.25% | Roads |
| 17 | Kabupaten Muko-Muko | 47.500 | 17.10.2013 | 5 Years | 9.25% | Roads & Bridges |
| 18 | Kabupaten Boalemo | 51.000 | 25.10.2013 | 5 Years | 9.25% | Roads |
| 19 | Kabupaten Pesawaran | 50.000 | 21.11.2013 | 5 Years | 9.25% | General Hospital (RSUD) Type C |
| 20 | South-East Sulawesi Province | 70.000 | 06.12.2012 | 5 Years | 9.50% | Roads |
| 21 | Kabupaten Bangkalan | 96.000 | 20.12.2013 | 5 Years | 9.50% | Roads |
| | Total | 2,060.910 | | | | |

Source: PIP

APPENDIX 5: IUWASH & NON-IUWASH PDAM RECIPIENTS OF HIBAH GRANTS

| PDAM | Phase 1 Hibah | | Phase 2 Hibah | |
|---------------------|---------------|--------------------|----------------|--------------------|
| | Total HC | Rp '000 | Total HC | Rp '000 |
| Kabupaten Bandung | | | 2,000 | 5,000,000 |
| Kabupaten Bekasi | | | 1,000 | 2,000,000 |
| Kota Bekasi | | | 3,466 | 9,398,000 |
| Kota Bogor | 2,000 | 5,000,000 | 3,000 | 8,000,000 |
| Kabupaten Karawang | 5,000 | 14,000,000 | 2,000 | 5,000,000 |
| Kabupaten Serang | 4,000 | 11,000,000 | 3,000 | 8,000,000 |
| Kabupaten Tangerang | | | 3,000 | 8,000,000 |
| Kabupaten Klaten | 3,000 | 8,000,000 | 3,000 | 8,000,000 |
| Kabupaten Kudus | 1,000 | 2,000,000 | 2,000 | 5,000,000 |
| Kabupaten Sukoharjo | 1,000 | 2,000,000 | 2,500 | 6,500,000 |
| Kota Surakarta | | | 4,000 | 11,000,000 |
| Kota Malang | 4,000 | 11,000,000 | 8,500 | 24,500,000 |
| Kabupaten Sidoarjo | 5,000 | 14,000,000 | 8,000 | 23,000,000 |
| Kota Jayapura | 500 | 1,000,000 | | |
| IUWASH PDAM | 25,500 | 68,000,000 | 45,466 | 123,398,000 |
| Non-IUWASH PDAM | 54,000 | 138,060 | 205,807 | 512,449,293 |
| Total | 79,500 | 206,050,000 | 251,273 | 635,847,293 |

Source: Indll

Notes:

- (i) In Phase 2, USAID will fund 34,273 house connections for 27 PDAMs in a grant amount of Rp 76.847 equivalent, to be administered by Indll.
- (ii) The total number of PDAM recipients in Phase 1 was 35, and 121 in Phase 2

APPENDIX 6: PPP WATER SUPPLY PROJECTS UNDER PREPARATION

APPENDIX 6.1: PPP Water Supply Projects under Preparation - Umbulan Springs BOT

The Umbulan Springs have been considered as a potential source of water for Surabaya and surrounding districts since the mid-1970s and a number of unsuccessful attempts have been made to design an institutional framework involving the private sector in order to develop this resource. Beginning in 2007, a further attempt was initiated to organize a competitive tender through the PPP process. It involves the design, financing, construction, operation and maintenance of a potable water supply for conveyance to PDAMs Kota Surabaya, Kabupaten Pasuruan, Kota Pasuruan, Kabupaten Sidoarjo, Kabupaten Gresik, each of which has specific technical and financial profiles, and the Pasuruan Industrial Estate Rembang, whose water supply system is operated by the East Java Provincial Government Water Enterprise (EJPDAB). The project components include an intake facility of 4,000 lps, chlorination treatment, reservoir and pumping station, approximately 102 kilometres of bulk transmission mains, and distribution lines to sixteen (16) off-takes along the bulk transmission main alignment. The East Java Provincial Government, as the project cooperation sponsor (PJK), or contracting agency (CA), is responsible for supplying all land requirements, including 8.3 hectares at the spring itself. The EJPDAB will act as the CA's Project Management Unit (PMU).

The term of the BOT is 25 years, excluding a two-year construction period. The value of the project was estimated in 2010 at USD 207 million equivalent, but will obviously be higher today.

The lead adviser to the CA is PT SMI, assisted by the International Finance Corporation (IFC) to provide transaction advisory support. PT SMI and the IFC are also expected to participate in lending to the successful bidder.

Based on real demand, willingness and ability-to-pay surveys of residents in the five (5) participating cities and regencies, the East Java Provincial Government, as the CA, has decided on a water purchase price of Rp 2,000 per m³ and has applied to MOF for VGF support and to the IIGF for contingency support in the form of a performance guarantee for the project to backstop the CA's obligations.

Therefore, the agreements which will make up the entire project package and transaction documents are: (i) the agreement between the CA and the successful project company, (ii) the bulk water purchase agreement between the PMU and the project company, (iii) the cooperation agreement between the CA and the five (5) participating cities and regencies, (iv) the individual sale and purchase agreements between the PMU and the five (5) PDAMs, and (v) the guarantee agreement between the IIGF and the investor.

The EJPDAB, as the PMU and off-taker, will pay the agreed purchase price in the quantities within the range of minimum and maximum volumes specified in the agreement between the CA and the project company, whether or not taken. Title to and risk of loss of the water will pass from the project company to the EJPDAB at the delivery points. The project company will be required to pay a penalty to the CA, through the PMU, for delivered bulk water which does not meet specific quality standards or falls below the minimum delivery volumes.

The tariff to be paid by the PMU to the project company will be comprised of two (2) components: (i) an availability or capacity charge and (ii) a consumption or variable charge. The capacity charge is based on the volume of water to be made available for use by the PMU, not on the volume actually used by it. This element of the tariff structure allows the project company to generate the revenues necessary to recover fixed assets depreciation, debt service and rate of return on investment. On the other hand, the variable charge is to be paid based on the actual volume of water taken by the PMU at the delivery points and is designed to cover variable

operating and maintenance costs. The tariff will be linked to periodic adjustment factors to protect the project company against inflation.

The Umbulan water absorption plan assumes a 2% NRW factor, with distribution to users of the balance scaling up to the maximum of 3,980 lps by the fifth year of operation of the project as shown below.

Forecast of Bulk Water Absorption by Offtaker in Project Years 1-5

| Off-taker | Year 1(lps) | Year 2(lps) | Year 3(lps) | Year 4(lps) | Year 5(lps) |
|-------------------------|--------------|--------------|--------------|--------------|--------------|
| PDAM Kota Pasuruan | 50 | 75 | 100 | 110 | 110 |
| PDAM Kabupaten Pasuruan | 140 | 190 | 250 | 320 | 410 |
| PDAB East Java Province | 100 | 150 | 200 | 200 | 200 |
| PDAM Kabupaten Sidoarjo | 500 | 800 | 1,000 | 1,200 | 1,200 |
| PDAM Kota Surabaya | 500 | 1,000 | 1,000 | 1,000 | 1,000 |
| PDAM Kabupaten Gresik | 550 | 700 | 1,000 | 1,000 | 1,000 |
| Total Absorption | 1,840 | 2,915 | 3,550 | 3,830 | 3,920 |

The issue of the tender and subsequent implementation of the project have been delayed by several factors which are still in need of resolution, the most important of which are the following:

- The uncertainty surrounding financing arrangements for the distribution systems which must be constructed by the participating PDAMs to absorb their off-take from the bulk transmission main and supply their customers. It is understood that PDAM Kota Surabaya's need to install additional distribution pipes is small and that the only physical investment required is for connections to satisfy the current waiting list. PDAM Kabupaten Sidoarjo has entered the Perpres 29 programme but is still waiting for approval to proceed from the head of the regional government. In any case, it is possible that this programme will not continue after the end of 2014¹⁶⁰. In the case of the other three (3) PDAMs, there is not much clarity. Interviews with stakeholders suggested a blend of APBN, APBD province and regional governments and PDAM equity, but there are no firm arrangements.
- There is no agreement between the provincial government and the participating regional city and regency governments which must be concluded in a provincial government decree (*perda*) before the individual sale and purchase agreements between the PMU and the five (5) PDAMs can be made. These inter-governmental agreements would presumably include arrangements for financing the distribution systems. It is not clear whether the two (2) Pasuruan regional governments, which own land around Umbulan Springs, have yet agreed in principle to the project.

Without this agreement, MOF cannot approve VGF support and, without the VGF, the IIGF cannot issue the guarantee because the project is not financially viable without the VGF.

- Other problems associated with VGF are related to the release mechanism. Unless or until MOF is able to find a solution within PMK No 223/2012 or to issue an amendment which satisfies internal misgivings, the IIGF will also be unable to issue the guarantee.
- The IIGF and the East Java Provincial Government are still unable to agree on risk allocation in the project guarantee, although at least three (3) drafts have been prepared to date by the IIGF. It is understood that the provincial government has reservations about a situation

¹⁶⁰ Ref Section 3.1.2

where it is required to absorb public sector risk whilst the beneficiaries are the city and regency governments.

Tenders for the project cannot be issued until all the above matters have been resolved. In consequence of these delays, the number of pre-qualified potential contractors has diminished. Those still interested are:

- PT Medco Group and PT Bangun Cipta Kontraktor consortium
- China Harbour Engineering Ltd, Sound Global Ltd, and PT China Manggala Pumama Sakti consortium
- PT Amerta Bumi Capital, PT Bakrieland Development and the Beijing Water Enterprise Water Group Ltd consortium

Sources: Executive Summary of the Pre-Feasibility Study (Infrastructure Memorandum), East Java Provincial Government, Bisnis Indonesia, Media Indonesia, and interviews with stakeholders

APPENDIX 6.2: PPP Projects under Preparation - Bandar Lampung BOT Plus

The Bandar Lampung PPP water supply project comprises two (2) components, known as PPP1 and PPP2, as follows:

- Under PPP1, a project company will design, build, finance and operate a 475 lps bulk water supply system. The raw water source is Way (River) Sekampong to the west of Bandar Lampung. A short raw water transmission main will convey the water from the intake to the WTP. A bulk treated water transmission will then transport the treated water over a distance of 28 kilometres to a storage reservoir.

The project company will also build and finance about 40 kilometres of secondary and 340 kilometres of tertiary distribution pipelines. The project will service nine (9) districts and is expected to yield a total of 44,000 new connections.

The construction project will be undertaken in two phases: (i) the first to be operational two years following financial close between the CA (the regional government of Kota Bandar Lampung) and the project company, with an output of 20,500 m³ per day, and (ii) the second to be operational five years after financial closure so that the project will deliver a total of 41,000 m³ per day.

The regional government has already acquired 3.5 hectares of land at the intake location and 2 hectares at the reservoir area.

The total estimated cost is between USD 80-100 million. The duration is 27 years, including the construction period. The CA has applied for VGF to MOF¹⁶¹ and a guarantee from the IIGF.

Given its hybrid nature, it is often referred to as a “BOT Plus” PPP project.

- PPP2 is an assignment for the management, operation and maintenance of the distribution system to be constructed under PPP1 (i.e. excluding existing PDAM assets). It will consist of three phases: (i) pre-operation for demand and design inputs, (ii) first phase operational output of 20,500 m³ per day, and (iii) full operational output of 41,000 m³ per day. It will be the first contract of its kind in Indonesia.

The IIGF will provide a guarantee to the O&M contractor in terms of risk allocation.

The scope of the project company’s activity is as follows:

- Design input: advise on the distribution system design and location so that pipeline alignments match forecast demand
- Measurement: (i) GIS mapping of customer meters, (ii) reading, maintenance and replacement of meters, and (iii) assisting PDAM with customer billing
- New connections: (i) marketing of connections, and (ii) building and maintaining a customer database
- Despatching: assisting in ordering deliveries from the primary storage reservoir
- Distribution management: (i) building and maintaining a management information system (MIS), (ii) preparation of an SOP manual, and (iii) management of a SCADA system

¹⁶¹ For the problems concerning MOF approval of the VGF, see Section 3.4.1.

- Distribution O&M: (i) system operation from reservoir outlet to customer meters, and (ii) ensuring customers receive specified service levels (continuity of supply, pressure, quality and response to complaints)
- Fixed assets management: establishment and maintenance of a fixed assets database for management of the O&M and expansion of the distribution system, including investment requirements

The tenor of the PPP2 agreement will be 8-10 years, with an option to renew based on performance and the possibility of the scope of the contract being extended to include PDAM existing assets.

Payment to the PPP1 BOT Plus project company will be made by the regional government CA in accordance with : (i) achievement of agreed milestones, as specified in the VGF feasibility support letter issued by MOF to the CA, and (ii) readings from the bulk water supply meter at the storage reservoir. The regional government will make its own financial arrangements with the PDAM in this regard.

The payment mechanism for the O&M contractor will consist of a fee for the pre-operations period, (ii) a fixed fee to cover operating costs and meeting agreed service standards (NRW, water quality, continuity, pressure, etc) and commercial targets (number of new connections, volume of water sold), (iii) connection fees, and (iv) an incentive payment.

The mechanism for paying the O&M contractor will be through customer payments which PDAM will deliver to an escrow account at an Indonesian bank. Payments will be authorised by the CA in accordance with the contract agreement. Any balance in the escrow account at termination of agreement will be distributed by arrangement between the regional government and PDAM Bandar Lampung which will continue to manage and operate existing assets.

The remaining two pre-qualified candidates for PPP1 are still awaiting release of the VGF announcement and tender documents. They are: (i) a JV of Manila Water and PT Great Giant Pineapple Company, and (ii) a JV of Abeimsa Infraestructuras Medio Ambiente (Abeima, Spain) and PT Wijaya Karya Persero. A number of contractors have withdrawn from the planned tender because of delays.

EOIs were issued last year for the PPP2 O&M contract. Details of pre-qualified candidates are not known, but it is understood that one pre-qualified candidate is Manila Water.

Sources: Hogan Lovell, transaction advisers for the project, and interviews with stakeholders

APPENDIX 6.3: PPP Water Supply Projects under Preparation - Pondok Gede, Kota Bekasi, Concession

The piped water service coverage in the city is only 25% and less than 1% in Pondok Gede District (*kecamatan*), with a single intake of ten (10) lps serving only 400 connections. The regional government plans to significantly increase the coverage in Pondok Gede and surrounding areas by establishing a PPP arrangement for a BOT whereby a project company will be responsible for the financing, construction operation and maintenance of: (i) a raw water transmission main, (ii) a WTP of 300 lps capacity, (iii) reservoirs with a total capacity of 7,000 m³, and (iv) 61 kilometres of primary distribution to the PDAM reservoirs. The number of incremental connections is estimated to be 30,000.

The planned raw water source is the West Tarum Canal. According to Information from Perum Tirta Jasa II (a state-owned enterprise for water resources management), the canal is 80 kilometres long, with an average width of 25 metres and an average flow rate of 55 m³ per second. In addition to supplying local irrigation requirements, the canal is also a raw water source for DKI Jakarta, as well as Kabupaten Bekasi. The regional government is in the process of applying for an allocation of 300 lps from this source for the proposed PPP project.

A total land requirement of about 8,000 m³ has been estimated for the development of the raw water intake, WTP and service reservoirs. It is expected that the transmission mains will be built on public land. Compensation will be provided for the acquisition of land and buildings, the transfer of public utilities and the replacement of trees, plants and other vegetation.

Initial investigations have indicated that project implementation should not pose any significant environmental problems, but an Environmental Impact Assessment (EIA), an Environmental Management Plan (EMP), and a public consultation are planned.

The project office of IRSDP at BAPPENAS has provided the following project structure:

Estimated project cost – USD 20 million equivalent

Indicative debt to equity ratio – 60:40

Contract period: BOT for 20-25 years

The IRSDP project preparation document indicates that the project may require VGF support to increase financial viability, as well as a government decree through the IIGF to mitigate project risks from changes in demand and to the regional government political framework.

Source: BAPPENAS PPP Infrastructure Projects Plan and Consultant's Visit

APPENDIX 6.4: PPP Water Supply Projects under Preparation - West Semarang BOT

PDAM Kota Semarang has installed production capacity of 3,200 lps, but at present produces only 2,600-2,800 lps in the dry season. It also has NRW of more than 50%. PDAM service coverage over the entire city is about 57% (142,000 connections), but only 33% (33,000) in the western area of Semarang. This will be the service area of the proposed 1,050 lps BOT, covering the districts of West Semarang, Tugu and Ngaliyan.

The technical services to be provided under the BOT are:

- The BOT itself, consisting of: (i) an intake from the Jatibarang Dam, pumping station and bulk raw water transmission main of 2.2 km to the WTP, (ii) a WTP of 1,050 lps output capacity, (iii) 15 km bulk treated water transmission mains to the service reservoirs, (iv) four (4) service reservoirs with an aggregate capacity of 10,800 m³, and (v) a 200 metre transmission main connecting one of the service reservoirs with an existing unit.
- Operation and maintenance of an existing service reservoir.
- Build and transfer to the PDAM immediately following construction 79 km of primary and 298 km of secondary distribution pipes.

PDAM and the CA will be responsible for financing the tertiary distribution systems. About 80,000 new connections are forecast.

The CA will be the city regional government of Semarang. It will provide all necessary land at its own cost and will not seek recovery from the project company. Funds for land acquisition have been allocated in the APBD. The project will also require a water extraction permit (SIPA), which cannot be issued until the Jatibarang Dam is operational. However, the Directorate General of Water resources at MPW has provided a letter of comfort to the CA that this issue will not delay the project.

There will be a fixed take-or-pay arrangement to cover capital investment and fixed recurrent costs, plus an output cost for the variable production costs. The payment structure allocates this risk entirely to the public sector (CA). The IIGF and CA are discussing a cooperation agreement and it is expected that the IIGF will provide a guarantee; however, the IIGF will first require a regional government regulation (*perda*) from the DPRD as a pre-condition to issuing the guarantee. The city government is carrying out a socialisation of this matter and the *perda* is expected to be passed by the end of 2014.

The pre-FS estimated a FIRR of 10%, using an average tariff of Rp 6,700 per m³ based on a willingness-to-pay survey. The CA is currently preparing a VGF application to MOF to enable a 15% FIRR.

An EOI has been issued which has attracted some 32 potential participants, including both national and international companies.

The PDAM will need significant capacity-building to manage the expected 80,000 incremental connections. There is also a requirement for a fixed assets management programme to prepare investment and financing plans for the interface between the PPP project and the distribution network.

Sources: BAPPENAS PPP Infrastructure Projects Plan and Consultant's Visit

APPENDIX 6.5: PPP Water Supply Projects under Preparation - South Bali BOT

A priority of the provincial government of Bali is to increase and improve the water supply service in the tourist-dependent and densely populated regional governments of Kota Denpasar and Kabupaten Bandung, as well as Kabupatens Klungkung and Gianyar. Three (3) sources of raw water have been proposed – Tukad Unda, Tukad Penet and Tukad Petanu. The project will deliver an aggregate of 1,000 lps of raw water to meet projected demand for the next 15 years.

The technical profile of the project consists of: (i) a 1,000 lps capacity WTP taking raw water from Tukad Unda, (ii) a reservoir, (iii) a bulk transmission main from the WTP to the distribution point, and (iv) O&M of the two (2) 300 lps capacity WTPs supplied from Tukad Penet and Tukad Petanu respectively.

Most project components will be constructed on public land. However, the reservoir will be located on what is currently on privately-owned land, and resettlement and compensation will be required.

The project office of IRSDP at BAPPENAS has provided the following project structure:

Estimated project cost – USD 220 million equivalent

Indicative debt to equity ratio – 70:30

Contract period: BOT for 20-25 years

The project is unsolicited and has been proposed by a consortium. Consequently, although the consortium was the successful tenderer, the project is not eligible for VGF. This constitutes a problem since the FIRR for the project as currently defined is below the threshold acceptable to the proponent, whilst the EIRR of 14% demonstrates economic feasibility. However, the project is eligible for a guarantee from the IIGF. A draft of the guarantee is currently with the provincial governor awaiting approval (The provincial government will be the CA for the project)

Source: BAPPENAS PPP Infrastructure Projects Plan

APPENDIX 6.6: PPP Projects under Preparation - Lamongan Concession

This PPP project was initiated by the regional government of Kabupaten Lamongan, East Java Province, for an area where only 3% of the population is connected to the PDAM service. The regional government is the CA. The districts to be served are Paciran, Brondong, Laren and Solokuro which form part of the Pantura Special Economic Zone along the northern coastal road of East Java. The reason for the PPP project is that PDAM Kabupaten Lamongan lacks the financial capability to provide even limited investment.

The project involves an initial investment of approximately USD 15 million equivalent. The raw water sources are the Sedayulawas spillway (volume 2.1 million m³), the Jabung swamp (volume 30.5 million m³), and a raw water reserve of 17.35 million m³. A 215 lps transfer of raw water is planned along a 15 km transmission main of 550 mm diameter to a 200 lps WTP and thence to a 3,000 m³ capacity primary storage reservoir. From there, the treated water will be sent via a 19 km transmission main to four (4) secondary storage reservoirs (2 x 2,000 m³ and 2 x 1,000 m³).

The 200 lps will be notionally distributed in quantities of 60% to households and 40% to industry. The CA has not made application to MOF for either VGF or the IIGF guarantee. The regional government stated that the project was too small, but this is not correct as the cost is estimated at considerably more than Rp 100 billion, whilst the project is also entered in the BAPPENAS PPP Book. It is possible that the industrial and commercial demands provide an acceptable FIRR and therefore no VGF is required. Risk allocation is, however, provided in the tender documents, based on advice from IRSDP.

The project will be 100% investor-bid, including land acquisition. The water purchase tariff of Rp 3,200 will be the determinant for the successful bidder. Tariff conditions include a provision for a revision every two (2) years in accordance with the published annual inflation rates of the National Central Statistics Office (BPS). The project company will be responsible for marketing connections, billing and collection.

Three (3) entities have pre-qualified: (i) a joint venture of PT Bakrie Land Development and a Koean company, (ii) PT Nusantara Infrastructure and (iii) PT Acuatico. Tenders are expected to be issued shortly.

Sources: BAPPENAS PPP Infrastructure Projects Plan, Bisnis Indonesia August 28, 2013, and Consultant's Visit

APPENDIX 7: B2B WATER SUPPLY CONTRACTORS

APPENDIX 7.1: B2B Water Supply Contractors - Meeting with PT Tirta Gajah Mungkur (TJM), 16.04.2014

PT Tirta Gajah Mungkur is an SPV formed by PT Degremont which manages a WTP in Kota Semarang and also provides technical assistance on fire safety and security solutions. PT Degremont itself is the Indonesian subsidiary of Degremont Equipment, manufacturers of and contractors for a broad range water treatment facilities, owned in turn by Degremont S.A, France, itself a subsidiary of Suez Environment. PT Degremont has considerable experience in Indonesia, including construction of 2,000 and 3,000 lps WTPs in Jakarta and a 500 lps WTP BOT JV in Medan for 25 years from 1999-2024. PT Degremont has an 85% in the Medan SPV (PT Tirta Lyonnaise) and PDAM Tirtanadi 15%.

PT TJM has a 15-year RUOT contract with PDAM Kota Semarang, signed in 2005. The contract required PT TJM to rehabilitate and up-rate a 400 lps WTP to 500 lps and then to 600 lps progressively over four (4) years and to operate and maintain the entire plant. The total original investment was Rp 26 billion. The project was financed out of PT Degremont equity. The contract contains the standard elements of a fixed charge to cover depreciation and management costs and a variable charge for O&M. The contract provides for the tariff to be adjusted annually in accordance with BPS published inflation data.

The source raw water from the river is pumped up a gradient to the WTP complex and is said to be a problem because of sedimentation. Continuity of the electricity supply is also an issue.

PT TJM has had problems with BPKP in its annual performance reviews (*laporan kinerja*), with BPKP citing issues with the clarity of the agreement and the treated water purchase price. Starting in 2007, the company received no payment for 18 months and eventually ceased work on the contract. The BPKP performance review of PDAM's 2008 activities cleared the way for a resumption of work by PT TJM, and a contract amendment was agreed, increasing the investment to Rp 33.8 billion. However, BPKP again raised queries in its report on PDAM's 2011 performance concerning the unit purchase price. PT TJM stated that the price was subsequently reduced to Rp 900 per m³. The parent company either feels satisfied with the reduced price or is willing to continue operations at a loss for marketing reasons.

The contract has never included a clause requiring a BPKP opinion prior to effectiveness.

APPENDIX 7.2: B2B Water Supply Contractors - Meeting with PT Drupadi Agung Lestari, 02.05.2014

PT Drupadi Agung Lestari is a water supply developer which constructs and manages B2B projects. It currently has two (2) following projects under operation:

The first project is with PDAM Kabupaten Gresik, East Java Province and is located at Kecamatan Krikilan. It consists of the rehabilitation of a 150 lps WTP and subsequently up-rating it to 250 lps (total cost Rp 47 billion). The company is presently operating and managing this unit and will commence its rehabilitation when a new 100 lps WTP with transmission pipe to the reservoir has been constructed (total cost Rp 86 billion and 90% complete at this time). The agreement is for 25 years

The tariff for the O&M of the existing unit is Rp 1,000 per m³. It will rise to Rp 2,500 once the new WTP is operational, with the same tariff to be applied for the rehabilitated/up-rated WTP. An annual inflation adjustment of 6.5% is provided for in the contract with PDAM.

The second project is located in Kabupaten Banjar, South Kalimantan Province. The PDAM supplies the kabupaten and part of the kota. An agreement was signed in October 2012 for a BOT of 500 lps, with 150 lps to be operational by October 2013 (which was achieved) at a cost of Rp 70 billion. A further 150 lps WTP is due for commissioning at the end of 2014, with the final 200 lps being ready by the end of 2015. The agreement is for 20 years. The tariff is Rp 2,500 per m³, the same price that PDAM Banjar is currently paying PDAM Banjarmasin.

Both arrangements required about six (6) months to close from time of initial contact.

Drupadi looks for a maximum of 70:30 DER. In the case of Banjar the ratio is 54.46. the tenor of both loans (Bank South Kalimantan is the lender for Banjar) is 10 years, including a one-year grace period. The interest rate was not disclosed, but the 18% FIRR suggests it is probably around 12%.

Drupadi states that there are no references in their contracts to a need to obtain an opinion from BPKP before they become operational and that they have no problems. However, at a meeting on 21 April, 2014, PDAM Gresik noted that BPKP have already raised queries about the unit purchase price and the fairness of risk allocation and penalties.

The company has MOUs with PDAM Deli Serdang, North Sumatra Province, for two (2) 1,000 lps BOTs, and for a 200 lps BOT at PDAM Kota Pontianak, West Kalimantan Province. There are problems with raising finance on acceptable conditions. It is assumed that both these MOUs have option limits in terms of time for Drupadi to conclude financing arrangements. The USAID DCA is attractive to the company which is anxious to explore further this financial instrument.

APPENDIX 7.3: B2B Water Supply Contractors - Meeting with PT Moya Indonesia, 27.03.14

PT Moya Indonesia is a water supply development and service company which is 100% owned by Moya Asia Ltd, a Singapore-based company listed on the Singapore Stock Exchange. Moya Asia Ltd is 54% owned by Moya Holdings Company, a Bahreini closed joint stock company.

PT Moya has three (3) B2B operations in Indonesia, each of which is managed and operated by an SPV. In sequence of establishment, they are: (i) PT Moya Bekasi Jaya, (ii) PT Moya Tangerang, and (iii) PT Moya Makassar.

PT Moya Bekasi: In August 2011, it was announced that PT Moya Indonesia had entered into a 25-year BOT-type contract with PDAM Kabupaten Bekasi to supply bulk water in two (2) phases: (i) construction of a new 200 lps WTP and up-rating of existing facilities to 500 lps, and (ii) up-grading and up-rating of the resulting 700 lps to 1,000 lps. All physical investment was to be completed by 2017. The estimated cost was USD 20 million, to be funded from internal resources.

The FIRR is 16% and the take-or-pay tariff Rp 2,150 per m³.

A JV company was established to carry out the project, 95% owned by PT Moya Indonesia and 5% owned by PT Bekasi Putera Jaya, a development and investment company owned by the Kabupaten Bekasi regional government.

The project was delayed due to the election of a new head of the regional government and appointment of a new managing director (*direktur utama*). BPKP asked for clarification of details of the contract, especially the unit off-take price and the build-up of the capital and operating expenditure (capex, opex) profiles, which the new managing director could not answer. PT Moya Bekasi has given a presentation which seems to have satisfied all parties, with an amendment to the contract which breaks out the opex for the WTP to be up-rated and up-graded and that for the new unit. Project implementation has now resumed. However, it is not clear whether the uncertainties concerning PT Moya Tangerang's project in Kota Tangerang will impact upon the activities in Kabupaten Bekasi

PT Moya Tangerang: In February 2012, PT Moya Indonesia entered into another 25-year BOT-type contract, this time with PDAM Kota Tangerang. The project was to be rolled out in three (3) zones with a total capacity of 1,950 lps: Zone I comprising Kecamatan Neglasari, Cipondoh, Bandu and Batuaceper, plus Soekarno Hatta Airport; Zone II Kecamatan Jatiuwang, Karawaci, Periuk and Cibodas; and Zone III Karang Tengah, Pinang, Larangan and Ciledug. Commencement of construction work in each zone would be subject to a minimum level of water demand and a work plan to be agreed by PT Moya Indonesia with PDAM. These have been completed, but the IIF has requested a re-location of one of the WTPs to a position closer to Soekarno Hatta airport for which a new AMDAL is required.

Beginning with Zone I, PT Moya Indonesia was to build a new WTP with a capacity of 500 lps and to up-grade an existing WTP to 400 lps. Zones II and III were to each comprise a WTP of 500 lps, with 100 lps allocated to Soekarno Hatta Airport. Total implementation was scheduled to be spread over five (5) years, i.e. to the end of 2016. In addition, PT Moya Indonesia was to design and build 800 km of distribution pipelines for management and operation by PDAM. The value of the investment was estimated at USD 110-120 million equivalent.

The agreement sets an initial off-take tariff of Rp. 3,750 per m³, based on an FIRR 16%.

PT Moya Tangerang, an SPV 100% owned by PT Moya Indonesia, has been established to manage and operate the facilities. PT IIF, together with PT SMI and the IFC, has led a syndicated loan of Rp 750 billion to PT Moya Indonesia. The agreement was signed in June 2013, with the contribution of PT IIF being approximately Rp 280 billion, PT SMI 250 billion and the IFC 220 billion. The IFC is also investing USD 8.7 million equivalent as equity. The terms are of the loan for a 12-year tenor including a grace period of five (5) years. The interest rate of the loan is understood to be in the order of 10%. The debt to equity ratio (DER) is 55:45. The arrangement, which was signed in June 2013, took about six (6) months to close; since the MOU was signed in February 2012, this means that it took PT Moya about ten (10) months to find a basis for negotiating a loan. A commitment fee of 2% was paid up-front, which PT Moya Indonesia thinks was excessive, but probably felt there was no alternative. No drawdown has been made as yet because of the need for an AMDAL (see paragraph above).

Problems have arisen because of the election of a new head of local government, whilst BPKP has recommended a review of the contract on the grounds that it is unaffordable to households and may cause PDAM severe losses. Moya is proposing to renegotiate the contract by reducing the investment to cover Zone I only, i.e. to build a new WTP with a capacity of 500 lps and to upgrade an existing WTP to 400 lps for a total of 900 lps. It is understood that agreement has been reached in principle with PDAM, but that a lower tariff is still under discussion. The revised contract will then be submitted to BPKP for another opinion. However, there also reports that the loan facility has been suspended due to alleged irregularities by the borrower, meaning that work carried out to date has been financed out of equity from the parent companies.

PT Moya Makassar: In July 2013, PT Moya Indonesia reached an agreement in the form of an MOU to build two (2) 300 lps WTP plus distribution networks in stages to provide potable water to the Makassar Industrial Estate in Kecamatan Taralanra and Biringkanaya. The agreement is subject to an opinion from BPKP, agreement with PDAM on design documents and construction plan, and obtaining raw water extraction permits, the requisite land acquisition rights and all other necessary permits and licenses.

The treated bulk water tariff is Rp 2,000 per m³, again based on a FIRR of 16%

The agreement contains a clause requiring an opinion from BPKP before it becomes effective as a contract. The opinion has not yet been provided.

APPENDIX 7.4: B2B Water Supply Contractors - Meeting with PT Acuatico, 16.05.14

PT Acuatico is 100% owned by Acuatico Pte Ltd, a closed joint stock company with its headquarters in Singapore, which is in turn owned by PT Recapital Securities, an Indonesian investment company and a New York-based hedge fund. The parent company provides water supply services in Indonesia and Vietnam. PT Acuatico was established in 2007 when the parent company bought the shares of PT TPJ, the Indonesian company formed by Thames Water International in 1997 after being awarded the water supply concession for East Jakarta. PT Acuatico then formed PT Aetra Air Jakarta (AAJ) as an SPV to manage and operate the concession. PT AAJ is 95% owned by PT Acuatico and 5% by PT Alberta utilities, a subsidiary of PT Bakrie Investindo. The company is qualified to ISO 9001.

PT Acuatico financed investment through a 10-year bond issue in 2008. It has also borrowed Rp 250 billion from PT SMI and has other sources of finance from domestic banks. It manages treatment facilities totalling 9,000 lps and nearly 6,000 kilometres of distribution pipelines. It has more than 400,000 customers. NRW is slowly being reduced but is still 45%. The company is introducing computer-based tracking mechanisms to improve this performance. It claims to make profits but financial statements are not available, so it is not clear whether it is counting outstanding accounts receivable from PAM Jaya as revenue which it may eventually have to write off; however, it is not laying claim to the 22% rate of return as established in the original concession agreement with PT TPJ which expires in 2022. Its future relationship with the provincial government of DKI Jakarta which is currently buying out the shares of PT Palyja, the concessionaire of the West Jakarta service area.

In 2008, PT Acuatico was awarded a 25-year green field concession in Kabupaten Tangerang to supply water to four (4) districts – Pasar Kemis, Cikupa, Rajeg and Sindang Jaya. PT Aetra Air Tangerang is the SPV established as the operator. This is the only project awarded in accordance with Perpres No 67/2005, and is the only water supply operation providing potable water in Indonesia. The original investment was estimated at Rp 520 billion to supply 900 lps of treated water to a forecast 70,000 new connections.

The concession became operational in 2012 with a 275 lps WTP supplying 28,000 connections by the end of that year. The demand for connections has exceeded expectations and 600 lps of treated water will become available by the end of 2014 to supply 52,000 connections. The full capacity will be installed by the end of 2015 and the company plans to up-rate WTP capacity to 1,080 lps by the end of 2016. The domestic tariff is Rp 4,500 per m³ and the industrial/commercial tariff Rp 13,000.

PT Acuatico is one of three (3) candidates pre-qualified for the 200 lps Kabupaten Lamongan concession which is expected to be put to tender shortly. The project is seen as an attractive business proposition because of its planned 60:40 ratio of supply between domestic and industrial/commercial customers.

APPENDIX 8: PDAMs VISITED

APPENDIX 8.1: PDAMs Visited - Meeting with PDAM Kota Bogor, 28.04.2014

PDAM is qualified to ISO 9001 and has a credit rating from Moodys of Baa2. The rating was funded by ESP in 2008. It is widely recognized as one of the best-managed and most creditworthy PDAMs in Indonesia.

It has three (3) outstanding loans:

- A 1994 loan of Rp 31 billion through the Regional Development Account (RDA)¹⁶² in MOF Treasury from an ADB IUIDP sovereign loan . Terms are 25 years, including a 5-year grace period, at 11.5% interest. The loan closes in 2019.
- A second loan of Rp 84 billion through the RDA in MOF Treasury from the World Bank co-financed UWSSP project. Terms are 24 years, including a 9-year grace period, at 6-month variable LIBOR plus 5.02% to cover GOI's foreign exchange risk, as per PMK No 83/2005¹⁶³. Implementation will be complete this year. The loan is between MOF and the regional government, with the latter on-lending it to the PDAM on the same terms and conditions. The regional government has agreed to accept an intercept¹⁶⁴ on its intergovernmental fiscal transfers in case the PDAM should default and the local government does not make good.
- A ten-year loan plus one-year grace period from Bank Jabar (West Java Bank) for Rp 25 billion at 10% interest. Repayment is guaranteed through a full credit guarantee provided by PT Askrido at an up-front cost of Rp 300 million (equal to a 1.2% premium on the loan at undiscounted prices).

The PDAM wants finance for a project to: (i) construct two new WTPs, each with a capacity of 300 lps and up-rate a third WTP to 240 lps, with reservoirs and transmission/distribution pipes, (ii) acquire NRW reduction technology and equipment, and (iii) construct a new office building. The project is costed at approximately Rp 400 billion in 2013 prices, but a design change is required to accommodate a new intake location. A partial pre-FS has been prepared.

The DPRD will not agree to a further loan through the UWSSP project, which would involve an additional contingent liability through the required intercept. PDAM has little interest in B2B arrangements. It was suggested that PDAM might consider meeting with the International Finance Corporation (IFC) and PDAM asked IUWASH to make a preliminary contact. This was done and IFC expressed interest, probably in co-operation with PT IIF.

¹⁶² Subsequently becoming the Directorate for Investment Management Systems (SMI)

¹⁶³ PMK No 83/2005 on Additional Interest on SLA to Regional Governments

¹⁶⁴ PMK No 129/2008 on Procedures for Implementing an Intercept of the General Allocation Fund (DAU) and/or Shared Revenues (DBH) in connection with a Regional Government Loan from Central Government

APPENDIX 8.2: Meeting with PDAM Kabupaten Serang, 30.04.2014

A private BOO with a 100 lps WTP and distribution system is managed and operated by PT Sarana Tirta Rejeki in Kecamatan Cikande to supply water to the nearby industrial estate. There are 76 industrial connections. The selling price of water is Rp 3,600 per m³. The agreement has a twenty (20) years tenor from 2008 to 2027.

IUWASH has assisted PDAM to prepare a pre-FS for a 200 lps WTP and distribution system to cover the kecamatan of Cikande, Bandung and Jawilan with an anticipated 17,500 connections. The DPRD does not wish to approve a Perpres 29 loan of about Rp 40 billion for the distribution systems because of the contingent liability of the intercept on DAU/DBH transfers. A source of credit still needs to be identified, but the loan terms would probably be difficult.

The initial FIRR base case is only 9.2%, which means that it is not suitable for B2B arrangements; it could be proposed for PPP funding since the estimated value of the works is more than Rp 100 billion. However, the transaction process would likely be lengthy.

APPENDIX 8.3: Meeting with PDAM Kota Bekasi, 02.05.2014

PDAM has four (4) potential SPAM projects for improving the service coverage which currently stands at only 25%:

- A 200 lps BOT treatment plant with transmission main to a PDAM reservoir at Teluk Buyung, forecast to provide 15,000 new connections. PDAM has already acquired the land. Three (3) B2B investors have made presentations upon invitation from PDAM, and the technical evaluation has made the following ranking: (i) PT Metito with a water purchase price of Rp 2,800 per m³, (ii) PT TPN with Rp 2,150 per m³, and (iii) PT Drupadi Agung Lestari with Rp 1,450. The implementation schedule proposed by PT Metito calls for 50 lps by the end of the first year, 75 lps by the end of the second year and so on up to 200 lps by the end of the eighth year. The B2B agreement will have 25 years duration.

PDAM intends to call PT Metito for negotiations, particularly with a view to reducing the tariff. However, there is a legal issue in that ex-managing director is still the official representative of PDAM and not the recently appointed person. The validity of the power of attorney of the new managing director to conduct negotiations and sign an agreement with the successful investor may, according to the mayor, have to be decided in court, with the possibility that the presentation process may have to be repeated. PDAM also plans to ask BPKP for a review of the process and an opinion that the contract with the winner can be signed and become effective. The mayor will give an informal opinion on the agreement through the PDAM Supervisory Board, although all this will be delayed until the legal proceedings have been settled.

- A second BOT WTP of 200 lps is planned for Mustika Raya District, also expected to yield 15,000 additional connections. IUWASH has assisted with the preparation of the pre-FS. However, PDAM will not proceed with B2B pre-qualification arrangements until decisions on Teluk Buyung have been made. The situation is expected to be resolved by the end of 2014.
- The third SPAM will involve a WTP 300 lps off-take of raw water from the proposed dam at Jatiluhur for Pondok Gede District, where the service coverage is less than 1%; alternatively, the scheme may take raw water from the West Tarum canal. IUWASH has assisted with preparation of the pre-FS. This prospect is discussed more fully under PPP activities in Appendix 6.3.
- The fourth is a regional SPAM with SOE Perum Jasa Tirta 2 for a 100 lps WTP at Jati Asih with a potential 8,000 connections, via an offtake from the raw water transmission main from the Jatiluhur Dam to Jakarta and other West Java regional governments. This project is currently on hold due delay in groundbreaking for the Jatiluhur project, now expected to begin at the end of 2014.

In addition, there is a 50 lps WTP and distribution system which serves a residential estate developed by PT Kemang Pratama. The developer manages and operates the system.

APPENDIX 9: DISTRIBUTION OF PT SMI FINANCING AND INVESTMENT IN INFRASTRUCTURE PROJECTS

| Project Typology | Location |
|---------------------------------------|--|
| Oil Supply Base | Kota Lhokseumawe, Aceh Province |
| Road Reconstruction Project | Kab Central Aceh |
| Harbour Project | Kec Tanjung Batu, Bangka/Belitung Province |
| Mini-Hydro Power Plant | Kec Tara Bintang, Kab Hampang Hasandutan, North Sumatra Province |
| Hydro Power Plant | Kec Humbahas, Kab Hampang Hasandutan, North Sumatra Province |
| Hydro Power Plant | Kab Asahan, North Sumatra Province |
| Oil Supply Base | Kec Belawan, Kota Medan, North Sumatra Province |
| Gas Power Plant | Kec Tanjung Uncam, Kota Batam, Riau Islands Province |
| Offloading/ Storage Floating Platform | Kab Natuna, Riau Islands Province |
| Urban Flood Control System | Kota Padang, West Sumatra |
| Mini-Hydro Power Plant | Kab South Solok, West Sumatra Province |
| Irrigation Project | Kab Empat Lawang, South Sumatra Province |
| Mini-Hydro Power Plant | Kab Rejang Lebong, Bengkulu Province |
| By-Pass | Kota Bandar Lampung, Lampung Province |
| Water Supply Project | Aetra Concession, DKI Jakarta |
| Water Supply Project | PT Moya B2B BOT, Kota Tangerang |
| Underpass Project | Cibubur, DKI Jakarta |
| Toll Road | Cikampek - Palimanan, West Java Province |
| Mini-Hydro Power Plant | Kab Lebak, Banten Province |
| Mini-Hydro Power Plant | Kab Banjarnegara, Central Java |
| Southern Ring Road | Kec Ambarawa, Kab Semarang Central Java Province |
| LPG Terminal | Kota Semarang, Central Java Province |
| Offloading/ Storage Floating Platform | Kab Madura, East Java Province |
| Wundulaka Irrigation Project | Kab Kolaka, South-East Sulawesi Province |
| Oil Pipeline Construction | Kab Tuban, East Java Province |
| Fuel Transit Terminal | Kab Tuban, East Java Province |
| Oil Refinery | Kab Bojonegoro, East Java Province |
| Bulk Port | Kab Gresik, East Java Province |
| Girindulu Project | Kab Pacitan, East Java Province |
| Reservoir | Kec Bajulmati, Kab Banyuwangi, East Java Province |
| Road | Teraju-Batas Balia Bekuak, Kab Sanggau, West Kalimantan Province |
| Lampeong Project | Kab North Barito, Central Kalimantan Province |
| Methane Gas Complex | Kota Banjarmasin, South Kalimantan Province |
| Depot & Support Facilities | Palaran Port, Kota Samarinda, East Kalimantan Province |
| Coal Gasification Power Plant | Kab West Kutai, East Kalimantan Province |
| Steam Turbine Power Plant | Kab Tanah Grogot, East Kalimantan Province |
| River Kujang Drainage Project | Kota Samarinda, East Kalimantan Province |
| Road Project | Kab Jenepono-Kab Bataeng, South Sulawesi Province |
| Gerok Tempe Reservoir | Kab Wajo, South Sulawesi Province |
| Pumblu River Bridge | West Sulawesi Province |
| Port | Kec Marisa, Kab Pohuwato Gorontalo Province |
| Steam Turbine Power Plant | Kab Gorontalo, Gorontalo Province |
| Irrigation Project | Kec Sangkup, Kab Bolaang Mongondow, North Sulawesi Province |
| Mini-Hydro Power Plant | Kec Mabuya, North Sulawesi Province |
| Klamana Kambuaya Road Project | Kab Sorong, West Papua Province |
| Arar Transportation Project | Kab Sorong, West Papua Province |
| Kali Api Bridge | Kab Manokwari, West Papua Province |
| Wariki Bridge | Kab Manokwari, West Papua Province |
| Oil Logistics Base, Murphy Semai | Kab Fakfak, West Papua province |
| Road Project | Kec Dekai Oksibil, Kab Pegunungan Bintang, Papua Province |

ADVISORY SERVICES

| Project Typology | Location |
|--|--|
| Mini-Hydro Power Plant | Kec Tara Bintang, Kab Hampang Hasandutan, North Sumatra Province |
| Tugu Station & Pedestrian Revitalisation | Kota Yogyakarta, DKI Yogyakarta |
| Bulk Port | Kab Tuban, East Java Province |
| Mass Rapid Transit Project | Kota Surabaya, East Java Province |
| Coal Train | East Kalimantan Province |
| Wind Energy Power Plant | Timor Island, East Nusa Tenggara Province |

PROJECT DEVELOPMENT

| Project Typology | Location |
|----------------------------------|-----------------------------------|
| Soekarno Hatta Airport Rail Link | DKI Jakarta – Kab Tangerang |
| Umbulan Springs Water Supply | East Java Province |
| Municipal Solid Waste Management | Kota Batam, Riau Islands Province |

Source: PT SMI

APPENDIX 10: IIGF GUARANTEE - PROJECT APPRAISAL CRITERIA AND RISK ASSESSMENT FACTORS

APPENDIX 10.1: IIGF PPP Project Appraisal Criteria

| Aspect | Issues | Supporting Documentation/ Information | Basis & Description of Assessment |
|----------------------|---|---|--|
| Viability | Economic, financial & technical viability | Pre-FS Project Cash Flow | Project can be implemented from technical perspective, fulfils required economic and financial rates of return ¹⁶⁵ . Methodology, assumption and primary and secondary data are realistic, accurate and comprehensive |
| | Environmental & social issues | Economic & social impact assessment | Identification of project impact on natural and social environment, as well as impact mitigation plans |
| | Government support | Detailed description of government support | If project requires direct government support to achieve viability, there must be clarity on the form of participation |
| Risk | Risk management | PPP structure PPP agreement Risk matrix Risk mitigation plan | Comprehensive identification of risks, their allocation between parties that fulfils best practices, robust mitigation plans, construction of sound PPP structure and proper exposition of risk allocation in PPP agreements |
| | Guarantee coverage | Guarantee coverage Cover letter | Guarantee coverage provided by IGF is based on PMK No 260/2010, with reference to sections on PPP structure and agreement, as well as the risk matrix |
| Investor procurement | | Procurement plan | Quality of the procurement process is a determinant of project success in terms of selecting a credible investor and is also required to fulfil Perpres No 67/2005, as amended by Perpres No 13/2010 |
| CA capacity | | CA-related information | CA will need to explain how it plans to control and mitigate the extent of the risk borne, including any agreements entered into with other parties. IIGF will then assess and ask MOF to arrange for financial support |

Source: IIGF

¹⁶⁵ FIRR may be supplemented by direct GOI financial support (VGF)

APPENDIX 10.2: Risk Assessment Matrix for Water Supply BOT

| Risk Category & Event | Description | Public Risk | Private Risk | Shared Risk | Mitigation Strategy | Specific Conditions to Risk Allocation |
|---|---|-------------|--------------|-------------|---|---|
| 1. Site Risk | | | | | | |
| Land acquisition delay and cost overruns | Delay and costs increase due to unclear and prolonged acquisition process | X | | | Government acquires and clears project land site before procurement process | Land requirement for WTP and transmission pipes acquired early |
| Land acquisition is incomplete | Difficult land acquisition process | X | | | Clear legal status and clearance procedures | Land legal status and clearance may be obstacle |
| Complex resettlement process | Delay and costs increase due to complicated resettlement process | X | | | Fair compensation and good communication with those impacted | Risk category and event not significant for water supply sector and small social impact |
| Unforeseen site condition difficulties | Delay and cost increases due to time required for solution | | X | | Historical land use data and land survey | Land requirement not large for water supply sector , therefore manageable risk |
| Artifacts and antiquities found on site | As above | | X | | As above | As above |
| Site safety issues | | | X | | Effective work safety measures | |
| 2. Design, Construction & Commissioning Risk | | | | | | |
| Design brief risk | Time and cost overruns due to unclear/incomplete project brief | | X | | Experienced design consultants | |
| Design defects | Commissioning uncovers design defects | | X | | Experienced design consultants | Usually identified at technical operations testing |
| Delay in construction works completion | May include delay in returning site access | | X | | Qualified contractor and standard contract clauses | |
| Construction cost increase | | | X | | Adequate price escalation clauses in agreement | |
| Commissioning risk | Incorrect time/cost estimates of commissioning | | X | | Good coordination between contractor and operator | |
| 3. Sponsor Risk | | | | | | |
| Poor performance of sub-contractors | | | X | | Efficient sub-contractor selection process | |
| Sub-contractor default | | | X | | As above | |
| Prime contractor default | | | X | | Credible and solid sponsors | |
| Project sponsor default | | | X | | Credible and solid PQ process | |

| Risk Category & Event | Description | Public Risk | Private Risk | Shared Risk | Mitigation Strategy | Specific Conditions to Risk Allocation |
|---|--|-------------|--------------|-------------|--|---|
| 4. Financial Risk | | | | | | |
| Failure to achieve financial closure | Market uncertainty | | X | | Good relationships with potential lenders | Possibility of conditions precedent not being fulfilled |
| Financial structure risk | Sub-optimal capital structure of project | | X | | Credible and solid sponsors and lenders | |
| Foreign exchange risk | Fluctuation of forex rate | | X | | Hedging instruments | |
| Inflation rate risk | Increase of inflation rate used for estimating life-cycle costs | | X | | Tariff indexation factor (rebasings) | |
| Interest rate risk | Fluctuation of interest rate | | X | | Interest rate hedging | |
| Insurance risk (1) | Cover for a certain risk is not available on market | | X | | Consult insurance specialists | Especially for insurance risk coverage under force majeure conditions |
| Insurance risk (2) | Substantial increases in rates at which premiums are calculated | | X | | Consult insurance specialists | |
| 5. Operating Risk | | | | | | |
| Availability of facilities | Due to lack of facilities, contract is delayed/cannot be completed | | X | | Competent contractor | |
| Poor performance of services | Due to lack of facilities, project cannot be operated | | X | | Competent contractor Clear output specifications | |
| Industrial action | Strike, lock-out, go-slow, etc | | X | | Good human resources and industrial relations policies | Operator, sub-contractor or supplier problem |
| O&M cost over-run | Underestimation of O&M costs | | X | | Competent operator Contract escalation factor | |
| Increase in energy costs due to inefficient plant | | | X | | Correct unit specifications and good quality | |
| Irregular availability of utilities | | | X | | Anticipation measures, back-up facilities (g. generator set) | Potential problems should be anticipated as early as possible |
| Shortfall of input quantity | Raw deficit due to reasons under public sector control | X | | | Sound regulation and coordination between related agencies | |
| Shortfall of input quality | Poor water quality due to reasons under public sector control | X | | | Sound regulation and coordination between related agencies | |
| Uncertainty of input continuity | | X | | | Sound regulation and coordination between related agencies | Depending on water source location |
| Shortfall of output quantity | | | X | | Competent operator Penalty mechanism | |
| Decrease of output quality | | | X | | Competent operator Penalty mechanism | |

| Risk Category & Event | Description | Public Risk | Private Risk | Shared Risk | Mitigation Strategy | Specific Conditions to Risk Allocation |
|---|--|-------------|--------------|-------------|---|--|
| 6. Revenue Risk | | | | | | |
| Changes in demand volume on project output | | X | | | Accurate real demand survey | |
| Tariff initial determination failure | User affordability and willingness-to-pay below feasible level | X | | | Subsidy for construction, operation or, preferably tariff | |
| Periodic tariff adjustment delayed | i.e. tariff indexation to inflation rate | X | | | Clear and satisfactory operational performance | |
| Adjusted tariff level below that originally projected | After tariff indexing and rebasing | X | | | Clear and satisfactory operational performance | |
| Miscalculation of tariff estimate | | | X | | Accurate user affordability and willingness-to-pay survey | |
| 7. Network Connectivity Risk | | | | | | |
| Network risk (1) | Leakages/contamination in existing network | X | | | Proper supervision and operational performance standards | |
| Network risk (2) | Breach of CA's obligation to build and maintain required network | X | | | Good understanding of contractual obligations by CA/public sector | |
| Network risk (3) | Breach of CA's obligation to build connecting facilities | X | | | Good understanding of contractual obligations by CA/public sector | |
| Network risk (4) | Breach of CA's obligation not to build competing facilities | X | | | Good understanding of contractual obligations by CA/public sector | |
| 8. Interface Risk | | | | | | |
| Interface risk (1) | Unabsorbed output in first years of operation | X | | | Take-or-pay clauses in water purchase contract | |
| Interface risk (2) | Disparity in quality of works done by government (as fiscal support) and project company | X | X | | Remedial action by party with sub-standard quality of works | |
| Interface risk (3) | Substantial re-work required due to different standards/delivery methods | | X | | Prior agreement on standards/ delivery methods | |

| Risk Category & Event | Description | Public Risk | Private Risk | Shared Risk | Mitigation Strategy | Specific Conditions to Risk Allocation |
|---|---|-------------|--------------|-------------|---|---|
| 9. Political Risk | | | | | | |
| Currency non-convertibility | Unavailability/non-convertibility of local currency to that of investor | X | | | Local financing Off-shore account Host central bank guarantee | |
| Currency non-transfer | Inability to transfer forex funds to investor country | X | | | Local financing Off-shore account Host central bank guarantee | |
| Expropriation | | X | | | Mediation Host government guarantee | |
| Changes in law (including tax law) | | X | | | Clear contract provisions, including compensation | |
| Planning or consent approval delays | If caused by public sector unilateral decision | X | | | Clear contract provisions, including compensation | |
| Delay for site access | If caused by public sector unilateral decision | X | | | Clear contract provisions, including compensation | |
| Parastatal risk (1) | Breach of off-taker's contractual obligations | X | | | Political risk insurance Host government guarantee | |
| Parastatal risk (2) | Privatisation of off-taker | X | | | Political risk insurance Host government guarantee | |
| 10. Force Majeure Risk | | | | | | |
| Natural disaster | Catastrophe, act of God events | | | X | Insurance, to the extent possible | |
| Political risk | War, riot, civil disturbance | | | X | Insurance, to the extent possible | |
| Extreme weather | | | | X | Insurance, to the extent possible | |
| Prolonged force majeure | Financial problems for affected party if no insurance | | | X | Termination of contract for cause clause | Especially if insurance not available for certain risks |
| 11. Asset Ownership Risk | | | | | | |
| Asset loss risk event | Fire, flood, explosion etc | | X | | Insurance | |
| Asset transfer after PPP agreement terminates | | | X | | Robust business due diligence in pre-FS | |

Source: Indonesia Infrastructure Guarantee Fund

APPENDIX 10.3: Additional Risk Factors for Water Supply Concession

| Risk Category & Event | Description | Public Risk | Private Risk | Shared Risk | Mitigation Strategy | Specific Conditions to Risk Allocation |
|--|--|-------------|--------------|-------------|--|--|
| 6. Additional Revenue Risks | | | | | | |
| Changes in demand ¹⁶⁶ volume on project output | | | X | | Accurate volume demand calculation based on affordability and willingness-to-pay | |
| Incorrect estimate of revenue from income generation model | | | X | | Accurate volume demand calculation based on affordability and willingness-to-pay | |
| Consumers (retail) fail to pay | Consumer affordability and willingness-to-pay are below the feasible tariff | X | | | Subsidy for construction, operations or, preferably, tariff | |
| Failure to collect payments | Failure/non-optimal payments collection system | | X | | Accurate consumers' affordability and willingness-to-pay survey | |
| Failure to obtain proposed tariff revision | Inability of project company to obtain proposed tariff levels due to failure to achieve agreed levels of service | | X | | Clear and satisfactory operational performance | |
| 8. Additional Interface Risk | | | | | | |
| Interface risk (I) ¹⁶⁷ | Unabsorbed output in first years of operation | | X | | Accurate volume demand calculation based on affordability and willingness-to-pay | |
| 12. Additional Asset Ownership Risks | | | | | | |
| Transfer of existing business risk | Uncertainty of conditions at time of transfer of existing business | | X | | Robust business due diligence in pre-FS | |
| Transfer of existing asset risk | Unanticipated condition of existing assets | | X | | Robust fixed assets management due diligence | |

Source: Indonesia Infrastructure Guarantee Fund

¹⁶⁶ Risk allocation changed from the public sector for a BOT to the private sector for a concession¹⁶⁷ As above

Additional Risk Factors for Water Supply Concession

| Project | Sector | Total Project Cost (Rp Billion) | PT SMI Commitment (Rp Billion) | PT SMI Share (%) |
|--|-----------------------------|------------------------------------|--------------------------------------|---------------------|
| Investment | | | | |
| Electricity development projects in Sumatra and Sulawesi | Electricity | 3,447.3 | 304.7 | 8.8% |
| Asahan Hydro Power Project, Stage I | Electricity | 3,547.0 | 243.8 | 6.9% |
| Kabupaten Tangerang Drinking Water Supply | Water supply | 1,412.0 | 240.0 | 17.0% |
| Gresik Bulk Port Expansion | Transportation | 107.9 | 87.5 | 8.1% |
| Base Transceiver Station Co-Location | Telecommunications | 3,000.0 | 200.0 | 6.7% |
| Tanjung Uncan, Batam, Gas Generator Power Plant | Electricity | 780.1 | 292.5 | 37.5% |
| Bojonegoro, East Java, Oil Refinery | Oil and Gas | 1,828.4 | 115.5 | 6.3% |
| Gorontalo, Steam Generator Power Plant | Electricity | 476.9 | 341.3 | 71.6% |
| Palaran, East Kalimantan, Seaport and Supporting Facilities | Transportation | 550.0 | 370.0 | 67.2% |
| Palaran, East Kalimantan, Stuffing Stripping Depot, Seaport Construction | Transportation | 61.4 | 50.0 | 81.4% |
| Sub-Total | | 15,240.9 | 2,245.3 | 14.7% |
| Working Capital | | | | |
| Roads, Bridges and Railway Construction | Roads and Transportation | 171.2 | 100.0 | 58.4% |
| Roads and Irrigation Construction | Roads and Irrigation | 217.8 | 100.0 | 45.9% |
| Dekai Oksibil Road Construction; Bajulmati Irrigation Construction | Roads and Irrigation | 739.7 | 150.0 | 20.3% |
| Telecommunications | Telecommunications | 700.0 | 350.0 | 50.0% |
| Sub-Total | | 1,828.6 | 700.0 | 38.3% |
| Total | | 17,069.6 | 2,945.3 | 17.3% |

Source: PT SMI 2013 Annual Report

APPENDIX I I: CENTRAL JAVA SPAM REGIONAL

| No | PDAM | Ips | No H/H Conns | Trans RW Cost Rp Bill | WTP/BTM Cost Rp Bill | Distrib Cost Rp Bill | Total Rp Bill |
|----|------------------|-------|--------------|-----------------------|----------------------|----------------------|---------------|
| 1 | Kab Brebes | 200 | 16,000 | 193.9 | 221.6 | 100.0 | 515.5 |
| | Kab Tegal | 250 | 20,000 | | | | |
| | Kota Tegal | 200 | 16,000 | | | | |
| | Sub-Total | 650 | 56,000 | | | | |
| 2 | Kab Kebumen | 400 | 32,000 | 203.0 | 90.0 | 96.0 | 389.0 |
| | Kab Purworejo | 200 | 16,000 | | | | |
| | Sub-Total | 600 | 48,000 | | | | |
| 3 | Kab Wonogiri | 200 | 16,000 | 846.3 | 150.1 | 336.0 | 1,332.4 |
| | Kab Sukoharjo | 300 | 24,000 | | | | |
| | Kota Surakarta | 900 | 72,000 | | | | |
| | Kab Karanganyar | 350 | 28,000 | | | | |
| | Kab Sragen | 350 | 28,000 | | | | |
| | Sub-Total | 2,150 | 168,000 | | | | |
| 4 | Kab Batang | 300 | 24,000 | 284.8 | 165.1 | 176.0 | 625.9 |
| | Kab Pekalongan | 200 | 16,000 | | | | |
| | Kota Pekalongan | 600 | 48,000 | | | | |
| | Sub-Total | 1,100 | 88,000 | | | | |
| 5 | Kab Purbalingga | 240 | 19,200 | 310.3 | 0.0 | 96.0 | 406.3 |
| | Kab Banjarnegara | 100 | 8,000 | | | | |
| | Kab Banyumas | 260 | 20,800 | | | | |
| | Sub-Total | 600 | 48,000 | | | | |
| 6 | Kab Grobogan | 200 | 16,000 | 670.0 | 76.6 | 216.0 | 962.2 |
| | Kab Kudus | 300 | 24,000 | | | | |
| | Kota Pati | 350 | 28,000 | | | | |
| | Kab Jepara | 500 | 40,000 | | | | |
| | Sub-Total | 1,350 | 108,000 | | | | |
| 7 | Kab Semarang | 150 | 12,000 | 90.4 | 17.0 | 40.0 | 147.4 |
| | Kab Salatiga | 100 | 8,000 | | | | |
| | Sub-Total | 250 | 20,000 | | | | |
| 8 | Kab Banjarnegara | 150 | 12,000 | 91.2 | 31.3 | 24.0 | 146.5 |
| | Kab Wonosobo | N/A | N/A | | | | |
| | Sub-Total | 150 | 12,000 | | | | |
| | Total | 6,800 | 544,000 | 2,689.9 | 751.7 | 1,084.0 | 4,525.6 |

Source: PDAB Central Java Province

APPENDIX 12: PERSONS MET DURING THE ASSIGNMENT AND THEIR AFFILIATIONS

| Name | Affiliation |
|---------------------|--|
| | Consultants |
| Edward Gustely | Independent Financial Adviser |
| Gerald McManus | Business Manager, Cardno, ex-IRSDP Team Leader |
| Andre Oosterman | Independent Public Finance Specialist |
| Jose Cordovilla | Team Leader, Infrastructure Reform Sector Development Project, BAPPENAS |
| Stefanos Kristianto | Financial Analyst, Infrastructure Reform Sector Development Project, BAPPENAS |
| Chris Sandeman | Water Supply Engineer, PT Mott MacDonald |
| Andrew McLernon | Independent Institutional Consultant |
| Windhu Hidranto | Managing Director, PT PPP |
| Rudi Willem | Director, PT Infratama Yakti |
| Jardin Bahar | Partner, Hermawan Juniarto, Lawyers |
| Rashmi Nain | Director, International Business, Crisil Risk & Infrastructure Solutions Ltd |
| | Donors |
| Irma Setiono | Water & Sanitation Specialist, World Bank, Jakarta |
| Blane Lewis | Public Sector Finance Consultant, World Bank |
| Staffan Synnerstrom | Governance Adviser, World Bank |
| Tetsuya Harada | Public Finance Economist, World Bank, Jakarta |
| Risyana Sukarma | Water & Sanitation Specialist, World Bank, Jakarta |
| Noraya Soewarno | Senior Investment Officer, Asian Development Bank, Jakarta |
| Pamela Bracey | Head, Private Sector Operations, Asian Development Bank, Jakarta |
| Paul van Klaveren | Senior Urban Development Specialist, Asian Development Bank, Jakarta |
| Alejandro Perez | Senior Investment Officer, Infrastructure & Natural Resources, International Finance Corporation |
| David Ray | Facility Director, Indll |
| Jim Coucouvinis | Technical Director, Water & Sanitation, Indll |
| Lynton Ulrich | Director, Policy & Investment, Indll |
| James Woodcock | Adviser, PMU, Perpres 29 Project, Indll |
| Poppy Lestari | Senior Programme Officer, Municipal Finance, Indll |
| David Hawes | Senior Infrastructure Adviser, Indonesia Office, Department of Foreign of foreign Affairs & Trade, Government of Australia |
| Peter Gauthier | Investment Officer, Development Credit Authority, USAID Washington |
| Jesse Shapiro | WASH Adviser & Sanitation Focal Point, USAID, Washington |
| Heather d'Agnes | Environment Officer, USAID, Jakarta |
| Aurelia Micko | Deputy Director, Environment Office, USAID, Jakarta |
| Brian Duzsa | Private Sector Specialist, Environment Office, USAID, Jakarta |
| | Commercial Bank & Non-Bank Financing Institutions |
| Arianto Wibowo | Executive Vice-President, Head of Business Development, Indonesia Infrastructure Guarantee Fund |
| Emil Dardak | Executive Vice-President, Head of Project Appraisal & Structuring, Indonesia Infrastructure Guarantee Fund |
| Siti Maesaroh | Assistant Vice-President, Corporate Relationships, Bank Nasional Indonesia 1946 |
| Ibrahim Anwar | Credit Analyst, Bank of Central Java |

| Name | Affiliation |
|----------------------|--|
| Irman Boyle | Executive Vice-President, Head of Public Sector Advisory, Indonesia Infrastructure Finance |
| Richard Michael | Executive Vice-President, Head of Private Clients Advisory, Indonesia Infrastructure Finance |
| Asido Sitompul | Vice-President, Investment, Indonesia Infrastructure Finance |
| Harold Tjiptadaja | Managing Director, Head of Domestic Clients Investment, Indonesia Infrastructure Finance |
| Indria Purwaningsih | Financing & Investment Division, PT SMI |
| Ramona Harimurti | Financing & Investment Division, PT SMI |
| Adyaksa Paripurna | Project Preparation Division, PT SMI |
| Eri Wibowo | Financing & Investment Division, PT SMI |
| Edwin Syahrudad | Executive Vice-President, Advisory Services, PT SMI |
| Frans Nembo Sukardi | Director, Advisory Services & Project Preparation, PT SMI |
| | Water Supply Development Companies |
| Scott Younger | Director, PT Nusantara Infrastructure |
| Tom Shreve | Managing Director, PT Acuatico |
| Eko Bagus Delianto | President Director, PT Cirijasa Rancanbagun Mandiri |
| Kris Herry Widodo | Managing Director, PT Moya, Indonesia |
| Lukito Pudjanarko | Manager, Finance & Accounting, PT Moya Indonesia |
| Dedi Budiarto | President Director, PT Moya Tangerang |
| Yuri Supriyanto | President Director, PT Moya Makassar |
| Rachmat Karnadi | Adviser, PT Moya |
| Sona | Manager, Krikilan WTP RUOT, PDAM Kab Gresik, PT Drupadi Agung Lestari |
| Dadan Hendra Sambas | President Director, PT Drupadi Agung Lestari |
| Ronald C Simanjuntak | Finance & Administration Director, PT Drupadi Agung Lestari |
| Henry Satrio | General Manager, Finance, PT Drupadi Agung Lestari |
| Hendra Mohammad | O&M Manager, PT Tirta Gajah Mungkur |
| | Central Government |
| Noor Faisal | Deputy Director, Regional Government Loan Management, Directorate of Investment Management Systems, Directorate General of Treasury, Ministry of Finance |
| Soritaon Siregar | Managing Director, Indonesia Investment Agency, Ministry of Finance |
| Mohammad Ferian | Securities Direct Investment Manager, Indonesia Investment Agency |
| Bastari Pandji Indra | Director, PPP Development, BAPPENAS |
| Rachmat Mardiana | Deputy Director, Risk & Tariff Analysis, Directorate of PPP Development, BAPPENAS |
| Yusuf | BAPPENAS Team Leader, Infrastructure Reform Sector Development Project |
| Rina Agustin | Secretary, BPPSPAM, Ministry of Public Works |
| Hilwan | Deputy Director, Water Supply Directorate, Directorate General of Human Settlements, |
| | Provincial Government |
| Purnando | Head, Public Works Department, Central Java Province |
| Oktaviana | Secretary, Public Works Department, Central Java Province |
| Joko Triono | Managing Director, PDAB, East Java Province |
| Kristanto Herustono | Finance Director, PDAB, East Java Province |

| Name | Affiliation |
|----------------------|--|
| Suparno | Technical Director, PDAB, East Java Province |
| Hartadi | Coordinator, SPAM Regional, PDAB, East Java Province |
| | Regional (City and Regency) Government |
| Purnomo Dwi Sasongko | Head of Infrastructure Division, BAPPEDA, Kota Semarang |
| Bagus Irawan | Staff, Infrastructure Division, BAPPEDA, Kota Semarang |
| Susi Pujahandiri | Staff, Infrastructure Division, BAPPEDA, Kota Semarang |
| Agustin | Section Head, Planning and Implementation, BAPPEDA, Kabupaten Lamongan |
| Dinar Dwi Andhi | Staff, Planning and Implementation, BAPPEDA, Kabupaten Lamongan |
| Sigit Hari Mardani | Staff, Public Works Department, Kabupaten Lamongan |
| | PDAM |
| H Singgih Triwibowo | Managing Director, PDAM Surakarta |
| Mariyanto | Technical Director, PDAM Surakarta |
| Taufan | Director, General Affairs, PDAM Surakarta |
| Syaiful | Team Leader, KPS, PDAM Semarang |
| Gunawan | Member, KPS, PDAM Semarang |
| Hariyanto | Member, KPS, PDAM Semarang |
| Enni | Secretary, KPS, PDAM Semarang |
| Zacky Zulkarnaen | Director, General Affairs, PDAM Kabupaten Gresik |
| Yunies Irwin | Head, Training Division, PDAM Kabupaten Gresik |
| Suwono | Section Head, Planning Division, PDAM Kabupaten Gresik |
| Yulin Darwati | Section Head, Accounts & Finance Division, PDAM Kabupaten Gresik |
| Hery Sudhi | Head, Finance Division, PDAM Kabupaten Gresik |
| Lutvil Hakim | Director, PDAM Kabupaten Mojokerto |
| Mohammad Maksun | Director, PDAM Kabupaten Lamongan |
| Munief R | Head, Accounts & Finance Division, PDAM Kabupaten Lamongan |
| Sumito | Section Head, Accounts & Finance Division, PDAM Kabupaten Lamongan |
| M Ali Mahfudi | Head, Technical Division, PDAM Kabupaten Lamongan |
| H Abdul Basit Lao | Director, General Affairs, PDAM Kabupaten Sidoarjo |
| Ardhiyanti | Head, Legal Division, PDAM Kabupaten Sidoarjo |
| H Untung Kurniadi | Managing Director, PDAM Kota Bogor |
| Ade Sarip | Director, General Affairs, PDAM Kota Bogor |
| Hendra Setiawan | Head, Legal Division, PDAM Kota Bogor |
| Sri Maryati | Head, Finance Division, PDAM Kota Bogor |
| Achmad Rifa'i | Director, PDAM Kabupaten Serang |
| M Nasir | Head, Technical Division, PDAM Kabupaten Serang |
| Udi Rosadi | Head, General Affairs Division, PDAM Kabupaten Serang |
| Heri Sudrajat | Supervisor, Water Production, PDAM Kabupaten Serang |
| Iis Imam P | Supervisor, Water Distribution, PDAM Kabupaten Serang |
| Nurdin S | Supervisor, Finance & Accounting, PDAM Kabupaten Serang |
| Hendy Irawan | Managing Director, PDAM Kota Bekasi |
| Cecep Achmadi | Technical Director, PDAM Kota Bekasi |
| Lia | Head, Legal Division, PDAM Kota Bekasi |

INDONESIA URBAN WATER SANITATION AND HYGIENE

**Mayapada Tower 10th Fl
Jl. Jend. Sudirman Kav. 28
Jakarta 12920
Indonesia**

**Tel. +62-21 522 - 0540
Fax. +62-21 522 - 0539**

www.iuwash.or.id