APPENDIX

AP1 Executive Summary (Indonesian Version)

AP1 Executive Summary (Indonesian Version)

AP2 Executive Summary Charts (English Version)

AP2-1 Executive Summary Charts (English Version)

AP2-2 Executive Summary Charts (Appendix)

AP3 Executive Summary Charts (Japanese Version)

AP3 Executive Summary Charts (Japanese Version)

AP4 Appendix to Chapter 2

AP4-1 Detailed comparison of Revisions (draft) of BAPPENAS and Recommendations of PPP Study Team

AP4-2 Cross-Sectoral legal frame work "Objectives and Key Content"

AP4-3 SAMPLE TOR FOR PROPOSAL

AP4-4 SAMPLE COOPERATION AGREEMENT

AP4-5 Questionnaire to Contracting Agency

AP4-6 Issue of PPP Project process on Private sector Point of View

AP5 Appendix to Chapter 3

AP5-1 MINUTES OF DISCUSSION on 8th May 2009

AP5-2 First Stage Screening Detailed Results

AP5-3 Cost Comparison

AP5-4 Comparison of Future Traffic Volume Estimation

AP5-5 Site Photos (8 candidates)

AP5-6 Financial Calculation in Second Stage Screening

AP6 Appendix to Chapter 4

AP6-1 MINUTES OF DISCUSSION

AP6-2 Site Photos

AP1 Executive Summary (Indonesian Version)

Japan International Cooperation Agency

Republik Indonesia

Survey Persiapan Proyek Pembanunan Infrastruktur dengan Skema Kerjasama Pemerintah Swasta (KPS)

RINGKASAN EKSEKUTIF

NIPPON KOEI
Challenging mind, Changing dynamics

PADECO

September 2009

LATAR BELAKANG STUDI JICA

•Pengembangan infrastruktur publik telah menjadi (dan akan tetap menjadi) salah satu topik prioritas utama Indonesia.

•Dengan kemampuan pembiayaan pemerintah Indonesia, KPS telah menarik perhatian sebagai cara yang efektif untuk mempercepat pembangunan infrastruktur. Jika berhasil dilaksanakan, KPS dapat memberikan kemampuan pembiayaan tambahan dan memberikan pelayanan yang lebih baik dengan biaya yang lebih sedikit.

•Tetapi, meskipun ada upaya-upaya pemerintah, kemajuan riil agak lamban. Partisipasi investor swasta terbatas dan banyak terjadi permasalahan-permasalahan pada pelaksanaannya.

•Penting untuk mensintesis permasalahan-permasalahan yang terjadi saat ini dan mengembangkan perspektif mengenai bagaimana mempercepat pelaksanaan yang berhasil. Perspektif ini harus berdasarkan pada contoh-contoh sukses yang nyata.

•Dalam konteks ini, studi JICA dilaksanakan untuk mengkaji situasi saat ini dan memulai proses pengembangan “model kasus” pada dua sektor penting; jalan tol dan air minum.

TUJUAN DAN LINGKUP STUDI JICA

TUJUAN:

1. Mengkaji dan menyintesis situasi dan isu-isu saat ini yang terjadi dalam kegiatan pembangunan infrastruktur dengan skema KPS
2. Mengembangkan rekomendasi mengenai dukungan teknis yang diperlukan untuk mengatasi isu-isu tersebut
3. Menyaring dan mengurutkan proyek-proyek pembangunan infrastruktur dengan skema KPS yang berprioritas tinggi, yang dapat dikatalisasi dengan pinjaman ODA Jepang.

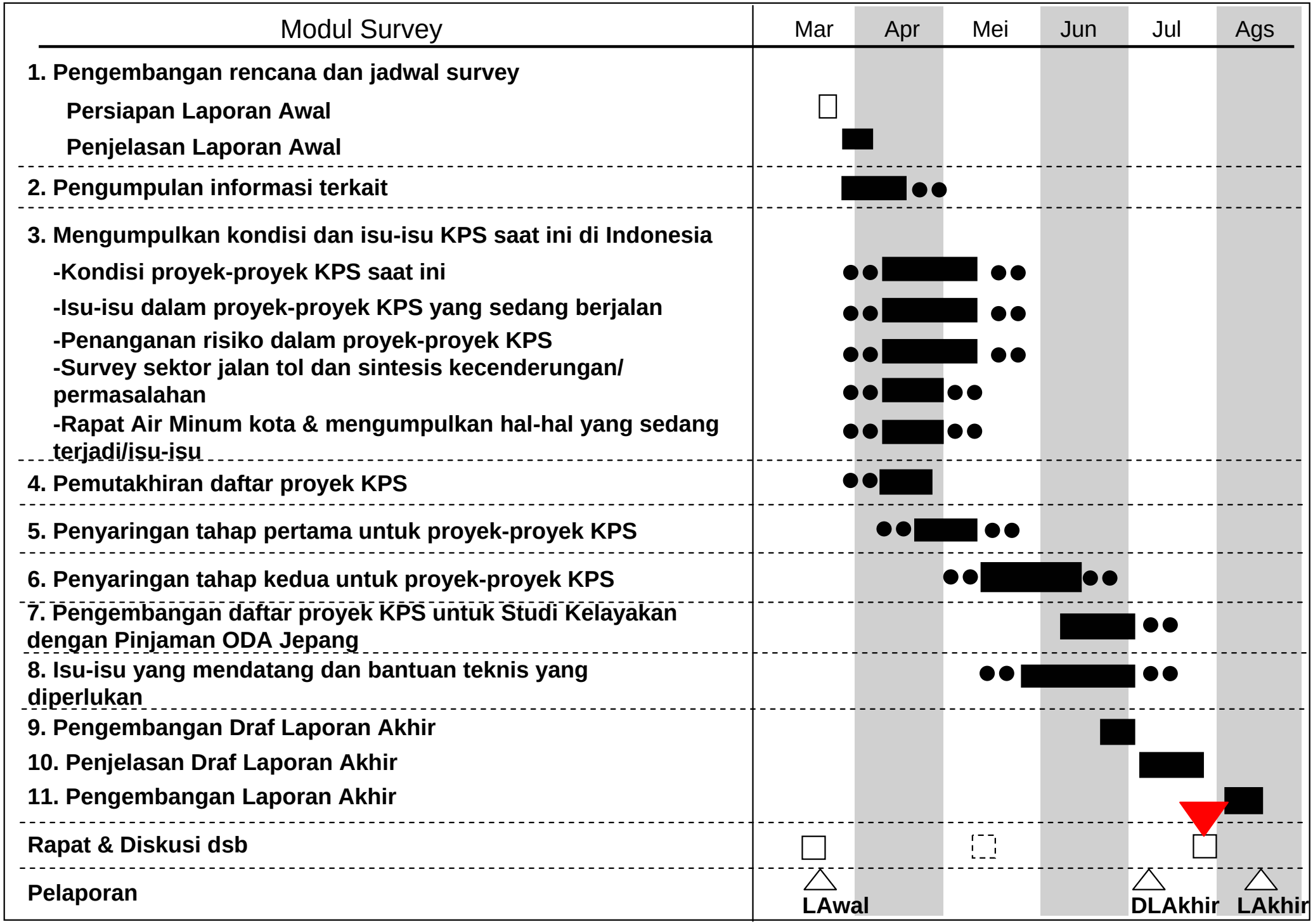
LINGKUP

- Cakupan geografis : Seluruh Indonesia
- Sektor target : Jalan tol, Air minum
- Penerima : Pengguna infrastruktur

- Badan Penanggung jawab/Pelaksana : Departemen Pekerjaan Umum
  - Direktorat Jenderal Bina Marga
  - Direktorat Jenderal Cipta Karya

- Lembaga terkait : Kementerian Koordinator Bidang Perekonomian
  BAPPENAS
  Departemen Keuangan
  KKPPI
  BPJT, BPPSPAM

RENCANA KERJA



CATATAN PENTING

Situasi dan isu-isu saat ini dalam KPS secara keseluruhan

•Iklim investasi Indonesia untuk proyek pembangunan infrastruktur KPS telah meningkat. Ada inisiatif terus menerus untuk menyempurnakan kebijakan, mengembangkan kemampuan dan menghasilkan proyek-proyek KPS yang baru.

•Tetapi, kecepatan kemajuannya masih jauh dari yang diharapkan. Ini karena pelaksanaan KPS yang rumit dan tumpang tindih dengan berbagai isu-isu yang saling berhubungan; 1) isu hukum & kebijakan, 2) isu-isu sistem, 3) isu-isu organisasi dan 4) isu-isu kemampuan.

•Tim studi telah mengumpulkan 10 kelompok tindakan yang diperlukan untuk meningkatkan keseluruhan iklim KPS. Karena banyak tindakan yang bukan merupakan sesuatu yang baru, penting untuk menekankan bahwa inisiatif harus disinergikan (dikemas sebaik mungkin) untuk memastikan isu-isu berlapis tersebut diatasi secara simultan.

KPS Jalan Tol

•Tim studi memulai dari daftar awal 59 calon proyek KPS dan melakukan penyaringan untuk mendapatkan 2 calon terpilih; 1) Pandaan-Malang, 2) Sukabumi-Ciranjang-Padalarang

•Ke depan, tim studi menyarankan 3 modul inisiatif paralel untuk memaksimalkan peluang mengembangkan model contoh proyek jalan tol dengan skema KPS yang benar-benar berhasil; 1) peningkatan organisasi pembebasan lahan, 2) perencanaan kembali proses inti BPJT, 3) studi kelayakan KPS untuk 1-2 proyek (dari calon proyek terpilih)

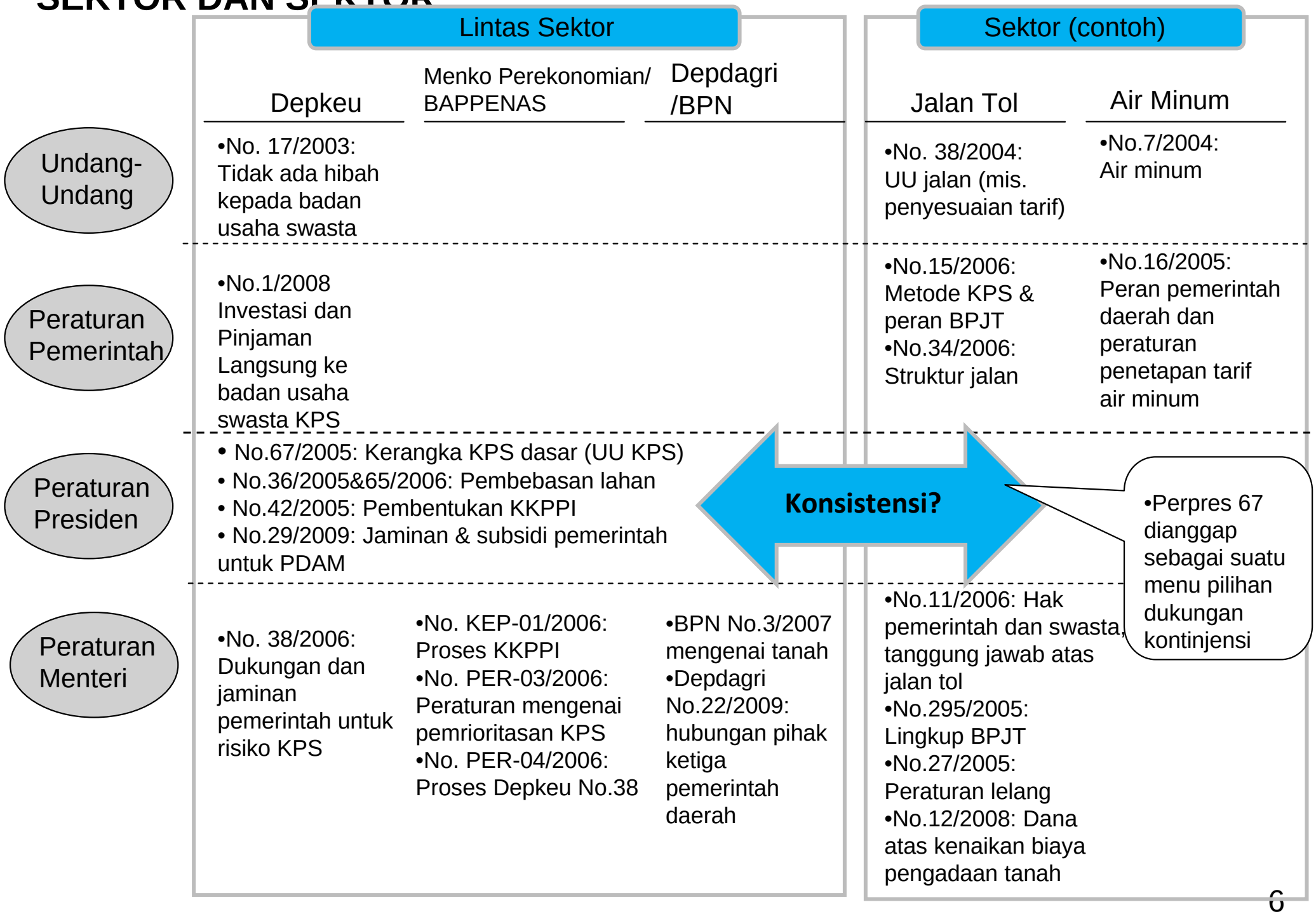
KPS Air minum

•Tim studi memulai dari daftar awal 53 calon proyek KPS dan melakukan penyaringan untuk mendapatkan 3 calon terpilih; 1) Air Minum Umbulan, 2) Air Minum Semarang Barat, 3) Air Minum JABEKA

•Untuk selanjutnya, tim studi menyarankan 3 modul inisiatif paralel dengan keputusan “diteruskan atau tidak” sepanjang proyek tersebut dapat; 1) program peningkatan laba PDAM, 2) inisiatif koordinasi pemangku kepentingan, 3) studi kelayakan KPS untuk 1 proyek (dari calon terpilih)

DAFTAR ISI

KPS DIATUR DALAM PERATURAN PERUNDANG-UNDANGAN LINTAS SEKTOR DAN SEKTOR



ISU-ISU PROSES KPS YANG TERJADI DALAM SETIAP TAHAP

	TAHAP1: Penyusunan dan Penyaringan Proyek	TAHAP2: Pra-SK dan Persiapan Lelang	TAHAP3: Lelang dan Pengadaan	TAHAP4: Negosiasi Kontrak	STEP5: Contract Management
Isu-isu Utama:	•Kurangnya kemampuan menyusun dokumen KKPPI dan berkoordinasi dengan kementerian lain •Kriteria pemrioritasan yang tidak jelas, dengan kurangnya Analisis Multi-Kriteria	•Pra-SK konvensional masih berlaku, di samping adanya perbedaan yang jelas dengan persyaratan KPS •Informasi* yang terbatas tentang lelang termasuk; 1)jaminan dan dukungan langsung dari pemerintah 2)situasi tanah 3)Modalitas KPS	•Kurangnya penjajakan pasar (komunikasi dua arah dengan investor potensial) sebelum pelelangan •KAK tidak mencerminkan pokok-pokok KPS •Metode lelang (dua amplop) tidak sesuai dengan karakteristik KPS	•Perjanjian Kerjasama kurang terperinci, dengan banyak surat menyurat •Ketidakjelasan dalam ketentuan mengenai tindakan, batas akhir dan sanksi untuk kedua belah pihak	•Kurangnya sistem pemantauan proyek secara jelas •Perjanjian Kerjasama tidak mencakup KPI khusus untuk Manajemen Proyek
	Penyaringan Adhoc	***Pra-SK kurang memadai, Persiapan Lelang kurang matang***	***Tidak disesuaikan dengan KPS***	***Tidak terikat pada tanggung jawab***	***Jauh dari praktik terbaik MP***

*informasi mengenai situasi, rencana pemerintah, tanggung jawab dan jadwal

INVESTOR SWASTA MEMINTA PENINGKATAN DALAM PERSIAPAN PEMERINTAH

Komentar Wawancara

"Konsep kerjasama memerlukan perubahan signifikan pada pola pikir pejabat pemerintah yang biasa berhubungan dengan kontraktor. Menurut saya, perubahan pola pikir di Indonesia akan memerlukan waktu"

"Berikan alasan yang jelas mengapa kami harus mempertimbangkan untuk berinvestasi di Indonesia, sementara banyak negara lain yang memiliki catatan investasi yang lebih baik"

→ Iklim investasi dianggap di bawah rata-rata

"Perjanjian Kerjasama saat ini seperti perjanjian bersama tanpa ikatan hukum (*gentleman's agreement*). Perjanjian tersebut tidak menentukan perincian. Dengan kata lain, perjanjian tersebut tidak bisa dibankkan (tidak *bankable*)"

"Risiko tarif dan kebutuhan di luar kontrol kami. (Kami) tidak dapat mempertanggungjawabkan investasi tanpa adanya jaminan pemerintah, yang tidak jelas bagi kami saat ini"

→ Dukungan pemerintah dan standar pelaksanaan harus ditingkatkan

"Jika kondisinya sesuai, kami tertarik dalam investasi dan alih teknologi di Indonesia"

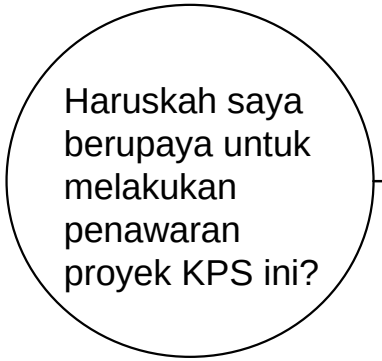
"Investasi infrastruktur di Indonesia menarik jika pengembalian yang stabil dalam jangka panjang dapat diupayakan"

→ Ada potensi, jika kondisi disiapkan dengan baik

PERSIAPAN PEMERINTAH HARUS MENCAKUP PAKET INFORMASI “CUKUP DAPAT DIPERCAYA”

Kekhawatiran investor swasta

Pertanyaan utama yang harus dijawab dalam dokumen lelang



Seberapa menarik profil risiko/ pengembalian?

Apakah ada kesulitan utama pada proyek?

Profil Risiko:
- Apa komitmen dasar dari pemerintah untuk memberikan jaminan terhadap risiko politik, risiko kebutuhan dan risiko kinerja?
- Kapan pemerintah akan memberikan persetujuan resmi?

Profil Pengembalian:
- Apa komitmen dasar dari pemerintah dalam dukungan langsung terhadap biaya investasi?
- Kapan pemerintah akan memberikan persetujuan resmi?
- Apa asumsi di balik proyeksi penerimaan pra-SK?

Lahan:
- Apa persyaratan dan jadwal pembebasan lahan oleh pemerintah?
- Apa rencana untuk pemukiman kembali?

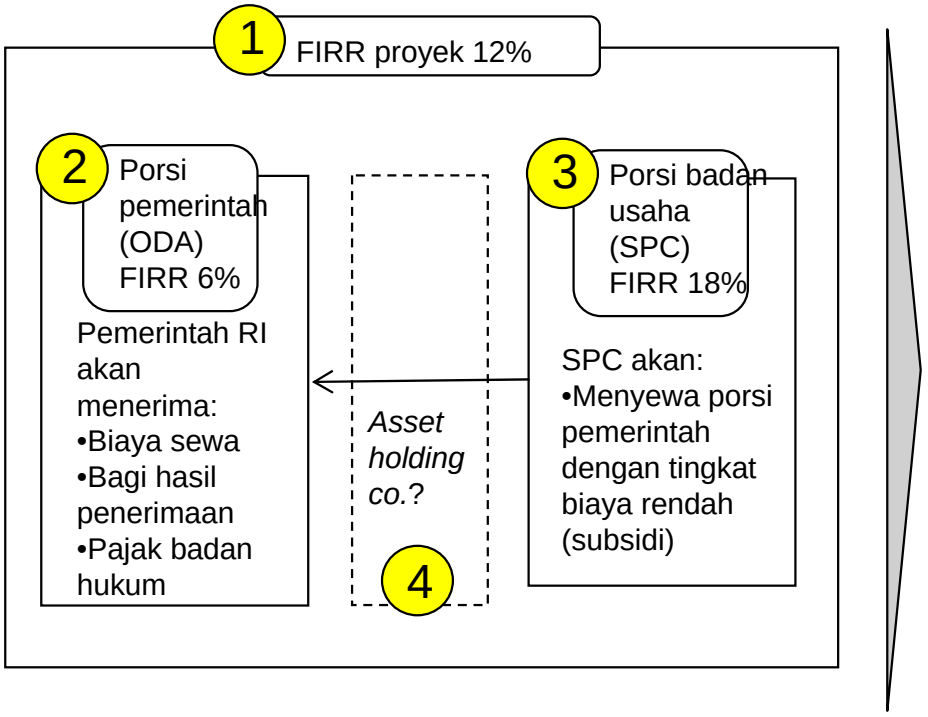
Lingkungan:
- Apakah ada permasalahan lingkungan yang signifikan?

Manajemen pemangku kepentingan:
- Siapa pemangku kepentingan utama dan apa posisi mereka dalam mendukung proyek ini?

Pemerintah **tidak perlu menjamin** akurasi informasi tetapi informasi tersebut **harus cukup dapat dipercaya** bagi investor

SKEMA KPS UNTUK MENGGABUNGKAN DANA PEMERINTAH DAN SWASTA MEMERLUKAN KLARIFIKASI KEBIJAKAN

Contoh skema proyek KPS



Poin-poin klarifikasi kebijakan

Persyaratan persetujuan jaminan pemerintah

•UPR (Unit Pengelolaan Risiko) mengkaji kelayakan finansial untuk menyetujui jaminan pemerintah
T: UPR akan mengkaji (1) atau 2 atau (3)?

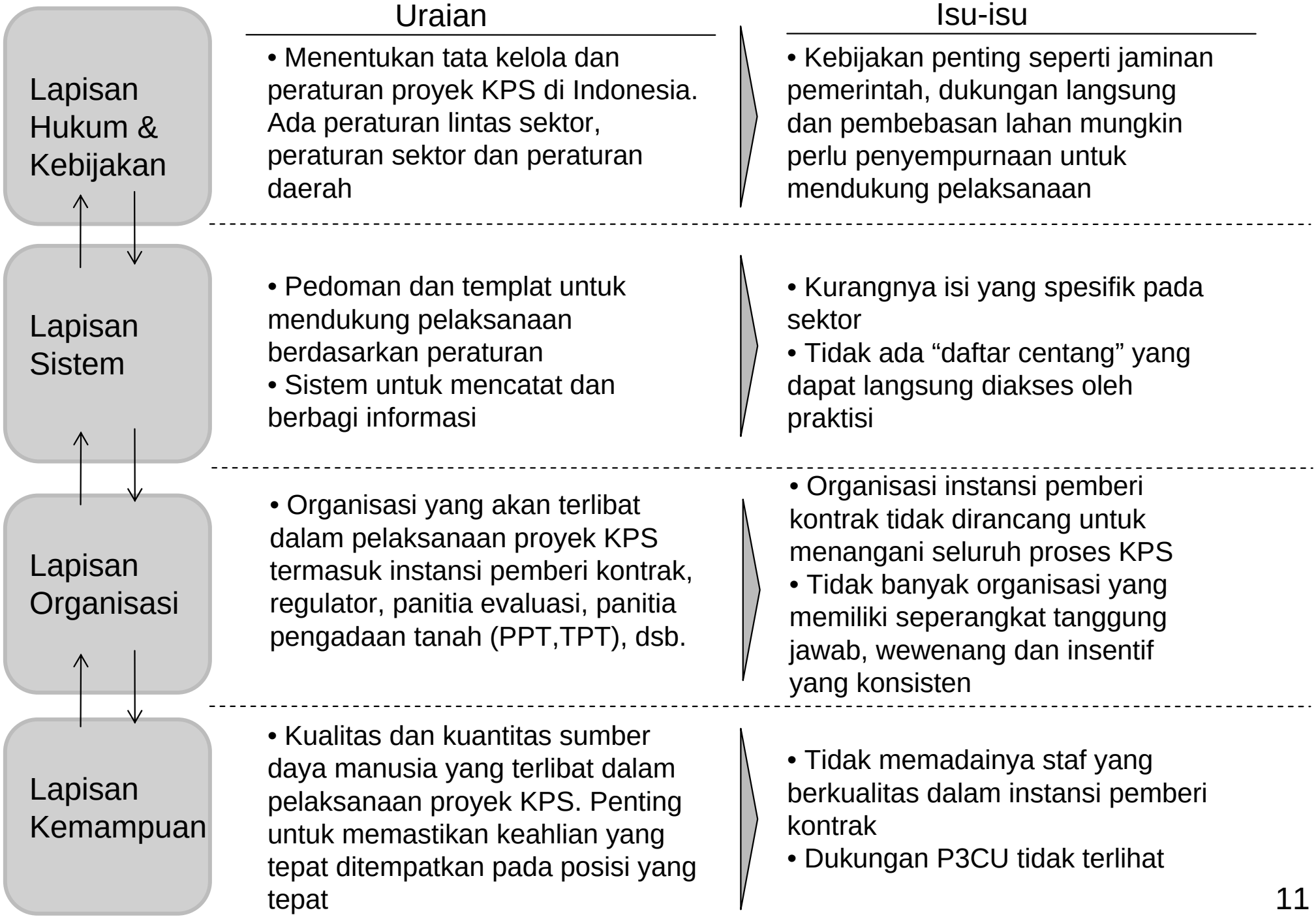
Persyaratan persetujuan *on-lending*

•Untuk air minum, porsi ODA pemerintah dapat berbentuk "*peminjaman/on-lending*" kepada pemerintah daerah
Q: Apakah persetujuan akan memerlukan (2) lebih tinggi daripada suku bunga *on-lending*?

Mekanisme penyaluran dana

•Aset porsi pemerintah akan disewakan kepada SPC
T: Siapa yang akan menjadi pemilik aset? (Membentuk perusahaan pemegang aset di no. 4 (3)?)
Bagaimana biaya sewa aset akan disalurkan kembali ke Pemerintah RI? (langsung ke Depkeu?, ditahan dalam perusahaan pemegang aset.?)

PELAKSANAAN KPS TUMPANG TINDIH DENGAN BERBAGAI ISU-ISU BERLAPIS YANG SALING BERHUBUNGAN



10 KELOMPOK TINDAKAN YANG DIPERLUKAN UNTUK MENINGKATKAN IKLIM KPS SECARA KESELURUHAN

Lapisan Hukum & Kebijakan

1.Mempercepat penyempurnaan peraturan yang terkait dengan KPS

-Revisi Perpres 67/2005 termasuk; 1)tanggung jawab pemerintah untuk menyediakan tanah, 2)klarifikasi mengenai jaminan dan dukungan langsung pemerintah, termasuk jadwal keputusan

-Menyinkronkan perundang-undangan/peraturan sektor dengan Perpres 67

-Penyempurnaan pengadaan tanah Perpres 36/2005 & 65/2006 mengenai negosiasi & kompensasi

2.Memperjelas kebijakan untuk penggabungan dana swasta dan pemerintah

3.Posisi "Manual Pedoman Pelaksanaan/OGM" sebagai pedoman resmi

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Lapisan Sistem

4.Mengembangkan khusus sektor dan templat sesuai dengan KPS

-khusus sektor dengan analisis multi kriteria

-Sesuai dengan KPS:1) pra-SK, 2)KAK lelang, 3)metode lelang, 4)templat perjanjian kerjasama

5.Menetapkan "prasyarat" lelang. Misalnya,

-Pemerintah menetapkan prasyarat perolehan persentase tanah minimum tertentu dan menyusun inventarisasi informasi dan jadwal untuk persentase selebihnya

-Persetujuan dasar untuk jaminan dan dukungan langsung pemerintah, dengan jadwal persetujuan keputusan

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Lapisan Organisasi

6.Mengubah pendekatan PPT untuk pembebasan lahan

-Profesional purna waktu sebagai ujung tombak, termasuk pengalihdayaan (*outsourcing*) pihak ketiga

-Pemberian insentif untuk ketepatan waktu dan biaya

-Kekuatan negosiasi langsung *pintu-ke-pintu*

7.Membentuk komite penasihat (dengan staf berstandar global) *untuk mendukung panitia evaluasi*

8.Meningkatkan Unit Pusat Pengembangan KPS (P3CU), Simpul KPS (P3 Node), diperkuat untuk mengkaji dan memberikan pelatihan mengenai dokumen lelang, perjanjian kerjasama

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Lapisan Kemampuan

9.Mengambil langkah yang berani untuk meningkatkan kemampuan instansi pemberi kontrak secara signifikan

-Memasukkan staf legal, finansial, dan negosiasi bisnis

-Mendayagunakan tenaga ahli pihak ketiga dan melaksanakan OJT secara terus menerus

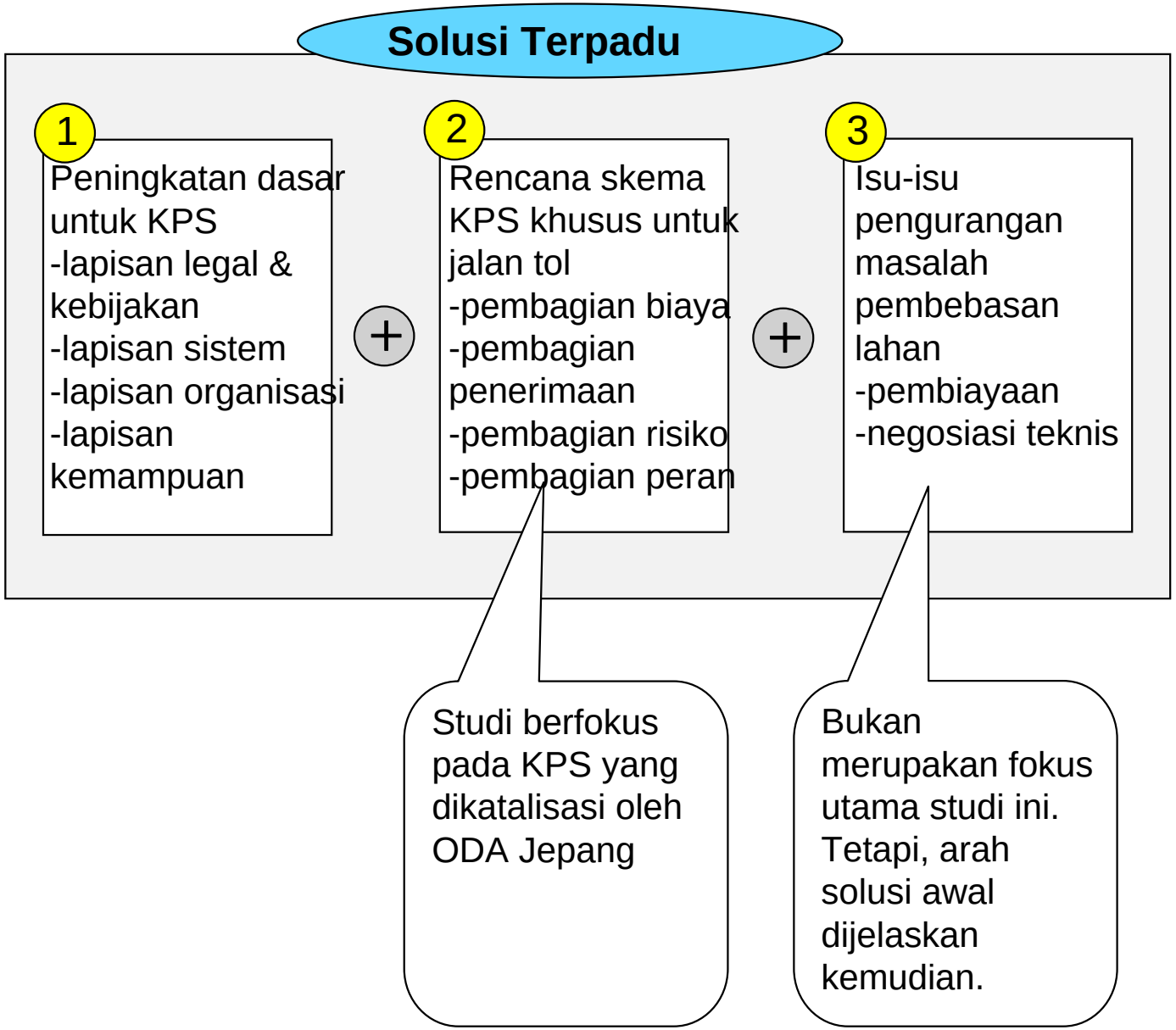
10.Mengadakan lokakarya lintas kementerian/investor/pembiaya/operator untuk belajar dari contoh sukses dan gagal di Indonesia dan luar negeri

DAFTAR ISI

KEMAJUAN BOT/KPS JALAN TOL LAMBAN KARENA BEBERAPA KESULITAN STRUKTURAL

Situasi	Alasan
Umumnya, jumlah peserta lelang yang berpartisipasi terbatas	•**Diperlukan pembiayaan besar di samping potensi FIRR rendah:** Ruas yang tersisa tidak memiliki volume lalu lintas yang memadai dan pihak swasta kurang tertarik untuk membiayai tanah dan konstruksinya •**Dukungan pemerintah yang tidak jelas:** Jaminan pemerintah / pembagian biaya tdk jelas bagi peserta lelang
Banyak proyek tidak mengalami kemajuan walaupun telah mencapai penandatanganan proyek	•**Kepastian waktu negosiasi pembebasan lahan:** sosialisasi / negosiasi TPT dan PPT memerlukan banyak waktu karena kenaikan harga •**Kurangnya dana pembebasan lahan:** Dana dari pihak swasta tidak langsung tersedia. Beberapa pemegang izin swasta mungkin telah kehilangan kemampuan atau motivasi untuk membiayai.
Perjanjian kerjasama tidak diputuskan di samping terbatasnya kegiatan yang dilakukan selama bertahun-tahun	•**Ketidakpatuhan pemerintah dan swasta:** Pemerintah belum memenuhi tenggat utk menyelesaikan negosiasi pembebasan lahan dgn tepat waktu. Pihak swasta belum memenuhi persyaratan pembiayaan. Oleh karena itu, kasus tersebut dapat diajukan ke pengadilan atas pemutusan mendadak. Beberapa pihak swasta mungkin lebih memilih utk “menunggu & melihat” dan mencari waktu yg tepat utk menjual atau membeli hak konsesi.

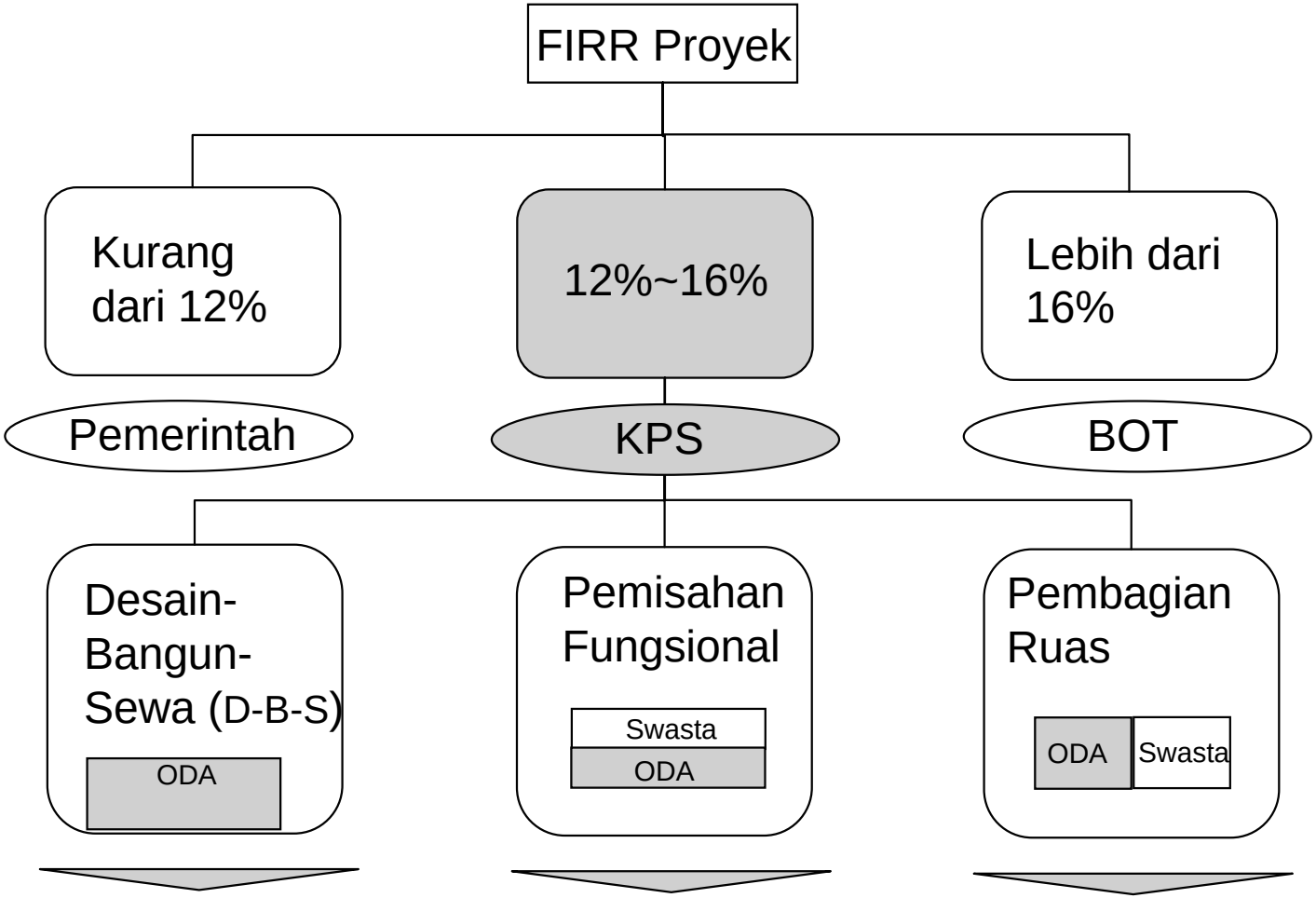
PROYEK KPS JALAN TOL YANG BERHASIL MEMERLUKAN SOLUSI TERPADU



Dampak yg diharapkan

- Menarik investasi swasta melalui:
  -pembagian biaya yg seimbang
  -jaminan pemerintah
- Mempercepat pembebasan lahan
- Perjanjian kerjasama yg lebih jelas
  -komitmen tanggung jawab
  -tidak ada kebuntuan

MODALITAS KPS, YANG DIKATALISASI OLEH ODA



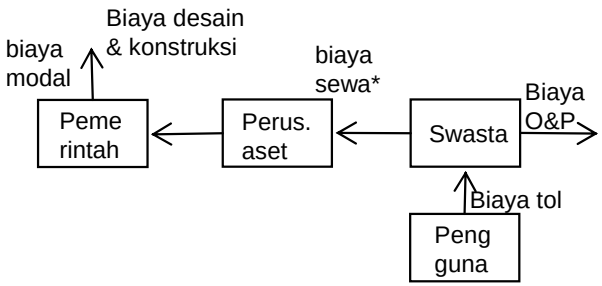
•Model praktis. Tetapi, tidak dapat terlalu bergantung pada hal ini karena keterbatasan kemampuan meminjam pemerintah.

•Sulit untuk memastikan kondisi ODA secara sendiri

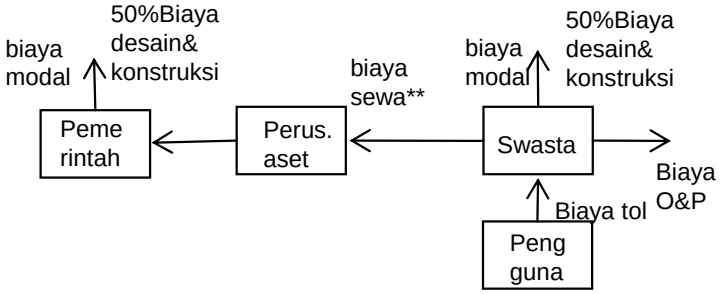
•Model praktis. Sinkronisasi jadwal akan memerlukan perencanaan yang matang.

PERBANDINGAN “D-B-S” DAN “PEMBAGIAN RUAS”

DBS



Pembagian Ruas (contoh 50/50)

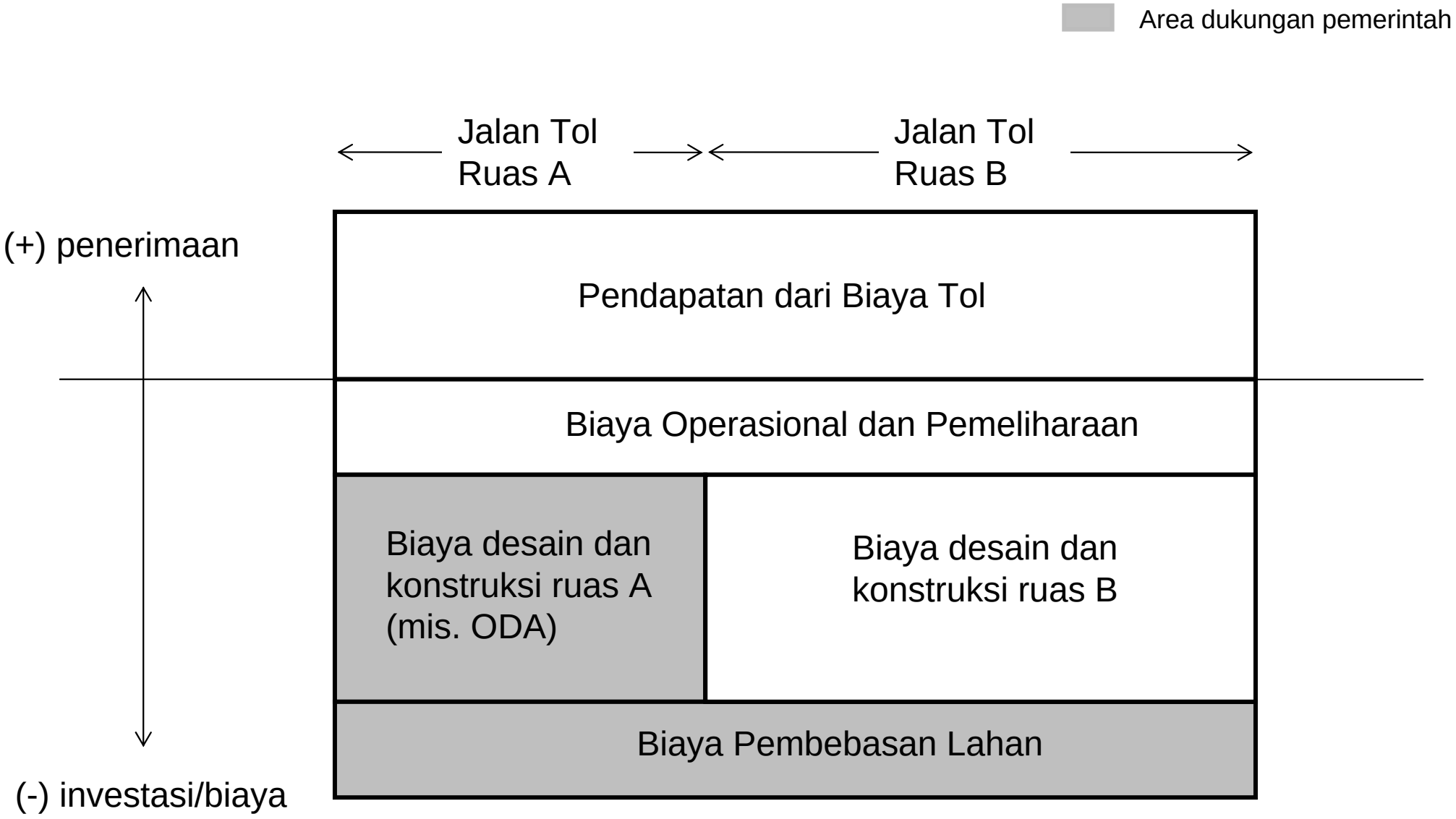


	DBS	Pembagian Ruas (contoh 50/50)
Pembiayaan:	100%pemerintah	50/50
Desain Bangun:	100%pemerintah	50/50
O&P:	100%swasta	100%swasta
Kelebihan:	•Biaya modal keseluruhan rendah •Lebih mudah untuk menarik pihak swasta	•Kemampuan pembiayaan tambahan dari pihak swasta •Pemerintah menanggung risiko yang lebih sedikit
Kekurangan:	•Tidak ada kemampuan finansial tambahan dari pihak swasta …kecepatan pembangunan jaringan dikorbankan •Pemerintah menanggung risiko penerimaan	•Biaya modal lebih tinggi •Perlu penciptaan pasar untuk menarik sektor swasta

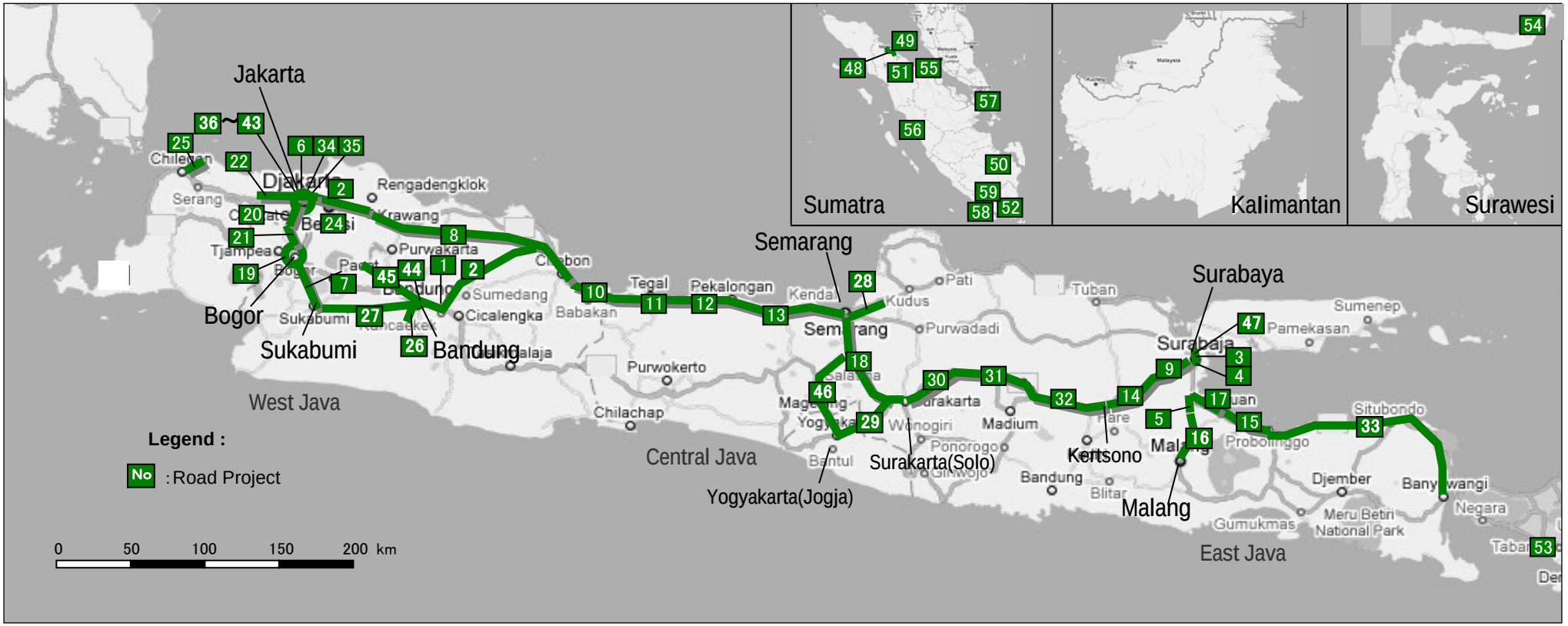
* tol- (biaya O&P + laba)

** % biaya konstruksi. 0% dapat ditentukan jika Depkeu menyetujui subsidi langsung 100%

“PEMBAGIAN RUAS” PROYEK JALAN TOL DENGAN SKEMA KPS



DAFTAR AWAL PROYEK JALAN TOL



Road Project	
No	Project
1	Ciranjang - Padalarang Road *1)
2	Bekasi - Cawang - Kampung Melayu *1)
3	Waru - Wonokromo-Tj Perak Road *1)
4	Waru - Tj Perak Stage 1 Road *1)
5	Gempol - Pandaan Road *1)
6	Jakarta Outer RR W1 *1)
7	Ciawi-Sukabumi Road *1)
8	Cikampek-Cirebon Road *1)
9	Surabaya-Mojokerto Road *1)
10	Kanci-Pejagan Road *1)
11	Pejagan-Pemalang Road *1)
12	Pemalang-Batang Road *1)
13	Batang-Semarang Road *1)
14	Kertosono-Mojokerto Road *1)
15	Pasuruan-Probolinggo Road *1)
16	Pandaan-Malang Road *1) *3)

No	Project
17	Gempol-Pasuruan Road *1)
18	Semarang-Solo Road *1)
19	Bogor Ring Road *1)
20	Depok-Antasari Road *1)
21	Cinere-Jagorawi Road *1)
22	Cikarang-Tanjung Priok Road *1)
23	Cileunyi-Sumedang-Dawuan Road *1) *3)
24	Makasar Seksi IV Road *1)
25	Cilegon-Bojanegara Road *1)
26	Pasir Koja-Soreang Road *1) *3)
27	Sukabumi-Ciranjang Road *1) *3)
28	Semarang-Demak Road *1) *3)
29	Jogja-Solo Road *1) *3)
30	Solo-Mantingan Road *1)*2)
31	Mantingan-Ngawi Road *1)*2)
32	Ngawi-Kertosono Road *1)*2)
33	Probolinggo-Banyuwangi Road *1) *3)

No	Project
34	Jakarta Outer RR-2 *1)
35	Jakarta Outer RR W2 North *1)
36	Kamal- Teluk Naga- Batu Ceper *3)
37	Kemayoran- Kampung Melayu *3)
38	Sunter- Rawa Buaya- Batu Ceper *3)
39	Ulujami- Tanah Abang *3)
40	Pasar Minggu- Casablanca *3)
41	Sunter- Pulo Gebang- Tambelang *3)
42	Duri Pulo- Kampung Melayu *3)
43	Tanjung Priyok Access *3)
44	Terusan Pasteur- Ujung Berung- Cileuny *3)
45	Ujung Berung- Gedebage- Majalaya *3)
46	Yogyakarta- Bawen *3)
47	Bandara Juanda- Tanjung Perak *3)
48	Medan-Kuala Namu-Tebing Tinggi *1)*2)*3)
49	Medan - Binjai *1) *3)
50	Palembang - Indralaya *1) *3)

No	Project
51	Pekanbaru- Kandis- Dumai *3)
52	Tegginnere - Babatan *3)
53	Serangang - Tj. Benoa *3)
54	Menado Bitung *3)
55	Kisaran-Tebing Tinggi *3)
56	Bukit Tinggi- Padang Panjang- Lubuk Alung- Pada *3)
57	Batu Ampar- Muka Kuning- Bandara Hang Nadim *3)
58	Terbanggi Besar- Menggala- Pematang Pangganç *3)
59	Bakaheuni- Terbanggi Besar *3)

Source)

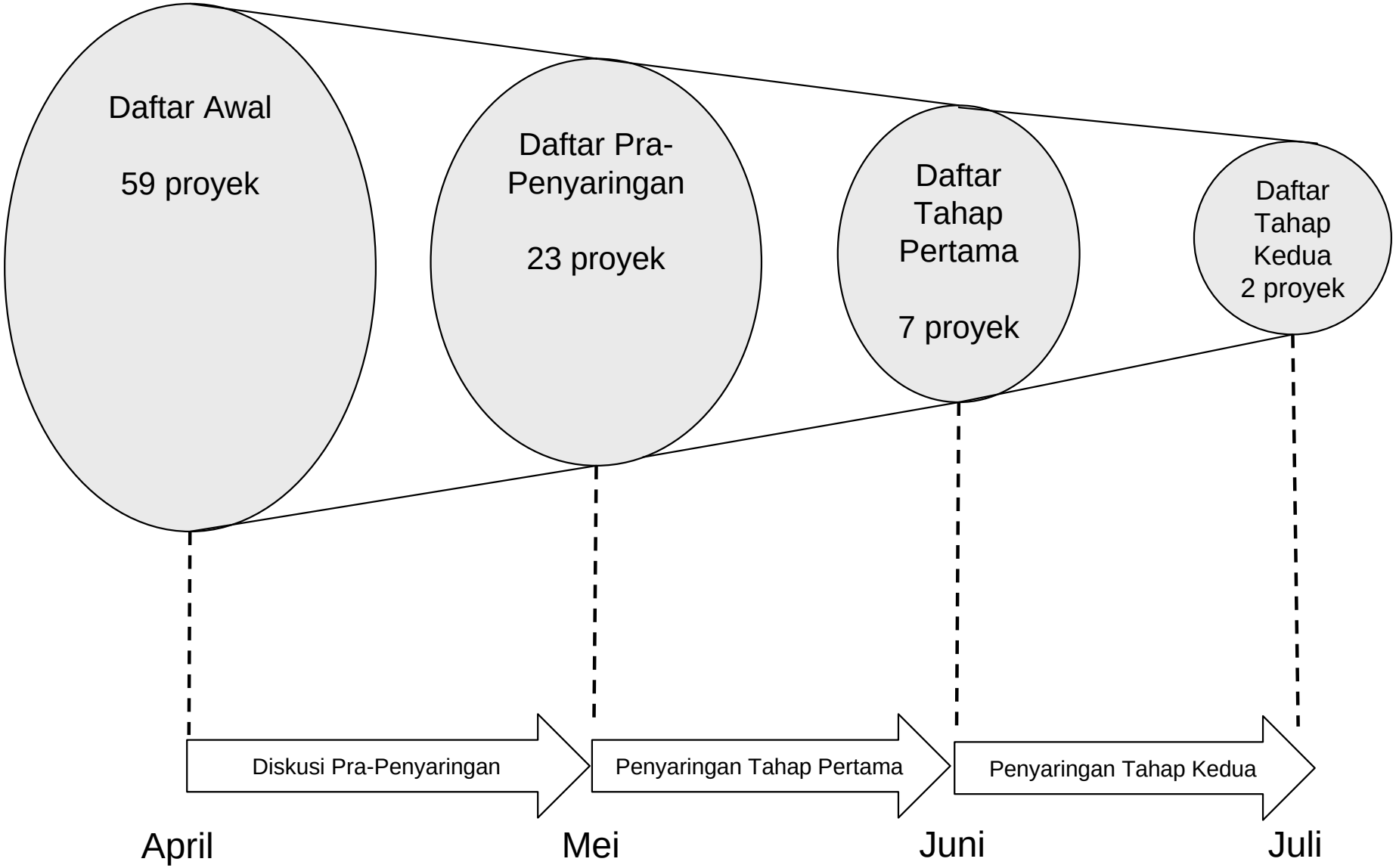
* 1) Infrastructure summit 2005
* 2) Infrastructure Conference 2006
* 3) other latest sources (2009)

Ref : Table : Prospective PPP project list (Road)

No.s in the table are correspondent to no.s in the figure

PPP Project (Road) Location Map

GAMBARAN PENYARINGAN



HASIL PENYARINGAN TAHAP PERTAMA (DARI 23 MENJADI 7)

No.	Nama Proyek	Penyaringan 1(FIRR)		Penyaringan 2	Penyaringan 3
		SK	SK Revisi		
1	Bandara Juanda - Tanjung Perak	13,43 %	15,70 %	★★★★★/★★★★★/★★★★★	★☆
2	Cileunyi - Sumedang- Dawuan	15,64 %	14,12 %	★★★★★/★★★★★/★★★★	★
3	Medan - Kualanamu - Tebing Tinggi	–	11,26 %	★★★★★/★★★★★/★★★★★	
4	Sukabumi - Ciranjang- Padalarang	11,28 %	13,08 %	★★★★★/★★★★★/★★	★
5	Batu Ampar - Mk Kuning - Bandara Hang Nadim	15,03 %	7,78 %	★★★★★/★★★★★/	★★
6	Kamal - Teluk Naga - Batu Ceper	12,89 %	–	★★★★★/★★★★★/★★★	☆
7	Pandaan - Malang	15,20 %	16,09 %	★★★★★/★★★★★/★	
8	Pekanbaru - Kandis - Dumai	15,48 %	9,01 %	★★★★★/★★★★	★★
9	Jogja - Solo	–	16,73 %	★★★★★/★★★★★/	
10	Probolinggo - Banyuwangi	12,39 %	10,63 %	★★★★★/★★★★★/	
11	Bakauheni - Terbanggi Besar	–	–	★★★★★/★★★★★/	
12	Palembang - Indralaya	16,70 %	15,57 %	★★★★★/★★★★	
13	Semarang - Demak	–	10,99 %	★★★★★/★★★★	
14	Manado - Bitung	–	9,66 %	★★★★★/★★★	★
15	Bakauheni - Terbanggi Besar(Tegineneg-Babatan)	13,32 %	15,48 %	★★★★★/★★★	
16	Jogja - Bawen	–	15,13 %	★★★★★/★★★	
17	Terbanggi Besar - Menggala - Pmtg Panggang	5,91 %	–	★★★★★/★★	
18	Kisaran - Tebing Tinggi	5,08 %	–	★★★★★/★★	
19	Bkt Tinggi - Pdg Panjang - Lbk Alung - Padang	–	–	★★★★★/	
	Medan - Binjai	14,95 %	15,98 %	**（15.80km）**	
	Cilegon - Bojonegara	–	12,05 %	**（15.69km）**	
	Pasirkoja - Soreang	15,66 %	11,88 %	**（9.8km）**	
	Serangan - Tanjung Benoa	–	6,93 %	**（9.0km）**	

Disisihkan dari penyaringan tahap pertama karena tidak memadainya panjang jalan untuk skema pembagian ruas

RESULT OF SECOND STAGE SCREENING (FROM 8 TO 2 CANDIDATES)

KategorI	Kriteria Evaluasi	Bobot	Pandaan -Malang	Sukabumi-Padalarang	Bandara Juanda-Tj. Perak	Pekambaru-Dumai	Batu Ampar-Muka Kuning-Hang Nadim	Cileunyi-Dawuan	**Jogja-Solo*** **
Tingkat Kebutuhan (45%)	**EIRR**	**10,0%**	2	3	2	1	2	2	2
	Tingkat kepentingan proyek bagi pemerintah daerah	**8,0%**	2	2	2	3	2	3	2
	Kepentingan dengan rencana sektoral	**10,0%**	2	2	2	3	1	2	2
	Kontribusi terhadap pertanian dan industri (dibagi menjadi 5 *item*)	**10,0%**	1.4*	2.0	2.4	2.2	2.2	1.8	1.4
	Perkembangan teknologi	**7,0%**	1	3	3	1	2	3	2
Tingkat Keuntungan (25%)	**FIRR (FIRR Proyek)**	**12,0%**	3	3	2	1	1	2	3
	Tren rasio pertumbuhan yang lalu (dibagi menjadi 2 *item*)	**8,0%**	2.0*	1.5	2.0	2.0	2.5	1.5	2.5
	Potensi risiko dan ketidakpastian (konektivitas, permasalahan)	**5,0%**	3	1	2	3	3	3	3
Tingkat pelaksanaan (30%)	**Ketidakpastian daya bangun melalui desain yang ada**	**3,0%**	2	2	2	2	3	1	2
	Kemampuan fiskal oleh pemerintah daerah	**4,0%**	2	1	2	3	2	1	2
	Persetujuan trase (SP2LP)	**4,0%**	3	2	2	2	2	3	2
	Kesulitan pembebasan lahan	**4,0%**	3	2	1	2	3	3	1
	Tingkat dampak terhadap alam	**4,0%**	3	3	3	2	3	3	2
	Tingkat dampak sosial	**5,0%**	3	1	2	3	3	1	1
	Kelayakan partisipasi swasta untuk skema KPS (pembagian ruas)	**6,0%**	3	3	2	1	1	3	3
Weighted Score			**2,27**	**2,21**	**2,11****	**1,99**	**1,99**	**2,20****	**2,12**

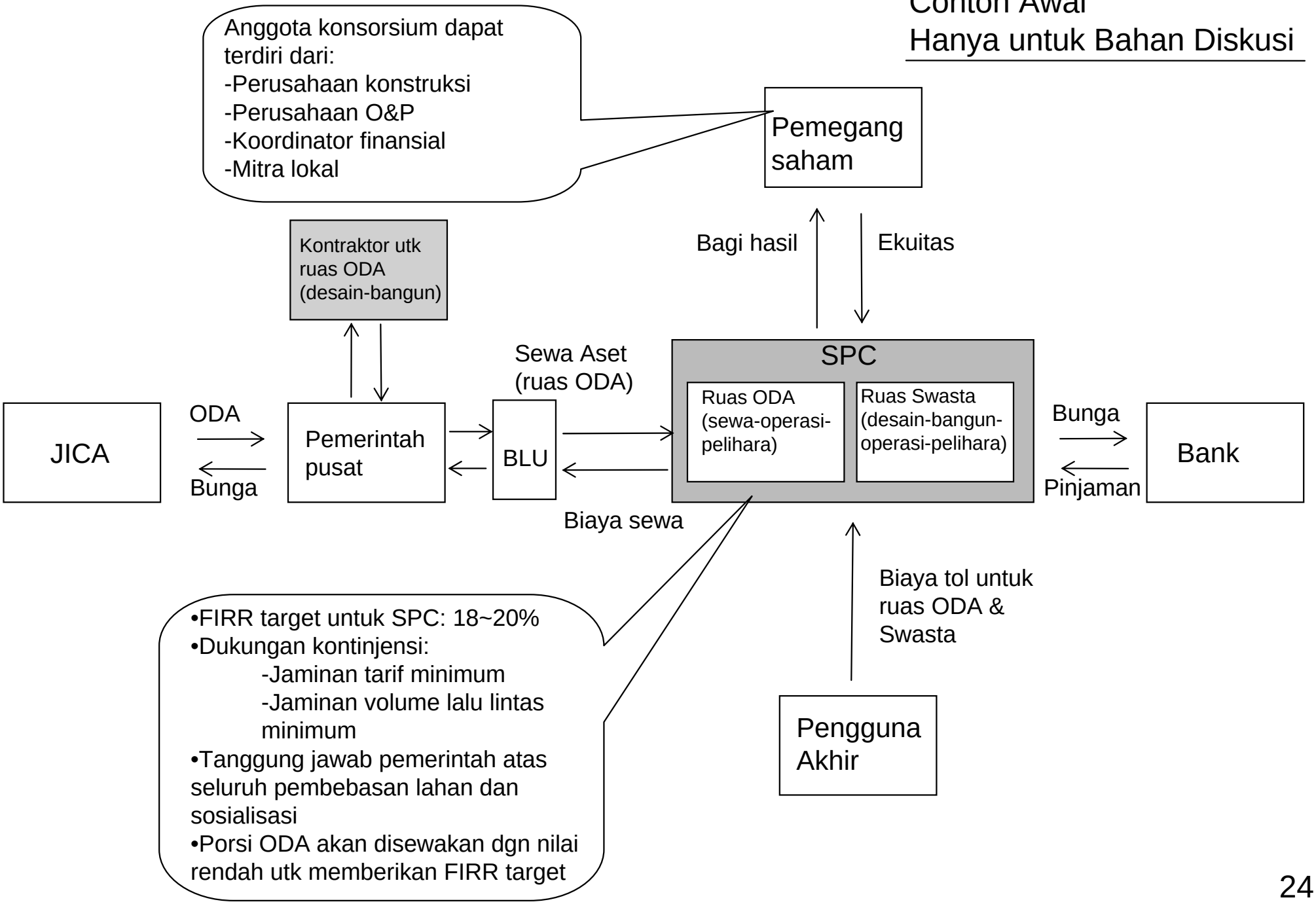
*catatan: angka ini menunjukkan rerata total *item* yang dibagi.
**catatan: Cileunyi- Dawuan & Bandara Juanda –Tg.Perak ditarik krn bantuan donor lain & kebijakan lelang oleh Bina Marga.
***Catatan : Yogya-Solo ditambahkan sebagai tambahan setelah dikeluarkan dari kedua jalan tol tersebut.

PROFIL CALON TERPILIH PROYEK JALAN TOL DENGAN SKEMA KPS

	Panjang Biaya Proyek	Lokasi & Peran Proyek	Karakteristik Proyek
Pandaan-Malang	**37km 3,478 bil Rp**	1) Sebagian ruas menghubungkan Surabaya dan Malang 2) Rute distribusi dan pariwisata menghubungkan Surabaya dengan Malang dan kawasan pantai selatan.	1) Melewati bukit/daerah datar, dan sedikit rumah yang terkena dampak. 2) Kesulitan teknis rendah.
Sukabumi-Ciranjang-Padalarang	**64km 5,785 bil Rp**	1) Sebagian ruas menghubungkan Jakarta dan Bandung melalui Sukabumi 2) Rute distribusi ke Jakarta 3) Berkurangnya kemacetan lalu lintas di sepanjang rute 4) Rute alternatif antara Jakarta dan Bandung	1) Melewati sawah/daerah berbukit, dan banyak rumah yang terkena dampak. 2) Diperlukan pengkajian alinyemen vertikal. 3) Jembatan bentang panjang dan terowongan akan direncanakan.
Jogja - Solo	**41km 2,928 bil Rp**	1) Jalan tol ini mulai di Solo yang menghubungi jalan toll Trans Jawa dan Yogyakarta. 2) Memberikan kontibusi pada wisatawan Yogyakarta 3) Memberikan kontribusi pada lalu lintas yang pulang pergi antara Solo-Yogyakarta	1) Melewati daerah persawahan yang amat terkemuka dan jalan tol ini mengalami kesulitan memperoleh persetujuan dengan Departemen Pertanian. 2) Memerlukan pengaturan yang telah dilakukan untuk menhindari dampak sosial terhadap warisan budaya dunia (misalnya candi Prambanan)

CONTOH RENCANA TRANSAKSI FINANSIAL (JALAN TOL)

Contoh Awal
Hanya untuk Bahan Diskusi



Sukabumi-Ciranjang-Padalarang

Biaya investasi:
Rp 5,785 miliar
FIRR Proyek 12%

		Public Private Ratio					
		25 : 75		50 : 50		75 : 25	
		SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR
Lease Fee	4%	12.20%	10.40%	13.70%	9.40%	16.60%	8.90%
	2%	12.60%	9.50%	14.80%	8.00%	19.30%	7.10%
	1%	12.80%	9.00%	15.40%	7.20%	20.60%	6.10%
	0%	13.00%	8.50%	15.90%	6.40%	22.00%	5.10%

Pandaan-Malang

Biaya investasi:
Rp 3,478 miliar
FIRR Proyek 13,8%

		Public Private Ratio					
		25 : 75		50 : 50		75 : 25	
		SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR
Lease Fee	4%	15.80%	9.90%	18.30%	9.40%	23.80%	9.10%
	2%	16.20%	9.20%	19.50%	8.20%	26.70%	7.60%
	1%	16.40%	8.80%	20.00%	7.60%	28.20%	6.80%
	0%	16.60%	8.50%	20.60%	6.90%	29.70%	5.90%

Jogja-Solo

Biaya investasi:
Rp 2,928 miliar
FIRR Proyek 12.7%

		Public Private Ratio					
		25 : 75		50 : 50		75 : 25	
		SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR
Lease Fee	4%	14.10%	9.90%	15.80%	9.30%	19.20%	8.90%
	2%	14.40%	9.30%	16.80%	8.30%	21.50%	7.60%
	1%	14.60%	8.90%	17.20%	7.70%	22.80%	6.90%
	0%	14.80%	8.60%	17.70%	7.20%	24.10%	6.20%

REKAPITULASI FINANSIAL CALON PROYEK KPS JALAN TOL

			TJ-4-4	JB-4	TJ-18-3	TS-8	S-4	Batam-1
			Cileunyi-Dawuan	**Sukabumi-Padalarang**	**Pandaan-Malang**	**Pekanbaru-Dumai**	**Surabaya (SERR)**	**Batam**
1	Tanah lapang		Pegunungan	Gunung Berbukit	Perbukitan	Perbukitan	Perkotaan	Dataran
2	Panjang	km	58,5	61,0	36,6	135,0	23,7	28,5
3	Biaya Pembebasan Lahan	Miliar Rp.	504,8	487,9	532,2	474,6	867,8	0,0
4	Biaya Konstruksi	Miliar Rp.	2925	2745	1464	5400	2370	855
		Miliar Rp./km	50	45	40	40	100	30
5	Biaya Investasi	Miliar Rp.	6130	5785	3478	10529	5495	1992
6	Biaya OM Tahunan	Miliar Rp./km	1,5	1,5	1,5	1,0	1,5	1,0
7	Biaya sewa infrastruktur	% biaya konstruksi porsi pemerintah	1,00%	1,00%	1,00%	2,85%	2,30%	2,97%
8	Biaya Tol Tipe I	Rp/km	650	650	650	900	1.100	650
9	FIRR	Proyek	11,7%	12,0%	13,8%	9,3%	10,5%	9,2%
		SPC	18,0%	18,0%	18,0%	18,0%	18,0%	18,0%
		Pemr Indonesia	6,1%	6,5%	8,1%	6,5%	6,0%	6,0%
10	Porsi KPS	SPC	31,5%	34,5%	62%	5%	28%	7%
		Pemr Indonesia	68,5%	65,5%	38%	95%	72%	93%
11	Jenis Skema		Pembagian Ruas	Pembagian Ruas	Pembagian Ruas	DBS	Pembagian Ruas	DBS

ISU-ISU PEMBEBASAN LAHAN DAN ARAH SOLUSI (UTK DISKUSI)

	Membekukan Transaksi	Memastikan Dana	Sosialisasi dan Negosiasi	Penyelesaian di Pengadilan
Uraian :	•Mengeluarkan SP2LP utk membekukan transaksi setelah damija ditetapkan	•Sektor swasta pemegang konsesi diharapkan menyiapkan dana •Dana atas kenaikan harga tanah*/dana bergulir untuk mendukung transaksi	•TPT menetapkan pengelolaan anggaran PPT (komite) melakukan nego dgn pemilik tanah • Penilaian independen atas harga pasar dan harga kompensasi	•Sewaktu 75% tanah dibebaskan atau 75% pemilik tanah menyetujui harga dalam satu ruas konstruksi, penyelesaian di pengadilan utk ruas tersebut mungkin dilakukan setelah 120 hari negosiasi
Permasalahan:	•Keterlambatan penerbitan SP2LP dalam hal waktu	•Beberapa sektor swasta tidak mau/tidak bisa menyiapkan dana (mis. tidak dapat memastikan jaminan bank untuk BLU)	•Kepemilikan tanah kadang-kadang tidak terdaftar •PPT adalah panitia paruh waktu tanpa insentif yang kuat untuk menyelesaikan negosiasi	•Hanya 3 kasus yang diselesaikan di pengadilan karena: 1)ruas sosialisasi terlalu besar untuk mencapai 75%, 2)sulit meyakinkan pejabat daerah
Arah solusi:	•Memungkinkan periode SP2LP yang lebih lama sesuai dengan kepastian waktu proyek	•Pemerintah harus bertanggung jawab untuk menyediakan tanah (revisi Perpres 67)	•Merevisi Perpres 36 & 65 utk mengubah pendekatan PPT •Membentuk organisasi berdedikasi dengan staf profesional. Memberikan insentif untuk penyelesaian tepat waktu •Memungkinkan pengalihdayaan ke kontraktor swasta	•Memastikan sosialisasi dilakukan pada ruas yang lebih kecil dan memfokuskan upaya untuk mencapai 75% atau lebih

*Harga 100% = (NJOP + Harga Pasar)/2

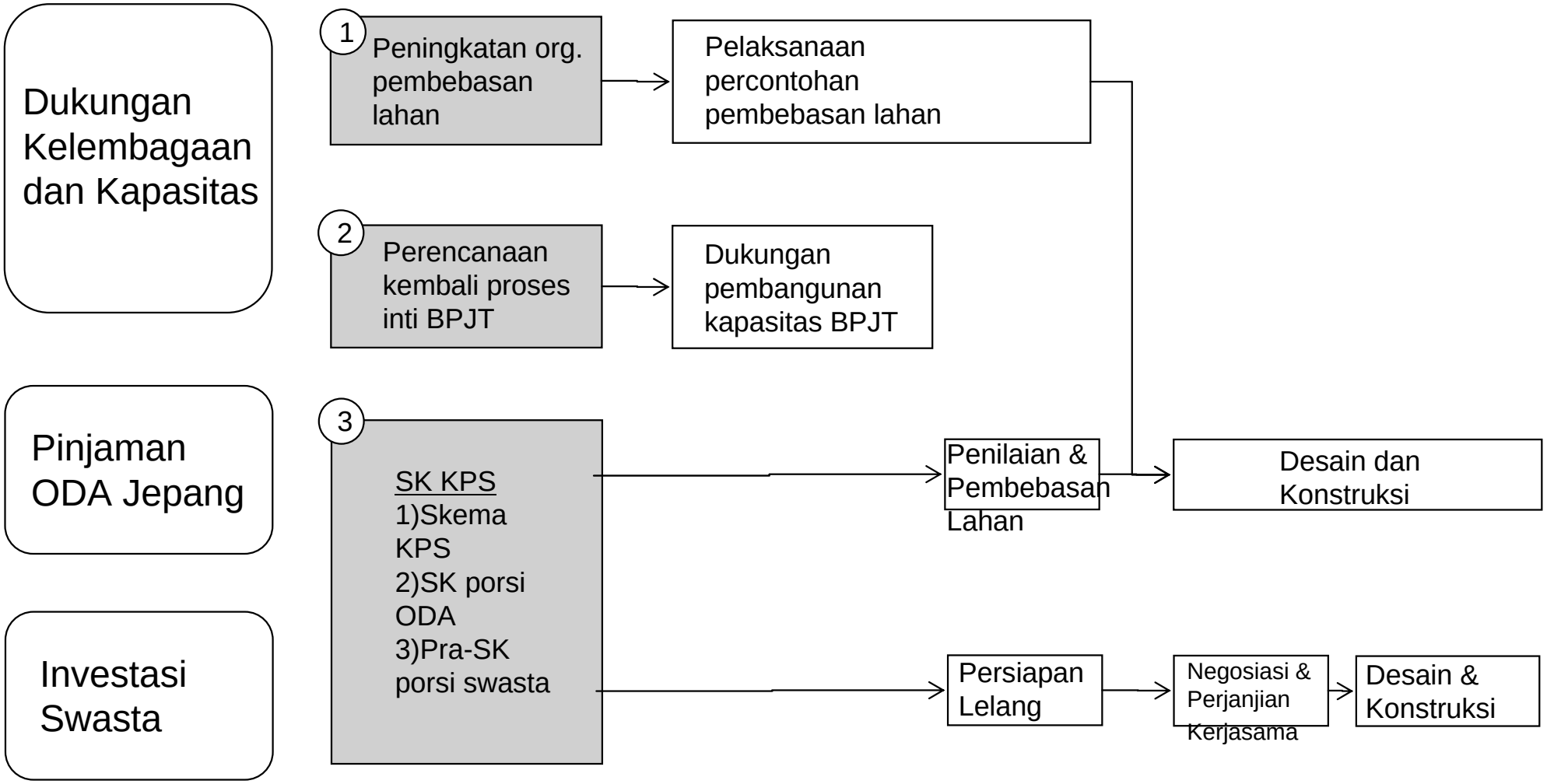
ORGANISASI BERDEDIKASI UNTUK PEMBEBASAN LAHAN (CONTOH JALAN TOL DI JEPANG)

	Jepang Selatan ruas A	Jepang Selatan ruas B
Panjang ruas:	14,6 km	21,7 km
Target penyelesaian:	2013	2015
# pemilik tanah:	650	800
# staf dlm organisasi pembebasan lahan berdedikasi:		
Staf langsung:	6	18
Staf kontrak:	26	25
Total:	32	43

- **Ketua organisasi berpengalaman lebih dari 10 tahun dalam pembebasan lahan**
- **Seluruh wakil ketua berpengalaman 1-10 tahun dalam pembebasan lahan**
- **Termasuk staf teknik sipil, ahli kompensasi finansial**

DAFTAR ISI

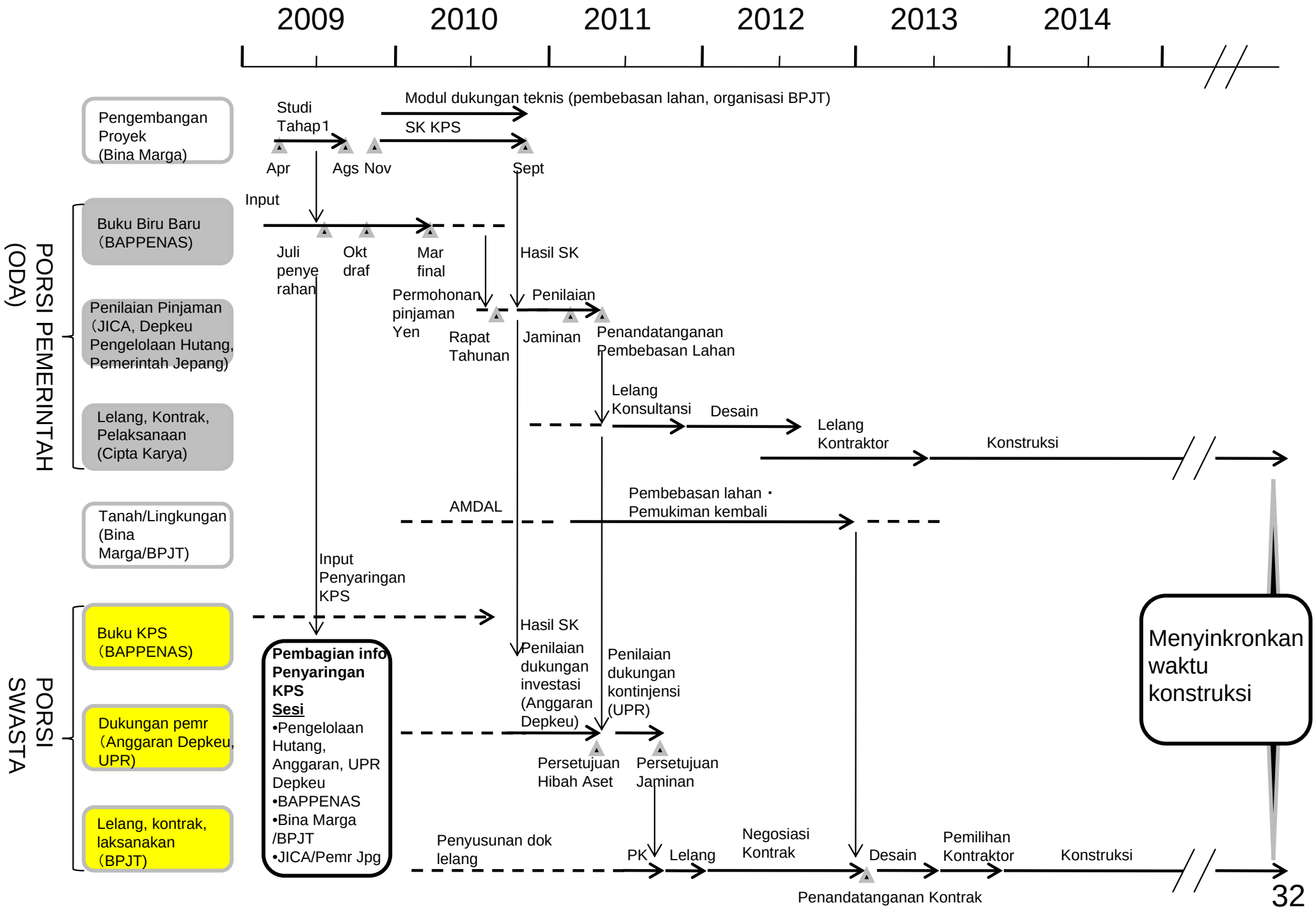
PETA JALAN LANGKAH SELANJUTNYA UNTUK PROYEK KPS JALAN TOL (UNTUK DISKUSI)



URAIAN MODUL LANGKAH SELANJUTNYA UNTUK JALAN TOL

	Uraian	Keluaran Utama
1 Peningkatan org. pembebasan lahan	• Patokan praktik terbaik luar negeri untuk pembebasan lahan dan meningkatkan pendekatan yang ada. Merekomendasikan perubahan terhadap TPT/PPT termasuk tanggung jawab dan insentif	•Membentuk org. percontohan unit kecil untuk pembebasan lahan di sepanjang damija proyek
2 Perencanaan kembali proses inti BPJT	• Perencanaan kembali proses inti organisasi BPJT sejalan dengan proses KPS. Memperjelas ketentuan tanggung jawab, wewenang, keahlian dan evaluasi untuk setiap proses	•Memperkuat org. BPJT untuk melaksanakan proses KPS berkualitas baik
3 SK KPS 1)Skema KPS 2)SK porsi BPR 3)Pra-SK porsi swasta	• **Skema KPS** Desain detail termasuk 1)porsi swasta/pemerintah, 2)jaminan pemerintah dan dukungan langsung, 3)FIRR proyek, IRR SPC, Simulasi VfM, 4) penjadwalan • **SK porsi ODA** Pengkajian aspek finansial, teknis dan lingkungan proyek untuk menilai apakah proyek memenuhi pedoman ODA • **Pra-SK porsi swasta** Melakukan studi dan analisis dasar sebelum persiapan lelang termasuk 1)desain metode lelang, 2)kualifikasi sektor swasta, 3)prinsip alokasi risiko, 4)persyaratan perjanjian kerjasama	•Seluruh informasi yang diperlukan untuk penilaian Pinjaman ODA dianalisis dan disediakan •Seluruh informasi yang diperlukan untuk penyusunan dokumen lelang dianalisis dan disediakan

JADWAL “PEMBAGIAN VERTIKAL” PROYEK JALAN TOL DENGAN SKEMA KPS

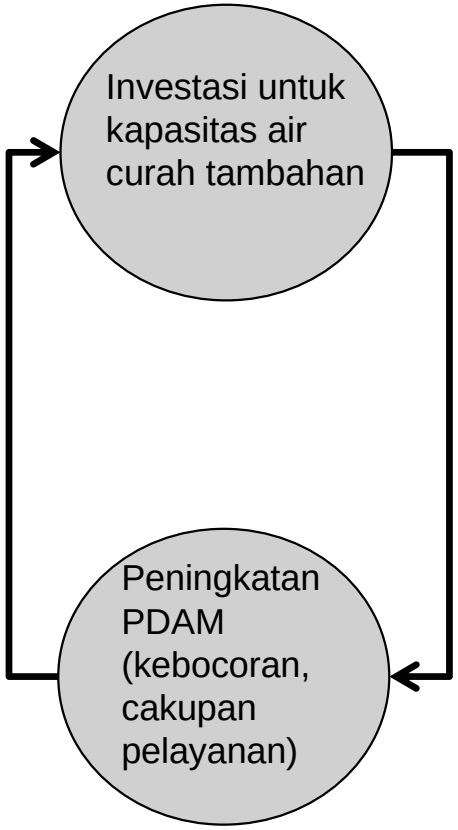


DAFTAR ISI

AIR MINUM MEMILIKI ISU-ISU MANAJERIAL DAN STRUKTURAL

Situasi	Alasan
Banyak PDAM berlaba negatif. Hal ini menyebabkan kurangnya dana untuk menambah sambungan rumah dan merehabilitasi jaringan distribusi. **Implikasi:** Investasi kapasitas air curah saja tidak akan menyelesaikan masalah	• **Kebocoran tinggi (30~60%):** Kehilangan fisik dan komersial menekan tingkat keuntungan finansial • **Tarif di bawah biaya** : Penyesuaian tarif akibat inflasi tidak dilakukan secara otomatis dan tarif tetap rendah. Beberapa kota mendesak mendapatkan persetujuan DPRD, di samping persyaratan non-peraturan. • **Masalah manajemen PDAM**: Banyak PDAM mungkin tidak memiliki keahlian manajemen yang memadai • **Kurangnya dukungan dana**: Depkeu telah menghentikan pemberian dukungan pembiayaan kepada PDAM yang memiliki tunggakan hutang. PDAM tersebut harus menyerahkan rencana restrukturisasi, yang memerlukan persetujuan pemerintah pusat. Pemerintah daerah juga memiliki kemampuan yang kurang memadai untuk memberikan dukungan pembiayaan. Bahkan PAM Jaya DKI Jakarta memiliki banyak tunggakan hutang.
Laba proyek sulit diberikan untuk kota kecil karena kurangnya skala ekonomi. Di lain pihak, proyek lintas PDAM memerlukan koordinasi pemangku kepentingan, yang memerlukan waktu lama	• **Pemerintah pusat dan provinsi memiliki penguasaan yang terbatas terhadap PDAM**: Pemerintah Kota dan Kabupaten memiliki wewenang yang kuat, yang kadang-kadang menyulitkan koordinasi lintas PDAM • **PDAM menetapkan tarif yang berbeda**: Proyek lintas PDAM sulit untuk direncanakan karena sulit untuk menetapkan tarif air curah yang sesuai

AIR MINUM MEMERLUKAN SOLUSI TERPADU UNTUK MENGATASI HULU DAN HILIR SECARA SIMULTAN

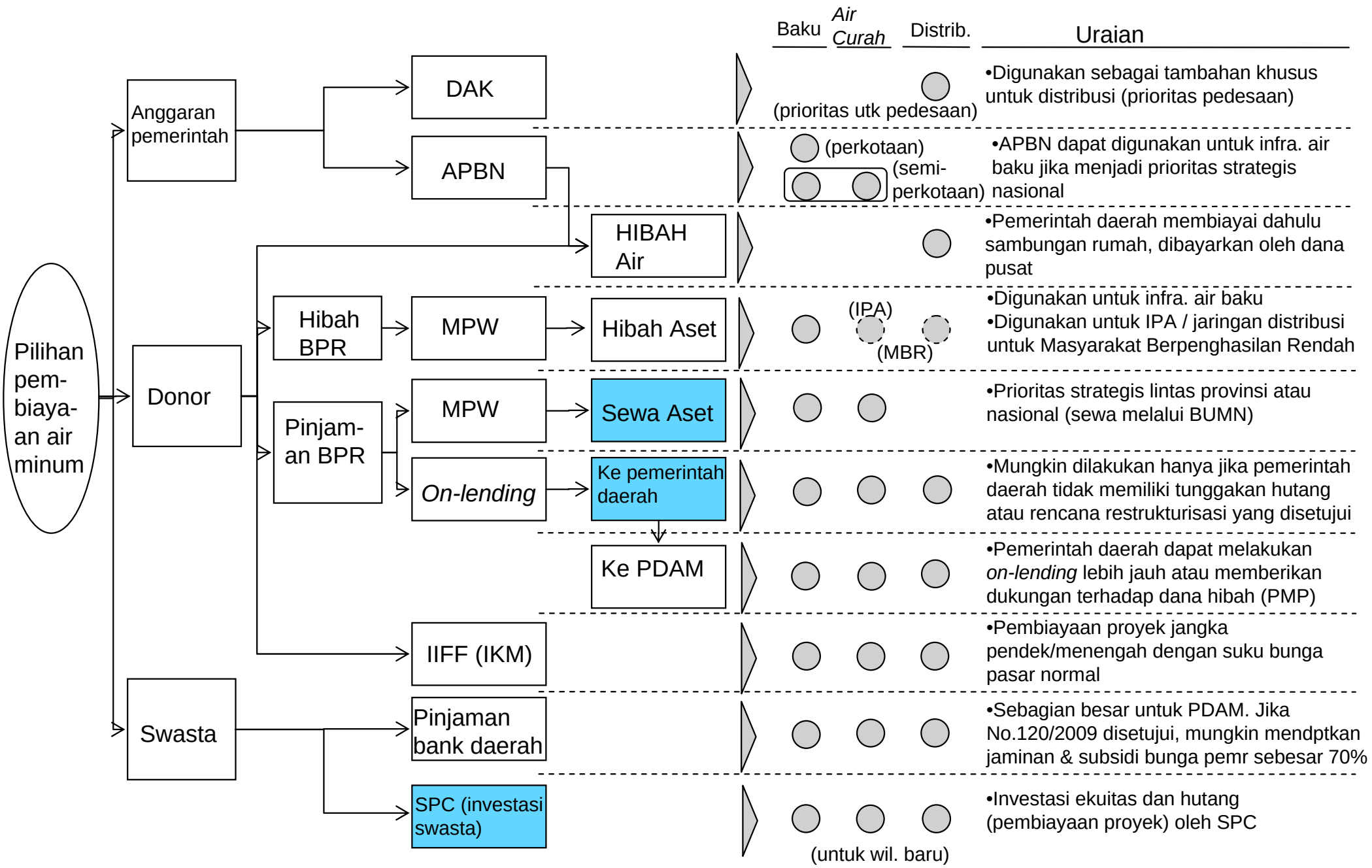


Kebutuhan Dukungan

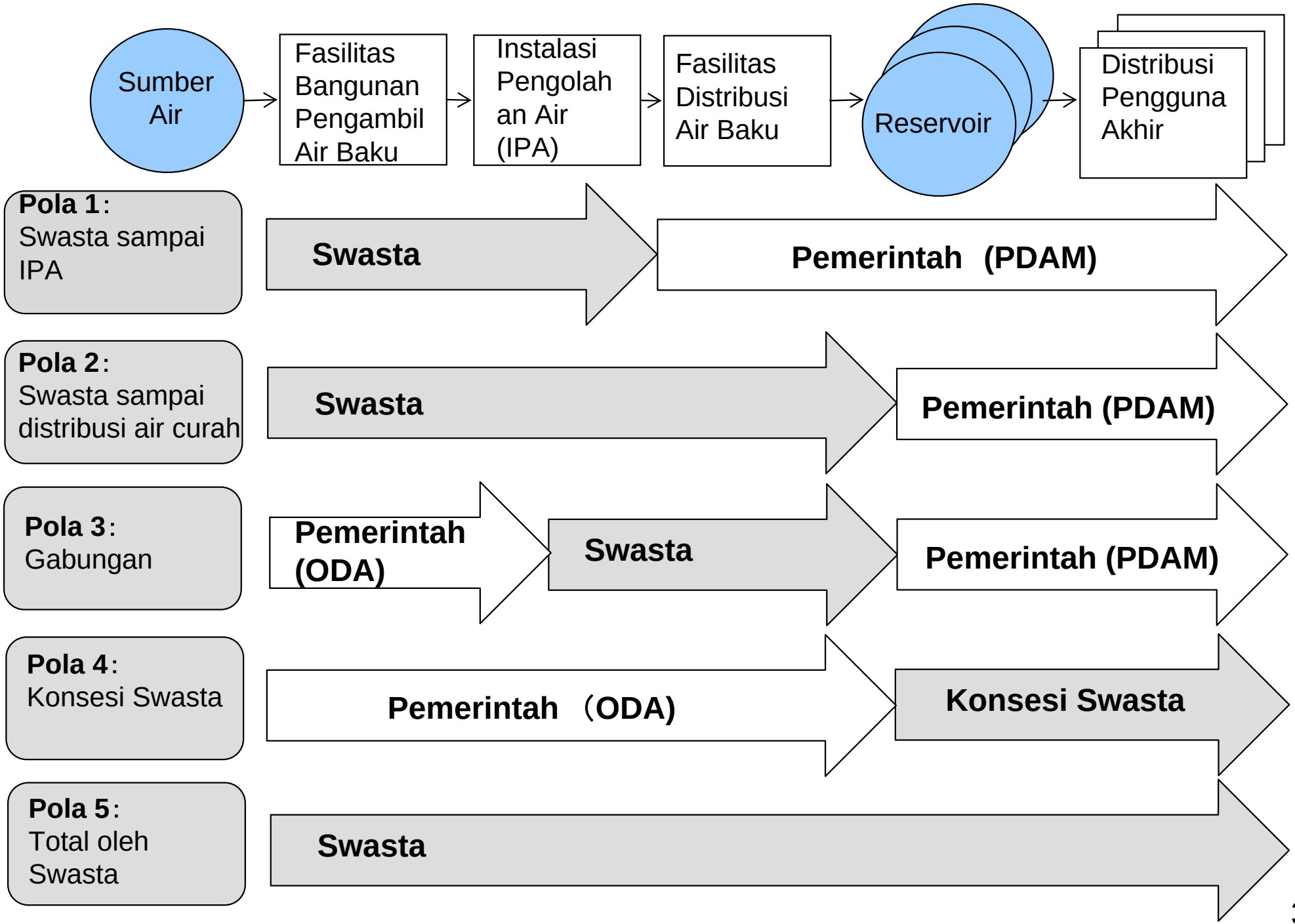
•Koordinasi pemangku kepentingan (rencana yang saling menguntungkan, fasilitasi）
•Pembiayaan proyek untuk proyek besar (menggabungkan swasta dan ODA)

•Pelatihan manajemen PDAM
•Dukungan teknis untuk perbaikan tingkat kebocoran
•Dukungan pembiayaan rehabilitasi jaringan distribusi dan penambahan sambungan rumah

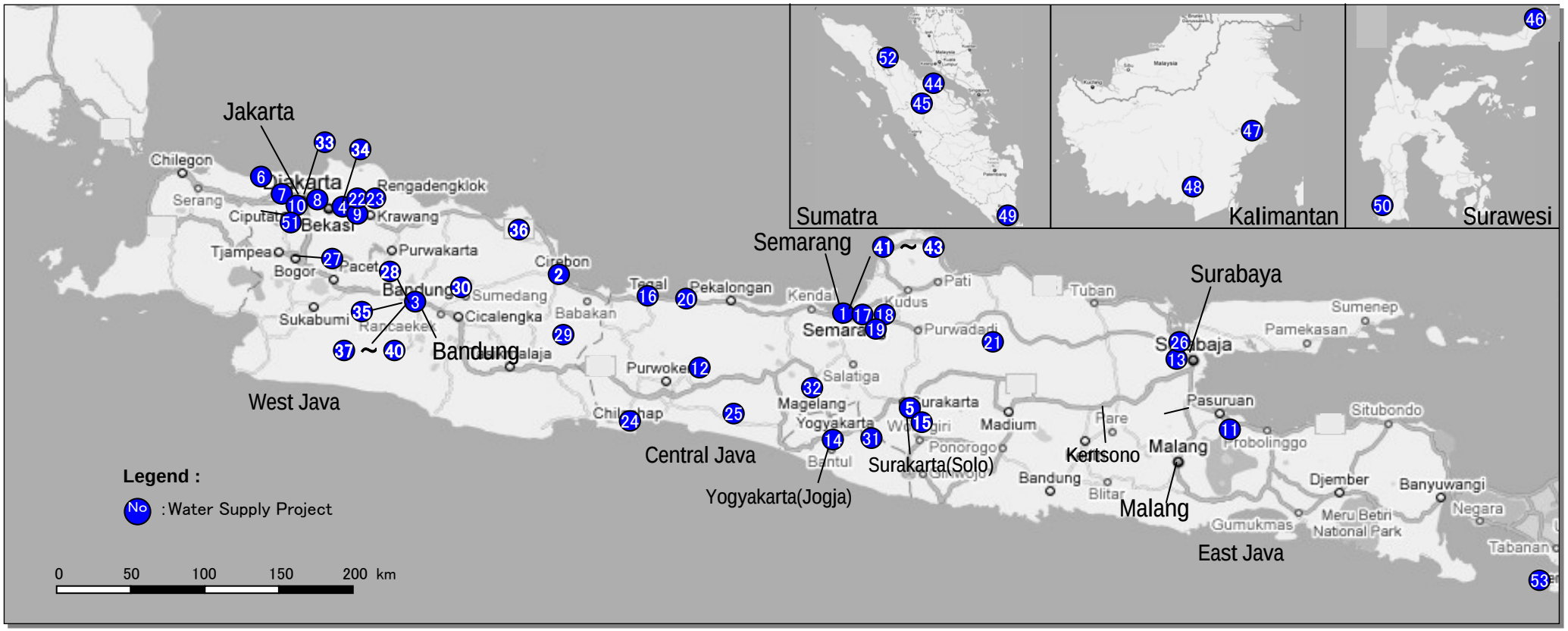
OPSI PENYALURAN DANA UNTUK AIR MINUM HARUS DIPERJELAS



CONTOH SKEMA KPS: POLA AIR MINUM



DAFTAR AWAL PROYEK AIR MINUM



Water Supply Project		
No	Project	
1	Uprating WTP Kali Garang Semarang	*1)
2	Cirebon Bulk & Water Supply	*1) *3)*4)
3	Jatinangor Water Supply	*1)
4	Cikarang Water Supply	*1)
5	Pondok Gede Water Supply	*1) *3)*4)
6	Sepatan Water Supply	*1)
7	Ciparens Tangerang Water Supply	*1)*2)
8	Kecamatan Benda & Cengkareng	*1)
9	Cileduk Water Supply	*1)
10	Tanjung Pinang Water Supply	*1)
11	Umbulan Water Supply	*1)
12	Karang Pilang IV Bulk Treated W	*1)
13	Menganti Water Supply	*1)
14	Greater Yogyakarta & Magelang	*1)

No	Project	
15	Surakarta-Sukoharjo Sukoharjo	*1) *4)
16	Tegal Water Supply Water	*1)
17	Regency&City of Semarang	*1)
18	East Semarang New Water Supply	*1)
19	Semarang Raw Water Supply	*1)
20	Pemalang Water Supply	*3)
21	Jambi Water Supply	*3)
22	Munici. Bekasi Water Supply	*3)
23	Regency Bekasi Water Supply	*3)
24	Cilacap Water Supply	*3)
25	Kebumen Water Supply	*3)
26	Gresik Water Supply	*3)
27	Bogor Water Supply	*3)
28	Bandung Water Supply	*2) *4)
29	Subang Water Supply	*3)

No	Project	
30	Sumedang Water Supply	*3)*4)
31	Kanan Water Supply	*2)
32	Magelang-Kartamantul WS	*3)
33	DKI Jakarta- Bekasi- Karawang	*4)
34	West Cikarang & Cibitung Bekasi Rege	*4)
35	Bandung Regency	*3)*4)
36	Indramayu Regency	*4)
37	West Bandung Alt. I- Water Conveyanc	*4)
38	West Bandung Alt. II- Water Conveyan	*4)
39	East Bandung Alt. I- Water Conveyanc	*4)
40	East Bandung Alt. II- Water Conveyanc	*4)
41	Semarang Alt. I- Water Conveyanc	*4)
42	Semarang Alt. II- Water Conveyanc	*4)
43	Semarang Alt. III- Water Conveyan	*4)
44	Dumai Water Supply	*1)*2)

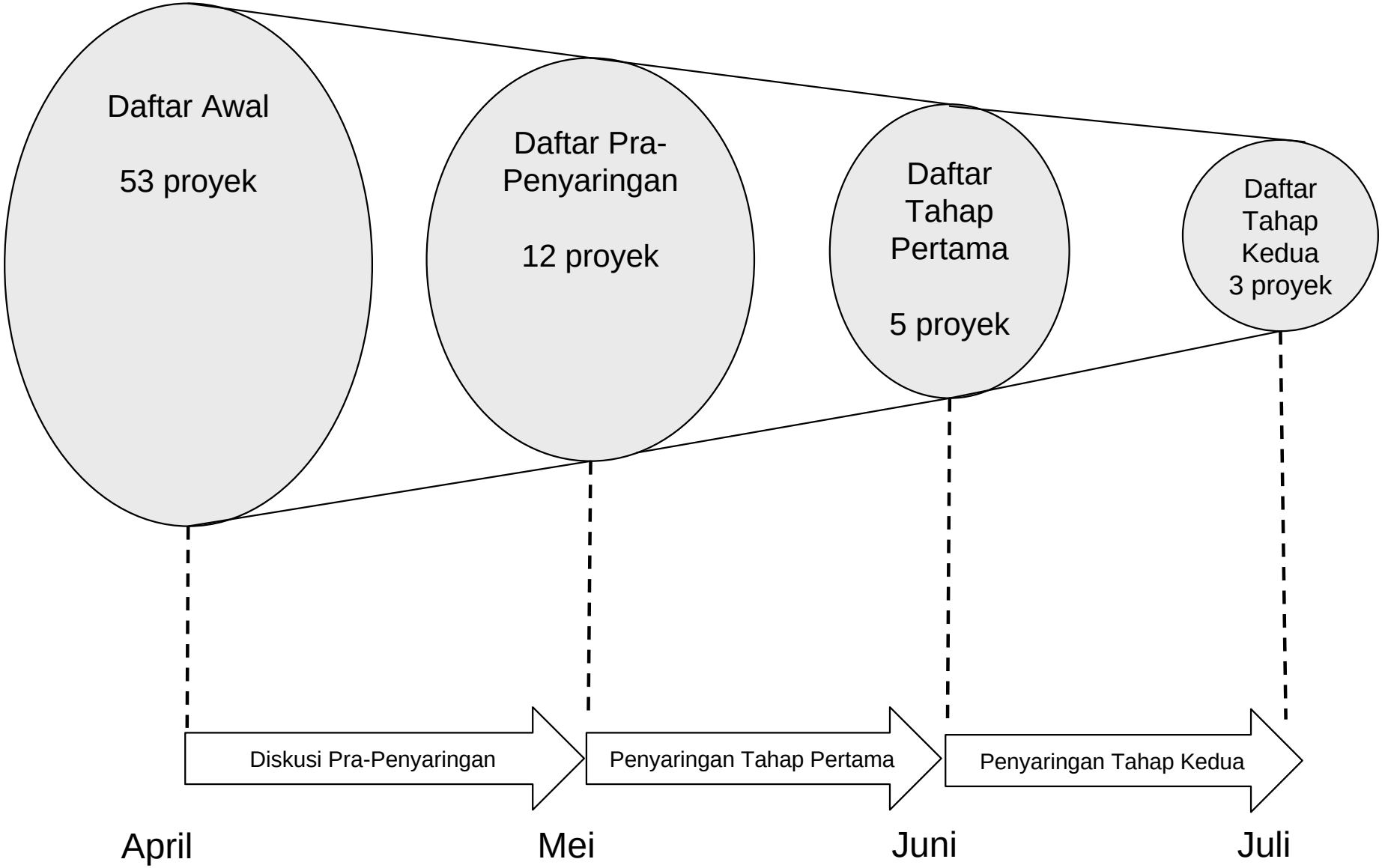
No	Project	
45	Duri Water Supply	*1)
46	Manado Bulk Treated Water Supply	*1)
47	Samarinda Bulk Treated Water Supply	*1) *3)
48	Banjarmasin Bulk Treated Water Supply	
49	City of Bandar Lampung	*3)*4)
50	Regency of Maros	*3)*4)
51	DAM Karian(Tangerang)	*3)
52	Medan Municiparity	*4)
53	Klung kung Regency	*4)

Source) *1) Infrastructure summit 2005
*2) Infrastructure Conference 2006
*3) BPP-SPAM Leaflet 2008
*4) other latest sources (2009)

No.s in the table are correspondent to no.s in the figure

PPP Project (Water Supply) Location Map

GAMBARAN PENYARINGAN



HASIL PRA-PENYARINGAN (I)

No	Proyek Terpilih	Nama Proyek	Alasan Penolakan						
			Sudah Dimulai	Dibiayai bukan oleh KPS	Diserap ke proyek lain	Dibatalkan oleh pemerintah daerah	Masalah sumber air	Kapasitas kecil (>100 l/s)	Masalah hukum
1		Peningkatan Kapasitas Produksi IPA Kali Garang Semarang			X				
2		Air Minum & Air Curah Cirebon			X				
3		Air Minum Jatinangor				X			
4	X	Air Minum Cikarang							
5	X	Air Minum Pondok Gede							
6		Air Minum Sepatan	X						
7	X	Air Minum Ciparens Tangerang							
8		Kecamatan Benda & Cengkareng	X						
9		Air Minum Cileduk	X						
10		Air Minum Tanjung Pinang					X		
11	X	Air Minum Curah Umbulan							
12		Pengolahan Air Curah Karang Pilang IV		X					
13		Air Minum Menganti				X			
14		Greater Yogyakarta & Magelang							X
15		Surakarta-Sukoharjo Sukoharjo						X	
16		Air Minum Tegal					X		
17		Kabupaten & Kota Semarang						X	
18		Air Minum Baru Semarang Timur						X	
19	X	Air Baku Semarang							
20		Air Minum Pemalang				X			
21		Air Minum Jambi	X						
22		Air Minum Kota Bekasi				X			
23		Air Minum Kabupaten Bekasi				X			
24		Air Minum Cilacap					X		
25		Air Minum Kebumen						X	
26	X	Air Minum Gresik							
27	X	Air Minum Bogor							

HASIL PRA-PENYARINGAN (II)

No	Proyek Terpilih	Nama Proyek	Alasan Penolakan						
			Sudah Dimulai	Dibiayai bukan oleh KPS	Diserap ke proyek lain	Dibatalkan oleh pemerintah daerah	Masalah sumber air	Kapasitas kecil (>100 l/s)	Masalah hukum
28		Air Minum Bandung			X				
29		Air Minum Subang			X				
30		Air Minum Sumedang				X			
31		Air Minum Kanan			X				
32		Air Minum Magelang-Kartamantul			X				
33	X	DKI Jakarta- Bekasi- Karawang							
34		Kabupaten Cikarang Barat & Cibitung Bekasi				X			
35	X	Kabupaten Bandung							
36		Kabupaten Indramayu					X		
37		Sistem Transmisi Air Bandung Barat Alt. I					X		
38	X	Sistem Transmisi Air Bandung Barat Alt. II							
39		Sistem Transmisi Air Bandung Timur Alt. I					X		
40	X	Sistem Transmisi Air Bandung Timur Alt. II							
41		Sistem Transmisi Air Semarang Alt. I			X				
42		Sistem Transmisi Air Semarang Alt. II			X				
43		Sistem Transmisi Air Semarang Alt. III			X				
44		Air Minum Dumai		X		X			
45		Air Minum Duri		X		X			
46		Pengolahan Air Minum Curah Manado			X				
47		Pengolahan Air Minum Curah Samarinda		X					
48		Pengolahan Air Minum Curah Banjarmasin		X					
49	X	Kota Bandar Lampung							
50		Kabupaten Maros						X	
51		DAM Karian (Tangerang)			X				
52		Kota Medan		X					
53		Kabupaten Klung kung		X					
		Frekuensi	4	7	11	9	6	5	1

Sumber: CIPTA KARYA

HASIL PENYARINGAN TAHAP PERTAMA

Kriteria	1 Air Minum Cikarang & Cikarang Barat & Cibitung Bekasi	2 Air Minum Pondok Gede	3 Air Minum Ciparens Tangerang	4 Air Minum Curah Umbulan	5 Air Minum Baru Semarang Barat	6 Air Minum Gresik	7 Air Minum Bogor	8 DKI Jakarta-Bekasi-Karawang	9 Kabupaten Bandung	10 Sistem Transmisi Air Bandung Barat Alt. II	11 Sistem Transmisi Air Bandung Timur Alt. II	12 Kota Bandar Lampung
1) Ketidaktersediaan air alternatif	1	3	1	3	3	1	2	1	*2*	*2*	*2*	*2*
2) Aksesibilitas ke sumber air baku	3	3	3	3	3	3	3	3	3	3	*2*	3
3) Kapasitas produksi	*2*	1	*2*	3	3	1	1	3	2	1	*2*	1
4) Tarif saat ini	*2*	*2*	*2*	2	*2*	1	3	2	2	*2*	*2*	*2*
5) Kebutuhan air industri dan komersial	3	1	3	3	3	3	1	3	3	3	3	3
6) Jumlah penduduk penerima air eceran	*2*	2	*2*	3	1	1	1	*2*	*2*	1	*2*	2
7) Pertumbuhan penduduk	*2*	3	*2*	1	2	*2*	*2*	3	2	2	*2*	2
Nilai Total	2.15	2.36	2.15	2.58	2.28	1.72	2.00	2.36	2.29	2.00	2.07	2.22
Proyek Terpilih		✓		✓	✓			✓	✓			✓

Catatan: "Tidak ada data" diberi nilai 2 poin (dicetak miring dan digarisbawahi).

Setelah penyaringan tahap pertama, kami menemukan bahwa pemerintah daerah membatalkan proyek tersebut dan menyisihkannya dari daftar.

HASIL PENYARINGAN TAHAP KEDUA

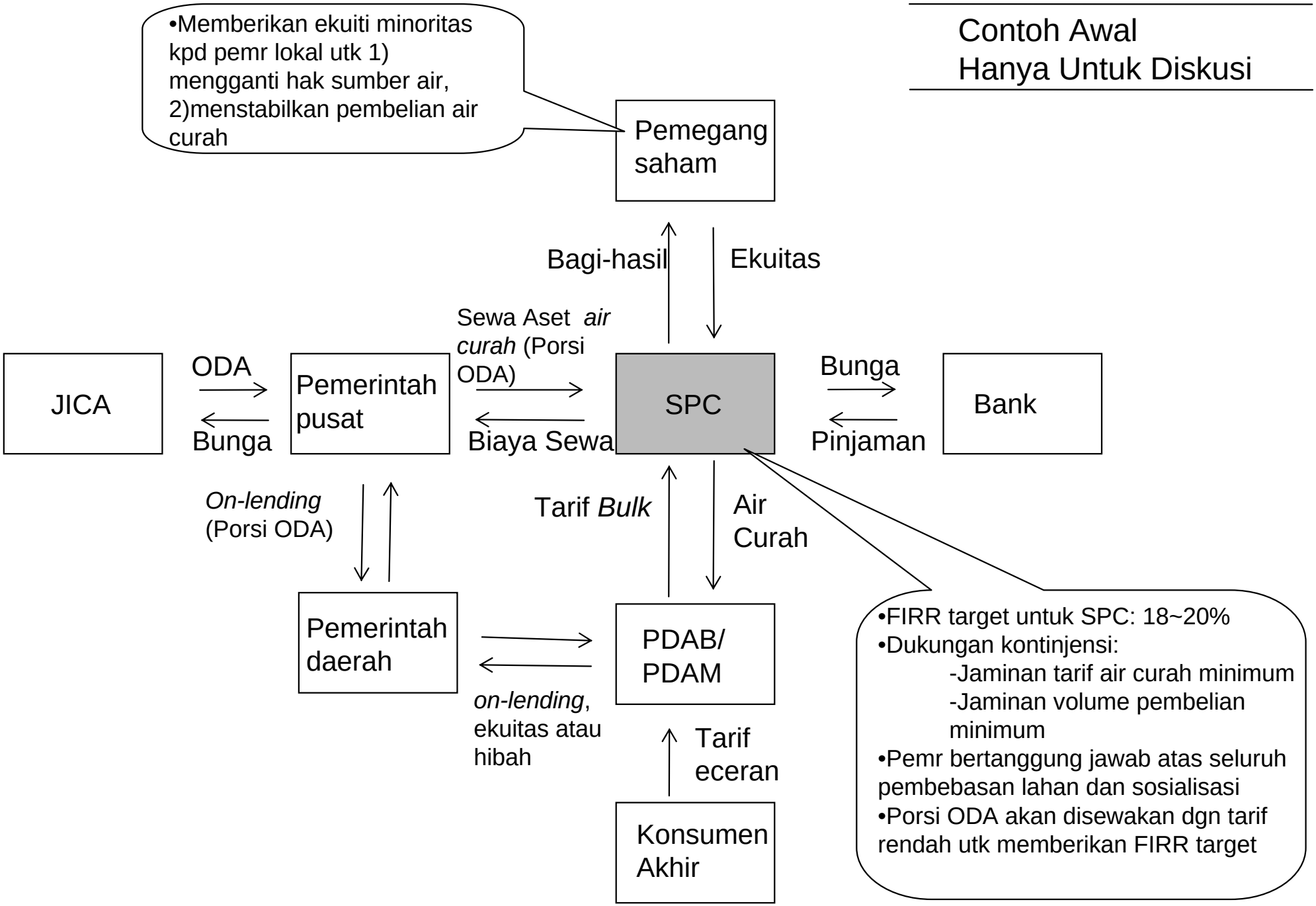
Kriteria Evaluasi		Umbulan	Semarang	DKI Jakarta - Bekasi-Karawang	Bandung Regency	Bandar Lampung
1) Tingkat kebutuhan 20%	1.1) Pertumbuhan PDRB	2	2	2	3	3
	1.2) Jumlah biaya modal dlm PDRB	2	3	1	2	3
	1.3) Komponen distribusi	3	3	1	2	2
	1.4) Pertimbangan pro-rakyat miskin	2	2	1	2	3
	Nilai	2.25	2.50	1.25	2.25	2.75
2) Tingkat keuntungan 35%	2.1) FIRR	1	1	3	1	1
	2.2) EIRR	3	3	1	2	2
	2.3) Biaya modal	3	2	3	2	1
	2.4) Kapasitas produksi	2	2	3	1	1
	Nilai	2.14	1.86	2.71	1.43	1.14
3) Tingkat pelaksanaan 45%	3.1) Pemastian air baku	2	2	2	1	3
	3.2) Risiko/kesiapan teknis	2	2	2	2	2
	3.3) Konsensus pemerintah	2	3	2	3	3
	3.4) Kinerja PDAM	2.58	1	1.75	1	1
	3.5) Dampak terhadap lingkungan hidup	2	2	2	2	1
	3.6) Pembebasan Lahan	3	3	3	3	2
	Nilai	2.18	2.22	2.08	2.00	2.22
	Total Nilai	2.18	2.15	2.14	1.85	1.95

PROFIL CALON TERPILIH PROYEK AIR MINUM

	Ringkasan Proyek	Biaya investasi	Fasilitas konstruksi
Air Minum Umbulan	Proyek ini adalah untuk Surabaya ,Gresik, Sidoarjo dan Pasuruan. Sumber airnya berasal dari mata air Umbulan di Kabupaten Pasuruan. Kapasitas intake 4.000 L/det, dan jumlah penduduk penerima adalah 2.880.000 dgn dasar 120 liter per kapita per hari. Pemeliharaan lingkungan sekitar mata air akan diperlukan.	US$ 235 juta	•Intake 4000 l/det untuk mata air. •Panjang total pipa transmisi 92 km •Jaringan distribusi untuk melayani 883.944 sambungan rumah sampai 2015.
Jakarta-Karawang-Bekasi	Proyek ini adalah untuk Jakarta, Karawang dan Bekasi. Sumber airnya berasal dari Waduk Jatiluhur. Kapasitas intake 15.000 L/det, dan jumlah penduduk penerima adalah 10.800.000 dgn dasar 120 liter per kapita per hari.	US$ 563 juta	•Instalasi Pengolahan Air 15.000 l/det. •Panjang pipa transmisi 58 km.
Semarang Barat	Proyek ini adalah untuk Semarang Barat. Sumber airnya adalah Sungai Kreo. Kapasitas intake 1050 L/det, dan jumlah penduduk penerima adalah 174.970.	US$ 70 juta	•Fasilitas intake 1.050 l/det •Pipa pembawa air baku 2,2 km •Instalasi Pengolahan Air 1.050 l/det •Pipa transmisi utama 3,1 km dan 9,7 km •Sistem distribusi 44

CONTOH RENCANA TRANSAKSI FINANSIAL

Contoh Awal
Hanya Untuk Diskusi



SIMULASI FINANSIAL CALON PROYEK KPS AIR MINUM

Proyek Umbulan

Biaya investasi:
Rp 2,357 miliar
FIRR proyek 10,1%

		Public Private Ratio					
		25 : 75		50 : 50		75 : 25	
		SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR
Lease Fee	4%	15.90%	6.36%	19.27%	6.12%	27.20%	5.97%
	3%	16.10%	5.95%	19.89%	5.47%	28.65%	5.16%
	2%	16.30%	5.53%	20.49%	4.78%	30.07%	4.28%
	1%	16.60%	5.09%	21.09%	4.04%	31.45%	3.32%
	0%	16.80%	4.63%	21.68%	3.24%	32.81%	2.24%

Proyek Semarang

Biaya investasi:
Rp703 miliar
FIRR proyek 6,5%

		Public Private Ratio							
		25 : 75		50 : 50		75 : 25		90 : 10	
		SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR
Lease Fee	4%	7.46%	7.10%	8.22%	6.44%	9.92%	6.14%	12.74%	6.04%
	3%	7.81%	6.24%	9.18%	5.31%	12.14%	4.88%	17.21%	4.71%
	2%	8.16%	5.31%	10.07%	4.07%	14.15%	3.47%	21.34%	3.24%
	1%	8.50%	4.31%	10.92%	2.67%	16.04%	1.83%	25.33%	1.50%
	0%	8.84%	3.21%	11.74%	1.01%	17.84%	-0.20%	29.22%	-0.70%

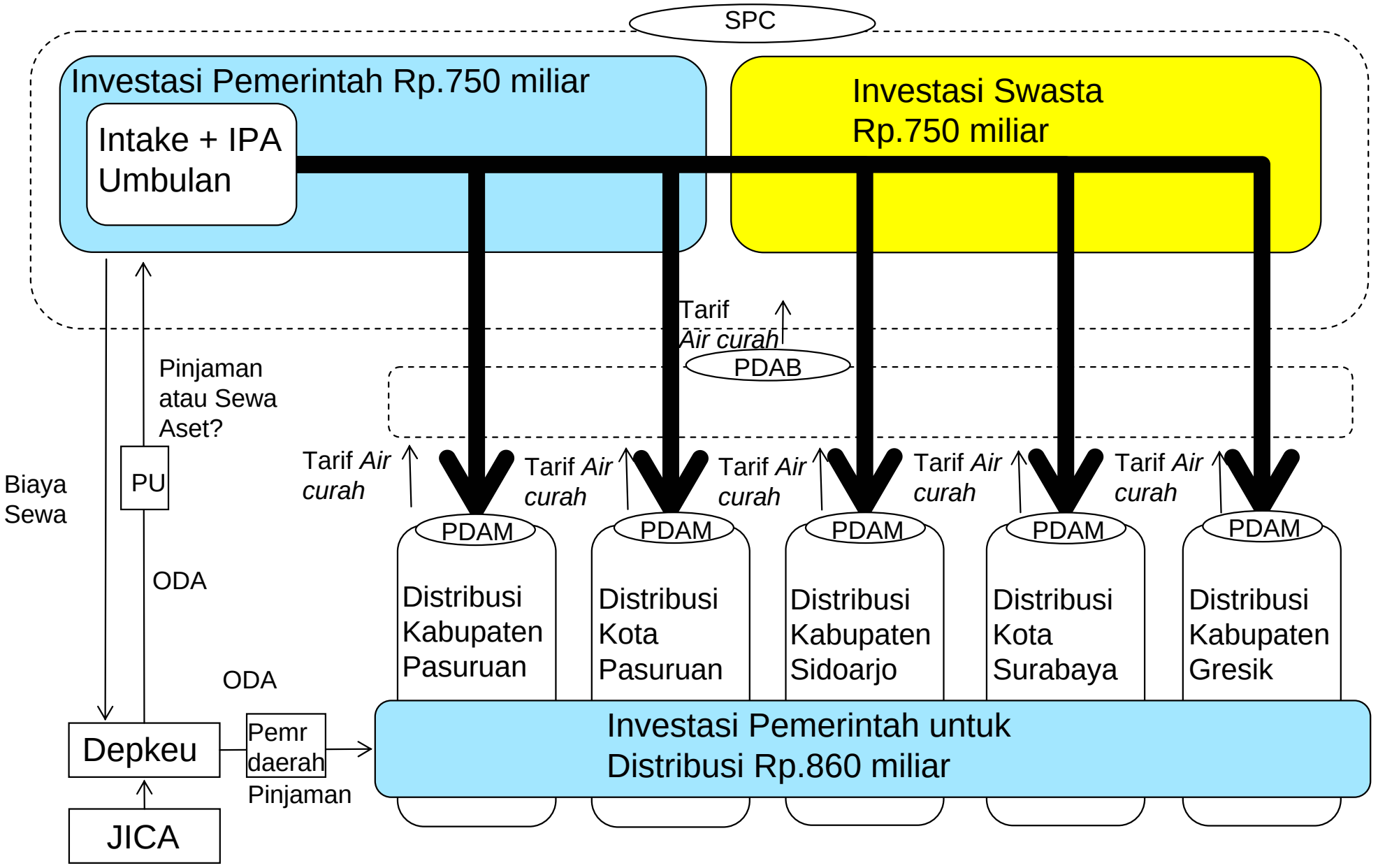
Proyek JABEKA

Biaya investasi:
Rp 5,635 miliar
FIRR proyek 12,8%

		Public Private Ratio					
		25 : 75		50 : 50		75 : 25	
		SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR
Lease Fee	4%	14.61%	16.04%	17.69%	11.70%	24.82%	9.92%
	3%	14.86%	15.34%	18.31%	10.80%	26.26%	8.89%
	2%	15.10%	14.61%	18.93%	9.84%	27.65%	7.77%
	1%	15.34%	13.87%	19.53%	8.81%	29.01%	6.55%
	0%	15.57%	13.09%	20.11%	7.70%	30.33%	5.17%

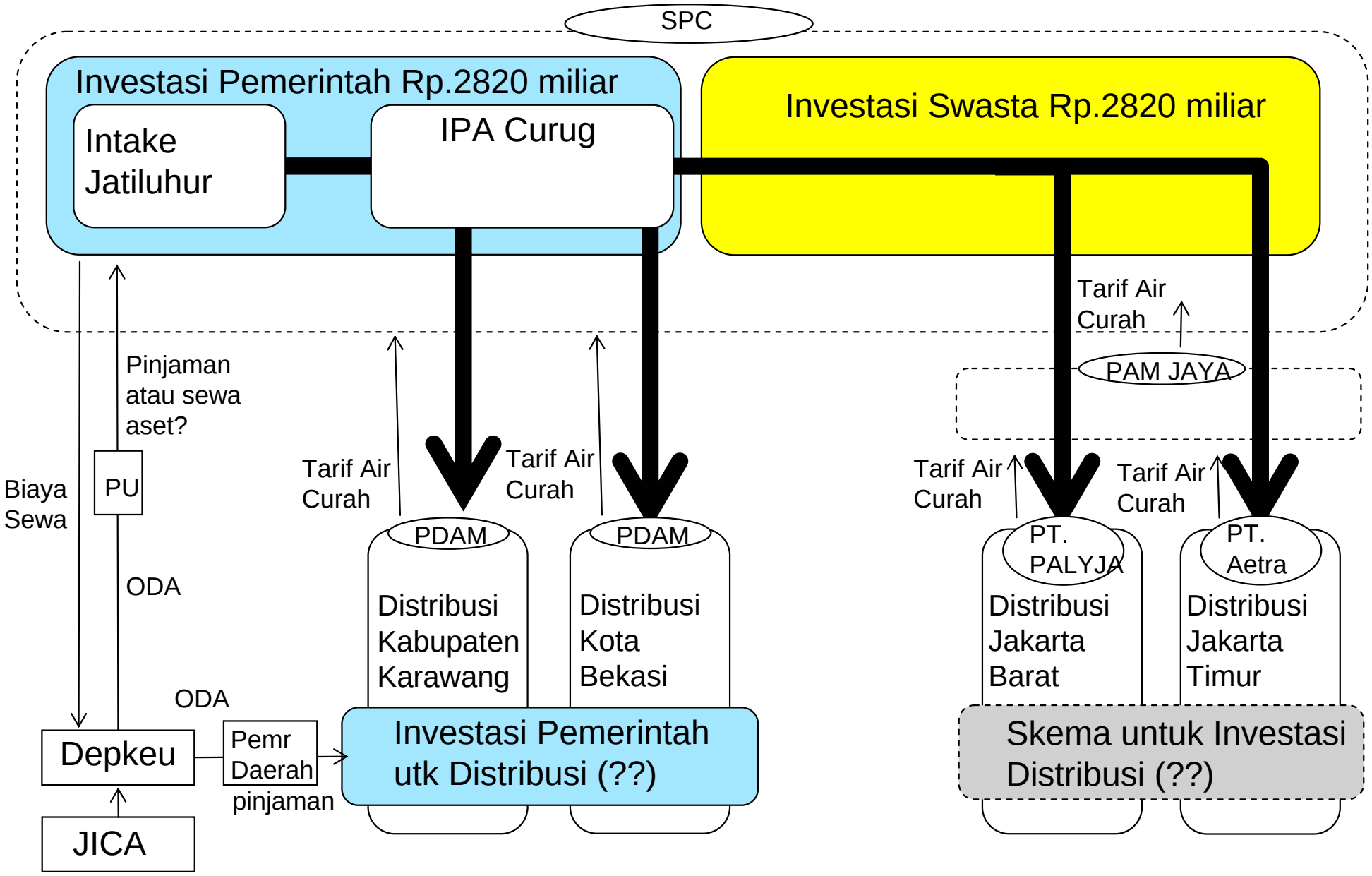
SKEMA KPS POTENSIAL: AIR MINUM UMBULAN

Contoh Awal
Hanya Untuk Diskusi



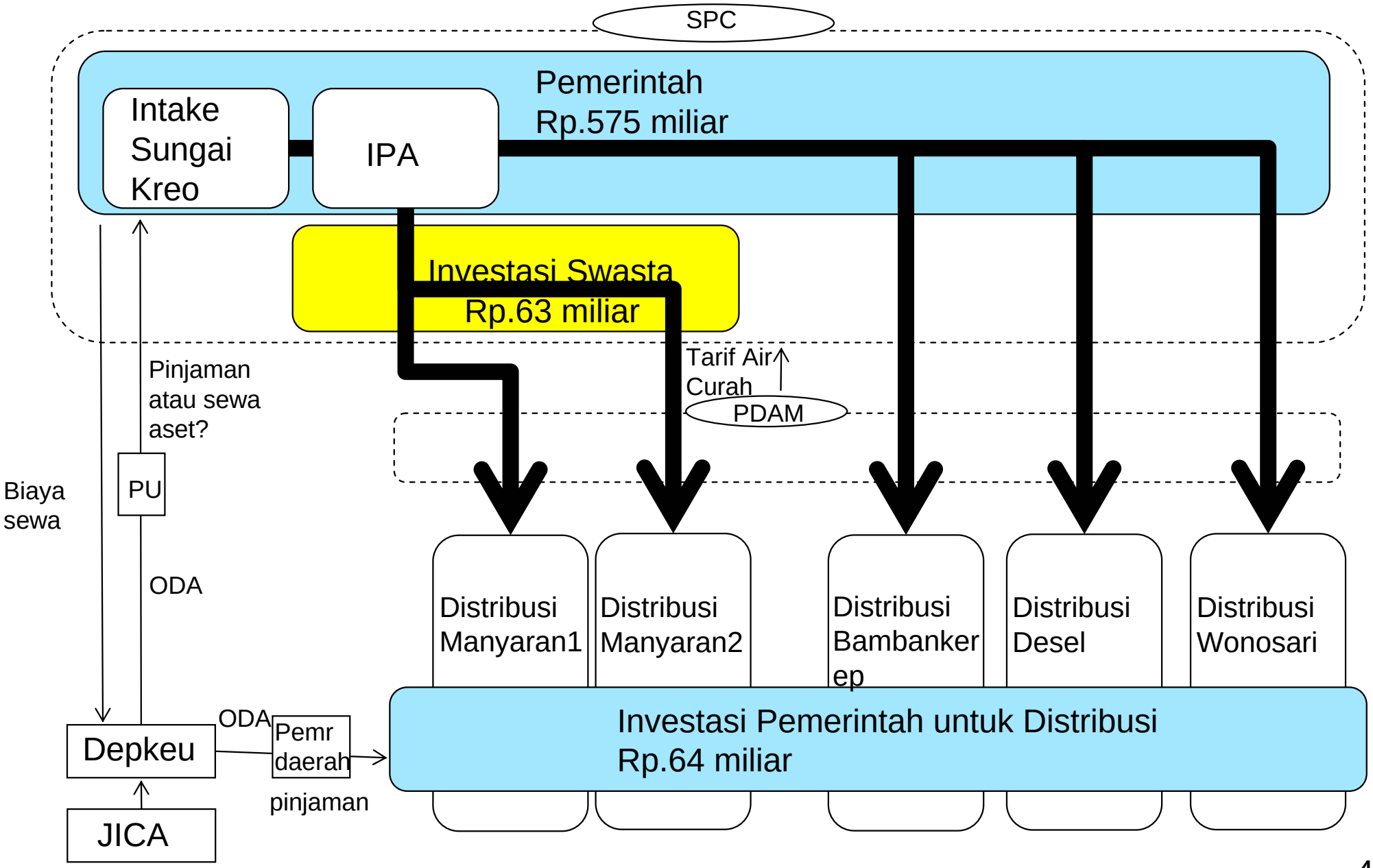
SKEMA KPS POTENSIAL: AIR MINUM JABEKA

Contoh Awal
Hanya Untuk Diskusi



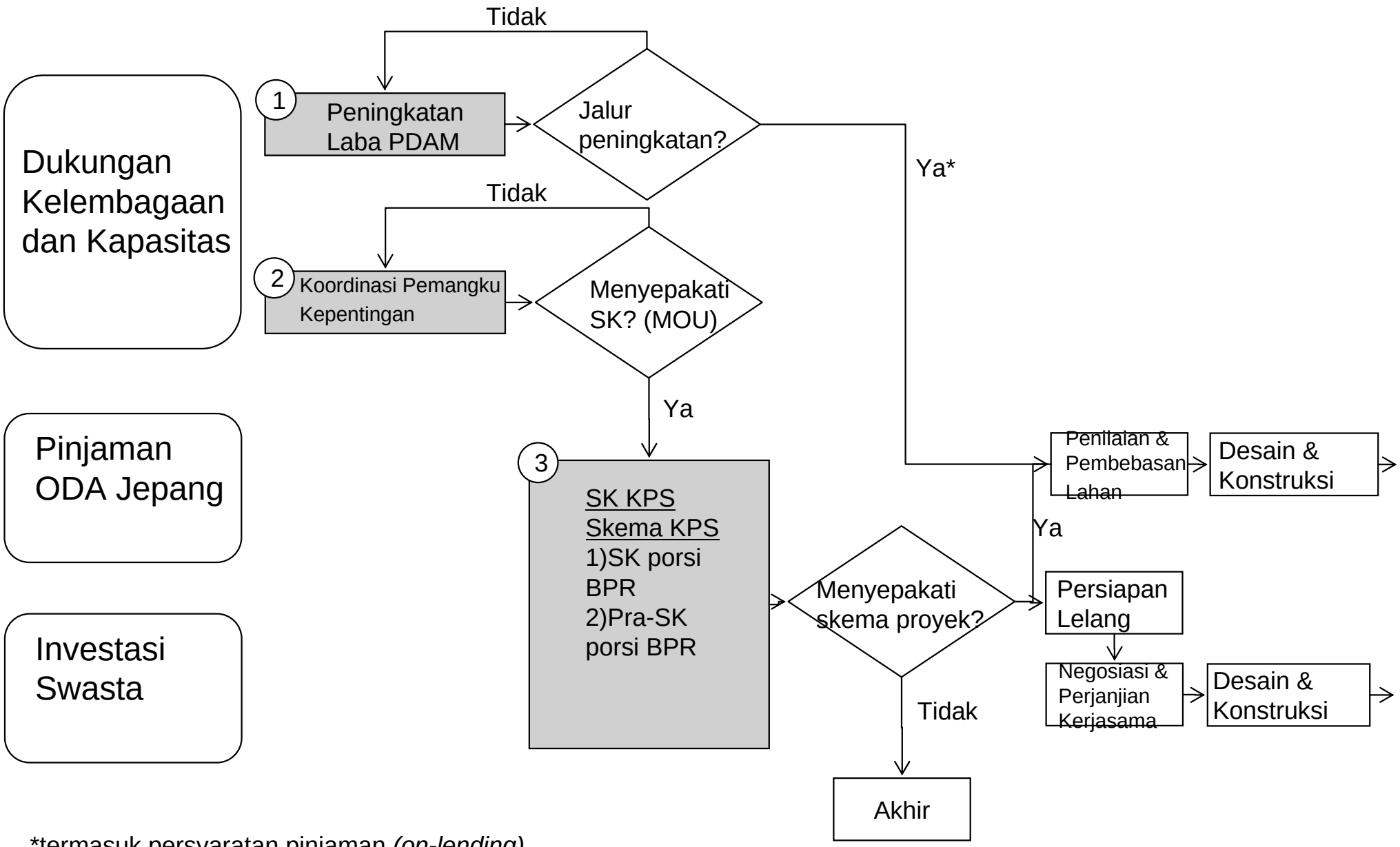
SKEMA KPS POTENSIAL: AIR MINUM SEMARANG BARAT

Contoh Awal
Hanya Untuk Diskusi



DAFTAR ISI

PETA JALAN LANGKAH SELANJUTNYA UNTUK PROYEK KPS AIR MINUM (UNTUK DISKUSI)

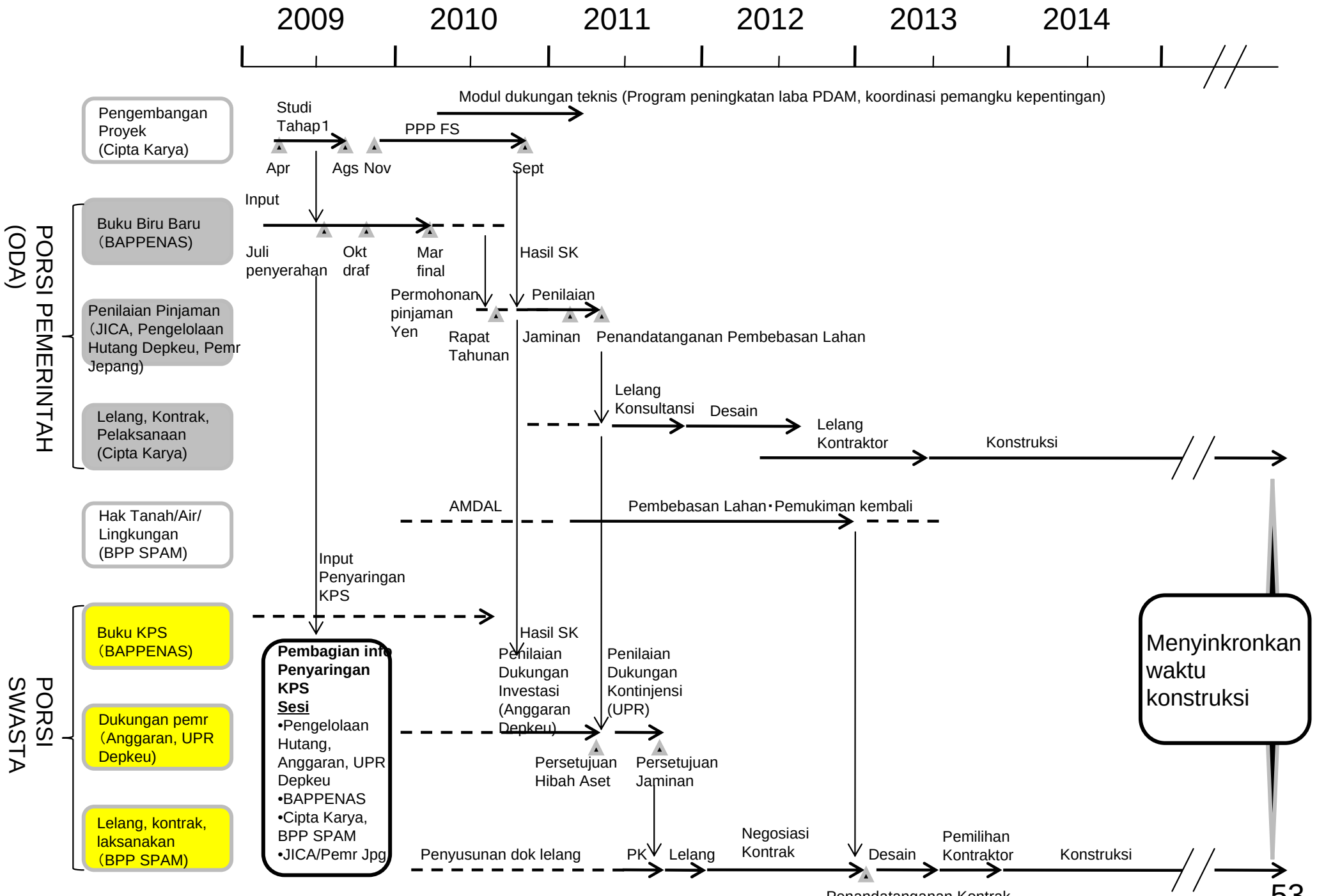


*termasuk persyaratan pinjaman *(on-lending)*

URAIAN MODUL LANGKAH SELANJUTNYA UNTUK PROYEK KPS AIR MINUM

	Uraian	Keluaran Utama
1 Peningkatan Laba PDAM	• Program peningkatan laba secara komprehensif termasuk 1) penurunan kebocoran, 2) penurunan biaya operasi, 3) pembangunan kapasitas manajemen	•PDAM menunjukkan jalur positif menuju keberlanjutan finansial •PDAM memenuhi ketentuan untuk *on-lending*
2 Koordinasi Pemangku Kepentingan	• Membantu dalam rapat berkala dengan pemangku kepentingan dengan menyediakan fakta dan analisis proyek. Tujuannya untuk memastikan seluruh pemangku kepentingan menyepakati skema proyek.	•Pemangku kepentingan pemerintah menandatangani MOU untuk skema proyek
3 SK KPS 1)Skema KPS 2)SK porsi ODA 3)Pra-SK porsi swasta	• **Skema KPS** Desain detail termasuk 1)porsi swasta/pemerintah, 2)jaminan dan dukungan langsung pemerintah, 3)Simulasi FIRR, IRR SPC, VfM proyek, 4) penjadwalan • **SK porsi ODA** Pengkajian aspek finansial, teknis dan lingkungan proyek untuk menilai apakah proyek tersebut memenuhi pedoman ODA. Selain itu, penyaluran dana ke PDAM harus dikaji bersama Depkeu. • **Pra-SK porsi swasta** Melakukan studi dan analisis dasar sebelum persiapan lelang termasuk 1)rencana metode lelang, 2)kualifikasi sektor swasta, 3)prinsip alokasi risiko, 4)persyaratan perjanjian kerjasama	•Seluruh informasi yang diperlukan untuk penilaian Pinjaman ODA dianalisis dan disediakan •Seluruh informasi yang diperlukan untuk penyusunan dokumen lelang dianalisis dan disediakan

JADWAL “PEMBAGIAN VERTIKAL” PROYEK AIR MINUM DENGAN SKEMA KPS



AP2-1 Executive Summary Charts (English Version)

Japan International Cooperation Agency

Republic of Indonesia

Preparatory Survey on Public Private Partnership (PPP) Infrastructure Development Projects

SUMMARY CHARTS

NIPPON KOEI
Challenging mind, Changing dynamics

PADECO

September, 2009

BACKGROUND OF JICA STUDY

•Public infrastructure development has been (and will continue to be) one of Indonesia's top priority themes.

•Given Indonesian government's financing capacity, PPP has attracted attention as an effective way to accelerate infrastructure development. If implemented successfully, PPP can provide additional financing capacity and deliver higher services at lower costs.

• However, despite government's efforts, real progress has been quite slow. Participation from private investor has been limited and there are many implementation bottlenecks along the way.

•It is essential to synthesize the current bottlenecks and develop perspectives on how to accelerate successful implementation. This perspective must be grounded on real cases of success.

•In this context, JICA study was launched to review current situation and start a process for "model case" development in two important sectors; toll road and water supply.

OBJECTIVE AND SCOPE OF JICA STUDY

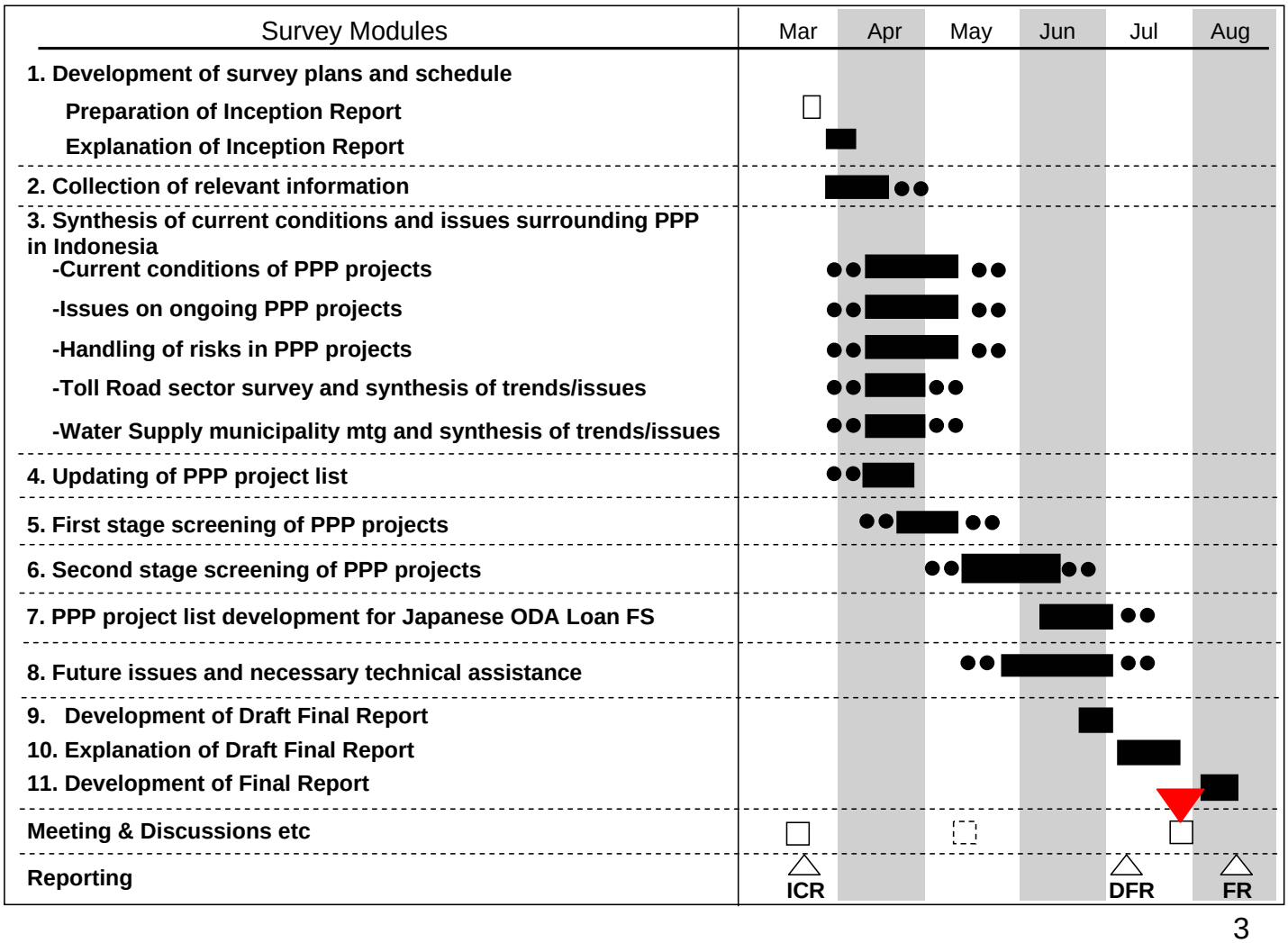
OBJECTIVE :

1. Review and synthesize current situation and issues surrounding PPP infrastructure development activities
2. Develop recommendations for required technical support to solve issues
3. Screen and list-up high priority PPP infrastructure development projects, which can be catalyzed by Japanese ODA loan

SCOPE:

•Geographic coverage	: All of Indonesia
•Target sectors	:Toll road, Water supply
•Beneficiary	:Users of infrastructure
•Responsible/Implementing Agency	:Ministry of Public Works -Directorate General of Highways -Directorate General of Human Settlements
•Related Agency	:Coordinating Ministry for Economic Affairs BAPPENAS Ministry of Finance KKPPI BPJT, BPP-SPAM

WORK PLAN



KEY MESSAGE

Current situation and issues on overall PPP

•Indonesia's investment environment for PPP infrastructure development project has been improving. There are constant initiatives to refine policies, build capacity and generate new PPP projects.
•However, speed of progress is still below expectations. This is because PPP implementation is complex and cuts across multiple inter-related layers of issues; 1) legal&policy issues, 2)system issues, 3)organization issues and 4)capacity issues.
•The study team synthesized 10 groupings of required actions to improve the overall PPP environment. While many of the these actions are not new, it is important to emphasize that initiatives should be synergized (packaged as much as possible) to ensure multi-layered issues are addressed simultaneously

PPP toll road

•Study team started from an initial list of 59 PPP project candidates and screened them to reach 2 selected candidates; 1) Pandaan-Malang, 2) Sukabumi-Ciranjang-Padalarang
•Going forward, the study team suggests 3 modules of parallel initiatives to maximize the chances of developing a truly successful PPP toll road model case; 1) land acquisition organization enhancement, 2)BPJT core process redesign, 3) PPP feasibility study for 1-2 projects(from the selected candidates)

PPP water supply

•Study team started from an initial list of 53 PPP project candidates and screened them to reach 3 selected candidates; 1) Umbulan Water Supply, 2) West Semarang Water Supply, 3) JABEKA Water Supply
•Going forward, the study team suggests 3 modules of parallel initiatives with "go or no-go" decision points along the way; 1) PDAM profit improvement program, 2) Stakeholder coordination initiative, 3) PPP feasibility study for 1project (from the selected candidates)

TABLE OF CONTENTS

PPP IS GOVERNED BY CROSS-SECTOR AND SECTOR LAWS AND REGULATIONS

	Cross Sector			Sector (example)	
	MOF	CMEA/ BAPPENAS	MOHA/BPN	Toll Road	Water Supply
Law	•No. 17/2003: No grant to private entity			•No. 38/2004: Road law (e.g. tariff adjustment)	•No.7/2004: Water supply
Gov't Regulation	•No.1/2008 Direct Investment and Loan to PPP private entity			•No.15/2006: PPP method & BPJT role •No.34/2006: Road structure	•No.16/2005: Local gov't role and tariff setting rules for water supply
Presidential Regulation	• No.67/2005: Basic PPP framework (PPP Law) • No.36/2005&65/2006: Land acquisition • No.42/2005: KKPPI establishment • No.29/2009: Govt Guarantee & subsidy to PDAM				
Ministerial Regulation	•No. 38/2006: Gov't support and guarantee for PPP risk	•No. KEP-01/2006: Process of KKPPI •No. PER-03/2006: Rules for PPP prioritization •No. PER-04/2006: Process for MOF No.38	•BPN No.3/2007 on land •MOHA No.22/2009: 3rd party relations of local gov't	•No.11/2006: Public and private rights, responsibility for toll roads •No.295/2005: Scope of BPJT •No.27/2005: Tender rules •No.12/2008: Land capping fund	

Consistency?

•Perpres67 is considered a contingent support option menu

PPP PROCESS ISSUES EXIST IN EACH STEP

	STEP1: Project Generation and Screening	STEP2: Pre-FS and Tender Preparation	STEP3: Tender and Procurement	STEP4: Contract Negotiation	STEP5: Contract Management
Key Issues:	•Lack capacity to prepare KKPPI document and coordinate with other ministries •Unclear prioritization criteria, with not much trace of Multi-Criteria Analysis	•Conventional pre-FS still prevails, despite clear difference with PPP requirements •Limited information* for tender including; 1)gov't guarantee and direct support 2)land situation 3)PPP modality	•Lack of market sounding (two way communication with potential investor) prior to tender •TOR not reflecting PPP specifics •Tender method (two envelope) does not match PPP characteristics	•CA lacks details, with many side letters •Unclear action, deadline and penalty requirements for both parties	•Lack of clear project monitoring system •CA does not include specific KPI for Project Management
	Adhoc screening	***Poor pre-FS, Insufficient Tender Prep***	***Not tailored to PPP***	***Not committed to responsibility***	***Far from PM best practice***

*information on situation, gov't plans, responsibility and schedule

PPP Process Issues exist in step 3– TOR (4)

PRINCIPLE DEVIATION of "PUBLIC" and "PRIVATE" ROLES ARE NOT CLARIFIED

Example Items	Description	Consequence
Land Acquisition	Land shall be delivered by Government within 24 months after effective date of CA (date of sign) with the 6 months time extension for the case of delay. However, no clear obligation and right of both parties are stated including penalty for non-fulfillment of conditions which shall be described a part and site packages of Right of Way.	Financial Closure will not be predictable and commencement of construction is also unforeseeably delayed..
Government Support	Sectional Split methodology for both land and construction is proposed by bidder. The length and amount of support is not known to Government until CA is signed.	Government may take time to synthesis cross sector Ministry to get support of MOF, causing delay.
Construction Portion	The portion of Sectional Split for Government is unknown for complexity of construction until CA was signed. Procurement for design and construction for Government portion need to take time and synthesis of construction schedule with TRC may be difficult.	Difficult portion (Government) for construction cause delay for completion and revenue generation for whole PPP Project.
Risk allocation	TRC agree to accept all risks and expenses as a result of or related to the Toll Road Concession. TRC shall be deemed to have all information which affect the concession, in particular Engineering Design, Construction, O & M and Funding. TRC shall accept total responsibility of all difficulties, schedule and costs. TRC shall hold the Government harmless of all claims from third parties.	TRC shall bear huge risk despite the description of responsibility each incident specified in clauses. Dispute between parties may be increased due to tight and many risk, pending spirit of "Cooperation" PPP.

(Source; PPP Study Team)

GOVERNMENT PREPARATION MUST INCLUDE "CREDIBLE ENOUGH" INFORMATION PACKAGE

Private investor's concern

Should I make the effort to bid for this PPP project?

- How attractive is the risk/return profile?
- Are there major project hurdles?

Key questions to be answered by tender document

Risk Profile:
- What are the principle commitment from gov't to provide guarantee against political risk, demand risk and performance risk?
- When will gov't provide official approval?

Return Profile:
- What are the principle commitment from gov't on direct support to investment cost?
- When will gov't provide official approval?
- What are assumptions behind pre-FS revenue forecast?

Land:
- What is the land acquisition requirement and schedule by gov't?
- What are the plans for resettlement?

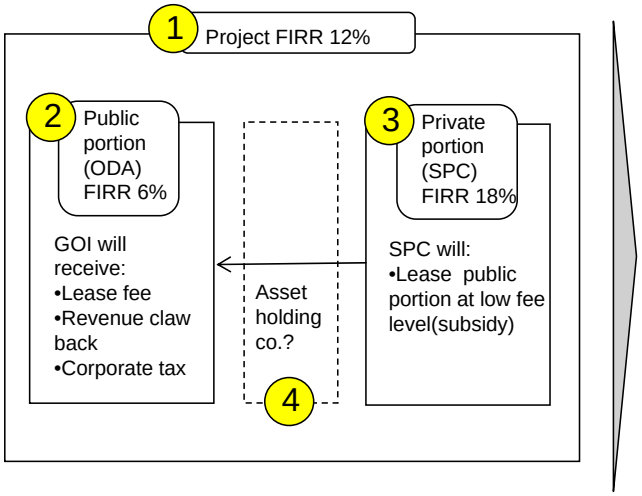
Environment:
- Are there any significant environment concerns?

Stakeholder management:
- Who are the major stakeholders and what is their position on support for this project?

Government **does not need to guarantee** accuracy of info but it **needs to be credible enough** for investors

PPP SCHEME TO MIX PUBLIC AND PRIVATE FUND REQUIRES POLICY CLARIFICATION

Example of PPP project scheme



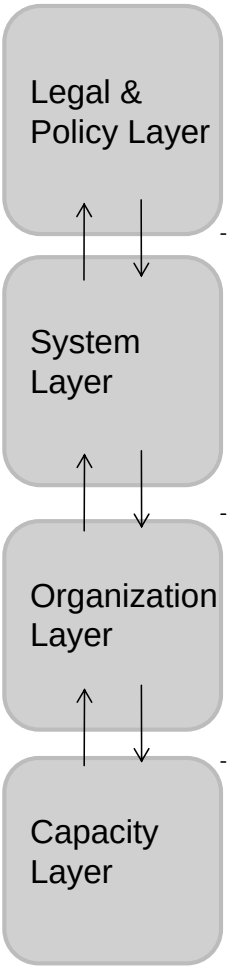
Policy clarification points

Requirement for gov't guarantee approval	•RMU reviews financial feasibility to approve gov't guarantee Q: Will RMU review ①or②or③?
Requirement for on-lending approval	•For water supply, ODA public portion could be in the form of "on-lending" to local gov't Q: Will approval require ② to be higher than on-lending interest rate?
Fund channeling mechanism	•Public portion asset will be leased to SPC Q: Who will be the asset owner? (Set up asset holding co. at ④?) How will asset lease fee be channeled back to GOI? (direct to MOF?, retained within asset co.?)

PPP IMPLEMENTATION CUTS ACROSS MULTIPLE INTER-RELATED LAYERS OF ISSUES

	Description	Issues
Legal & Policy Layer	• Defines governance and rules of PPP projects in Indonesia. There are cross-sector regulations, sector regulations and local regulations	• Important policies such as government guarantee, direct support and land acquisition may require refinements to support implementation
System Layer	• Guidelines and templates to support implementation based on regulations • Systems to record and share information	• Lacks sector-specific contents • No practical "check-list" readily accessible for practitioners
Organization Layer	• Organization that will be involved in PPP project implementation including contracting agency, regulator, evaluation committee, land procurement committee(PPT,TPT), etc.	• Contracting agency organization not designed to handle all PPP processes • Not many organization has consistent set of responsibility, authority and incentives
Capacity Layer	• Quality and quantity of human resources involved in PPP project implementation. Important to ensure right skill sets in the right position	• Not enough qualified staff in contracting agency • P3CU support not visible

10 GROUPINGS OF REQUIRED ACTIONS TO IMPROVE OVERALL PPP ENVIRONMENT



1.Accelerate refinements to PPP related regulations

-Perpres67/2005 revision including; 1)gov't responsibility to provide land, 2)clarification of gov't guarantee and direct support, including decision timeline

-Synchronize sector law/regulation with Perpres67

-Refinements to land procurement Perpres36/2005&65/2006 on nego&comp

2.Clarify policy for mix of private and public funds

3.Position "OGM" as official guideline

4.Develop sector-specific and PPP-tailored template

-Sector-specific MCA

-PPP-tailored:1) pre-FS, 2)tender TOR, 3)tender method, 4)CA template

5.Set up "pre-conditions" for tender. For example,

-Gov't pre-acquires a defined minimum percentage of land and prepares inventory info and schedule for remainder

-Principle approval for gov't guarantee and direct support, with timeline for official approval

6.Change PPT approach for land acquisition

-Full-time professionals in frontline, including 3rd party outsourcing

-Incentivized for timeliness and cost

-Direct door-to-door negotiation power

7.Launch advisory committee (with global standard staff) to support evaluation committee

8.Enhance P3CU, P3Node, empowered to review and coach on tender doc, CA

9.Take bold steps to significantly strengthen contracting agency capacity

-Inject legal, financial and business negotiation staff

-Leverage 3rd party experts and continuously operate OJT

10.Hold cross-ministerial/investor/financier/operator workshops to learn from real success and failure cases in Indonesia and overseas

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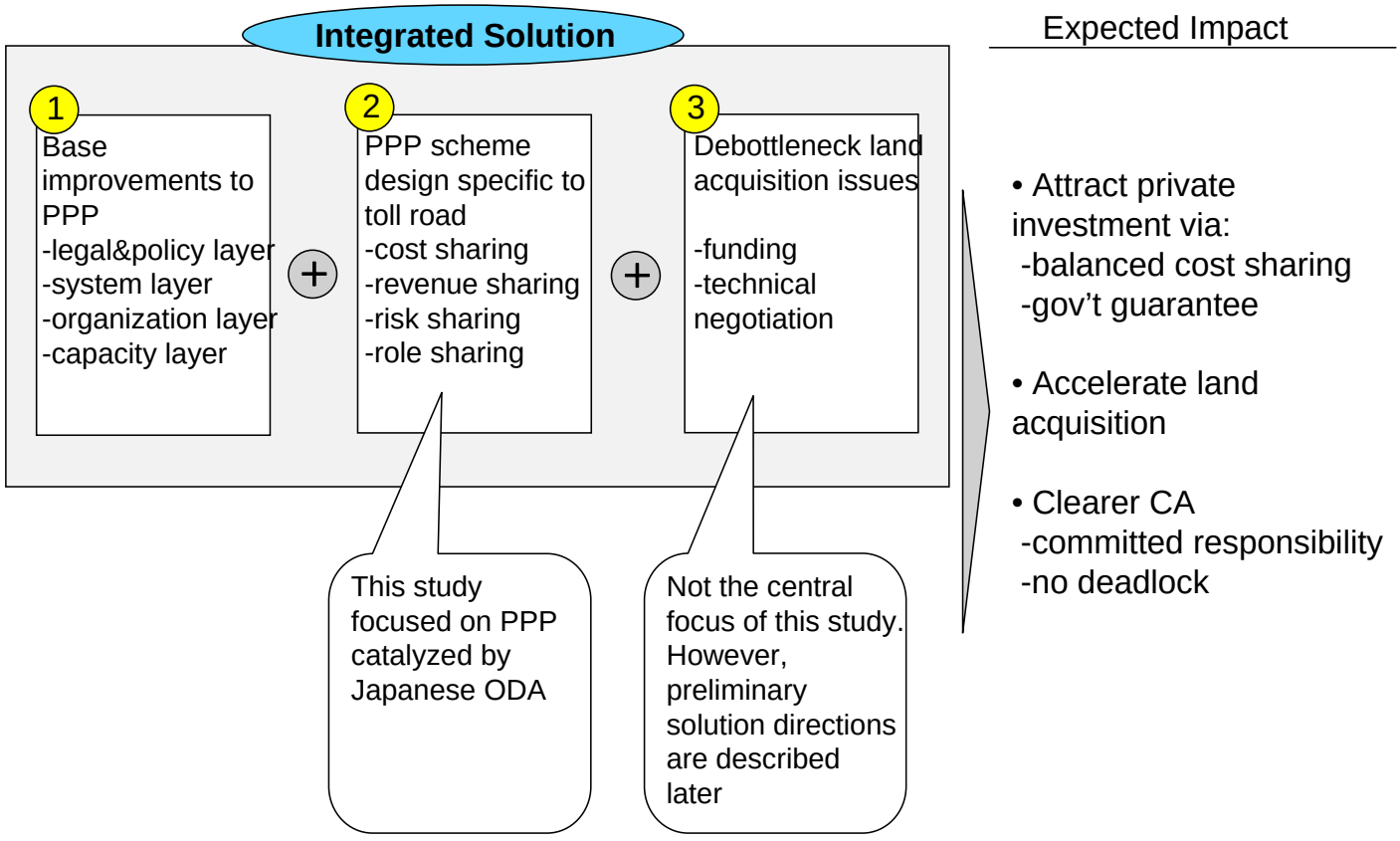
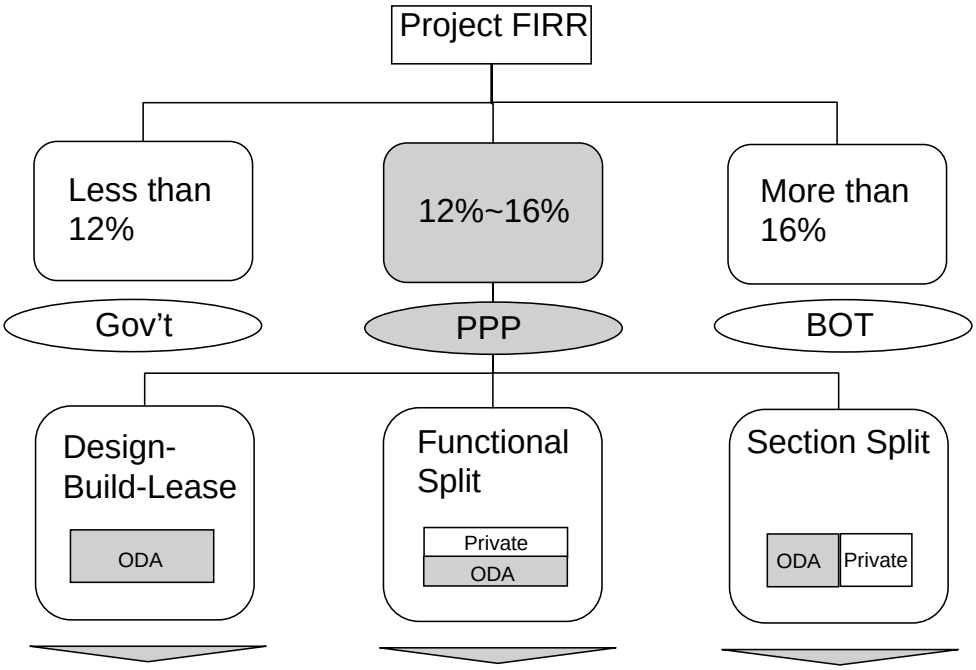
PROGRESS OF TOLL ROAD BOT/PPP IS SLOW DUE TO A NUMBER OF STRUCTURAL HURDLES

Situation	Reason
In general, limited number of bidders participate	•**High funding requirements, despite low potential FIRR:** Remaining sections do not have enough traffic volume and private has little appetite to fund both land and construction •**Unclear government support:** Government guarantee or cost sharing scheme not clear for bidders
Many projects not moving forward even if it reaches CA signing	•**Lead time of land acquisition negotiation:** TPT and PPT socialization / negotiation takes time, due to price hike •**Lack of land acquisition funds:** Funds from private not readily available. Some private concessionaires may have lost funding capability or motivation.
CA not terminated despite many years of limited activity	•**Non-compliance of both public and private:** Government has not fulfilled deadline to complete land acquisition negotiation on time. Private has not fulfilled funding requirements. Therefore, the case could be taken to court upon abrupt termination. Some private may prefer to "wait and see" and seek timing to sell or buy concession rights

SUCCESSFUL TOLL ROAD PPP REQUIRES AN INTEGRATED SOLUTION



PPP MODALITY, CATALYZED BY ODA

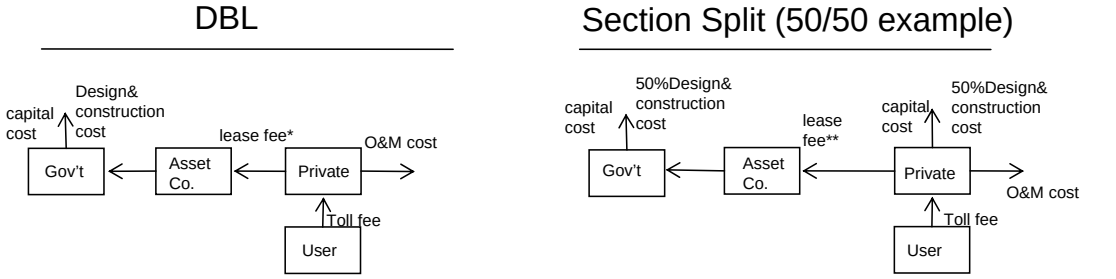


•Practical model. However, cannot over-rely on this due to limitations of gov't borrowing capacity

•Difficult to secure ODA standalone conditions

•Practical model. Schedule synchronization will need careful planning

COMPARISON OF "D-B-L" AND "SECTION SPLIT"

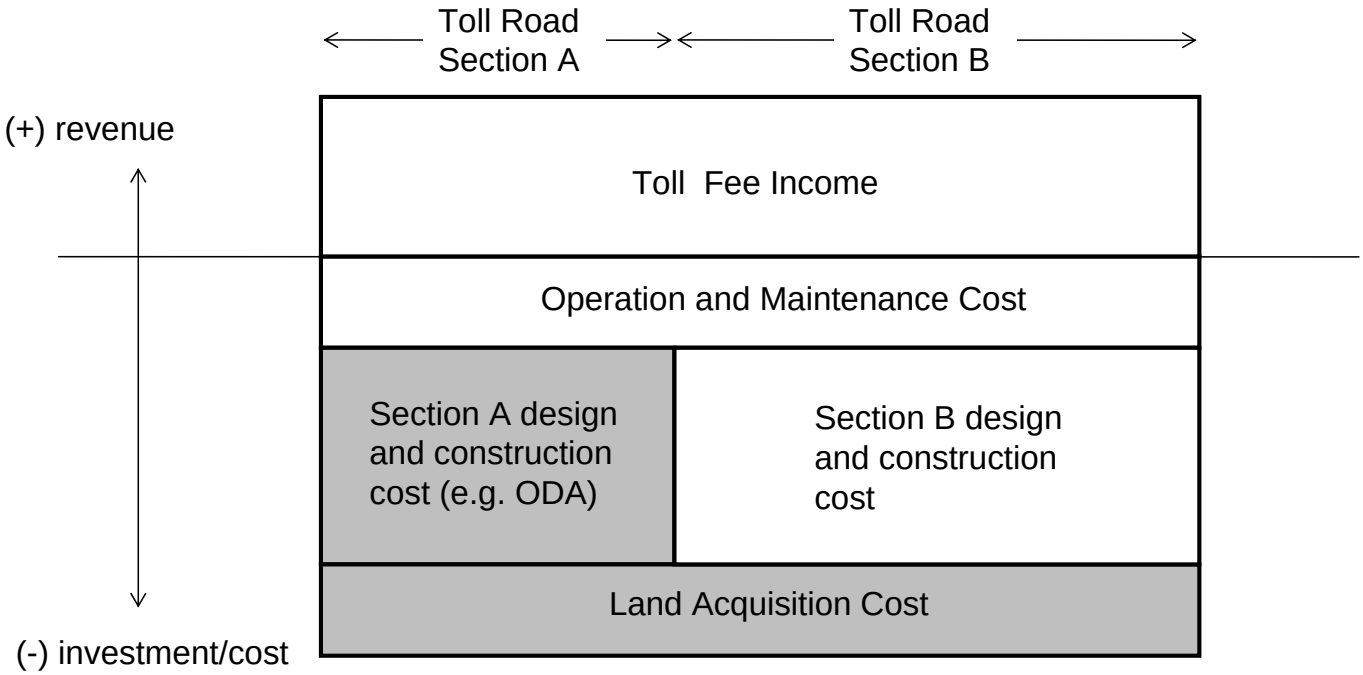


Funding:	100%gov't	50/50
DesignBuild:	100%gov't	50/50
O&M:	100%private	100%private
Merit:	•Overall low capital cost •Easier to attract private	•Additional financing capacity from private •Gov't carries less risk
Demerit:	•No additional financing capacity from private…speed of network building sacrificed •Gov't takes revenue risk	•Higher cost of capital •Need market cultivation to attract private

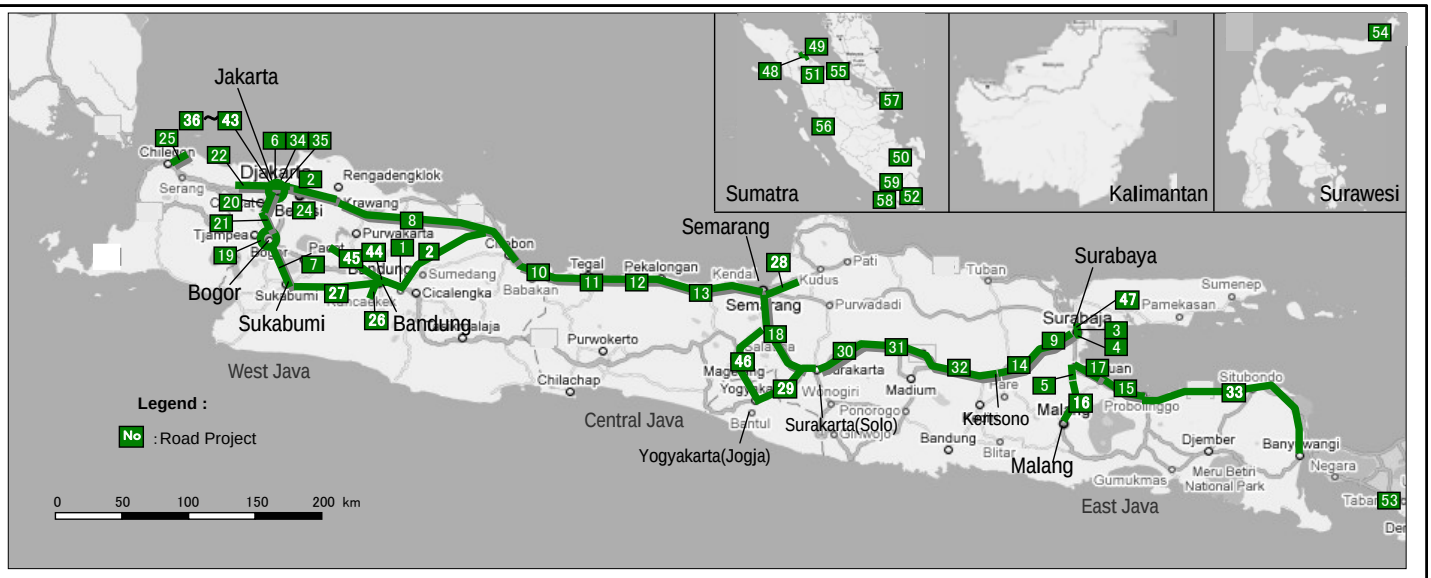
* toll- (O&Mcost+profit)
** %of construction cost. 0% could be decided if MOF agrees to 100%direct subsidy

TOLL ROAD "SECTION SPLIT" PPP SCHEME

Area of gov't support



TOLL ROAD PROJECT INITIAL LIST



Road Project	
No	Project
1	Ciranjang - Padalarang Road *1)
2	Bekasi - Cawang - Kampung Melayu *1)
3	Waru - Wonokromo-Tj Perak Road *1)
4	Waru - Tj Perak Stage 1 Road *1)
5	Gempol - Pandaan Road *1)
6	Jakarta Outer RR W1 *1)
7	Ciawi-Sukabumi Road *1)
8	Cikampek-Cirebon Road *1)
9	Surabaya-Mojokerto Road *1)
10	Kanci-Pejagan Road *1)
11	Pejagan-Pemalang Road *1)
12	Pemalang-Batang Road *1)
13	Batang-Semarang Road *1)
14	Kertosono-Mojokerto Road *1)
15	Pasuruan-Probolinggo Road *1)
16	Pandaan-Malang Road *1) *3)

No	Project	
17	Gempol-Pasuruan Road	*1)
18	Semarang-Solo Road	*1)
19	Bogor Ring Road	*1)
20	Depok-Antasari Road	*1)
21	Cinere-Jagorawi Road	*1)
22	Cikarang-Tanjung Priok Road	*1)
23	Cileunyi-Sumedang-Dawuan Road	*1) *3)
24	Makasar Seksi IV Road	*1)
25	Cilegon-Bojanegara Road	*1)
26	Pasir Koja-Soreang Road	*1) *3)
27	Sukabumi-Ciranjang Road	*1) *3)
28	Semarang-Demak Road	*1) *3)
29	Jogja-Solo Road	*1) *3)
30	Solo-Mantingan Road	*1)*2)
31	Mantingan-Ngawi Road	*1)*2)
32	Ngawi-Kertosono Road	*1)*2)
33	Probolinggo-Banyuwangi Road	*1) *3)

No	Project	
34	Jakarta Outer RR-2	*1)
35	Jakarta Outer RR W2 North	*1)
36	Kamal- Teluk Naga- Batu Ceper	*3)
37	Kemayoran- Kampung Melayu	*3)
38	Sunter- Rawa Buaya- Batu Ceper	*3)
39	Ulujami- Tanah Abang	*3)
40	Pasar Minggu- Casablanca	*3)
41	Sunter- Pulo Gebang- Tambelang	*3)
42	Duri Pulo- Kampung Melayu	*3)
43	Tanjung Priyok Access	*3)
44	Terusan Pasteur- Ujung Berung- Cileun	*3)
45	Ujung Berung- Gedebage- Majalaya	*3)
46	Yogyakarta- Bawen	*3)
47	Bandara Juanda- Tanjung Perak	*3)
48	Medan-Kuala Namu-Tebing Tinggi	*1)*2)*3)
49	Medan - Binjai	*1) *3)
50	Palembang - Indralaya	*1) *3)

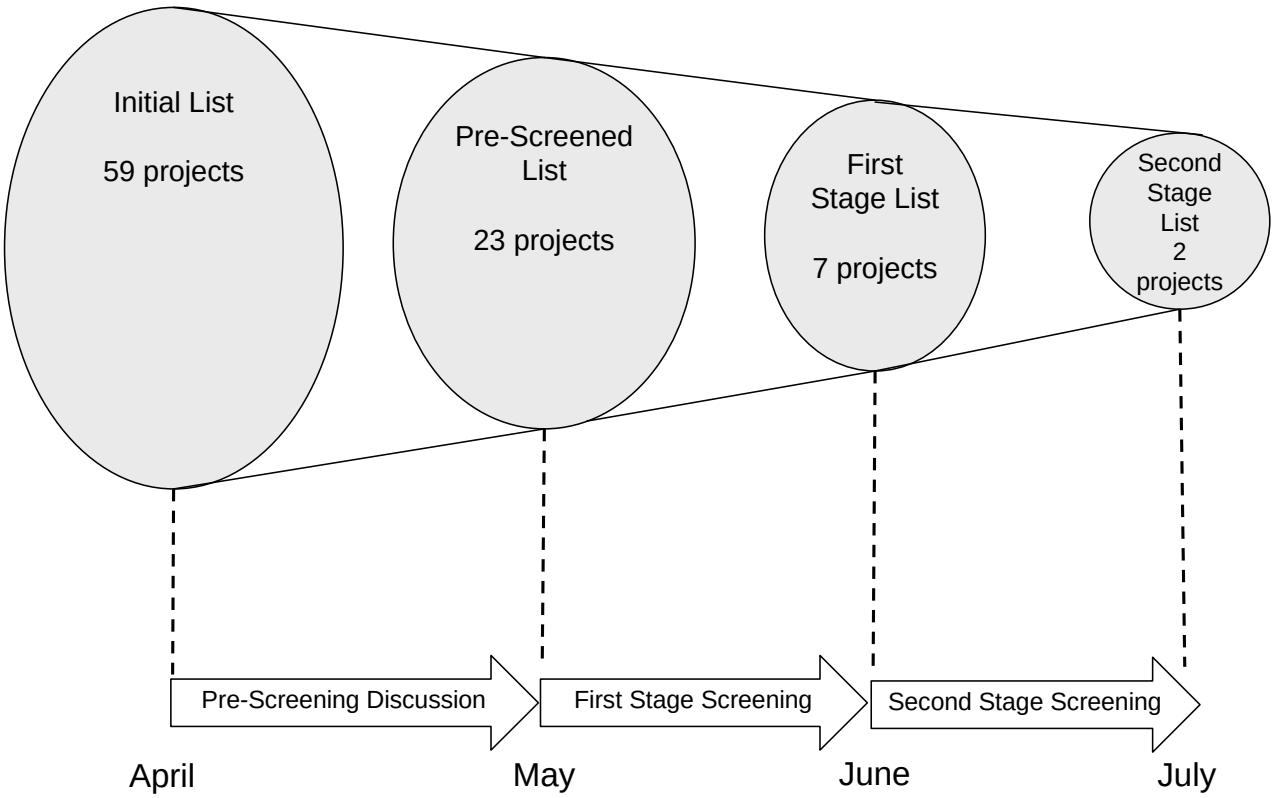
No	Project	
51	Pekanbaru- Kandis- Dumai	*3)
52	Tegginnere - Babatan	*3)
53	Serangang - Tj. Benoa	*3)
54	Menado Bitung	*3)
55	Kisaran-Tebing Tinggi	*3)
56	Bukit Tinggi- Padang Panjang- Lubuk Alung- Pada	*3)
57	Batu Ampar- Muka Kuning- Bandara Hang Nadim	*3)
58	Terbanggi Besar- Menggala- Pematang Pangganç	*3)
59	Bakaheuni- Terbanggi Besar	*3)

Source)
- *1) Infrastructure summit 2005
- *2) Infrastructure Conference 2006
- *3) other latest sources (2009)

Ref : Table : Prospective PPP project list (Road)
No.s in the table are correspondent to no.s in the figure

PPP Project (Road) Location Map

SCREENING OVERVIEW



RESULTS OF FIRST STAGE SCREENING (FROM 23 TO 7)

No.	Name of the Project	Screen 1(FIRR)		Screen 2	Screen 3
		FS	Revised FS		
1	**Bandara Juanda - Tanjung Perak**	13.43 %	15.70 %	★★★★★/★★★★★/★★★★★	★☆
2	**Cileunyi - Sumedang- Dawuan**	15.64 %	14.12 %	★★★★★/★★★★★/★★★★	★
3	**Medan - Kualanamu - Tebing Tinggi**	–	11.26 %	★★★★★/★★★★★/★★★★★	
4	**Sukabumi - Ciranjang- Padalarang**	11.28 %	13.08 %	★★★★★/★★★★★/★★	★
5	**Batu Ampar - Mk Kuning - Bandara Hang Nadim**	15.03 %	7.78 %	★★★★★/★★★★★/	★★
6	**Kamal - Teluk Naga - Batu Ceper**	12.89 %	–	★★★★★/★★★★★/★★★	☆
7	**Pandaan - Malang**	15.20 %	16.09 %	★★★★★/★★★★★/★	
8	**Pekanbaru - Kandis - Dumai**	15.48 %	9.01 %	★★★★★/★★★★	★★
9	**Jogja - Solo**	–	16.73 %	★★★★★/★★★★★/	
10	**Probolinggo - Banyuwangi**	12.39 %	10.63 %	★★★★★/★★★★★/	
11	**Bakauheni - Terbanggi Besar**	–	–	★★★★★/★★★★★/	
12	**Palembang - Indralaya**	16.70 %	15.57 %	★★★★★/★★★★	
13	**Semarang - Demak**	–	10.99 %	★★★★★/★★★★	
14	**Manado - Bitung**	–	9.66 %	★★★★★/★★★	★
15	**Bakauheni - Terbanggi Besar(Tegineneg-Babatan)**	13.32 %	15.48 %	★★★★★/★★★	
16	**Jogja - Bawen**	–	15.13 %	★★★★★/★★★	
17	**Terbanggi Besar - Menggala - Pmtg Panggang**	5.91 %	–	★★★★★/★★	
18	**Kisaran - Tebing Tinggi**	5.08 %	–	★★★★★/★★	
19	**Bkt Tinggi - Pdg Panjang - Lbk Alung - Padang**	–	–	★★★★★/	
	Medan - Binjai	14.95 %	15.98 %	**(15.80km)**	
	Cilegon - Bojonegara	–	12.05 %	**(15.69km)**	
	Pasirkoja - Soreang	15.66 %	11.88 %	**(9.8km)**	
	Serangan - Tanjung Benoa	–	6.93 %	**(9.0km)**	

Eliminated from first stage screening due to lack of sufficient length for section split scheme

RESULT OF SECOND STAGE SCREENING (FROM 8 TO 2 CANDIDATES)

Category	Evaluation contents	Weight	Pandaan -Malang	Sukabumi - Padalarang	Bandara Juanda- Tj. Perak	Pekambaru- Dumai	Batu Ampar- Muka Kuning- Hang Nadim	Cileunyi- Dawuan	Jogja- Solo***
Necessity (45%)	EIRR	10.0%	2	3	2	1	2	2	2
	The importance level of the project by regional government	8.0%	2	2	2	3	2	3	2
	The importance with in sectoral plan	10.0%	2	2	2	3	1	2	2
	Contribution to agriculture and industries (subdiv. to 5 items)	10.0%	1.4*	2.0	2.4	2.2	2.2	1.8	1.4
	Technological Development	7.0%	1	3	3	1	2	3	2
Profitability (25%)	FIRR(Project FIRR)	12.0%	3	3	2	1	1	2	3
	Past trends of Growth ratio (subdiv. to 2 items)	8.0%	2.0*	1.5	2.0	2.0	2.5	1.5	2.5
	Potential risks and uncertainty (connectivity, bottleneck)	5.0%	3	1	2	3	3	3	3
Implementability (30%)	Uncertainty of constructionability through existing design	3.0%	2	2	2	2	3	1	2
	Fiscal capacity by local government	4.0%	2	1	2	3	2	1	2
	Trace approval (SP2LP)	4.0%	3	2	2	2	2	3	2
	Difficulty of land acquisition	4.0%	3	2	1	2	3	3	1
	Extent of natural impacts	4.0%	3	3	3	2	3	3	2
	Extents of social impacts	5.0%	3	1	2	3	3	1	1
	Appropriateness of private participation for PPP scheme (section split)	6.0%	3	3	2	1	1	3	3
Weighted Score			**2.27**	**2.21**	**2.11****	**1.99**	**1.99**	**2.20****	**2.12**

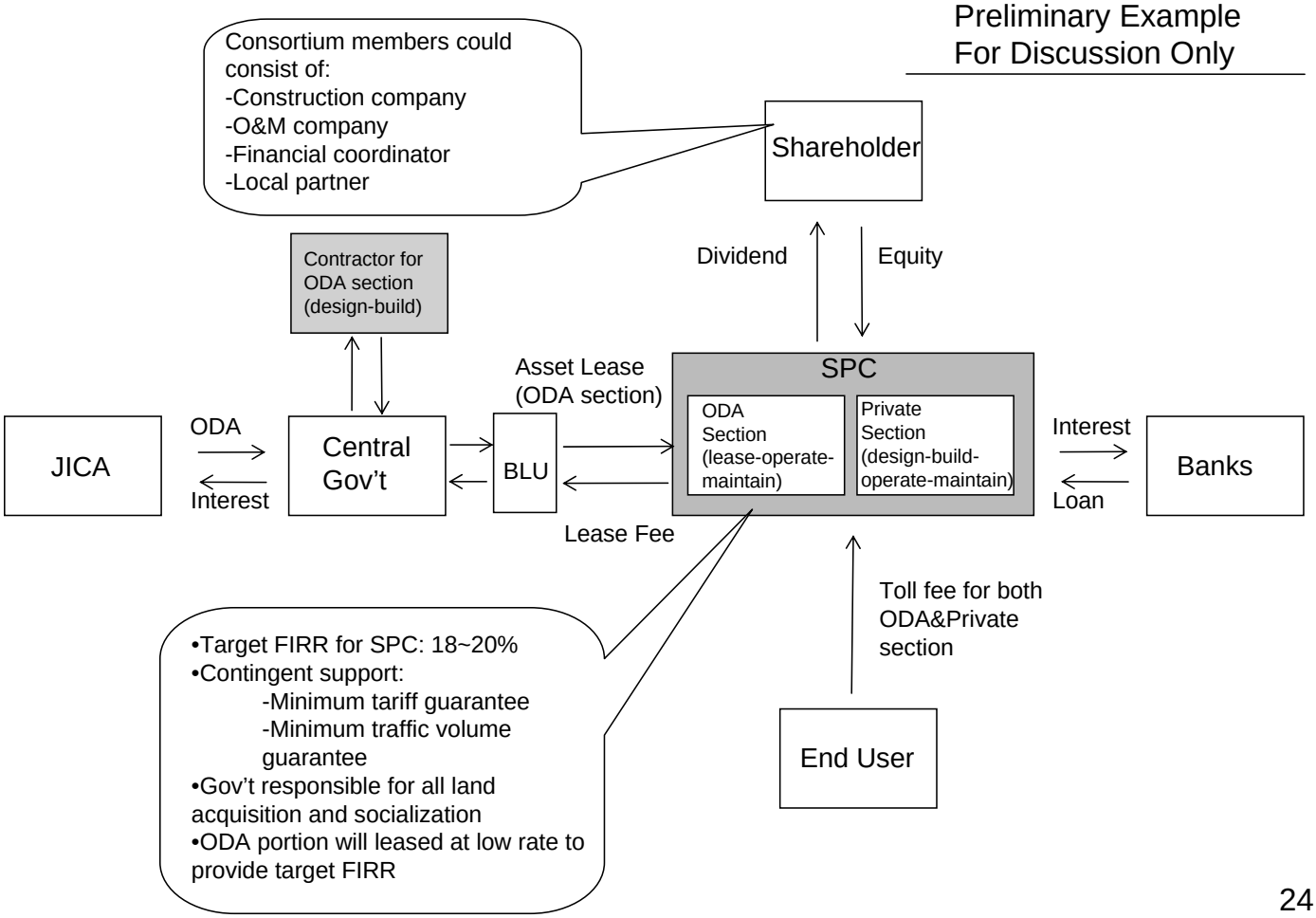
*note : the figures shows the average of subdivided items' total.
**note: Cileunyi- Dawuan & Bandara Juanda –Tg.Perak are withdrawn because of the other donor's support and tendering policy by Bina Marga.
***note: Jogja-Solo is supplementarily added after elimination of the above two toll roads.

PROFILE OF PPP TOLL ROAD SELECTED CANDIDATES

	Length Project Cost	Location & Role of Project	Project Characteristics
Pandaan-Malang	**37km 3,478 bil Rp**	1) A part of section connects between Surabaya and Malang 2) Distribution and tourist route connects Surabaya with Malang and south coast region.	1) Passes through hill/flat area, and affected houses are few. 2) Technical difficulty is low.
Sukabumi-Ciranjang-Padalarang	**64km 5,785 bil Rp**	1) A part of section connects between Jakarta and Bandung via Sukabumi 2) Distribution route to Jakarta 3) Easing traffic jam along the route 4) Alternative route between Jakarta and Bandung	1) Passes through paddy field/hill area, and affected houses are a lot. 2) Reviewing the vertical alignment is necessary. 3) Long span bridge and tunnel will be planned
Jogja - Solo	**41km 2,928 bil Rp**	1) This toll road begin at Solo with connecting Trans Jawa Toll Road and connects to Yogyakarta. 2) Contribute to the tourism of Yogyakarta 3) Contribute to commuters traffic between Solo-Yogyakarta	1) Passes on the most famous granary and this toll road has difficulty to build consensus with agricultural department. 2) Required arrangement is already done to avoid social impact to world heritage (e.g. Prambanan Temple Compounds)

EXAMPLE OF FINANCIAL TRANSACTION DESIGN（TOLL ROAD)

Preliminary Example
For Discussion Only



TOLL ROAD PPP CANDIDATE FINANCIAL SIMULATION

Sukabumi-Ciranjang-Padalarang
Investment cost:
Rp 5,785 billion
Project FIRR 12%

		Public Private Ratio					
		25 : 75		50 : 50		75 : 25	
		SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR
Lease Fee	4%	12.20%	10.40%	13.70%	9.40%	16.60%	8.90%
	2%	12.60%	9.50%	14.80%	8.00%	19.30%	7.10%
	1%	12.80%	9.00%	15.40%	7.20%	20.60%	6.10%
	0%	13.00%	8.50%	15.90%	6.40%	22.00%	5.10%

Pandaan-Malang
Investment cost:
Rp 3,478 billion
Project FIRR 13.8%

		Public Private Ratio					
		25 : 75		50 : 50		75 : 25	
		SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR
Lease Fee	4%	15.80%	9.90%	18.30%	9.40%	23.80%	9.10%
	2%	16.20%	9.20%	19.50%	8.20%	26.70%	7.60%
	1%	16.40%	8.80%	20.00%	7.60%	28.20%	6.80%
	0%	16.60%	8.50%	20.60%	6.90%	29.70%	5.90%

Jogja-Solo
Investment cost:
Rp 2,928 billion
Project FIRR 12.7%

		Public Private Ratio					
		25 : 75		50 : 50		75 : 25	
		SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR
Lease Fee	4%	14.10%	9.90%	15.80%	9.30%	19.20%	8.90%
	2%	14.40%	9.30%	16.80%	8.30%	21.50%	7.60%
	1%	14.60%	8.90%	17.20%	7.70%	22.80%	6.90%
	0%	14.80%	8.60%	17.70%	7.20%	24.10%	6.20%

TOLL ROAD PPP CANDIDATE FINANCIAL SUMMARY

			TJ-4-4	JB-4	TJ-18-3	TS-8	S-4	Batam-1
			Cileunyi-Dawuan	*Sukabumi-Padalarang*	*Pandaan-Malang*	*Pekanbaru-Dumai*	*Surabaya (SERR)*	*Batam*
1	Terrain		Mountanious	Hilly Mountain	Hilly	Hilly	Urban	Flat
2	Length	km	58.5	61.0	36.6	135.0	23.7	28.5
3	Land Acquisiton Cost	Billion Rp.	504.8	487.9	532.2	474.6	867.8	0.0
4	Construction Cost	Billion Rp	2925	2745	1464	5400	2370	855
		Billion Rp/km	50	45	40	40	100	30
5	Investment Cost	Billion Rp	6130	5785	3478	10529	5495	1992
6	Annual OM cost	Billion Rp/km	1.5	1.5	1.5	1.0	1.5	1.0
7	Infrastructure lease fee	% of const. cost gov't portion	1.00%	1.00%	1.00%	2.85%	2.30%	2.97%
8	Toll fee Type I	Rp/km	650	650	650	900	1,100	650
9	FIRR	Project	11.7%	12.0%	13.8%	9.3%	10.5%	9.2%
		SPC	18.0%	18.0%	18.0%	18.0%	18.0%	18.0%
		GOI	6.1%	6.5%	8.1%	6.5%	6.0%	6.0%
10	PPP Portion	SPC	31.5%	34.5%	62%	5%	28%	7%
		GOI	68.5%	65.5%	38%	95%	72%	93%
11	Scheme Type		Section Split	Section Split	Section Split	DBL	Section Split	DBL

LAND ACQUISITION ISSUES AND SOLUTION DIRECTION (FOR DISCUSSION)

	Freeze Transaction	Secure Funds	Socialization and Negotiation	Court Settlement
Description:	•Issue SP2LP to freeze transaction after ROW is fixed	•Private concessionaire expected to prepare fund •Land capping fund*/revolving fund to support transaction	•TPT set up for budget management PPT(committee) conducts nego with land owner • Independent appraisal for market price and comp price	•Once either 75% of land cleared or 75% of land owner agree to price within one construction section, court settlement within that section is possible after 120days of negotiation
Issue:	•Delayed timing of SP2LP issuance, in consideration of duration	•Some private party unwilling/or unable to prepare funds (e.g. cannot secure bank guarantee for BLU)	•Land ownership sometimes not registered •PPT is part-time committee without strong incentive to complete negotiation	•Only 3 cases settled in court because: 1)socialization section is too big to reach 75%, 2)difficult to convince local officials
Solution direction:	•Allow longer SP2LP duration given project lead time	•Government to be responsible to provide land (revision of PR67)	•Revise PR36&65 to change PPT approach •Set up dedicated org with professional staff. Provide incentives for timely completion •Allow outsourcing to private contractors	•Ensure socialization is done in smaller sections and focus efforts to reach 75% or more

*100% price=(NJOP + Market Price)/2

DEDICATED ORGANIZATION FOR LAND ACQUISITION (JAPAN TOLL ROAD EXAMPLE)

	South Japan section A	South Japan section B
Section length:	14.6 km	21.7 km
Target completion:	2013	2015
# of land owners:	650	800

# of staff in dedicated land acquisition organization

Direct staff:	6	18
Contract staff:	26	25
Total:	32	43

•Leader has more than 10 years of land acquisition experience
•Sub-leaders all have 1-10 years of land acquisition experience
•Technical civil engineering staff, financial compensation experts included

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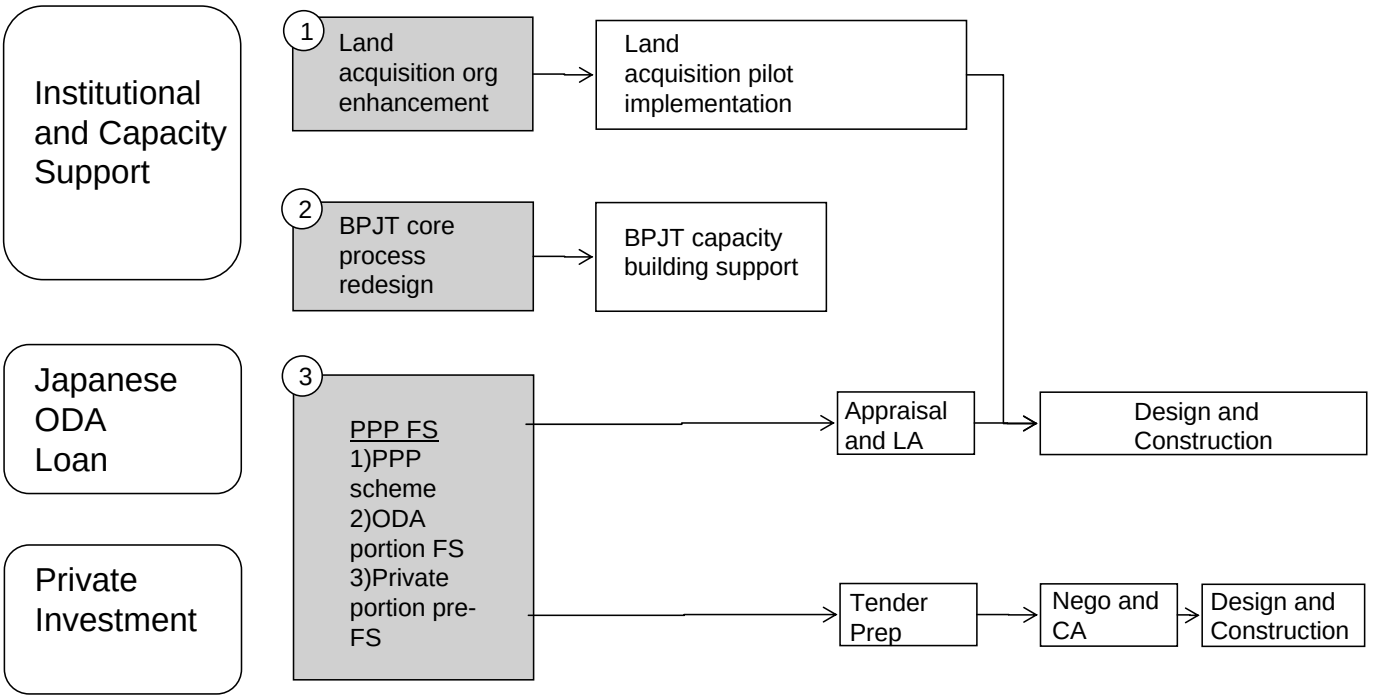
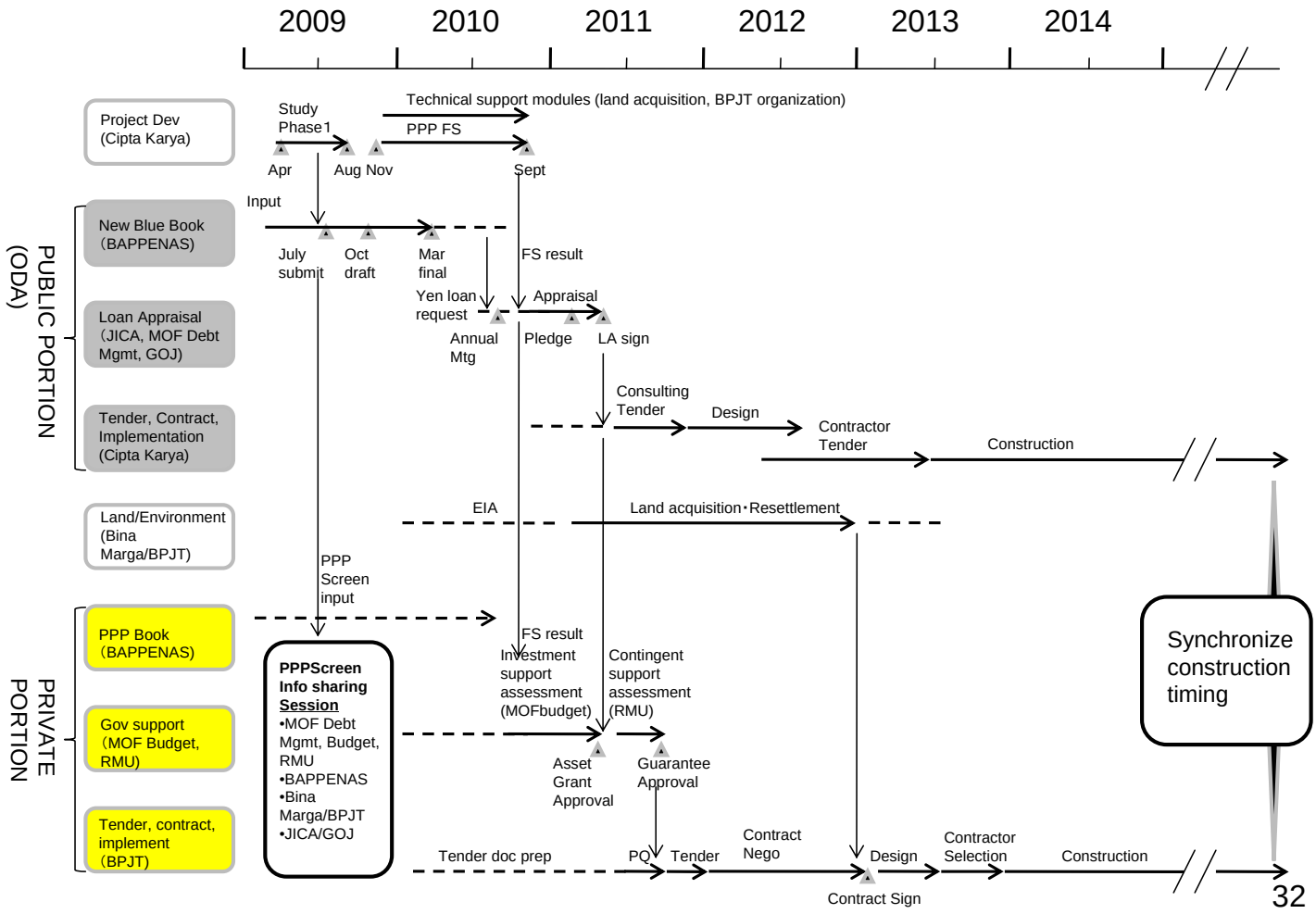
NEXT STEP ROADMAP FOR PPP TOLL ROAD (FOR DISCUSSION)



DESCRIPTION OF NEXT STEP MODULES FOR TOLL ROAD

	Description	Key Output
1 Land acquisition org enhancement	• Benchmark overseas best practice for land acquisition and enhance existing approach. Recommend changes to TPT/PPT including resonsibility and incentives	•Create a small unit pilot org for land acquisition along project ROW
2 BPJT core process redesign	• Core process re-design of BPJT organization along PPP process. Clarify responsibility, authority, skills and evaluation requirements for each process	•Strengthened BPJT org to carry out PPP process with high quality
3 PPP FS 1)PPP scheme 2)ODA portion FS 3)Private portion pre-FS	• **PPP scheme** Detail design including 1)private/public portion, 2)gov't guarantee and direct support, 3)Project FIRR, SPC IRR, VfM simulation , 4) scheduling • **ODA portion FS** Review of financial, technical and environmental aspects of project to assess whether the project fulfills ODA guidelines • **Private portion pre-FS** Conduct basic study and analysis prior to tender prep including 1)tender method design, 2)private party qualification, 3)risk allocation principles, 4)CA requirements	•Information required for ODA Loan appraisal is all analyzed and made available •Information required for tender document preparation is all analyzed and made available

TOLL ROAD “VERTICAL SPLIT” PPP SCHEDULE



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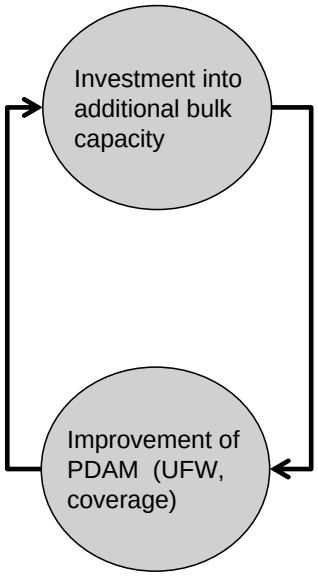
WATER SUPPLY SUFFERS FROM MANAGERIAL AND STRUCTURAL ISSUES

Situation	Reason
Many PDAMs have negative profit. This results in lack of funds to increase house connection and rehabilitate distribution. **Implication:** Bulk capacity investment alone will not solve the problem	• **High UFW (30~60%):** Both physical and commercial loss pressures financial profitability • **Tariff below cost：** Inflationary tariff adjustments are not automatic and tariff are kept low. Some municipalities still insist on local parliament approval, despite non-regulatory requirement. • **Issues of PDAM management**：Many PDAMs may not have sufficient management skills • **Lack of funding support**： MOF has rightfully stopped funding to PDAM with arrears. Such PDAM must submit a restructuring plan, which requires central approval. Local gov't also lacks capacity to provide funding support. Even PAM Jaya of DKI Jakarta carries heavy arrears
Project profit difficult to justify for small municipal size due to lack of scale economy. On the other hand, cross-PDAM projects require stakeholder coordination, which takes time	• **Central and Provincial gov't has limited grip on PDAM**: Municipal gov't (Kota and Kabupaten) has strong authority, which sometimes make cross-PDAM coordination difficult • **PDAM has different tariff levels：** Cross PDAM projects are difficult to arrange because it is difficult to set appropriate bulk tariff levels

WATER SUPPLY NEEDS INTEGRATED SOLUTIONS TO ADDRESS BOTH UPSTREAM AND DOWNSTREAM SIMULTANEOUSLY

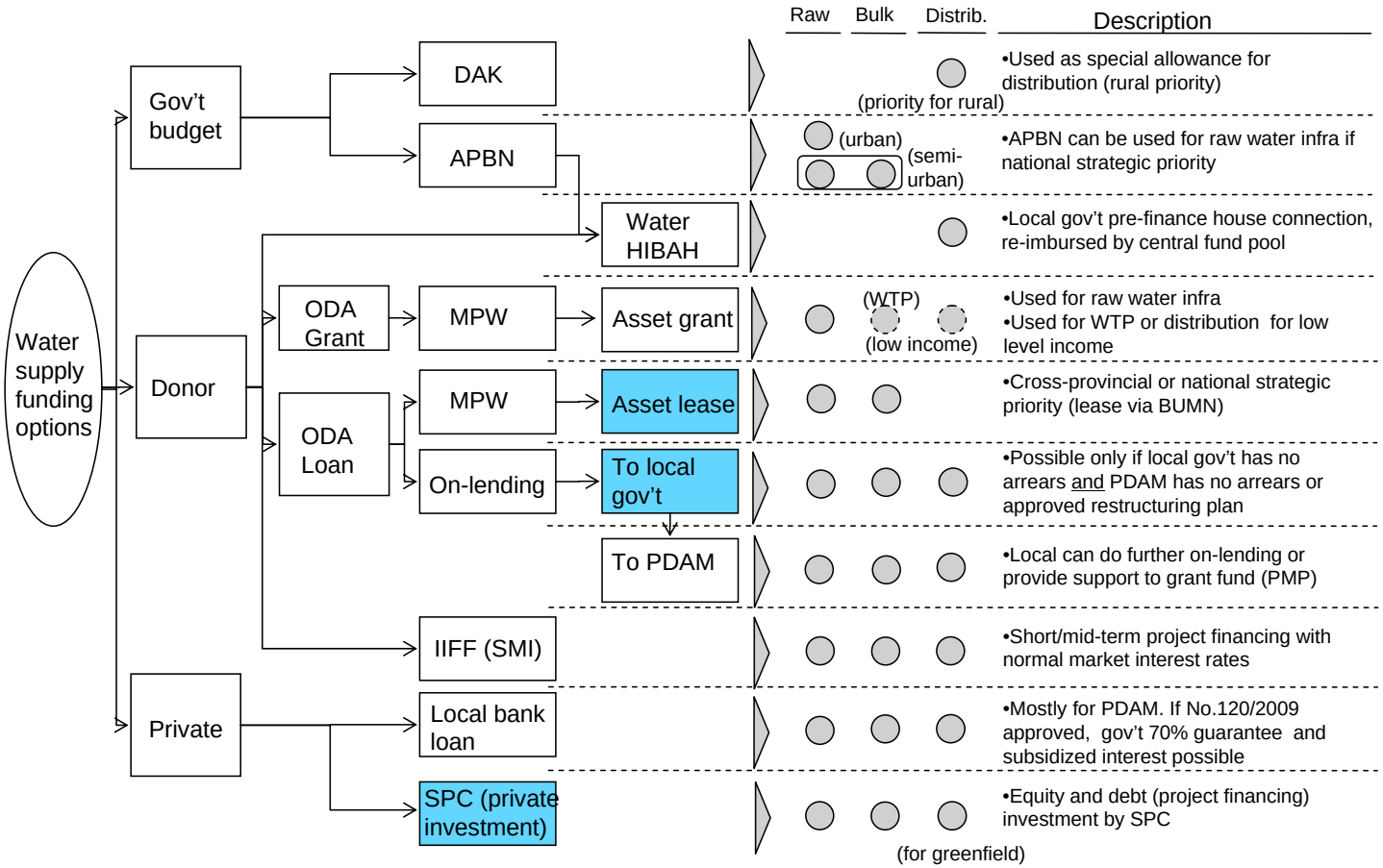


Support Needs

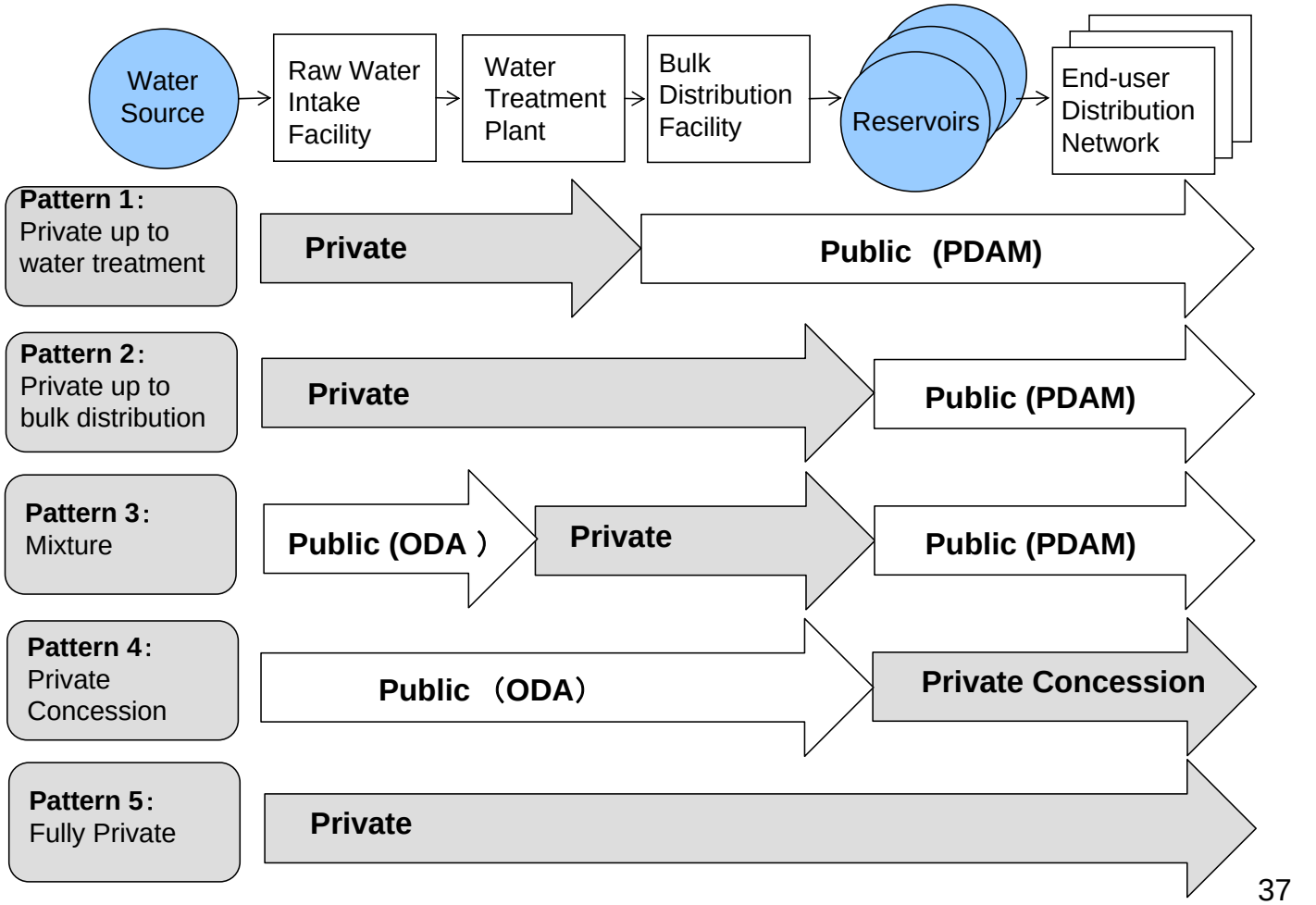
•Stakeholder coordination（win-win design, facilitation）
•Project funding for large projects (mix of private and ODA)

•PDAM management training
•Technical support for UFW enhancement
•Funding support for distribution rehabilitation and house connection increase

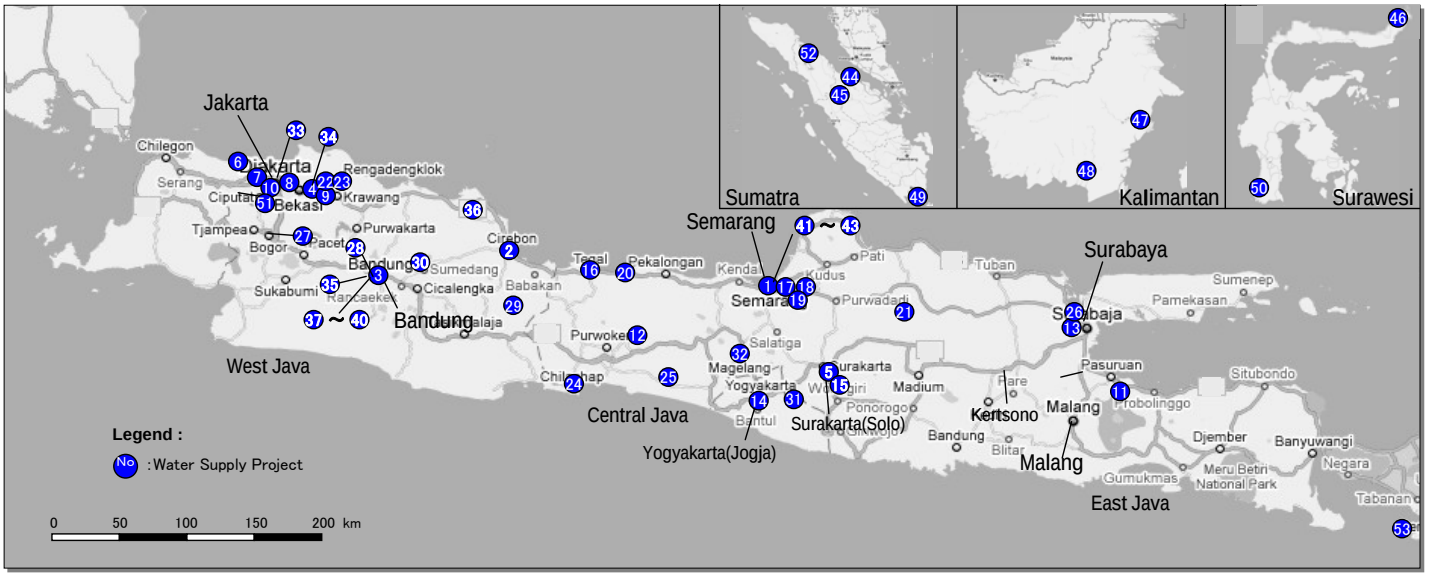
FUND CHANNELING OPTIONS FOR WATER SUPPLY MUST BE CLARIFIED



EXAMPLE OF PPP SCHEME: WATER SUPPLY PATTERNS



WATER SUPPLY PROJECT INITIAL LIST



Water Supply Project

No	Project	
1	Uprating WTP Kali Garang Semarang	*1)
2	Cirebon Bulk & Water Supply	*1) *3)*4)
3	Jatinangor Water Supply	*1)
4	Cikarang Water Supply	*1)
5	Pondok Gede Water Supply	*1) *3)*4)
6	Sepatan Water Supply	*1)
7	Ciparens Tangerang Water Supply	*1)*2)
8	Kecamatan Benda & Cengkareng	*1)
9	Cileduk Water Supply	*1)
10	Tanjung Pinang Water Supply	*1)
11	Umbulan Water Supply	*1)
12	Karang Pilang IV Bulk Treated W	*1)
13	Menganti Water Supply	*1)
14	Greater Yogyakarta & Magelang	*1)

No	Project	
15	Surakarta-Sukoharjo Sukoharjo	*1) *4)
16	Tegal Water Supply Water	*1)
17	Regency&City of Semarang	*1)
18	East Semarang New Water Supply	*1)
19	Semarang Raw Water Supply	*1)
20	Pemalang Water Supply	*3)
21	Jambi Water Supply	*3)
22	Munici. Bekasi Water Supply	*3)
23	Regency Bekasi Water Supply	*3)
24	Cilacap Water Supply	*3)
25	Kebumen Water Supply	*3)
26	Gresik Water Supply	*3)
27	Bogor Water Supply	*3)
28	Bandung Water Supply	*2) *4)
29	Subang Water Supply	*3)

No	Project	
30	Sumedang Water Supply	*3)*4)
31	Kanan Water Supply	*2)
32	Magelang-Kartamantul WS	*3)
33	DKI Jakarta- Bekasi- Karawang	*4)
34	West Cikarang & Cibitung Bekasi Rege	*4)
35	Bandung Regency	*3)*4)
36	Indramayu Regency	*4)
37	West Bandung Alt. I- Water Conveyanc	*4)
38	West Bandung Alt. II- Water Conveyan	*4)
39	East Bandung Alt. I- Water Conveyanc	*4)
40	East Bandung Alt. II- Water Conveyanc	*4)
41	Semarang Alt. I- Water Conveyanc	*4)
42	Semarang Alt. II- Water Conveyanc	*4)
43	Semarang Alt. III- Water Conveyan	*4)
44	Dumai Water Supply	*1)*2)

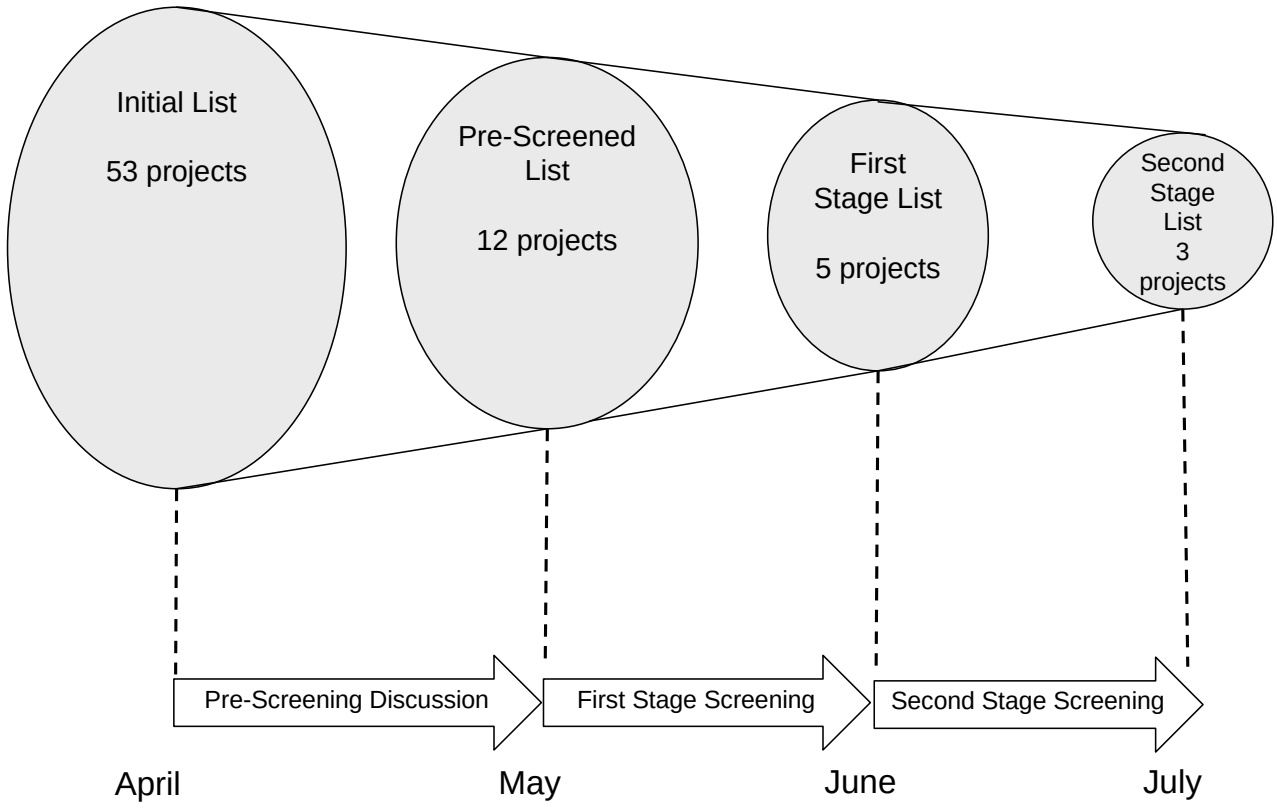
No	Project	
45	Duri Water Supply	*1)
46	Manado Bulk Treated Water Supply	*1)
47	Samarinda Bulk Treated Water Supply	*1) *3)
48	Banjarmasin Bulk Treated Water Supply	
49	City of Bandar Lampung	*3)*4)
50	Regency of Maros	*3)*4)
51	DAM Karian(Tangerang)	*3)
52	Medan Municiparity	*4)
53	Klung kung Regency	*4)

Source) *1) Infrastructure summit 2005
*2) Infrastructure Conference 2006
*3) BPP-SPAM Leaflet 2008
*4) other latest sources (2009)

No.s in the table are correspondent to no.s in the figure

PPP Project (Water Supply) Location Map

SCREENING OVERVIEW



PRE-SCREENING RESULTS (I)

No	Selected project	Project name	Reason of Rejection						
			Already started	Funded by other than PPP	Absorbed into other projects	Cancelled by local government	Problem in water resources	Small capacity (>100 l/s)	Legal problem
1		Uprating WTP Kali Garang Semarang			X				
2		Cirebon Bulk & Water Supply			X				
3		Jatinangor Water Supply				X			
4	X	Cikarang Water Supply							
5	X	Pondok Gede Water Supply							
6		Sepatan Water Supply	X						
7	X	Ciparens Tangerang Water Supply							
8		Kecamatan Benda & Cengkareng	X						
9		Cileduk Water Supply	X						
10		Tanjung Pinang Water Supply					X		
11	X	Umbulan Water Supply							
12		Karang Pilang IV Bulk Treated W		X					
13		Menganti Water Supply				X			
14		Greater Yogyakarta & Magelang							X
15		Surakarta-Sukoharjo Sukoharjo						X	
16		Tegal Water Supply Water					X		
17		Regency&City of Semarang						X	
18		East Semarang New Water Supply						X	
19	X	Semarang Raw Water Supply							
20		Pemalang Water Supply				X			
21		Jambi Water Supply	X						
22		Munici. Bekasi Water Supply				X			
23		Regency Bekasi Water Supply				X			
24		Cilacap Water Supply					X		
25		Kebumen Water Supply						X	
26	X	Gresik Water Supply							
27	X	Bogor Water Supply							

PRE-SCREENING RESULTS (II)

No	Selected project	Project name	Reason of Rejection						
			Already started	Funded by other than PPP	Absorbed into other projects	Cancelled by local government	Problem in water resources	Small capacity (>100 l/s)	Legal problem
28		Bandung Water Supply			X				
29		Subang Water Supply			X				
30		Sumedang Water Supply				X			
31		Kanan Water Supply			X				
32		Magelang-Kartamantul WS			X				
33	X	DKI Jakarta- Bekasi- Karawang							
34		West Cikarang & Cibitung Bekasi Regency				X			
35	X	Bandung Regency							
36		Indramayu Regency					X		
37		West Bandung Alt. I- Water Conveyance					X		
38	X	West Bandung Alt. II- Water Conveyance							
39		East Bandung Alt. I- Water Conveyance					X		
40	X	East Bandung Alt. II- Water Conveyance							
41		Semarang Alt. I- Water Conveyance			X				
42		Semarang Alt. II- Water Conveyance			X				
43		Semarang Alt. III- Water Conveyance			X				
44		Dumai Water Supply		X		X			
45		Duri Water Supply		X		X			
46		Manado Bulk Treated Water Supply			X				
47		Samarinda Bulk Treated Water Supply		X					
48		Banjarmasin Bulk Treated Water Supply		X					
49	X	City of Bandar Lampung							
50		Regency of Maros						X	
51		DAM Karian(Tangerang)			X				
52		Medan Municiparity		X					
53		Klung kung Regency		X					
		Frequency	4	7	11	9	6	5	1

Source: CIPTA KARYA

FIRST STAGE SCREENING RESULT

Criteria	1 Cikarang Water Supply & West Cikarang & Cibitung Bekasi	2 Pondok Gede Water Supply	3 Ciparens Tangerang Water Supply	4 Umbulan Water Supply	5 West Semarang New Water Supply	6 Gresik Water Supply	7 Bogor Water Supply	8 DKI Jakarta-Bekasi-Karawang	9 Bandung Regency	10 West Bandung Alt. II- Water Conveyance	11 East Bandung Alt. II- Water Conveyance	12 City of Bandar Lampung
1) Unavailability of alternative water	**1**	**3**	**1**	**3**	**3**	**1**	**2**	**1**	***2***	***2***	***2***	***2***
2) Accessibility to raw water resources	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	***2***	**3**
3) Production capacity	***2***	**1**	***2***	**3**	**3**	**1**	**1**	**3**	**2**	**1**	***2***	**1**
4) Existing tariff level	***2***	***2***	***2***	**2**	***2***	**1**	**3**	**2**	**2**	***2***	***2***	***2***
5) Industry and commercial water	**3**	**1**	**3**	**3**	**3**	**3**	**1**	**3**	**3**	**3**	**3**	**3**
6) Beneficiary population of retail water	***2***	**2**	***2***	**3**	**1**	**1**	**1**	***2***	***2***	**1**	***2***	**2**
7) Population growth	***2***	**3**	***2***	**1**	**2**	***2***	***2***	**3**	**2**	**2**	***2***	**2**
Overall Score	2.15	2.36	2.15	2.58	2.28	1.72	2.00	2.36	2.29	2.00	2.07	2.22
Selected Project		✓		✓	✓			✓	✓			✓

Note: "No data" gets 2points (italicized and underlined).

After first stage screening, we found out that local government cancelled the project and eliminated from the list

SECOND STAGE SCREENING RESULT

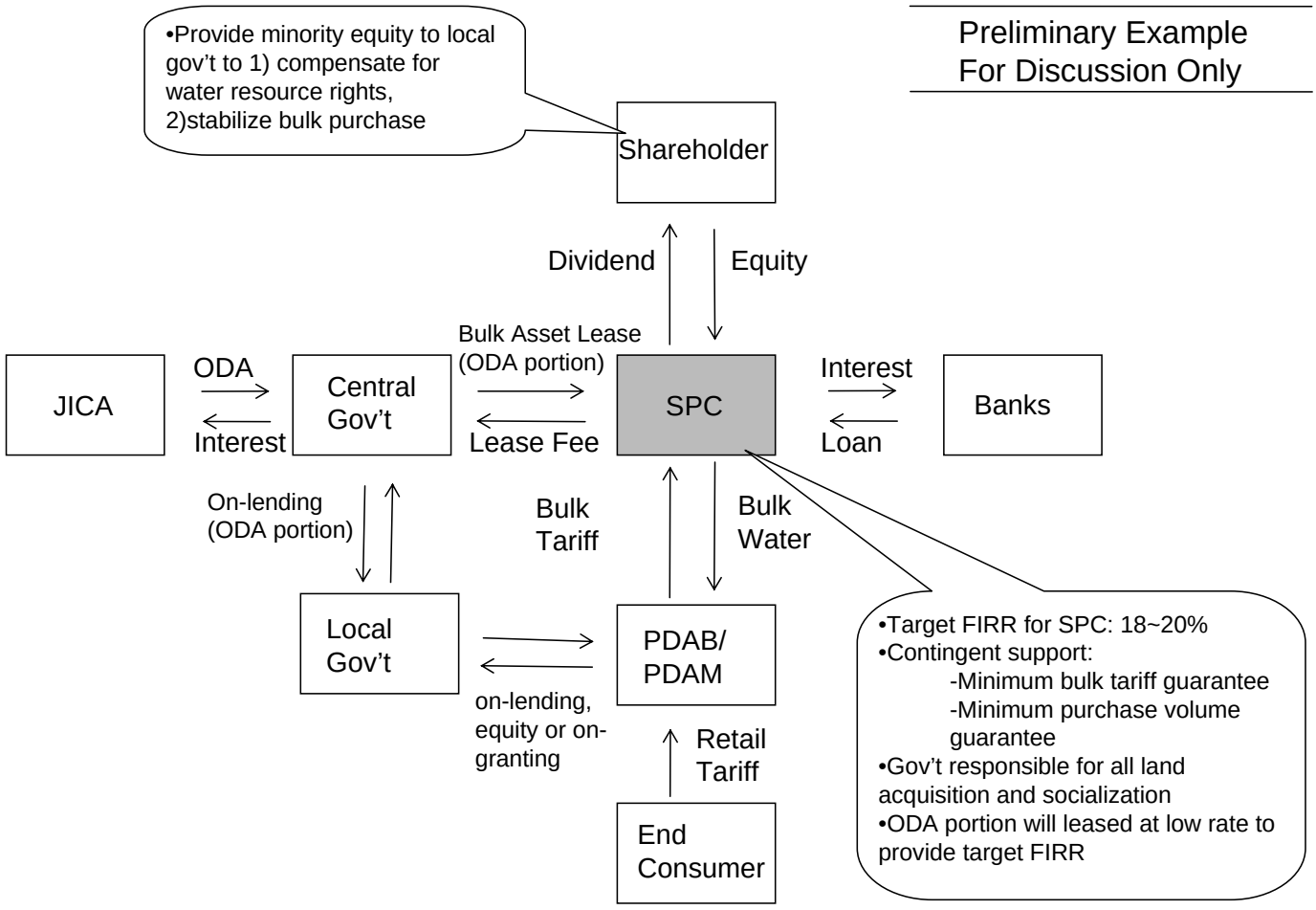
Evaluation Criteria		Umbulan	Semarang	DKI Jakarta-Bekasi-Karawang	Bandung Regency	Bandar Lampung
1) Necessity 20%	1.1) Growth of per capita GRDP	2	2	2	3	3
	1.2) Capital cost magnitude in GRDP	2	3	1	2	3
	1.3) Distribution component	3	3	1	2	2
	1.4) Pro-poor consideration	2	2	1	2	3
	Necessity score	2.25	2.50	1.25	2.25	2.75
2) Profitability 35%	2.1) FIRR	1	1	3	1	1
	2.2) EIRR	3	3	1	2	2
	2.3) Capital cost	3	2	3	2	1
	2.4) Production capacity	2	2	3	1	1
	Profitability score	2.14	1.86	2.71	1.43	1.14
3) Implementability 45%	3.1) Raw water securement	2	2	2	1	3
	3.2) Technical risk / Readiness	2	2	2	2	2
	3.3) Government consensus	2	3	2	3	3
	3.4) PDAM performance	2.58	1	1.75	1	1
	3.5) Impact on living environment	2	2	2	2	1
	3.6) Land acquisition	3	3	3	3	2
	Implementability Score	2.18	2.22	2.08	2.00	2.22
	Overall Score	2.18	2.15	2.14	1.85	1.95

PROFILE OF PPP WATER SUPPLY SELECTED CANDIDATES

	Project summary	Investment cost	Construction facilities
Umbulan Water Supply	The project is the water supply for Surabaya ,Gresik, Sidoarjo and Pasuruan. The water resource is Umbulan spring at Pasuruan regency. The amount of intake is 4,000 L/sec, and the beneficiary population is 2,880,000 on the basis of 120 l/sec per capita daily consumption. Maintenance of environment surrounding spring water will be necessary	US$ 235 mill	•Intake 4000 l/sec for spring water. •transmission pipe totally 92km •Distribution to provide 883,944 household connections by 2015.
Jakarta-Karawang-Bekasi	The project is the water supply for Jakarta, Karawang and Bekasi. The water resource is Jatiluhur Dam. The amount of intake is 15,000L/sec, and the beneficiary population is 10,800,000 on the basis of 120 l/sec per capita daily consumption.	US$ 563 mill	•Water Treatment Plant 15,000 l/sec. •transmission pipe 58km.
West Semarang	The project is the water supply for West Semarang. The water resource is Kreo river. The amount of intake is 1050L/sec, and the beneficiary population is 174,970.	US$ 70 mill	•intake facility 1,050 l/sec •raw water conveyance pipe 2.2km •Water Treatment Plant 1,050 l/sec. •main transmission pipe 3.1km and 9.7km •distribution system

EXAMPLE OF FINANCIAL TRANSACTION DESIGN

Preliminary Example
For Discussion Only



Water Supply PPP CANDIDATE FINANCIAL SIMULATION

Umbulan Project

Investment cost:
Rp 2,357 billion
Project FIRR 10.1%

		Public Private Ratio					
		25 : 75		50 : 50		75 : 25	
		SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR
Lease Fee	4%	15.90%	6.36%	19.27%	6.12%	27.20%	5.97%
	3%	16.10%	5.95%	19.89%	5.47%	28.65%	5.16%
	2%	16.30%	5.53%	20.49%	4.78%	30.07%	4.28%
	1%	16.60%	5.09%	21.09%	4.04%	31.45%	3.32%
	0%	16.80%	4.63%	21.68%	3.24%	32.81%	2.24%

Semarang Project

Investment cost:
Rp703 billion
Project FIRR 6.5%

		Public Private Ratio							
		25 : 75		50 : 50		75 : 25		90 : 10	
		SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR
Lease Fee	4%	7.46%	7.10%	8.22%	6.44%	9.92%	6.14%	12.74%	6.04%
	3%	7.81%	6.24%	9.18%	5.31%	12.14%	4.88%	17.21%	4.71%
	2%	8.16%	5.31%	10.07%	4.07%	14.15%	3.47%	21.34%	3.24%
	1%	8.50%	4.31%	10.92%	2.67%	16.04%	1.83%	25.33%	1.50%
	0%	8.84%	3.21%	11.74%	1.01%	17.84%	-0.20%	29.22%	-0.70%

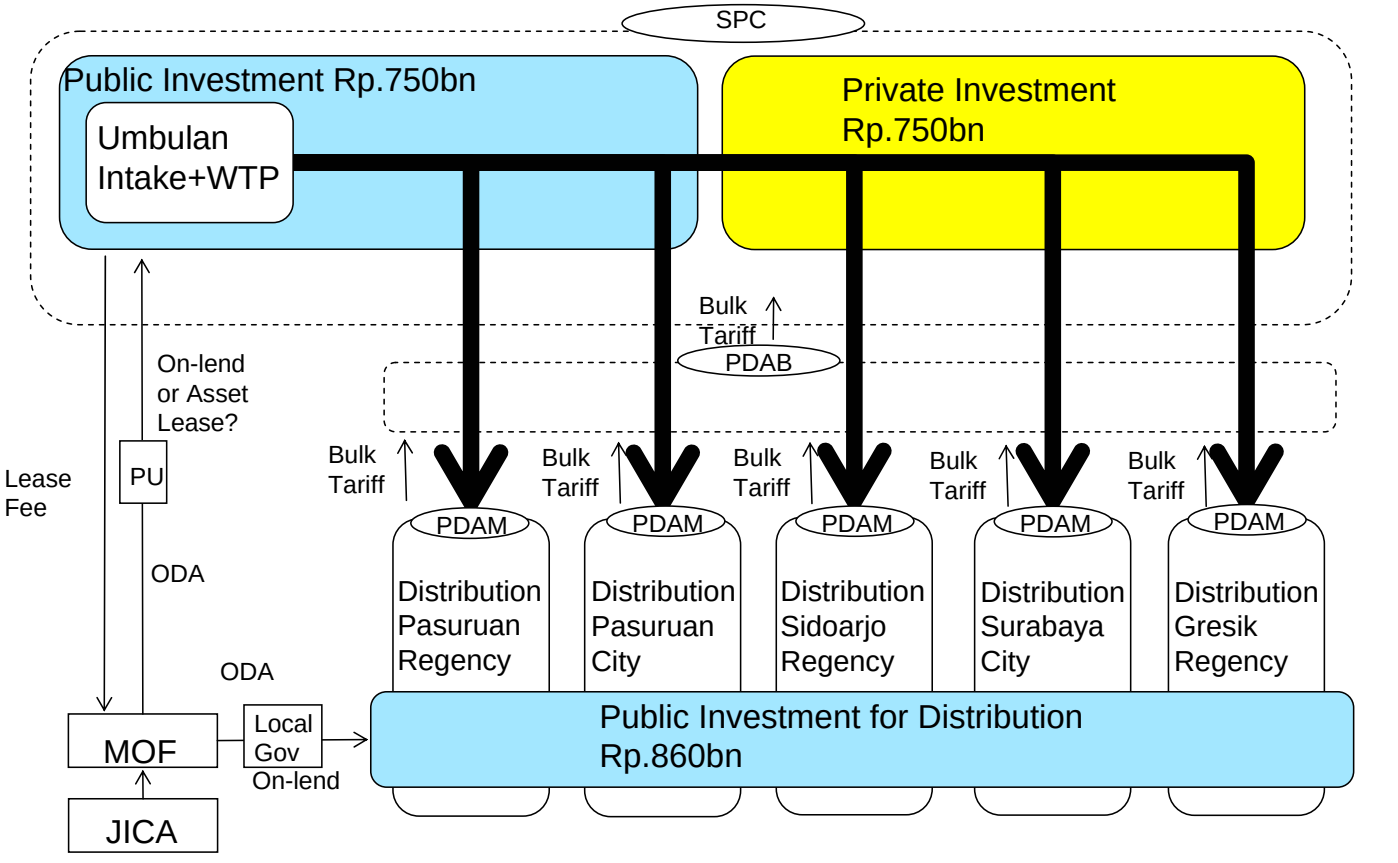
JABEKA Project

Investment cost:
Rp 5,635 billion
Project FIRR 12.8%

		Public Private Ratio					
		25 : 75		50 : 50		75 : 25	
		SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR
Lease Fee	4%	14.61%	16.04%	17.69%	11.70%	24.82%	9.92%
	3%	14.86%	15.34%	18.31%	10.80%	26.26%	8.89%
	2%	15.10%	14.61%	18.93%	9.84%	27.65%	7.77%
	1%	15.34%	13.87%	19.53%	8.81%	29.01%	6.55%
	0%	15.57%	13.09%	20.11%	7.70%	30.33%	5.17%

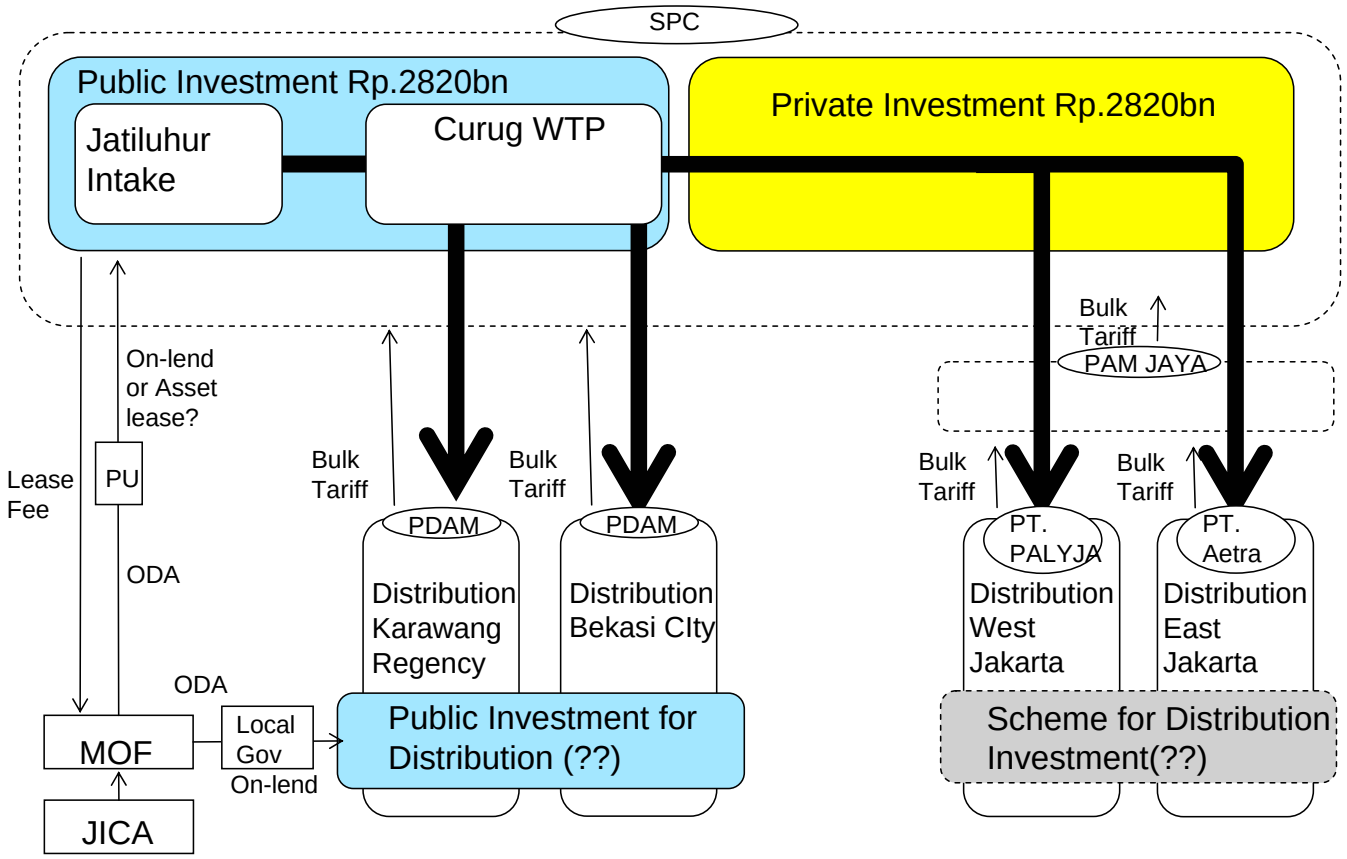
POTENTIAL PPP SCHEME: UMBULAN WATER SUPPLY

Preliminary Example
For Discussion Only



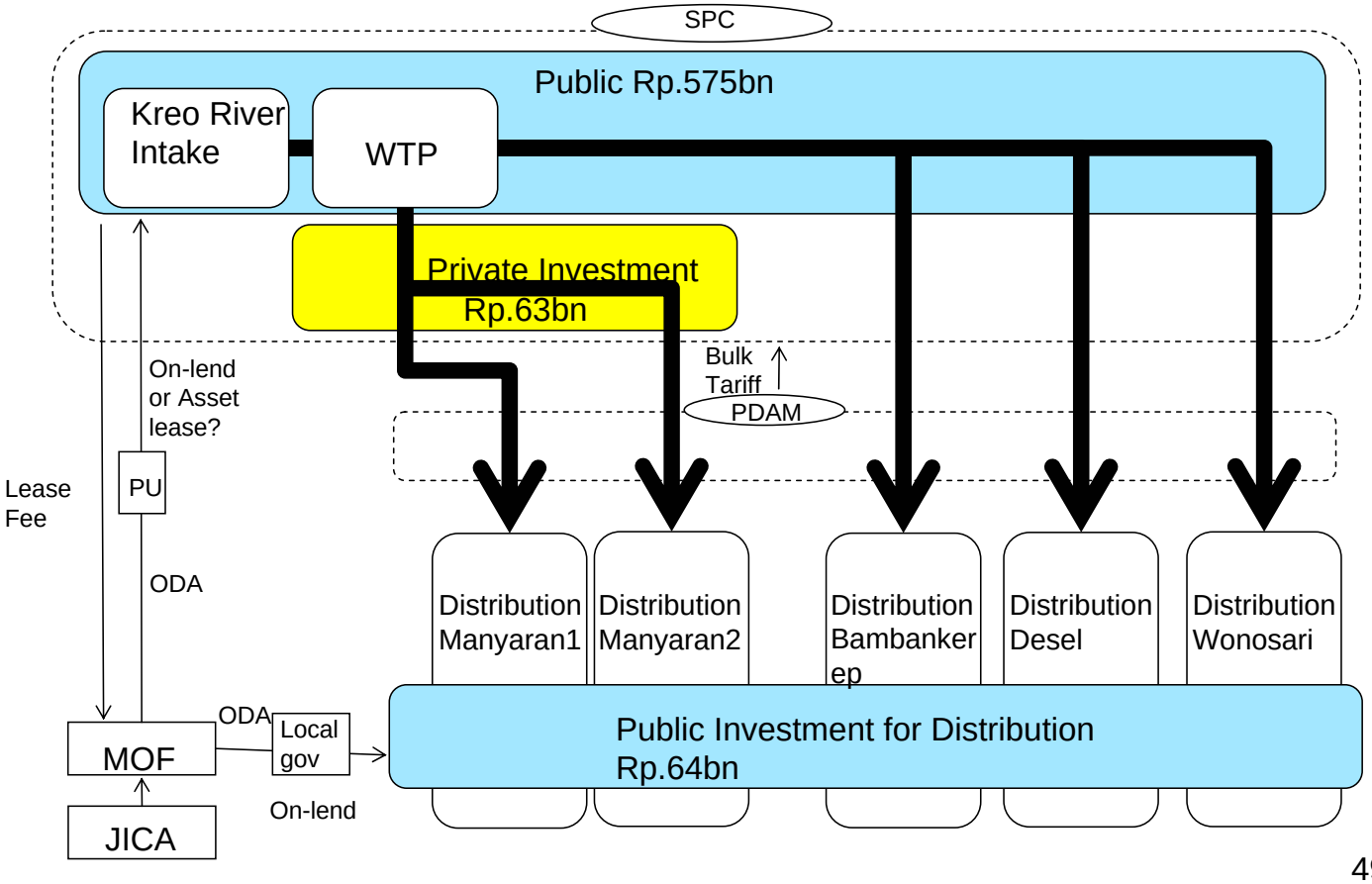
POTENTIAL PPP SCHEME: JABEKA WATER SUPPLY

Preliminary Example
For Discussion Only



POTENTIAL PPP SCHEME: WEST SEMARANG WATER SUPPLY

Preliminary Example
For Discussion Only



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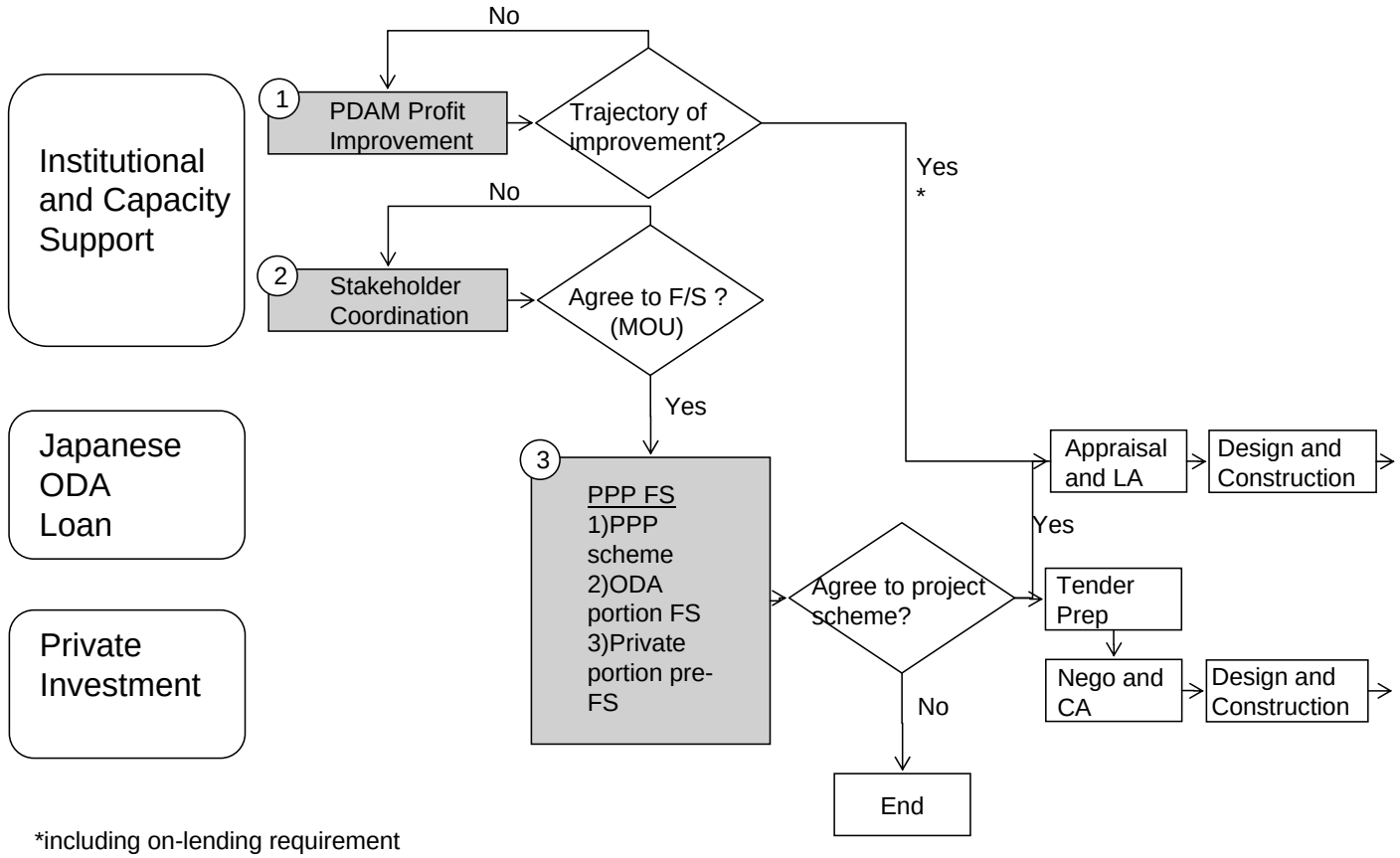
NEXT STEP ROADMAP FOR PPP WATER SUPPLY (FOR DISCUSSION)

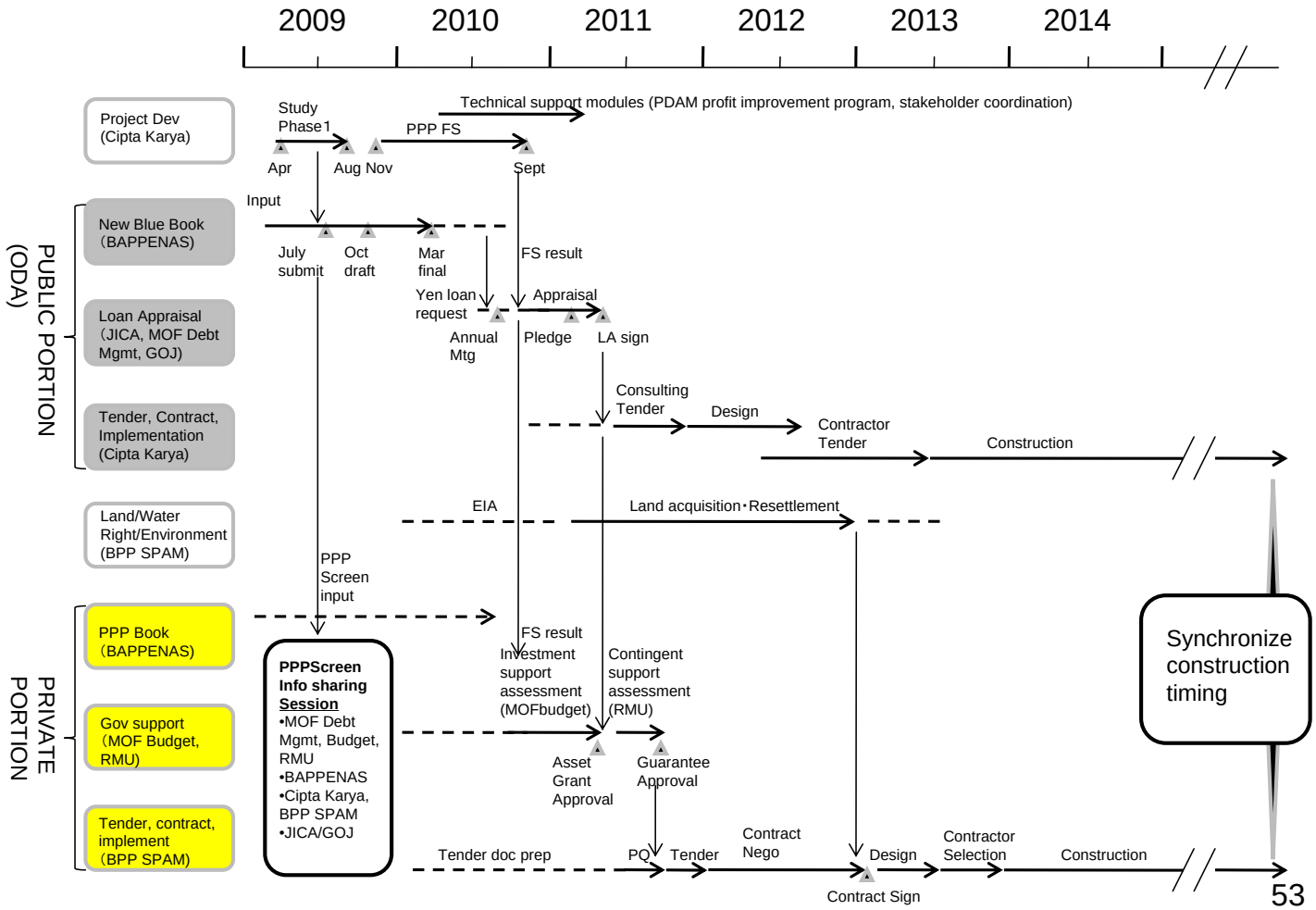


*including on-lending requirement

DESCRIPTION OF NEXT STEP MODULES FOR PPP WATER SUPPLY

	Description	Key Output
1 PDAM Profit Improvement	• A comprehensive profit improvement program including 1) reduction of UFW, 2) reduction of operation cost , 3)management capacity building	•PDAM indicates positive trajectory towards financial sustainability •PDAM fulfills conditions for on-lending
2 Stakeholder Coordination	• Facilitate period stakeholder meetings with facts and analysis on the project. Objective is to ensure all stakeholders agree to the project scheme	•Government stakeholders sign MOU for project scheme
3 PPP FS 1)PPP scheme 2)ODA portion FS 3)Private portion pre-FS	• **PPP scheme** Detail design including 1)private/public portion, 2)gov't guarantee and direct support, 3)Project FIRR, SPC IRR, VfM simulation , 4) scheduling • **ODA portion FS** Review of financial, technical and environmental aspects of project to assess whether the project fulfills ODA guidelines. Also, fund channeling to PDAM must be reviewed with MOF • **Private portion pre-FS** Conduct basic study and analysis prior to tender prep including 1)tender method design, 2)private party qualification, 3)risk allocation principles, 4)CA requirements	•Information required for ODA Loan appraisal is all analyzed and made available •Information required for tender document preparation is all analyzed and made available

WATER SUPPLY "VERTICAL SPLIT" PPP SCHEDULE



AP2-2 Executive Summary Charts (Appendix)

Japan International Cooperation Agency

Republic of Indonesia

Preparatory Survey on Public Private Partnership (PPP) Infrastructure Development Projects

APPENDIX CHARTS

NIPPON KOEI
Challenging mind, Changing dynamics

PADECO

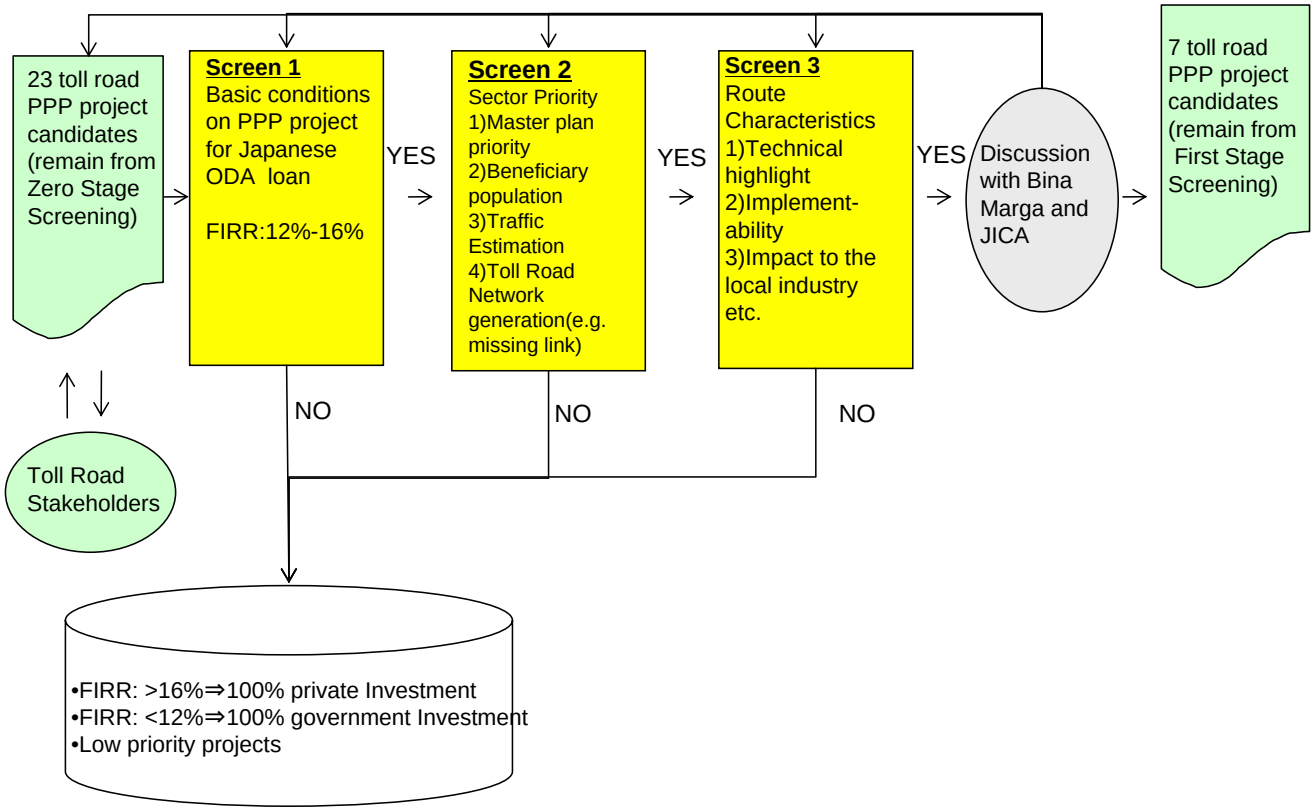
September, 2009

APPENDIX

Toll road
- •Screening methodology
- •Detail profile of selected candidates
- •Financial analysis

Water supply
- •Screening methodology
- •Detail profile of selected candidates
- •Financial analysis

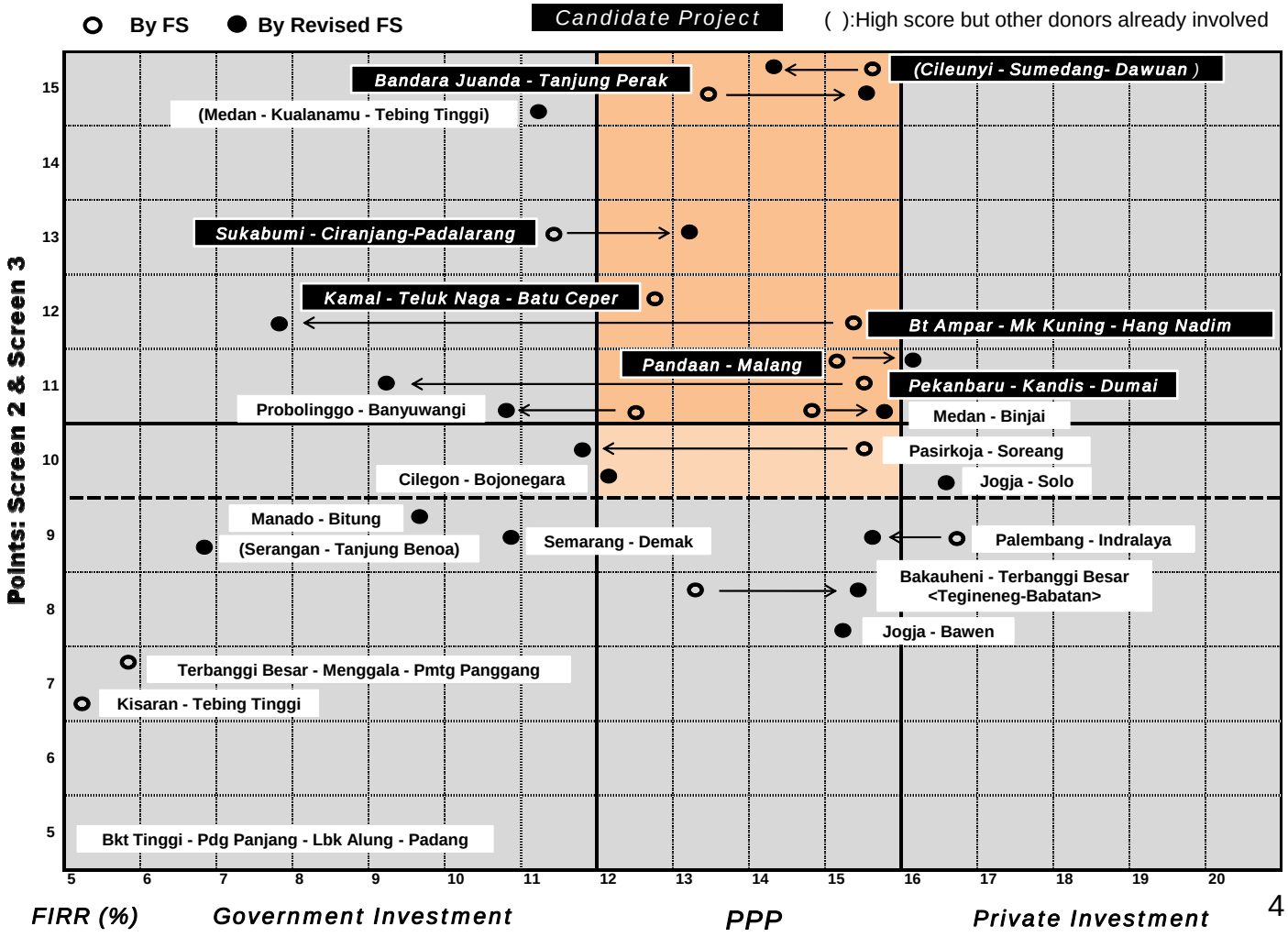
FIRST STAGE SCREENING OVERVIEW



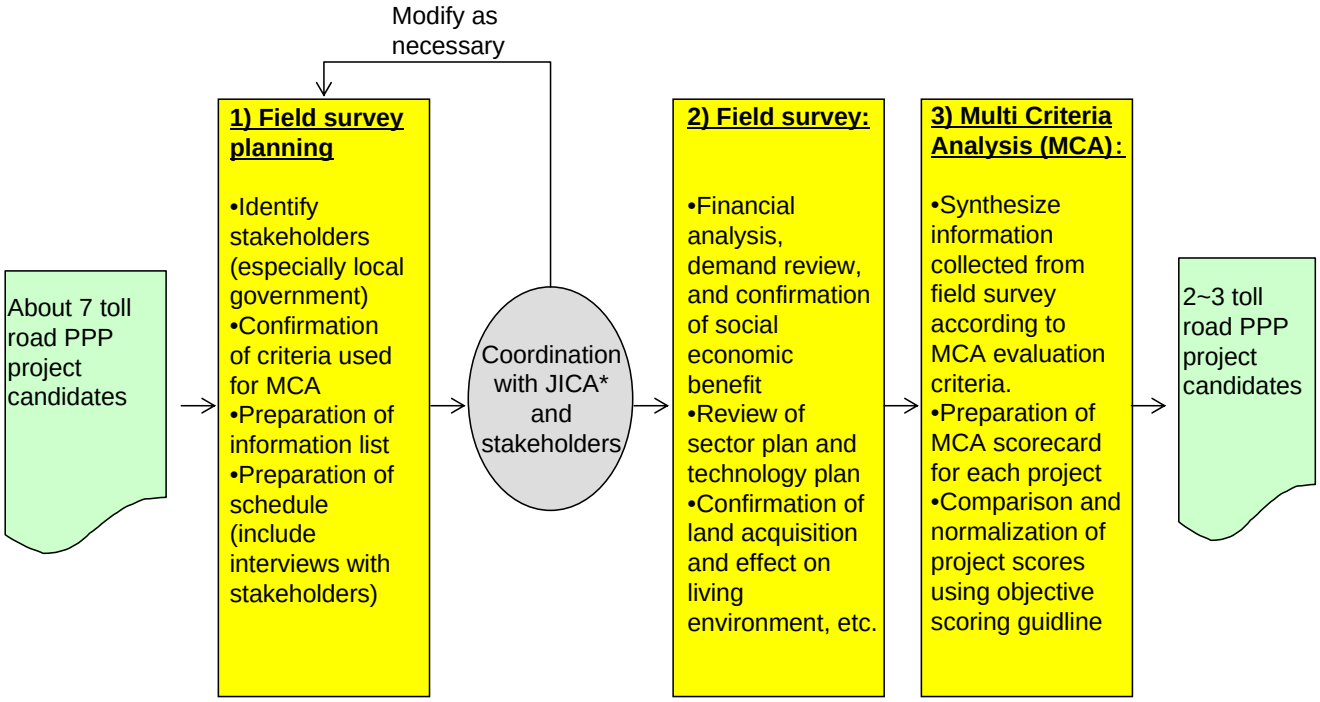
EVALUATION ON FIRST STAGE SCREENING

Evaluation Items	Evaluation			Remarks
Screen 1: Basic Condition on PPP project for Japanese ODA loan				
FIRR	<12%: Government Investment	12%-16%: PPP	>16%: Private Investment	
Screen 2: Sector Priority				
Score	★	★★	★★★	
Consistent with the Sector Plan (Blue Book) (PPP Book)	Add ★ , if the section is listed in the Blue Book.			
	Potential	Priority	Ready for Offer	
Beneficiary Population	<2,000,000	: 2,000,000-4,000,000	>5,000,000	
Traffic Estimation (0 year)	<20,000	20,000-30,000	>30,000	
Increasing Rate (average)	<5%	6% - 10%	>11%	
Toll Road Network Generation (Location of the Section)	Independent Section	Extension Section	Missing Link	
Connectivity to the important Facilities	Add ★, if there are some important facilities (e.g. airport, seaport etc.).			
Composition of the Trans Toll Road	Add ★ , if the section is part of Trans Jawa / Sumatra Toll Road.			
Screen 3: Route Characteristic				
Technical Highlight	Add ★ , if construction work is needed high technology. (e.g. tunnel, long span bridge etc.)			
Implementability of Project / O&M	Add ★, if the section has more easy to implement (e.g. land acquisition complete, local government support etc.). Minus ☆ , if the section has a limitation and barrier (e.g. short length, difficulty of land acquisition etc.).			
Impact to the Local Industry	Add ★, if the toll road will give direct impact to the industrial area.			

ANALYSIS OF FIRST STAGE SCREENING



SECOND STAGE SCREENING OVERVIEW



POINTS OF SECOND STAGE SCREENING

Category	MCA category	Evaluation contents	Weight	Allocation
Necessity	Social Economic Benefit	EIRR	10.0%	45%
	Priority of local government	The importance level of the project by regional government	8.0%	
	Importance within sectoral plan	The importance with in sectoral plan	10.0%	
	Contribution to Agriculture and Industries	Contribution to agriculture and industries the value of existing tourism (2%); export products (2%); agriculture&fishery(2%); industrial product(2%) and future regional plans(2%)	10.0%	
	Technical Highlight	Technological Development	7.0%	
Profitability	Financial Viability	FIRR (Project FIRR)	12.0%	25%
	Demand generation prospects	Past trends of Growth ratio (GRDP growth rate, Past trends of no. of registered vehicle w/o motorcycle)	8.0%	
	Demand Risks	Potential demand risks and uncertainty	5.0%	
Implementability	Uncertainty of Constructionability	Uncertainty of constructionability through existing design	3.0%	30%
	Readiness for Land Acquisition	Fiscal capacity by local government	4.0%	
		Trace approval (SP2LP)	4.0%	
		Difficulty of land acquisition	4.0%	
	Impact on living environment	Extent of natural impacts	4.0%	
		Extents of social impacts	5.0%	
	Project Type & cost	Appropriateness of private participation in PPP scheme (section split)	6.0%	

APPENDIX

Toll road
- •Screening methodology
- •Detail profile of selected candidates
- •Financial analysis

Water supply
- •Screening methodology
- •Detail profile of selected candidates
- •Financial analysis

MODULE TOLL ROAD : PPP PROJECT LIST DEVELOPMENT FOR JAPANESE ODA LOAN FS
SUKABUMI-PADALARANG

(1/2)

1. Name of Project

1) **Section Name: Sukabumi-Ciranjang-Padalarang**
2) **Length :** 61.0km
3) **Total Project Cost:** 5,103 bil Rp (79.74 bil.Rp /km)
4) **Counterpart Agency:** Bina Marga/BPJT/West Jawa Province

2. Role and Priority

1) **Implication :** Route between Jakarta and Bandung though Sukabumi
2) **Role:** commodity distribution route to Jakarta from roadside, alternative route of Jakarta･Cikampek-Bandung
3) **Priority :** Tender was made as Batch IV after termination of concession for Ciranjang-Padalarang, but Investor is not decided. "Priority Projects" in PPP book.

3. Project Outline

1) **Road Class, Lane, Design Speed:** Class I, 2lanes×2directions(3X2 future expansion),100km/h(flat), 80 km/h (mountainous)
2) **Cost Breakdown:** Const. 2,808 bil Rp（44 bil Rp /km）,Land Acquisition 549 bil Rp（9 bil Rp /km）
3) **Beneficially Population:** 4,246,856 people
4) **Forecasted Traffic :** 13,154veh./day(0yr), 45,625veh/day (10yrs)
5) **Exist. Traffic on arterial road:** 18,864veh/day(AADT 2008)
6) **Technical Characteristics:** Passing paddy field, hilly area and mountainous area from Sukabumi to Padalarang. Revision of Vertical alignment is necessary on mountainous section and applicability of tunnel const. Long span br. with particular structure type in the immediate vicinity of Exist. Citarum Br. (L=220m / Center Span=125m)

4. PPP Modality

PPP scheme with "Section Split".

5. Necessity, Profitability, Implementability

1) Necessity

- **EIRR**：17.7%
- **Priority of Regional Government**：
  As No.2 priority after Cilenyui-Dauwan
- **Sector Priority**： As subsequent priority after Trunk Toll Road (e.g.Trans Jawa, Trans Sumartra)
- **Contribution to Regional Economic** ：
  Expect contribution to not only the business between Jakarta and Bandung but also Tourism. Relatively huge production along the toll road such total production in Agri, Forestly &Fishery and Industry & Mining along the toll road is total Rp20,000bill.
- **Technical Highlight**：
  Applicability of the tunnel in the mountainous section And long span bridge (Steel particular bridge etc.) should be planned across deep valley at Sta.92km.

2) Profitability

FIRR (Project FIRR)：（FS）11.28% (Revised FS）13.08% (Revised this Study 12.1%)

Demand Generation Prospects：Ave. GDP Growth 5.3%, Ave. Growth of Registered vehicles 8.8%

Demand risks : Land acquisition of Ciawi – Sukabumi Section is still 0%.There's uncertainty of implementation in near future.

MODULE WATER SUPPLY : PPP PROJECT LIST DEVELOPMENT FOR JAPANESE ODA LOAN FS
SUKABUMI-PADALARANG

(2/2)

3)Implementability

-Uncertainty of Constructionability : Moderate risks are assumed in terms of constructionability

-**Fiscal Capacity of Regional Gov.**： Original Tax Income per person人is Rp92,000.

-Readiness for Land Acquisition Readiness for Land Acquisition (Issuance of SP2LP) ：Not yet

-**Difficulty of Land Acquisition :** Ratio of Residential Area 22%

-**Natural Environmental Impact:** No considerable impacts for Natural Environment is foreseen.

Social Environmental Impact: No. of Buildings to be resettled 2485 nos

Appropriateness of Private in Section Split Scheme : Private Participation and Proportion Rp1,738bill.(35%)

6. Anticipated Issues and Risks

The existing pre-F/S design needs further review by the detailed topographic data. In this review, the redesign of vertical alignment is necessary in consideration of the application of tunnel for the safety design. However effect to the profitability by cost increase should be taken into consideration.

1) The implementation of Ciawi – Sukabumi section will also influence to the traffic demand in Sukabumi – Ciranjang. There's concession in Ciawi – Sukabumi, but the progress of land acquisition still 0%.

7. Environmental and Social Considerations

1) Social Impacts

The almost alignment passes on the rural area. However, no. of buildings to be resettled are the most largest of the candidate route. The mitigation measures should be taken in the further sturdy.

2) Natural Impacts

here's no serious and sensitive area such as conservation forests nature reserve. The review of AMDAL is necessary in terms of usual natural impacts (e.g. atmosphere, noise and vibrations). There's existing AMDAL only for Sukabumi-Cilanjang section and the AMDAL study for Cilanjang-Padalarang should be carry out.

8. Concerns related to the adoption

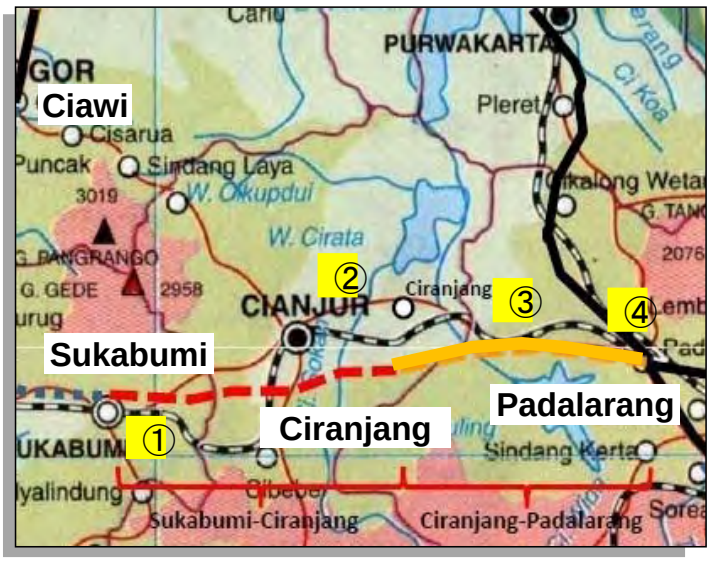
1) The investor for Ciawi – Sukabumi Section is determined, but land acquisition is not progressed.（0% as of March, 2009）. This implementation of Ciawi-Sukabumi will boost up the necessity of Sukabumi-Paralarang and increase the traffic demand from Jakarta to Bandung.

- It should be considered that the applicability of tunnel in the mountainous section and particular types of bridge in Citrarum in terms of technical development of Indonesia.

Sukabumi-Ciranjang-Padalarang

Length (km)	FIRR (%)	Project Cost billion Rp (billion Rp/km)			Beneficiary Population (people)	Traffic Forecast (vehicle/day)		Traffic Ordinary Road
			Construction	Land Acquisition		0year	10year	
64.00	11.28 →13.08	5,103 (79.74)	2,808 (43.88)	549 (8.58)	4,246,856	13,154	45,625	18,864 Y2008ADT

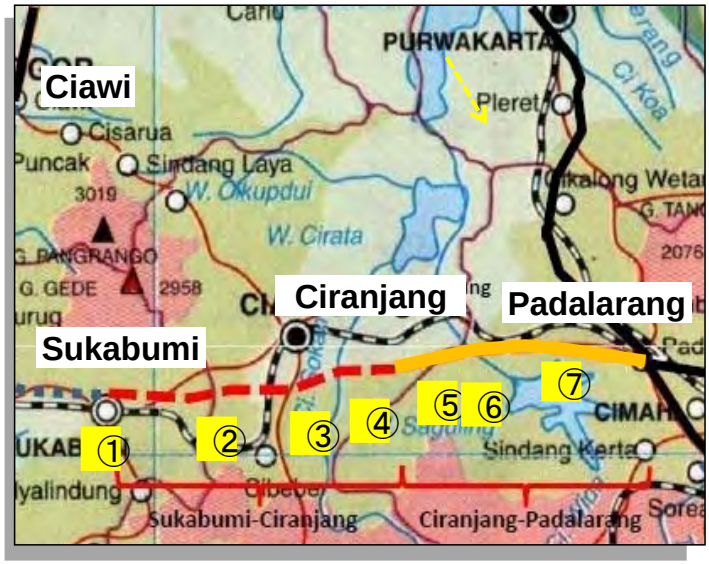
【Section Characteristic】 ①Route where connects between Jakarta and Bandung together with Ciawi-Sukabumi section, ②Distribution route to Jakarta ③Easing traffic jam along the route, ④ Necessary to review the section alignment, ⑤ Long span bridge and tunnel will be planned ⑥Contract Agreement on Ciranjang-Padalarang section was cancelled before. ⑦ Alternative route between Jakarta and Bandung toll road



Private Public Section (ODA)

Ordinary Road Condition (arrow: Pandalarang direction)

Planned Toll Road Condition（arrow: Pandalarang direction)



MODULE TOLL ROAD : PPP PROJECT LIST DEVELOPMENT FOR JAPANESE ODA LOAN FS

PANDAAN-MALANG

(1/2)

1. Name of Project

1) **Section Name:** Pandaan-Malang
2) **Length:** 36.6km
3) **Project Cost:** 2,530 bil Rp (68.37 bil.Rp/km)
4) **Couterpart Agency:** Bina Marga/BPJT/East Jawa Province

2. Role and Priority

1) Implication: This route is a part of toll road between Surabaya and Malang. This route connects to Trans Jawa toll road at Pandaan.
2) Role: The traffic heading to Malang and southern seacoast area through Malang utilize this route. There're also the traffic aimed to tourism in Malang
3) Priority: The BOT concession of this route was terminated and tendered out as Batch IV. However no investors are determined . "Priority Project" in the PPP Book.

3. Project Outline

1) **Road Class, Lane, Design Speed:** Class I, 2lanes×2directions（3X2 future expansion）、100km/h（flat）、80 km/h（mountainous）
2) **Cost Breakdown:** Const. Cost1,375 bil Rp (37.16 bil.Rp/km)、Land Acquisition Cost293 bil Rp (7.92 bil.Rp/km)
3) **Beneficially Population:** 4,447,873 people
4) **Forecasted Traffic**: 41,803veh./day (0year)、52,760veh./day (10year)
5) **Exist. Traffic on arterial road**: 53,334veh./day (AADT 2008)
6) **Technical Characteristics**: This route passes on gently hilly area heading to Malang from Pandaan. Near to the Malang city, the alignment passes on the flat paddy field. There's no considerable technical difficulty throughout the route.

4. PPP Modality

- PPP scheme with "Section Split".

5. Necessity, Profitability, Implementability

1) <u>Necessity</u>

- **EIRR**:21.7%
- **Priority Regional Government**:
  The porvincial gov willing to concentrate on the implementation of i) Surabaya – Mojokerto,II)Gempol – Pasuruan, iii)relocation of polon disaster, iv)Waru(aloha) - Tg.Perak, v)Gempol – Pandaan.
- **Sector Priority**:As subsequent priority after Trunk Toll Road (e.g.Trans Jawa, Trans Sumartra).
- **Contribution to Regional Economic**:
  Malang area is well-balanced development area in both agriculture& forestry and Industry & Mining. The production value of agriculture& forestry is about Rp3902bill, and Industry & Mining is Rp6784bill. The industrial park (Sendang Biru:4000ha) and Real Estate Plan (Kepanjen:28,000ha) are planed as the regional development plan along the route and further traffic generation will be expected.
- **Technical Highlight**:
  Northern area of Malang is gently hilly area and flat paddy field. Thus there may be no particularly difficult structure. Less chance to transfer of the technology is expected.

2)<u>Profitability</u>

- **FIRR(Project FIRR):**（FS）11.28% (Revised FS）13.08% (Revised this Study 13.1%)

Demand Generation Prospects: Ave. GDP Growth 5.7%, Past trend of Registered Vehicles16.7%

MODULE WATER SUPPLY : PPP PROJECT LIST DEVELOPMENT FOR JAPANESE ODA LOAN FS

PANDAAN-MALANG

(2/2)

(continued)

Demand risks : The progress of land acquisition in Gempol - Pandaan which is adjacent line of Pandaan-Malang is 73.94%(as of Feb.2009). The realization of this Gempol - Pandaan is realistic and the connectivity from Trans Jawa to this project may be ensured. The diversion ration from existing route to the toll road is the key factor in terms of profitability.

3)<u>Implementability</u>

- **Uncertainty of Constructionability :** Moderate risks are assumed in terms of constructionability
- **Fiscal Capacity of Regional Gov.**: Original Tax Income per person Rp113,000
- **Readiness for Land Acquisition (Issuance of SP2LP)** : already Issued
- **Difficulty of Land Acquisition :** Ratio of Residential Area 1%
- **Natural Environmental Impact:** No considerable impacts for Natural Environment is foreseen.
- **Social Environmental Impact :** No. of Buildings to be resettled 238nos
- **Private Participation and Proportion**: 1,642 (62%)

6. Anticipated Issues and Risks

1) The readiness of land acquisition is already prepared because the investor was awarded by BOT scheme. Regional gov. is also cooperative and no considerable issues related to land acquisition are foreseen
2) The progress of land acquistion of Gempol-Pandaan 74% and this route will be inaugurated earlier than this project.
3) The part of Surabaya-Gempol at Sidoarjo were damaged by mud eruption. This accident becomes public issues and the government is very positive to restore this toll road.

7. Environmental and Social Considerations

1) Social Impacts
The affected no. of buildings, 238nos are extremely low impact for 40km length toll road. The existing alignment is well-examined to avoid social impacts.

2) Natural Impacts
There's no serious and sensitive area such as conservation forests nature reserve. The review of AMDAL is necessary in terms of usual natural impacts (e.g. atmosphere, noise and vibrations).

8. Concerns related to the adoption

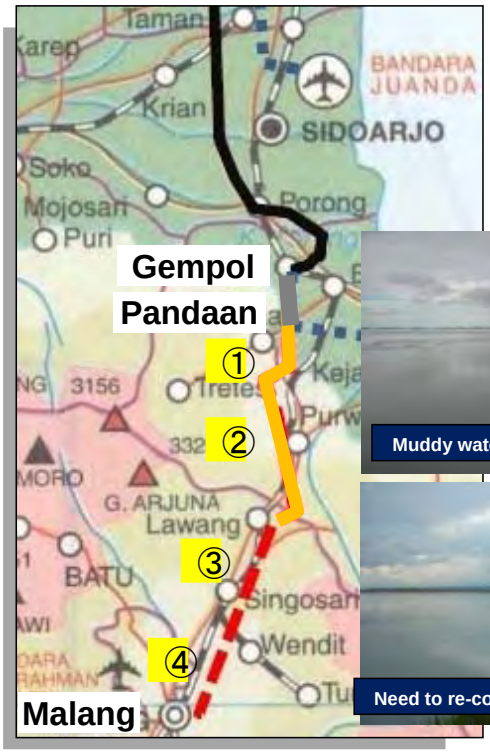
1) The concession of this toll road was terminated and BPJT tendered out again as BOT scheme. However the investor is not determined yet until now. BPJT may be now willing to tender out sooner.

2) Although no remarkable issues for this route, the specific reasons to select this project in terms of application of Japanese ODA loan are indiscoverable.

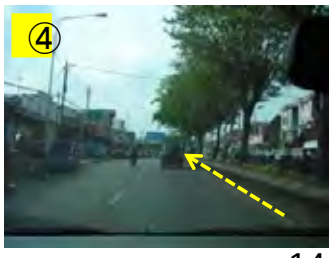
Pandaan-Malang

Length (km)	FIRR (%)	Project Cost billion Rp (billion Rp/km)			Beneficiary Population (people)	Traffic Forecast (vehicle/day)		Traffic Ordinary Road
			Construction	Land Acquition		0year	10year	
37.00	15.2 →16.09	2,530 (68.37)	1,375 (37.16)	293 (7.92)	4,447,873	41,803	52,760	53,334 Y2008ADT

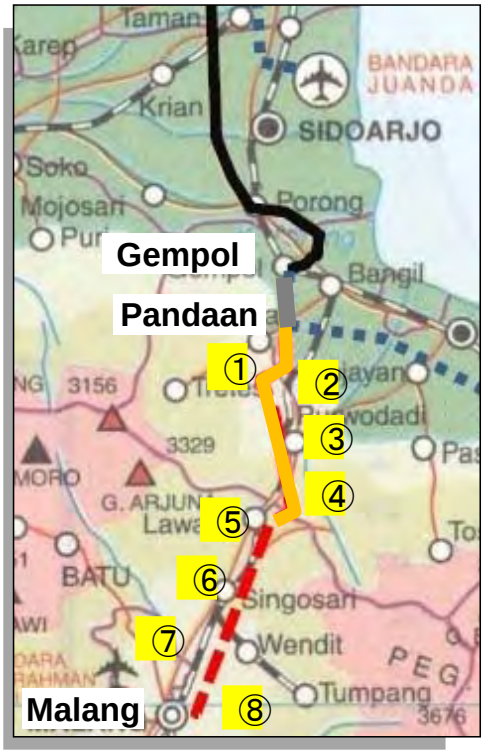
【Section Characteristic】①One of section in route where connects between Surabaya and Malang, ②Gempol-Pandaan section is in process (Land acquisition: 74%) ③Distribution and tourist route that connects Surabaya with Malang and south coast area. ④Passes through hill, and affected houses are few. ⑤Technical difficulty is low. ⑥There is a toll road submerged by the muddy water gush at Sidoarjo on this side of this project



Ordinary Road Condition (arrow: Malang direction)



Private Public Section (ODA)



Planned Toll Road Condition (arrow: Malang direction)

APPENDIX

Toll road
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Water supply
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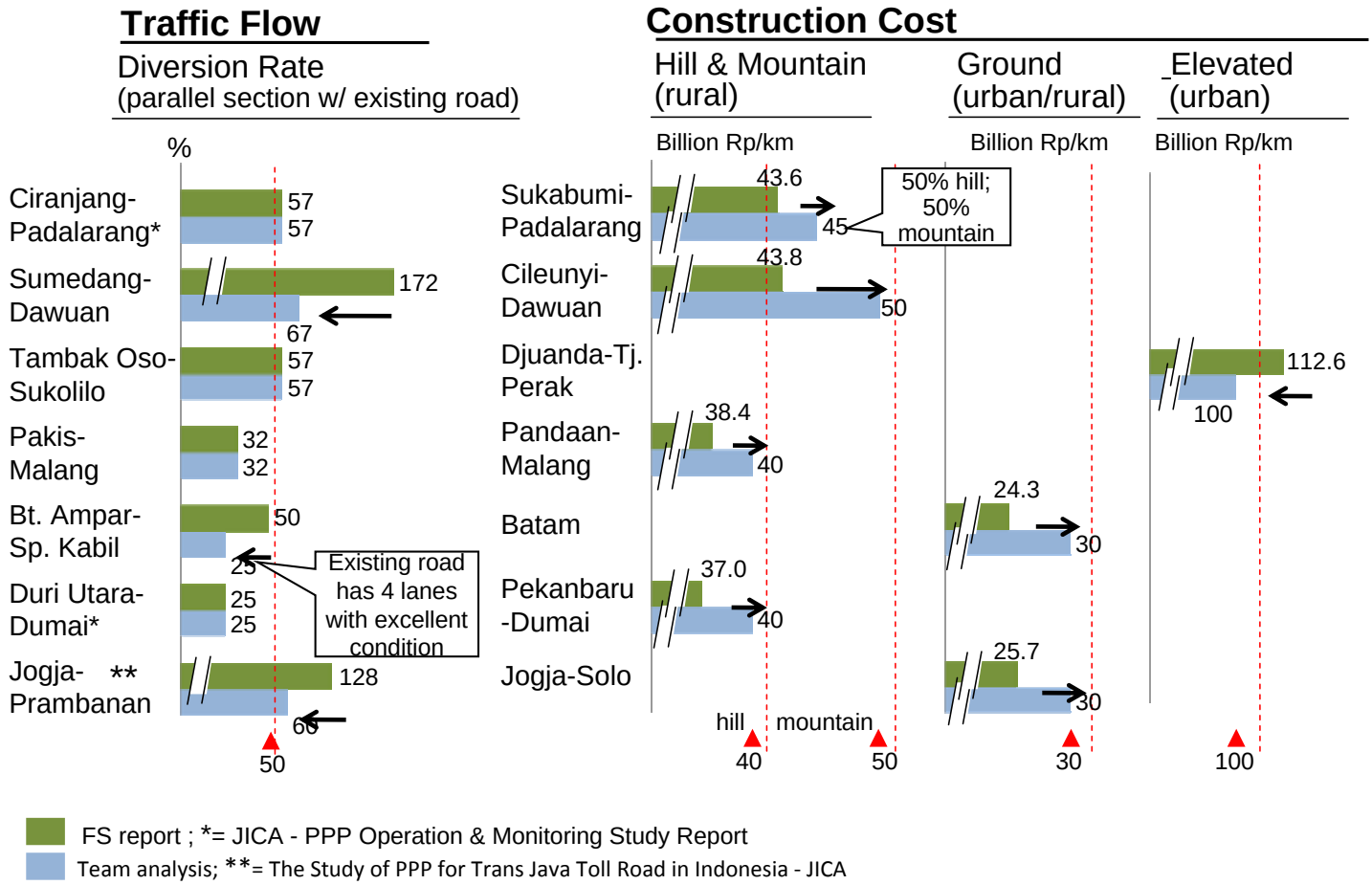
CONSTRUCTION COST AND TRAFFIC FLOW COMPARISON



FS report ; *= JICA - PPP Operation & Monitoring Study Report

Team analysis; **= The Study of PPP for Trans Java Toll Road in Indonesia - JICA

FINANCIAL ASSUMPTIONS

		Cileunyi-Dawuan	Sukabumi-Padalarang	Pandaan-Malang	Pekanbaru-Dumai	Bandara Juanda - tj.Perak	Batam
Terrain		Mountaniou	Hilly Mountai	Hilly	Hilly	Urban	Flat
Length	km	58.5	61.0	36.6	135.0	23.7	28.5
Land Acquisiton Cost	Billion Rp.	505	488	532	475	868	0
Construction Cost	Billion Rp	2925	2745	1464	5400	2370	855
	Billion Rp/km	50	45	40	40	100	30
Investment Cost	Billion Rp	6,107	5,786	3,482	10,515	5,480	1,988
Annual OM cost	Billion Rp/km	1.5	1.5	1.5	1.0	1.5	1.0
Toll fee Type I	Rp/km	650	650	650	900	1,100	650
Infrastructure depreciation				30years			
Land Acquisition Work Allocation				2years			
Construction Work Allocation				3years			
Design (DED)				2.00%			
Overhead cost				1.00%			
Physical contingency cost				10.00%			
Price escalation				6.00%			
Supervision & management				3.00%			
Financial administration				1.25%			
Operation & Maintenance cost(incl. routine & peri				1.5			
Non toll road revenue				1%			
Operation days				365			
Discount Rate				15%			
Infration				6%			
VAT				10%			
Corporate tax				25%			

FINANCIAL CASH FLOWS OF PANDAAN MALANG

Project Cashflow (Billion Rp)

Item	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1. Cash inflow																				
Toll revenue						257	268	313	326	381	396	463	486	573	601	708	743	875	918	1082
Non toll revenue						3	3	3	3	4	4	5	5	6	6	7	7	9	9	11
Total cash inflow						260	270	316	329	385	400	468	491	579	607	715	750	884	927	1093
2. Cash outflow																				
Investment cost	379	317	518	1294	776															
Land acquisition	317	317																		
DED	38																			
Construction project cost			518	1294	776															
Financial administration cost	23																			
Operation and maintenance (OM)						55	58	62	65	69	73	78	83	88	93	98	104	110	117	124
Routine OM cost						55	58	62	65	69	73	78	83	88	93	98	104	110	117	124
Periodical maintenance cost						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- every 3 years								0			0			0			0			0
- every 5 years										0					0					0
- every 10 years															0					
Total cash outflow	379	317	518	1294	776	55	58	62	65	69	73	78	83	88	93	98	104	110	117	124
3. Net cashflow	(379)	(317)	(518)	(1294)	(776)	205	212	254	264	315	327	390	408	491	514	617	646	774	810	969
Accumulated Net Cashflow	(379)	(696)	(1213)	(2507)	(3284)	(3079)	(2867)	(2612)	(2348)	(2033)	(1706)	(1316)	(907)	(416)	98	715	1361	2134	2945	3914

Item	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	Total
1. Cash inflow																
Toll revenue	1135	1338	1403	1654	1735	2044	2144	2527	2651	3125	3278	3863	4052	4776	5010	49128
Non toll revenue	11	13	14	17	17	20	21	25	27	31	33	39	41	48	50	491
Total cash inflow	1146	1351	1417	1670	1752	2065	2166	2553	2678	3156	3311	3902	4093	4824	5061	49619
2. Cash outflow																
Investment cost																3284
Land acquisition																634
DED																38
Construction project cost																2588
Financial administration cost																23
Operation and maintenance (OM)	132	139	148	157	166	176	187	198	210	222	236	250	265	281	297	4340
Routine OM cost	132	139	148	157	166	176	187	198	210	222	236	250	265	281	297	4340
Periodical maintenance cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- every 3 years			0			0			0			0			0	0
- every 5 years					0					0					0	0
- every 10 years					0										0	0
Total cash outflow	132	139	148	157	166	176	187	198	210	222	236	250	265	281	297	7624
3. Net cashflow	1015	1212	1269	1514	1586	1889	1979	2355	2468	2934	3075	3652	3828	4544	4763	41995
Accumulated Net Cashflow	4928	6140	7409	8923	10509	12397	14377	16732	19200	22133	25208	28860	32688	37232	41995	

FIRR (nominal terms)	13.8%
FIRR (real terms)	7.4%

FINANCIAL CASH FLOW OF SUKABUMI-PADALARANG

Project Cashflow (Billion Rp)

Item	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1. Cash inflow																				
Toll revenue						237	255	308	332	401	432	523	563	681	734	878	935	1119	1192	1427
Non toll revenue						2	3	3	3	4	4	5	6	7	7	9	9	11	12	14
Total cash inflow						239	257	311	335	405	436	528	569	688	741	887	944	1130	1204	1441
2. Cash outflow																				
Investment cost	410	291	971	2426	1456															
Land acquisition	291	291																		
DED	72																			
Construction project cost			971	2426	1456															
Financial administration cost	47																			
Operation and maintenance (OM)						92	97	103	109	116	122	130	138	146	155	164	174	184	195	207
Routine OM cost						92	97	103	109	116	122	130	138	146	155	164	174	184	195	207
Periodical maintenance cost						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- every 3 years								0			0			0			0			0
- every 5 years										0					0					0
- every 10 years															0					
Total cash outflow	410	291	971	2426	1456	92	97	103	109	116	122	130	138	146	155	164	174	184	195	207
3. Net cashflow	(410)	(291)	(971)	(2426)	(1456)	148	160	208	226	290	314	398	431	542	587	723	771	946	1009	1234
Accumulated Net Cashflow	(410)	(700)	(1671)	(4097)	(5553)	(5405)	(5245)	(5037)	(4810)	(4521)	(4207)	(3808)	(3377)	(2835)	(2248)	(1525)	(755)	191	1200	2434

Item	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	Total
1. Cash inflow																
Toll revenue	1520	1821	1941	2325	2479	2971	3169	3800	4055	4862	5190	6226	6649	7979	8522	73526
Non toll revenue	15	18	19	23	25	30	32	38	41	49	52	62	66	80	85	735
Total cash inflow	1536	1839	1960	2348	2504	3001	3201	3838	4095	4911	5242	6289	6715	8058	8608	74261
2. Cash outflow																
Investment cost																5553
Land acquisition																581
DED																72
Construction project cost																4853
Financial administration cost																47
Operation and maintenance (OM)	219	232	246	261	277	293	311	330	350	370	393	416	441	468	496	7234
Routine OM cost	219	232	246	261	277	293	311	330	350	370	393	416	441	468	496	7234
Periodical maintenance cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- every 3 years			0			0			0			0			0	0
- every 5 years					0					0					0	0
- every 10 years					0										0	0
Total cash outflow	219	232	246	261	277	293	311	330	350	370	393	416	441	468	496	12787
3. Net cashflow	1316	1606	1714	2087	2227	2707	2890	3508	3746	4540	4850	5872	6274	7591	8112	61475
Accumulated Net Cashflow	3750	5357	7070	9158	11385	14092	16982	20490	24236	28776	33626	39498	45772	53363	61475	

FIRR (nominal terms)	12.0%
FIRR (real terms)	5.6%

FINANCIAL CASH FLOW OF JOGJA-SOLO

Project Cashflow (Billion Rp)

Item	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1. Cash inflow																				
Toll revenue						155	161	187	193	224	232	270	279	324	336	390	430	532	587	727
Non toll revenue						2	2	2	2	2	2	3	3	3	3	4	4	5	6	7
Total cash inflow						157	162	189	195	227	234	272	282	328	339	394	434	538	593	734
2. Cash outflow																				
Investment cost	352	303	430	1074	644															
Land acquisition	303	303																		
DED	32																			
Construction project cost			430	1074	644															
Financial administration cost	18																			
Operation and maintenance (OM)						61	64	68	72	77	81	86	91	97	103	109	115	122	130	137
Routine OM cost						61	64	68	72	77	81	86	91	97	103	109	115	122	130	137
Periodical maintenance cost						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- every 3 years								0			0			0			0			0
- every 5 years										0					0					0
- every 10 years															0					
Total cash outflow	352	303	430	1074	644	61	64	68	72	77	81	86	91	97	103	109	115	122	130	137
3. Net cashflow	(352)	(303)	(430)	(1074)	(644)	96	98	120	123	150	153	186	191	231	236	285	319	415	463	597
Accumulated Net Cashflow	(352)	(655)	(1084)	(2158)	(2802)	(2706)	(2608)	(2488)	(2365)	(2215)	(2062)	(1875)	(1685)	(1454)	(1218)	(933)	(614)	(199)	264	861

Item	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	Total
1. Cash inflow																
Toll revenue	802	994	1096	1360	1501	1862	2057	2553	2821	3504	3874	4815	5327	6623	7332	51548
Non toll revenue	8	10	11	14	15	19	21	26	28	35	39	48	53	66	73	515
Total cash inflow	810	1004	1107	1373	1516	1881	2077	2579	2850	3539	3913	4863	5380	6690	7405	52063
2. Cash outflow																
Investment cost																2802
Land acquisition																605
DED																32
Construction project cost																2148
Financial administration cost																18
Operation and maintenance (OM)	146	154	164	173	184	195	206	219	232	246	261	276	293	310	329	4802
Routine OM cost	146	154	164	173	184	195	206	219	232	246	261	276	293	310	329	4802
Periodical maintenance cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- every 3 years			0			0			0			0			0	0
- every 5 years					0					0					0	0
- every 10 years					0										0	0
Total cash outflow	146	154	164	173	184	195	206	219	232	246	261	276	293	310	329	7605
3. Net cashflow	664	849	944	1200	1332	1686	1871	2360	2618	3293	3652	4587	5087	6379	7076	44459
Accumulated Net Cashflow	1525	2374	3318	4518	5850	7536	9407	11767	14384	17677	21330	25916	31003	37382	44459	

FIRR (nominal terms)	12.7%
FIRR (real terms)	6.4%

APPENDIX

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- •Screening methodology
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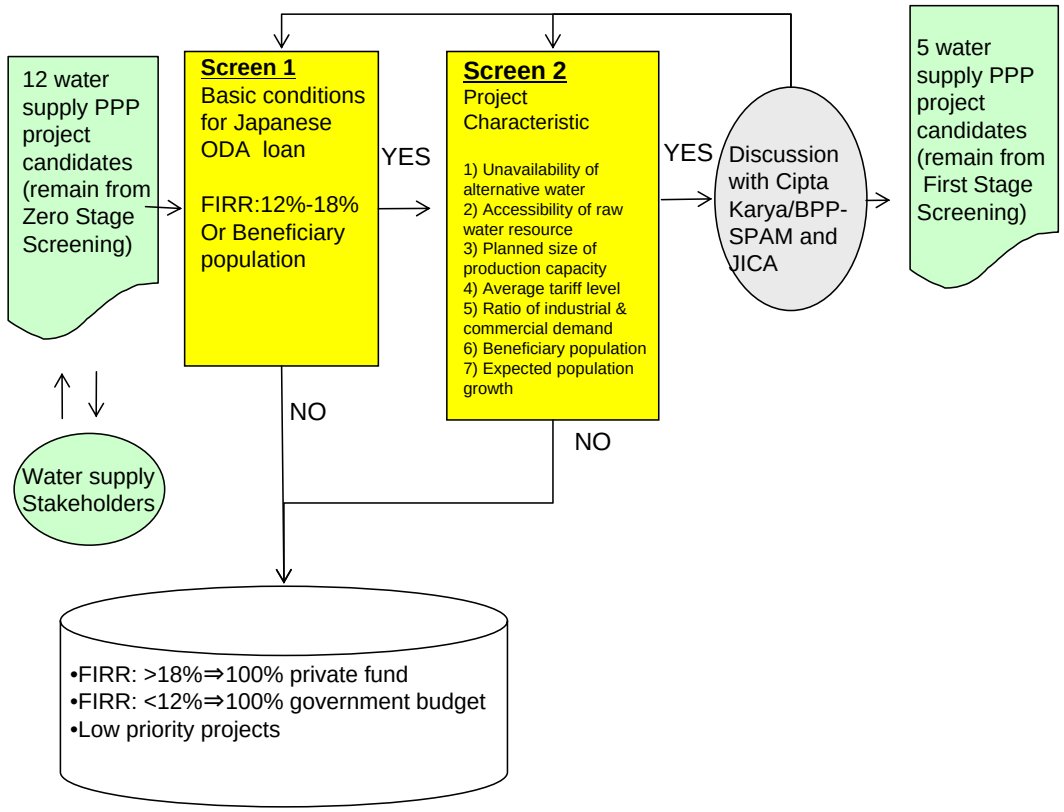
First Stage Screening Overview



Evaluation Criteria at First Stage Screening

Evaluation Criteria	Scoring Rule
Unavailability of alternative water	No alternative water exist= 3 points; Alternative water narrowly exist= 2 points; Alternative water abundantly exist = 1 point
Accessibility to raw water resources	Very Accessible= 3 points; accessible= 2 point; Not accessible= 1 point
Planned size of production capacity	Planned size of production capacity ≥ 1000 L/sec.= 3 points; 500-999 L/sec.= 2 points; < 499 L/sec.= 1 point
Average tariff existing level	Existing Tariff Level ≥ Rp 3,500 per m3 =3points; 2000-3499 per m3 =2points; <1999 per m3 = 1point
Non-domestic retail water demand *1	Non-domestic retail water demand accounts for 10-50% =3Points; <10% = 2points, >50% =1point
Beneficiary population of retail water	Beneficiary population of retail water >1 million =3Points; 0.5-1million = 2points, >0.5 =1point
Population growth	Population growth in served area >3% = 3points; 1-3%= 2points; <1% = 1point

Note: "No data" gets 2points (italicized and underlined). "Not applicable" gets 2points (italicized and double-underlined).
*1: Water supplied by project can be devided into (i) bulk water, (ii) domestic retail water, and (iii) non-domestic retail water.

Second Stage Screening Activity

	Completed	**Planned**
Umbulan	• 5/19, 20 : Field survey (BAPPEDA, PDAB, CIPTA KARYA, Water Resource, Environmental Board, Umbulan spring, F/S Consultant, BPS, water vendor • 6/4: Discussion of PPP modality at CIPTA KARYA	• Data Compilation (-mid June)
JABEKA	• 4/24: Meeting with PAM JAYA re water demand • 5/1: Meeting with the F/S consultant • 5/5, 6: Meeting with industrial water users in Bakasi and Karawang • 5/15: visit to Jatiluhur Dam Authority Meeting with PJT 2 re raw water supply • 6/3: Meeting with the F/S consultant	• Meeting with PALYJA re water demand (mid June) • Data Compilation (-mid June)
West Semarang	• 5/12: Meeting with the F/S consultant • 5/25, 26: Field survey (PDAM, CIPTA KARYA, Bappeda, Water Resource, Water Management Center, F/S consultant, BPS)	• Data Compilation (-mid June)
Bandar Lampung	• 5/28, 29: Field survey PDAM, CIPTA KARYA, Bappeda, BPS)	• Data Compilation (-mid June)
Bandung Regency	• 6/9: Discussion and field survey (Bappeda, CIPTA KARYA, PDAMs	• Field survey (-mid June) • Data Compilation (-mid June)

Multi Criteria Assessment at Second Stage Screening

Evaluation Criteria		Scoring Rule	Weight
1) Necessity	1.1) Growth of per capita GRDP	GRDP per head growth rate >15% = 3points; 10-15% = 2points, <10% = 1point	5%
20%	1.2) Capital cost magnitude in GRDP	Project capital cost / latest GRDP >2% = 3points; 1-2% = 2points, <1% = 1point	5%
	1.3) Distribution component	Out of (i) Intake, WTP, (ii) Transmission, and (iii) Distribution, the capital cost for distribution accounts for more than 30% = 3points; 10-30% = 2 points; less than 10% = 1point	5%
	1.4) Pro-poor consideration	Percentage of population below the poverty line is more than 20% = 3 points; 10-20% = 2 points; less than 10% = 1 point	5%
2) Profitability	2.1) FIRR	Estimated FIRR in real terms is 6-12% = 3 ponts; ≥ 12% = 2 points; < 6% = 1 point	10%
35%	2.2) EIRR	Estimated economic IRR in real terms is more than 24% =3Points; 12-24% = 2points, less than 12% =1point	5%
	2.3) Capital cost	Capital cost is more than Rp 2,000 billion = 3 points; Rp 1,000 - 2,000 billion= 2 points; less than 1,000 billion = 1 point	10%
	2.4) Production capacity	Planned size of production capacity ≥ 5000 l/sec.= 3 points; 1000-4999 l/sec.= 2 points; < 1000 l/sec.= 1 point	10%
3) Implementability	3.1) Raw water securement	100% of planned raw water requirement is secured = 3points; 70-99% = 2 points; less than 70% = 1point	10%
45%	3.2) Technical risk / Readiness	Readiness of project. "Can start design & construction immediately if funds are prepared" = 3 points; "Will take another 1-3 years of preparation" = 2 points; "Will take more than 3 years" = 1 point	10%
	3.3) Government consensus	Consensus among central/provincial/municipal governments and other key stakeholders for project implementation is obtained = 3points; half obtained = 2 points; not obtained = 1point	10%
	3.4) PDAM performance	BPP-SPAM evaluation. Healthy = 3 points; Less healthy = 2 points; Unhealthy = 1 point	5%
	3.5) Impact on living environment	Potential negative impact on living environment. "Very limited and negligible"= 3 points; "Exists but compensation and communication can overcome = 2 points; "Significant and takes time to solve"or worse = 1 point	5%
	3.6) Land acquisition	Timeframe for remaining land acquisition provided that government has reasonable budget to pay for market price. Less than a year = 3 points; 1-3 years= 2 points; more than 3 years = 1point	5%

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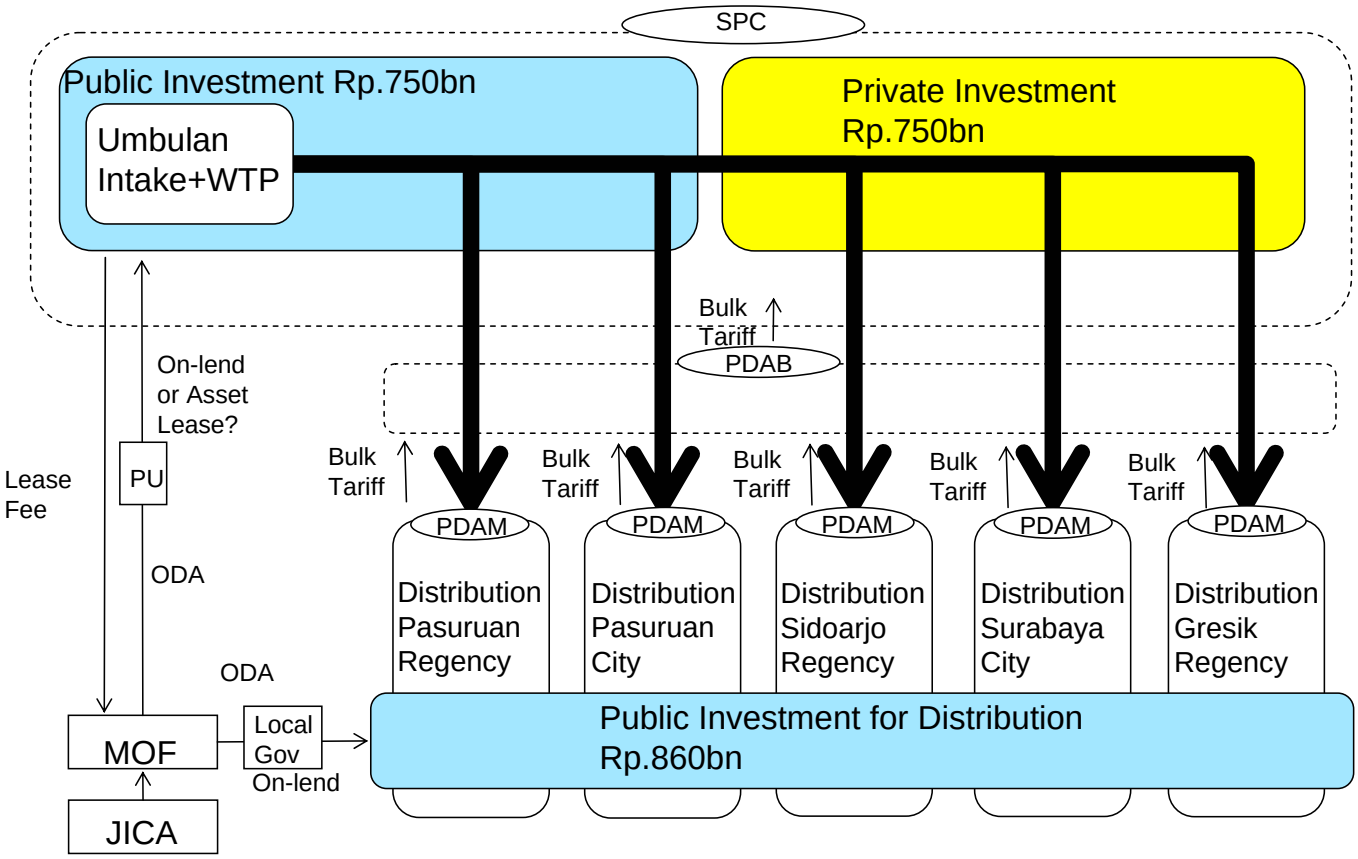
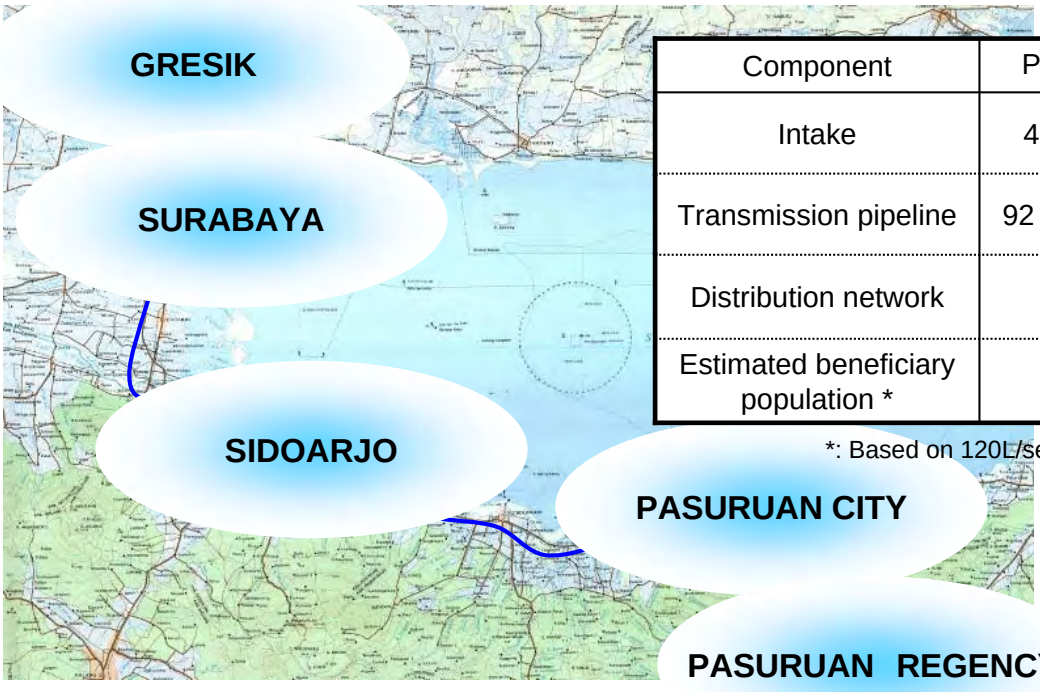
POTENTIAL PPP SCHEME: UMBULAN WATER SUPPLY

Preliminary Example
For Discussion Only

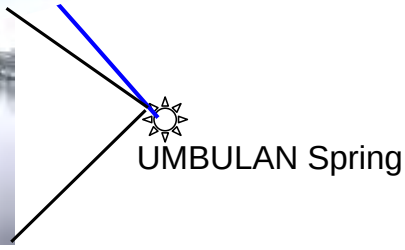


POTENTIAL PPP SCHEME: UMBULAN WATER SUPPLY



Component	Proposed design capacity
Intake	4,000 L/sec, Spring water
Transmission pipeline	92 km (dia. 1,800~1,000mm)
Distribution network	For 883,944 household (by 2015)
Estimated beneficiary population *	2,880,000

*: Based on 120L/sec per capita daily consumption



Umbulan PPP Project Sheet

1. Project Name
   - Country: Indonesia
   - Project Name: Umbulan Water Supply
   - Project Cost: IDR 2,400 billions

2. Project Objectives
   - To provide clean water supply to Surabaya city, Gresik Regency, Sidoarjo regency, and both Pasuruan city and regency, since shortage of raw water for Surabaya, Sidoarjo and Gresik while those areas are prospective developed becoming metropolitan and industries area in future.

3. Project Scope
   - Project Area: Surabaya, Gresik regency, Sidoarjo regency, Pasuruan city and regency
   - Project Components: Intake and disinfectant Plant, bulk transmission pipe and distribution pipeline
   - Project Cost Breakdown (IDR billion): Intake and disinfectant Plant (32), bulk transmission pipe (1,568) and distribution pipeline (860)
   - Institutional Framework:
     - Contracting agency : Governor of East Java Province
     - Relevant Stakeholders : Central Cipta Karya Ministry of Home Affair (MOHA), Province East Java gov't, Provincial Cipta Karya, Provincial PU Water Resources, Surabaya gov't, Gresik regency gov't, Sidoarjo regency gov't, Pasuruan municipal gov't, Pasuruan regency gov't, PDAB, PDAM Surabaya, PDAM Gresik PDAM Sidoarjo regency, PDAM Pasuruan municpal, PDAM Pasuruan regency

4. PPP Modality/Scheme :
   - Vertical split
   - Private portion : Design-Build-Operate-Transfer
   - Public portion : Lease-Operate-Transfer

5. Necessity and Viability of the Project
- Current Issues in Umbulan Water Supply project
  - Organizational and law issues such as central-provincial-local government coordination to improve water supply infrastructure; Umbulan spring water right that legally is managed by province however Pasuruan regency has claimed to be managed under the regency; and regulatory barriers against to private sector participation (e.g. tariff setting degrees of freedom)
  - Operational issues
    - Need increasing coverage services area that is average in those regions 45% to be 65% in 2016;
    - high NRW (Non-Revenue-Water) that is varied on 35% to 46% in 2009 and it is planned to be reduced becoming 30% in 2016;
    - Need concrete plan for extension distribution pipeline to absorption Umbulan water from all operator PDAMs involved

Cont'n of Umbulan PPP Project Sheet

- Performance of PDAMs involved in the project is based on overdue date (Rp.bn) in 2007, are Pasuruan reg. does not have information, Pasuruan ct (22), Sidoarjo reg. does not have it, Surabaya (0.8) and Gresik reg. (14)
- Consistency with Upper Sectoral Plan:
  - To support government program on MDGs in 2016, all 5 regions have gap demand 4,800 l/sec.
  - Umbulan spring water is potency water resources for all 5 regions especially for Surabaya, Sidoarjo, and Gresik as industrial and commercial area that need many clean water while they have problem in shortage of water resources.

6. Risk

Type of Risk	Risk Allocation	
	Government	Private
1. Construction risks:		
a. Cost overrun, delay construction, completion risk		✓
b. Land acquisition	✓	
2. Operation risks:		
a. Raw water shortage quantity & quality risk	✓	
b. Treated water quality risk, system maintenance risk		✓
c. Tariff setting risk	✓	
d. Demand guarantee	✓	
3.Government risks:		
a. Legal risk, change of Law, Economic risk	✓	
b. Currency risk	✓	✓
4. Force majeure:		
a. Natural disaster risk,	✓	✓
b. Civil disturbance risk, political risk	✓	

7.Expected Impact
- Project FIRR :
- SPC FIRR :
- Gov't FIRR :

8.Environmental and Social Considerations

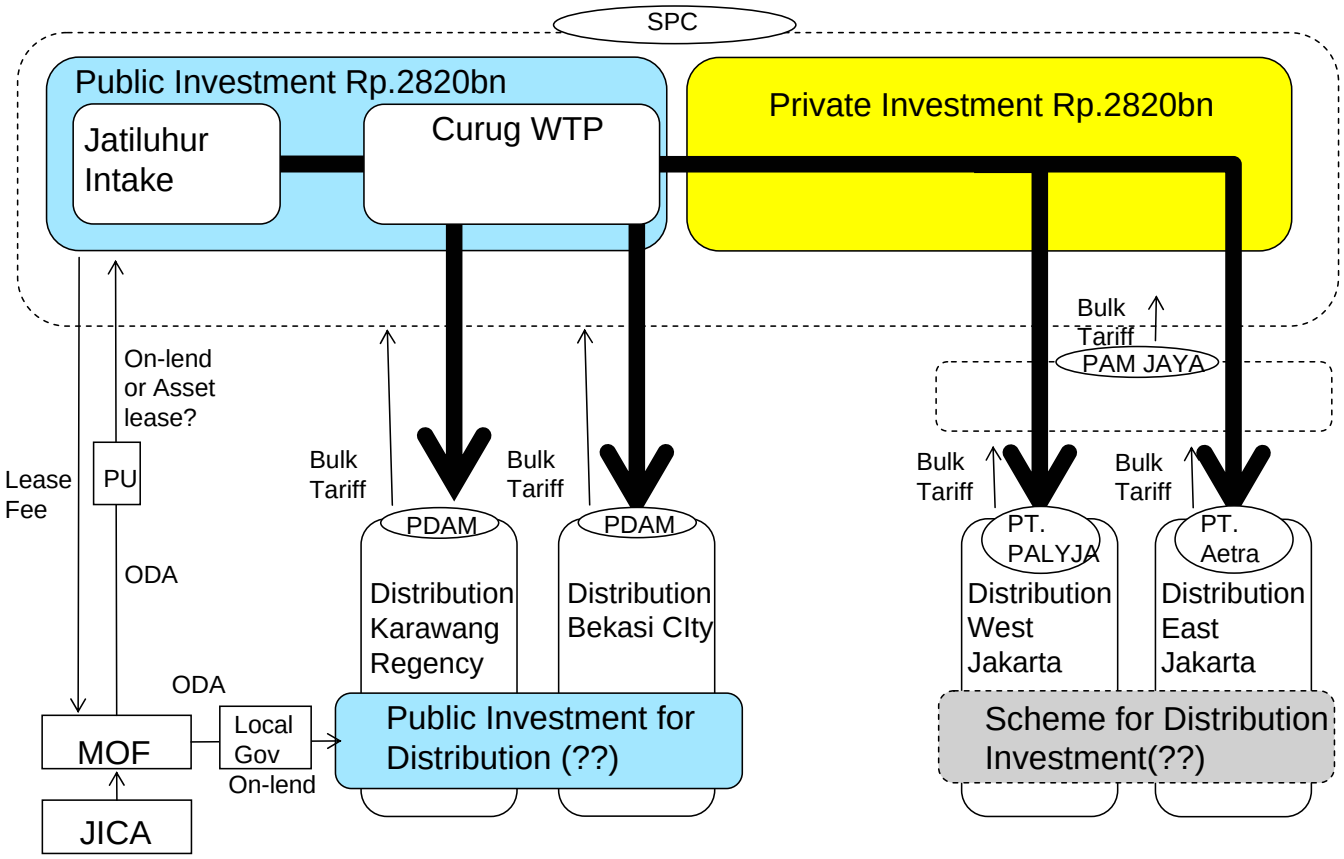
The project takes water from Umbulan spring water that naturally has catchment area in out of Pasuruan regency like as Lumajang regency, Probolinggo regency and Malang regency, the continuity of spring water capacity on Umbulan spring water is depend on activity in the catchment area which should keep forestry vegetations. To avoid the deforest activities, the regions in catchment area should be involved in environmental management.

The transmission pipeline is 92km with various pipe dia. 1000mm to 1800mm, and water capacity intake 4000 l/sec. the project size has beyond the standard required and the project should have EIA document due to the length of the transmission pipe is more than 10 km, intake capacity is more than 250 l/sec. and distribution area plan is more than 500 ha.

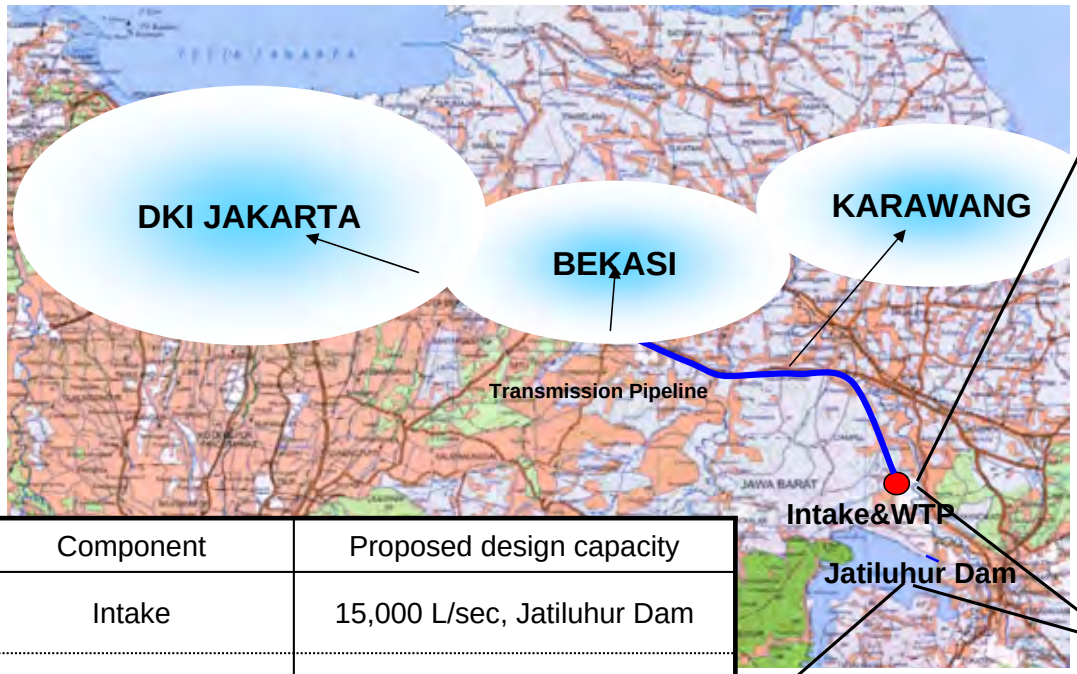
The predicted significant social environmental impact will occur on land acquisition for small part of transmission pipeline (about 16 ha) and public perception on the project during pre construction, construction and post construction phases as well as natural environmental impact in the umbulan spring catchment area. The detail description for environmental and social issues will be obtained on EIA document that currently is not carried out yet.

POTENTIAL PPP SCHEME: JABEKA WATER SUPPLY

Preliminary Example
For Discussion Only



POTENTIAL PPP SCHEME: JABEKA WATER SUPPLY



Component	Proposed design capacity
Intake	15,000 L/sec, Jatiluhur Dam
WTP	15,000 L/sec, Rapid sand filter
Transmission pipeline	58 km (dia. 2,000mm x 2 line)
Estimated beneficiary population *	10,800,000

*: Based on 120L/sec per capita daily consumption

PROJECT SHEET FOR THREE PPP CANDIDATE PROJECTS FOR JAPANESE ODA LOAN FS

Jakarta-Bekasi-Karawang (Jabeka) Project Sheet

1. Project Name
   - Country: Indonesia
   - Project Name: Jakarta-Bekasi-Karawang
   - Project Cost: IDR 3,778 billions

2. Project Objectives
   - To provide clean water supply to Jakarta, Bekasi and Karawang, and to minimize groundwater usage in Jakarta

3. Project Scope
   - Project Area: Purwakarta, Jakarta, Bekasi, Karawang
   - Project Components: Water Treatment Plant, bulk transmission pipe, tapping points and design
   - Project Cost Breakdown (IDR billion): Water Treatment Plant (456), bulk transmission pipe (2,129), tapping points (193) and design (999)
   - Institutional Framework:
     - Contracting agency: Ministry of Public Works
     - Relevant stakeholders: DKI Jakarta, Bekasi municipal gov't, Bekasi regency gov't, Karawang regency gov't, PAM jaya, PDAM Bekasi municipal and regency, PDAM Karawang regency, PT. Palyja, PT. Aetra, PTJ II, PT. Jasa Marga

4.PPP Modality/Scheme :
   - Vertical split
   - Private portion : Design-Build-Operate-Transfer
   - Public portion : Lease-Operate-Transfer

5. Necessity and Viability of the Project
   - Current Issues in Water Supply Sector
     - •<u>Organizational and law issues</u>:
       - Since Jabeka project is unsolicited type, applying President Decree No. 67 regarding PPP project should be confirmed to private side.
     - •<u>Operational issues</u>
       - Need increasing coverage services area that is average in those regions 49% to be 64% in 2015;
       - high NRW (Non-Revenue-Water) that is varied on 32% to 36% in 2009 and it is planned to be reduced becoming 22 to 30% in 2015;
       - Need concrete plan for extension distribution pipeline and improving services (24 hours services, quality and quantity of treated water) from all operator including PAM Jaya (PT. Palyja and PT. Aetra) and PDAMs involved
       - Performance of PDAMs involved in the project is based on overdue date (Rp.bn) in 2007, are PAM Jaya does not have it, Bekasi (54.8) and Karawang (32)
   - Consistency with Upper Sectoral Plan:
     To support government program on MDGs in 2015, Jakarta, both Bekasi municipal and regency and Karawang regency have 23,400 l/sec. gap water demand until 2015 to cover 64% average served area in those regions

Cont'n of Jakarta-Bekasi-Karawang (Jabeka) Project Sheet

6. Risk

Type of Risk	Risk Allocation	
	Government	Private
1. Construction risks:		
a. Cost overrun, delay construction, completion risk		✓
b. Land acquisition	✓	
2. Operation risks:		
a. Raw water shortage quantity & quality risk	✓	
b. Treated water quality risk, system maintenance risk		✓
c. Tariff setting risk	✓	
d. Demand guarantee	✓	
3.Government risks:		
a. Legal risk, change of Law, Economic risk	✓	
b. Currency risk	✓	✓
4. Force majeure:		
a. Natural disaster risk,	✓	✓
b. Civil disturbance risk, political risk	✓	

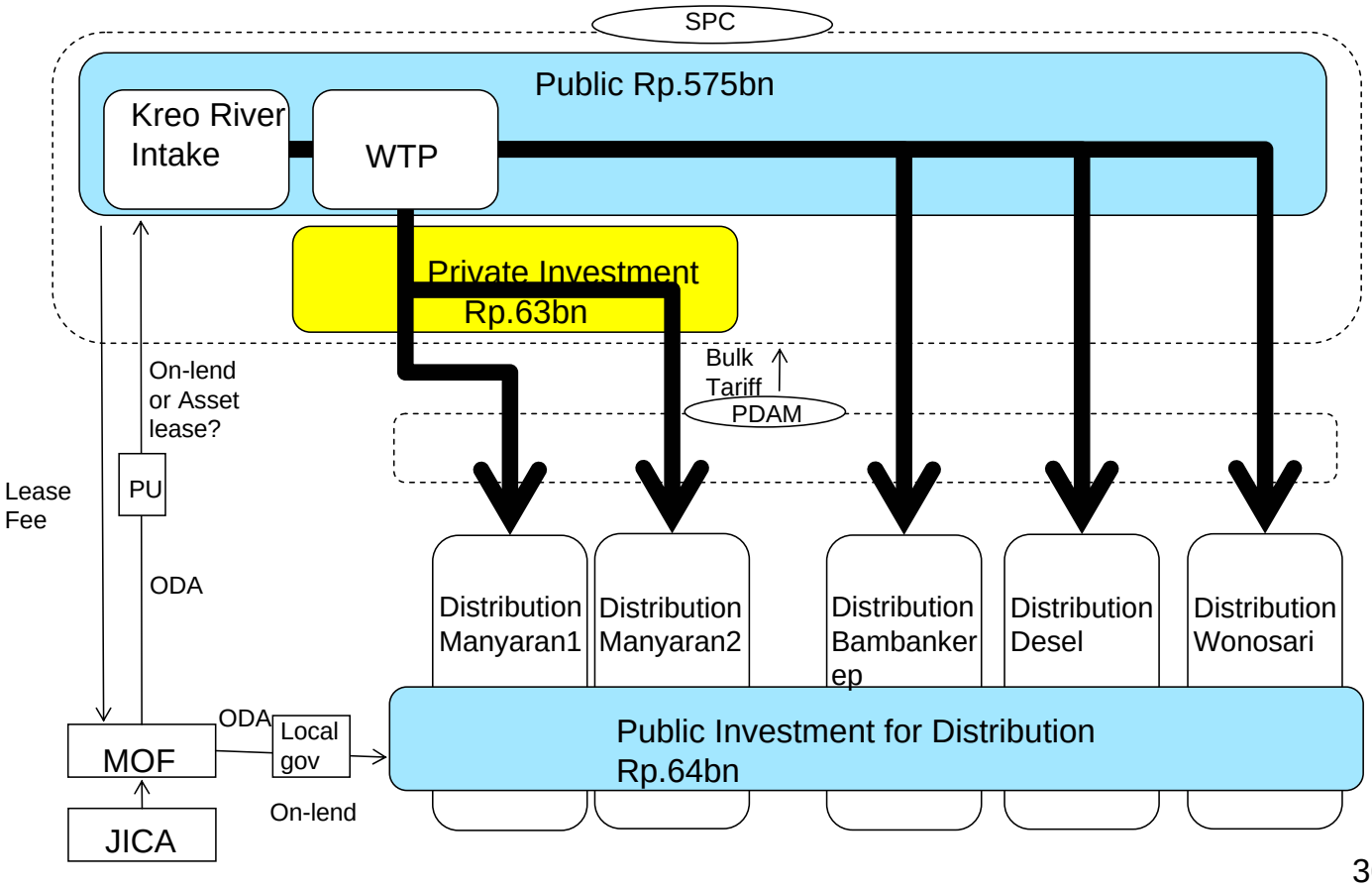
7.Expected Impact
•Project FIRR:
•SPC FIRR :
•Gov't FIRR :

8.Environmental and Social Considerations
Jabeka project has about 60km length of transmission pipeline with dia. 2,000mm and WTP with capacity 15,000 l/sec which will be build adjoining with Curug weir in inundated area. Small part of transmission pipeline will pass public area then the pipe pass toll road that has got permission from PT. Jasa Tirta for utilization the toll line. WTP location will use area owned by PJT II that does not need land acquisition, however the location currently used by people in surrounding for paddy field and some people put fish blanket in the inundated water.
Jabeka project is beyond the standard stipulated in Environmental Ministry regulation no 11/2006, the project should has EIA document due to the length of the transmission pipe is more than 10 km, intake capacity is more than 250 l/sec. and distribution area plan is more than 500 ha.

The predicted significant social environmental impact will occur on land acquisition for small part of transmission pipeline and public perception on the project during pre construction, construction and post construction phases. The detail description for environmental and social issues will be obtained on EIA document that currently is not carried out yet.

POTENTIAL PPP SCHEME: WEST SEMARANG WATER SUPPLY

Preliminary Example
For Discussion Only



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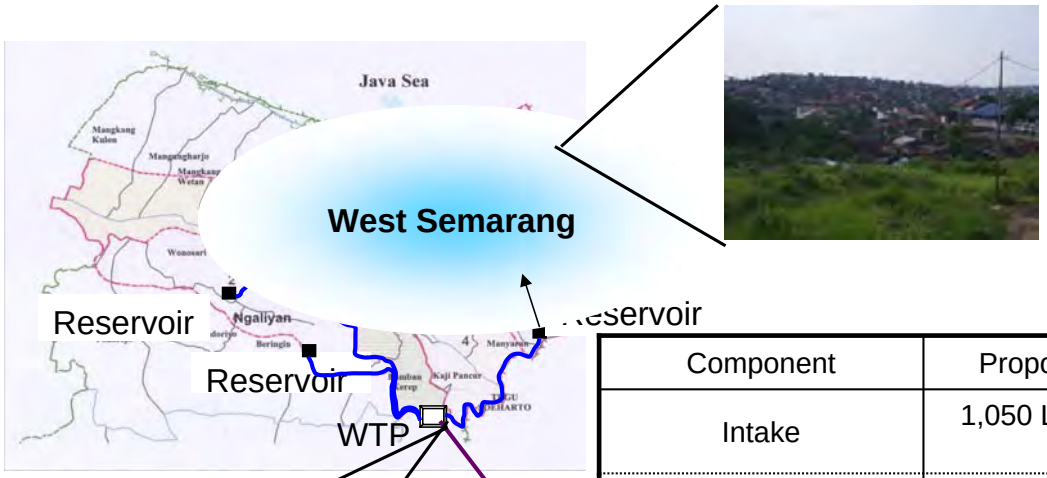

Component	Proposed design capacity
Intake	1,050 L/sec, Semarang Dam (on going project)
Raw water pipeline	2.2 km (dia. 900mm x 2 line)
WTP	1,050 L/sec, Rapid sand filter
Transmission pipeline	3.1 km (dia. 700mm) 9.7 km (dia. 450mm)
Distribution network	84.7 km
Estimated beneficiary population *	720,000

*: Based on 120L/sec per capita daily consumption

West Semarang PPP Project Sheet

1. Project Name
   - Country: Indonesia
   - Project Name: Water Supply Works for the Western Area of Semarang City
   - Project Cost: IDR 824 millions

2. Project Objectives
   - To provide clean water to western area of Semarang City. This piped water supply development is expected can reduce the over exploitation of groundwater which cause land subsidence in the coastal area.

3. Project Scope
   - Project Area: Western area of Semarang City, is defined as area covered by Cabang Barat where comprises 5 Kecamatan (Semarang Barat, Tugu, Ngaliyan, Mijen, and part of Gunungpati)
   - Project Components: Intake-Water Treatment Plant-Transmission, and distribution facilities
   - Project Cost Breakdown (IDR billion): Intake-Water Treatment Plant-Transmission (455), and Distribution Facilities (369)
   - Institutional Framework:
     - Contracting agency: Mayor of Semarang City
     - Relevant stakeholder : Central Cipta Karya, Semarang regency gov't, Semarang City gov't, PDAM Semarang city, Balai Besar Pamali-Juana (water resources management center)

4.PPP Modality/Scheme :
- Vertical split
- Private portion : Design-Build-Operate-Transfer
- Public portion : Lease-Operate-Transfer

5. Necessity and Viability of the Project
   - Current Issues in Water Supply Sector
     - •Organizational and law issues is regulatory barriers against to private sector participation (e.g. tariff setting degrees of freedom)
     - •Operational issues
       - coverage services area that is average in those regions 10% to be 70% in 2017;
       - Performance of PDAM Semarang city that is involved on the project, has Rp. 284 billion overdue date debt in 2007.
   - Consistency with Upper Sectoral Plan:
     To support government program on MDGs in 2015, through west Semarang water supply, house connection will increase about 29,000 connections.

Cont'n of West Semarang PPP Project Sheet

6. Risk

Type of Risk	Risk Allocation	
	Government	Private
1. Construction risks:		
a. Cost overrun, delay construction, completion risk		✓
b. Land acquisition	✓	
2. Operation risks:		
a. Raw water shortage quantity & quality risk	✓	
b. Treated water quality risk, system maintenance risk		✓
c. Tariff setting risk	✓	
d. Demand guarantee	✓	
3.Government risks:		
a. Legal risk, change of Law, Economic risk	✓	
b. Currency risk	✓	✓
4. Force majeure:		
a. Natural disaster risk,	✓	✓
b. Civil disturbance risk, political risk	✓	

7.Expected Impact
- •Project FIRR :
  - •SPC FIRR :
  - •Gov't FIRR :

8.Environmental and Social Considerations

West Semarang water supply takes raw water from Jatigarang weir that is planning to be constructed and will be finished in 2004 for construction and need more one year for impounding water in weir, the weir is basiccally has function for flood control.

The raw water transmission pipe is 2km with dia. 900mm and treated water transmission pipe is 13km with dia 450mm to 900mm. The intake is located adjoining with final solid waste disposal of Semarang at sub-district Bambangkerep. In the location, many scavenger activities, small part of raw water transmission pipeline will pass this location and it is potency to get reaction from the scavenger, while the mostly pipeline will pass along river that is owned by Balai Besar.

the project size has beyond the standard required and the project should have EIA document due to the length of the transmission pipe is more than 10 km, intake capacity is more than 250 l/sec. and distribution area plan is more than 500 ha.

Regarding to the result of EIA conducted by consultant, mostly activities has not significant impact to environmental component which is shown with impact value from negative-small to negative medium.

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Assumptions Used in FIRR Computation

	Umbulan	Semarang	Jakarta, Bekasi, Karawang	Bandung	Lampung
New water production (liter/sec)	4,000	1,050	15,000	1,200	500
Project cost (Rp billion)	2,357	703	5,635	1,060	581
O&M cost (Rp billion/year)	53.6	4 to 7	206 to 441	2 to 5	18.9
Water source in served area					
Well water (%)	20%	20%	0%	20%	20%
Vendor supplied water (%)	10%	10%	0%	10%	10%
Treated (PDAM) water (%)	70%	70%	100%	70%	70%
of which, paid supply (%)	60%	60%	93%	60%	60%
of which, technical loss (%)	20%	20%	7%	20%	20%
of which, commercial loss (%)	20%	20%	0%	20%	20%
Depreciation (# of years- straight line)	40	40	40	40	40
Corporate income tax rate	30%	30%	30%	30%	30%
Water price assumption (Rp/m3)	2,600-3,300	2,700-3,300	2,500	2,400-3,600	3,500-5,000
Current domestic water price (Rp/m3)	2,400	2,500	N/A	2,200	3,200
Affordable based on poverty line* (Rp/m3)	3,238	3,270	N/A	3,516	3,654

* Estimated affordable tariff, assuming 5% of poverty line and water consumption of 120L/cap/day.

Assumptions Used in EIRR Computation

	Umbulan	Semarang	Jakarta, Bekasi, Karawang	Bandung	Lampung
New water production (liter/sec)	4,000	1,050	15,000	1,200	500
Project cost (Rp billion)	2,206.2	658.1	5,274.8	992.5	543.5
O&M cost (Rp billion/year)	50.2	4 to 7	193 to 413	2 to 5	17.7
Water source in served area					
Well water (%)	20%	20%	0%	20%	20%
Vendor supplied water (%)	10%	10%	0%	10%	10%
Treated (PDAM) water (%)	70%	70%	100%	70%	70%
of which, paid supply (%)	60%	60%	93%	60%	60%
of which, technical loss (%)	20%	20%	7%	20%	20%
of which, commercial loss (%)	20%	20%	0%	20%	20%
Well water cost (Rp/m3)	4,000	4,000	0	4,000	4,000
Vendor water cost (Rp/m3)	56,400	145,050	0	59,250	62,400
Average cost of alternative water (Rp/m3)	9,181 to 9,637	19,555 to 19,945	2,500	9,383 to 10,164	10,465 to 11,442

Revised Capital Cost vs Pre-FS Cost

Semarang Project **(Rp million)**

Component	Reviewed Cost	Original Cost
1. Intake, WTP and Transmission	639,536	455,000
2. Distribution system	63,525	369,000
Total	703,061	824,000

JABEKA Project **(Rp million)**

Component	Reviewed Cost	Cost (Pre F/S)
1. Water Treatment Plant (WTP)	1,622,934	456,331
2. Transmission pipe	3,512,552	3,332,279
Total	5,635,435	3,778,610

Umbulan Project **(Rp million)**

Component	Reviewed Cost	Original Cost
1. Intake construction	120,000	32,000
2. Transmission pipe	1,377,000	1,568,000
3. Distribution network	860,000	860,000
Total	2,357,000	2,460,000

Financial Cash Flows of Umbulan Project

(Unit: Rp billion in constant 2009 prices)

Year	Investment *1	Incremental O&M cost	Water tariff (Rp/m3)	Revenue from new water	Depreciation*2	Income tax*3	Net benefits
1	236						(236)
2	707						(707)
3	943						(943)
4	471						(471)
5		54	2,600	197	59	25	118
6		54	2,750	208	59	29	126
7		54	2,900	219	59	32	134
8		54	3,100	235	59	37	144
9		54	3,300	250	59	41	155
10		54	3,300	250	59	41	155
11		54	3,300	250	59	41	155
12		54	3,300	250	59	41	155
13		54	3,300	250	59	41	155
14		54	3,300	250	59	41	155
15		54	3,300	250	59	41	155
16		54	3,300	250	59	41	155
17		54	3,300	250	59	41	155
18		54	3,300	250	59	41	155
19		54	3,300	250	59	41	155
20		54	3,300	250	59	41	155
21		54	3,300	250	59	41	155
22		54	3,300	250	59	41	155
23		54	3,300	250	59	41	155
24		54	3,300	250	59	41	155
25		54	3,300	250	59	41	155
26		54	3,300	250	59	41	155
27		54	3,300	250	59	41	155
28		54	3,300	250	59	41	155
29		54	3,300	250	59	41	155
						FIRR (real terms)=	3.5%
						FIRR (nominal terms*4)=	9.7%

*1: Disbursement takes place in year 1 (10%), year 2 (30%), year 3 (40%), and year 4 (20%). No salvage value is expected at the

*2: Depreciation is straight line at 2.5% p.a. and tax deductible. No salvage value is taken into account at the end of project period, applying conservative policy.

*3: Income tax rate is assumed at 30%.

*4: Nominal FIRR is computed assuming that an inflation of 6% (annual inflation in May 2009) is applied throughout the project

Financial Cash Flows of Semarang Project

(Unit: Rp billion in constant 2009 prices)

Year	Investment *1	Incremental O&M cost	Water tariff (Rp/m3)	Revenue from new water	Depreciation*2	Income tax*3	Net benefits
1	70						(70)
2	211						(211)
3	281						(281)
4	141						(141)
5		12	2,700	27	18	-	15
6		13	2,900	31	18	0	18
7		13	3,100	35	18	1	21
8		14	3,300	39	18	2	23
9		15	3,300	41	18	3	24
10		16	3,300	43	18	3	25
11		16	3,300	45	18	3	26
12		17	3,300	47	18	4	27
13		18	3,300	50	18	4	28
14		19	3,300	52	18	5	28
15		19	3,300	54	18	5	29
16		20	3,300	56	18	5	30
17		21	3,300	58	18	6	31
18		21	3,300	60	18	6	32
19		22	3,300	62	18	7	33
20		23	3,300	64	18	7	34
21		24	3,300	66	18	7	35
22		24	3,300	66	18	7	35
23		24	3,300	66	18	7	35
24		24	3,300	66	18	7	35
25		24	3,300	66	18	7	35
26		24	3,300	66	18	7	35
27		24	3,300	66	18	7	35
28		24	3,300	66	18	7	35
29		24	3,300	66	18	7	35
						FIRR (real terms)=	0.3%
						FIRR (nominal terms*4)=	6.3%

*1: Disbursement takes place in year 1 (10%), year 2 (30%), year 3 (40%), and year 4 (20%).

*2: Depreciation is straight line at 2.5% p.a. and tax deductible. No salvage value is taken into account at the end of project period, applying conservative policy.

*3: Income tax rate is assumed at 30%.

*4: Nominal FIRR is computed assuming that an inflation of 6% (annual inflation in May 2009) is applied throughout the project

Financial Cash Flows of JABEKA Candidate Projects

(Unit: Rp billion in constant 2009 prices)

Year	Investment *1	Incremental O&M cost	Water tariff (Rp/m3)	Revenue from new water	Depreciation*2	Income tax*3	Net benefits
1	564						(564)
2	1,691						(1,691)
3	2,254						(2,254)
4	1,127						(1,127)
5		206	2,500	513	141	50	257
6		324	2,500	807	141	103	380
7		442	2,500	1,100	141	155	503
8		442	2,500	1,100	141	155	503
9		442	2,500	1,100	141	155	503
10		442	2,500	1,100	141	155	503
11		442	2,500	1,100	141	155	503
12		442	2,500	1,100	141	155	503
13		442	2,500	1,100	141	155	503
14		442	2,500	1,100	141	155	503
15		442	2,500	1,100	141	155	503
16		442	2,500	1,100	141	155	503
17		442	2,500	1,100	141	155	503
18		442	2,500	1,100	141	155	503
19		442	2,500	1,100	141	155	503
20		442	2,500	1,100	141	155	503
21		442	2,500	1,100	141	155	503
22		442	2,500	1,100	141	155	503
23		442	2,500	1,100	141	155	503
24		442	2,500	1,100	141	155	503
25		442	2,500	1,100	141	155	503
26		442	2,500	1,100	141	155	503
27		442	2,500	1,100	141	155	503
28		442	2,500	1,100	141	155	503
29		442	2,500	1,100	141	155	503
						FIRR (real terms)=	6.0%
						FIRR (nominal terms*4)=	12.4%

*1: Disbursement takes place in year 1 (10%), year 2 (30%), year 3 (40%), and year 4 (20%).

*2: Depreciation is straight line at 2.5% p.a. and tax deductible. No salvage value is taken into account at the end of project period, applying conservative policy.

*3: Income tax rate is assumed at 30%.

*4: Nominal FIRR is computed assuming that an inflation of 6% (annual inflation in May 2009) is applied throughout the project period.

Financial Cash Flows of Bandung Project

(Unit: Rp billion in constant 2009 prices)

Year	Investment *1	Incremental O&M cost	Water tariff (Rp/m3)	Revenue from new water	Depreciation*2	Income tax*3	Net benefits
1	106						(106)
2	318						(318)
3	424						(424)
4	212						(212)
5		2	2,400	24	27	-	22
6		4	2,600	42	27	4	35
7		5	2,800	64	27	10	49
8		5	3,000	68	27	11	52
9		5	3,200	73	27	12	55
10		5	3,400	77	27	14	59
11		5	3,600	82	27	15	62
12		5	3,600	82	27	15	62
13		5	3,600	82	27	15	62
14		5	3,600	82	27	15	62
15		5	3,600	82	27	15	62
16		5	3,600	82	27	15	62
17		5	3,600	82	27	15	62
18		5	3,600	82	27	15	62
19		5	3,600	82	27	15	62
20		5	3,600	82	27	15	62
21		5	3,600	82	27	15	62
22		5	3,600	82	27	15	62
23		5	3,600	82	27	15	62
24		5	3,600	82	27	15	62
25		5	3,600	82	27	15	62
26		5	3,600	82	27	15	62
27		5	3,600	82	27	15	62
28		5	3,600	82	27	15	62
29		5	3,600	82	27	15	62
						FIRR (real terms)=	2.1%
						FIRR (nominal terms*4)=	8.3%

*1: Disbursement takes place in year 1 (10%), year 2 (30%), year 3 (40%), and year 4 (20%).

*2: Depreciation is straight line at 2.5% p.a. and tax deductible. No salvage value is taken into account at the end of project period, applying conservative policy.

*3: Income tax rate is assumed at 30%.

*4: Nominal FIRR is computed assuming that an inflation of 6% (annual inflation in May 2009) is applied throughout the project

Financial Cash Flows of Lampung Project

(Unit: Rp billion in constant 2009 prices)

Year	Investment *1	Incremental O&M cost	Water tariff (Rp/m3)	Revenue from new water	Depreciation*2	Income tax*3	Net benefits
1	58						(58)
2	174						(174)
3	232						(232)
4	116						(116)
5		19	3,500	33	15	-	14
6		19	3,800	36	15	1	16
7		19	4,200	40	15	2	19
8		19	4,600	44	15	3	22
9		19	5,000	47	15	4	24
10		19	5,000	47	15	4	24
11		19	5,000	47	15	4	24
12		19	5,000	47	15	4	24
13		19	5,000	47	15	4	24
14		19	5,000	47	15	4	24
15		19	5,000	47	15	4	24
16		19	5,000	47	15	4	24
17		19	5,000	47	15	4	24
18		19	5,000	47	15	4	24
19		19	5,000	47	15	4	24
20		19	5,000	47	15	4	24
21		19	5,000	47	15	4	24
22		19	5,000	47	15	4	24
23		19	5,000	47	15	4	24
24		19	5,000	47	15	4	24
25		19	5,000	47	15	4	24
26		19	5,000	47	15	4	24
27		19	5,000	47	15	4	24
28		19	5,000	47	15	4	24
29		19	5,000	47	15	4	24
						FIRR (real terms)=	0.0%
						FIRR (nominal terms*4)=	6.0%

*1: Disbursement takes place in year 1 (10%), year 2 (30%), year 3 (40%), and year 4 (20%).

*2: Depreciation is straight line at 2.5% p.a. and tax deductible. No salvage value is taken into account at the end of project period, applying conservative policy.

*3: Income tax rate is assumed at 30%.

*4: Nominal FIRR is computed assuming that an inflation of 6% (annual inflation in May 2009) is applied throughout the project

Economic Cash Flows of Umbulan Project

(Unit: Rp billion in constant 2009 prices)

Year	Investment *1 *2	Incremental O&M cost *2	Benefit from non-incremental water use	Benefit from incremental water use	Benefit from commercial water loss	Net benefits
1	221					(221)
2	662					(662)
3	882					(882)
4	441					(441)
5		50	347	486	46	830
6		50	351	492	49	841
7		50	355	497	51	853
8		50	360	504	55	868
9		50	365	511	58	883
10		50	365	511	58	883
11		50	365	511	58	883
12		50	365	511	58	883
13		50	365	511	58	883
14		50	365	511	58	883
15		50	365	511	58	883
16		50	365	511	58	883
17		50	365	511	58	883
18		50	365	511	58	883
19		50	365	511	58	883
20		50	365	511	58	883
21		50	365	511	58	883
22		50	365	511	58	883
23		50	365	511	58	883
24		50	365	511	58	883
25		50	365	511	58	883
26		50	365	511	58	883
27		50	365	511	58	883
28		50	365	511	58	883
29		50	365	511	58	883
					EIRR (real terms)=	27.6%

*1: Disbursement takes place in year 1 (10%), year 2 (40%), year 3 (30%), and year 4 (20%).

*2: Conversion factor to economic prices is assumed to be 0.936.

Economic Cash Flows of Semarang Project

(Unit: Rp billion in constant 2009 prices)

Year	Investment *1 *2	Incremental O&M cost *2	Benefit from non-incremental water use	Benefit from incremental water use	Benefit from commercial water loss	Net benefits
1	221					(221)
2	662					(662)
3	882					(882)
4	441					(441)
5		50	347	486	46	830
6		50	351	492	49	841
7		50	355	497	51	853
8		50	360	504	55	868
9		50	365	511	58	883
10		50	365	511	58	883
11		50	365	511	58	883
12		50	365	511	58	883
13		50	365	511	58	883
14		50	365	511	58	883
15		50	365	511	58	883
16		50	365	511	58	883
17		50	365	511	58	883
18		50	365	511	58	883
19		50	365	511	58	883
20		50	365	511	58	883
21		50	365	511	58	883
22		50	365	511	58	883
23		50	365	511	58	883
24		50	365	511	58	883
25		50	365	511	58	883
26		50	365	511	58	883
27		50	365	511	58	883
28		50	365	511	58	883
29		50	365	511	58	883
					EIRR (real terms)=	27.6%

*1: Disbursement takes place in year 1 (10%), year 2 (40%), year 3 (30%), and year 4 (20%).

*2: Conversion factor to economic prices is assumed to be 0.936.

Economic Cash Flows of JABEKA Candidate Project

(Unit: Rp billion in constant 2009 prices)

Year	Investment *1 *2	Incremental O&M cost *2	Benefit from non-incremental water use	Benefit from incremental water use	Benefit from commercial water loss	Net benefits
1	527					(527)
2	1,582					(1,582)
3	2,110					(2,110)
4	1,055					(1,055)
5		193	0	513	0	320
6		303	0	807	0	503
7		413	0	1,100	0	686
8		413	0	1,100	0	686
9		413	0	1,100	0	686
10		413	0	1,100	0	686
11		413	0	1,100	0	686
12		413	0	1,100	0	686
13		413	0	1,100	0	686
14		413	0	1,100	0	686
15		413	0	1,100	0	686
16		413	0	1,100	0	686
17		413	0	1,100	0	686
18		413	0	1,100	0	686
19		413	0	1,100	0	686
20		413	0	1,100	0	686
21		413	0	1,100	0	686
22		413	0	1,100	0	686
23		413	0	1,100	0	686
24		413	0	1,100	0	686
25		413	0	1,100	0	686
26		413	0	1,100	0	686
27		413	0	1,100	0	686
28		413	0	1,100	0	686
29		413	0	1,100	0	686
					EIRR (real terms)=	9.6%

*1: Disbursement takes place in year 1 (10%), year 2 (40%), year 3 (30%), and year 4 (20%).

*2: Conversion factor to economic prices is assumed to be 0.936.

Economic Cash Flows of Bandung Project

(Unit: Rp billion in constant 2009 prices)

Year	Investment *1 *2	Incremental O&M cost *2	Benefit from non-incremental water use	Benefit from incremental water use	Benefit from commercial water loss	Net benefits
1	99					(99)
2	298					(298)
3	397					(397)
4	198					(198)
5		2	46	65	6	115
6		3	78	109	10	193
7		5	109	153	15	273
8		5	111	155	16	278
9		5	112	157	17	282
10		5	114	159	18	287
11		5	115	162	19	291
12		5	115	162	19	291
13		5	115	162	19	291
14		5	115	162	19	291
15		5	115	162	19	291
16		5	115	162	19	291
17		5	115	162	19	291
18		5	115	162	19	291
19		5	115	162	19	291
20		5	115	162	19	291
21		5	115	162	19	291
22		5	115	162	19	291
23		5	115	162	19	291
24		5	115	162	19	291
25		5	115	162	19	291
26		5	115	162	19	291
27		5	115	162	19	291
28		5	115	162	19	291
29		5	115	162	19	291
					EIRR (real terms)=	19.1%

*1: Disbursement takes place in year 1 (10%), year 2 (40%), year 3 (30%), and year 4 (20%).

*2: Conversion factor to economic prices is assumed to be 0.936.

Economic Cash Flows of Lampung Project

(Unit: Rp billion in constant 2009 prices)

Year	Investment *1 *2	Incremental O&M cost *2	Benefit from non-incremental water use	Benefit from incremental water use	Benefit from commercial water loss	Net benefits
1	54					(54)
2	163					(163)
3	217					(217)
4	109					(109)
5		18	50	69	8	109
6		18	50	71	8	112
7		18	52	72	9	116
8		18	53	74	10	119
9		18	54	76	11	123
10		18	54	76	11	123
11		18	54	76	11	123
12		18	54	76	11	123
13		18	54	76	11	123
14		18	54	76	11	123
15		18	54	76	11	123
16		18	54	76	11	123
17		18	54	76	11	123
18		18	54	76	11	123
19		18	54	76	11	123
20		18	54	76	11	123
21		18	54	76	11	123
22		18	54	76	11	123
23		18	54	76	11	123
24		18	54	76	11	123
25		18	54	76	11	123
26		18	54	76	11	123
27		18	54	76	11	123
28		18	54	76	11	123
29		18	54	76	11	123
					EIRR (real terms)=	17.2%

*1: Disbursement takes place in year 1 (10%), year 2 (40%), year 3 (30%), and year 4 (20%).

*2: Conversion factor to economic prices is assumed to be 0.936.

AP3　Executive Summary Charts (Japanese Version)

Japan International Cooperation Agency

インドネシア共和国

官民協調インフラ事業準備調査

チャート集

NIPPON KOEI
Challenging mind, Changing dynamics

PADECO

2009年9月

本調査の背景

•公共インフラ整備は、インドネシア共和国（以下「イ」国）の最優先課題のひとつである

•「イ」国政府は財政負担軽減を考慮し、PPPによるインフラ整備の推進に注力してきた。順調にプロジェクトが実施されれば、民間からの資金調達のみならず、サービスレベルやコスト効率向上のベネフィットも期待されていた

•しかしながら、「イ」国政府の様々な働きかけにも関わらず、実際のPPP案件は遅々として進捗していないのが現状である。民間からの参画が限定的で、たとえ契約締結にまで至っても、実施における多くのボトルネックが介在しているからである。

•この状況においては、現状のボトルネックの全体像を整理し、解決・改善への見通しを立てることが極めて重要である。この解決・改善への道程は、トップダウンのみならず、実際の案件形成の過程の中からボトムアップで着実かつ建設的に進めていく必要がある。

•これらの背景から、本調査はPPPにおける現状と課題をレビューし、有料道路および上水道セクターにおいて具体的な“モデルケース”づくりのプロセスを開始するために立ち上げられた。

本調査の目的および調査対象は以下の設定になっている

調査の目的：

1. PPPインフラ整備事業を取り巻く環境の整理および課題の取りまとめ
2. 必要な技術支援の検討
3. Multi Criteria Analysis(以下MCA)の評価結果に基く、円借款支援を念頭に置いた優先的PPPインフラ整備事業のリストアップ

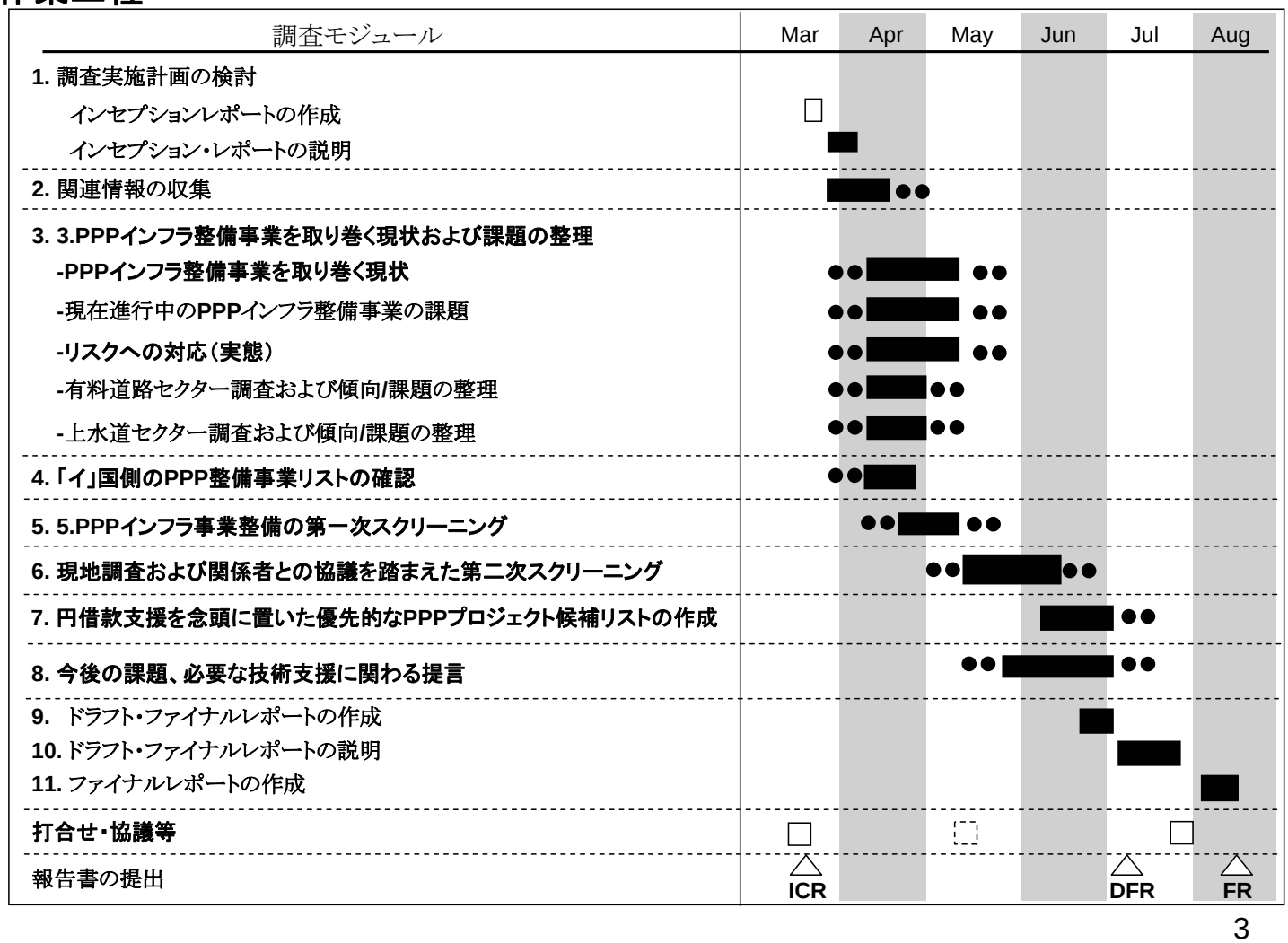
調査対象及び実施機関：

- 対象事業　：道路、上水道
- 責任・実施機関　：公共事業省高速道路総局(Bina Marga)・居住総局(Cipta Karya)
- 関係機関　：経済調整大臣府、財務省、BAPPENAS、KKPPI

調査スケジュール：

- 2009年3月下旬～8月中旬

作業工程



調査結果の要点

PPPをとりまく現状および課題

•「イ」国におけるPPPインフラ開発における投資環境は改善してきているといえる。方針の改善、キャパシティ向上および新しいPPP案件発掘のために、政府主導で継続的な活動がなされてきている。
•しかしながら、具体的案件の進捗は遅く、期待されていた成果からははるかに遠い状況であることが確認された。これは、PPP案件の実施が複雑であり、かつ、課題が多層構造的に絡み合っていることに起因する。具体的には、4つの課題レイヤーが存在： 1)法制度・方針に関する課題、2)システムにまつわる課題、3)組織に関する課題、4)キャパシティーに関する課題

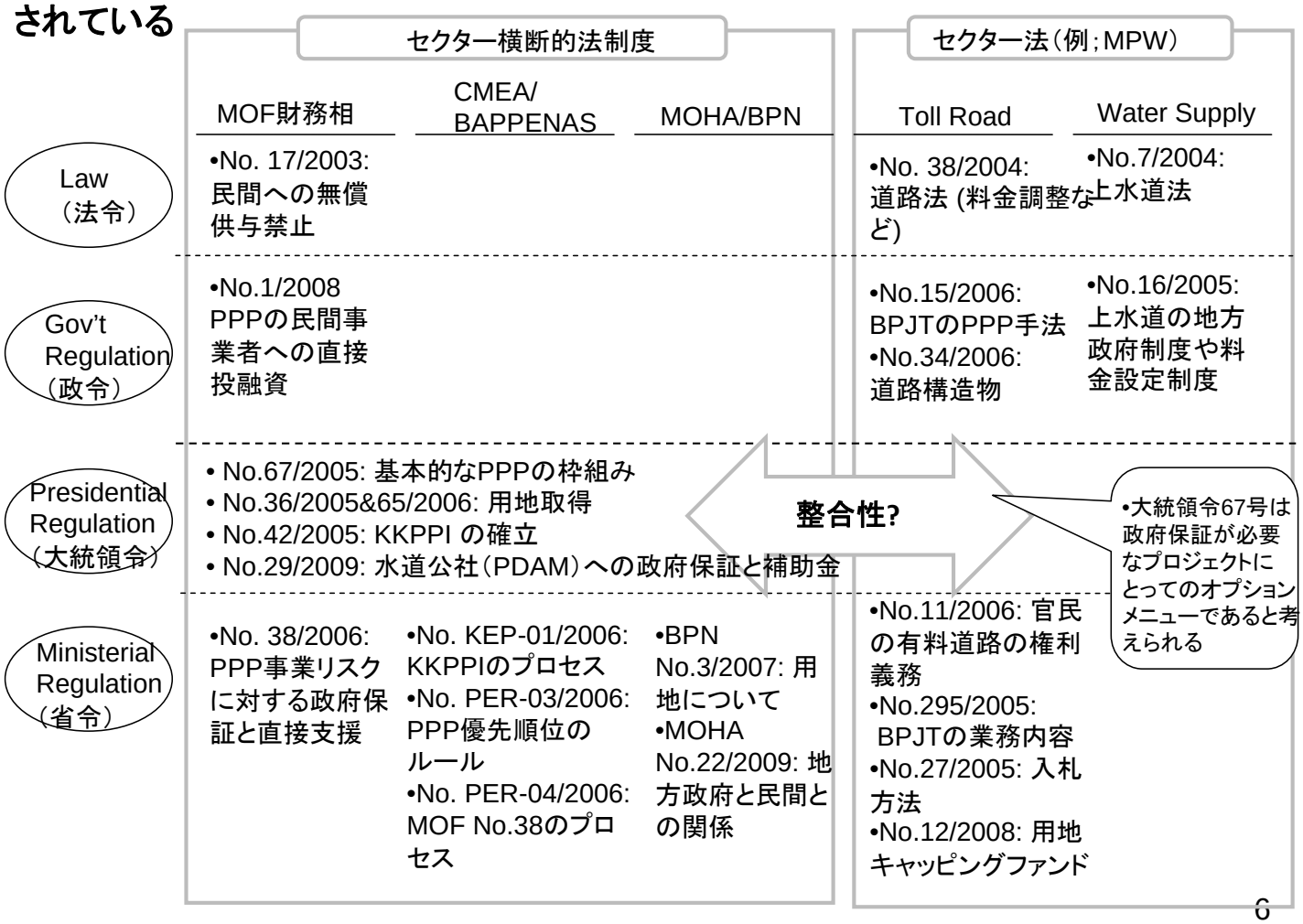
•調査団は、PPP全体の環境を改善するために、この課題レイヤー上に必要なアクションを10のグループに分けて整理した。これらのアクションには、すでに他の関連調査にて提言されている項目も含まれているが、あえて全体像を示した。このことにより、単発的な改善活動を超えた、複数の課題レイヤーに跨る大きな改善の流れが形成されることが望まれる

有料道路PPP案件
•調査団は59のPPP案件候補リストに始まり、最終的には1) Pandaan-Malang, 2) Sukabumi-Ciranjang-Padalarang の2候補案件が選定された。
•PPP案件のモデルケースづくりを成功に導くためには、以下の3つのモジュールを同時並行的に実施することを提案： 1)用地取得組織の拡充、2)BPJTのコアプロセスの再設計、3)選定された案件のPPP-FS調査

PPP water supply
•調査団は53のPPP案件候補リストに始まり、最終的には1) Umbulan Water Supply, 2) West Semarang Water Supply, 3) JABEKA Water Supply の3候補案件が選定された。
•上水道の場合は、PPP FSを実施するための前提条件を形成・確認するための2つのモジュールを選定された案件にて実施することをっ提案：1)PDAM収益改善プログラム、2)ステークホルダー間調整
•このモジュールの実施状況の中で”Go or No-go” を判断し、条件がそろえば、さらに、 3)PPP-FS調査を開始することが望まれる。

目次

「イ」国におけるPPP は、セクター横断的法制度およびセクター法制度により統治されている



PPP事業実施の各段階における課題

	STEP1: 案件発掘とスクリーニング	STEP2: フィージビリティスタディおよび入札準備	STEP3: 資格審査、入札および事業者選定	STEP4: 事業者との交渉および事業契約締結	STEP5: 事業推進管理
主要課題:	•KKPPI提出書類の準備や他省庁との調整能力不足 • Multi-Criteria Analysisを踏襲しないで優先基準が不明	•PPP要求事項とは異なる従来型のF/Sが横行している •入札書類が投資家向けの情報パッケージ*として不十分。特に以下の情報が不足； 1)政府保証と政府補助 2)用地取得状況および見通し 3)PPP形態	•入札前の市場調査欠如 (投資家との双方向コミュニケーション不足) •TOR（入札条件書）はPPPの特徴を反映していない •2envelopeに限定した入札方式は必ずしもすべてのPPPになじまない	•CA（事業契約書）は詳細が欠如しているケースが多く、しかも、サイドレターにて問題を先送りしている場合もある •官民各々がコミットするアクション、期限、ペナルティが不明確である	•明確なプロジェクト進捗モニターシステムがない •CA（事業契約書）は事業進捗を管理するための指標（KPI)を含んでいないケースが多い
	優先基準が不明	***不十分なF/Sと入札準備不足***	***PPP仕立てになっていない***	***具体的アクションを伴う責任にコミットしない***	***プロジェクトマネジメント標準未確立***

*投資家が応札するかどうかの判断材料として、プロジェクトリスク・リターンや実施上の障害などに関する情報を含む

民間投資家は「イ」国政府による入札準備の改善を求めている

聞き取り調査での意見

"パートナーシップの概念は、いままで請負業者との取引に慣れている役人の意識改革が必要でしょう。私は、インドネシアではこれに時間がかかると思いますよ。"

"インドネシアへの投資を考えねばならない理由は何でしょうか。より投資実績の優れた国は他にたくさんあると思いますが。"

→ 「イ」国の投資環境に対するイメージは良くない

"現在のCA（事業契約書）は紳士協定のようなものだ。詳細が詰められていない。とても銀行の融資審査に耐える内容ではない。"

"料金と需要にはコントロール外の要素がある。何らかの政府保証なしでは投資を正当化できない。"

→ 政府支援と実務水準の改善余地は大きい

"もし条件が合えば，我々はインドネシアへの技術移転はもとより投資にも興味がある。"

"もし長期安定的な利益への見通しが立てば、インドネシアのインフラストラクチャー投資は前向きに検討したい。"

→ 条件が整えばポテンシャルはある

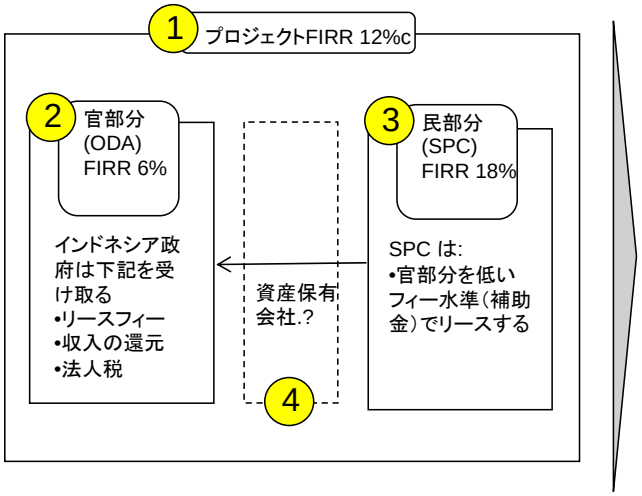
政府の準備作業は、応札判断に必要な信頼性の高い「情報パッケージ」を作成することが鍵

民間投資家の関心事	入札書類の情報にて明確にされるべき質問
このPPP事業に応札し、プロポーザルに労力をかけるべきか？	
リスクとリターンはどの程度か?	**リスク:** •政治リスク、需要リスクや実施リスクなどに対する政府保証への基本合意はなされているのか？ その内容は？ 正式な承認はいつまでに得られる見通しなのか? **リターン:** •投資コストの直接支援に関する政府の基本合意はあるのか? その内容は？ 正式なはいつまでに得られる見通しなのか? •Pre-FSの需要予測はどのような計算仮定によるものか?
プロジェクト実施上の大きな障害はあるか?	**用地:** •政府による用地取得の状況や今後の取得計画・スケジュールはどのようになっているのか? •住民移転数など、実施上の難易度はどうか? **環境:** •何か特筆すべき環境問題はあるか? **ステークホルダー間コンセンサス:** •主なステークホルダー（中央政府関連機関、地方政府関連機関など）は誰か？本プロジェクトの実施に賛成しているのか?

政府は情報の精度を保証する必要はないが、投資家にとって信頼性のある調査結果やファクトを提供することが必要である

官民双方の財源を組み合わせたPPPスキームへの方針は、より明確にされる必要がある

PPPプロジェクトスキームの例



明確にされるべき方針の例

政府保証承認の審査基準	•RMU（リスク管理ユニット）は政府保証承認の際、財務健全性を検討する Q: 財務健全性は①又は②又は③を審査するのか？
転貸承認の必要事項	•上水道に関しては、ODA官部分は地方政府への転貸となることが想定される Q: 転貸承認のためには、②は転貸金利よりも高いリターンが求められるのか?
お金の流れに関する仕組み	•官部分の資産はSPCにリースされる Q: 資産所有の形態は？（④の資産保有会社を設立する?) 資産リースフィーは如何にして政府へ流れるのか? (財務省へ直接?, 又は資産所有会社に留保?)

PPP 実施上の課題は、多層構造的に絡み合っている

	説明	課題
法制度と政策レイヤー	• 「イ」国PPPプロジェクトのガバナンスと制度を定義付ける •セクター横断的な法制度、セクター法、地方政府関連の法制度がある	• 政府保証・直接支援や用地取得などの重要な法制度・政策は、必ずしも明快かつ実践的な内容となっていない
システムレイヤー	•法制度に従った実施を支援するためのガイドラインや各種テンプレート • 情報を記録し共有するシステムなど	•各セクターの特質を踏まえた内容になっていない • 契約機関がアクセスできる実用的な“チェックリスト”がない
組織レイヤー	• 契約機関、レギュレーター、評価委員会、用地取得委員会（PPT,TPT)などを含めたPPPプロジェクト実施に関連する組織	• 契約機関は、PPPの各プロセスが実施できるような体制になっていない • 多くの組織では、責任、権限、インセンティブなどが一貫していない
実施能力レイヤー	• PPPプロジェクトの実施に必要な人材の質と量。適材適所で人材が配置されていることが重要である	• 契約機関スタッフのスキル不足 • P3CUによる支援不在

PPPプロジェクトに関する投資環境の改善に必要な10 項目

法制度と政策レイヤー

1.PPP関連法制度の改正を促進する

-大統領令67/2005の改定; 1)用地は政府の責任のもと準備する、2)政府保証と直接補助の内容改善

-大統領令67号とセクター法・制度との整合性を図る

-大統領令36/2005および65/2006に規定されている用地取得方法の改正

2.民間資金と政府資金を組み合わせたPPPに関する制度を明確にする

3.OGM（大統領令67号の実施要綱）を公式なガイドラインとする

システムレイヤー

4.セクター別にPPP仕立てのテンプレートを完備する

-各セクターの特質を加味したMCA（multi-criteria analysis）テンプレート

-PPP仕立ての:1)pre-FS, 2)入札条件書（TOR）, 3)入札方法, 4)事業契約書（CA） テンプレート

5.入札への「必要条件」を確立する. 例えば,

-政府は定められた最低限の用地取得を完了し、用地目録と用地取得予定を明確にする

-政府保証と直接支援の政府内基本合意を済ませ、正式承認のプロセスと期日を明確にする

組織レイヤー

6.用地取得委員会（PPT）のあり方を改善し、専属実行部隊を設立する

-フルタイムの専門家を配置し、民間へのアウトソーシングも可能にする

-目標達成度（コストと時間）に対する奨励金を与える

-個別訪問による直接的交渉権限を付与する

7.評価委員会を支援する（国際標準のスタッフによる）アドバイザー委員会を立ち上げる

8.P3CU,P3Nodeの活性化 （入札書類や事業契約書をレビューする権限付与など）

実施能力レイヤー

9.契約機関の能力を強化するための大胆な方策を取ること

-法務、財務および事業交渉スタッフを大量採用する

-外部専門家を雇い、継続的なOJTを実施する

10.関係省庁・投資家・金融機関・オペレーターを交えたワークショップを開催する

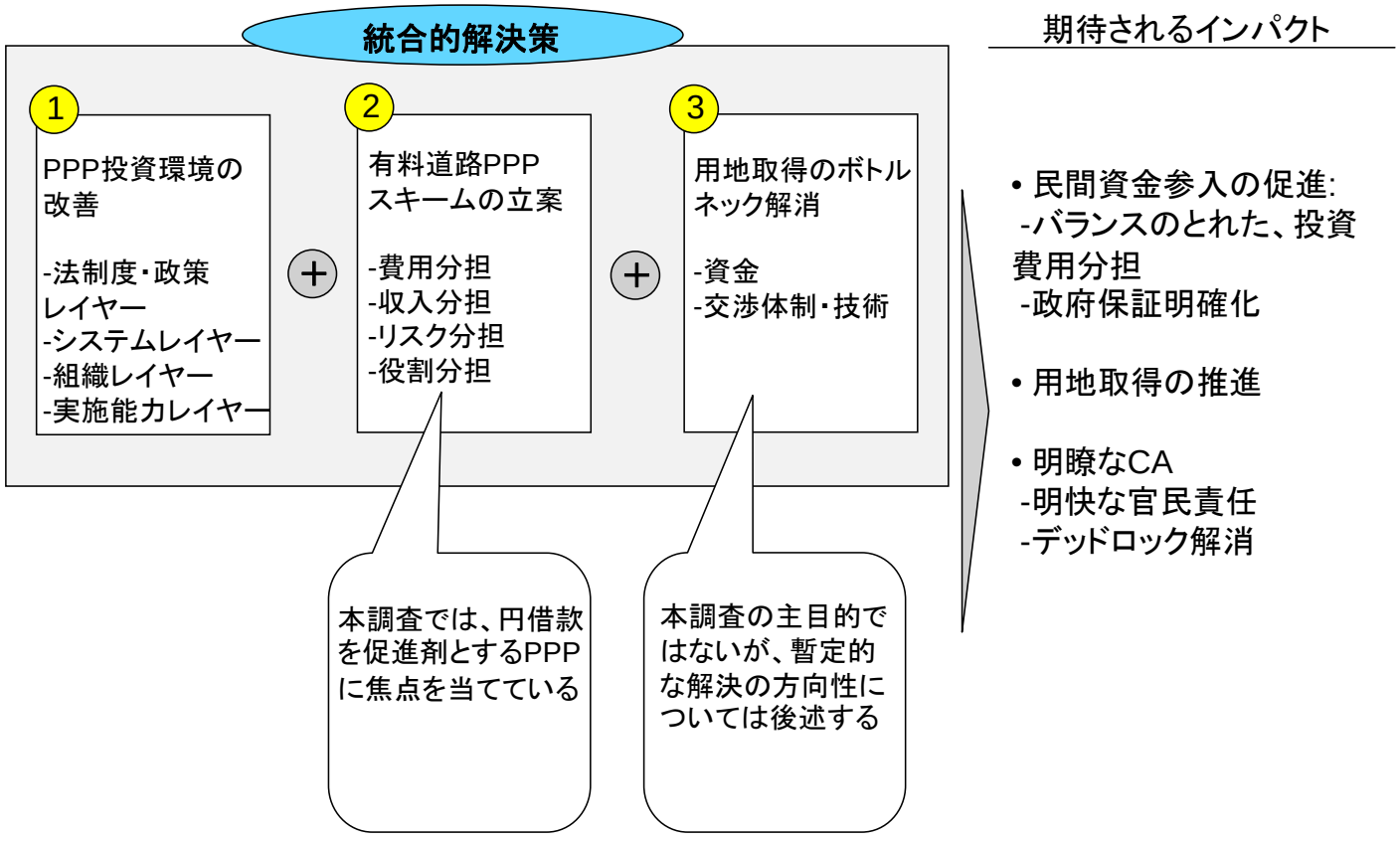
（インドネシア及び海外の成功失敗例を共有するなど ）

目次

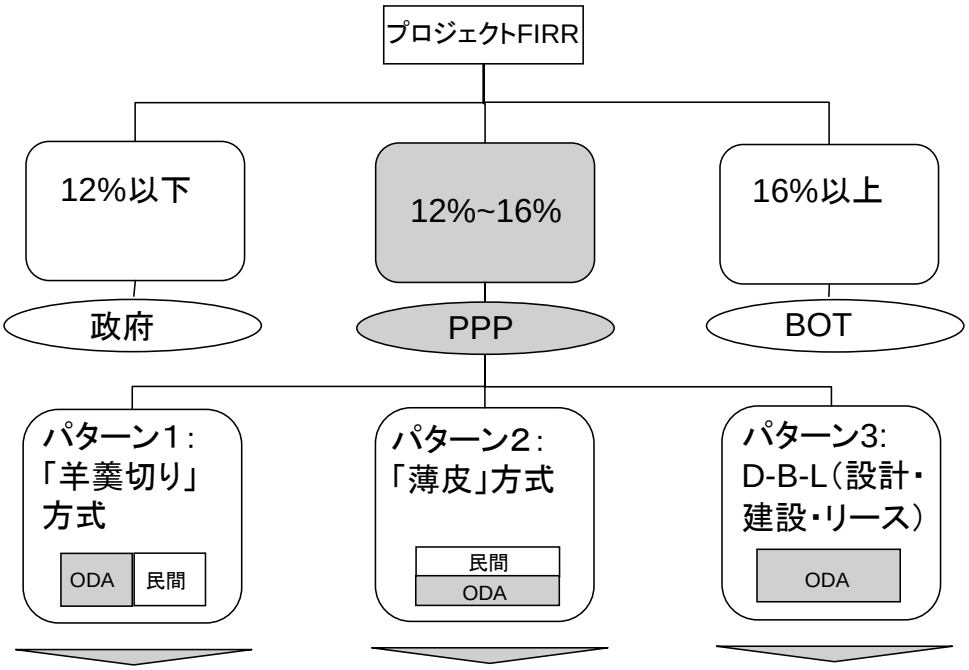
有料道路BOT/PPP事業には構造的な課題が存在している

現状	原因
そもそも応札企業が少ない	• **過度な資金負担**：十分な交通量を得ることができない路線が残されているにもかかわらず、民間に大半の資金負担を強いたため、構造的に応札企業が少なくなってきている • **政府の過少リスク分担**：政府保証の内容が明確でなく、需要リスクをはじめ大半の事業リスクを民間が抱える内容となっていた
たとえ、コンセッション契約まで至っても、プロジェクトがなかなか始まらない	• **用地取得交渉のボトルネック**：用地に関する地方政府の交渉が滞っている。これは、用地取得委員会の仕組みや価格高騰などが原因 • **用地取得資金のボトルネック**：一方、たとえ交渉が成立しても、民間の資金源が枯渇しているケースが多い。銀行保証など、revolving fund運用に必要な書類がそろわないことも課題
しかも、長期間全く始まらないコンセッションを白紙撤回できない	• **双方の契約不履行**：政府としての交渉責任を時間内に果たしていないので、民からの訴訟を恐れている。しかも、民は「座して待つ」姿勢をとり、権利を売るタイミングを計っているようなところもある。そもそもの民選定Qualityにも問題があった可能性がある

有料道路PPPプロジェクトが成功するための統合的解決策



有料道路において、ODAを促進剤とするPPPの形態が検討された

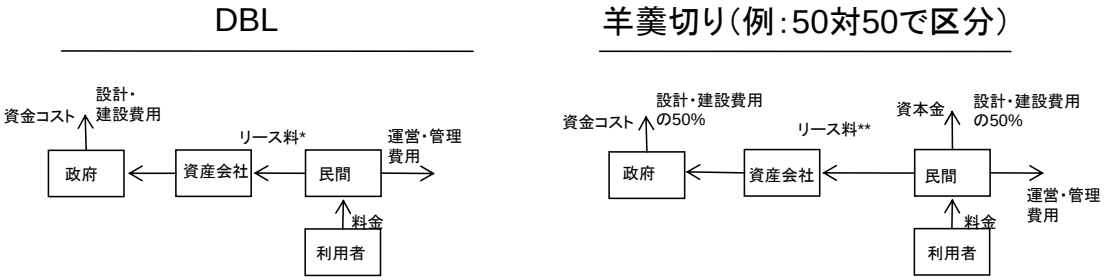


•実用的な方式
•官民双方のスケジュールの歩調を十分に合わせることが必要

•ODA 区間の独立性の条件を満たすことが困難

•実用的な方式
•しかし、政府の借入金に限度があることから、本方式に過度な期待はできない

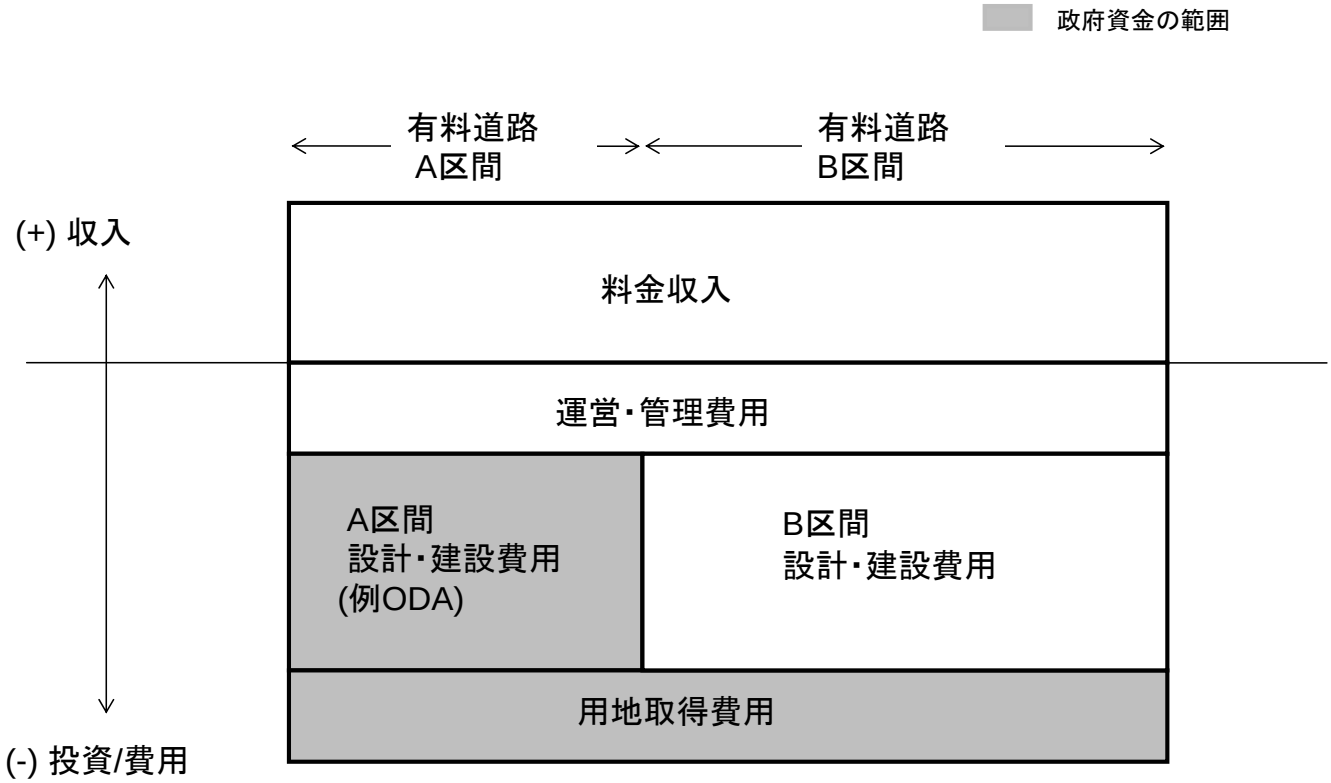
「D-B-L」と「羊羹切り」方式との比較



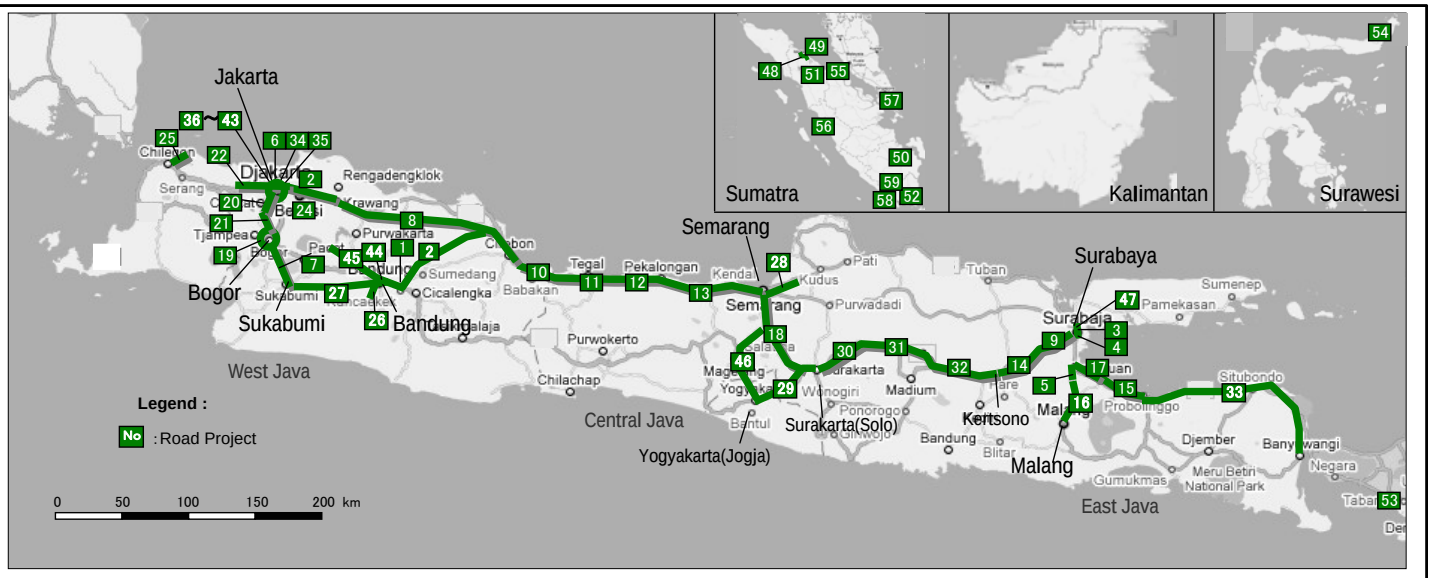
資金:	100%政府	50/50
設計・施工:	100%政府	50/50
運営・管理:	100%民間	100%民間
長所:	•全体の資金コストは小さい •民間の参加が容易	•民間資金が活用される •政府のリスクが小さくなる
短所:	•民間資金が十分活用されない •有料道路網の形成が遅れる •政府が料金収入リスクを負う	•資金コストが高くなる •民間の参加を促す働きかけが必要

* toll- (O&Mcost+profit)
** %of construction cost. 0% could be decided if MOF agrees to 100%direct subsidy

有料道路PPPプロジェクト「羊羹切り」方式における費用内訳



PPP候補案件選定に使用した、初期有料道路プロジェクトリスト



Road Project		
No	Project	
1	Ciranjang - Padalarang Road	*1)
2	Bekasi - Cawang - Kampung Melayu	*1)
3	Waru - Wonokromo-Tj Perak Road	*1)
4	Waru - Tj Perak Stage 1 Road	*1)
5	Gempol - Pandaan Road	*1)
6	Jakarta Outer RR W1	*1)
7	Ciawi-Sukabumi Road	*1)
8	Cikampek-Cirebon Road	*1)
9	Surabaya-Mojokerto Road	*1)
10	Kanci-Pejagan Road	*1)
11	Pejagan-Pemalang Road	*1)
12	Pemalang-Batang Road	*1)
13	Batang-Semarang Road	*1)
14	Kertosono-Mojokerto Road	*1)
15	Pasuruan-Probolinggo Road	*1)
16	Pandaan-Malang Road	*1) *3)

No	Project	
17	Gempol-Pasuruan Road	*1)
18	Semarang-Solo Road	*1)
19	Bogor Ring Road	*1)
20	Depok-Antasari Road	*1)
21	Cinere-Jagorawi Road	*1)
22	Cikarang-Tanjung Priok Road	*1)
23	Cileunyi-Sumedang-Dawuan Road	*1) *3)
24	Makasar Seksi IV Road	*1)
25	Cilegon-Bojanegara Road	*1)
26	Pasir Koja-Soreang Road	*1) *3)
27	Sukabumi-Ciranjang Road	*1) *3)
28	Semarang-Demak Road	*1) *3)
29	Jogja-Solo Road	*1) *3)
30	Solo-Mantingan Road	*1)*2)
31	Mantingan-Ngawi Road	*1)*2)
32	Ngawi-Kertosono Road	*1)*2)
33	Probolinggo-Banyuwangi Road	*1) *3)

No	Project	
34	Jakarta Outer RR-2	*1)
35	Jakarta Outer RR W2 North	*1)
36	Kamal- Teluk Naga- Batu Ceper	*3)
37	Kemayoran- Kampung Melayu	*3)
38	Sunter- Rawa Buaya- Batu Ceper	*3)
39	Ulujami- Tanah Abang	*3)
40	Pasar Minggu- Casablanca	*3)
41	Sunter- Pulo Gebang- Tambelang	*3)
42	Duri Pulo- Kampung Melayu	*3)
43	Tanjung Priyok Access	*3)
44	Terusan Pasteur- Ujung Berung- Cileun	*3)
45	Ujung Berung- Gedebage- Majalaya	*3)
46	Yogyakarta- Bawen	*3)
47	Bandara Juanda- Tanjung Perak	*3)
48	Medan-Kuala Namu-Tebing Tinggi	*1)*2)*3)
49	Medan - Binjai	*1) *3)
50	Palembang - Indralaya	*1) *3)

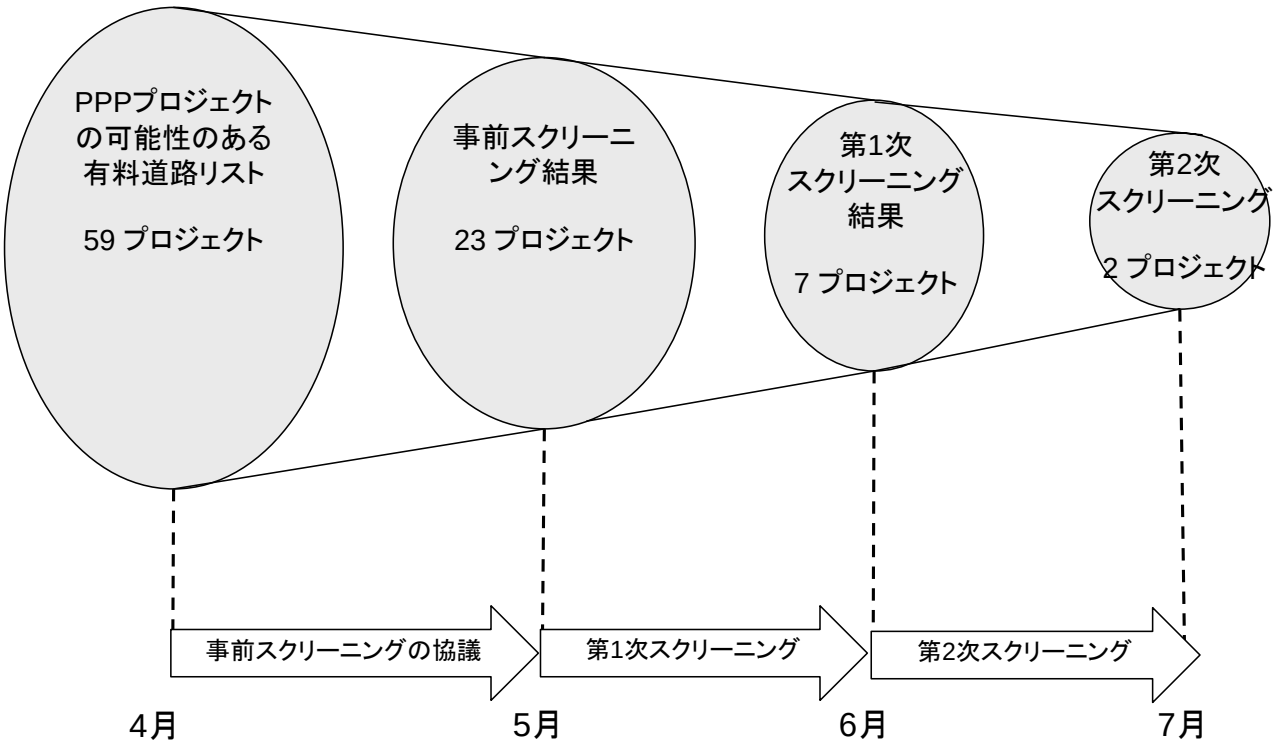
No	Project	
51	Pekanbaru- Kandis- Dumai	*3)
52	Tegginnere - Babatan	*3)
53	Serangang - Tj. Benoa	*3)
54	Menado Bitung	*3)
55	Kisaran-Tebing Tinggi	*3)
56	Bukit Tinggi- Padang Panjang- Lubuk Alung- Pada	*3)
57	Batu Ampar- Muka Kuning- Bandara Hang Nadim	*3)
58	Terbanggi Besar- Menggala- Pematang Panggang	*3)
59	Bakaheuni- Terbanggi Besar	*3)

Source)
- *1) Infrastructure summit 2005
- *2) Infrastructure Conference 2006
- *3) other latest sources (2009)

Ref : Table : Prospective PPP project list (Road)
No.s in the table are correspondent to no.s in the figure

PPP Project (Road) Location Map

スクリーニングの概要 （有料道路）



第1次スクリーニング結果 (23プロジェクトから7プロジェクトを選定)

No.	プロジェクト名	スクリーン1(FIRR)		スクリーン2	スクリーン3
		情報源1	情報源2		
1	Bandara Juanda - Tanjung Perak	13.43 %	15.70 %	★★★★★/★★★★★/★★★★★	★☆
2	Cileunyi - Sumedang- Dawuan	15.64 %	14.12 %	★★★★★/★★★★★/★★★★	★
3	Medan - Kualanamu - Tebing Tinggi	–	11.26 %	★★★★★/★★★★★/★★★★★	
4	Sukabumi - Ciranjang- Padalarang	11.28 %	13.08 %	★★★★★/★★★★★/★★	★
5	Batu Ampar - Mk Kuning - Bandara Hang Nadim	15.03 %	7.78 %	★★★★★/★★★★★/	★★
6	Kamal - Teluk Naga - Batu Ceper	12.89 %	–	★★★★★/★★★★★/★★★	☆
7	Pandaan - Malang	15.20 %	16.09 %	★★★★★/★★★★★/★	
8	Pekanbaru - Kandis - Dumai	15.48 %	9.01 %	★★★★★/★★★★	★★
9	Jogja - Solo	–	16.73 %	★★★★★/★★★★★/	
10	Probolinggo - Banyuwangi	12.39 %	10.63 %	★★★★★/★★★★★/	
11	Bakauheni - Terbanggi Besar	–	–	★★★★★/★★★★★/	
12	Palembang - Indralaya	16.70 %	15.57 %	★★★★★/★★★★	
13	Semarang - Demak	–	10.99 %	★★★★★/★★★★	
14	Manado - Bitung	–	9.66 %	★★★★★/★★★	★
15	Bakauheni - Terbanggi Besar(Tegineneg-Babatan)	13.32 %	15.48 %	★★★★★/★★★	
16	Jogja - Bawen	–	15.13 %	★★★★★/★★★	
17	Terbanggi Besar - Menggala - Pmtg Panggang	5.91 %	–	★★★★★/★★	
18	Kisaran - Tebing Tinggi	5.08 %	–	★★★★★/★★	
19	Bkt Tinggi - Pdg Panjang - Lbk Alung - Padang	–	–	★★★★★/	
	Medan - Binjai	14.95 %	15.98 %	(15.80km)	
	Cilegon - Bojonegara	–	12.05 %	(15.69km)	
	Pasirkoja - Soreang	15.66 %	11.88 %	(9.8km)	
	Serangan - Tanjung Benoa	–	6.93 %	(9.0km)	

4プロジェクトは「羊羹切り」を想定した場合、延長が短いことから第1次スクリーニングにおいて落とした。

第2次スクリーニング結果 (8案件→3案件)

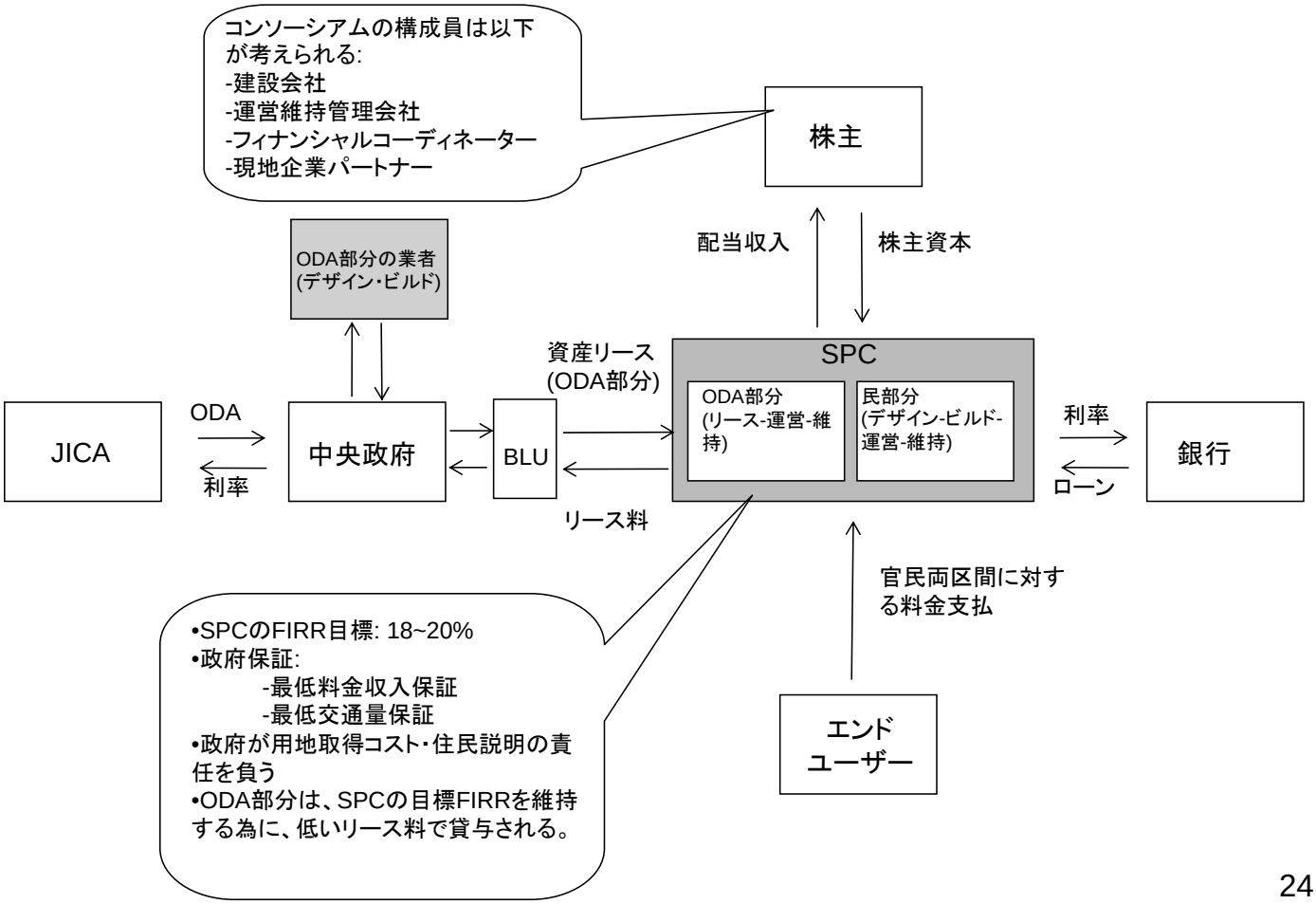
種類	評価指標	ウェイト	Pandaan-Malang	Sukabumi - Padalarang	Bandara Juanda-Tj. Perak	Pekambaru-Dumai	Batu Ampar-Muka Kuning-Hang Nadim	Cileunyi-Dawuan	**Jogja-Solo*** **
必要性 (45%)	EIRR	**10.0%**	2	3	2	1	2	2	2
	地方政府における優先順位	**8.0%**	2	2	2	3	2	3	2
	セクター内（中央政府）での優先順位	**10.0%**	2	2	2	3	1	2	2
	農林水産業・鉱工業への貢献（5項目に細分化）	**10.0%**	1.4*	2.0	2.4	2.2	2.2	1.8	1.4
	技術移転の可能性	**7.0%**	1	3	3	1	2	3	2
採算性 (25%)	FIRR(Project FIRR)	**12.0%**	3	3	2	1	1	2	3
	交通需要の過去の傾向 (2項目に細分化)	**8.0%**	2.0*	1.5	2.0	2.0	2.5	1.5	2.5
	交通需要における潜在リスク(接続性、ボトルネック)	**5.0%**	3	1	2	3	3	3	3
実行性 (30%)	建設時のリスク	**3.0%**	2	2	2	2	3	1	2
	地方政府の財務能力	**4.0%**	2	1	2	3	2	1	2
	用地境界内の売買制約I (SP2LP)	**4.0%**	3	2	2	2	2	3	2
	用地取得の難易性	**4.0%**	3	2	1	2	3	3	1
	自然環境へのインパクト	**4.0%**	3	3	3	2	3	3	2
	社会環境へのインパクト	**5.0%**	3	1	2	3	3	1	1
	羊羹切りを考慮した場合の民間投資の適切性	**6.0%**	3	3	2	1	1	3	3
重み付けを考慮したスコア			**2.27**	**2.21**	**2.11****	**1.99**	**1.99**	**2.20****	**2.12**

*note : 細分化された各アイテムの平均値を示す。
**note: Cileunyi- Dawuan および Bandara Juanda –Tg.Perakは他ドナーによるサポートや道路総局の入札方針により、最終候補としては提案しない
***note: Jogja-Soloについては、上記の2路線を除外後に追加を行ったものである

有料道路PPP候補案件の概要

	区間延長および事業費	位置および案件の役割	プロジェクトの特徴
パンダアン-マラン	**37km 3,478 bil Rp**	1) スラバヤとマランを結ぶ有料高速道路路線の一部。 2) スラバヤとマラン地域、南部海岸部を結ぶ物流および観光ルートとしての役割	1) なだらかな丘陵地および平地を通過する路線。移転対象家屋数が少ないことが特徴 2) 技術的な難易度は平易であり、高度な技術導入は予想されない。
スカブミ-チランジャン-パダララン	**64km 5,785 bil Rp**	1) スカブミを経由して、ジャカルタとバンドゥンを結ぶ路線の一部。 2) ジャカルタへの物流ルート 3) 既存国道沿線で発生している交通渋滞緩和に寄与する 4) 現在供用中のジャカルターバンドゥン路線（チカンペックーパダララン）の代替路線としての性格ももつ	1) 耕作地域/丘陵地域を通過する路線。移転対象戸数が候補路線中比較的多く、社会配慮が必要である。 2) 区間終点側（バンドン側）で急な縦断勾配を使用しており、見直しが必要である 3) 長支間橋梁およびトンネルの適用可能性がある
ジョグジャーソロ	**41km 2,928 bil Rp**	1) ジャワ縦貫道のソロからジョグジャを結ぶ有料高速道路。 2) ジョグジャへの観光、ソロ-ジョグジャ間の通勤を目的とした交通が多く利用する。	1) 国内有数の穀倉地帯を通過することで農業省との協議に難航が予想される。 2) 近接するプランバナン遺跡群と計画路線とは調整がなされている。

関係組織間の資金フローの例（有料道路）



有料道路最終候補案件のPPPスキーム財務シミュレーション

Sukabumi-Ciranjang-Padalarang

事業費:Rp 5,785 billion
Project FIRR 12%

		Public Private Ratio					
		25 : 75		50 : 50		75 : 25	
		SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR
Lease Fee	4%	12.20%	10.40%	13.70%	9.40%	16.60%	8.90%
	2%	12.60%	9.50%	14.80%	8.00%	19.30%	7.10%
	1%	12.80%	9.00%	15.40%	7.20%	20.60%	6.10%
	0%	13.00%	8.50%	15.90%	6.40%	22.00%	5.10%

Pandaan-Malang

事業費: Rp 3,478 billion
Project FIRR 13.8%

		Public Private Ratio					
		25 : 75		50 : 50		75 : 25	
		SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR
Lease Fee	4%	15.80%	9.90%	18.30%	9.40%	23.80%	9.10%
	2%	16.20%	9.20%	19.50%	8.20%	26.70%	7.60%
	1%	16.40%	8.80%	20.00%	7.60%	28.20%	6.80%
	0%	16.60%	8.50%	20.60%	6.90%	29.70%	5.90%

Jogja-Solo

事業費Rp 2,928 billion
Project FIRR 12.7%

		Public Private Ratio					
		25 : 75		50 : 50		75 : 25	
		SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR
Lease Fee	4%	14.10%	9.90%	15.80%	9.30%	19.20%	8.90%
	2%	14.40%	9.30%	16.80%	8.30%	21.50%	7.60%
	1%	14.60%	8.90%	17.20%	7.70%	22.80%	6.90%
	0%	14.80%	8.60%	17.70%	7.20%	24.10%	6.20%

用地取得の課題および解決の方向性

	用地境界内における売買制約 (SP2LP)	用地取得資金の準備	住民説明および交渉	法廷での調停
現状:	•用地境界を決定した後に、境界内の用地売買を制限するSP2LPを発行している。	•民間事業者が資金準備をしている •資金調達をサポートするため、land capping fund*/revolving fundを活用している	•TPT（用地取得チーム）が民間からの資金管理を行い、PPT(用地取得委員会)が土地所有者等と交渉をしている •独立した価格審査チームが市場価格および保証価格を算定。	•交渉開始120日後でも解決されない場合、法廷にもちこまれ、当該区間の75%の用地取得または 75%土地所有者の合意 のどちらかを満足すれば、法廷係争中でも建設行為が可能
課題:	•SP2LP発行のタイミングが有効期限を考慮して遅れている	•民間事業者は資金調達に対して積極的ではない、もしくはできない (例: BLUに銀行保証を提出できない等)	•土地所有者が登記されていないことがしばしばある。 •PPTメンバーは非常勤であり、かつ交渉早期解決に有効なインセンティブが設定されていない	•わずか3ケースしか法廷係争の例はない 1)住民説明対象戸数が多く、75%になかなか至らない 2）ローカル政府を説得できない
解決の方向性:	•SP2LPの有効期限を長くするなど、発行のタイミングを早め、価格高騰を未然に防止する	•用地取得は全面的に政府責任とする。(大統領令67の改正)	•PPTによる手法をPR36&65の改正により改善する •経験者による常勤組織を立ち上げ、早期解決へのインセンティブを与え •民間への業務アウトソースも考慮する	•用地取得単位区間をより小さくし、75%の進捗を達成することに集中する

*100% price=(NJOP + Market Price)/2

用地取得の専属組織（NEXCOの例)

用地取得専属組織のスタッフ数

	区間 A	区間 B
計画延長:	14.6 km	21.7 km
予定開通年:	2013	2015
土地所有者数:	650	800
直営スタッフ:	6	18
契約スタッフ:	26	25
合計:	32	43

•リーダーは10年以上の用地取得業務経験を有する
•サブリーダーは1～10年の用地取得業務経験を有する
•技術専門家（技術士・一級建築士など）や財務・補償専門家（不動産鑑定士・土地家屋調査士など）を含む

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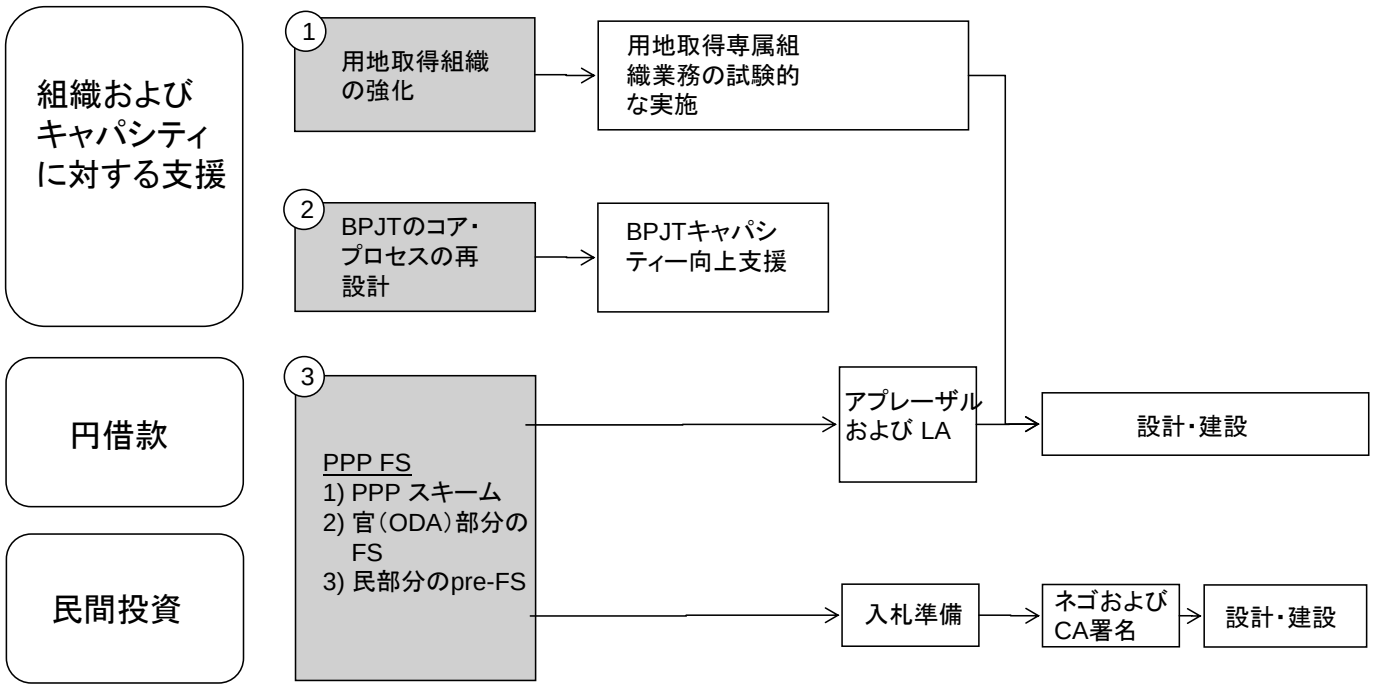
2. 有料道路PPP案件
   - 案件スクリーニング結果
   - 今後の進め方の提案

3. 上水道PPP案件
   - 案件スクリーニング結果
   - 今後の進め方の提案

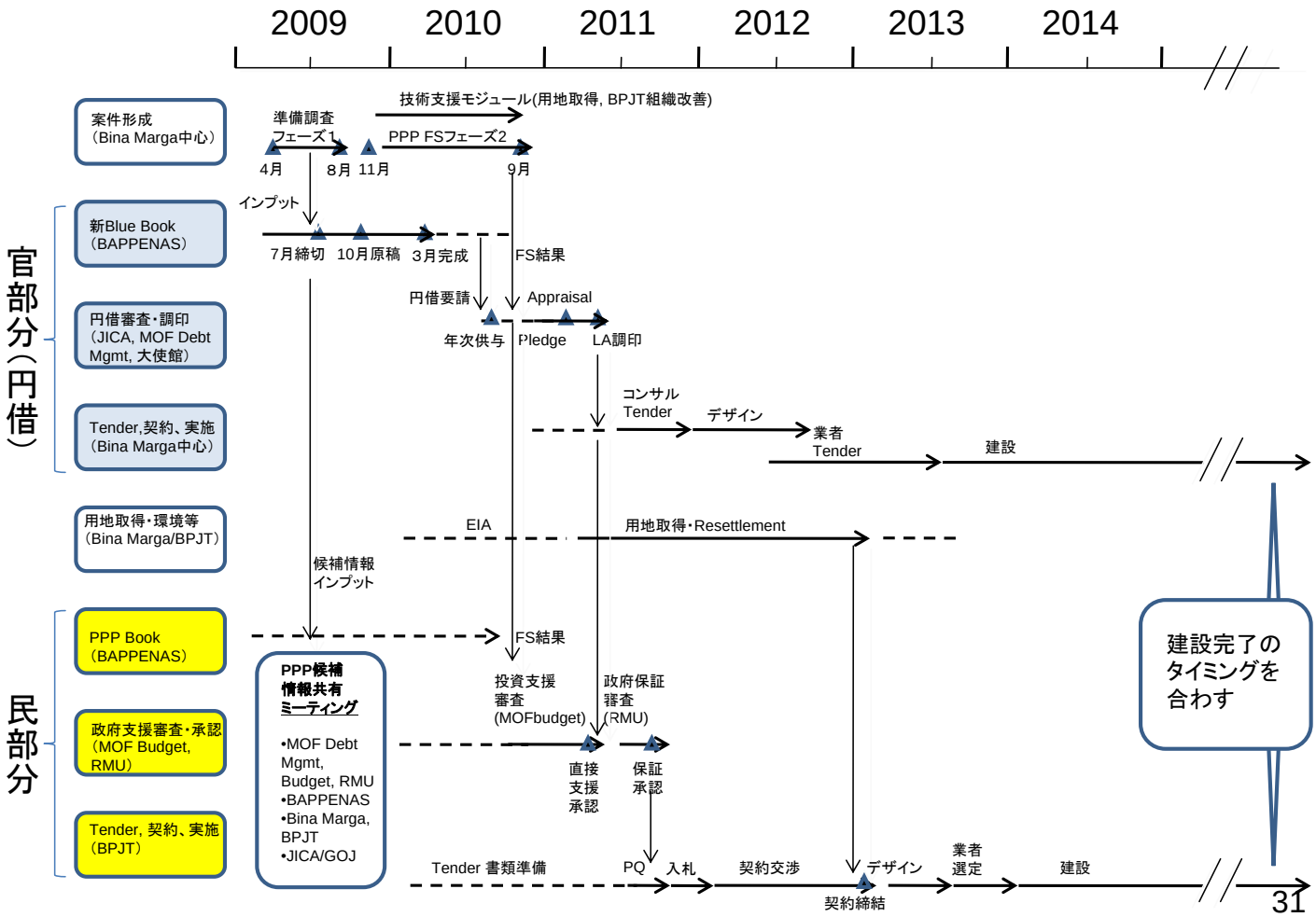
PPP有料道路事業におけるロードマップ



PPP有料道路事業における次期支援内容の提言

	内容	主なアウトプット
1 用地取得組織の強化	• 用地取得の諸外国事例・ベストプラクティスを整理し、既存手法の改善を図る。TPT/PPTの責務とインセンティブなどを含めた体制見直しの提案をおこなう	•小規模な用地取得パイロット組織の立ち上げ
2 BPJTのコア・プロセスの再設計	• PPPプロセスに沿ったBPJTのコアプロセスの再設計。責任と権限、スキルと各プロセスでの評価要件の明確化	•PPPプロセスを実施するために必要な体制が整備されたBPJT組織
3 PPP FS 1) PPP スキーム 2) ODA 部分のFS 3) 民間部分のpre-FS	• **PPP スキーム** 1)民/官比率、2)政府保証と直接支援、3) Project FIRR, SPC FIRR, VfMシミュレーション、4)実施計画などを含んだスキームの詳細設計 • **ODA部分のFS** ODAガイドラインに沿った財務・技術および環境面などのレビュー • **民間部分のpre-FS** 1)入札手法設計、2)民間企業適格性の設計、3)リスク分担、4)CA必要条件、を含む入札準備に必要な基本設計および分析の実施	•ODAローン審査に必要な情報を分析し、整理する •民間企業入札準備に必要な情報を分析し、整理する

“羊羹切り”有料道路PPP案件のスケジュール



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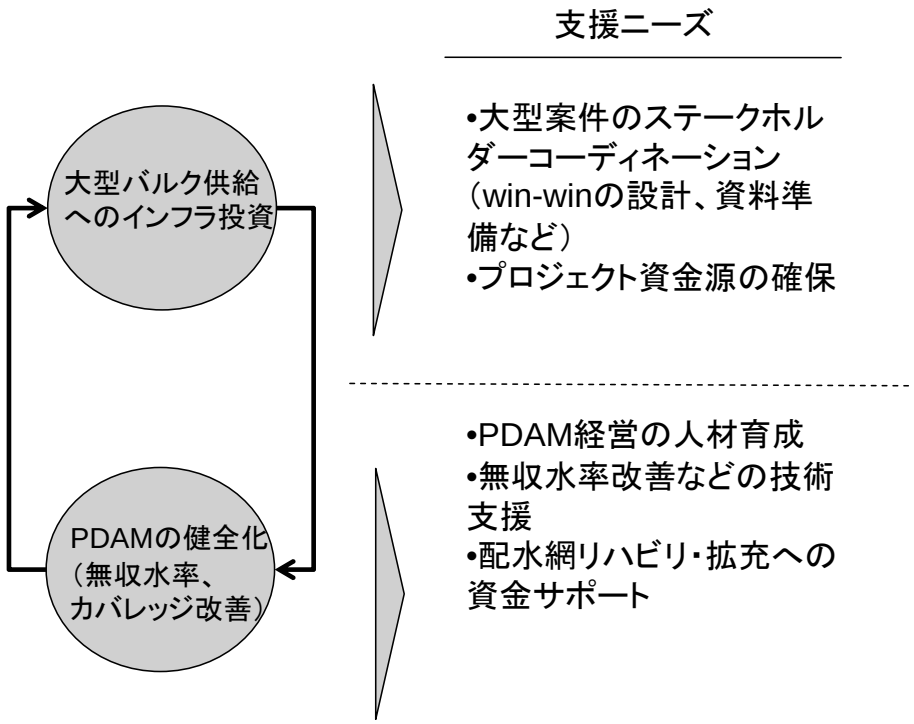
3. 上水道PPP案件
   - 案件スクリーニング結果
   - 今後の進め方の提案

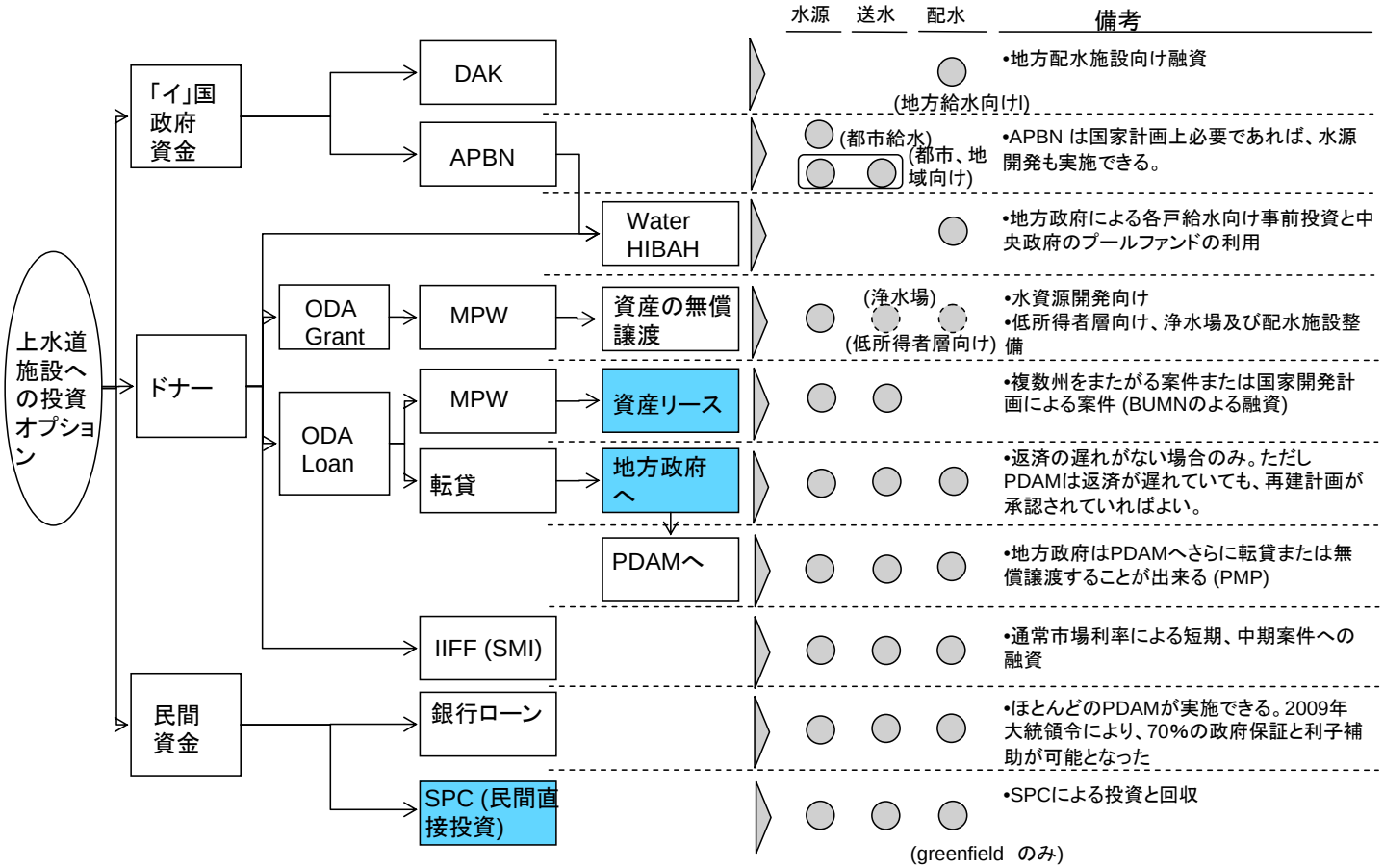
上水道事業には構造的な課題が存在している

現状	原因
PDAMの大半は恒常的な経営赤字。配水網の拡充・リハビリへの投資が滞っており、バルク供給部分のみ増やしても抜本的解決にはならない	• **無収水率30~60%**：漏水、盗水、料金未回収の問題が経営を圧迫 • **料金がコスト以下**：インフレなどに伴う料金改正がなされていないケースが多い。一部地域では地方議会の承認を必要としている。コストは自然上昇するので、赤字幅が悪化 • **経営陣の問題**：一部のPDAMは人材が悪く、経営改善が遅々として進まない • **政府財源が流れない**：中央政府（財務省）は経営改善なしでさらなる財源投入はしない姿勢。地方政府は財源そのものがないところも多い。再建計画の承認を前提とした支援や民間金融補助など、改善のきざしはみられる。
Municipalityの規模では採算ベースに乗りにくい。一方で、規模を追求したPDAM横断的なプロジェクトはステークホルダー調整に時間がかかる	• **地方分権の中で中央と州政府のグリップが効かない**：Municipalityに相当強い権限が与えられており、中央・州は調整出張を続けているのみ • **PDAMごとの料金のちがい**：PDAM横断的なプロジェクトはバルク料金の設定などに時間がかかるので実現の障害になっている

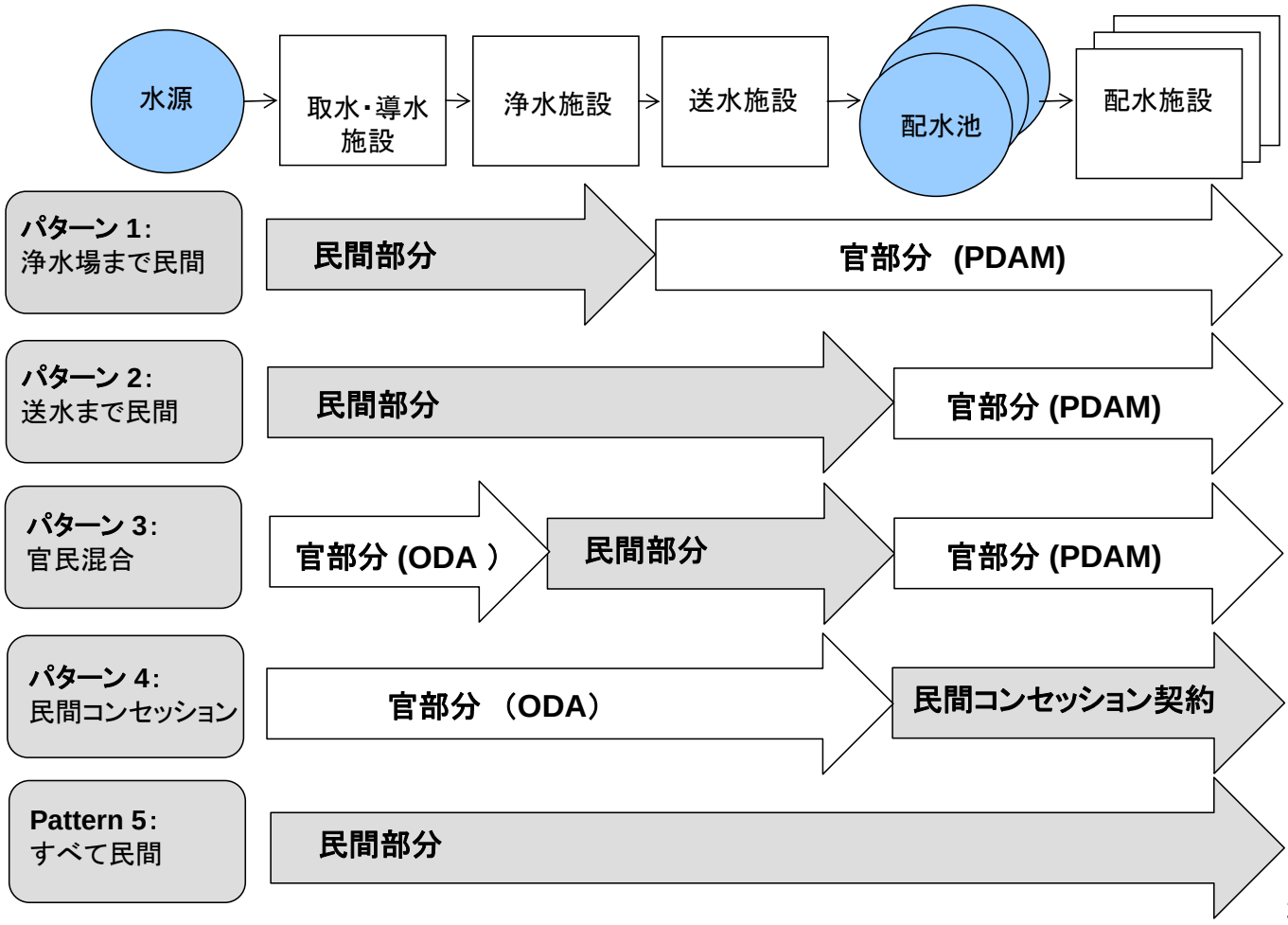
上水道事業は、バルク部分と配水網部分双方へのパッケージ支援が必要



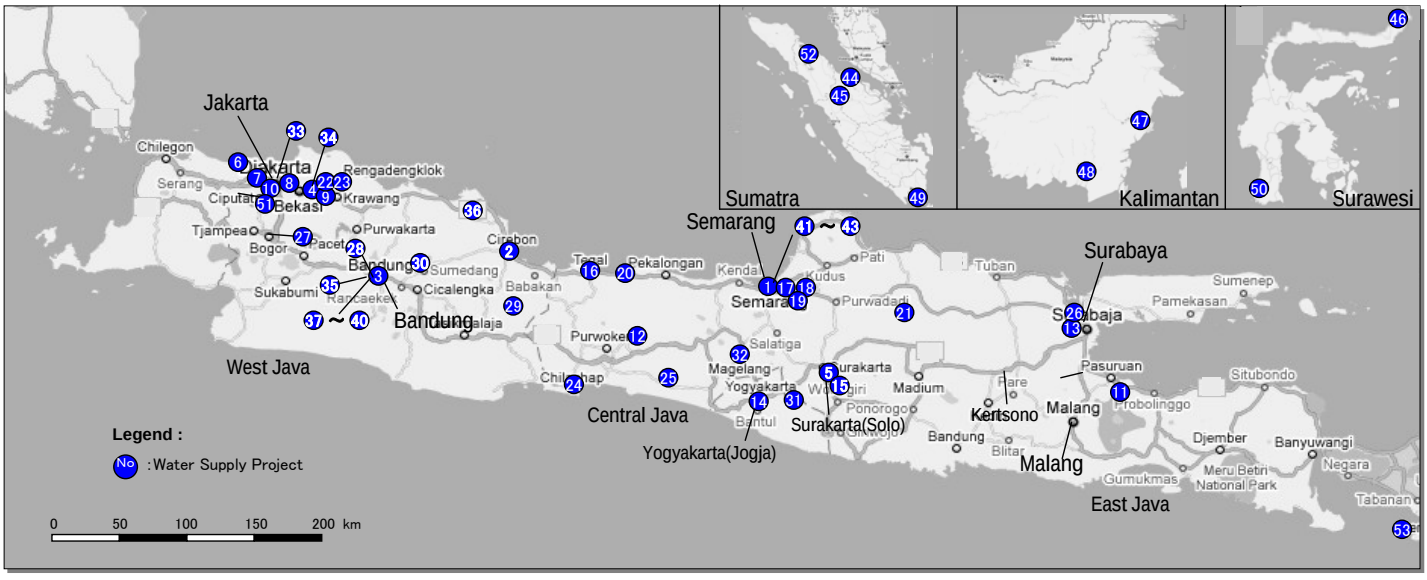
上水道施設への資金フローを明確にする必要がある



上水道PPP形態の多様なパターンが検討された



PPP候補案件選定に使用した、初期上水道プロジェクトリスト



Water Supply Project

No	Project	
1	Uprating WTP Kali Garang Semarang	*1)
2	Cirebon Bulk & Water Supply	*1) *3)*4)
3	Jatinangor Water Supply	*1)
4	Cikarang Water Supply	*1)
5	Pondok Gede Water Supply	*1) *3)*4)
6	Sepatan Water Supply	*1)
7	Ciparens Tangerang Water Supply	*1)*2)
8	Kecamatan Benda & Cengkareng	*1)
9	Cileduk Water Supply	*1)
10	Tanjung Pinang Water Supply	*1)
11	Umbulan Water Supply	*1)
12	Karang Pilang IV Bulk Treated W	*1)
13	Menganti Water Supply	*1)
14	Greater Yogyakarta & Magelang	*1)

No	Project	
15	Surakarta-Sukoharjo Sukoharjo	*1) *4)
16	Tegal Water Supply Water	*1)
17	Regency&City of Semarang	*1)
18	East Semarang New Water Supply	*1)
19	Semarang Raw Water Supply	*1)
20	Pemalang Water Supply	*3)
21	Jambi Water Supply	*3)
22	Munici. Bekasi Water Supply	*3)
23	Regency Bekasi Water Supply	*3)
24	Cilacap Water Supply	*3)
25	Kebumen Water Supply	*3)
26	Gresik Water Supply	*3)
27	Bogor Water Supply	*3)
28	Bandung Water Supply	*2) *4)
29	Subang Water Supply	*3)

No	Project	
30	Sumedang Water Supply	*3)*4)
31	Kanan Water Supply	*2)
32	Magelang-Kartamantul WS	*3)
33	DKI Jakarta- Bekasi- Karawang	*4)
34	West Cikarang & Cibitung Bekasi Rege	*4)
35	Bandung Regency	*3)*4)
36	Indramayu Regency	*4)
37	West Bandung Alt. I- Water Conveyanc	*4)
38	West Bandung Alt. II- Water Conveyan	*4)
39	East Bandung Alt. I- Water Conveyanc	*4)
40	East Bandung Alt. II- Water Conveyanc	*4)
41	Semarang Alt. I- Water Conveyanc	*4)
42	Semarang Alt. II- Water Conveyanc	*4)
43	Semarang Alt. III- Water Conveyan	*4)
44	Dumai Water Supply	*1)*2)

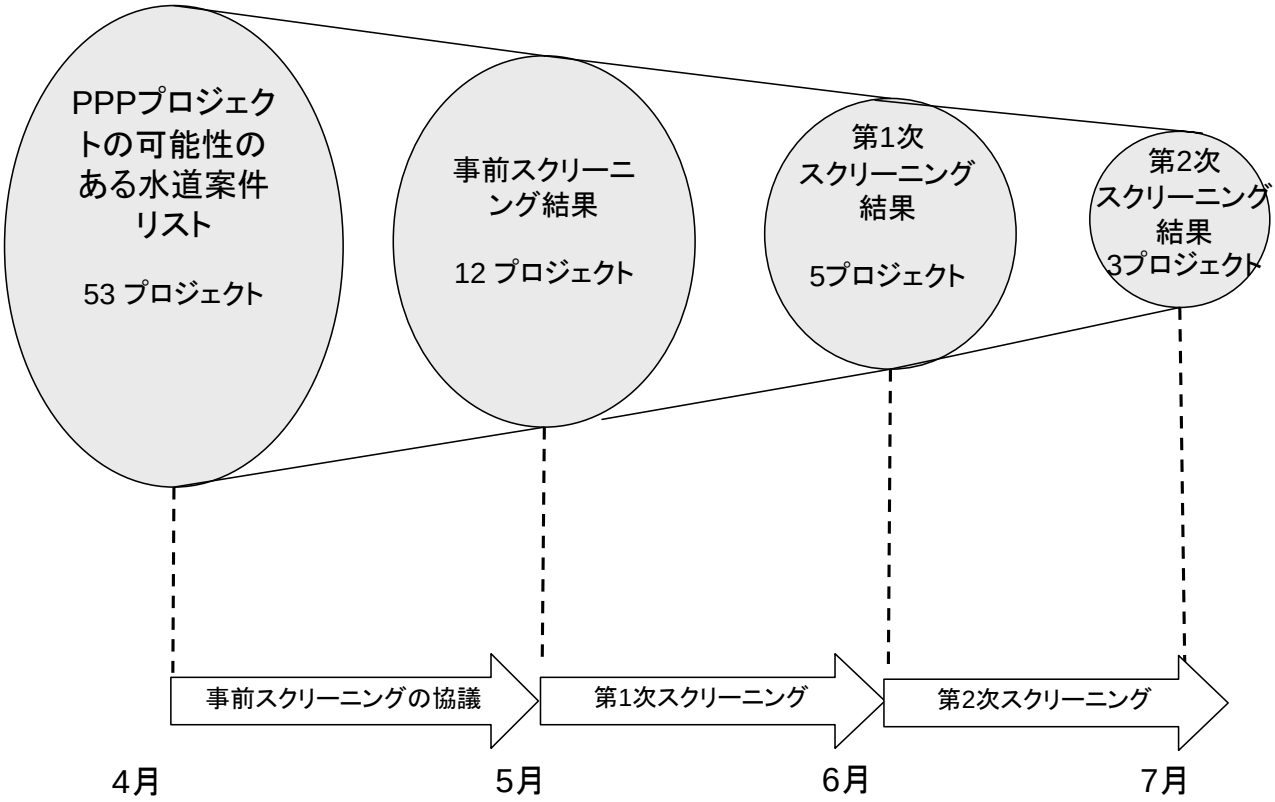
No	Project	
45	Duri Water Supply	*1)
46	Manado Bulk Treated Water Supply	*1)
47	Samarinda Bulk Treated Water Supply	*1) *3)
48	Banjarmasin Bulk Treated Water Supply	
49	City of Bandar Lampung	*3)*4)
50	Regency of Maros	*3)*4)
51	DAM Karian(Tangerang)	*3)
52	Medan Municiparity	*4)
53	Klung kung Regency	*4)

Source) *1) Infrastructure summit 2005
*2) Infrastructure Conference 2006
*3) BPP-SPAM Leaflet 2008
*4) other latest sources (2009)

No.s in the table are correspondent to no.s in the figure

PPP Project (Water Supply) Location Map

スクリーニングの概要 （上水道）



事前スクリーニング協議結果 (I)

No	選択	案件名	削除基準						
			開始済み	資金調達先決定済み	他案件と合同	地方政府による中止	水源の問題	規模が小さい (>100 l/s)	その他
1		Uprating WTP Kali Garang Semarang			X				
2		Cirebon Bulk & Water Supply			X				
3		Jatinangor Water Supply				X			
4	X	Cikarang Water Supply							
5	X	Pondok Gede Water Supply							
6		Sepatan Water Supply	X						
7	X	Ciparens Tangerang Water Supply							
8		Kecamatan Benda & Cengkareng	X						
9		Cileduk Water Supply	X						
10		Tanjung Pinang Water Supply					X		
11	X	Umbulan Water Supply							
12		Karang Pilang IV Bulk Treated W		X					
13		Menganti Water Supply				X			
14		Greater Yogyakarta & Magelang							X
15		Surakarta-Sukoharjo Sukoharjo						X	
16		Tegal Water Supply Water					X		
17		Regency&City of Semarang						X	
18		East Semarang New Water Supply						X	
19	X	Semarang Raw Water Supply							
20		Pemalang Water Supply				X			
21		Jambi Water Supply	X						
22		Munici. Bekasi Water Supply				X			
23		Regency Bekasi Water Supply				X			
24		Cilacap Water Supply					X		
25		Kebumen Water Supply						X	
26	X	Gresik Water Supply							
27	X	Bogor Water Supply							

事前スクリーニング協議結果 (II)

No	選択	案件名	削除基準						
			開始済み	資金調達先決定済み	他案件と合同	地方政府による中止	水源の問題	規模が小さい (>100 l/s)	その他
28		Bandung Water Supply			X				
29		Subang Water Supply			X				
30		Sumedang Water Supply				X			
31		Kanan Water Supply			X				
32		Magelang-Kartamantul WS			X				
33	X	DKI Jakarta- Bekasi- Karawang							
34		West Cikarang & Cibitung Bekasi Regency				X			
35	X	Bandung Regency							
36		Indramayu Regency					X		
37		West Bandung Alt. I- Water Conveyance					X		
38	X	West Bandung Alt. II- Water Conveyance							
39		East Bandung Alt. I- Water Conveyance					X		
40	X	East Bandung Alt. II- Water Conveyance							
41		Semarang Alt. I- Water Conveyance			X				
42		Semarang Alt. II- Water Conveyance			X				
43		Semarang Alt. III- Water Conveyance			X				
44		Dumai Water Supply		X		X			
45		Duri Water Supply		X		X			
46		Manado Bulk Treated Water Supply			X				
47		Samarinda Bulk Treated Water Supply		X					
48		Banjarmasin Bulk Treated Water Supply		X					
49	X	City of Bandar Lampung							
50		Regency of Maros						X	
51		DAM Karian(Tangerang)			X				
52		Medan Municiparity		X					
53		Klung kung Regency		X					
		集計	4	7	11	9	6	5	1

第一次スクリーニング結果

基準	1 Cikarang Water Supply & West Cikarang & Cibitung Bekasi	2 Pondok Gede Water Supply	3 Ciparens Tangerang Water Supply	4 Umbulan Water Supply	5 West Semarang New Water Supply	6 Gresik Water Supply	7 Bogor Water Supply	8 DKI Jakarta-Bekasi-Karawang	9 Bandung Regency	10 West Bandung Alt. II- Water Conveyance	11 East Bandung Alt. II- Water Conveyance	12 City of Bandar Lampung
1) 代替水源の有無	1	3	1	3	3	1	2	1	2	2	2	2
2) 水源へのアクセス	3	3	3	3	3	3	3	3	3	3	2	3
3) 水供給量	2	1	2	3	3	1	1	3	2	1	2	1
4) 現在の水道料金	2	2	2	2	2	1	3	2	2	2	2	2
5) 工業用水、商業用水需要	3	1	3	3	3	3	1	3	3	3	3	3
6) 裨益人口	2	2	2	3	1	1	1	2	2	1	2	2
7) 人口増加率	2	3	2	1	2	2	2	3	2	2	2	2
合計点数	2.15	2.36	2.15	2.58	2.28	1.72	2.00	2.36	2.29	2.00	2.07	2.22
選定案件		✓		✓	✓			✓	✓			✓

第一次スクリーニング後、当該地方政府が案件を中止することを決めたため、選定案件からはずすこととする。

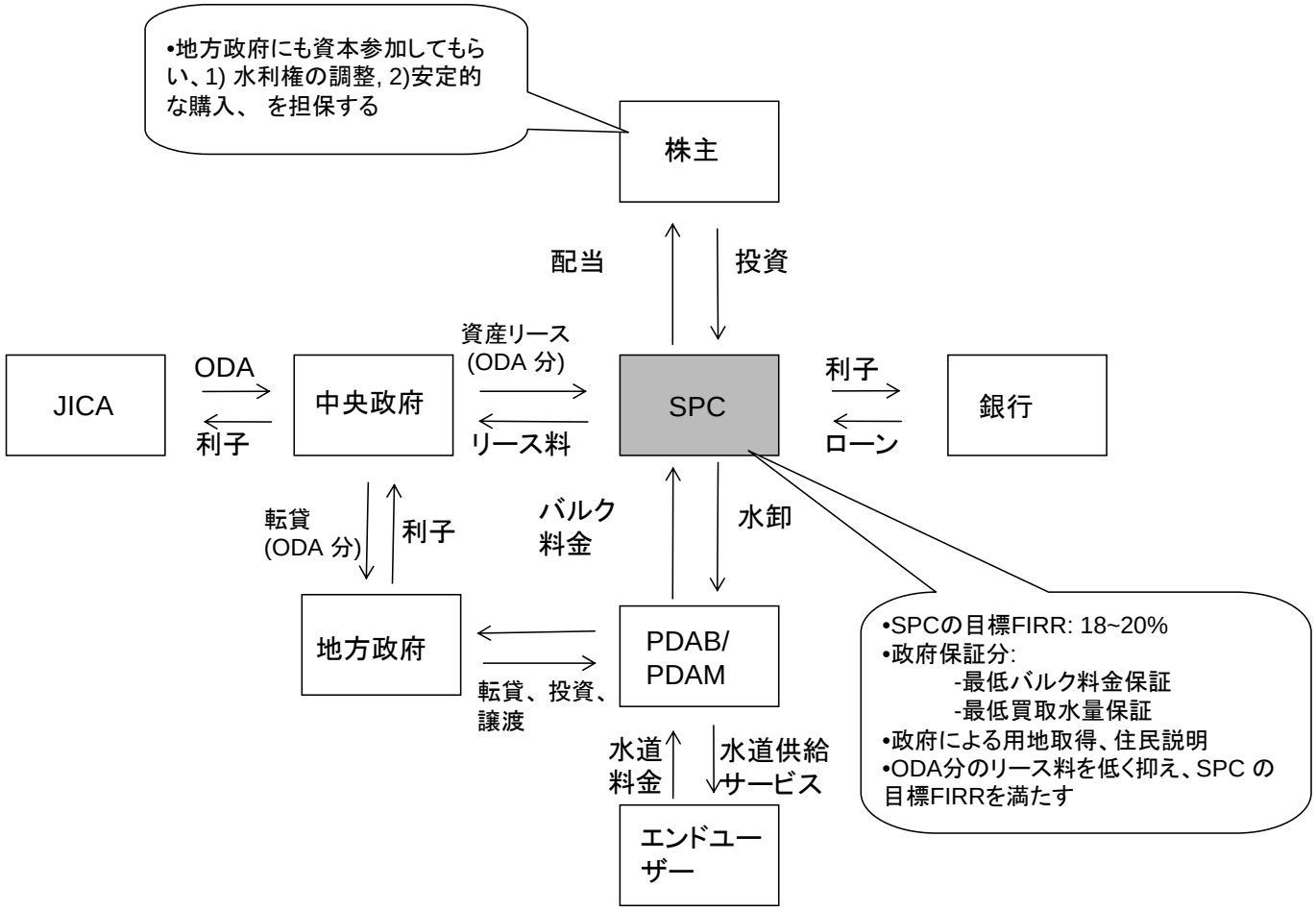
第2次スクリーニング結果

基準		Umbulan	Semarang	DKI Jakarta-Bekasi-Karawang	Bandung Regency	Bandar Lampung
1) 必要性 20%	1.1) 一人当たりのGRDP増加率	2	2	2	3	3
	1.2) GRDPにおける一人当たりのコスト規模	2	3	1	2	3
	1.3) 配水施設率	3	3	1	2	2
	1.4) 貧困削減	2	2	1	2	3
	必要性の点数	2.25	2.50	1.25	2.25	2.75
2) 収益性 35%	2.1) FIRR	1	1	3	1	1
	2.2) EIRR	3	3	1	2	2
	2.3) 一人当たりのコスト	3	2	3	2	1
	2.4) 水供給量	2	2	3	1	1
	収益性の点数	2.14	1.86	2.71	1.43	1.14
3) 実現性 45%	3.1) 原水の確保	2	2	2	1	3
	3.2) 技術的リスク / 案件準備状況	2	2	2	2	2
	3.3) 政府見解の統一	2	3	2	3	3
	3.4) PDAMの経営状況	2.58	1	1.75	1	1
	3.5) 環境へのインパクト	2	2	2	2	1
	3.6) 用地買収	3	3	3	3	2
	実現性の点数	2.18	2.22	2.08	2.00	2.22
合計点		2.18	2.15	2.14	1.85	1.95

上水道PPP候補3案件の概要

	プロジェクト概要	投資規模	投資内容
Umbulan	•ジャワ島スラバヤを中心として、周辺のGresik, Sidoarjo, Pasuruanに供給。Pasuruan奥地のUmbulan湧水を水源とし、35万ﾄﾝ/日の取水を計画。裨益人口136万人。	約235億円	•湧水からの取水施設、塩素処理、送水施設（水道用水供給部分） •各市町村配水施設、給水施設の拡充
Jakarta-Karawang-Bekasi (JABEKA)	•ジャカルタ西部及び周辺のKarawang、Bekasiへの水道用水供給。水源のJatiluhurダムから130万ﾄﾝ/日を取水。裨益人口1,792万人	約563億円	•取水施設、浄水場、ポンプ、送水管など
West Semarang	•ジャワ島スマラン西部地区への水供給。河川水源から9万ﾄﾝ/日を取水し、裨益人口17万人。	約70億円	•取水施設、導水管、浄水場、ポンプ、送水管、配水施設、給水施設

関係組織間の資金フローの例（上水道）



PPP候補3案件の財務シュミレーション

Umbulan上水道

投資額:
Rp 2,357 billion
Project FIRR 10.1%

		Public Private Ratio					
		25 : 75		50 : 50		75 : 25	
		SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR
Lease Fee	4%	15.90%	6.36%	19.27%	6.12%	27.20%	5.97%
	3%	16.10%	5.95%	19.89%	5.47%	28.65%	5.16%
	2%	16.30%	5.53%	20.49%	4.78%	30.07%	4.28%
	1%	16.60%	5.09%	21.09%	4.04%	31.45%	3.32%
	0%	16.80%	4.63%	21.68%	3.24%	32.81%	2.24%

Semarang上水道

投資額:
Rp703 billion
Project FIRR 6.5%

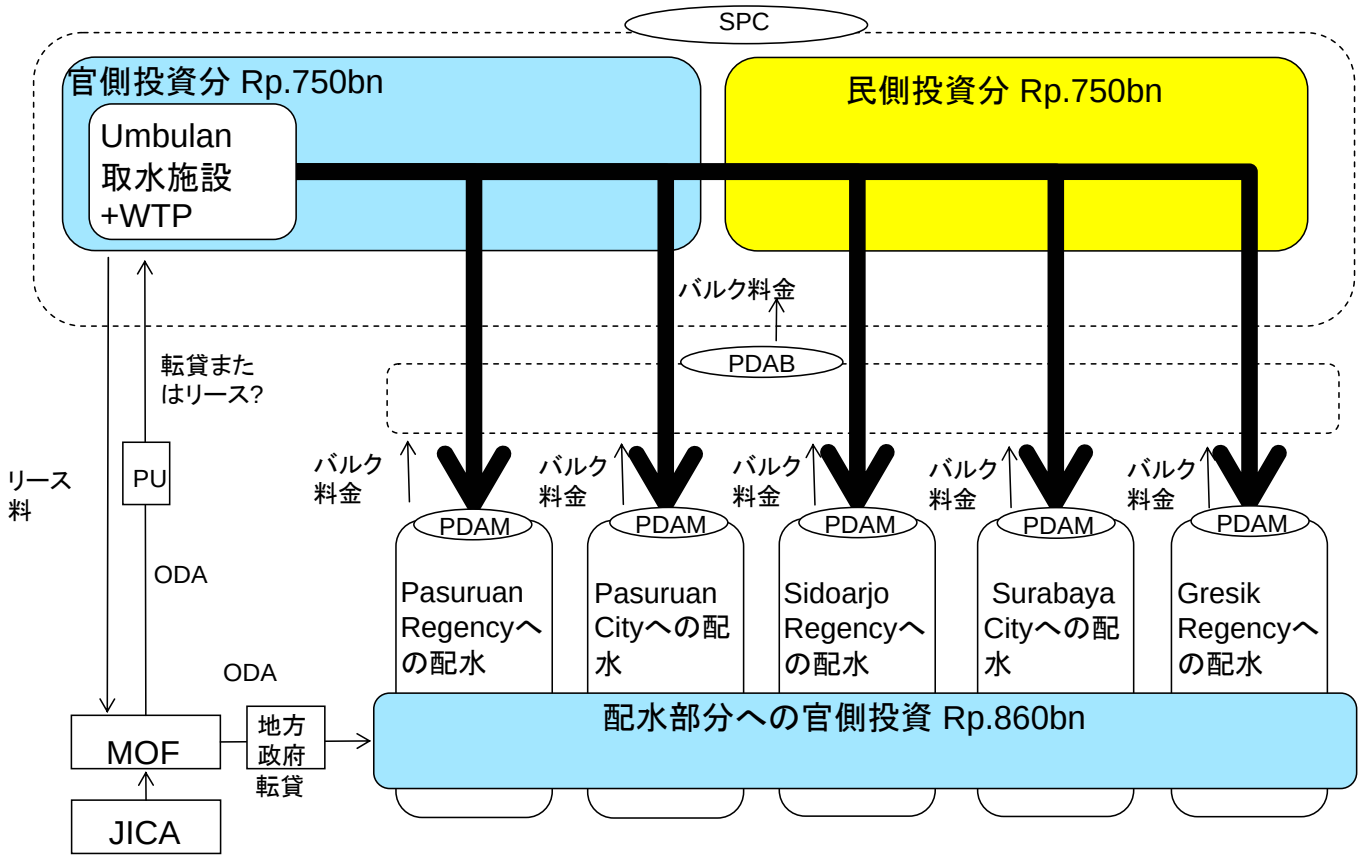
		Public Private Ratio							
		25 : 75		50 : 50		75 : 25		90 : 10	
		SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR
Lease Fee	4%	7.46%	7.10%	8.22%	6.44%	9.92%	6.14%	12.74%	6.04%
	3%	7.81%	6.24%	9.18%	5.31%	12.14%	4.88%	17.21%	4.71%
	2%	8.16%	5.31%	10.07%	4.07%	14.15%	3.47%	21.34%	3.24%
	1%	8.50%	4.31%	10.92%	2.67%	16.04%	1.83%	25.33%	1.50%
	0%	8.84%	3.21%	11.74%	1.01%	17.84%	-0.20%	29.22%	-0.70%

JABEKA上水道

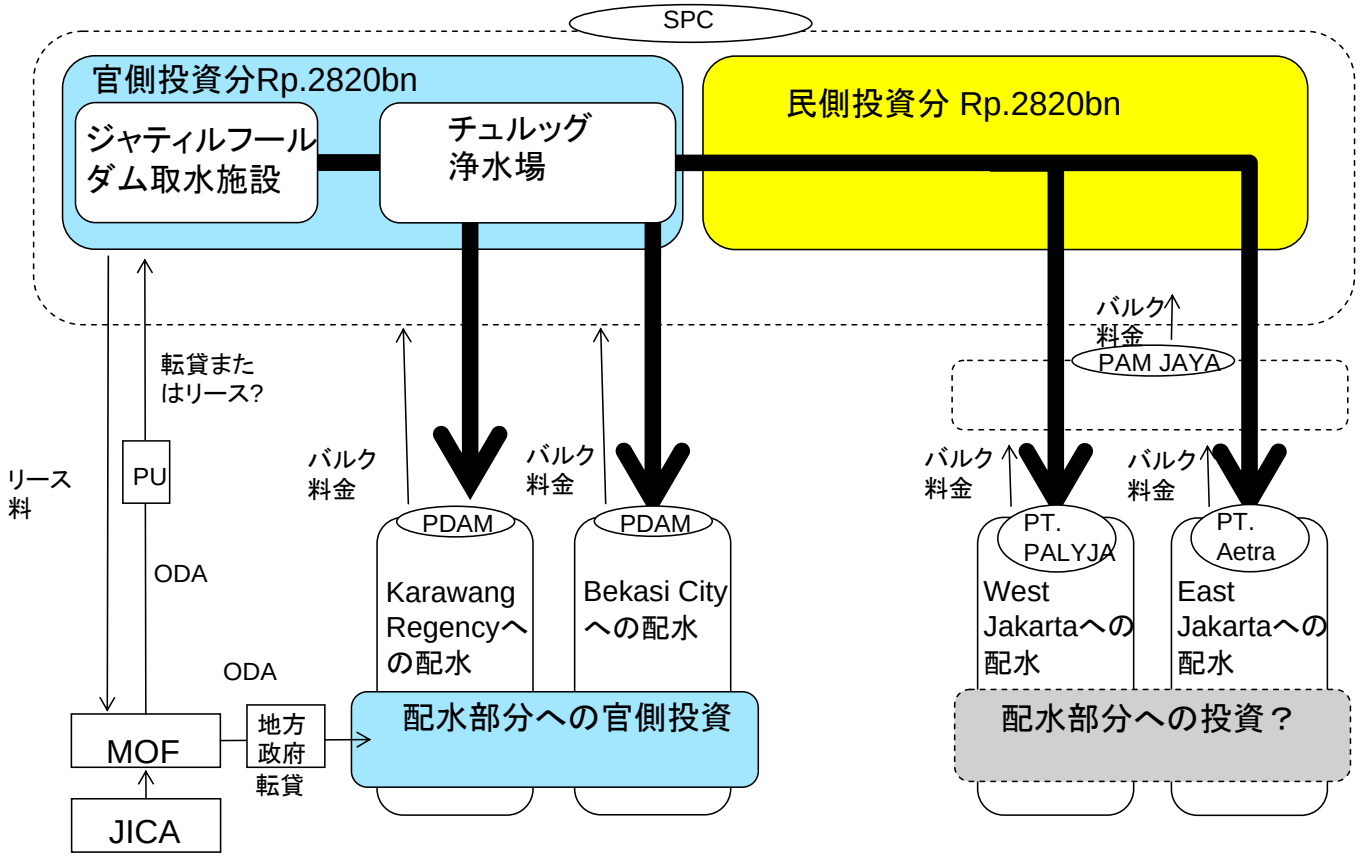
投資額:
Rp 5,635 billion
Project FIRR 12.8%

		Public Private Ratio					
		25 : 75		50 : 50		75 : 25	
		SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR	SPC FIRR	GOI FIRR
Lease Fee	4%	14.61%	16.04%	17.69%	11.70%	24.82%	9.92%
	3%	14.86%	15.34%	18.31%	10.80%	26.26%	8.89%
	2%	15.10%	14.61%	18.93%	9.84%	27.65%	7.77%
	1%	15.34%	13.87%	19.53%	8.81%	29.01%	6.55%
	0%	15.57%	13.09%	20.11%	7.70%	30.33%	5.17%

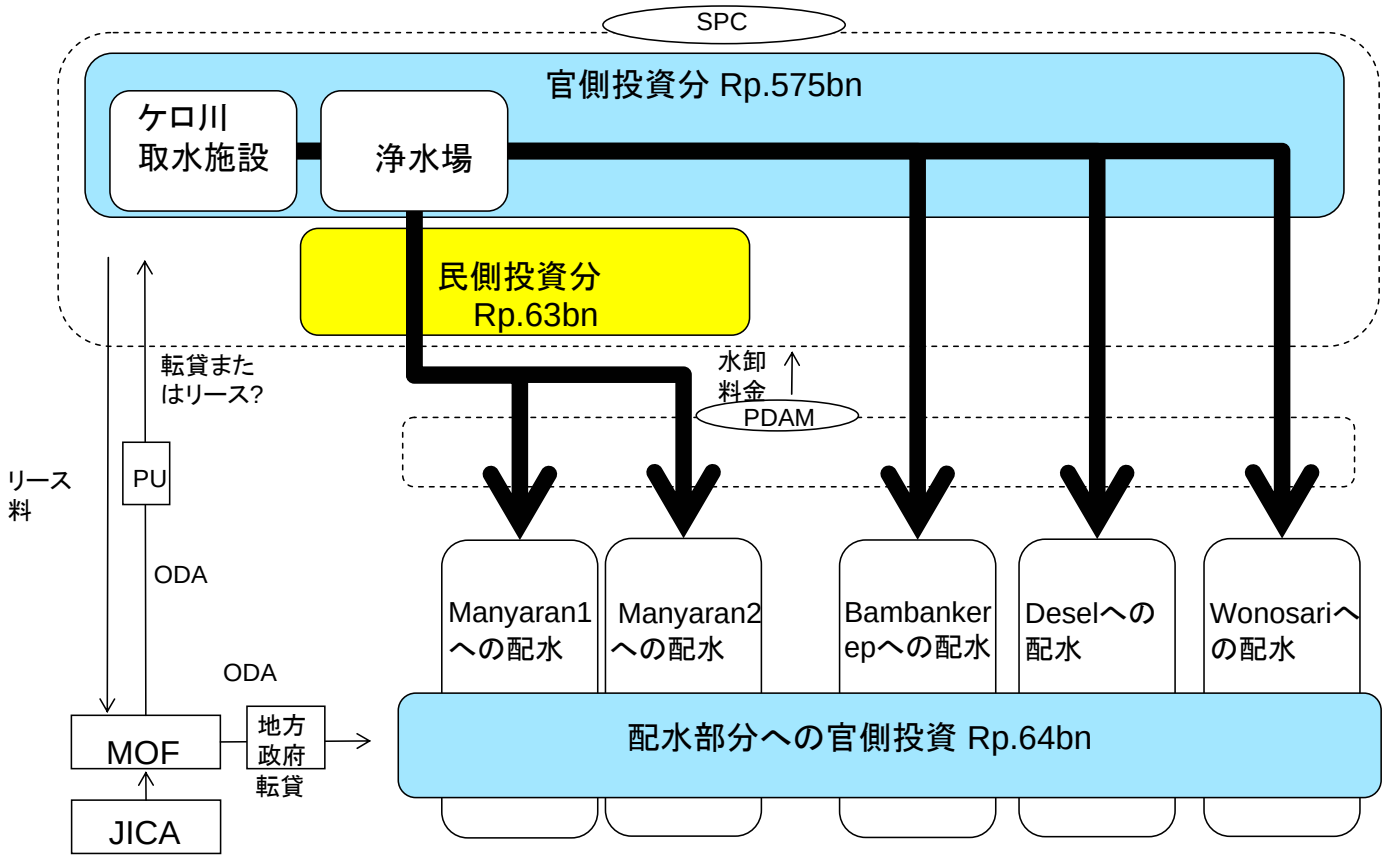
UMBULAN上水道PPPスキーム



JABEKA上水道　PPPスキーム



Semarang上水道　PPPスキーム



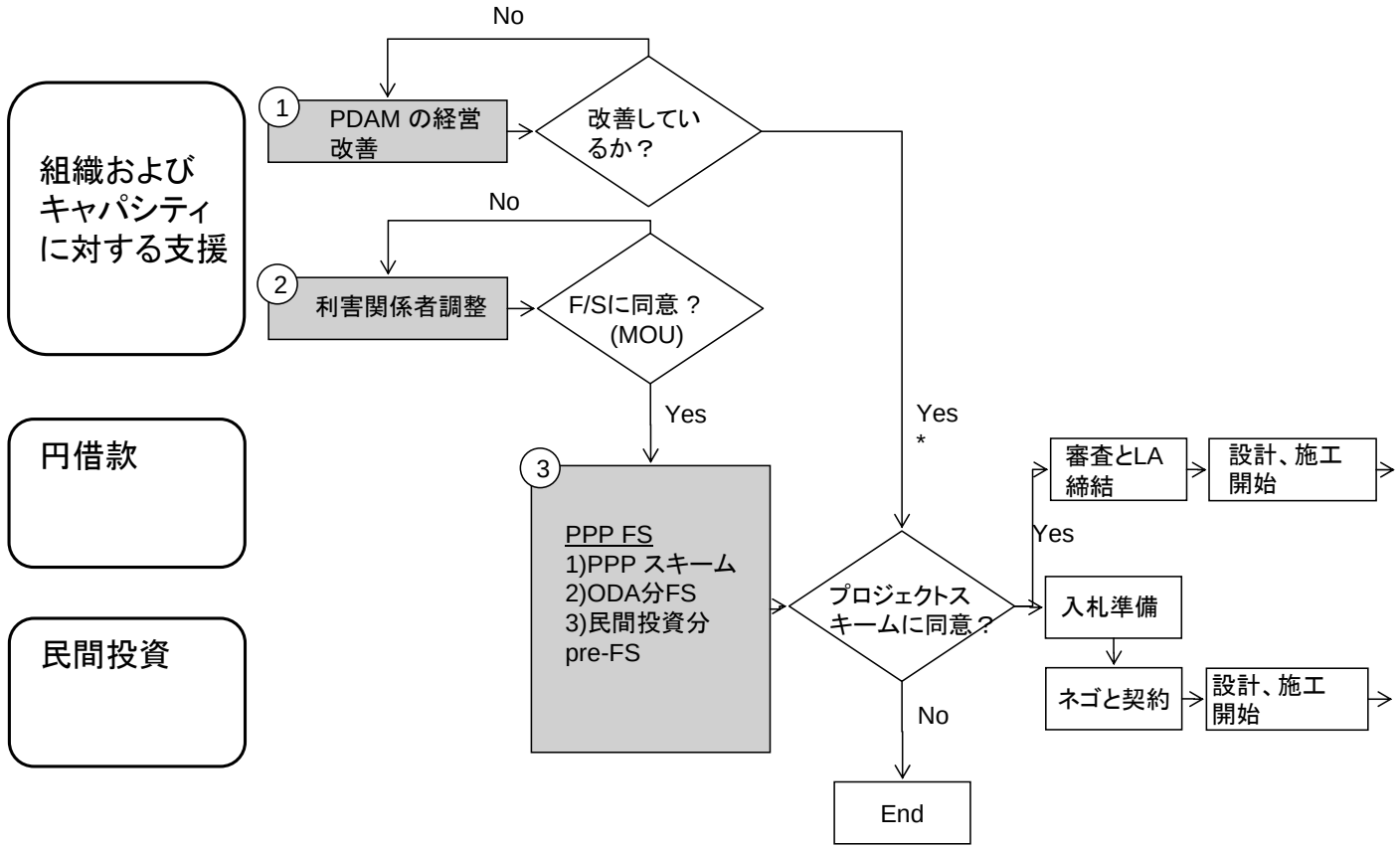
目次

1. インドネシアのPPP案件における現状と課題

2. 有料道路PPP案件
   - 案件スクリーニング結果
   - 今後の進め方の提案

3. 上水道PPP案件
   - 案件スクリーニング結果
   - 今後の進め方の提案

PPP上水道事業におけるロードマップ

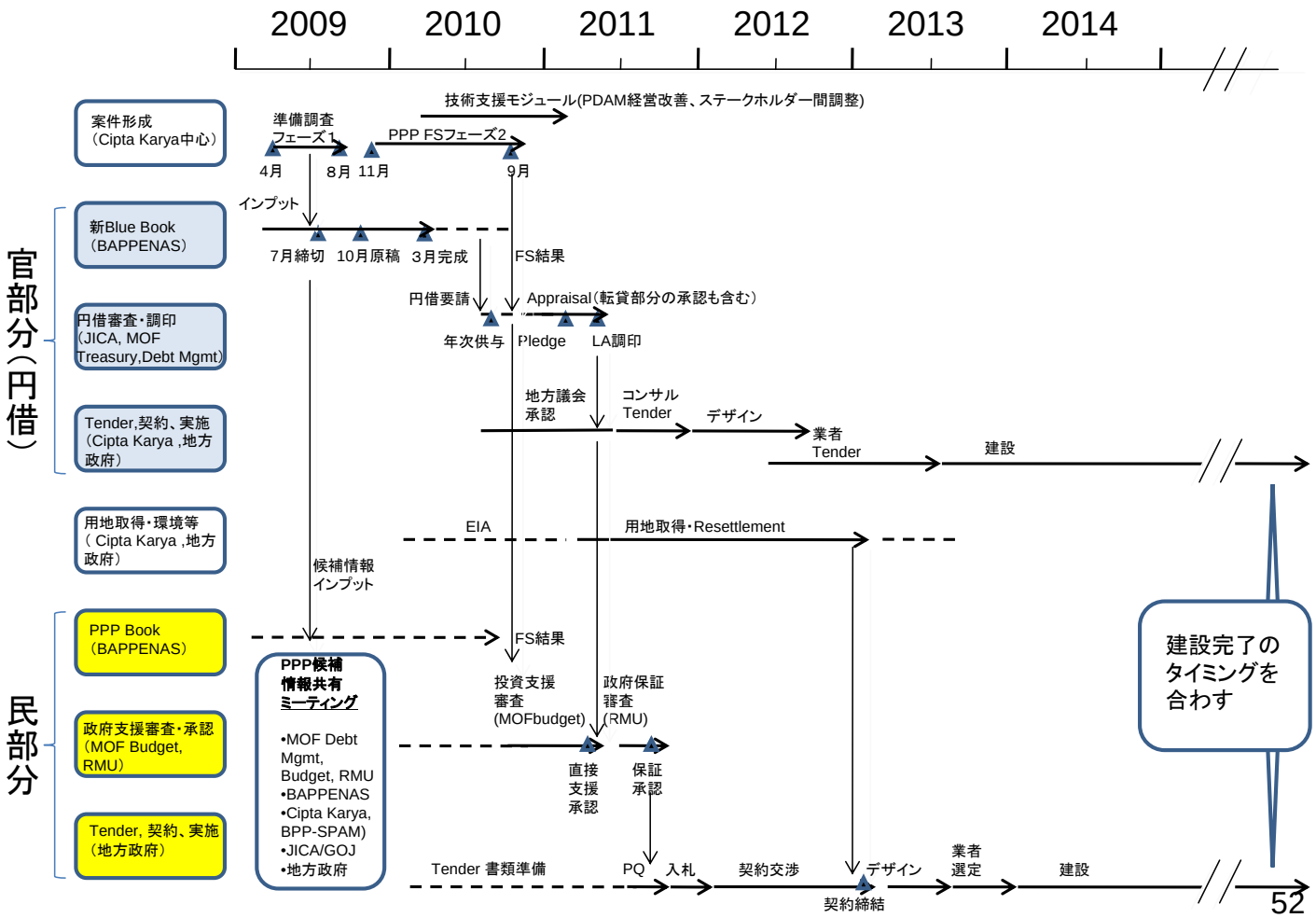


*転貸条件を満たすことも含む

PPP上水道事業における次期支援内容の提言

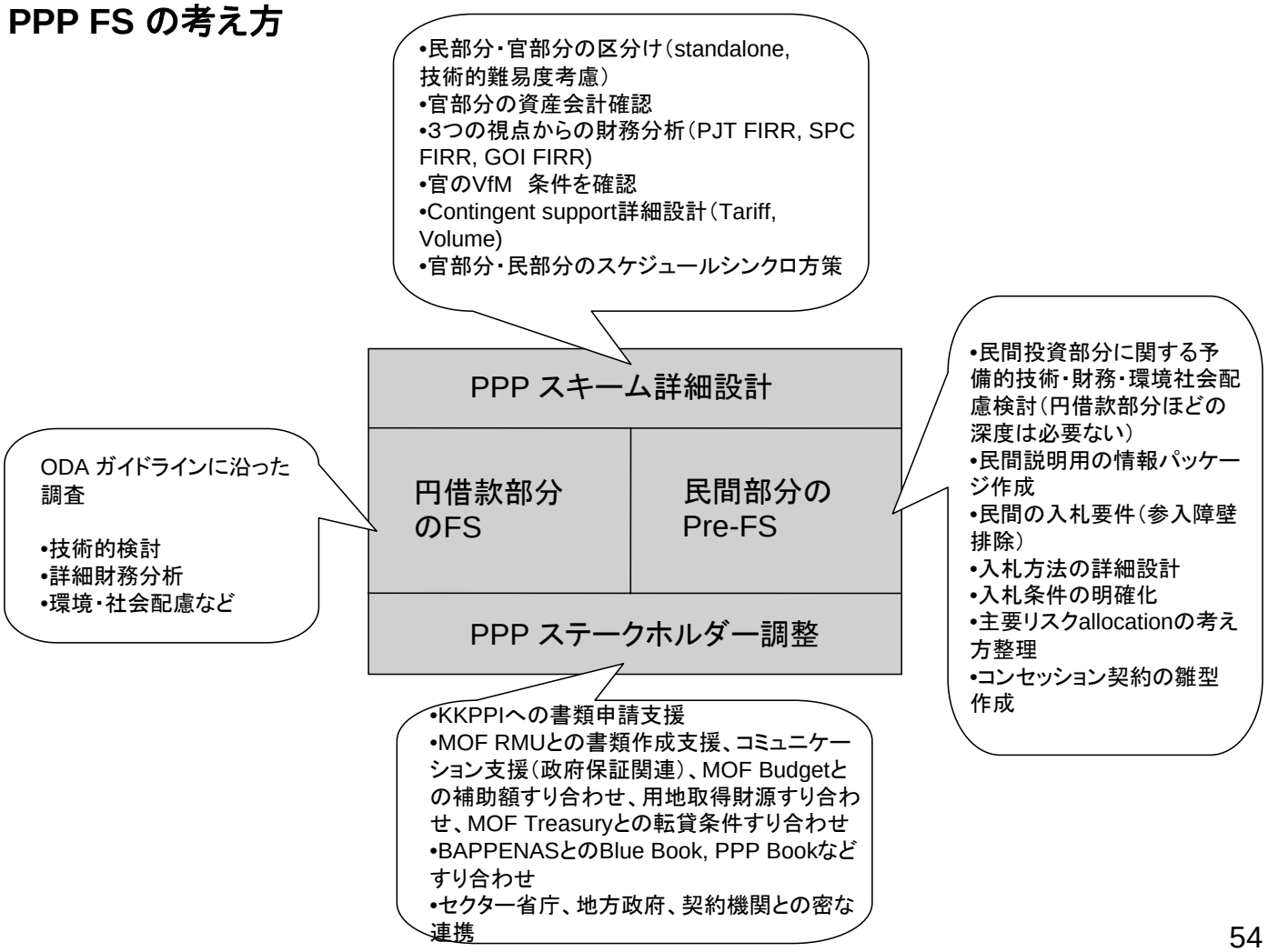
	提言	キーアウトプット
1 PDAM 経営改善	•1) UFW低減, 2) オペレーションコストの低減 , 3)マネジメント能力強化を含む収益性改善プログラムの実施	•PDAMの収益性改善の見通しが明確になる •地方政府・PDAMへの転貸審査基準が満たされる
2 ステークホルダー間調整	• ステークホルダー会議の議事進行を補佐し、プロジェクトに対する相互理解を深めるとともに、コンセンサスを図る	•プロジェクトスキームに関してステークホルダーがMOUを締結する
3 PPP FS 1)PPP スキーム 2)ODA 部分 FS 3)民間投資部分 pre-FS	• **PPP スキーム** 1)民/官比率、2)政府保証と直接支援、3) Project FIRR, SPC FIRR, VfMシミュレーション、4)実施計画などを含んだスキームの詳細設計 • **ODA部分のFS** ODAガイドラインに沿った財務・技術および環境面などのレビュー • **民間部分のpre-FS** 1)入札手法設計、2)民間企業適格性の設計、3)リスク分担、4)CA必要条件、を含む入札準備に必要な基本設計および分析の実施	•円借款アプレーザルに必要な情報を分析し、整理する •入札書類作成に必要な情報を分析し、整理する

上水道PPP案件のスケジュール



付属資料

PPP FS の考え方



PDAM 経営改善

背景

•民間投資家は、上水道PPP案件を検討する際、PDAMによる支払いリスクを最大の懸念事項としてあげている。事実、「イ」国の多くのPDAMは、恒常的な赤字体質に陥っているのが現状である。
•このような状況の中、MOFは累積債務を抱えたPDAMに対して再建計画の提出を要請し、条件を満たしたPDAMへの財務支援プログラムを実施している。この財務省の経営再建への承認は、配水網の拡充に向けた資金をODAにより提供するための、転貸審査基準をクリアするうえでも必要となる。
•したがって、PPP案件対象地域におけるPDAMの経営改善は、PPP案件を推進するための前提条件となる

目的

•PPP案件対象地域内の中でも経営赤字となっているPDAMを対象とする
•UFW低減、オペレーションコスト効率化、水道料金適正化などをてこに、まずは単年度黒字化の道筋を立て、かつ、継続性を確保するための組織体制・経営能力強化を図る
•さらに、配水網拡充に向けて、既存配水網の透明化を進め、区画毎のリハビリ、拡充計画および資金計画を立てる

期待成果

•民間投資家向けに、確度の高い経営改善の見通しおよびその根拠を示すことによって、PPP案件投資への関心が高まる
•財務省の転貸審査基準が確実に満たされる条件が担保される

活動内容

•診断フェーズ（3か月）、解決策フェーズ（3か月）、パイロットフェーズ（6～12か月）に分ける
•診断フェーズは、収益方程式の各要素の時系列比較、他PDAMとの比較、ベンチマーク比較などから改善レバーを抽出する。組織のインタビュー、ワークショップを通じ、原因分析を実施
•解決フェーズは、改善レバー悪化原因を取り除くための方策を策定する。また、継続的な改善を図るための組織体制の提言もおこない、パイロットフェーズへの合意をとりつける
•パイロットフェーズは、特定区画や特定テーマを選定し、2～3の改善活動の実施を支援する。定量的な改善目標とタイミングを定め、定期的に改善効果をモニタリングする。この活動の中で、併せて組織体制の改善と能力強化を図っていく。具体的改善テーマはPDAMによって異なるが、「区画AのUFW　physical loss 30%改善」といったわかりやすいテーマ選定が望まれる

必要リソース

•PDAMあたり、3－4名のチーム体制、12～18か月
•経営再建専門家、上水道専門家（特にUFW低減）、財務分析専門家など

用地取得組織の強化

背景
•「イ」国インフラプロジェクトを推進するうえでの大きなボトルネックは用地取得である
•有料道路においては、22案件が用地取得が主たる理由で実施が大幅に遅れている
•この原因は、1）資金源が確保できない、2）用地取得交渉がうまくいかない、ことによる
•資金源に関しては、Perpres67の改定など、政府の責任を明確にすることで確保されつつある
•一方、用地取得交渉に関しては、PPT/PTPの2つの組織による交渉が必ずしもうまくいっていない。やはり、委員会形式によるパートタイム組織の限界、用地取得スキル不足などがあげられる

目的
•用地取得組織の海外ベストプラクティスを調査したうえで、「イ」国で実現可能な専属組織のあり方を提言する
•インフラ関係各機関との密なコミュニケーションを図り、用地取得組織の強化へ向けた方策へのコンセンサスを形成する。その中で、具体的案件を選別し、パイロット的に新組織による用地取得交渉の実施を開始させる

期待成果
•有料道路PPP案件候補ROW沿いの用地がスケジュール通りに実施される体制が整う。また、このことを民間投資家に説明することで、案件投資への関心が高まる
•他の有料道路案件（e.g. 22のCA調印済み案件）実施の加速化

活動内容
•海外ベストプラクティスの調査・整理。特に、用地取得プロセス上の工夫、組織の責任、権限、インセンティブ、スキルなど各要素のあり方
•「イ」国PPP/PTPによる現状の課題整理
•新たな用地取得組織体制の設計
•ステークホルダーとのワークショップなどを通し、実現へのステップを討議のうえ合意

必要リソース
•3-4名のチーム体制、計8-10か月
•組織改革専門家、組織設計専門家、用地取得専門家など

BPJT コア・プロセスの再設計

背景
•有料道路PPP案件を実施するうえでの大きな課題は、契約機関であるBPJT組織の業務遂行能力が不足していることである
•これは、組織個々人の能力改善を超えた問題として、そもそもPPPプロセスの各業務を遂行する組織上の体制や仕組みが整っていないことによると思われる
•具体的には、業務プロセスを満たすためのシステム、スタッフ、ストラクチャー、スキルなどの組織要素の再考が望まれる

目的
•PPPプロセスに沿った、BPJT組織コア・プロセスの再設計をおこなう
•そのうえで、BPJTの新たな組織体制を提案し、関係ステークホルダーとのコミュニケーションを通じ、組織改革に向けたロードマップに合意する

期待成果
•有料道路PPP案件候補の入札準備、入札・調達、契約交渉・管理が新組織体制のもとで実施されることにより、モデルケースとしての成功確率が高まる

活動内容
•BPJT現行組織の現状分析と課題整理
•PPPコア・プロセスの詳細設計（業務内容、必要スキル、スタッフ数など） ； 1）案件発掘とスクリーニング、2）フィージビリティスタディと入札準備、3）入札・調達、4）契約交渉、 5）契約管理
•組織構造および組織間連携の検討
•BPJTの新たな組織体制オプションを複数立案する
•ステークホルダーワークショップにて新組織への意思決定を促し、ロードマップに合意する

必要リソース
•5-6名のチーム体制、計8-10か月
•組織改革専門家、組織設計専門家、PPP専門家、PPP業務専門家（特に入札・調達、契約交渉）、有料道路専門家など

PPP FS (有料道路)-その1

背景

•「イ」国におけるPPP 有料道路プロジェクトは、FIRR 12%~16%の範囲の案件に関して討議、計画がなされてきている
•MCAを中心とした案件候補のスクリーニングにより、AB区間の有料道路案件がPPP有料道路プロジェクトの「羊羹切り方式」のモデルケース候補として選定された
•本案件の実施を成功させるには、PPP FSによる入念な情報収集と分析が鍵となる。特に、従来のインフラプロジェクト向けのFSとは異なる以下の点に留意することが必要。

1. PPPスキーム詳細設計をおこない、官部分（円借款部分）と民部分をきめ細かく定義する。また、「イ」国政府支援の基本的考え方やリスク配分の考え方も決める。さらに、官部分と民部分の実施スケジュールを合わせるための方策も十分に練る。
2. 官部分に関しては、ODAガイドラインに則ったFSを実施する一方、民部分に関しては、民間投資家向けの「情報パッケージ」を準備する。この準備内容は、情報の精度を民間投資家に保証する性質ではないものの、投資家にとって信頼性のある調査結果やファクトを提供することが求められる。
3. PPPステークホルダー調整は従来のインフラプロジェクトに比べて、はるかに複雑である。資金調達、政府保証、政府補助、用地取得など様々な内容について、複数の組織をまたがる調整がなされなければならない。

目的

•「羊羹切り方式」によるPPPスキームの詳細設計をおこない、官と民の役割分担を明確にする
•ODAガイドラインに則り、官部分のFSを完遂する
•民部分のPre-FSを完遂し、投資家向けの「情報パッケージ」を準備する
•PPPスキームに関して、PPPステークホルダー間でその内容に合意し、各組織が担う役割を確認する

期待成果

•PPPプロジェクトのモデルケースを成功させるため、実施に向けて必要十分な情報および分析内容が揃い、プロジェクト推進へのモメンタムが築かれる。特に、以下の点が担保される。 1）円借款のローンアプレーザルに必要な官部分の調査結果が揃う、 2）民部分の入札準備が整う、3）政府支援の内容に関する基本合意が得られる

PPP FS (有料道路)-その2

活動内容

•PPPスキームの詳細設計

1. 民部分と官部分の区分け （官部分の独立性、技術的難易度など考慮）
2. 官部分の資産会計確認
3. 3つの視点からの財務分析（プロジェクト FIRR, SPC FIRR, GOI FIRR)
4. 官のVfM 条件を確認
5. 政府保証の詳細設計（料金, 交通量)
6. 官部分・民部分のスケジュールシンクロ方策

•官部分のFS

1. 技術的検討
2. 詳細財務分析
3. 環境・社会配慮など

•民部分のPre-FS

1. 民間投資部分に関する予備的技術・財務・環境社会配慮検討（円借款部分ほどの深度は必要ない）
2. 民間説明用の情報パッケージ作成
3. 民間の入札要件（参入障壁排除）
4. 入札方法の詳細設計
5. 入札条件の明確化
6. 主要リスク配分の考え方整理
7. コンセッション契約の雛型作成

•PPPステークホルダー調整 (契約機関となるBPJTとの活動を軸に他ステークホルダーと連携)

1. 公共事業省Bina Margaとの全体計画の調整
2. KKPPIへの書類申請支援
3. MOF RMUとの書類作成支援、コミュニケーション支援（政府保証関連）、MOF Budgetとの補助額すり合わせ、用地取得財源すり合わせ
4. BAPPENASとのBlue Book, PPP Bookなどすり合わせ

必要リソース

•10名のチーム体制、計10か月
•PPP総合専門家、PPP財務専門家、PPP業務専門家、PPP法制度専門家、PPP投資家連携専門家、有料道路計画専門家、有料道路設計専門家、有料道路運営維持管理専門家、用地取得専門家、環境・社会配慮専門家など

PPP FS (上水道)-その1

背景

•「イ」国におけるPPP 上水道プロジェクトは、過去においていろいろな計画が立てられてきたが、成功案件はほとんど存在しないのが現状である
•これは、上水道プロジェクトが上流のバルク供給への投資と下流の配水網拡充への投資を同時並行的に進めるという複雑な条件を満たさなければならないことによる
•MCAを中心とした案件候補のスクリーニングにより、上流と下流双方への投資をパッケージ化した上水道案件XYがPPPのモデルケース候補として選定された
•本案件の実施を成功させるには、PPP FSによる入念な情報収集と分析が鍵となる。特に、従来のインフラプロジェクト向けのFSとは異なる以下の点に留意することが必要。

1. PPPスキーム詳細設計をおこない、官部分（円借款部分）と民部分をきめ細かく定義する。また、「イ」国政府支援の基本的考え方やリスク配分の考え方も決める。さらに、官部分と民部分の実施スケジュールを合わせるための方策も十分に練る。
2. 官部分に関しては、ODAガイドラインに則ったFSを実施する一方、民部分に関しては、民間投資家向けの「情報パッケージ」を準備する。この準備内容は、情報の精度を民間投資家に保証する性質ではないものの、投資家にとって信頼性のある調査結果やファクトを提供することが求められる。
3. PPPステークホルダー調整は従来のインフラプロジェクトに比べて、はるかに複雑である。資金調達、政府保証、政府補助、用地取得、転貸要件など様々な内容について、複数の組織をまたがる調整がなされなければならない。

目的

•バルク供給と配水網拡充をパッケージ化したPPPスキームの詳細設計をおこない、官と民の役割分担を明確にする
•ODAガイドラインに則り、官部分のFSを完遂する（配水網部分の資金として、地方政府への転貸要件の検討を含む）
•民部分のPre-FSを完遂し、投資家向けの「情報パッケージ」を準備する
•PPPスキームに関して、PPPステークホルダー間でその内容に合意し、各組織が担う役割を確認する

期待成果

•PPPプロジェクトのモデルケースを成功させるため、実施に向けて必要十分な情報および分析内容が揃い、プロジェクト推進へのモメンタムが築かれる。特に、以下の点が担保される。 1）円借款のローンアプレーザルに必要な官部分の調査結果が揃う、 2）民部分の入札準備が整う、3）政府支援の内容に関する基本合意が得られる

PPP FS (上水道)-その2

活動内容

•PPPスキームの詳細設計

1. 民部分と官部分の区分け（官部分の独立性、技術的難易度、バルク供給と配水網拡充への資金を考慮）
2. 官部分の資産会計確認 （バルク供給部分への会計処理と配水網拡充部分への会計処理を別に検討）
3. 3つの視点からの財務分析（プロジェクト FIRR, SPC FIRR, GOI FIRR)
4. 官のVfM 条件を確認
5. 政府保証の詳細設計（水道バルク料金、PDAMの支払いリスクなど)
6. 官部分・民部分のスケジュールシンクロ方策

•官部分のFS

1. 技術的検討
2. 詳細財務分析
3. 環境・社会配慮など

•民部分のPre-FS

1. 民間投資部分に関する予備的技術・財務・環境社会配慮検討（円借款部分ほどの深度は必要ない）
2. 民間説明用の情報パッケージ作成
3. 民間の入札要件（参入障壁排除）
4. 入札方法の詳細設計
5. 入札条件の明確化
6. 主要リスク配分の考え方整理
7. コンセッション契約の雛型作成

•PPPステークホルダー調整 (契約機関との活動を軸に他ステークホルダーと連携)

1. 公共事業省Cipta Karyaとの全体計画の調整
2. KKPPIへの書類申請支援
3. MOF RMUとの書類作成支援、コミュニケーション支援（政府保証関連）、MOF Budgetとの補助額すり合わせ、用地取得財源すり合わせ、MOF Treasuryとの転貸要件すり合わせ
4. BAPPENASとのBlue Book, PPP Bookなどすり合わせ

必要リソース

•10名のチーム体制、計12か月
•PPP総合専門家、PPP財務専門家、PPP業務専門家、PPP法制度専門家、PPP投資家連携専門家、上水道計画専門家、上水道取水・浄水施設専門家、上水道送水施設専門家、上水道配水網施設専門家、環境・社会配慮専門家など