

CHAPTER 3.5

THE DEPARTMENT OF PUBLIC WORKS

3.5.1 Sector Perspective

The development of physical infrastructure continues to be a major priority in Indonesia, in which the Department of Public Works plays a highly significant role. The Department controls water resource engineering and management, housing and human settlement development, and road and bridge engineering employing as many as 30,000 staff. To give some indication of the scope of the Department:-

Between *Repelita* 1 and *Repelita* 4 over 280,000km of road were rehabilitated;

In the same period 3,600 km of new road were constructed;

The *Repelita* 5 target for new low cost housing units is 450,000

In the same period the government aims to provide urban settlement (*kampung*) improvements for 7.5 million people and access to clean water for over 12 million urban residents

In 1985 a total of over 4.8 million hectares of land was under irrigation

During *Repelita* 5 the government aims to recover 440,000ha of swampland and to develop new irrigation networks for 500,000ha of land outside of Java.

3.5.2 The Structure of the Department of Public works

The Departmental structure is shown in Figure 3.5.1.

3.5.3 The Secretariat-General of Public Works

The functions of Secretariats-General are covered in Section 2.1.

For the Department of Public works, the Secretariat-General consists of the following bureaux:

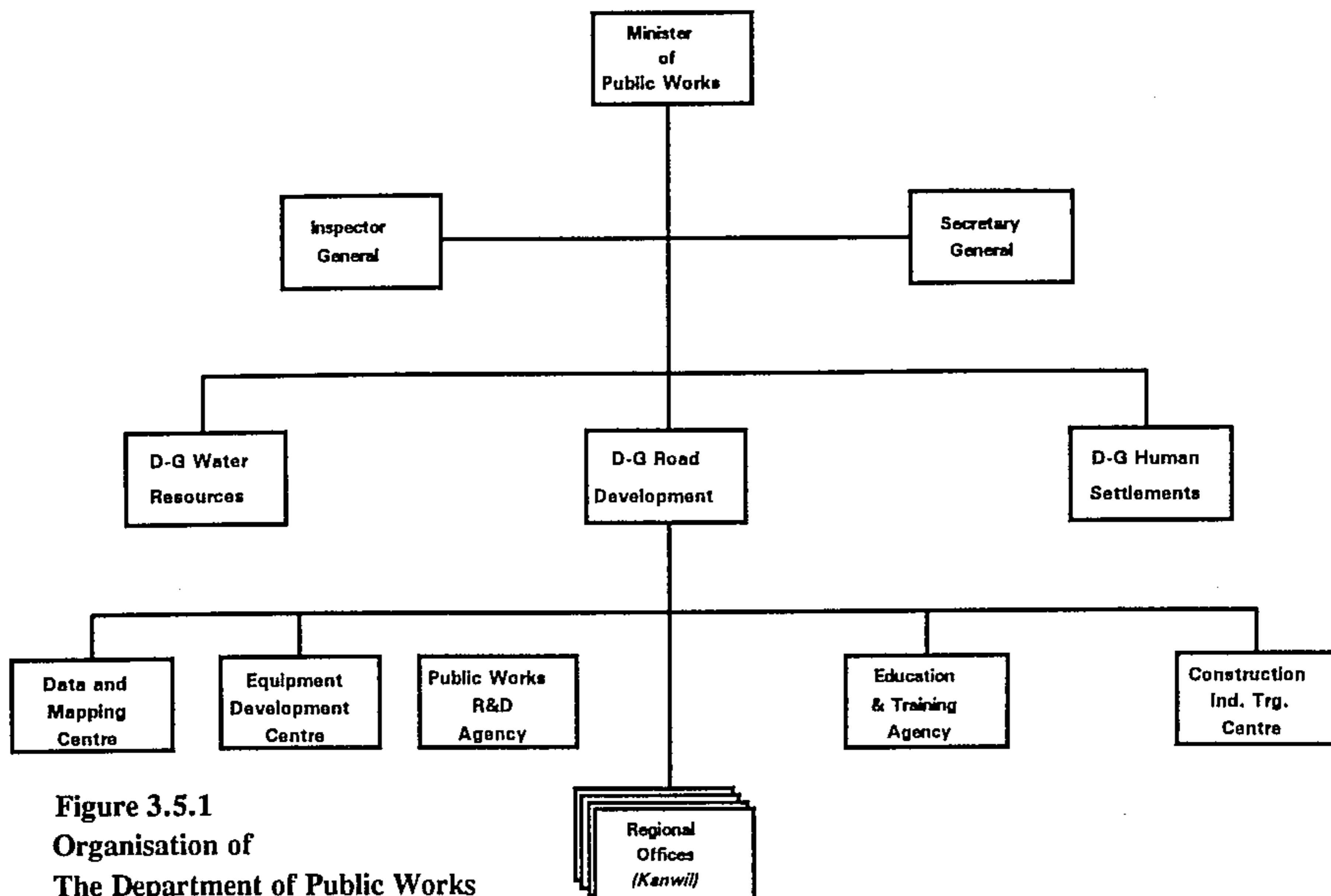


Figure 3.5.1
Organisation of
The Department of Public Works

Perencanaan
Kepegawaian
Perlengkapan
Hukum
Umum
Keuangan
Kerjasama Luar Negeri
Bina Sarana Perusahaan

Planning
 Personnel
 Supplies
 Law
 General Affairs
 Finance
 Foreign Cooperation
 State Enterprise Structure
 Development

The Secretariat-General of Public works is located in Jakarta

The Bureaux of Planning, Finance and Foreign Cooperation are likely to have a direct involvement in foreign assisted projects, particularly in respect of budgeting.

3.5.4 The Inspectorate-General of Public Works

For the Department of Public Works, the Inspectorate-General consists of the following units:

<i>Sekretariat</i>	Secretariat
<i>Inspektur Wilayah 1</i>	Inspector Region 1 (Aceh, Sumut, Sumbar, Riau)
<i>Inspektur Wilayah 2</i>	Inspector Region 2 (Jambi, Sumsel, Bengkulu, Lampung)
<i>Inspektur Wilayah 3</i>	Inspector Region 3 (Kalbar, Kalteng, Kalsel, Kaltim, Sulut)
<i>Inspektur Wilayah 4</i>	Inspector Region 4 (DKI, Jabar, DIY, Jateng)
<i>Inspektur Wilayah 5</i>	Inspector Region 5 (Jatim, Bali, NTB, NTT, Timtim)
<i>Inspektur Wilayah 6</i>	Inspector Region 6 (Sulteng, Sultra, Sulsel, Maluku, Irian Jaya)
<i>Inspektur Tugas Umum</i>	Inspector General Duties
<i>Inspektur Urusan Khusus</i>	Inspector Special Affairs

Inspection duties are assigned by province to a number of Assistant Inspectorates (*Inspektur Pembantu Wilayah*) within each regional inspectorate. Within each Assistant Inspectorate, technical inspection duties are assigned as follows:

<i>Pengairan</i>	Water Resources
<i>Bina Marga</i>	Road Development
<i>Cipta Karya</i>	Human Settlements
<i>Keuangan</i>	Finance
<i>Peralatan dan Perbekalan</i>	Equipment and Supplies
<i>Ketatalaksanaan dan Kepegawaian</i>	Management and Personnel

All Inspectorates are located in the main Public Works complex in Jakarta.

3.5.5 The Directorates-General in Public works

The three D.Gs of Public Works are as follows:

3.5.5.1. The Directorate -General of Water Resources

The D.G of Water Resources (*DJ Pengairan*) consists of a Secretariat and six Directorates:

<i>Bina Program Pengairan</i>	Program Development
<i>Sungai</i>	Rivers
<i>Rawa</i>	Swamps
<i>Irigasi 1</i>	Irrigation 1
<i>Irigasi 2</i>	Irrigation 2
<i>Peralatan</i>	Equipment

The functions of the D.G of Water Resources are:

To prepare technical policy in and to regulate the development of water resources throughout the country in irrigation, swamp reclamation and control and river engineering;

To prepare long and medium term plans in these areas; and

To guide and monitor developments in these fields according to established national policies and laws.

AIDAB has assisted over the last decade in the implementation of the Bah Bolon Project in North Sumatra, which provides irrigation and flood control in an area of 30,000 ha. The D.G of Water Resources is located at the Department of Public Works HQ in Jalan Pattimura, South Jakarta .

3.5.5.2 The Directorate-General of Road Development

The D.G of Road Development (*DJ Bina Marga*) consists of a Secretariat and six Directorates:

<i>Bina Program Jalan</i>	Road Program Development
<i>Pembinaan Jalan Kota</i>	Urban Road Development
<i>Pelaksana Barat</i>	Implementation Western Region
<i>Pelaksana Tengah</i>	Implementation Central Region
<i>Pelaksana Timur</i>	Implementation Eastern Region
<i>Peralatan Jalan</i>	Road Equipment

The D.G of Road Development is located at the Public Works HQ in Jalan Pattimura, South Jakarta.

The role of the D.G of Road Development is:-

To prepare technical policy in and to regulate the development of roads and bridges throughout the country including the preparation of long and medium term plans and programs; and

To guide, control and monitor developments in these fields according to established national policies and laws.

DJ Bina Marga is currently undertaking a large number of bridge and road upgrading and maintenance projects throughout the country. It is mainly responsible for overseeing works on national and provincial roads. National roads are defined as those between provincial capitals, whilst provincial roads are defined as those between district capitals. It is estimated that there are 22,500 bridges on these roads.

AIDAB has a long history of assisting bridge development in Indonesia, through a number of programs; the construction of concrete factories for bridge components (completed), the provision of components for and technical assistance in the

construction of steel bridges (on-going), and technical assistance in the design of an integrated bridge management system (completed).

In common with most public works activities, road and bridge works are carried out by contractors selected under a government tender process. The government's role in implementation is therefore predominantly the preparation and monitoring of contracts. The *Pelaksana* Directorates divide road implementation throughout the country as follows:

<i>Pelaksana Barat</i>	Sumatera and Kalimantan
<i>Pelaksana Tengah</i>	Java and Bali
<i>Pelaksana Timur</i>	Sulawesi, Maluku, Nusa Tenggara, Irian Jaya, Timor Timur

3.5.5.3 The Directorate-General of Human Settlements

The D.G of Human Settlements (*DJ Cipta Karya*) consists of a Secretariat and six Directorates:

<i>Bina Program</i>	Program Development
<i>Tata Kota dan Tata Daerah</i>	Urban and Rural Planning
<i>Perumahan</i>	Housing
<i>Tata Bangunan</i>	Building Systems
<i>Penyehatan Lingkungan Pemukiman</i>	Environmental Sanitation
<i>Air Bersih</i>	Clean Water

The role of the D.G of Human Settlements is:

To prepare technical policy in and to regulate the development of human settlements throughout the country including the preparation of long and medium term plans and programs; and

To guide, control and monitor developments in these fields according to established national policies and laws.

Human settlement development under the D.G includes urban and rural planning services, clean water and environmental sanitation services, and the development of housing, particularly of low cost types. AIDAB is currently providing assistance in an integrated urban development project in Irian Jaya, and in water and sanitation development projects in Nusa Tenggara Barat and Timor Timur.

The D.G of *Cipta Karya* is located in the central PU complex in South Jakarta, with the exception of the Directorates of Housing (Kebayoran Baru, Jakarta) and Building Systems (Kramat Raya, Central Jakarta).

3.5.6. The Central Support Units in Public Works

There are five central support units in the Department of Public Works:

3.5.6.1 Public Works Research and Development Agency

Whilst the headquarters of the Public Works Research and Development Agency (*Badan Penelitian dan Pengembangan Pekerjaan Umum* or *Badan Litbang*) is in Jakarta, its three main centres are located in Bandung, West Java. Research and development tasks are allocated along the subsectoral lines of the three Directorates-General. The *Badan Litbang* has a secretariat and the following Research and Development Centres:

Puslitbang Pengairan The Research Centre for Water Resources deals with Research and Development in the fields of irrigation, river and swamp development. It consists of the following subunits (*bidang*):

<i>Tata Operasional</i>	Administration
<i>Kualitas Lingkungan Tata Air</i>	Water Quality
<i>Hidrolika dan Bangunan Air</i>	Hydrology and Water Engineering
<i>Konservasi dan Tata Air</i>	Water Conservation and Systems
<i>Penyaluran Hasil</i>	Research Dissemination

Puslitbang Jalan The Research Centre for Road Development deals with R&D in the fields of road and traffic engineering. It consists of the following subunits:

<i>Tata Operasional</i>	Administration
<i>Teknik Jalan</i>	Road Engineering (including Soil Mechanics)
<i>Teknik Lalu Lintas</i>	Traffic and Transport Engineering
<i>Konstruksi Bangunan Perlengkapan Jalan</i>	Construction Techniques (including Materials)
<i>Penyaluran Hasil</i>	Research Dissemination

Puslitbang Pemukiman The Research Centre for Human Settlement Development deals with R&D in the fields of human settlements engineering. It consists of the following subunits (*bidang*):

<i>Tata Operasional</i>	Administration
<i>Bahan Bangunan</i>	Building Materials
<i>Struktur dan Konstruksi Bangunan</i>	Structures and Building Construction
<i>Lingkungan Perumahan dan Teknik Penyehatan</i>	Housing Environment and Sanitation (including Clean Water)
<i>Penyaluran Hasil</i>	Research Dissemination

3.5.6.2 Public Works Education and Training Centre

The Department of Public Works undertakes an extensive program of training and education for its staff through four training units in Jakarta and a series of six regional training centres around the country. The central training units are:

<i>Bidang Diklat Teknik Umum dan Tata Laksana</i>	General Technical and Management Training Unit
<i>Bidang Diklat Pengairan</i>	Water Resources Engineering Training Unit
<i>Bidang Diklat Bina Marga</i>	Road Engineering Training Unit
<i>Bidang Diklat Cipta Karya</i>	Human Settlements Engineering Training Unit

Each *bidang diklat* has a *sub diklat* for programming, curriculum and media, training implementation (*persiapan penyelenggaraan*) and evaluation and reporting.

The regional training centres are located as follows, to cover Public Works training needs of staff from the regions:

<i>Diklat Wilayah 1</i>	Medan, Sumut
<i>Diklat Wilayah 2</i>	Bandung, Jabar
<i>Diklat Wilayah 3</i>	Yogyakarta, DIY
<i>Diklat Wilayah 4</i>	Surabaya, Jatim
<i>Diklat Wilayah 5</i>	Ujung Pandang, Sulsel
<i>Diklat PU</i>	Jakarta

The *Diklat Wilayah* in Surabaya also houses an audio visual training materials unit.

The Department of Public Works also sponsors and places teaching staff in a number of higher education programs at three state universities. They are the Institute of Technology in Bandung, the Institute of Technology in Surabaya and Diponegoro University in Semarang,

3.5.6.3 Construction Industry Training Centre

The Department of Public Works plays an active role in training local consultants and contractors in the construction industry, with the aim of improving the implementation of works projects around the country. Attendance at several of the courses run at the Construction Industry Training Centre (*Pusat Pembinaan Latihan Ketrampilan Jasa Konstruksi* or *Pusbinlat*) is compulsory for contractors and consultants wishing to tender for Public Works contracts. The centre is divided into five subunits:

<i>Bagian Tata Usaha</i>	Administration Division
<i>Bidang Bina Program</i>	Programming
<i>Bidang Bina Latihan Tenaga Jasa Konstruksi</i>	Construction Industry Skills Training

<i>Bidang Bina Tatalaksana Pengusahaan</i>	Construction Industry Management
<i>Bidang Bina Teknis Pelaksanaan Konstruksi</i>	Construction Technical Implementation

The centre is located in Jakarta.

3.5.6.4 Data and Mapping Centre

The Public Works Department Data and mapping services are provided by this centre (*Pusat Pengelolaan Data dan Pemetaan* or *Pusdata*), which is located in Jakarta. The following subunits form the centre:

<i>Bagian Tata Usaha</i>	Administration Division
<i>Bidang Pengelolaan Data</i>	Data Management (Inc. computing)
<i>Bidang Statistik</i>	Statistics
<i>Bidang Pemetaan</i>	Mapping, Surveys and Aerial Mapping
<i>Bidang Penginderaan Jauh</i>	Remote Sensing
<i>Bidang Pendukung Teknis</i>	Technical Support (computer hardware, instrumentation and reprographic services)

3.5.6.5 Equipment Development Centre

Equipment services are provided by the Equipment Development Centre (*Pusat Pembinaan Peralatan*), located in Jalan Dr. Suratmo, Central Jakarta. It consists of the following sections:

<i>Bagian Tata Usaha</i>	Administration Division
<i>Bidang Bina Program</i>	Planning
<i>Bidang Standar dan Spesifikasi Peralatan</i>	Equipment Standards and Specification
<i>Bidang Bina Perbengkelan</i>	Workshop Development
<i>Bina Operasi</i>	Operations (Supply planning, equipment and usage inspection)

3.5.7 Provincial arrangements for Public Works

3.5.7.1 Kanwil and Dinas structures

The Department of Public Works operates a system of regional vertical offices or *kantor wilayah* in all 27 provinces of Indonesia. The *kantor wilayah* are structured as follows:

<i>Bagian Tata Usaha</i>	Administration Division
<i>Bidang Teknis</i>	Technical Division

The Technical Division is responsible for compiling provincial programs across the three public works sectors; water resources management, human settlements and roads, and for maintaining a management information system for the *kepala kanwil*. The Equipment and Supplies Division is responsible for the procurement of equipment and supplies relating to deconcentrated activities in the public works sector. (See Section 1.4.3 for a discussion on deconcentration). It also handles equipment maintenance. The Testing Division maintains laboratories for water, soils and construction materials. The latter ensures material quality in the contracting industry. Water and soils testing are carried out as a PU service to the community and the industry.

The Administrative Division includes a personnel subdivision, which is responsible for all personnel matters for nationally employed PU staff in the province. It also usually handles PU training functions for the province. The person responsible for training is known as the *pedikprop* (provincial PU training officer), and is often the head of personnel. Training needs analysis is carried out centrally by the various *diklat PU*, and training is usually conducted in the *Diklat Wilayah* or regional training centres mentioned in section 3.5.6.2. This means that the provincial training function in public works is usually limited to selection of candidates for training elsewhere, or the logistics of training if it is carried out in the province.

3.5.7.2 *Dinas* structures

There are two main patterns for *dinas* structures in Public Works. The pattern used in a particular province depends on the size and development of the PU operation. A third pattern exists in Jakarta.

Pattern 1: The more advanced structure employs three separate *dinas* offices; one for each main branch of public works.

Dinas Pengairan vary slightly under this pattern, but usually contain the following:

<i>Bagian Tata Usaha</i>	Administration
<i>Sub Dinas Bina Program</i>	Programming
<i>Sub Dinas Perencanaan Teknis</i>	Technical Planning
<i>Sub Dinas Irigasi</i>	Irrigation
<i>Sub Dinas Sungai dan Rawa</i>	Rivers and Swamps
<i>Sub Dinas Eksploitasi dan Pemeliharaan</i>	Exploitation and Maintenance

Dinas Bina Marga structures are (with some variation) as follows:

<i>Bagian Tata Usaha</i>	Administration
<i>Sub Dinas Bina Program</i>	Programming
<i>Sub Dinas Peralatan dan Perbekelan</i>	Equipment and Supplies

<i>Sub Dinas Pelaksana 1</i>	Implementation (one-third of the province)
<i>Sub Dinas Pelaksana 2</i>	Implementation (one-third of the province)
<i>Sub Dinas Pelaksana 3</i>	Implementation (one-third of the province)

Dinas Cipta Karya structures are (with some variation) as follows:

<i>Bagian Tata Usaha</i>	Administration
<i>Sub Dinas Bina Program</i>	Programming
<i>Sub Dinas Tata Kota dan Tata Daerah</i>	Urban and Rural Planning
<i>Sub Dinas Tata Bangunan</i>	Building
<i>Sub Dinas Perumahan</i>	Housing
<i>Sub Dinas Teknik Penyehatan</i>	Environmental Health (Water and sanitation)

Currently, provinces with three *dinas* of public works are: West, Central and East Java, North Sumatra and South Sulawesi.

Pattern B: Most public works structures employ one *dinas* only. In this case the three branches of public works activity are afforded *subdinas* status. The usual patterns is as follows:

<i>Bagian Tata Usaha</i>	Administration
<i>Sub Dinas Bina Program</i>	Programming
<i>Sub Dinas Pengairan</i>	Water Resources
<i>Sub Dinas Bina Marga</i>	Roads
<i>Sub Dinas Cipta Karya</i>	Human Settlements
<i>Sub Dinas Peralatan dan Perbekelan</i>	Equipment and Supplies

Generally the functions of the full *dinas* (pattern 1) are included in each of the *subdinas*, but programming, and equipment and supplies, are centralised.

Pattern 3: Because of the special needs of Jakarta, a different PU structure has evolved. The *Kepala Dinas* is assisted by a Deputy (*Wakil Kepala Dinas*). Instead of one administration division, it has two; for administration and finance, and for personnel. There are seven *subdinas* as follows:

<i>Bina Program</i>	Programming
<i>Tata Air</i>	Water
<i>Jalan</i>	Roads
<i>Penyehatan Lingkungan</i>	Environmental Health
<i>Pemeliharaan</i>	Maintenance
<i>Prasarana Kota</i>	Urban Infrastructure
<i>Peralatan dan Perbekelan</i>	Equipment and Supplies

There are also several subregional offices, known as *suku dinas*, located in the five *kotamadya* (autonomous towns) that make up Jakarta (Central, West, East, North and South). There is also a survey and measurements unit (*unit penyelidikan dan pengukuran*).

3.5.7.3 Responsibilities of *Kanwil* and *Dinas*

The *Kepala Kantor Wilayah* is responsible directly to the Minister of Public Works, but reports on day-to-day matters to the Secretary-General. The functions of the *kanwil* office are:

- To assist the Governor in the coordination of all provincial public works activities;
- To coordinate the activities of deconcentrated projects;
- To provide overall programming and management information services for public works in the province;
- To compile technical guidelines and to technically supervise the implementation of works activities;
- To coordinate with offices of other sectoral interests;
- To guide the institutional development of public works regional bodies in the province;
- To provide equipment maintenance and supplies services, particularly for deconcentrated activity; and
- To conduct soils, water and materials testing.

The various *kepala dinas* at the provincial level head the implementation arm of the provincial government in their field and region. They report directly to the Governor. *Dinas* offices are required:

- To undertake planning activities for decentralised and co-administered public works activities;
- To provide technical guidance and prepare technical policy for regional public works activities;
- To undertake technical activities for roads, water resources and human settlements; and
- To undertake technical monitoring and evaluation of works projects.

In a number of provinces the *kepala dinas* and the *kepala kanwil* are the same person. This occurs in the provinces of Irian Jaya, Bali, Central Sulawesi and all four provinces in Kalimantan. It is intended to phase out this arrangement in the future. It should also be noted that at the time of publication, a revised structure for all regional Public Works organisations is being considered.

3.5.8 Relevant legislation

Whilst there are hundreds of regulations regarding the organisation, implementation and control of public works activity, the following are particularly relevant:

Regulation Title	Regulation Number
Control of Water	PP 22/1982
Water Resources Development	UU 11/1974
Rivers	PP 35/1991
Structure and Roles of Central DPU Organisations	211/KPTS/1984
Transfer of PU Activities to Regions	PP/14/1987
Functions Transferred to Regions	57/PRT/1991
<i>Kanwil</i> Role in Regional Technical Guidance	58/PRT/1991
Organisation and Management of <i>Kanwil</i> Offices in Public Works	60/KPTS/1982
Form, Organisation and Management of <i>Dinas</i> PU Tkt 1 NTB	<i>Perda</i> 7/1978 NTT
Form, Organisation and Management of <i>Dinas</i> PU Tkt 1 NTB (Proposed)	<i>Ranc. Perda</i> 1991 NTT
Guidelines on Project Organisation in Public Works	99/KPTS/1984
Guidelines on Administration of Foreign Cooperation in DPU	438/KPTS/1988
Procurement Management for Goods and Services in Public Works	646/KPTS/1991

Table 3.5.1 Regulations in the Field of Public Works