



Laporan Tahunan

2008

annual report

JABATAN UKUR DAN PEMETAAN MALAYSIA

Laporan Tahunan

2008

annual report



JABATAN UKUR DAN PEMETAAN MALAYSIA

KANDUNGAN

Contents

1	PERUTUSAN KPUP <i>message from DGSM</i>
4	MAKLUMAT KORPORAT <i>corporate information</i>
4	VISI <i>vision</i>
	MISI <i>mission</i>
	OBJEKTIF <i>objectives</i>
5	FUNGSI <i>functions</i>
6	PROFIL PENGURUSAN TERTINGGI <i>top management profile</i>
10	CARTA ORGANISASI JUPEM <i>JUPEM organisational chart</i>
11	LATAR BELAKANG ORGANISASI <i>organisation background</i>
	Pejabat KPUP <i>office of the DGSM</i>
	Bahagian Geospatial Pertahanan <i>defence geospatial division</i>
	Bahagian Pemetaan <i>mapping division</i>
	Bahagian Kadaster <i>cadastre division</i>
19	PENGURUSAN SUMBER MANUSIA <i>human resource management</i>
21	PENCAPAIAN 2008 <i>2008 performance</i>
21	INFRASTRUKTUR GEOMATIK <i>geomatic infrastructure</i>
	Sistem Penentuan Lokasi Sejagat (GPS) <i>global positioning system (GPS)</i>
	Stesen Tolok Air Pasang Surut <i>tide gauge stations</i>
	Jaringan Ukur Aras <i>precise levelling network</i>
	Ukuran Graviti <i>gravity survey</i>
	Astronomi <i>astronomy</i>
	Pusat Khidmat Pelanggan <i>customer service centre</i>
30	PENERBITAN PETA <i>map publication</i>
	Penawanan Data dan Foto Udara <i>data acquisition and aerial photography</i>
	Ukuran Titik Kawal <i>control point survey</i>
	Penyediaan Pangkalan Data <i>database preparation</i>
	Ukuran Penyudahan Padang <i>field completion survey</i>
	Kartografi <i>cartography</i>
	Percetakan <i>printing</i>
38	PERSEMPADANAN ANTARABANGSA <i>international boundaries</i>
	Ukuran Sempadan Antarabangsa Malaysia-Thailand <i>demarcation and survey of Malaysia-Thailand international boundaries</i>
	Ukuran Sempadan Antarabangsa Malaysia-Indonesia <i>demarcation and survey of Malaysia-Indonesia international boundaries</i>
43	PERSEMPADANAN NEGERI <i>state boundaries</i>
44	UKURAN KADASTER <i>cadastral survey</i>
	Pengukuran Hak Milik Tanah <i>land title survey</i>
	Semakan Permohonan Hak Milik Strata <i>Assessment of Strata Title Applications</i>
51	PANGKALAN DATA UKUR KADASTER (PDUK) <i>Cadastral Database</i>
	Penyediaan Pangkalan Data Ukur Kadaster <i>Preparation of Cadastral Survey Database</i>
	Penyelarasan semula dan Recoordination and Repopulation of DCDB oleh PA
	Penyediaan Sistem Pengurusan Lapisan GIS <i>Preparation of GIS Layer Management System</i>
56	PEKELILING KPUP <i>DGSM Circulars</i>
57	SURAT PEKELILING KPUP <i>DGSM Circulars Letters</i>
58	PERANCANGAN AKTIVITI UKUR DAN PEMETAAN 2009 <i>2009 planning of survey and mapping activities</i>
58	PERANCANGAN PEMETAAN <i>mapping planning</i>
59	PERANCANGAN UKUR KADASTER <i>cadastral survey planning</i>
60	PENGURUSAN KEWANGAN <i>financial management</i>
61	BELANJA MENGURUS <i>expenditure management</i>
63	PERUNTUKAN PEMBANGUNAN <i>development allocation</i>
65	HASIL 2008 <i>2008 revenue</i>
68	INOVASI/PENGIKTIRAFAN <i>innovations/recognition</i>



PERUTUSAN

Message

KETUA PENGARAH UKUR DAN PEMETAAN
DIRECTOR GENERAL OF SURVEY AND MAPPING



Sepanjang tahun 2008 pelbagai aktiviti dan program telah berjaya dilaksanakan oleh jabatan ini. Dengan semangat yang lebih kental serta penuh iltizam, warga JUPEM telah sama-sama mencorak dan memajukan JUPEM demi memenuhi kehendak pelanggan serta meningkatkan sistem penyampaian.

Setiap warga JUPEM harus bijak membahagikan masa supaya setiap saat dapat dimanfaatkan sepenuhnya dengan kebaikan. Dengan demikian hidup kita akan berada dalam keadaan aman dan tenteram serta menerima rezeki hasil daripada tugas kita dengan tangan terbuka dan penuh rasa kesyukuran.

Throughout the year 2008, various activities and programmes were successfully carried out by the department. Armed with great fortitude and strong determination, JUPEM employees worked as one to shape and develop JUPEM for the sake of fulfilling the needs of customers as well as improving on the delivery system.

Every JUPEM employee has to be wise in managing time so that every second will be beneficially and optimally spent. With that, our life will be peaceful and tranquil and we can enjoy with relish and gratitude the prosperity resulting from our hard work.

Seperti mana firman Allah SWT dalam surah Al-A'raf ayat 144, yang bermaksud, "Terimalah semua yang telah Allah berikan kepadamu dan termasuklah kamu antara orang-orang yang bersyukur". Kita juga tidak harus lupa ganjaran yang diberi oleh kerajaan yang berbentuk kenaikan gaji yang menuntut kita memberikan perkhidmatan yang terbaik untuk rakyat dan negara.

Semua warga JUPEM disarankan supaya meningkatkan akauntabiliti dan membentuk jati diri sebagai penjawat awam untuk memenuhi hasrat kerajaan mewujudkan tadbir urus yang baik. Hasrat ini dapat dicapai apabila mempunyai kefahaman yang jelas dan mantap terhadap unsur-unsur spiritual dan kebendaan berasaskan empat prinsip utama tadbir urus sektor awam iaitu integriti, akauntabiliti, pengamanahan dan pengawasan dan ketelusan. Ini dapat mewujudkan budaya kerja berintegriti melalui penerapan nilai-nilai peribadi asas yang digariskan dalam Nilai dan Etika Perkhidmatan Awam.

Allah SWT says in surah Al-A'raf verse 144, which means, "Accept all that Allah has given you and be among those who are grateful". We should also not forget incentives provided by the government in the form of pay increases, which make it even more imperative that we give the best service to the public and the nation.

All JUPEM employees are urged to step up accountability and develop their personal integrity as public officials to fulfil the government's desire to develop good governance. This desire can be realised when there is clear and unequivocal understanding of spiritual and materialistic elements based on the four main principles of public sector governance, i.e. integrity, accountability, trustworthiness and stewardship, and transparency. This can create a work culture of integrity through the inculcation of fundamental personal values as outlined in the Values and Ethics of Public Service.



“...mewujudkan persekitaran organisasi pembelajaran bagi mendokong usaha penambahbaikan secara berterusan...” | *“A learning organisation environment supporting efforts of continuous improvements can result in creating an excellent work culture.....”*

Kejayaan sesebuah organisasi akan terhasil dengan mengamalkan sikap bekerja secara efisien dan efektif. Mewujudkan persekitaran organisasi pembelajaran bagi mendokong usaha penambahbaikan secara berterusan yang dapat menghasilkan budaya kerja cemerlang serta sikap suka menjalankan tugas yang menghasilkan kerja yang berkualiti, kreatif dan inovatif. Sebagai kakitangan awam, kita juga perlu ada rasa tergesa dalam melaksanakan tugas dan membuat keputusan.

The success of an organisation will be achieved with the practice of working efficiently and effectively. A learning organisation environment supporting efforts of continuous improvements can result in creating an excellent work culture and the inclination to carry out duties that result in quality, creative and innovative work. As public servants, we also need to have a sense of urgency when carrying out our duties and when making decisions.

Kejayaan perancangan pembangunan tidak bermakna, jika tiada pemantauan yang berterusan kerana rakyat ingin melihat impak sesuatu projek yang dilaksanakan. Antara saranan kerajaan ialah melaksanakan kajian prestasi berasaskan Penunjuk Prestasi Utama atau Key Performance Indicators (KPI) di jabatan. Strategi KPI akan menetapkan tahap prestasi yang disasarkan dalam bentuk kuantitatif bagi penyampaian output dan hasil serta dapat memantau keberkesanan prestasi penyampaian.

Successful development planning is meaningless without constant monitoring because the public want to see the impact of a project that is being implemented. Among proposals made by the government is carrying out performance assessment based on Key Performance Indicators (KPI) in the department. The KPI strategy will determine the targetted performance level in quantitative form for output and outcome delivery as well as enable the monitoring of delivery performance effectiveness.



“ Setiap warga JUPEM harus bijak membahagikan masa supaya setiap saat dapat dimanfaatkan sepenuhnya dengan kebaikan ” | *“Every JUPEM employee has to be wise in managing time so that every second will be beneficially and optimally spent ”*

Akhir kata, saya mengucapkan setinggi-tinggi penghargaan dan terima kasih kepada semua warga JUPEM atas segala sokongan, kerjasama dan tanggungjawab yang telah ditunaikan demi kecemerlangan JUPEM. Semoga JUPEM akan terus menempa kejayaan dengan penuh cemerlang dan terus unggul dalam perkhidmatan awam.

In conclusion, I would like to express my deepest appreciation and gratitude to all JUPEM employees for their unstinting support, cooperation and responsibility shown in the pursuit of excellence for JUPEM. I pray that JUPEM will continue to garner success with excellence and continue to be in the forefront of public service .

(DATUK HAMID BIN ALI)
Ketua Pengarah Ukur dan Pemetaan Malaysia
Director General of Survey and Mapping, Malaysia



MAKLUMAT KOPORAT

corporate informations

VISI | VISION

Menjadikan JUPEM terbilang dalam perkhidmatan ukur dan pemetaan serta pengurusan data geospasial bagi memenuhi wawasan negara.

To make JUPEM a distinguished agency in survey and mapping services as well as in geospatial data management in the fulfilment of the national vision.

MISI | MISSION

Menyediakan perkhidmatan ukur dan pemetaan serta pengurusan data geospasial yang berkualiti melalui sistem terbaik, sumber manusia yang kompeten dan persekitaran kerja yang kondusif.

To provide quality survey and mapping services as well as quality geospatial data management through an excellent system , a competent workforce, and a conducive work environment.

OBJEKTIF | OBJECTIVES

- ▶ Memastikan produk dan perkhidmatan ukur kadaster dan pemetaan menepati sistem kualiti serta memenuhi keperluan pelanggan;
To ensure that cadastral surveying and mapping products and services comply with the quality system as well as fulfil the needs of clients;
- ▶ Memastikan pewujudan dan penyelenggaraan Pangkalan Data Ukur Kadaster dan Pemetaan yang kemaskini dan berkualiti bagi memenuhi keperluan prasarana data geospasial negara;
To ensure the creation and maintenance of up-to-date and quality Cadastral and Mapping databases that satisfy the needs of national geospatial data infrastructure;
- ▶ Menjadikan JUPEM pusat kecermerlangan dan rujukan dalam bidang ukur kadaster dan pemetaan; dan
To make JUPEM a centre of excellence and reference in the field of cadastral surveying and mapping; and
- ▶ Memastikan penentuan, penandaan dan pengukuran sempadan negeri dan antarabangsa memenuhi keperluan pentadbiran negeri serta menjamin kedaulatan negara.
To ensure that the determination, demarcation and surveying of state and international boundaries meet with the requirements of state administration as well as ensure the sovereignty of the nation.

FUNGSI | FUNCTIONS

- ▶ Menasihati kerajaan dalam bidang ukur kadaster dan pemetaan serta persempadanan negeri dan antarabangsa;
To advise the government on matters pertaining to cadastral surveying and mapping as well as national and international boundaries;
- ▶ Menyediakan maklumat ukur kadaster secara lengkap dan kekal untuk tujuan pengeluaran hak milik tanah strata dan stratum;
To provide complete and conclusive cadastral survey information for the purpose of issuing strata and stratum land titles;
- ▶ Menguruskan pangkalan data ukur kadaster dan pemetaan dengan efisien;
To efficiently manage cadastral survey and mapping databases;
- ▶ Menerbitkan peta-peta topografi, kadaster, tematik dan utiliti untuk tujuan perancangan, pengurusan sumber asli, pemuliharaan alam sekitar, pembangunan, pemantauan dan keselamatan;
To publish topographic, cadastral, thematic and utility maps for purposes of planning, managing natural resources, preserving the environment, development, surveillance and security;
- ▶ Menentu, menanda, mengukur dan menyenggara sempadan-sempadan negeri dan antarabangsa demi menjaga kedaulatan negara; dan
To determine, demarcate, survey and maintain state and national boundaries in safeguarding the sovereignty of the nation; and
- ▶ Menyediakan prasarana geodetik bagi ukuran kadaster, pemetaan, kejuruteraan dan kajian saintifik.
To provide geodetic infrastructure for cadastral survey, mapping, engineering and scientific research.





PROFIL PENGURUSAN TERTINGGI TOP MANAGEMENT PROFILE

Y.Bhg. Datuk **HAMID BIN ALI** berkelulusan B. Sc. (Surv.) (Hons.) (CNAALondon dan Diploma Ukur Tanah daripada Maktab Teknik Kuala Lumpur, dilantik sebagai Ketua Pengarah Ukur dan Pemetaan Malaysia pada 17 Mei 2000. Pernah bertugas sebagai Juruukur Daerah Kelantan Barat, Timbalan Pengarah Ukur Terengganu, Timbalan Pengarah Ukur Kelantan, Timbalan Pengarah Ukur (Unit Khas) Kelantan, Timbalan Pengarah Ukur (Unit Khas) Pahang, Pengarah Ukur Pulau Pinang, Negeri Sembilan, Terengganu dan Pahang. Pada 3 Januari 1995 beliau dilantik sebagai Pengarah Ukur Bahagian (Penyelarasan Kadaster) seterusnya Timbalan Pengarah Ukur dan Pemetaan Malaysia sehingga 16 Mei 2000. Beliau juga adalah Pengerusi Lembaga Juruukur Tanah Semenanjung Malaysia, Presiden Pertubuhan Juruukur Malaysia, Felo Pertubuhan Juruukur Malaysia dan seorang Juruukur Tanah Bertauliah.

*Y. Bhg. Datuk **HAMID BIN ALI**, who graduated with a B. Sc. (Surv) (Hons) (CNAALondon and a Diploma in Land Surveying from the Technical College Kuala Lumpur, was appointed Director General of Survey and Mapping Malaysia on 17 May 2000. He had previously served as District Surveyor for West Kelantan , Deputy Director of Survey Terengganu, Deputy Director of Survey Kelantan, Deputy Director of Survey (Task Force) Kelantan, Deputy Director of Survey (Task Force) Pahang, Director of Survey for Pulau Pinang, Negeri Sembilan, Terengganu and Pahang. On 3 January 1995, he was appointed Director of Survey (Cadastral Coordination Division) and thereafter was Deputy Director of Survey and Mapping Malaysia until 16 May 2000. He is also Chairman of the Peninsular Malaysia Land Surveyors Board , President of the Surveyors Association Malaysia, a Fellow of the Surveyors Association Malaysia and a Certified Land Surveyor.*



DATUK HAMID BIN ALI, P.JN, DIMP, KMN, PMC, PJC
Ketua Pengarah Ukur dan Pemetaan Malaysia
Director General of Survey and Mapping Malaysia



DATO' PROF. DR. ABDUL KADIR BIN TAIB, DSDK, SDK, KMN
Timbalan Ketua Pengarah Ukur dan Pemetaan Malaysia
Deputy Director General of Survey and Mapping Malaysia

Y.Bhg. Dato' Prof. Dr. **ABDUL KADIR BIN TAIB** memegang Ijazah Doktor Falsafah dari Universiti New South Wales Australia, Ijazah Sarjana Sains Fotogrametri, Diploma Lanjutan Fotogrametri ITC Netherlands, Ijazah Sarjana Muda Ukur (Tanah) dari Universiti Teknologi Malaysia. Beliau dilantik sebagai Timbalan Ketua Pengarah Ukur dan Pemetaan Malaysia pada 20 Mac 2004. Pernah bertugas sebagai Jurutera Fotogrametri, Penolong Pengarah Ukur Topografi (Geodesi), Penolong Pengarah Ukur Topografi (Fotogrametri), Timbalan Pengarah Ukur Johor, Ketua Penolong Pengarah Ukur (Ehwal Persempadanan), Pengarah Ukur Bahagian (Pengeluaran Pemetaan), Pengarah Ukur Bahagian (Pengurusan dan Pembangunan) dan Pengarah Ukur Bahagian (Pemetaan). Beliau juga ialah Pengerusi Bahagian Ukur Tanah Pertubuhan Juruukur Malaysia, Felo Pertubuhan Juruukur Malaysia dan seorang Juruukur Tanah Bertauliah.

*Y. Bhg. Dato' Prof. Dr. **ABDUL KADIR BIN TAIB** holds a Doctorate of Philosophy from the University of New South Wales Australia, Masters in Photogrammetry, Advanced Diploma in Photogrammetry from ITC Netherlands, Bachelors Degree in Survey (Land) from University of Technology Malaysia. He was appointed Deputy Director General and Mapping Malaysia on 20 March 2004. He formerly served as Photogrammetric Engineer, Assistant Director of Topographic Survey (Geodesy), Assistant Director of Topographic Survey (Photogrammetry), Deputy Director of Survey Johore, Principal Assistant Director of Survey (Boundary Affairs), Director of Survey (Map Production Division), Director of Survey (Management and Development Division) and Director of Survey (Mapping Division). He is also Chairman of the Land Survey Division, Land Surveyors Association Malaysia, a Fellow of the Surveyors Association Malaysia and a Certified Land Surveyor.*



ENCIK AHMAD FAUZI BIN NORDIN, JSM, KMN.
Pengarah Ukur Bahagian (Pemetaan)
Director of Survey (Mapping Division)

Encik **AHMAD FAUZI BIN NORDIN** memegang Ijazah Sarjana Geoinformatics dari Universiti Teknologi Malaysia, *Post-Graduate Diploma in Geographical Information System* daripada ITC, Netherlands dan Ijazah Sarjana Muda Ukur (Tanah) dari Universiti Teknologi Malaysia. Dilantik sebagai Pengarah Ukur Bahagian (Pemetaan) pada 5 April 2004. Pernah bertugas sebagai Juruukur Daerah Kuala Kangsar, Penolong Pengarah Ukur Topografi (Wilayah Utara), Timbalan Pengarah Ukur Kedah / Perlis, Penolong Pengarah Ukur Kadaster (RT), Timbalan Pengarah Ukur (Unit Khas) Pahang, Timbalan Pengarah Ukur Perak, Pengarah Ukur Topografi Sarawak, Timbalan Pengarah Ukur Topografi 1 Topografi Semenanjung, Pengarah Ukur W.P Kuala Lumpur, Ketua Penolong Pengarah Ukur (Hak Milik), Pengarah Ukur Selangor, Pengarah Ukur Bahagian (Ukur Geodetik), Pengarah Ukur Bahagian (Penyelarasan Kadaster) dan Pengarah Ukur Bahagian (Kadaster). Beliau juga seorang Juruukur Tanah Bertauliah.

*Encik **AHMAD FAUZI BIN NORDIN** holds a Masters Degree in Geoinformatics from the University of Technology Malaysia, Post-Graduate Diploma in Geographical Information System from the ITC, Netherlands, and Bachelors Degree in Survey (Land) from the University of Technology Malaysia. He was appointed Director of Survey (Mapping Division) on 5 April 2004. He previously served as District Surveyor in Kuala Kangsar, Assistant Director of Topographic Survey (Northern Region), Deputy Director of Survey for Kedah / Perlis, Assistant Director of Cadastral Survey (RT), Deputy Director of Survey (Task Force) Pahang, Deputy Director of Survey for Perak, Director of Topographic Survey for Sarawak, Deputy Director of Topographic Survey 1 for Peninsular Topography, Director of Survey for Kuala Lumpur F.T., Principal Assistant Director of Survey (Titles), Director of Survey for Selangor, Director of Survey (Geodetic Survey Division), Director of Survey (Cadastral Coordination Division) and Director of Survey (Cadastral Division). He is also a Certified Land Surveyor.*



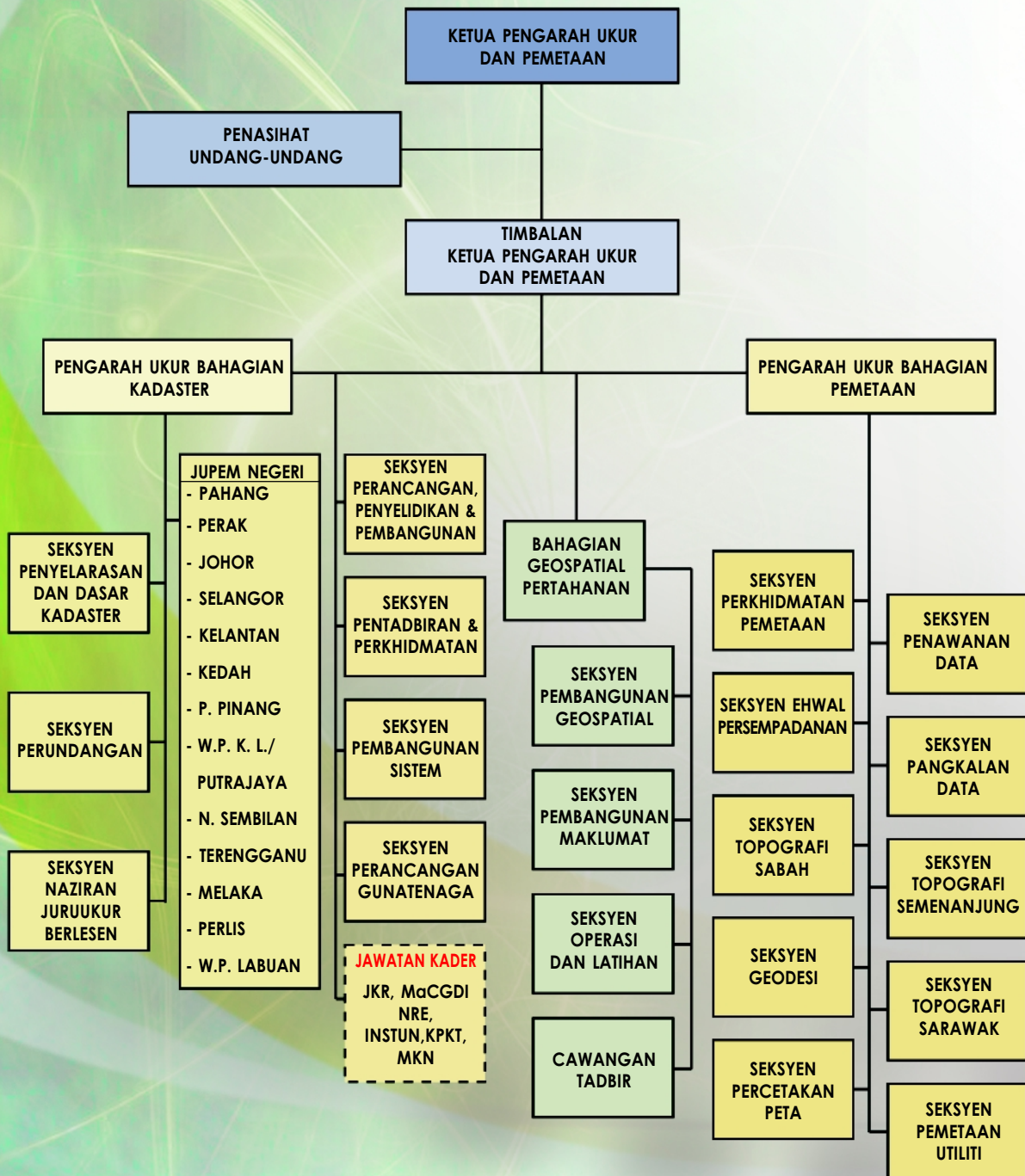
HAJI MUHAMED KAMIL BIN MAT DAUD, KMN
Pengarah Ukur Bahagian (Kadaster)
Director of Survey (Cadastral Division)

Tuan Haji **MUHAMED KAMIL BIN MAT DAUD**, memegang Ijazah Sarjana Muda Ukur Tanah dan Diploma Ukur Tanah daripada Universiti Teknologi Malaysia, dilantik sebagai Pengarah Ukur Bahagian (Kadaster) pada 5 April 2004. Pernah bertugas sebagai Juruukur Daerah Kelantan Selatan, Timbalan Pengarah Ukur Terengganu, Timbalan Pengarah Ukur Kelantan, Timbalan Pengarah Ukur Johor, Pengarah Ukur Negeri Sembilan, Pengarah Ukur Kelantan, Pengarah Ukur Bahagian (Pengeluaran Pemetaan) dan Pengarah Ukur Wilayah Persekutuan Kuala Lumpur / Putrajaya. Beliau juga seorang Juruukur Tanah Bertauliah.

*Tuan Haji **MUHAMED KAMIL BIN MAT DAUD**, holder of a Diploma and a Bachelors Degree in Land Survey from the University of Technology Malaysia, was appointed Director of Survey (Cadastral Division) on 5 April 2004. He previously served as District Surveyor for South Kelantan, Deputy Director of Survey for Terengganu, Deputy Director of Survey for Kelantan, Deputy Director of Survey for Johor, Director of Survey for Negeri Sembilan, Director of Survey for Kelantan, Director of Survey (Map Production Division) and Director of Survey for the Federal Territory of Kuala Lumpur / Putrajaya. He is also a Certified Land Surveyor.*



CARTA ORGANISASI ORGANISATION CHART





LATAR BELAKANG ORGANISASI ORGANISATION BACKGROUND

JUPEM merupakan salah sebuah jabatan di bawah Kementerian Sumber Asli dan Alam Sekitar (NRE) yang diketuai oleh Ketua Pengarah Ukur dan Pemetaan Malaysia merangkap Pengarah Pemetaan Tentera. Ia dibahagikan kepada tiga komponen utama iaitu Pejabat Ketua Pengarah Ukur dan Pemetaan, Bahagian Pemetaan dan Bahagian Kadaster.

JUPEM is one of the agencies under the Ministry of Natural Resources and Environment (NRE). It is headed by the Director General of Survey and Mapping who is also Director of Military Mapping. The department is divided into three main components, i.e., the Office of the Director General of Survey and Mapping, the Mapping Division, and the Cadastral Division.

PEJABAT KETUA PENGARAH UKUR DAN PEMETAAN OFFICE OF THE DIRECTOR GENERAL OF SURVEY AND MAPPING

Seksyen-seksyen yang terletak di bawah Pejabat Ketua Pengarah Ukur dan Pemetaan berperanan dalam memberikan khidmat sokongan dan menyelaras kepada aktiviti, program pembangunan, penyelidikan dan pemodenan JUPEM secara keseluruhan. Di samping mengurus serta menyelaras hal ehwal pentadbiran, kewangan dan pengurusan korporat serta pelaksanaan dasar-dasar kerajaan dan jabatan, seksyen-seksyen di bawah Pejabat KPUP ini juga menyelaras pembangunan sumber manusia dan kerjaya kakitangan. Ia melibatkan program yang menitikberatkan kepada elemen penglibatan dan pembelajaran ke arah meningkatkan pengetahuan, kemahiran dan kecekapan kakitangan mengikut keperluan semasa.

The sections under the Office of Director General of Survey and Mapping have their own roles in providing support services as well as coordinating activities, development programmes, research and the modernisation of JUPEM as a whole. Aside from managing and coordinating financial and corporate management affairs as well as the implementation of government and department policies, these sections also coordinate the development of human resource and employee career paths. This involves programmes that emphasise employee participation and learning that contribute to the enhancement of their knowledge, skills and efficiency, enabling them to keep up with current needs.

KUMPULAN PENGURUSAN THE MANAGEMENT TEAM

Pengarah Ukur
(Perancangan, Penyelidikan dan Pembangunan)
Director of Survey (Planning, Research and Development)

Ahamad bin Zakaria

Pengarah (Pentadbiran dan Perkhidmatan)
Director (Administration and Services)

Ja'apar bin Wahab, DNS, DSM, JSD, KMN, PBM

Ketua Penolong Pengarah Ukur
(Perancangan Gunatenaga)
Principal Assistant Director of Survey (Manpower Planning)

Engku Mohd Adlin bin Engku Habib

Ketua Penolong Pengarah (Pembangunan Sistem)
Principal Assistant Director (System Development)

Ahmad Kamil bin Hassan Rabein

Penasihat Undang-Undang
Legal Advisor

Amir Affendy bin Hamzah

BAHAGIAN GEOSPATIAL PERTAHANAN (BGSP) ***DEFENCE GEOSPATIAL DIVISION(DGD)***

Peranan dan fungsi BGSP adalah untuk memperoleh, menyedia, mengemas kini, mengkoordinasi dan membekalkan data dan maklumat geospasial pertahanan serta menyelaraskan semua aplikasi-aplikasi geospasial dalam sistem-sistem pertahanan Angkatan Tentera Malaysia (ATM). Ianya merangkumi aspek-aspek polisi, perancangan, prosedur, operasi dan latihan geospasial bagi ketiga-tiga cabang Perkhidmatan ATM di samping mengekalkan peranan yang telah diwartakan sejak penubuhan Cawangan Pemetaan Pertahanan (CPP) di bawah Direktorat Pemetaan Negara Malaysia (DPNM) pada tahun 1965 dan garis panduan dari *Military Mapping Committee* (MMC).

The role and functions of the DGD are to acquire, prepare, update, coordinate and provide defence geospatial data and information as well as coordinate all geospatial applications in the MAF Defence systems. All these cover geospatial policies, planning, procedural, operational and training aspects for all three branches of the MAF Services besides retaining the role gazetted since the setting up of the CPP under the DPNM in 1965 and guidelines from the MMC.

KUMPULAN PENGURUSAN GEOSPATIAL PERTAHANAN ***THE DEFENCE GEOSPATIAL TEAM***

Pengarah Bahagian Geospasial Pertahanan
Director of Defence Geospatial Division

Brigadier Jeneral Dato' Pahlawan Mior
Safian bin Saidin, PCM, KAT, KMN

Pengarah Seksyen (Pembangunan Geospasial)
Director (Geospatial Development Section)

Kol Sr Dr Mohd. Zambri bin Mohamad Rabab

Ketua Penolong Pengarah Pembangunan Framework
(Pembangunan Maklumat)
*Principal Assistant Director of Framework Development
(Information Development)*

Lt Kol Sr Arifin bin Abdul Rahman

Ketua Penolong Pengarah Geospasial Medan
(Operasi dan Latihan)
*Principal Assistant Director of Field Geospatial
(Operation and Training)*

Lt Kol Azhari bin Jupri

BAHAGIAN PEMETAAN MAPPING DIVISION

Mesyuarat Jawatankuasa Pemetaan dan Data Spatial Negara (JPDSN) yang diadakan pada setiap tahun memberikan peranan dan tanggungjawab kepada Bahagian Pemetaan JUPEM untuk melaksanakan dasar dan strategi pemetaan negara.

JPDSN yang ditubuhkan melalui keputusan Jemaah Menteri (Kabinet) pada tahun 1965, membolehkan Bahagian Pemetaan menerbit dan membekalkan peta-peta yang merangkumi topografi, tematik, ortofoto, elektronik dan sebagainya untuk kegunaan Angkatan Tentera Malaysia dan orang awam bagi tujuan keselamatan, perancangan dan pembangunan negara.

Manakala dalam menjaga kedaulatan negara, Bahagian Pemetaan juga terlibat dalam kerja-kerja ukuran sempadan antarabangsa dengan negara-negara jiran, penentuan pelantar benua (Zon Ekonomi Eksklusif) dan sempadan antara negeri-negeri di Malaysia.

Bahagian Pemetaan juga menerbitkan buku-buku jadual / ramalan air pasang surut, memberikan perkhidmatan hitungan kalendar hijrah serta cerapan anak bulan dan mewujudkan pangkalan-pangkalan data pemetaan seperti Pangkalan Data Topografi dan Pangkalan Data Kartografi.

Selain itu, bahagian ini juga melaksanakan kerja-kerja ukur geodetik dalam mewujudkan prasarana ukur seperti stesen Tanda Aras (Benchmark), Sistem Penentuan Lokasi Sejagat (GPS), sistem penentuan Baitul Hilal (tempat cerapan anak bulan) dan Stesen Tolok Air Pasang Surut (STAPS).

The National Committee of Mapping and Spatial Data (NCMSD) Meeting held every year gives the Mapping Division of JUPEM the role and the responsibility to implement the national mapping policies and strategies.

The NCMSD, formed through a Cabinet decision in 1965, enables the Mapping Division to publish and supply maps that include topographic, thematic, orthophoto, electronic, etc. for the Malaysian Military and public to use for national security, planning and development purposes.

At the same time, in protecting the national sovereignty, the Mapping Division is also involved in the demarcation of international borders with neighbouring countries, determination of the continental shelf (Exclusive Economic Zone) and Malaysian state boundaries.

The Mapping Division also publishes tidal tables / schedules, provides services in the calculation of the Muslim calendar as well as the sighting of the new moon, and establishes mapping databases such as the Topography and the Cartography Databases.

Besides that, this division also carries out geodetic surveys in order to set up survey infrastructures such as Benchmark Stations, Global Positioning Systems (GPS), a system to determine Baitul Hilal (observation points for sighting of the new moon) and Tide Gauge Stations (TGS).

FUNGSI BAHAGIAN PEMETAAN *FUNCTIONS OF THE MAPPING DIVISION*

-  Menggubal dasar pemetaan negara.
Formulate national mapping policies.
-  Membuat, menerbit dan mencetak pelbagai peta dan bukan peta.
Produce, publish and print various maps and non-maps.
-  Menguruskan tapisan keselamatan dan pengeluaran lesen hak cipta.
Manage security filtering and issue copyright licences.
-  Melaksanakan penggambaran udara bagi tujuan pemetaan.
Undertake aerial photography for mapping purposes.
-  Melaksanakan pemetaan topografi dan menyelenggarakan pangkalan data topografi dan kartografi.
Undertake topographic mapping and maintain topography and cartography databases.
-  Menyelenggara Perpustakaan Peta Negara.
Manage National Map Library.
-  Urus setia kepada Jawatankuasa Pemetaan dan Data Spatial Negara (JPDSN) dan Jawatankuasa Kebangsaan Nama-nama Geografi.
Act as secretariat for the National Mapping and Spatial Data Committee (NMSDC) and the National Geographical Names Committee.
-  Mengukur sempadan antarabangsa / negeri.
Demarcate international/ state boundaries.
-  Menyediakan prasarana ukur dan pemetaan.
Provide survey and mapping infrastructures.
-  Menguruskan pengiraan rukyah / takwim bagi penentuan awal Ramadan dan Syawal serta Kalendar Islam.
Manage the calculation of the rukyah / lunar calendar to determine the first day of Ramadan and of Syawal as well as the Muslim Calendar .
-  Menjadi konsultan kepada Majlis Keselamatan Negara (MKN) dan Kementerian Luar Negeri dalam urusan persempadanan negara.
Provide consultancy services on boundary issues to the National Security Council (NSC) and the Ministry of Foreign Affairs.

KUMPULAN PENGURUSAN PEMETAAN THE MAPPING MANAGEMENT TEAM

Pengarah Ukur (Ehwal Persempadanan)
Director of Survey (Boundary Affairs)

Pengarah Ukur (Penawanan Data)
Director of Survey (Data Acquisition)

Pengarah Ukur Topografi Sabah
Director of Survey (Topography), Sabah

Pengarah Ukur (Kartografi)
Director of Survey (Cartography)

Pengarah Ukur Topografi Sarawak
Director of Survey (Topography), Sarawak

Pengarah Ukur Topografi Semenanjung
Director of Survey (Topography), Peninsular

Pengarah Ukur (Perkhidmatan Pemetaan)
Director of Survey (Mapping Services)

Pengarah Ukur (Geodesi)
Director of Survey (Geodesy)

Pengarah Ukur (Pemetaan Utiliti)
Director of Survey (Utility Mapping)

Ketua Penolong Pengarah Ukur (Pangkalan Data)
Principal Assistant Director of Survey (Databases)

Ketua Penolong Pengarah (Percetakan Peta)
Principal Assistant Director (Map Printing)

Tan Ah Bah, AMN

Haji Mohamad Kamali bin Adimin
(mulai 4 Februari 2008)
Wan Zainuddin bin Wan Yusoff, KMN
(sehingga 3 Februari 2008)

Zakaria bin Saat

Haji Ali bin Ahmad, ANS
(mulai 4 Februari 2008)
Haji Mohamad Kamali bin Adimin
(sehingga 3 Februari 2008)

Haji Ramli bin Nor

Sohaime bin Rasidi

Ng Eng Guan

Dr. Azhari bin Mohamed, PJK

Md. Zaki bin Ad. Wahid

Zoher bin Nomanbhoy

Haji Muhammad Puzi bin Ahmat, KSD

BAHAGIAN KADASTER CADASTRE DIVISION

Bahagian Kadaster dipertanggungjawabkan untuk melaksanakan kerja-kerja ukuran hak milik tanah, semakan kerja Juruukur Tanah Berlesen, semakan Pelan Permohonan Strata, semakan Pelan Akui Strata, penyediaan suratan hak milik dan pembersihan pangkalan data ukur kadaster.

Usaha-usaha telah dijalankan untuk meningkatkan lagi keseluruhan ukur kadaster JUPEM bersesuaian dengan era pemodenan ICT sekarang.

Peningkatan produktiviti terbukti berhasil apabila JUPEM membangunkan sistem-sistem sedia ada seperti Sistem Automasi Pejabat Ukur Daerah (SAPD), Sistem Pangkalan Data Kadaster (SPDK), Penaiktarafan SAPD (SAPD Upgrade), Penaiktarafan SPDK (SPDK Upgrade), Sistem Total Stesen (STS), Lapangan ke Akhir atau *Field to Finish* (F2F) dan sebagainya. Pada keseluruhannya aktiviti ukuran hak milik tanah lebih efisien dan memenuhi kehendak piagam pelanggan.

The Cadastre Division is responsible for carrying out surveys on land titles, monitoring the work of Licensed Land Surveyors, checking strata application plans, checking strata certified plans, preparing title documents and cleaning cadastral survey databases .

Efforts have been made to upgrade the whole of JUPEM's cadastral survey in keeping with the present era of ICT modernisation.

The increase in productivity is evident with the development of JUPEM's existing systems such as the District Survey Office Automatic System (DSOAS), Cadastral Databases System (CDS), DSOAS Upgrade, CDS Upgrade, Total Station System (TSS), Field to Finish (F2F), etc. On the whole, land title surveying has become more efficient and meets with the requirements of the client's charter.

FUNGSI BAHAGIAN KADASTER
FUNCTIONS OF THE CADASTRE DIVISION

-  Menasihati Jabatan mengenai penggubalan dasar ukur kadaster melalui peruntukan undang-undang, peraturan ukur dan Pekeliling Ketua Pengarah Ukur dan Pemetaan.
Advise the Department on the formulation of cadastral survey policies through provisions in the law, survey regulations and circulars from the Director General of Survey and Mapping.
-  Merancang dan mengawasi kerja-kerja ukur kadaster dan pangkalan data ukur kadaster yang dilaksanakan oleh JUPEM Negeri supaya siap mengikut tempoh serta menepati matlamat yang telah ditetapkan.
Plan and monitor cadastral surveys carried out and cadastral survey databases developed by State JUPEM to ensure timely completion and achievement of set objectives.
-  Mengawal selia prestasi dan kualiti ukuran kadaster yang dijalankan oleh Juruukur Tanah Berlesen (JTB) supaya mematuhi peruntukan undang-undang dan peraturan yang telah ditetapkan. Prestasi kerja dapat dinilai melalui laporan yang disediakan oleh JUPEM Negeri. Manakala kualiti dapat ditentukan melalui semakan rambang di lapangan.
Supervise the performance and quality of cadastral surveys carried out by the Licensed Land Surveyors (LLS) to ensure adherence to the laws and regulations laid down. Work performance can be appraised based on reports prepared by the State JUPEM, while the work quality is assessed through random checks in the field.
-  Merancang dan melaksanakan pembangunan sistem ukur kadaster yang sentiasa efisien di seluruh JUPEM Negeri yang meliputi aspek-aspek kerja di lapangan dan juga di pejabat.
Plan and implement the development of a consistently efficient cadastre system for all State JUPEMs that encompasses work aspects in the field and in the office.

KUMPULAN PENGURUSAN KADASTER
THE CADASTRE MANAGEMENT TEAM

Pengarah Ukur dan Pemetaan W.P Kuala Lumpur / Putrajaya <i>Director of Survey and Mapping F.T. of Kuala Lumpur / Putrajaya</i>	Hasan bin Jamil, AMN
Pengarah Ukur dan Pemetaan Perak <i>Director of Survey and Mapping, Perak</i>	Mohamed Azhari bin Mohamed Zainudin, KMN
Pengarah Ukur dan Pemetaan Kelantan <i>Director of Survey and Mapping, Kelantan</i>	Mohamed bin Yunus, KMN, AMN

Pengarah Ukur dan Pemetaan Pahang
Director of Survey and Mapping, Pahang

Mohd Noor bin Isa, SMP

Pengarah Ukur dan Pemetaan Johor
Director of Survey and Mapping, Johor

Junaimee bin Dahlan

Pengarah Ukur dan Pemetaan Selangor
Director of Survey and Mapping, Selangor

John Elvis Koh, SIS, PPT

Pengarah Ukur dan Pemetaan Negeri Sembilan
Director of Survey and Mapping, Negeri Sembilan

Haji Abd Rahman bin Mohd Don
(mulai 1 Ogos 2008)
Wan Zainuddin bin Wan Yusoff, KMN
(sehingga 16 Mac 2008)
Haji Ali bin Ahmad, ANS
(sehingga 3 Februari 2008)

Pengarah Ukur dan Pemetaan Pulau Pinang
Director of Survey and Mapping, Pulau Pinang

Haji Mohd. Salehan bin Ngadiman

Pengarah Ukur dan Pemetaan Terengganu
Director of Survey and Mapping, Terengganu

Haji Hamdani bin Haji Sadiman

Pengarah Ukur dan Pemetaan Kedah
Director of Survey and Mapping, Kedah

Haji Mohammad Yunus bin Md. Yusof, PPT

Pengarah Ukur dan Pemetaan Perlis
Director of Survey and Mapping, Perlis

Haji Anuar bin Sulaiman

Pengarah Ukur dan Pemetaan W.P. Labuan
Director of Survey and Mapping, F.T. Labuan

Che Mohamad Bakri bin Omar, ADK

Pengarah Ukur dan Pemetaan Melaka
Director of Survey and Mapping, Melaka

Wan Zahari bin Wan Nilam, AAP
(mulai 1 April 2008)

Pengarah Ukur (Penyelarasan dan Dasar Kadaster)
Director of Survey (Coordination and Cadastral Policies)

Dr. Teng Chee Hua

Ketua Penolong Pengarah Ukur (Perundangan)
Principal Assistant Director of Survey (Legislation)

Jasni bin A. Rahman

Ketua Penolong Pengarah Ukur (Naziran/Juruukur Berlesen)
Principal Assistant Director of Survey (Inspectorate/Licensed Surveyors)

Padzillah bin Che Ros, BKT, AMN



PENGURUSAN SUMBER MANUSIA 2008 HUMAN RESOURCE MANAGEMENT 2008

Mengikut Waran Perjawatan JUPEM Tahun 2008, JUPEM mempunyai jumlah kakitangan yang diluluskan seramai 5,080 jawatan meliputi kumpulan perkhidmatan teknikal dan bukan teknikal.

Daripada jumlah tersebut, sebanyak 4,909 jawatan telah diisi mengikut kekosongan dan keutamaan.

According to Appointment Warrants for JUPEM for year 2008, JUPEM has a total of 5,080 approved posts covering both technical and non-technical services.

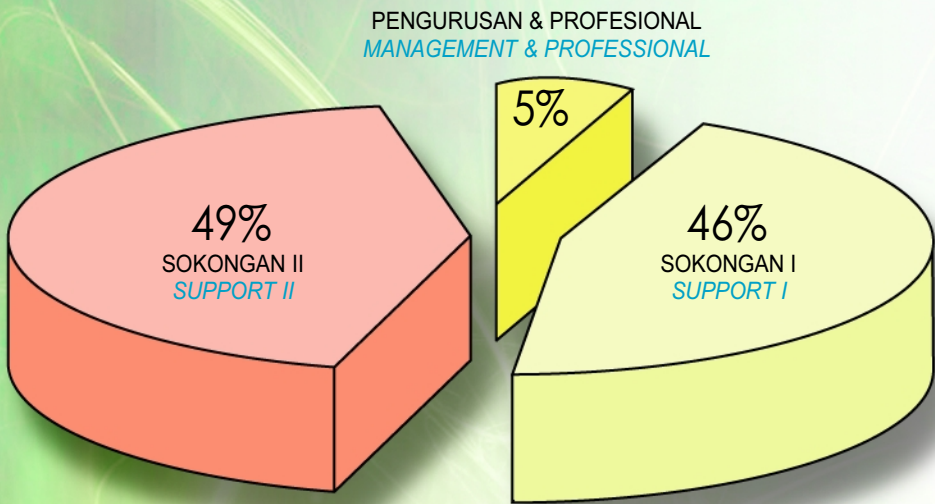
Of the total, 4,909 posts have been filled according to vacancy and priority.

KUMPULAN group		LULUS approved	ISI filled	KOSONG vacant
PENGURUSAN & PROFESIONAL MANAGEMENT & PROFESSIONAL	GRED UTAMA (JUSAA, B & C)	4	4	-
	GRED (54)	22	22	-
	GRED (48 – 52)	62	60	2
	GRED (41 – 44)	190	174	16
SOKONGAN I SUPPORT I	GRED (27 – 38)	592	558	34
	GRED (17 – 26)	1,734	1,673	61
SOKONGAN II SUPPORT II	GRED (1 – 16)	2,476	2,418	58
JUMLAH total		5,080	4,909	171

Pertambahan jawatan kakitangan JUPEM disebabkan pewujudan jawatan baru di Seksyen Pentadbiran dan Perkhidmatan berkuatkuasa 16 Februari 2008 dan sebanyak 37 jawatan pelbagai gred telah diluluskan mengikut Waran Perjawatan Bil. E15 Tahun 2008 bertarikh 14 Februari 2008.

The increase in the number of posts for JUPEM is due to the creation of new posts in the Administrative and Services Section with effect from 16 February 2008; a total of 37 additional posts of various grades were approved as per Appointment Warrant No. E15 2008 dated 14 February 2008.

Pecahan Perjawatan JUPEM Tahun 2008
Distribution of JUPEM Posts in 2008



Manakala terdapat 90 Jawatan KADER JUPEM yang ditempatkan di pelbagai jabatan kerajaan yang lain seperti di Kementerian Sumber Asli dan Alam Sekitar (NRE), Jabatan Kerja Raya (JKR), Pusat Infrastruktur Data Geospatial Negara (MaCGDI), Institut Tanah dan Ukur Negara (INSTUN), Kementerian Perumahan dan Kerajaan Tempatan (KPKT) & Majlis Keselamatan Negara (MKN). Jumlah keseluruhan jawatan KADER JUPEM adalah seperti yang berikut;

Meanwhile, there are 90 JUPEM cadre posts placed in various government departments such as the Ministry of Natural Resources and Environment (NRE), Public Works Department (PWD), Malaysian Centre for Geospatial Data Infrastructure (MaCGDI), National Land and Survey Institute (INSTUN), Ministry of Housing and Local Government (MHLG) & National Security Council (NSC). The overall total of JUPEM cadre posts is as follows;

KUMPULAN group	LULUS approved	ISI filled	KOSONG vacant
PENGURUSAN & PROFESIONAL MANAGEMENT & PROFESSIONAL	59	56	3
SOKONGAN SUPPORT	31	29	2
JUMLAH total	90	85	5



PENCAPAIAN 2008

2008 PERFORMANCE



INFRASTRUKTUR GEODETIK GEODETIC INFRASTRUCTURE



JUPEM adalah satu-satunya agensi kerajaan yang bertanggungjawab dalam membangunkan Prasarana Geodetik di Malaysia. Bermula pada tahun 1885 hingga kini, jabatan ini telah membangunkan pelbagai prasarana geodetik yang bertaraf dunia dan berteknologi tinggi. Penubuhan prasarana ini menjadi asas kepada pengurusan pembangunan tanah bagi tujuan pertahanan, penyelidikan saintifik, pembelajaran dan sebagainya.

Antara prasarana terkini yang dibangunkan ialah MyRTKnet, MyGeoid, Pusat Maklumat dan Jualan Data Geospasial Negara (PMJDGN) dan JUPEM Geoportal. Prasarana geomatik jabatan ini, dibangunkan secara bersepadu menggunakan peralatan dan pengukuran yang tepat serta berkejituan tinggi, di samping pembangunan sistem rangkaian penyebaran maklumat geospasial kebangsaan yang efektif dan mesra pengguna.

Aktiviti utama yang dijalankan di bawah prasarana ini ialah Cerapan Sistem Penentuan kedudukan Sejagat (GPS), Cerapan Air Pasang Surut, Ukuran Aras, Ukuran Gravitasi dan Astronomi. Selain itu, kemudahan seperti Perpustakaan Peta Negara, Stor Pusat Peta dan PMJDGN serta JUPEM Geoportal telah disediakan bagi membolehkan penyelidikan dan pembelajaran dilakukan secara berterusan seterusnya dapat meningkatkan sistem penyampaian yang lebih baik kepada orang awam.

JUPEM is the government agency responsible for developing the Geodetic Infrastructure in Malaysia. From 1885 until today, the department has developed various world class and high technology geodetic infrastructures. The setting up of these infrastructures has become the basis in the management of land development for the purposes of defence, scientific research, learning and such.

Among the most recent infrastructures set up are MyRTKnet, MyGeoid, National Geospatial Data Information and Sales (NGINS) and JUPEM Geoportal. The geomatic infrastructures of the department were set up integratively using accurate and highly precise equipment and surveying, besides the development of an effective and user friendly national spatial information dissemination network system.

The main activities carried out under this infrastructure are the Global Positioning System (GPS) Observation, Tidal Observation, Levelling Survey, Gravity Survey, and Astronomy. Aside from that, facilities such as National Map Library, Central Map Store and NGINS as well as JUPEM Geoportal are provided to facilitate continuous research and learning, thus ensuring a better delivery system to the public.

SISTEM PENENTUDUDUKAN SEJAGAT
GLOBAL POSITIONING SYSTEM(GPS)



Cerapan GPS dijalankan bertujuan untuk mendapatkan kedudukan sesuatu titik yang dicerap pada permukaan bumi sebagai suatu nilai koordinat. Aktiviti yang dijalankan dalam operasi GPS bagi tahun 2008 melibatkan kerja-kerja ukuran jaringan dan kawalan GPS serta pengendalian operasi stesen MyRTKnet.

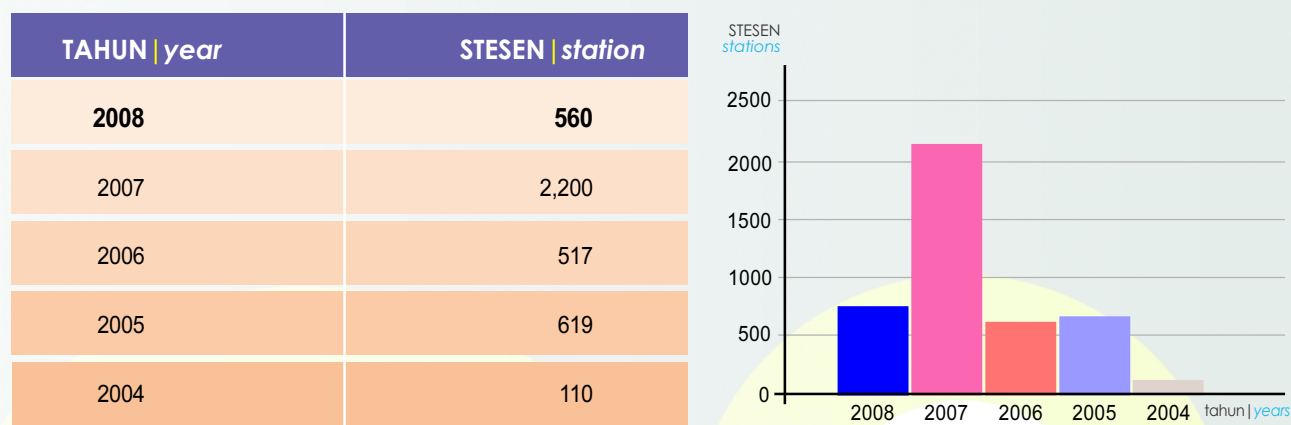


GPS Observation is carried out to determine the position of a point observed on the surface of the earth calculated as a coordinate value. Activities carried out in the operation of the GPS for 2008 involved network survey and GPS control as well as managing the operations of MyRTKnet stations.

Perincian pencapaian setahun aktiviti tersebut adalah seperti yang berikut:
Detailed performance of year's activities are as follows :

BIL. no.	AKTIVITI activity	UNIT unit
i.	Ukuran Jaringan dan Kawalan GPS <i>GPS Network and Control Survey</i>	560 stesen <i>560 stations</i>
ii.	Pengoperasian dan Penyelenggaraan Stesen MyRTKnet <i>Operations and Maintenance of MyRTKnet Stations</i>	142 kali <i>142 times</i>
iii.	Pengurusan Data GPS Stesen MyRTKnet <i>Data Management of MyRTKnet GPS Stations</i>	584,140 data <i>584,140 data</i>
iv.	Pemprosesan Data GPS Stesen MyRTKnet Harian <i>Daily Data Processing of MyRTKnet GPS Stations</i>	24,155 data <i>24,155 data</i>
v.	Pemprosesan Data GPS Stesen MyRTKnet Mingguan <i>Weekly Data Processing of MyRTKnet GPS Stations</i>	3,440 data <i>3,440 data</i>

Pencapaian selama tempoh lima tahun bagi aktiviti cerapan GPS adalah seperti yang berikut :
Performance over five years of GPS observation activities are as follows :



STESEN TOLOK AIR PASANG SURUT (STAPS)
TIDE GAUGE STATIONS (TGS)

Cerapan Air Pasang Surut

Cerapan Air Pasang Surut dilakukan untuk mendapatkan nilai aras purata laut. Ketika ini terdapat 21 buah Stesen Tolok Air Pasang Surut yang beroperasi di seluruh negara, iaitu 12 di Semenanjung, 6 di Sabah dan 3 di Sarawak. Pencapaian aktiviti cerapan air pasang surut bagi tahun 2008 adalah seperti yang berikut :

LOKASI LOCATION	PENCAPAIAN (SET DATA) PERFORMANCE (DATA SET)
Semenanjung	144
Sarawak	36
Sabah	72
JUMLAH TOTAL	252

Data-data yang diperoleh daripada cerapan tersebut telah diproses, dibuat analisis dan didokumenkan untuk tujuan penerbitan Buku Rekod Cerapan Air Pasang Surut 2008 dan Jadual Ramalan Air Pasang Surut 2010. Kedua-dua set buku tersebut akan diterbitkan pada tahun 2009.

Tidal Observation

Tidal observation is carried out to determine the mean sea level. At present, 21 Tide Gauge Stations are in operation nationwide, i.e.12 in the Peninsular, 6 in Sabah and 3 in Sarawak. Performance of tidal observation activities for 2008 are as follows :



Data gathered from such observation have been processed, analysed and documented for the purpose of publishing Tidal Observation Record 2008 and Tidal Prediction Tables 2010. Both documents will be published in 2009.

JARINGAN UKUR ARAS
LEVELLING NETWORK

Ukur Aras dijalankan bertujuan untuk mendapatkan nilai ketinggian aras purata laut pada tanda aras (Benchmark) yang dihubungkan secara relatif dengan stesen-stesen cerapan air pasang surut. JUPEM menjalankan dua kelas ukuran aras, iaitu Ukuran Aras Jitu dan Ukuran Aras Kelas Kedua. Sehingga 31 Disember 2008, pencapaian setahun aktiviti ini adalah seperti yang berikut:

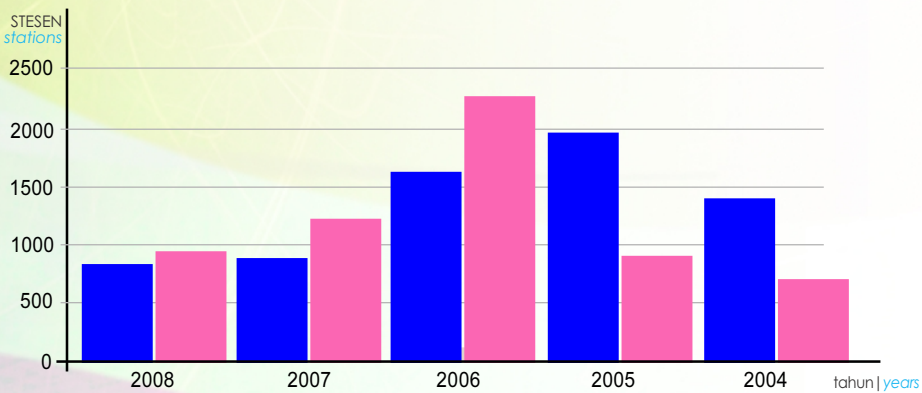
Levelling is carried out to determine the mean sea level heights at the benchmark relatively connected to tide observation stations. JUPEM carried out two classes of levelling, i.e. Precise Levelling and Second Class Levelling. Up to 31 December 2008, the year's performance for this activity are as follows :



AKTIVITI activity	PENCAPAIAN (Tanda Aras) performance (benchmark)
Ukuran Aras Jitu <i>Precise Levelling</i>	852
Ukuran Aras Kelas Dua <i>Second Class Levelling</i>	890
Pemprosesan Data Ukuran Aras Jitu <i>Precise Levelling Data Processing</i>	921
Pemprosesan Data Ukuran Aras Kelas Kedua <i>Second Class Levelling Data Processing</i>	974

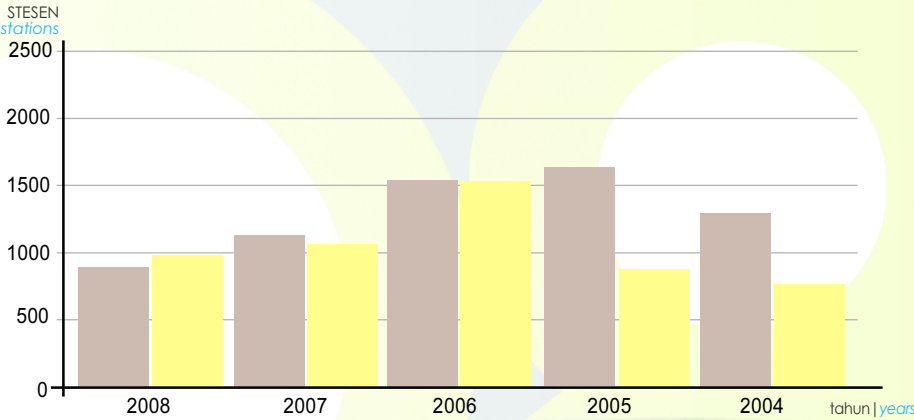
Pencapaian tahunan aktiviti kerja-kerja ukur aras jitu bagi tahun 2004 hingga 2008 adalah seperti yang berikut:
Yearly performance for precise levelling activities for years 2004 until 2008 are as follows:

TAHUN year	UKURAN ARAS JITU precise levelling	PEMROSESAN DATA UKUR ARAS JITU precise levelling data processing
2008	852	921
2007	904	1,247
2006	1,689	2,336
2005	1,998	896
2004	1,399	739



Perbandingan pencapaian aktiviti ukur aras kedua bagi tempoh lima tahun adalah seperti yang berikut:
Comparison of performance of second class levelling activities over a five year period is as follows:

TAHUN year	UKURAN KELAS KE DUA second class levelling	PEMROSESAN DATA UKUR ARAS KELAS KEDUA second class levelling data processing
2008	890	974
2007	1,127	1,059
2006	1,536	1,530
2005	1,627	873
2004	1,291	762



UKURAN GRAVITI GRAVITY SURVEY

Pengukuran Graviti yang dijalankan oleh JUPEM bertujuan untuk mendapatkan nilai pembetulan ortometrik di semua stesen cerapan ukur aras dan stesen Cerapan Air Pasang Surut bagi memperoleh nilai ketinggian sebenar. Nilai-nilai ini boleh dijadikan sebagai datum ketinggian kepada kerja-kerja ukur dan pemetaan, penyelidikan serta kajian saintifik.

Bagi tahun 2008, ukuran Graviti telah dijalankan di bawah projek *Cadastral Control Infrastructure (CCI)* dan Sistem Pemodenan Ketinggian (Height Modernization System) Lembah Klang. Sebanyak 760 stesen di bawah kedua-dua projek tersebut telah dibuat ukuran graviti.



Gravity Surveying carried out by JUPEM is for the purpose of determining orthometric correction value in all levelling observation stations and Tidal Observation stations so as to get the actual height value. These values can be used as height datum for survey and mapping work, research and also scientific studies.

In 2008, Gravity Survey was carried out under the Cadastral Control Infrastructure (CCI) and Klang Valley Height Modernization System projects. Gravity Surveys for 760 stations under these two projects were performed.

ASTRONOMI
ASTRONOMY

Sejak tahun 1977 JUPEM telah menganggotai Majlis Kebangsaan bagi Hal Ehwal Islam Negeri-negeri. Melalui keanggotaan ini, JUPEM telah memainkan peranannya dalam memberikan perkhidmatan menyediakan Kalender Islam, penentuan Arah Kiblat dan juga cerapan hilal kepada masyarakat. Bagi maksud ini, JUPEM menggunakan peralatan dan kepakaran yang ada dalam membuat perkiraan di samping menyediakan alat dan tempat untuk cerapan hilal dengan kaedah yang terkini.

Since 1977, JUPEM has been a member of the National Council for State Islamic Affairs. As a member, JUPEM has played its role in rendering such public services as the preparation of the Islamic Calendar, determination of the Kiblat and also observation of the new moon (hilal). For this purpose, JUPEM makes use of existing equipment and expertise in its calculation as well as provides equipment and sites for observing the new moon using the latest methodology.

AKTIVITI activity	PENCAPAIAN (Unit) performance (unit)
Pengiraan Astronomi Rukyah dan Hilal <i>Astronomic Calculation of Rukyah and Hilal</i>	28 stesen <i>28 stations</i>
Cerapan Hilal di Balai Cerap Teluk Kemang bagi Tujuan Kajian Semula Kriteria-Kriteria Imkanur Rukyah <i>Observation of Hilal at Teluk Kemang Observatory for the Purpose of Reviewing all Criteria for Rukyah Imkanur</i>	9 kali <i>9 times</i>
Cerapan Kajian Cerahan Langit <i>Sky Brightness Study Observation</i>	6 kali <i>6 times</i>



PUSAT KHIDMAT PELANGGAN
CUSTOMER SERVICE CENTRE

Pusat Maklumat dan Jualan Data Geospasial Negara dan JUPEM Geoportal
National Information and Geospatial Data Sales Centre and JUPEM Geoportal

JUPEM Geoportal telah dibina bagi merealisasikan visi dan matlamat untuk memperoleh kemudahan simpanan dan pemulihan data geospasial, di samping membangunkan gudang data geospasial dan rangkaian penyebaran informasi geospasial secara bersepadu. Pelaksanaan JUPEM Geoportal melibatkan penyusunan semula data bagi membolehkan pelanggan JUPEM mengesan, memilih, membeli dan menggunakan data yang diperlukan serta menentukan penggunaan data dengan cara yang paling efisien melalui perkhidmatan web atau portal JUPEM.

JUPEM Geoportal was set up to realise the vision and objective of providing spatial data storage and recovery facility, besides developing geospatial data storehouse and geospatial information dissemination network integratively. Implementation of JUPEM Geoportal involves data rearrangement to enable JUPEM customers to locate, select, buy and use data required as well as determine the most efficient use of data through web services or JUPEM portal.

Faedah-faedah yang dapat diperolehi daripada pembangunan JUPEM Geoportal ialah :

Benefits from the development of JUPEM Geoportal are :

-  Penyelenggaraan satu prasarana yang berperanan sebagai satu punca kuasa bagi data geospasial
Maintenance of an infrastructure that acts as a power source for geospatial data
-  Dapat membekalkan data geospasial dengan kadar yang tinggi
Provision of geospatial data at a high rate
-  Dapat meningkatkan kualiti produk dan perkhidmatan kepada pelanggan
Enhanced product and service quality for customers
-  Dapat membekalkan kepelbagaian data geospasial dalam jumlah yang lebih besar kepada pelanggan seterusnya dapat memperbaiki mutu perkhidmatan
Availability of a range of geospatial data in large quantities for customers leading to improved quality of service
-  Perkhidmatan menjadi lebih efisien dan mengikut jadual
More efficient and timely service
-  Perkhidmatan kaunter lebih cekap dan cepat dalam menyalurkan data dan maklumat kepada pelanggan
More efficient and faster counter service in channelling data and information to customers

Di samping itu, Pusat Maklumat dan Jualan Data Geospasial Negara (PMJDGN) juga telah ditubuhkan bagi menawarkan pelbagai jenis produk geospasial dan perkhidmatan melalui satu sistem rangkaian penyebaran maklumat geospasial kebangsaan secara bersepadu. Antara produk JUPEM yang disediakan ialah peta-peta topografi dan tematik pelbagai skala yang meliputi Semenanjung Malaysia, Sabah dan Sarawak untuk kegunaan pihak tentera dan orang awam.

Selain itu, JUPEM memberikan pelbagai perkhidmatan seperti reproduksi peta, melapik peta, pengimbasan dan pencetakan untuk agensi-agensi kerajaan dan sektor awam serta orang perseorangan. JUPEM juga telah menerbitkan peta-peta digital seperti peta terimbas dan peta garisan vektor. Produk-produk dan perkhidmatan ini boleh dibeli, dipesan atau dipohon daripada Pusat Jualan Maklumat Geospasial secara dalam talian. Sebagai pusat pemasaran, PMJDGN menyediakan perkhidmatan rujukan peta-peta kepada pelanggan yang berurusan secara terus di Kaunter Jualan PMJDGN yang bertempat di Tingkat Bawah, Bangunan Ukur, Jalan Semarak, 50578 Kuala Lumpur.

Besides that, the National Information and Geospatial Data Sales Centre (NIGDSC) has also been set up to offer various geospatial products and services through an integrated national geospatial information dissemination network. Among JUPEM products provided are topographic and thematic maps of various scales covering Peninsular Malaysia, Sabah and Sarawak for the use of the military and the public.

JUPEM also offers various services such as map reproduction, map mounting, scanning and printing to government agencies and the public sector as well as to individuals. JUPEM has also published digital maps such as print maps and vector line maps. These products and services can be bought, ordered or requested on-line from the Geospatial Information Sales Centre. As a marketing centre, the NIGDSC provides map reference services to customers dealing directly with the NIGDSC Sales Counter located on the Ground Floor, Bangunan Ukur, Jalan Semarak, 50578 Kuala Lumpur.

Stor Pusat Peta Negara
National Central Map Store

Stor Pusat Peta Negara merupakan premis penyimpanan peta terbitan JUPEM yang disimpan secara pukal sebelum pengedaran. Stor ini juga bertanggungjawab ke atas penyimpanan stok dan pengedaran peta untuk pemasaran Pusat Maklumat dan Jualan Data Geo-Spatial Negara (PMJDGN). Selain itu, simpanan peta-peta ini adalah untuk pembekalan kepada pihak Angkatan Tentera Malaysia (ATM) dan pasukan keselamatan, khusus bagi kegunaan pertahanan dan keselamatan negara.

Aktiviti penyimpanan dan pembekalan peta-peta melibatkan jumlah seperti yang berikut:
Storage and supply of maps involve amount as follows:

AKTIVITI activity	PENCAPAIAN (keping) performance (pieces)
Penerimaan Peta <i>Maps Received</i>	422,649
Pembekalan Peta <i>Maps Distributed</i>	207,507

The National Central Map Store is the premises for storing maps published by JUPEM. These maps are stored in bulk before being distributed. The store is also responsible for storing stock and distributing maps for the National Geospatial Information and Sales Centre (NGISC) marketing. Apart from that, this map collection is for supply to the Malaysian Armed Forces (MAF) and security forces, specifically for use in national defence and security.



Perpustakaan Peta Negara
The National Map Library

Perpustakaan Peta Negara menyediakan sumber rujukan dalam bidang ukur dan pemetaan kepada kakitangan JUPEM serta orang awam. Perpustakaan menyediakan koleksi buku dan jurnal teknikal di samping premis penyimpanan dan rujukan pelbagai bahan terbitan dan keluaran JUPEM seperti peta, foto udara dan bahan cetak. Ia juga membekalkan foto udara dalam bentuk cetak lekap, mozek, diapositif dan pembesaran kepada pelanggan, khususnya Angkatan Tentera Malaysia, Polis Diraja Malaysia, Jabatan Kerajaan dan pihak swasta.

The National Map Library provides a source of reference in the field of survey and mapping to JUPEM staff as well as to the public. The library makes available a collection of books and technical journals as well as acts as storage and reference premise for a host of miscellaneous materials published and produced by JUPEM such as maps, aerial photographs and printed materials. It also supplies aerial photographs in the form of mounted prints, mosaic, diapositives and enlargements to customers, specifically the Malaysian Armed Forces, the Malaysian Royal Police, government departments and the private sector.



Selain itu, perpustakaan ini juga menyimpan pelbagai koleksi buku dan peta panduan jalan raya terbitan agensi swasta di bawah aktiviti cetak semula peta, peta-peta rampaian dan peta tematik serta salinan-salinan peta yang diperoleh daripada agensi pemetaan luar negara melalui program pertukaran peta. Pengunjung boleh mendapatkan bahan-bahan berkaitan dengan aktiviti-aktiviti ukur dan pemetaan di Perpustakaan Peta Negara bertempat di Tingkat 1, Bangunan Ukur, JUPEM, Jalan Semarak, 50578 Wilayah Persekutuan Kuala Lumpur.

Besides that, the library also stocks a varied collection of books and road maps published by private agencies as part of its activity to reprint maps, miscellaneous and thematic maps as well as copies of maps acquired from foreign map agencies through map exchange programmes. Visitors can obtain materials related to survey and mapping activities from the National Map Library located on the First Floor, Bangunan Ukur, JUPEM, Jalan Semarak, 50578 Federal Territory Kuala Lumpur.

Pencapaian aktiviti Perpustakaan Peta Negara adalah seperti berikut :
Performance of National Map Library activities are as follows :

AKTIVITI activity	PENCAPAIAN (Unit) performance (unit)
Perkhidmatan Perolehan Peta, Buku dll. (naskhah) <i>Services in Acquiring Maps, Books etc. (copies)</i>	6,783
Pendokumentasi Koleksi Perpustakaan (jilid) <i>Documentation of Library Collection (volumes)</i>	1,328
Pengedaran Bahan-Bahan Terbitan JUPEM (naskhah) <i>Distribution of JUPEM publications (copies)</i>	17,986

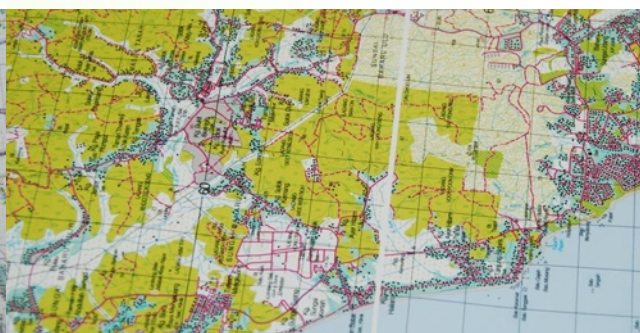




PENERBITAN PETA MAP PUBLICATION

JUPEM ialah sebuah agensi kerajaan yang dipertanggungjawabkan untuk menerbitkan peta-peta topografi di Malaysia bagi kegunaan pihak keselamatan dan awam. Di samping itu, terdapat juga agensi-agensi lain di bawah Jawatankuasa Pemetaan dan Data Spatial Negara (JPDSN) yang menguruskan penerbitan peta-peta tematik masing-masing secara berterusan. Nombor siri peta lama seperti siri L dan T ditetapkan sendiri oleh agensi-agensi penerbit, ini mengakibatkan penomboran siri peta yang tidak konsisten serta tidak membolehkan sesuatu rekod lengkap berkaitan penerbitan peta-peta tersebut disediakan secara berpusat.

JUPEM is the government agency given the responsibility to publish topographic maps in Malaysia for the use of security agencies and the public. Meanwhile, there are also other agencies under the National Mapping and Spatial Data Committee (NMSDC) that continue to manage the publication of their own thematic maps. The serial numbering of old maps such as the L and T series was determined by the publishing agencies themselves, thus resulting in an inconsistent numbering of map series as well as making it impossible to prepare a complete and centralised record of maps published.



Pelaksanaan kaedah penomboran siri peta baru, iaitu MY membolehkan agensi-agensi yang menyediakan peta menggunakan nombor siri yang seragam. Pada masa yang sama, penyelenggaraan rekod penomboran siri peta rampaian terbitan JUPEM dan agensi-agensi di bawah JPDSN akan dapat dilaksanakan dengan sistematik. Aktiviti ukuran titik kawal bagi pemetaan Siri T 738 dan T 931 yang diterbitkan oleh JUPEM telah dihentikan pada tahun 2006 dan diganti masing-masingnya dengan pemetaan Siri MY 511 T dan MY 711 T. Namun begitu, lembar-lembar siri lama yang masih belum diterbitkan masih diteruskan sehingga semua pemetaan siri lama selesai diterbitkan. Penerbitan peta di JUPEM melibatkan aktiviti-aktiviti seperti penawanan data, ukuran titik kawal, penyediaan pangkalan data, ukuran penyudahan padang, proses kartografi dan percetakan.

The implementation of a numbering method to serialise new maps i.e. MY has enabled map publishing agencies to use a uniform serial numbering system. At the same time, maintenance of a serial numbering record of miscellaneous maps published by JUPEM and agencies under JPDSN can be done systematically. Control point surveys for Mapping Series T 738 and T 931 published by JUPEM were stopped in 2006 and replaced by Mapping Series MY 511 T and MY 711 T respectively. Nevertheless, unpublished sheets belonging to the old series will continue to be published until completion. Publication of maps in JUPEM involves such activities as data acquisition, control point survey, preparation of databases, field completion survey, cartographic process, and printing.

PENAWANAN DATA DAN FOTO UDARA
DATA ACQUISITION AND AERIAL PHOTOGRAPHY



Fotografi udara merupakan aktiviti penawanan data yang utama untuk memperoleh maklumat-maklumat awalan yang diperlukan dalam penerbitan sesuatu peta pelbagai skala. Dalam proses ini JUPEM telah menjalankan penggambaran udara yang melibatkan beberapa misi penerbangan dengan khidmat pesawat swasta yang disewa secara kontrak.

Selain fotografi udara dan penyediaan cetak lekap, proses pemilihan titik kawal, penyediaan peta ortofoto, dataset penyudahan padang, dataset ulangan terhad, data ortorektifikasi dan data untuk tentera juga dijalankan. Sehingga 31 Disember 2008, pencapaian setahun bagi aktiviti penawanan data adalah seperti yang berikut:

Aerial photography is the main data acquisition activity for obtaining initial information needed for the publication of maps of various scales. In this process, JUPEM has carried out aerial photography involving several flying missions using the services of commercial aircraft leased on a contractual basis.

Apart from aerial photography and preparation of mount prints, the process of selecting control points, preparing orthophoto maps, field completion datasets, limited revision datasets, orthorectification data and data for the military were also carried out. Until 31 December 2008, the year's performance for data acquisition activities are as follows :

Kemajuan Aktiviti Penawanan Data
Data Acquisition Performance



AKTIVITI activity	LEMBAR sheet
Fotografi Udara <i>Aerial Photography</i>	117
Pemilihan Titik Kawal <i>Control Point Option</i>	146
Penyediaan Dataset Penyudahan Padang <i>Preparation of Field Completion Dataset</i>	131
Penyediaan Peta Ortofoto <i>Production of Orthophoto Maps</i>	81
Penyediaan Data Ortorektifikasi Imej Satelit <i>Preparation of Satellite Image Orthorectification Data</i>	18
Penyediaan Permohonan Data Bagi Pihak Angkatan Tentera Malaysia, Pengguna dan Jabatan / Agensi lain <i>Preparation of Data Requested by the Malaysian Armed Forces, Consumers and Other Departments / Agencies</i>	67

UKURAN TITIK KAWAL
CONTROL POINT SURVEY

Bagi tujuan pelarasan penyegitigaan udara, ukuran titik kawal dijalankan untuk mendapatkan maklumat koordinat planimetri dan ketinggian titik kawal yang akan digunakan sebagai kawalan model pada alat pemplot stereo. Pencapaian setahun aktiviti ukuran titik kawal mengikut siri peta yang dijalankan adalah seperti yang berikut:

SIRI series	SEMENJUNG	SABAH	SARAWAK
	STESEN stations		
L 808 T	133	-	-
MY 501T	328	-	-
MY 511 T	-	314	176
MY 701 T	254	-	-
MY 711 T	-	309	157
Projek Khas Special Project	22	-	6
JUMLAH total	737	623	339

Pada keseluruhannya ukuran titik kawal yang telah dijalankan bermula pada Januari 2008 hingga 31 Disember 2008 ialah sebanyak 1699 stesen. Pencapaian aktiviti ini dalam tempoh lima tahun (2004 -2008) adalah seperti yang berikut:

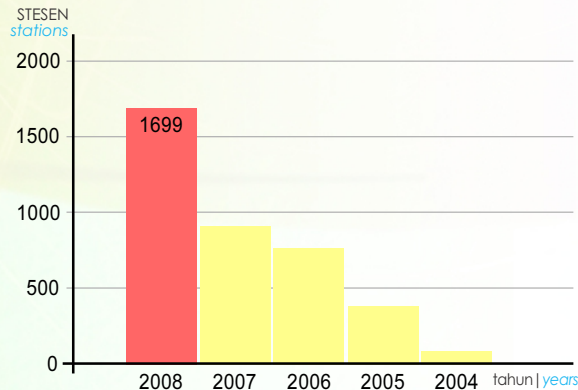
Ukuran Titik Kawal Bagi Tempoh Lima Tahun (2004-2008)
Control Point Survey Over Five Years (2004-2008)

TAHUN year	STESEN stations
2008	1699
2007	915
2006	773
2005	389
2004	89

For the purpose conducting aerial triangulation, control point surveys were carried out to obtain planimetric coordinates and control point elevation to be used in obtaining control model for stereo plotter equipment. The year's performance for control point survey according to map series used are as follows:



On the whole, control point surveys carried out beginning January 2008 until 31 December 2008 totalled 1699 stations. Performance over a period of five years (2004 -2008) is as follows:



PENYEDIAAN PANGKALAN DATA
PREPARATION OF DATABASES

Melalui pemodenan sistem pemetaan, JUPEM telah berjaya menghasilkan produk - produk pemetaan dalam bentuk digital seperti peta topografi berdigit, model ketinggian berdigit (DEM) dan peta ortofoto. Peta-peta yang diterbitkan oleh JUPEM terdapat dalam pelbagai siri skala iaitu 1 : 50,000, 1 : 25,000 dan 1: 3,000 – 1 : 12,000. Peta-peta digital yang diterbitkan oleh JUPEM adalah memenuhi keperluan asas bagi pelbagai aplikasi Sistem Maklumat Geografi (GIS) serta spesifikasi ketenteraan yang dikehendaki oleh Angkatan Tentera Malaysia (ATM), khususnya Tentera Udara Diraja Malaysia (TUDM) dan Bahagian Staf Perisikan Pertahanan (BSPP).

Peta topografi digital yang dijana menggunakan perisian GINIS (perolehan tahun 1988) disimpan dalam format DST dan dibekalkan dalam format DXF. Dengan meluasnya penggunaan GIS yang memerlukan peta topografi sebagai peta asas, maka peta topografi digital yang berasaskan perisian GINIS tidak lagi sesuai. Oleh itu, pada tahun 2002, JUPEM telah beralih kepada Pangkalan Data Berorientasi Objek (*Object Oriented Database Technology*) yang sesuai untuk aplikasi GIS dengan menggunakan GOTHIC LAMPS2. Bagi mewujudkan pangkalan data dalam persekitaran sistem GOTHIC, data sedia ada yang berasaskan perisian GINIS perlu dibuat migrasi ke pangkalan data GOTHIC melalui proses suntingan dan semakan. Migrasi data ke pangkalan data GOTHIC dijalankan ke atas semua peta topografi digital, iaitu bagi siri L 808, L905, T 931, L 8028 dan T 835.

By modernising its mapping system, JUPEM has successfully produced mapping products in digital form such as digital topographical maps, digital elevation models (DEM) and orthophoto maps. Maps published by JUPEM appear in varying series of scales 1 : 50,000, 1 : 25,000 and 1: 3,000 – 1 : 12,000. Digital maps published by JUPEM fulfil basic needs of various Geography Information System (GIS) applications as well as military specifications required by the Malaysian Armed Forces (MAF), in particular the Royal Malaysian Air Force (RMAF) and the Defence Intelligence Staff Division(DISD).

Digital topographic maps generated using GINIS software(1988 aquisition) are kept in DST format and supplied in DXF format . The widespread use of GIS that requires topographic maps as base maps has rendered digital topographic maps based on GINIS software no longer suitable. Thus, in 2002, JUPEM proceeded to move to Object Oriented Database suitable for GIS application by using GOTHIC LAMPS 2. To create databases around the GOTHIC system, existing data based on GINIS had to migrate to GOTHIC database through editing and verification processes. Data migration to GOTHIC database was carried out on all digital topographic maps, i.e. for L 808, L 905, T 931, L 8028 and T 835 series.



**Kemajuan Penyediaan
Pangkalan Data Ukur
Topografi**

*Development Progress
of Topographic Databases*

SKALA (SIRI) scale (series)	LEMBAR sheet
1: 50,000 (MY 501T & MY 511 T)	34
1: 25,000 (MY 601 T & MY 611 T)	65
1: 5,000 dan 1:10,000 (L 808, L 905, T 931, MY 701T & MY 711 T)	117
Migrasi ke Pangkalan Data GOTHIC Skala 1: 5,000 <i>Migration to GOTHIC Databases Scale 1: 5,000</i>	279

UKURAN PENYUDAHAN PADANG
FIELD COMPLETION SURVEY

Ukuran penyudahan padang merupakan salah satu proses asas yang perlu dijalankan bagi melengkapkan dan mengemaskinikan maklumat topografi pada peta asas pelbagai skala yang hendak diterbitkan. Sehingga 31 Disember 2008, pencapaian setahun bagi aktiviti ukuran penyudahan padang adalah seperti yang berikut:

Field completion survey is one of the basic processes performed complete and update topographic information on basic maps of various scales to be produced. Until 31 December 2008, the year's performance for field completion survey activity is as follows:



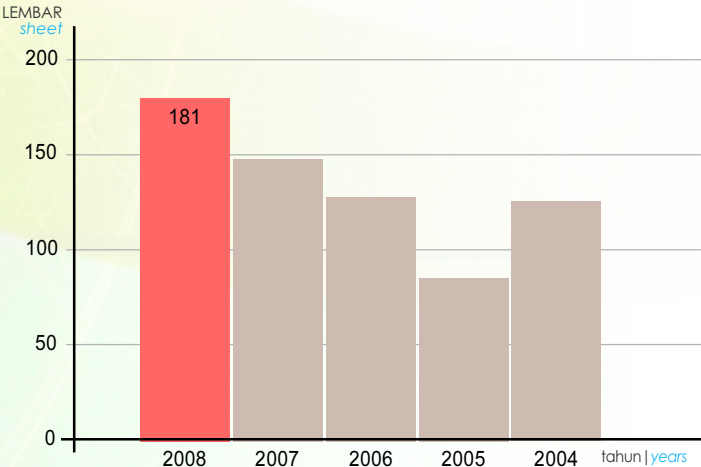
SIRI series	SEMENANJUNG	SABAH	SARAWAK
	LEMBAR sheets		
L 808 T	2	-	-
MY 501T	14	-	-
MY 511 T	-	30	38
MY 701 T	50	-	-
MY 711 T	-	35	12
JUMLAH total	66	65	50

Keseluruhannya, sebanyak 181 lembar peta telah dapat disiapkan ukuran penyudahan padang pada tahun tersebut. Pencapaian aktiviti tersebut bagi tempoh lima tahun, bermula tahun 2004 hingga 2008 adalah seperti yang berikut:

On the whole, a total of 181 maps were completed under the field completion survey activity. The performance of this activity over a period of five years, beginning 2004 up to 2008 are as follows :

Pencapaian Ukuran Ukuran Penyudah Padang Bagi Tempoh Lima Tahun (2004-2008)
Performance of Field Completion Survey Over Five Years (2004-2008)

TAHUN year	LEMBAR sheet
2008	181
2007	149
2006	129
2005	86
2004	126



KARTOGRAFI
CARTOGRAPHY

Urusan kartografi di JUPEM melibatkan aktiviti-aktiviti seperti suntingan kartografi, penerbitan peta topografi, penyediaan pangkalan data tematik dan penerbitan peta tematik. Aktiviti yang dijalankan ini bertujuan untuk mengemaskinikan Pangkalan Data Kartografi yang outputnya sebagai peta elektronik (e-Map) atau untuk percetakan peta seperti peta topografi dan peta tematik pelbagai siri.

Cartography in JUPEM involve activities such as cartographic editing, topographic map publication, thematic database preparation and thematic map publication. These activities are for the purpose of updating Cartography Database to be used for producing output such as electronic maps (e-Map) or for printing maps such as topographic maps and thematic maps of various series.

Kemajuan Aktiviti- Aktiviti Kartografi
Performance of Cartographic Activities

BIL. no.	AKTIVITI activity	LEMBAR sheet
1.	Penyediaan Pruf Semak Peta Topografi Pelbagai Siri <i>Preparation of Multi-series Topographic Maps Checking Proofs</i>	274
2.	Penyediaan Data Cetak Peta Topografi Pelbagai Siri <i>Preparation of Multi-series Topographic Maps Print Data</i>	251
3.	Penyediaan Pruf Semak Peta Tematik Pelbagai Siri <i>Preparation of Multi-series Thematic Maps Checking Proofs</i>	39
4.	Penyediaan Data Cetak Peta Tematik Pelbagai Siri <i>Preparation of Multi-series Thematic Maps Print Data</i>	49
5.	Cetak Ulang <i>Reprints</i>	21
6.	Penerbitan Peta Elektronik (e-Map) <i>Publication of Electronic Maps (e-Map)</i>	23
7.	Menyediakan Pangkalan Data GIS Profil Pulau-Pulau <i>Preparation of Island Profile GIS Databases</i>	2

PERCETAKAN
PRINTING

JUPEM menerbitkan pelbagai produk yang berasaskan kerja ukur kadaster dan pemetaan dalam bentuk digital dan salinan cetak. Produk digital seperti e - Map dan Lot Kadaster Berdigit dijual dalam bentuk cakera padat (CD) di kaunter dan juga boleh di muat turun secara dalam talian.

Produk ukur kadaster berbentuk salinan cetak seperti Pelan Akui dan Lembar Piawai Kadaster dicetak secara langsung di semua kaunter JUPEM mengikut permintaan pelanggan, manakala produk pemetaan seperti peta topografi dan tematik dicetak mengikut siri peta dan disimpan di Stor Pusat Peta Negara untuk edaran dan pemasaran di kaunter-kaunter JUPEM.

Kemajuan Aktiviti Percetakan
Performance of Printing Activity

JENIS type	LEMBAR sheet
Peta (Topografi & Tematik) Maps (Topographic & Thematic)	331
Bukan Peta Non- Maps	156

JENIS type	LEMBAR sheet				
	2008	2007	2006	2005	2004
Peta (Topografi & Tematik) Maps (Topographic & Thematic)	331	303	258	272	118
Bukan Peta Non- Maps	156	171	174	181	219

Selain menerbitkan peta bercetak, JUPEM juga membuat kerja - kerja mereka bentuk, memproses dan mencetak pelbagai dokumen seperti watakah, dokumen keselamatan dan produk - produk bukan peta yang lain sebagaimana yang diperlukan oleh jabatan/agensi kerajaan.

JUPEM publishes various cadastral and mapping products in digital form and printed copies. Digital products such as e-Map and Digital Cadastre Lots are sold in compact disc form (CD) over the counter and can also be downloaded on - line.

Cadastral products in print copy form such as Certified Plans and Cadastral Standard Sheets are printed directly at all JUPEM counters according to customer requests, while mapping products such as topographic and thematic maps are printed according to map series and kept in the National Map Central Store for distribution and marketing at JUPEM counters.



Apart from publishing copies of map prints, JUPEM also carries out the designing, processing and printing of various documents such as letters of authority/deeds, security documents and other non-map products as may be required by government departments / agencies



PERSEMPADANAN ANTARABANGSA INTERNATIONAL BOUNDARIES

PERSEMPADANAN ANTARABANGSA MALAYSIA-THAILAND INTERNATIONAL BOUNDARIES MALAYSIA-THAILAND

Projek Penandaan, Pengukuran dan Penyelenggaraan Sempadan Antarabangsa Malaysia-Thailand dijalankan secara bersama dengan Royal Thai Survey Department (RTSD).

The demarcation, survey and maintenance of the international boundary between Malaysia and Thailand is carried out jointly with the Royal Thai Survey Department (RTSD).



Penandaan dan pengukuran sempadan darat Malaysia -Thailand sepanjang 551.5 km telah dimulakan pada 6 Julai 1973 dan siap pada 26 September 1985. Aktiviti-aktiviti yang dijalankan di sepanjang tahun 2008 di bawah projek ini adalah seperti yang berikut:

The demarcation and survey of the Malaysia - Thailand land boundary stretching 551.5 km long began on 6 July 1973 and was completed on 26 September 1985. The activities carried out under this project throughout 2008 are as follows:

a. **Penandaan dan Pengukuran Sempadan Tetap dan Kekal di Sepanjang Sungai Golok** *Demarcation and Survey of the Fixed and Permanent Boundary along Sungai Golok*

Aktiviti penandaan dan pengukuran sempadan antarabangsa Malaysia-Thailand di sepanjang Sungai Golok sejauh 95 km merangkumi empat (4) kawasan keutamaan, iaitu Kawasan Keutamaan VIIIA, Kawasan Keutamaan VIIIB, Kawasan Keutamaan VIIC dan Kawasan Keutamaan VIID.

The demarcation and survey of the international boundary between Malaysia-Thailand along Sungai Golok stretching 95 km covered four (4) main areas i.e. Priority Area VIIIA, Priority Area VIIIB, Priority Area VIIC and Priority Area VIID.

Bagi memudahkan proses pelaksanaan di lapangan, setiap kawasan keutamaan dibahagikan mengikut seksyen - seksyen dan seterusnya penandaan dan pengukuran dijalankan secara berfasa seperti yang berikut:

To facilitate the implementation process in the field, each priority area was divided into sections and subsequently the demarcation and survey were carried out in phases as follows:



- (i) Fasa I (70 %) - Ukuran dan Penandaan
Phase I (70 %) - Survey and Demarcation
- (ii) Fasa II (30 %) - Ukuran Hidrografi, Pengemaskinian Pelan dan Dokumentasi
Phase II (30 %) - Hydrographic Survey, Plan Updating and Documentation

Perancangan kerja bagi tahun 2008 meliputi Kawasan Keutamaan VIII A dan Kawasan Keutamaan VIII B. Bagi Kawasan Keutamaan VIII A, penandaan dan pengukuran melibatkan Seksyen 1 hingga ke Seksyen 6 merangkumi jarak sejauh 35.4 km, manakala bagi Kawasan Keutamaan VIII B pula melibatkan Seksyen 1 hingga ke Seksyen 4 sejauh 20.1km.

Work planned for year 2008 covered Priority Area VIII A and Priority Area VIII B. For Priority Area VIII A, Demarcation and Survey would be carried out from Section 1 up to Section 6 covering a distance of 35.4 km, while for Priority Area VIII B the work involved Section 1 up to Section 4, a distance of 20.1 km.



Pencapaian keseluruhan bagi pengukuran Fasa I dan II sehingga 31 Disember 2008 adalah seperti yang berikut:

Overall performance for the survey work done for Phase I and II until 31 December 2008 are as follows:

AKTIVITI activity	PENCAPAIAN achievement
Penandaan dan Pengukuran Sempadan Tetap dan Kekal di sepanjang Sungai Golok Seksyen 1 bagi Kawasan Keutamaan VIII A <i>Demarcation and Survey of the Fixed and Permanent Boundary along Sungai Golok Section 1 for Priority Area VIII A</i>	6.0 km
Penandaan dan Pengukuran Sempadan Tetap dan Kekal di sepanjang Sungai Golok Seksyen 2 bagi Kawasan Keutamaan VIII A <i>Demarcation and Survey of the Fixed and Permanent Boundary along Sungai Golok Section 2 for Priority Area VIII A</i>	6.0 km
Penandaan dan Pengukuran Sempadan Tetap dan Kekal di sepanjang Sungai Golok Seksyen 3 bagi Kawasan Keutamaan VIII A <i>Demarcation and Survey of the Fixed and Permanent Boundary along Sungai Golok Section 3 for Priority Area VIII A</i>	6.0 km
Penandaan dan Pengukuran Sempadan Tetap dan Kekal di sepanjang Sungai Golok Seksyen 4 bagi Kawasan Keutamaan VIII A <i>Demarcation and Survey of the Fixed and Permanent Boundary along Sungai Golok Section 4 for Priority Area VIII A</i>	6.0 km
Penandaan dan Pengukuran Sempadan Tetap dan Kekal di sepanjang Sungai Golok Seksyen 5 bagi Kawasan Keutamaan VIII A <i>Demarcation and Survey of the Fixed and Permanent Boundary along Sungai Golok Section 5 for Priority Area VIII A</i>	6.0 km
Penandaan dan Pengukuran Sempadan Tetap dan Kekal di sepanjang Sungai Golok Seksyen 6 bagi Kawasan Keutamaan VIII A <i>Demarcation and Survey of the Fixed and Permanent Boundary along Sungai Golok Section 6 for Priority Area VIII A</i>	5.4 km
Penandaan dan Pengukuran Sempadan Tetap dan Kekal di sepanjang Sungai Golok Seksyen 1 di Kawasan Keutamaan VIII B <i>Demarcation and Survey of the Fixed and Permanent Boundary along Sungai Golok Section 1 in Priority Area VIII B</i>	5.1 km
Penandaan dan Pengukuran Sempadan Tetap dan Kekal di sepanjang Sungai Golok Seksyen 2 bagi Kawasan Keutamaan VIII B <i>Demarcation and Survey of the Fixed and Permanent Boundary along Sungai Golok Section 2 for Priority Area VIII B</i>	5.0 km
Penandaan dan Pengukuran Sempadan Tetap dan Kekal di sepanjang Sungai Golok Seksyen 3 bagi Kawasan Keutamaan VIII B <i>Demarcation and Survey of the Fixed and Permanent Boundary along Sungai Golok Section 3 for Priority Area VIII B</i>	5.0 km
Penandaan dan Pengukuran Sempadan Tetap dan Kekal di sepanjang Sungai Golok Seksyen 4 bagi Kawasan Keutamaan VIII B <i>Demarcation and Survey of the Fixed and Permanent Boundary along Sungai Golok Section 4 for Priority Area VIII B</i>	5.0 km

b. Ukuran Pelbagai Berkaitan Sempadan Antarabangsa Malaysia - Thailand
Various Surveys Related to the International Boundary of Malaysia - Thailand

- i. Ukuran Siasatan, Tanam Pastian dan Penyelenggaraan Sempadan Antarabangsa Malaysia - Thailand
Investigative Survey , Refixation of Boundary Pillars, and Maintenance of the International Boundary between Malaysia - Thailand

Sasaran Kerja Tahunan 2008 bagi aktiviti ini tidak ditetapkan kerana tumpuan diberikan kepada aktiviti penandaan dan pengukuran sempadan di sekitar Sungai Golok. Namun begitu, aktiviti Ukuran Siasatan, Tanam Pastian dan Penyelenggaraan Kawasan Keutamaan XVI (BP47A - BP50) (Pklin. Hulu / Betong) telah dijalankan pada tahun 2008 dan pencapaiannya adalah seperti yang berikut :

The 2008 Annual Work Target for this activity were not set because focus was given to the demarcation and survey of the the boundary around Sungai Golok. Nevertheless, Investigative Survey, Refixation of Boundary Pillars, and Maintenance of Priority Area XVI (BP47A - BP50) (Pklin. Hulu / Betong) were carried out in 2008 and the achievements are as follows :



AKTIVITI activity	PENCAPAIAN performance
Seksyen E <i>Section E</i> (5.7 km)	3.4 km
Seksyen F <i>Section F</i> (4.5 km)	4.5 km

- ii. Ukuran dan Pengawasan Bersama bagi Penjajaran Pagar Keselamatan Malaysia
Joint Survey and Surveillance for Alignment of Malaysian Security Fencing

Ukuran dan pengawasan bersama telah dijalankan bagi memastikan projek Penjajaran Pagar Keselamatan Malaysia oleh pihak Majlis Keselamatan Negara dilaksanakan di dalam wilayah Malaysia.

Joint survey and surveillance were carried out to ensure that the Malaysian Security Fencing Alignment project by the National Security Council was implemented in the Malaysian territory.

Pencapaian sehingga 31 Disember 2008 dan SKT 2009 adalah seperti yang berikut :
Achievements up to 31 December 2008 and AWT 2009 are as follows :

AKTIVITI activity	PENCAPAIAN performance
Penjajaran Pagar (Kawasan Keutamaan VI BP8C-BP16 & Kawasan Keutamaan III BP16-BP27) : 21.9km (Padang Besar - Chuping, Perlis) <i>Fence Alignment (Priority Area VI BP8C-BP16 & Priority Area III BP16-BP27) : 21.9km (Padang Besar - Chuping, Perlis)</i>	14.7 km

PERSEMPADANAN ANTARABANGSA MALAYSIA-INDONESIA *INTERNATIONAL BOUNDARIES MALAYSIA-INDONESIA*

Program Ukur 2008 bagi aktiviti Ukuran Penyelenggaraan Sempadan Antarabangsa Malaysia (Sarawak) - Indonesia (Kalimantan Barat) dan Ukuran Penyelenggaraan Sempadan Antarabangsa Malaysia (Sabah) - Indonesia (Kalimantan Timur) sepatutnya dimulakan dalam bulan Julai 2008 sebenarnya telah bermula pada awal bulan November 2008 atas permintaan pihak Indonesia.

The 2008 Programme for Maintenance Survey of the International Boundary between Malaysia (Sarawak) - Indonesia (West Kalimantan) and Maintenance Survey of the International Boundary between Malaysia (Sabah) - Indonesia (East Kalimantan), which were supposed to start in July 2008 actually started in early November 2008 at Indonesia's request.

Ukuran Penyelenggaraan Sempadan Antarabangsa Malaysia (Sarawak)-Indonesia (Kalimantan Barat)

Maintenance Survey of the International Boundary between Malaysia (Sarawak)-Indonesia (West Kalimantan)

Mesyuarat Pengarah-Pengarah Projek Bersama (IMCD) kali ke - 43 bagi Penandaan dan Pengukuran Sempadan Antarabangsa di antara Indonesia (Kalimantan Barat) - Malaysia (Sarawak) telah diadakan pada 6 hingga 8 Mei 2008 di Bandung, Jawa Barat, Indonesia. Mesyuarat ini telah mengambil keputusan bahawa program ukur bagi tahun 2008 dilaksanakan untuk Kawasan Keutamaan VII (H - I), iaitu dari tanda sempadan H 600 hingga I 01, yang merangkumi jarak sejauh 35.1 km. Sehingga 31 Disember 2008 hanya 10.7 km jarak pengukuran yang telah selesai dijalankan.

The 43rd Meeting of the Joint Project Co-Directors (IMCD) for Demarcation and Survey of the International Boundary between Indonesia (West Kalimantan) - Malaysia (Sarawak) was held on 6 - 8 May 2008 in Bandung, West Java, Indonesia. The Meeting decided that the survey programme for 2008 should be carried out for Priority Area VII (H - I), i.e. from the boundary mark H 600 to I 01, covering a distance of 35.1 km. Up to 31 December 2008, only 10.7 km of the distance had been surveyed.

Ukuran Penyelenggaraan Sempadan Antarabangsa Malaysia (Sabah) - Indonesia (Kalimantan Timur)

Maintenance Survey of the International Boundary between Malaysia (Sabah) - Indonesia (East Kalimantan)

Perancangan tahun 2008 bagi aktiviti ini melibatkan Sektor Sabah-Kalimantan Timur Kawasan Keutamaan II (B-C) Sub Sektor B 3300 - B 3100 (9.591 km), Kawasan Keutamaan III (C - D) Sub Sektor C 700 - D 001 (30.486 km) sepanjang 40.077 km. Walau bagaimanapun, aktiviti pengukuran penyelenggaraan bagi tahun 2008 hanya dapat dilaksanakan sepanjang 9.6 km.

The 2008 planning for this activity involved the Sabah-East Kalimantan Sector, Priority Area II (B-C), Sub-Sector B 3300 - B 3100 (9.591 km), Priority Area III (C - D), Sub Sector C 700 - D 001 (30.486 km) for a distance of 40.077 km. However, the maintenance survey for year 2008 could be carried out for a distance of only 9.6 km.

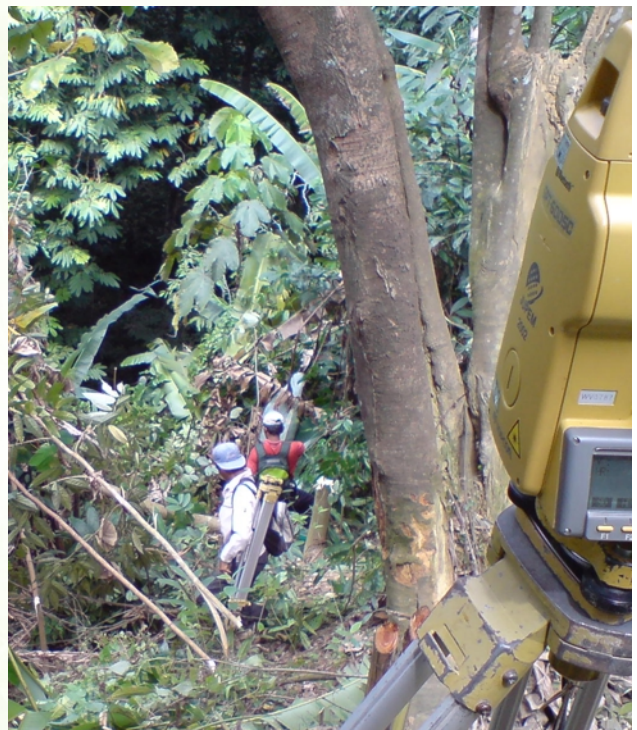


PERSEMPADAN NEGERI STATE BOUNDARIES

Bagi tahun 2008, projek penandaan dan pengukuran sempadan antara negeri-negeri melibatkan sempadan antara Pahang - Selangor dan Pahang - Negeri Sembilan.

Sasaran Kerja Tahunan 2008 yang dirancang untuk menyelesaikan pengukuran bagi baki sempadan yang masih belum diukur sepanjang 3.0 km bagi sempadan Pahang - Selangor dan sepanjang 37.1 km bagi sempadan Pahang - Negeri Sembilan telah berjaya disiapkan.

For the year 2008, the demarcation and survey of state boundaries involved the boundaries of Pahang - Selangor and Pahang - Negeri Sembilan. The 2008 Annual Work Target to complete the survey for the rest of the boundaries still unsurveyed, i.e. 3.0 km of the Pahang - Selangor boundary and 37.1 km of the Pahang - Negeri Sembilan boundary, was successfully met.





Aktiviti ukuran kadaster merangkumi aktiviti- aktiviti ukuran hak milik tanah, Semakan Kerja Juruukur Tanah Berlesen, Penyediaan Pelan Suratan Hak Milik, Semakan Pelan Permohonan Strata, Semakan Pelan Akui Strata dan Penyediaan Suratan Hak Milik Strata, penyediaan dan pembersihan Pangkalan Data Ukur Kadaster (PDUK), penyediaan lapisan GIS Layer Management System (GLMS) dan pengemaskinian Peta Daerah.

Cadastral surveying covers the following activities such as Land Title Surveys, Verification of the Work of Licensed Land Surveyors, Preparation of Title Documentation Plans, Assessment of Strata Application Plans, Assessment of Strata Certified Plans, Preparation of Strata Title Documentation, preparation and cleaning of the Cadastral Database (CDB), Preparation of the GIS Layer Management System (GLMS) and Updating of District Maps.



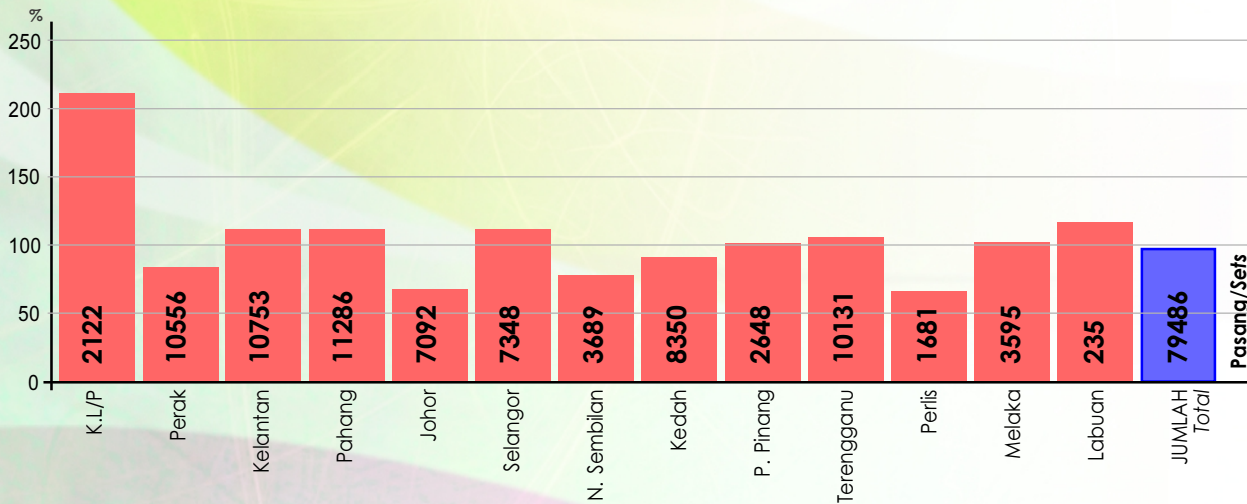
PENGUKURAN HAK MILIK TANAH
LAND TITLE SURVEY

Kemajuan yang dicapai bagi aktiviti ukuran hak milik tanah bagi tahun 2008 berjumlah 79,486 lot atau 96 % daripada matlamat tahunan sebanyak 83,000 lot. Komitmen yang ditunjukkan oleh JUPEM negeri di dalam mencapai SKT yang ditetapkan adalah memberangsangkan dan amat dihargai. Prestasi keseluruhannya adalah baik.

The progress achieved in Land Title Surveys in 2008 was a total of 79,486 lots or 96 % of the year's target of 83,000 lots. The commitment shown by state JUPEMs in meeting the AWT set is encouraging and highly appreciated. The overall performance is good.

Pencapaian keseluruhan ukuran hak milik tanah (lot) bagi tahun 2008 mengikut negeri-negeri
The overall performance for Land Title Survey (lots) for 2008 according to state

NEGERI state	SKT 2008 awt 2008	PRESTASI 2008 performance 2008		BEBAN KERJA work load (31.12.2008)
	LOT	LOT	%	LOT
W.P. K.Lumpur / Putrajaya	1000	2122	212	1192
Perak	12500	10556	84	5007
Kelantan	9500	10753	113	3614
Pahang	10000	11286	113	4311
Johor	11100	7092	64	12047
Selangor	6500	7348	113	6378
Negeri Sembilan	5000	3689	74	1259
Kedah	9100	8350	92	6344
Pulau Pinang	2600	2648	102	2663
Terengganu	9500	10131	107	5982
Perlis	2500	1681	67	1875
Melaka	3500	3595	103	821
W.P. Labuan	200	235	118	141
JUMLAH total	83000	79486	96	51634

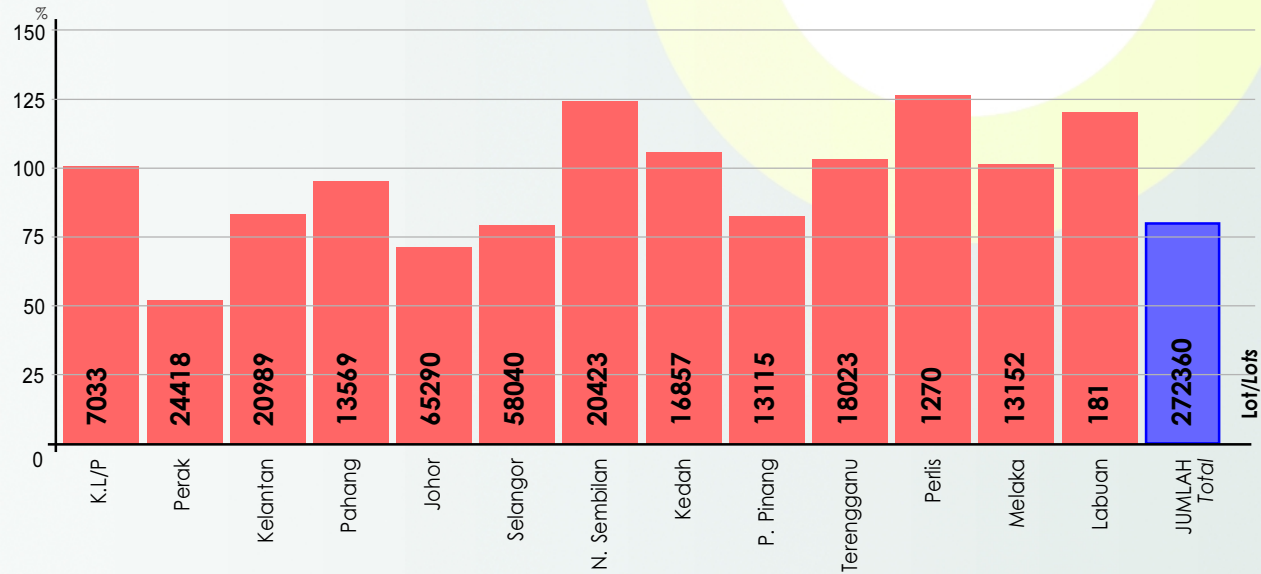


SEMAKAN KERJA JURUUKUR TANAH BERLESEN (JUBL)
VERIFICATION OF THE WORK DONE BY LICENSED LAND SURVEYORS (LLS)

Kemajuan yang dicapai bagi aktiviti semakan kerja Juruukur Tanah Berlesen berjumlah 272,360 lot atau 81 % daripada matlamat tahun 2008, iaitu sebanyak 336,000 lot. Pencapaian 2008 bagi Semakan Kerja Juruukur Tanah Berlesen (LOT) mengikut negeri - negeri adalah seperti yang berikut:

Achievements reached in verifying the work of Licensed Land Surveyors totalled 272,360 lots or 81 % of the 2008 target of 336,000 lots. The 2008 achievements for the Verification of Work of Licensed Land Surveyors (LOT) state by state are as follows:

NEGERI state	SKT 2008 awt 2008	PRESTASI 2008 performance 2008		BEBAN KERJA work load (31.12.2008)
	LOT	LOT	%	LOT
W.P. K.Lumpur / Putrajaya	6900	7033	101	687
Perak	46600	24418	52	5908
Kelantan	25000	20989	84	1168
Pahang	14200	13569	96	779
Johor	91000	65290	72	10643
Selangor	73000	58040	80	13138
Negeri Sembilan	16300	20423	125	6838
Kedah	15900	16857	106	1847
Pulau Pinang	15800	13115	83	1119
Terengganu	17300	18023	104	700
Perlis	1000	1270	127	218
Melaka	12900	13152	102	1095
W.P. Labuan	100	181	121	8
JUMLAH total	336000	272360	81	44148

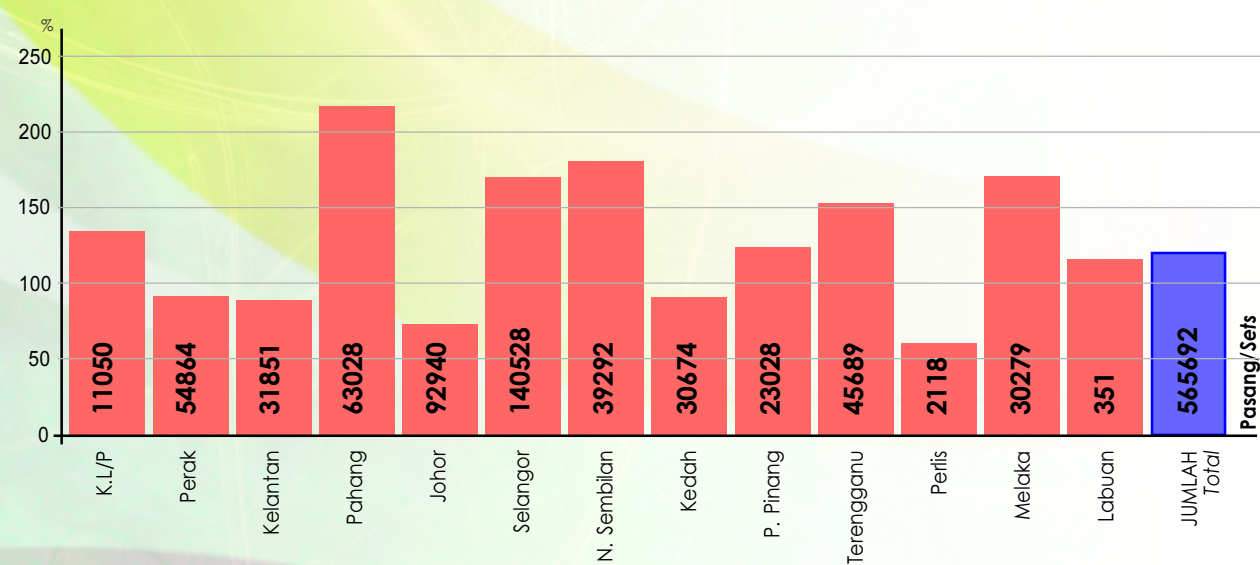


PENYEDIAAN PELAN SURATAN HAK MILIK
PREPARATION OF TITLE DOCUMENTATION PLANS

Prestasi penyediaan pelan suratan Hak Milik bagi tahun 2008 berjumlah 565,692 pasang, iaitu 122 % daripada matlamat tahunan sebanyak 462,400 pasang yang ditetapkan. Pencapaian tahun 2008 bagi Penyediaan Pelan Suratan Hak Milik mengikut negeri - negeri adalah seperti yang berikut :

Progress made in the preparation of Title documentation plans for 2008 was seen in a total of 565,692 sets, i.e. 122 % from the annual work target of 462,400 sets set. The 2008 achievements for the Preparation of Title Documentation Plans according to state are as follows :

NEGERI state	SKT 2008 awt 2008	PRESTASI 2008 performance 2008		BEBAN KERJA work load (31.12.2008)
	PASANG set	PASANG set	%	LOT
W.P. K.Lumpur / Putrajaya	8200	11050	135	300
Perak	59500	54864	92	58
Kelantan	35600	31851	90	51
Pahang	28900	63028	218	4473
Johor	125000	92940	74	5322
Selangor	82000	140528	171	7248
Negeri Sembilan	21300	39292	184	2687
Kedah	32500	30674	94	164
Pulau Pinang	18400	23028	125	247
Terengganu	29600	45689	154	106
Perlis	3500	2118	61	0
Melaka	17600	30279	172	581
W.P. Labuan	300	351	117	52
JUMLAH total	462400	565692	122	21289



SEMAKAN PERMOHONAN HAK MILIK STRATA
CHECKING OF STRATA TITLES APPLICATIONS

Proses semakan permohonan hak milik strata terbahagi kepada dua peringkat, iaitu Semakan Strata Peringkat 1 (Semakan Pelan Cadangan Strata) dan Semakan Strata Peringkat 2 (Semakan Pelan Akui dan Penyediaan Suratan Hak Milik). Piagam Pelanggan JUPEM telah menetapkan, setiap permohonan yang diterima disiapkan dalam tempoh 55 hari bagi Peringkat 1 dan 80 hari bagi Peringkat 2.

The process of checking strata Titles applications is divided into two stages i.e. Strata Checking Stage Level 1 (Checking Proposed Strata Plan) and Strata Checking Stage 2 (Checking Certified Plans and Preparation of Title Documents). JUPEM's Client's Charter has determined that every application received will be processed within 55 days for Stage 1 and 80 days for Stage 2.

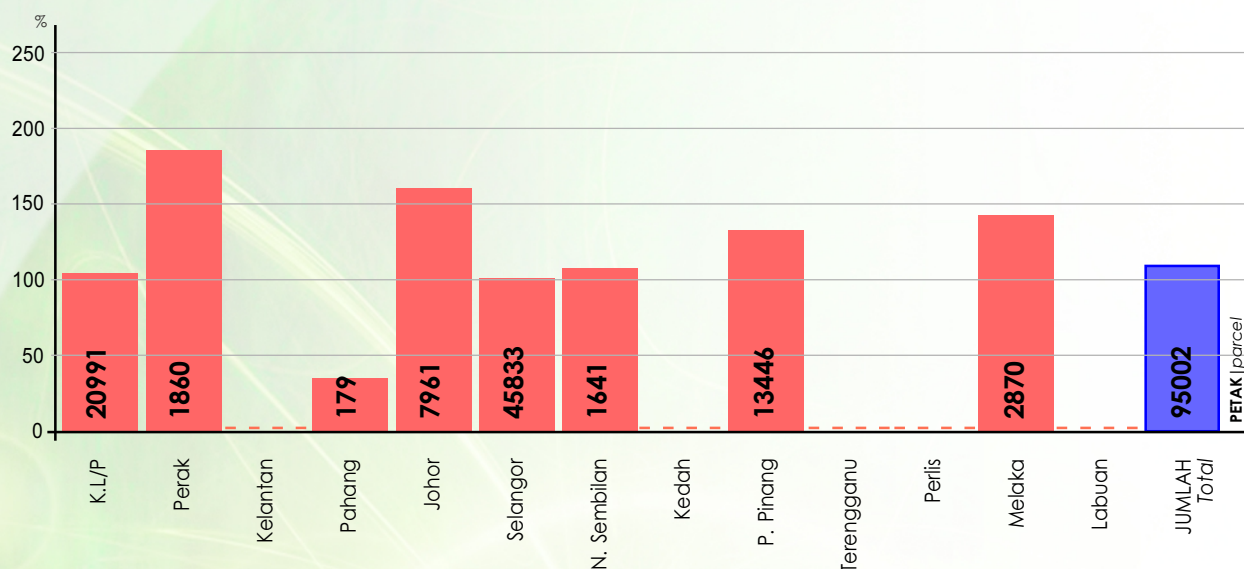
Semakan Strata Peringkat 1 (Petak)
Strata Checking Stage 1 (Parcels)

Kemajuan keseluruhan untuk kerja semakan pelan permohonan strata adalah baik dengan pencapaian berjumlah 95,002 petak, iaitu 111 % daripada matlamat tahunan 2008, iaitu sebanyak 86,000 petak.

The overall progress for checking of Strata application plans was good with a total of 95,002 parcels verified, i.e. 111 % of the 2008 annual target of 86,000 parcels.

Prestasi tahun 2008 bagi Semakan Kerja Strata Peringkat 1 (Petak), mengikut negeri - negeri
The 2008 performance for Strata Checking Stage 1 (Parcels), according to states

NEGERI state	SKT 2008 awt 2008	PRESTASI 2008 performance 2008		BEBAN KERJA work load (31.12.2008)
	PETAK parcel	PETAK parcel	%	PETAK parcel
W.P.K. Lumpur/Putrajaya	20000	20991	105	8237
Perak	1000	1860	186	393
Kelantan	-	68	-	-
Pahang	500	179	36	0
Johor	6000	7961	162	0
Selangor	45000	45833	102	8071
Negeri Sembilan	1500	1641	109	272
Kedah	-	113	-	-
Pulau Pinang	10000	13446	134	5335
Terengganu	-	40	-	-
Perlis	-	-	-	-
Melaka	2000	2870	144	1284
W.P. Labuan	-	-	-	-
JUMLAH total	86000	95002	111	23592



Semakan Strata Peringkat 2 (Petak) Strata Checking Stage 2 (Parcels)

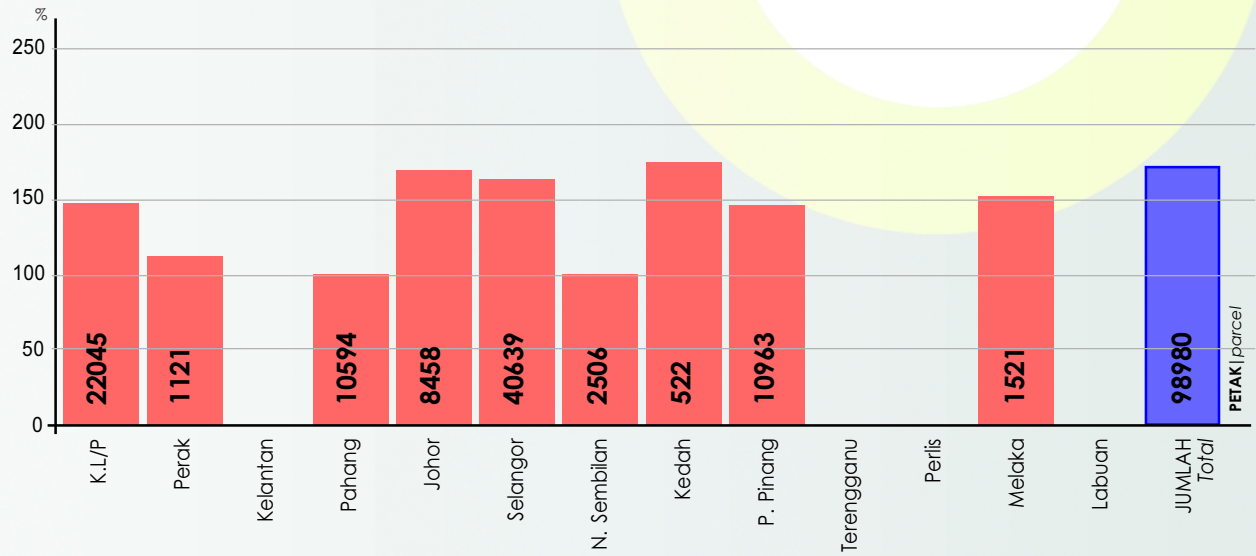
Peringkat 2 melibatkan Semakan Pelan Akui Strata dan Penyediaan Suratan Hak Milik strata. Penyediaan Suratan Hak Milik Strata bagi 2008 telah mencapai 98,980 petak iaitu 172 % daripada matlamat tahunan yang berjumlah 57,600 petak. Pencapaian bagi JUPEM Pahang amat baik apabila telah berjaya membantu JUPEM Selangor dalam menyelesaikan tunggakan strata. Pencapaian tahun 2008 mengikut negeri - negeri adalah seperti yang berikut :

Phase 2 involves Checking of Strata Certified Plans and Preparation of strata Title Documentation. Preparation of Strata Title Documentation in 2008 achieved a total of 98,980 parcels i.e. 172 % of the annual target of 57,600 parcels. The performance of JUPEM Pahang was very good indeed in that it was able to assist JUPEM Selangor to resolve its strata work backlog. The 2008 performance according to states is as follows :

NEGERI state	SKT 2008 awt 2008	PRESTASI 2008 performance 2008			BEBAN KERJA work load (31.12.2008)	
		PELAN AKUI cert. plans	SURATAN HAKMILIK title deeds		PELAN AKUI cert. plans	SURATAN HAKMILIK title deeds
		PETAK parcel		%	PETAK parcel	
W.P. K.Lumpur / Putrajaya	15000	21554	22045	147	353	859
Perak	1000	1504	1121	112	176	852
Kelantan	-	72	384	-	-	-
Pahang	300	226	10594*	100	0	0
Johor	5000	9561	8458	169	306	1094
Selangor	25000	46873	40639	163	0	6362
N. Sembilan	2500	2506	2506	100	0	0
Kedah	300	522	522	174	0	0
Pulau Pinang	7500	10221	10963	146	2547	0
Terengganu	-	227	227	-	-	-
Perlis	-	-	-	-	-	-
Melaka	1000	1521	1521	152	4	4
W.P. Labuan	-	-	-	-	-	-
JUMLAH total	57600	94787	98980	172	3386	9171

Nota | Note: * termasuk 10,298 petak kerja mobilisasi JUPEM Selangor
 * including 10,298 JUPEM Selangor mobilisation work parcels

Pencapaian bagi Semakan Kerja Strata Peringkat 2 bagi Tahun 2008
 2008 Performance for Strata Checking Stage 2

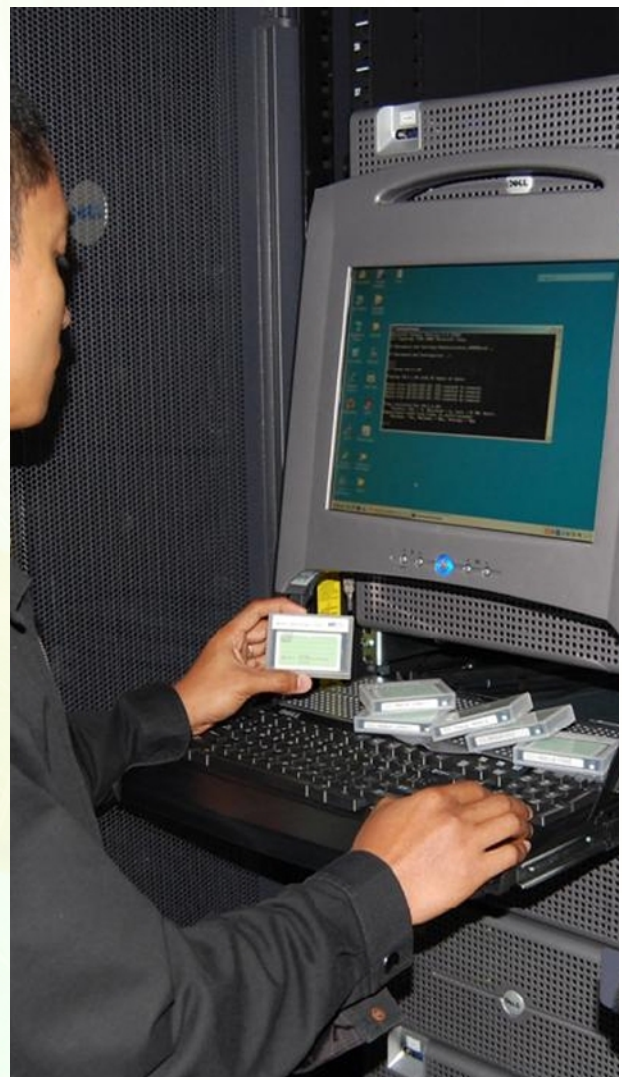
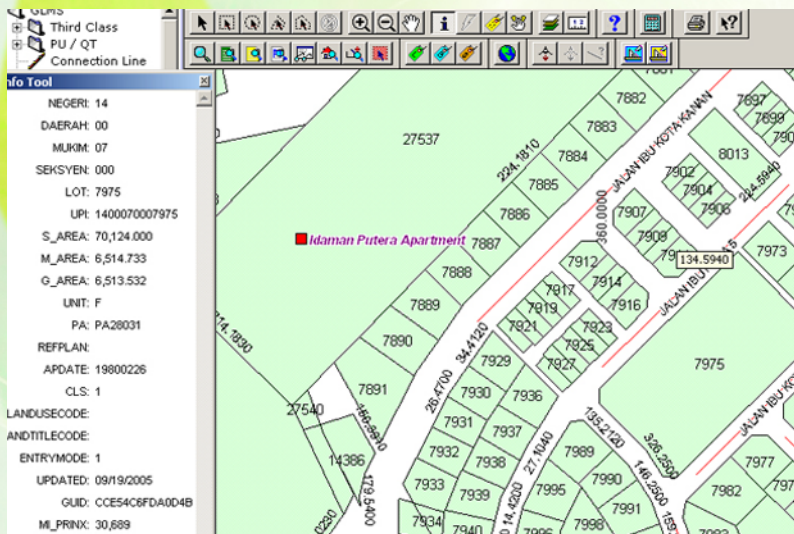




PANGKALAN DATA UKUR KADASTER (PDUK) CADASTRAL DATABASE

Bagi tahun 2008, terdapat dua aktiviti berkaitan pangkalan data ukur kadaster yang dijalankan, iaitu proses penyediaan dan geo-referencing serta pembersihan data. Penyediaan pangkalan data ukur kadaster melibatkan kerja pengemaskinian bagi kerja ukuran hak milik tanah dan semakan kerja Juruukur Tanah Berlesen. Manakala geo-referencing dan pembersihan data ukur kadaster melibatkan penyemakan dan pengemaskinian ke atas data PDUK mengikut Pelan Akui bagi memastikan kesahihan dan integriti data tersebut terjamin.

In 2008, two activities related to cadastral database were carried out, i.e. preparation process and geo-referencing as well as data cleaning (house keeping). Preparation of cadastral databases involves updating work for land titles survey and verifying the work of Licensed Land Surveyors. Meanwhile, geo-referencing and data cleaning cadastral data involve checking and updating CDB data according to Certified Plans to ensure the validity and integrity of the data .



PENYEDIAAN PANGKALAN DATA UKUR KADASTER (PDUK)
PREPARATION OF CADASTRAL DATABASES (CDB)

Pencapaian bagi 2008 berjumlah 409,862 lot atau 83 % daripada matlamat tahunan sebanyak 495,200 lot. Perincian bagi pencapaian kerja tahun 2008 mengikut negeri - negeri adalah seperti yang berikut:

The achievement for 2008 totalled 409,862 lots or 83 % of the year's target of 495,200 lots. Details of achievements in 2008 ,state by state, are as follows :

NEGERI state	JUMLAH LOT SIAP DIUKUR total of lots surveyed	JUMLAH LOT DALAM PDUK total of lots in CDB	BEBAN load (31.12.2008)	SKT 2008 awt 2008	PRESTASI 2008 performance 2008	
					PETAK parcel	%
W.P. K.Lumpur / Putrajaya	169376	202844	0	7900	10581	134
Perak	929763	968101	4004	64700	36627	57
Kelantan	780075	780006	69	36000	33041	92
Pahang	531007	528793	2429	28700	24453	85
Johor	1169258	1239956	18251	124000	88949	72
Selangor	1192148	1185332	18040	119000	101483	85
Neperi Sembilan	538826	567797	0	23000	25598	111
Kedah	638311	638628	2087	25000	23394	94
Pulau Pinang	294557	294557	0	18400	16895	92
Terengganu	515200	511482	0	28300	29666	105
Perlis	80212	80212	0	3500	2859	82
Melaka	15949	295956	581	16400	15949	97
W.P. Labuan	14444	14371	73	300	367	122
JUMLAH total	6869126	7308035	45534	495200	409862	83

Status PDUK sehingga 31 Disember 2008 | Status of the DCDB up to 31 December 2008

NEGERI state	PDUK CDB		GLMS (DEMARICATION/ UKURAN KELAS KE TIGA) (demarcation/ third class survey)	JUMLAH LOT total of lots
	HISTORY LOT history lot	CURRENT LOT current lot		
W.P. K. Lumpur / Putrajaya	33468	169376	-	202844
Perak	23471	902288	42342	968101
Kelantan	158355	621651	-	780006
Pahang	-	528578	215	528793
Johor	-	1151007	88949	1239956
Selangor	66564	1107544	11224	1185332
Negeri Sembilan	82824	481600	3373	567797
Kedah	-	636224	2404	638628
Pulau Pinang	-	294557	-	294557
Terengganu	82155	429327	-	511482
Perlis	10204	70008	-	80212
Melaka	14125	281831	-	295956
W.P. Labuan	1132	13239	-	14371
JUMLAH total	472298	6687230	148507	7308035

PENYELARASAN SEMULA DAN PENDUDUKAN SEMULA DCDB OLEH PA
RECOORDINATION AND REPOPULATION OF DCDB BY PA

National Digital Cadastral Data Base (NDCDB) merupakan salah satu komponen yang terdapat dalam projek e-Kadaster yang akan dilaksanakan dalam Rancangan Malaysia Kesembilan (RMK9). Penyediaan NDCDB bagi setiap JUPEM negeri telah dijalankan secara dalaman (in-house) dan dirancang siap sebelum akhir tahun 2008, bagi membolehkan kerja-kerja ukur dijalankan dalam persekitaran e-Kadaster.

Penyediaan sementara NDCDB merupakan langkah pertama yang perlu dilaksanakan oleh JUPEM negeri. Proses - proses yang terlibat ialah Penyelarasan semula dan pendudukan semula DCDB oleh PA (R & R by PA). Bagi tujuan tersebut, Bahagian Kadaster telah membangunkan aplikasi modul R & R untuk diterima pakai di JUPEM negeri.

Sehingga 31 Disember 2008 pencapaian Penyediaan Sementara NDCDB adalah seperti yang berikut:

National Digital Cadastral Data Base (NDCDB) is one of the components found in the e-Cadastre project scheduled to be implemented under the Ninth Malaysia Plan (RMK9). The preparation of the NDCDB for each State JUPEM was carried out in-house and scheduled to be completed before end of 2008 to enable survey work to be carried out in an e-Cadastre environment.

The preparation of a Temporary NDCDB was the first step that needed to be implemented by the state JUPEM. It involved the process of Recoordination and Repopulation of DCDB (R & R by PA). For that purpose, the Cadastre Division developed a R & R module application to be used in state JUPEM.

Up to 31 December 2008, the achievements in Preparation of Temporary NDCDB are as follows:

NEGERI state	SKT 2008 (TERTAKLUK KESELURUHAN BEBAN SEDIA ADA) awt 2008 (subject to overall existing work load)	PRESTASI 2008 performance 2008		BEBAN load
		TEMP NDCDB (PA)	SKT awt	
W.P. K. Lumpur / Putrajaya	*	11722	*	-
Perak	*	1242	*	-
Kelantan	*	-	*	-
Pahang	*	-	*	-
Johor	*	3158	*	-
Selangor	*	4852	*	-
Negeri Sembilan	*	9047	*	-
Kedah	*	70916	*	-
Pulau Pinang	*	203	*	-
Terengganu	*	7945	*	-
Perlis	*	3830	*	-
Melaka	*	-	*	-
W.P Labuan	*	-	*	-
JUMLAH total	*	112915	*	

*SKT tertakluk pada keseluruhan beban kerja (PA) yang masih ada dan perlu disiapkan sebelum Disember 2008.
*AWT subject to overall work load (PA) still pending and requiring completion before December 2008

PENYEDIAAN LAPISAN GIS ATAU GIS LAYER MANAGEMENT SYSTEM (GLMS)
PREPARATION OF GIS LAYER MANAGEMENT SYSTEM (GLMS) LAYERS

SKT 2008 bagi GLMS ditetapkan oleh Pengarah Ukur dan Pemetaan Negeri kecuali bagi aktiviti garisan sambungan hendaklah diberikan keutamaan bagi memudahkan penyediaan surihan kerja luar digital untuk ukuran di padang. Bagi tahun 2008, pencapaian bagi penyediaan GLMS dan SKT mengikut negeri-negeri adalah seperti yang berikut:

The 2008 AWT for GLMS were set by the State Director of Survey and Mapping except for linking line work that had to be prioritised to facilitate the preparation of digital field tracings for surveying on the field. For year 2008, the performance for preparation of GLMS and AWT according to states is as follows :

(i) Lapisan Ukuran Demarkasi/Ukuran Kelas Tiga
Demarcation Survey Layers/Third Class Survey

NEGERI state	PRESTASI 2008 performance 2008	BEBAN load
	DEMARKASI/ UKURAN KELAS KE TIGA (LOT) demarcation/ third class survey (lots)	
W.P. K. Lumpur / Putrajaya	-	*
Perak	-	*
Kelantan	-	*
Pahang	-	*
Johor	-	*
Selangor	-	*
Negeri Sembilan	-	*
Kedah	-	*
Pulau Pinang	-	*
Terengganu	-	*
Perlis	-	*
Melaka	-	*
W.P Labuan	-	*
JUMLAH total	-	*

SKT tertakluk pada keseluruhan beban kerja yang masih ada
AWT subject to overall work load still pending

(ii) Lapisan Permohonan Ukur / Hak Milik Sementara
Survey Application Layers / Temporary Titles

NEGERI state	PRESTASI 2008 performance 2008	BEBAN load
	DEMARKASI/ UKURAN KELAS KE TIGA (LOT) survey applications/temporary titles(lots)	
W.P. K. Lumpur / Putrajaya	-	Siap keseluruhan <i>Completed</i>
Perak	9767	978
Kelantan	8841	-
Pahang	21482	-
Johor	-	-
Selangor	65388	-
Negeri Sembilan	-	Siap keseluruhan <i>Completed</i>
Kedah	-	Siap keseluruhan <i>Completed</i>
Pulau Pinang	10631	semasa <i>current</i>
Terengganu	16898	-
Perlis	2397	-
Melaka	-	Siap keseluruhan <i>Completed</i>
JUMLAH total	135404	978

(iii) Lapisan Garisan Sambungan | *Linking Lines Layers*

NEGERI state	PRESTASI 2008 performance 2008	BEBAN load
	GARISAN SAMBUNGAN linking line (PA)	
W.P. K. Lumpur / Putrajaya	0	695
Perak	-	semasa <i>current</i>
Kelantan	3638	semasa <i>current</i>
Pahang	-	semasa <i>current</i>
Johor	-	semasa <i>current</i>
Selangor	-	semasa <i>current</i>
Negeri Sembilan	1094	semasa <i>current</i>
Kedah	2404	15597
Pulau Pinang	2145	semasa <i>current</i>
Terengganu	-	semasa <i>current</i>
Perlis	337	semasa <i>current</i>
Melaka	-	semasa <i>current</i>
JUMLAH total	9618	16292

(iv) Lapisan Nama Jalan/Sungai | *Road/River Names Layers*

NEGERI state	PRESTASI 2008 performance 2008	BEBAN load
	NAMA JALAN/SUNGAI (UNIT) road / river names (unit)	
W.P. K. Lumpur / Putrajaya	-	semasa <i>current</i>
Perak	-	semasa <i>current</i>
Kelantan	777	semasa <i>current</i>
Pahang	-	semasa <i>current</i>
Johor	-	semasa <i>current</i>
Selangor	-	semasa <i>current</i>
Negeri Sembilan	-	semasa <i>current</i>
Kedah	300	semasa <i>current</i>
Pulau Pinang	-	semasa <i>current</i>
Terengganu	-	semasa <i>current</i>
Perlis	-	semasa <i>current</i>
Melaka	-	semasa <i>current</i>
JUMLAH total	1077	semasa <i>current</i>

(v) Lapisan Nama Pekan/Kampung | *Town/Village Names Layers*

NEGERI state	PRESTASI 2008 performance 2008	BEBAN load
	NAMA PEKAN/KAMPUNG (UNIT) town/village names (unit)	
W.P. K. Lumpur / Putrajaya	-	Siap keseluruhan <i>Completed</i>
Perak	-	Siap keseluruhan <i>Completed</i>
Kelantan	252	-
Pahang	-	Siap keseluruhan <i>Completed</i>
Johor	-	-
Selangor	-	-
Negeri Sembilan	-	-
Kedah	300	Siap keseluruhan <i>Completed</i>
Pulau Pinang	-	Siap keseluruhan <i>Completed</i>
Terengganu	-	Siap keseluruhan <i>Completed</i>
Perlis	-	Siap keseluruhan <i>Completed</i>
Melaka	-	Siap keseluruhan <i>Completed</i>
JUMLAH total	552	



PEKELILING KETUA PENGARAH UKUR DAN PEMETAAN
DIRECTOR GENERAL OF SURVEY AND MAPPING CIRCULARS

Dalam tahun 2008, dua Pekeliling Ketua Pengarah Ukur dan Pemetaan telah dikeluarkan seperti yang berikut:

In 2008, two Director General of Survey and Mapping circulars were issued, i.e. as follows:

PEKELILING KPUP 2008 2008 DGSM Circulars	
1-2008	Garis Panduan Mengenai Ujian Alat Sistem Penentududukan Sejagat (GNSS) yang Menggunakan Malaysian RTK GNSS Network (MyRTKnet) <i>Guideline for Testing of Global Navigation Satellite System (GNSS) Equipment Using Malaysian RTK GNSS Network (MyRTKnet)</i> Pekeliling ini bertujuan untuk memberikan garis panduan mengenai ujian peralatan "Global Navigation Satellite System (GNSS)" tunggal menggunakan perkhidmatan MyRTKnet bagi kerja-kerja ukur kadaster di negeri-negeri. <i>This circular aimed to provide guidelines for testing the equipment used in the sole "Global Navigation Satellite System (GNSS)" using the services of MyRTKnet for cadastral survey work in the states.</i>
2-2008	Kadar Baru Elaun Kerja luar Kadaster dan Pemetaan bagi Kakitangan Jabatan Ukur dan Pemetaan Malaysia <i>New Allowance Rates for Cadastral And Mapping Field Work done by Survey and Mapping Malaysia Department Staff</i> Pekeliling ini bertujuan untuk menetapkan kadar baru serta syarat pembayaran elaun kerja luar kepada pegawai dan pekerja pasukan ukur Kadaster dan Pemetaan di Jabatan Ukur dan Pemetaan Malaysia. <i>This circular aimed to determine new rates as well as conditions for the payment of allowances for field work done by Cadastre and Mapping officers and team workers of the Survey and Mapping Department Malaysia.</i>



PENGELUARAN SURAT PEKELILING KETUA PENGARAH UKUR DAN PEMETAAN CIRCULAR LETTERS FROM THE DIRECTOR GENERAL OF SURVEY AND MAPPING

Dalam tahun 2008, lima Surat Pekeliling Ketua Pengarah Ukur dan Pemetaan telah dikeluarkan seperti yang berikut:

In 2008, five circular letters from the Director General of Survey and Mapping were issued, i.e. as follows:

SURAT PEKELILING KPUP 2008 2008 DGSM Circulars letters	
1-2008	Penetapan Resolusi dan Kompresi bagi PA tiff <i>Determination of Resolution And Compression For CP tiff</i> JUPEM telah mengambil keputusan menetapkan piawaian resolusi dan kompresi bagi penghantaran Pelan Akui (PA) berdigit yang perlu digunakan hendaklah beresolusi 300 dpi dan kompresi LZW. <i>JUPEM decided to determine the standard resolution and compression for submission of digitised Certified Plans (CP) to be used that it should have a resolution of 300 dpi and LZW compression.</i>
2-2008	Garis Panduan Ukuran Pecah Bahagi Bangunan untuk Tingkap Unjur (Bay Windows) <i>Guideline for Building Subdivision Survey For Bay Windows</i> Selaras dengan ciri-ciri baru rekaan bangunan yang dibina akibat daripada kreativiti arkitek, satu garis panduan baru dikeluarkan agar tingkap unjur ini dikira sebagai petak aksesori. <i>In line with new features of building design built based on the architect's creativity, a new guideline is issued so these bay windows can be considered as accessory parcels.</i>
3-2008	Pindaan kepada Takrifan Pelan Prahitungan (Pre-Computations Plan) <i>Amendment To Definition of Pre-Computations Plan</i> Selaras dengan pindaan Kanun Tanah Negara (Akta 56 tahun 1965) mengikut Akta A1333, Akta Kanun Tanah Negara (Pindaan) 2008, satu takrifan pelan prahitungan yang baru telah dikeluarkan oleh JUPEM. <i>Following the amendment to the National Land Code (Act 56 , 1965) according to Act A1333, National Land Code Act (Amendment) 2008, a new definition of pre-computation plan was issued by JUPEM.</i>
4-2008	Perlanjutan Penggunaan Modul e-Submit bagi Penerimaan Data Digital oleh JUPEM Negeri <i>Extension to Use of e-Submit Module to Receive Digital Data By State JUPEM</i> JUPEM telah mengambil keputusan untuk melanjutkan tempoh penghantaran data ukur berdigit oleh JTB sehingga akhir bulan September tahun 2008. <i>JUPEM decided to extend the period for submitting digital survey data by JTB up to end of September 2008.</i>
5-2008	Kedudukan Ruang Lobi Lif Di dalam Permohonan Pecah Bahagi Bangunan <i>Position of Lift Lobby in Building Subdivision Pecah Bahagi Bangunan Application</i> Menerangkan sama ada ruang lobi lif boleh dimohon sebagai petak atau petak aksesori. <i>To explain whether the lift lobby can be applied for as parcel or accessory parcel.</i>

PERANCANGAN AKTIVITI UKUR DAN PEMETAAN 2009

2009 PLANNING FOR SURVEY AND MAPPING ACTIVITIES

PERANCANGAN PEMETAAN | MAPPING PLANNING

AKTIVITI activity	SKT 2008 awt 2008
Sistem Penentuan kedudukan Sejagat <i>Global Positioning System</i>	
Pengoperasian dan Penyelenggaraan MyRTKnet <i>MyRTKnet Operations and Maintenance</i>	156 kali <i>156 times</i>
Ukuran Jaringan dan Kawalan GPS <i>Network Survey and GPS Control</i>	500 stesen <i>500 stations</i>
Air Pasang Surut <i>Tides</i>	
Cerapan Air Pasang Surut Semenanjung <i>Peninsular Tide Observation</i>	144 set data <i>144 data sets</i>
Cerapan Air Pasang Surut Sarawak <i>Sarawak Tide Observation</i>	36 set data <i>36 data sets</i>
Cerapan Air Pasang Surut Sabah <i>Sabah Tide Observation</i>	72 set data <i>72 data sets</i>
Penyediaan Buku Rekod Cerapan Air Pasang Surut <i>Preparation of Tide Observation Record Book</i>	1 naskhah <i>1 copy</i>
Penyediaan Buku Jadual Cerapan Air Pasang Surut <i>Preparation of Tide Observation Tables</i>	1 naskhah <i>1 copy</i>
Ukuran Aras <i>Levelling</i>	
Ukuran Aras Jitu <i>Precise Levelling</i>	768 BM <i>768 BM</i>
Ukuran Aras Kelas Dua <i>Second Class Levelling</i>	943 BM <i>943 BM</i>
Prosesan Data Ukuran Aras Jitu <i>Processing of Precise Levelling Data</i>	900 BM <i>900 BM</i>
Prosesan Data Ukuran Aras Kelas Kedua <i>Processing of Second Class Levelling Data</i>	950 BM <i>950 BM</i>
Ukuran Graviti <i>Gravity Survey</i>	
Ukuran Graviti <i>Gravity Survey</i>	180 stesen <i>180 stations</i>
Astronomi <i>Astronomy</i>	
Pengiraan Astronomi Rukyah dan Hilal <i>Rukyah and Hilal Astronomic Calculation</i>	29 stesen <i>29 stations</i>
Cerapan Hilal di Balai Cerap Teluk Kemang Bagi Tujuan Kajian Semula Kriteria-Kriteria Imkanur Rukyah <i>Hilal Observation at Teluk Kemang Observatory to Review Imkanur Rukyah Criteria</i>	9 kali <i>9 times</i>
Cerapan Kajian Cerahan Langit <i>Sky Brightness Study Observation</i>	6 kali <i>6 time</i>
Penerbitan Peta <i>Map Production</i>	
Fotografi Udara dan Penyediaan Cetak Lepak <i>Aerial Photography and Contact Print Preparation</i>	124 lembar <i>124 sheets</i>
Pemilihan Titik Kawal <i>Control Point Selection</i>	144 lembar <i>144 sheets</i>
Penyediaan Dataset Penyudahan Padang <i>Field Completion Dataset Preparation</i>	130 lembar <i>130 sheets</i>
Penyediaan Peta Ortofoto <i>Orthophoto</i>	90 lembar <i>90 sheets</i>

AKTIVITI activity	SKT 2008 awt 2008
Penerbitan Peta <i>Map Production</i>	
Penyediaan Data Ortorektifikasi Imej Satelit <i>Satellite Image Orthorectification Data Preparation</i>	35 lembar <i>35 sheets</i>
Penyediaan Dataset bagi Pemetaan Ulangan Terhad <i>Dataset Preparation For Limited Mapping Reproduction</i>	65 lembar <i>65 sheets</i>
Penyediaan Pruf Semak Peta Topografi Pelbagai Siri <i>Multiseries Topographic Map Proofreading Preparation</i>	270 lembar <i>270 sheets</i>
Penyediaan Data Cetak Peta Topografi Pelbagai Siri <i>Multiseries Topographic Map Print Data Preparation</i>	250 lembar <i>250 sheets</i>
Penyediaan Pruf Semak Peta Tematik Pelbagai Siri <i>Multiseries Thematic Map Proofreading Preparation</i>	42 lembar <i>42 sheets</i>
Penyediaan Data Cetak Peta Tematik Pelbagai Siri <i>Multiseries Thematic Map Print Data Preparation</i>	42 lembar <i>42 sheets</i>
Cetak Ulang <i>Reprint 1</i>	18 lembar <i>8 sheets</i>
Penerbitan Peta Elektronik (e-Map) <i>Electronic Map (e-Map) Production</i>	23 lembar <i>23 sheets</i>
Peta Bercetak <i>Map Print</i>	330 lembar <i>330 sheets</i>
Pangkalan Data Topografi dan Kartografi <i>Topography and Cartography Databases</i>	
Penyediaan Pangkalan Data Skala 1:50,000 <i>Preparation of Databases on Scale of 1:50,000</i>	50 lembar <i>50 sheets</i>
Penyediaan Pangkalan Data Skala 1:25,000 <i>Preparation of Databases on Scale of 1:25,000</i>	100 lembar <i>100 sheets</i>
Penyediaan Pangkalan Data Skala 1:5,000 dan 1:10,000 <i>Preparation of Databases on Scale of 1:5,000 and 1:10,000</i>	50 lembar <i>50 sheets</i>
Migrasi ke Pangkalan Data GOTHIC Skala 1:5,000 <i>Migration to GOTHIC Databases on Scale of 1:5,000</i>	132 lembar <i>132 sheets</i>
Ehwal Persempadanan <i>Boundary Affairs</i>	
Penandaan dan Pengukuran Sempadan Antarabangsa Malaysia-Thailand <i>Demarcation and Survey of the Malaysia-Thailand International Boundary</i>	8.2 km <i>8.2 km</i>
Penandaan dan Pengukuran Sempadan Antarabangsa Malaysia (Sarawak) -Indonesia (Kalimantan Barat) <i>Demarcation and Survey of the Malaysia (Sarawak) -Indonesia (West Kalimantan) International Boundary</i>	30.3 km <i>30.3 km</i>
Penandaan dan Pengukuran Sempadan Antarabangsa Malaysia (Sabah) -Indonesia (Kalimantan Timur) <i>Demarcation and Survey of the Malaysia (Sabah) -Indonesia (East Kalimantan) International Boundary</i>	30.5 km <i>30.5 km</i>
Penandaan dan Pengukuran Sempadan Antara Negeri-Negeri Semenanjung Malaysia (Melaka – Johor) <i>Demarcation and Survey of the Peninsular Malaysia (Melaka – Johor) State Boundary</i>	40.0 km <i>40.0 km</i>



PERANCANGAN UKUR KADASTER | CADASTRAL SURVEY PLANNING

AKTIVITI activity	SKT 2008 awt 2008
Ukuran Hak Milik Tanah <i>Land Titles Survey</i>	83,000 lot <i>83,000 lots</i>
Semakan Kerja Juruukur Tanah Berlesen <i>Verification of the Work of Licensed Land Surveyors</i>	336,000 lot <i>336,000 lots</i>
Penyediaan Suratan Hak Milik <i>Preparation of Titles Documentation</i>	462,400 pasang <i>462,400 duplicates</i>
Semakan Pelan Permohonan Strata (Peringkat 1) <i>Checking of Strata Application Plans (Stage 1)</i>	86,000 petak <i>86,000 lots</i>
Semakan Pelan Akui Strata dan Penyediaan Suratan Hak Milik Strata (Peringkat 2) <i>Checking of Strata Titles Documentation Preparation and Strata Certified Plans(Stage 2)</i>	57,600 petak <i>57,600 lots</i>
Pengemaskinian Pangkalan Data Ukur Kadaster (PDUK) <i>Updating Cadastral Survey Databases (UCSD)</i>	495,200 lot <i>495,200 lots</i>



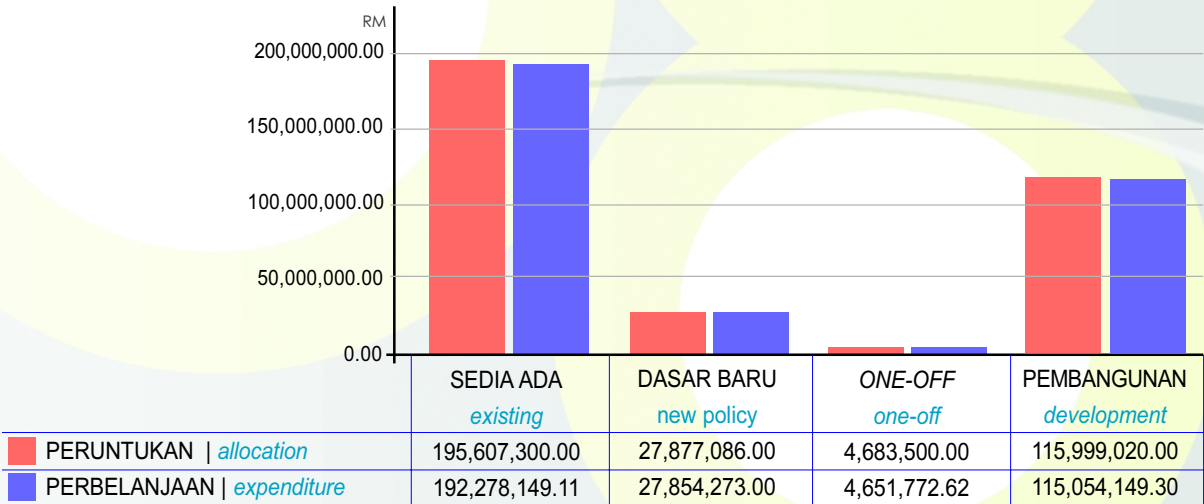
PENGURUSAN KEWANGAN

FINANCIAL MANAGEMENT

JUPEM telah diberi peruntukan kewangan sebanyak RM 344.17 juta bagi tahun 2008. Sehingga 31 Disember 2008 sejumlah RM 339,838,344.03 telah dibelanjakan, iaitu 99 % daripada jumlah keseluruhan peruntukan tersebut. Sejumlah RM 228.17 juta daripada jumlah peruntukan keseluruhan ialah peruntukan belanja mengurus, manakala baki sejumlah RM 116 juta adalah di bawah peruntukan pembangunan. Perbelanjaan sebanyak RM 224.78 juta atau 99 % daripada peruntukan belanja mengurus telah dilaksanakan, sementara perbelanjaan di bawah peruntukan pembangunan adalah sebanyak RM 115.05 juta (99%)

JUPEM was allocated RM 344.17 million for the year 2008. Up till 31 December 2008 a total of RM 339,838,344.03 has been spent, i.e. 99 % of the total allocation. The sum of RM 228.17 million of the overall total allocation was for management expenditure while the remaining RM 116 million was for development. Expenses amounting to RM 224.78 million or 99 % of the allocation for management expenditure has been spent, while expenditure under allocation for development amounts to RM 115.05 million (99 %).

Pencapaian Kewangan Tahun 2008
2008 Financial Performance



Perincian Agihan Peruntukan Dan Perbelanjaan Keseluruhan
Detailed Distribution of Overall Allocation and Expenditure

AGIHAN PERUNTUKAN <i>distribution of allocation</i>	PERUNTUKAN <i>allocation</i>	PERBELANJAAN <i>expenditure</i>	
	(RM)	(RM)	(%)
SEDIA ADA <i>CURRENT</i>	195,607,300.00	192,278,149.11	98
DASAR BARU <i>NEW POLICY</i>	27,877,086.00	27,854,273.00	100
ONE - OFF <i>ONE-OFF</i>	4,683,500.00	4,651,772.62	99
PEMBANGUNAN <i>DEVELOPMENT</i>	115,999,020.00	115,054,149.30	99
JUMLAH KESELURUHAN <i>GRAND TOTAL</i>	344,166,906.00	339,838,344.03	99



BELANJA MENGURUS OPERATING EXPENDITURE

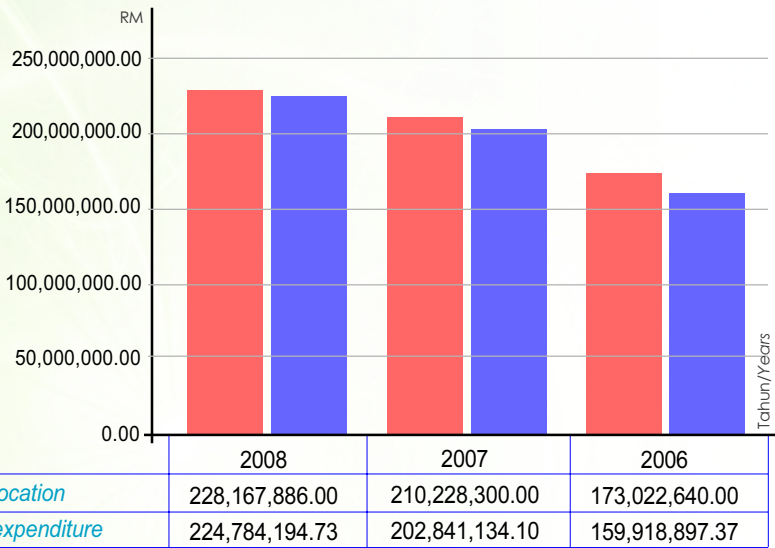
Perbandingan pencapaian belanjawan bagi tempoh tiga tahun menunjukkan bahawa perbelanjaan bagi peruntukan belanja mengurus tahun 2008 adalah sebanyak 98.52%, tahun 2007 96.49%, manakala tahun 2006 hanya 92.43%.

Carta bagi menunjukkan jumlah peruntukan dan perbelanjaan bagi tempoh tiga tahun tersebut adalah seperti yang berikut:

A comparison of the budget over the past three years shows that the expenses for the operating expenditure allocation for 2008 totalled 98.52%, for 2007 96.49%, while for 2006 the expenses amounted to only 92.43%.

The chart below shows the total allocation and expenditure for the last three years:

Jumlah peruntukan dan perbelanjaan bagi tempoh tiga tahun
Total allocation and expenditure for the three years



Perincian Pencapaian Peruntukan Belanja Mengurus Detailed Performance in Allocation of Operating Expenditure

DASAR SEDIA ADA | CURRENT POLICY

OBJEK AM general object	PERUNTUKAN allocation	PERBELANJAAN expenditure	
	(RM)	(RM)	(%)
10000 EMOLUMEN EMOLUMENTS	124,104,800.00	122,140,678.75	98.4
20000 PERKHIDMATAN & BEKALAN SERVICES & SUPPLIES	71,415,900.00	70,058,999.60	98.1
30000 ASET ASSETS	-	-	-
40000 PEMBERIAN & KENAAN TETAP GIFTS & FIXED COSTS	59,500.00	53,892.76	90.6
50000 PERBELANJAAN LAIN OTHER EXPENSES	27,100.00	24,578.00	90.7
JUMLAH TOTAL	195,607,300.00	192,278,149.11	98.3

DASAR BARU | *NEW POLICY*

OBJEK AM <i>general object</i>	PERUNTUKAN <i>allocation</i>	PERBELANJAAN <i>expenditure</i>	
	(RM)	(RM)	(%)
10000 EMOLUMEN <i>EMOLUMENTS</i>	25,219,686.00	25,206,073.00	99.9
20000 PERKHIDMATAN & BEKALAN <i>SERVICES & SUPPLIES</i>	2,657,400.00	2,648,200.00	99.7
30000 ASET <i>ASSETS</i>	-	-	-
40000 PEMBERIAN & KENAAN TETAP <i>GIFTS & FIXED COSTS</i>	-	-	-
50000 PERBELANJAAN LAIN <i>OTHER EXPENSES</i>	-	-	-
JUMLAH <i>TOTAL</i>	27,877,086.00	27,854,273.00	99.9

ONE-OFF | *ONE-OFF*

OBJEK AM <i>general object</i>	PERUNTUKAN <i>allocation</i>	PERBELANJAAN <i>expenditure</i>	
	(RM)	(RM)	(%)
10000 EMOLUMEN <i>EMOLUMENTS</i>	-	-	-
20000 PERKHIDMATAN & BEKALAN <i>SERVICES & SUPPLIES</i>	630,000.00	608,622.97	96.6
30000 ASET <i>ASSETS</i>	4,023,700.00	4,013,378.65	99.7
40000 PEMBERIAN & KENAAN TETAP <i>GIFTS & FIXED COSTS</i>	-	-	-
50000 PERBELANJAAN LAIN <i>OTHER EXPENSES</i>	29,800.00	29,771.00	99.9
JUMLAH <i>TOTAL</i>	4,683,500.00	4,651,772.62	99.3

Pencapaian Keseluruhan Peruntukan Aktiviti Belanja Mengurus
Overall Performance in Allocation of Operating Expenditure

AKTIVITI <i>activity</i>	PERUNTUKAN <i>allocation</i>	PERBELANJAAN <i>expenditure</i>	
	(RM)	(RM)	(%)
SEDIA ADA <i>CURRENT</i>	195,607,300.00	192,278,149.11	98.30
DASAR BARU <i>NEW POLICY</i>	27,877,086.00	27,854,273.00	99.92
ONE - OFF <i>ONE-OFF</i>	4,683,500.00	4,651,772.62	99.32
JUMLAH KESELURUHAN <i>GRAND TOTAL</i>	228,167,886.00	224,784,194.73	98.52



BELANJA PEMBANGUNAN DEVELOPMENT EXPENDITURE



Statistik prestasi peruntukan pembangunan 2008 JUPEM menunjukkan bahawa 99.19% telah dapat dibelanjakan berbanding pada tahun 2007 sebanyak 99.33%, manakala pada tahun 2006 pula hanya sebanyak 79.15%.

Performance statistics in regards to the 2008 development expenditure for JUPEM shows that 99.19% managed to be spent compared to 99.33% in 2007 and only 79.15% in 2006.

Pencapaian Peruntukan Pembangunan Bagi Tempoh Tiga Tahun (2006 - 2008)
Development Expenditure Performance For Three Year Period (2006-2008)



Perincian Pencapaian Peruntukan Pembangunan

Detailed Performance For Development Allocation

Di bawah Rancangan Malaysia Ke - 9, JUPEM telah diperakukan peruntukan sejumlah RM115,999,020 di bawah projek pembangunan yang disalurkan melalui projek - projek berikut:

Under the 9th Malaysia Plan, JUPEM had been allocated RM115,999,020 for development projects to be channelled to the following :

BUTIRAN details	PERUNTUKAN (RM) allocation (RM)	PERBELANJAAN expenditure	
		(RM)	(%)
02600 Pengautomasian Proses Kerja Topo Untuk Pemetaan <i>Automation of Topographic Processes For Mapping</i>	10.00	0.00	0
02701 Sistem Pangkalan Data Geodetik (SPDG) <i>Geodetic Databases System (GDS)</i>	6,960,000.00	6,919,393.00	99
02702 Menaik Taraf Kwarters Kakitangan Rendah <i>Upgrading of Lower Category Staff Quarters</i>	463,000.00	462,770.00	100
02801 Projek Penandaan, Pengukuran dan Penyenggaraan Sempadan Antarabangsa <i>Demarcation, Survey and Maintenance of International Boundaries Project</i>	5,300,000.00	4,608,542.62	87
02802 Projek Fotografi Udara Seluruh Sabah & Sarawak dan Sistem Kawalan GPS <i>Aerial Photography of the whole of Sabah Sabah & Sarawak and GPS Control System Project</i>	3,800,000.00	3,795,002.83	100
02803 Pewujudan Sistem Pemetaan Utiliti <i>Creation of Utility Mapping System</i>	6,850,000.00	6,840,414.11	100
02804 eKADASTER <i>eCADASTRE</i>	75,966,000.00	75,965,725.84	100
02807 Perolehan Sistem Kamera Udara Digital <i>Acquisition of Digital Aerial Camera System</i>	7,330,010.00	7,233,229.00	99
02808 PewujudanSistem Generalisasi Pangkalan Data Pemetaan <i>Creation of Mapping Database Generalisation System</i>	6,000,000.00	6,000,000.00	100
02809 Perolehan Sistem Penyediaan Data Cetak <i>Acquisition of Print Data Preparation System</i>	1,200,000.00	1,149,389.50	96
02810 Penggantian Perkakasan dan Perisian Map Publishing <i>Replacement of Map Publishing Equipment and Software</i>	2,130,000.00	2,079,682.40	98
JUMLAH TOTAL	115,999,020.00	115,054,149.30	99



KUTIPAN HASIL REVENUE COLLECTION

Hasil utama JUPEM adalah daripada jualan produk dan perkhidmatannya. Jumlah keseluruhan hasil dipungut bagi tahun 2008 ialah sebanyak RM 7,163,170.05 manakala hasil belum diterima sebanyak RM 7,880,821.00. Antara hasil jualan yang dipungut termasuklah bagi jualan:

- (i) Peta / Pelan Akui / Lembar Piawai ;
Maps / Certified Plans / Standard Sheets ;
- (ii) Fotografi udara; dan
Aerial Photography; and
- (iii) Data-data Geodesi dan Astronomi.
Geodetic and Astronomic Data.

The bulk of the revenue collected by JUPEM is under the category of Non-Taxable Revenue. Total revenue collected for 2008 amounted to RM 7,163,170.05 while revenue not yet received amounted to RM 7,880,821.00. Among the sales revenue collected are from the following:

Pencapaian Kutipan Hasil JUPEM Negeri *Performance of State JUPEM Revenue Collection*

BUTIRAN details	DIPUNGGUT collected (RM)	TIDAK DIPUNGGUT not collected (RM)	JUMLAH total (RM)
Perak	275,703.10	-	275,703.10
W.P. Kuala Lumpur / Putrajaya	207,875.00	-	207,875.00
Pahang	247,460.66	14,963.00	262,423.66
Selangor	243,886.68	4,762.00	248,648.68
Kelantan	687,368.60	231,960.00	919,328.00
Johor	601,482.08	-	601,482.08
Kedah	135,133.00	173.00	135,306.00
Negeri Sembilan	630,571.09	-	630,571.09
Terengganu	910,413.00	344,759.00	1,255,172.00
Pulau Pinang	119,030.93	800,550.86	919,581.79
Topografi Sabah	88,338.11	-	88,338.11
Topografi Sarawak	49,430.10	3,960.00	53,380.10
Melaka	642,609.68	50,505.00	693,114.68
W.P. Labuan	40,661.86	19,025.87	59,687.73
Perlis	75,851.30	55,534.40	131,385.40
JUMLAH TOTAL	4,955,814.89	1,526,183.13	6,481,998.02

Pencapaian Kutipan Hasil Ibu Pejabat JUPEM
Performance in Revenue Collection by JUPEM Headquarters

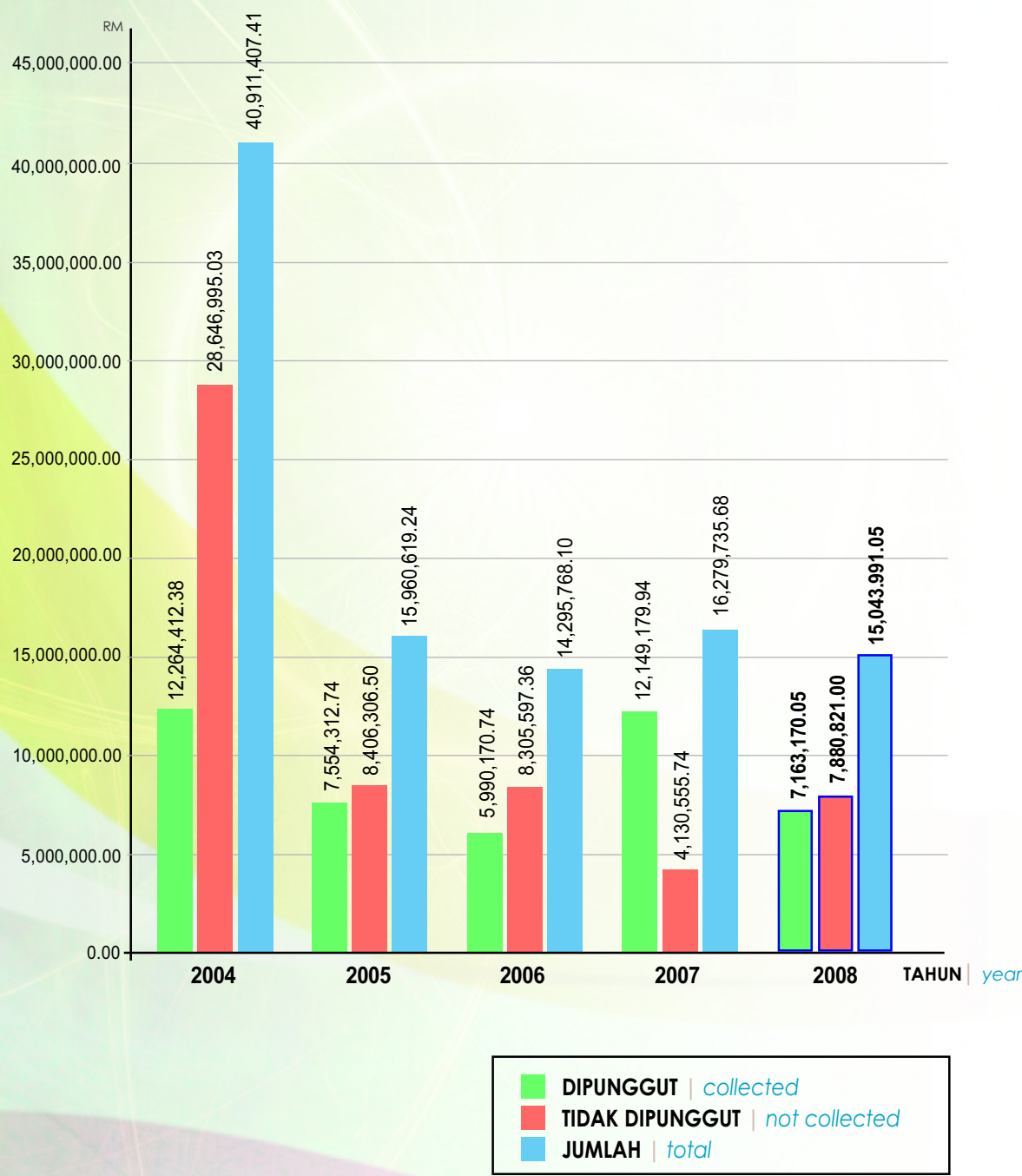
BUTIRAN details	DIPUNGGUT collected (RM)	TIDAK DIPUNGGUT not collected (RM)	JUMLAH total (RM)
Ehwal Persempadanan <i>Boundry Affairs</i>	-	-	-
Topografi Semenanjung <i>Peninsular Topography</i>	-	-	-
Geodesi <i>Geodesy</i>	121,282.00	-	121,282.00
Penawanan Data <i>Data Acquisition</i>	-	-	-
Perancangan, Penyelidikan dan Pembangunan <i>Planning, Research, and Development</i>	-	-	-
Penyelarasan & Dasar Kadaster <i>Coordination & Cadastre Policy</i>	-	-	-
Perkhidmatan Pemetaan <i>Mapping Services</i>	1,740,636.27	6,354,637.87	8,095,274.14
Kartografi <i>Cartography</i>	-	-	-
Pentadbiran dan Perkhidmatan <i>Administration and Services</i>	324,397.89	-	324,397.89
Pangkalan Data <i>Database</i>	-	-	-
Perancangan Gunatenaga <i>Human Resource Planning</i>	-	-	-
Pembangunan Sistem <i>System Development</i>	-	-	-
Percetakan Peta <i>Map Printing</i>	21,039.00	-	21,039.00
JUMLAH TOTAL	2,207,355.16	6,354,637.87	8,561,993.03

Pencapaian Pungutan Hasil
Bagi Tempoh Lima Tahun
Performance in Revenue
Collection Over a Five-Year
Period



TAHUN year	DIPUNGGUT collected (RM)	TIDAK DIPUNGGUT not collected (RM)	JUMLAH total (RM)
2004	12,264,412.38	28,646,995.03	40,911,407.41
2005	7,554,312.74	8,406,306.50	15,960,619.24
2006	5,990,170.74	8,305,597.36	14,295,768.10
2007	12,149,179.94	4,130,555.74	16,279,735.68
2008	7,163,170.05	7,880,821.00	15,043.991.05

Pencapaian Pungutan Hasil Bagi Tempoh Lima Tahun
Performance in Revenue Collection Over a Five-Year Period





INOVASI/PENGIKTIRAFAN

INNOVATIONS/RECOGNITION



PENGELUARAN PELAN HAK MILIK TANAH SECARA HYBRID ISSUANCE OF LAND TITLES BY HYBRID MEANS



JUPEM telah diumumkan sebagai pemenang Anugerah Inovasi Perkhidmatan Awam pada majlis penyampaian Anugerah Kualiti Sektor Awam (AKSA) 2008 yang telah diadakan pada 27 November 2008 bertempat di Pusat Konvensyen Antarabangsa Putrajaya (PICC).

JUPEM was declared winner of the Public Services Innovations Award at the 2008 Public Sector Quality Awards (PSQA) presentation ceremony held on 27 November 2008 at the Putrajaya International Convention Centre (PICC).

Inovasi yang diperkenalkan oleh Bahagian Kadaster, Ibu Pejabat JUPEM bertajuk Pengeluaran Pelan Hak Milik Tanah Secara Hybrid. Melalui kaedah ini, pelan hak milik tanah telah dapat dijana dalam jangkamasa yang singkat secara automasi sepenuhnya. Proses hybrid melibatkan gabungan di antara dua pangkalan data iaitu Pangkalan Data Ukur Kadaster (data vektor) dengan Pangkalan Data Imej Dokumen (data raster), membolehkan maklumat lot tanah dapat dicetak dan diwarnakan secara terus untuk setiap pelan hak milik tanah yang perlu dihasilkan.



JUPEM telah berjaya mengenyepikan 133 calon lain daripada pelbagai jabatan / agensi yang mengambil bahagian. Hanya 16 penyertaan yang disenarai pendekkan dan lima (5) daripadanya ialah pemenang Anugerah AIPA. Jabatan Ukur dan Pemetaan Malaysia adalah antara pemenang yang disenaraikan. Anugerah ini telah disampaikan oleh Y.A.B Perdana Menteri Datuk Seri Abdullah Ahmad Badawi kepada Y. Bhg. Datuk Hamid bin Ali, Ketua Pengarah Ukur dan Pemetaan Malaysia berupa hadiah wang tunai RM10,000.00, piala dan sijil penghargaan.



The innovation introduced by the Cadastre Division, JUPEM Headquarters was the Issue of Land Titles by Hybrid Means. Using this method, Land Title Plans were able to be generated automatically in a short period of time. This hybrid process involved combining two databases i.e. Cadastral Survey Database (vector data) and Document Image Database (raster data), enabling land lot information to be printed and colour applied directly to each land title plan to be issued.

JUPEM succeeded in defeating 133 other competitors from various departments / agencies participating. Only 16 participants were shortlisted, five of whom emerged winners of the AIPA Award. The Department of Survey and Mapping Malaysia was among the winners listed. The award, presented by Y.A.B Prime Minister Datuk Seri Abdullah Ahmad Badawi to Y. Bhg. Datuk Hamid bin Ali, Director General of Survey and Mapping Malaysia, was in the form of a RM10,000.00 cash prize, shield and certificate of appreciation.



ANUGERAH 5S 5S AWARD

Amalan 5S di JUPEM Labuan merupakan pelaksanaan terulung di peringkat JUPEM. Penerapan amalan 5S membawa banyak manfaat yang berganda kepada warga jabatan dan organisasi kerana amalan 5S terbukti telah meningkatkan kualiti tempat kerja, cara bekerja, hasil pengeluaran dan menjimatkan kos operasi.

Audit Persekitaran Kualiti 5S ke atas JUPEM Labuan telah dilakukan oleh pihak MPC pada 29 Ogos 2008. Program tersebut telah dimulakan dengan penyampaian taklimat tentang JUPEM Labuan oleh Pengarah Ukur Negeri JUPEM Labuan Encik Che Mohamad Bakri bin Omar, ADK. Stiker 5S yang menjadi simbol kejayaan pelaksanaan amalan 5S telah diperoleh dari pihak MPC setelah panel-panel berpuas hati dengan amalan 5S yang telah ditunjukkan pihak JUPEM Labuan pada tahun 2008.



Labuan telah menjadi contoh kepada agensi-agensi lain. Jabatan Akauntan Negara Malaysia (JANM) Cawangan Wilayah Persekutuan Labuan dan Perbadanan Labuan antara agensi yang telah membuat lawatan untuk mempelajari amalan 5S yang dilaksanakan oleh JUPEM Labuan.



The practice of 5S in JUPEM Labuan was considered the most excellent implementation at JUPEM level. The adoption of the 5S practice has brought about manifold benefits to the department and its workforce as it has proven that it improves the quality of the work place, working style, products, and has also cut operational costs.



The 5S Quality Environment Audit on JUPEM Labuan was carried out by MPC on 29 August 2008. The programme began with a briefing on JUPEM Labuan by the State Director of Survey of JUPEM Labuan, Encik Che Mohamad Bakri bin Omar, ADK. The 5S Sticker symbolising successful implementation of 5S practice was acquired from MPC after the panel members were satisfied with the 5S practice demonstrated by JUPEM Labuan in 2008.

Following the victory, JUPEM Labuan became the model for other agencies. The Malaysian Accountant General's Department (MAGD) Federal Territory of Labuan Branch and Labuan Corporation were among agencies that made visits to learn how the 5S practice was implemented by JUPEM Labuan.

Antara pengiktirafan melalui penganugerahan yang diperoleh JUPEM sepanjang tahun 2008 termasuklah yang berikut ;

Among the recognition in the form of awards received by JUPEM over the year 2008 are as follows:

KATEGORI category	PERINGKAT level	PENERIMA recipient
Anugerah Inovasi Perkhidmatan Awam (AIPA) 2008 (Pengeluaran Pelan Hak Milik Tanah Secara Hybrid) <i>Public Services Innovation Award (AIPA) 2008 (Issue of Land Titles by Hybrid Means)</i>	Kebangsaan <i>National</i>	JUPEM <i>JUPEM</i>
Special Achievement in GIS(Utility Mapping Section) <i>Special Achievement in GIS (Utility Mapping Section)</i>	Antarabangsa <i>International</i>	JUPEM <i>JUPEM</i>
Penganugerahan ISO 2000 <i>ISO 2000 Award</i>	Kementerian <i>Ministry</i>	JUPEM <i>JUPEM</i>
Hari Kualiti (Q) Laman WEB Terbaik <i>Quality (Q) DayBest Website</i>	Kementerian (Johan) <i>Ministry(Champion)</i>	JUPEM <i>JUPEM</i>
Hari Kualiti (Q) Anugerah Peneraju Kualiti <i>Quality (Q) Day Quality Leadership Award</i>	Kementerian (Ketiga) <i>Ministry(Third Place)</i>	JUPEM <i>JUPEM</i>
Sijil Amalan 5S <i>5S Certificate of Practice</i>	Negeri <i>State</i>	JUPEM Labuan <i>JUPEM Labuan</i>



Kejayaan dan pengiktirafan ini berdasarkan keupayaan dan kepercayaan para pelanggan terhadap perkhidmatan yang disediakan oleh JUPEM.

The achievement and recognition are also due to the efforts and trust of clients in the services provided by JUPEM.

Pengiktirafan seumpama ini, yakni daripada agensi kerajaan dan swasta, dapat meningkatkan lagi komitmen warga JUPEM untuk terus berusaha menjayakan aktiviti - aktiviti kerja ukur dan pemetaan di jabatan.

Such recognition from government and private agencies can motivate JUPEM employees to be more committed in continuously working towards the success of survey and mapping works conducted by the department.

