



JABATAN UKUR DAN PEMETAAN MALAYSIA  
DEPARTMENT OF SURVEY AND MAPPING MALAYSIA









laporan  
**TAHUNAN 2014**

---

# Kandungan

## LAPORAN TAHUNAN 2014

<b>1</b>	<b>PERUTUSAN KETUA PENGARAH UKUR DAN PEMETAAN MALAYSIA</b>	4
<b>2</b>	<b>MAKLUMAT KORPORAT</b>	7
	PENGURUSAN TERTINGGI JABATAN	9
	PROFIL PENGURUSAN TERTINGGI	10
	KUMPULAN PENGURUSAN JUPEM	13
	CARTA ORGANISASI JABATAN	20
	VISI, MISI DAN MOTTO	22
	OBJEKTIF DAN FUNGSI	22
	PIAGAM PELANGGAN	23
	KOD ETIKA	24
	LOGO	25
	LAGU JABATAN	26
<b>3</b>	<b>TADBIR URUS KORPORAT</b>	27
	PENGURUSAN SUMBER MANUSIA	28
	KURSUS DAN LATIHAN	34
	LAMAN WEB JUPEM GEOPORTAL	37
	PENERIMA BINTANG KEBESARAN PERSEKUTUAN DAN NEGERI	38
<b>4</b>	<b>LAPORAN PRESTASI 2014</b>	39
	INFRASTRUKTUR GEODETIK	
	• Ukuran Jaringan dan Kawalan GNSS	40
	• MyRTKnet	41
	• Cerapan Air Pasang Surut	42
	• Jaringan Ukur Aras	44
	• Ukuran Graviti	47
	• Astronomi	47
	PERSEMPADANAN ANTARABANGSA	49
	• Persempadanan Darat Malaysia-Thailand	49
	• Persempadanan Darat Malaysia-Indonesia	50
	• Persempadanan Maritim Malaysia-Indonesia	50
	• Persempadanan Maritim Malaysia-Singapura	51
	• Persempadanan Darat Malaysia-Brunei Darussalam	52

<b>PERSEMPADANAN NEGERI</b>	52
<b>SAKSI PAKAR KES-KES DI MAHKAMAH</b>	54
<b>PENERBITAN PETA</b>	55
• Penawanan Data	55
• Ukuran Titik Kawal	55
• Pangkalan Data	56
• Pengemaskinian Peta Topografi	57
• Kartografi	57
• Percetakan	58
• Pemetaan Utiliti	63
• Perkhidmatan Pemetaan	65
<b>UKURAN KADASTER</b>	66
• Pencapaian Ukuran Hak Milik Tanah	66
• Pencapaian Semakan Kerja Juruukur Tanah Berlesen (JTB)	67
• Pencapaian Semakan Kerja Ukuran Hak Milik Strata Peringkat I	68
• Pencapaian Semakan Kerja Ukuran Hak Milik Strata Peringkat II	69
• Pencapaian Penandaan Titik Kawalan CRM	70
<b>BAHAGIAN GEOSPATIAL PERTAHANAN</b>	71
• Penerbitan Data dan Peta Kegunaan Pertahanan dan Keselamatan	71
• Perkhidmatan Geospatial Pertahanan	72
• Perkhidmatan Web	73
• Bantuan Khidmat Geospatial Pertahanan di Medan	74
• Pembangunan Keupayaan uGeo for Defense	75
<b>LAPORAN KEWANGAN</b>	77
• Pengurusan Kewangan	78
• Belanja Mengurus	79
• Belanja Pembangunan	81
• Hasil	82
<b>ANUGERAH DAN PENGITIRAFAN</b>	85
<b>IMBASAN PERISTIWA 2014</b>	91
<b>DIREKTORI JABATAN</b>	99

# Perutusan

KETUA PENGARAH UKUR DAN PEMETAAN MALAYSIA

**YBHG. DATUK SR AHMAD FAUZI BIN NORDIN  
PMW, DPMT, DSAP, JSM, SMZ, KMN**  
**Ketua Pengarah Ukur dan Pemetaan Malaysia**

Assalamualaikum Warahmatullahi Wabarakatuh,

Salam Sejahtera dan Salam 1Malaysia

Alhamdulillah bersyukur saya ke hadrat llahi dengan limpah kurnia dan keizinanNya, JUPEM telah berjaya menerbitkan buku Laporan Tahunan 2014. Sekalung penghargaan dan syabas dititipkan buat warga JUPEM yang telah terlibat secara langsung dan tidak langsung dalam menyumbangkan idea, tenaga serta komitmen berterusan dalam menjayakan tugas dan amanah yang dipertanggungjawabkan.

Menyusuri kembali peristiwa dan pencapaian JUPEM sepanjang tahun 2014 ini, terlihat banyak kejayaan dan penganugerahan yang diterima sama ada di peringkat Antarabangsa, Kebangsaan, Kementerian maupun Jabatan sendiri. Kejayaan yang sangat membanggakan JUPEM di peringkat Antarabangsa pada tahun 2014 ini adalah penganugerahan Geospatial World Excellence Awards (*Cadastral Survey*) bersempena Geospatial World Forum di Geneva pada Mei 2014 dan Anugerah Khas GIS Antarabangsa oleh ESRI Malaysia kepada Bahagian Geospatial Pertahanan (BGSP) pada Oktober 2014.

Di peringkat Kebangsaan pula, JUPEM dikurniakan Anugerah Geospatial Kebangsaan (Kategori Umum) di majlis Simposium Maklumat Geospatial Kebangsaan (NGIS) ke-6 pada Mac 2014, Anugerah Emas sempena Konvensyen Team Excellence Wilayah Utara pada Jun 2014, dan Johan Pertandingan Cabaran Inovasi sempena Persidangan dan Pameran Perkomesilan MOSTI 2014.

Selain itu, JUPEM telah melakar kejayaan di peringkat Kementerian pada tahun 2014 ini dengan mendominasi kemenangan dalam pertandingan Hari Inovasi 1NRE yang dianjurkan oleh Kementerian Sumber Asli dan Alam Sekitar (NRE). Kemenangan ini telah melayakkan JUPEM merangkul anugerah Juara Keseluruhan dengan meraih kemenangan penuh dalam pertandingan Kumpulan Inovatif dan Kreatif (KIK) dan pertandingan Inovasi. Kejayaan ini merupakan pencapaian yang sangat membanggakan dan membuktikan JUPEM adalah sebuah organisasi yang sangat berdaya saing.

Selaras dengan prakarsa-prakarsa mega dalam pentadbiran awam seperti Program Transformasi Ekonomi (ETP), Program Transformasi Kerajaan (GTP) dan yang terkini Strategi Lautan Biru Kebangsaan (NBOS) yang dilaksanakan oleh Kerajaan, JUPEM sentiasa peka dalam membuat penambahbaikan kepada pendekatan dan strategi dalam usaha memberikan perkhidmatan terbaik kepada pelanggan. Sebagai contoh, dalam kes ETP, terdapat 12 Bidang Ekonomi Utama Negara (NKEA) yang akan diberikan tumpuan yang mana sebahagian besarnya memerlukan penggunaan maklumat geospatial dalam proses pelaksanaannya. Dalam perkara ini, JUPEM sebagai pembekal maklumat geospatial di negara ini dengan jelas telah dan akan berterusan memberi sumbangan yang ketara kepada pembangunan ekonomi negara.

Dalam masa yang sama, JUPEM terus menggunakan teknologi terkini dalam memperkasa dan mengarus perdanakan penawanan serta pengurusan data geospatial. Pemakaian teknologi seperti *Global Navigation Satellite System* (GNSS), *Unmanned Aerial Vehicle* (UAV), *Geographic Information System* (GIS) dan *cloud computing* secara keseluruhannya menyediakan semua kemudahan infrastruktur yang menyokong aktiviti pengukuran kadaster dan pemetaan topografi di Malaysia, yang bukan sahaja menjimatkan masa dan mengurangkan kos, malah dapat meningkatkan kualiti kerja secara lebih efektif dan produktif. Ini dibuktikan dengan pencapaian yang disasarkan dalam sasaran kerja tahunan; tahun demi tahun jelas menunjukkan peningkatan.

Suka saya merakamkan ucapan penghargaan dan terima kasih serta syabas dan tahniah buat semua pegawai dan staf JUPEM kerana telah saling bekerjasama dalam mencapai kejayaan-kejayaan yang membanggakan JUPEM. Semoga kita semua akan terus kompeten dan berusaha untuk menjadi warga Jabatan yang cemerlang, gemilang dan terbilang. Besar harapan saya supaya kejayaan-kejayaan ini menjadi pemangkin dan semangat buat semua untuk terus melangkah dan memacu JUPEM ke hadapan demi memenuhi kehendak pelanggan serta meningkatkan kualiti perkhidmatan Jabatan khasnya dan perkhidmatan awam umumnya.

Warga JUPEM juga harus mempunyai fikiran dan minda yang lebih kreatif serta bijaksana dalam mencari idea baru bagi merangsang penyelesaian dan penghasilan produk yang lebih inovatif dari data yang dihasilkan. Ini wajar diuruskan dengan memperluaskan kerjasama antara jabatan dengan agensi kerajaan yang lain dan pihak swasta melalui pendekatan Strategi Lautan Biru Kebangsaan (NBOS) ke arah merealisasikan dasar transformasi negara. Sehubungan itu, peningkatan kecekapan warga JUPEM juga perlu diutamakan agar dapat menyumbang perkhidmatan yang terbaik kepada rakyat dan negara melalui projek-projek pembangunan yang dilaksanakan.

Akhir kata, saya ingin menyeru kepada seluruh warga JUPEM supaya terus bersatu hati dan menggembung usaha dan tenaga untuk menjadi sebuah pasukan yang kukuh berserta dengan keyakinan dan keazaman yang tinggi dalam memartabatkan JUPEM untuk meneruskan kesinambungan kejayaannya. Dikesempatan ini juga, saya mengucapkan terima kasih buat Jawatankuasa Editorial Penyediaan Laporan Tahunan 2014 atas penerbitan laporan tahunan ini. Saya berharap laporan tahunan ini akan dapat dimanfaatkan sepenuhnya oleh warga JUPEM dan juga pihak-pihak yang berkepentingan.

Sekian, terima kasih.



KETUA PENGARAH UKUR DAN PEMETAAN MALAYSIA





maklumat  
**KORPORAT**

---



## PENGURUSAN TERTINGGI JABATAN



**DATO' SR HASAN**

**BIN JAMIL**

Timbalan Ketua Pengarah  
Ukur dan Pemetaan I

- **DATUK SR AHMAD FAUZI**
- **BIN NORDIN**
- Ketua Pengarah Ukur dan Pemetaan  
Malaysia
- 

**DATO' SR MOHD NOOR**

**BIN ISA**

Timbalan Ketua Pengarah Ukur dan  
Pemetaan II



**YBHG. DATUK SR AHMAD FAUZI  
BIN NORDIN, PMW, DPMT, DSAP, JSM,  
SMZ, KMN**

**Ketua Pengarah Ukur dan Pemetaan Malaysia**

YBhg. Datuk Sr Ahmad Fauzi bin Nordin telah dilantik sebagai Ketua Pengarah Ukur dan Pemetaan Malaysia pada 10 April 2014.

Beliau berkelulusan Ijazah Sarjana Sains (Geoinformatik) dari Universiti Teknologi Malaysia, Postgraduate Diploma in Geographical Information System (GIS) daripada ITC, Netherlands dan Ijazah Sarjana Muda Ukur (Tanah) dari Universiti Teknologi Malaysia.

Beliau pernah bertugas sebagai Juruukur Daerah Kuala Kangsar, Penolong Pengarah Ukur Topografi (Wilayah Utara), Timbalan Pengarah Ukur Kedah/Perlis, Penolong Pengarah Ukur Kadaster Rancangan Tanah (RT), Timbalan Pengarah Ukur (Unit Khas) Pahang, Timbalan Pengarah Ukur Perak, Pengarah Ukur Topografi Sarawak, Timbalan Pengarah Ukur | 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 (Kadaster) dan sebagai Pengarah Ukur Bahagian (Pemetaan) sebelum memegang jawatan sebagai Timbalan Ketua Pengarah Ukur dan Pemetaan I pada 17 Jun 2009. Pada 10 April 2014 beliau telah dilantik sebagai Ketua Pengarah Ukur dan Pemetaan Malaysia.

Beliau juga adalah Felo Pertubuhan Juruukur DiRaja Malaysia (RISM) dan Presiden RISM bagi sesi 2011/2012, Pengerusi Malaysian Building Industry Presidents Council (BIPC) bagi sesi 2011/2012, Pengerusi Lembaga Juruukur Tanah Malaysia (LJT) dan seorang Juruukur Tanah Bertauliah.

## PROFIL PENGURUSAN TERTINGGI

YBhg. Dato' Sr Hasan bin Jamil telah dilantik sebagai Timbalan Ketua Pengarah Ukur dan Pemetaan I pada 10 April 2014.

Beliau berkelulusan Ijazah Sarjana Geographical Information System (GIS) dari University of Edinburgh, United Kingdom dan Ijazah Sarjana Muda Ukur (Tanah) dari Universiti Teknologi Malaysia.

Beliau pernah bertugas sebagai Juruukur di Jabatan Ukur Terengganu, Penolong Pengarah Ukur Kelantan, Juruukur Daerah Kelantan Selatan Machang, Penolong Pengarah Ukur Topografi Sabah, Pengarah Ukur Topografi Sabah, Penolong Pengarah Ukur Kadaster, Pengarah Ukur Pulau Pinang, Pengarah Ukur Selangor, Pengarah Ukur Bahagian (Ukur Geodetik), Pengarah Ukur Seksyen (Ehwal Persempadan), Pengarah Ukur dan Pemetaan W.P. Kuala Lumpur / Putrajaya dan Pengarah Ukur Bahagian (Pemetaan). Beliau dilantik sebagai Timbalan Ketua Pengarah Ukur dan Pemetaan II pada 16 November 2010 sebelum memegang jawatan sebagai Timbalan Ketua Pengarah Ukur dan Pemetaan I.

Beliau juga adalah Presiden Pertubuhan Juruukur DiRaja Malaysia (RISM) bagi sesi 2014/2015, Timbalan Pengurus Lembaga Juruukur Tanah Malaysia (LJT) dan seorang Juruukur Tanah Bertauliah.



**YBHG. DATO' SR HASAN  
BIN JAMIL, DIMP, JMW, AMN**  
**Timbalan Ketua Pengarah Ukur dan Pemetaan I**



**YBHG. DATO' SR MOHD NOOR  
BIN ISA, DIMP, SMP**

**Timbalan Ketua Pengarah Ukur dan Pemetaan II**

YBhg. Dato' Sr Mohd Noor Bin Isa telah dilantik sebagai Timbalan Ketua Pengarah Ukur dan Pemetaan II pada 6 Mei 2014.

Beliau berkelulusan Ijazah Sarjana Muda Ukur (Tanah) dari Universiti Teknologi Malaysia dan pernah bertugas sebagai Juruukur Latihan (Jabatan Ukur Perak), Juruukur Daerah Perak Utara, Penolong Pengarah Ukur Pahang, Juruukur Daerah Pahang Barat, Juruukur Urusetia Unit Khas, Penolong Pengarah Ukur (Penyelarasian & Pembangunan), Ketua Penolong Pengarah Ukur (Latihan) dan Ketua Penolong Pengarah Ukur (Penyelarasian dan Pembangunan).

Beliau juga pernah memegang jawatan sebagai Pengarah Ukur (Perancangan, Penyelidikan dan Pembangunan), Pengarah Ukur dan Pemetaan Pahang, Pengarah Ukur Topografi Sabah dan seterusnya Pengarah Ukur Bahagian (Pemetaan).

Beliau juga adalah Pengurus Bahagian Geomatik dan Ukur Tanah (GLS), Pertubuhan Juruukur DiRaja Malaysia (RISM) bagi sesi 2014/2015 dan seorang Juruukur Tanah Bertauliah.

## KUMPULAN PENGURUSAN JUPEM



**BRIGEDIER JENERAL HJ ABU SUFIAN BIN HAJI AHMAD**  
**(Mulai 27 Jun 2014)**

**BRIGEDIER JENERAL DATO' ZAHARIN BIN DIN**  
Pengarah Bahagian (Geospatial Pertahanan)



**HAJI ABDUL HAMID BIN HASAN**  
Pengarah Bahagian (Khidmat Pengurusan)



**ZARIFAH BINTI ZULGHAFFAR**  
Pegawai Undang-Undang



**TRIVEINEI A/P SUNDARAM**  
Ketua Unit Integriti



**Sr TAN AH BAH**  
Pengarah Ukur Bahagian  
(Ehwal Persempadan)



**Sr DR. AZHARI BIN MOHAMED**  
Pengarah Ukur Bahagian  
(Ukur Geodetik)



**DATO' Sr ABDUL AZIZ BIN HAJI JANTAN**  
*(Mulai 14 Julai 2014)*  
**Sr JOHN ELVIS KOH**  
Pengarah Ukur Bahagian  
(Pemetaan Topografi Semenanjung)



**Sr HAJI MOHAMAD KAMALI  
BIN ADIMIN**  
*(Mulai 14 Julai 2014)*  
Pengarah Ukur Bahagian  
(Dasar dan Penyelarasaran Pemetaan)



**Sr HAJI RAMLI BIN NOR**  
Pengarah Ukur Bahagian  
(Perancangan dan Korporat)



**Sr MOHAMMAD ZAKI BIN  
MOHD GHAZALI**  
Pengarah Ukur Bahagian  
(Pemetaan Topografi Sabah)



**Sr DR. MOHD YUNUS BIN MOHD YUSOFF**  
**(Mulai 14 Julai 2014)**  
**Sr ZOHER BIN NORMANBHoy**  
Pengarah Ukur Bahagian  
(Pemetaan Utiliti)



**Haji Zahari Bin Zamlope**  
**(Mulai 22 September 2014)**  
**Sr SOHAIME BIN RASIDI**  
Pengarah Ukur Bahagian  
(Pemetaan Topografi Sarawak)



**Sr WAN MOHAMAD DARANI BIN  
AB. RAHMAN**  
**(Mulai 14 Julai 2014)**  
**Sr HAJI ALI BIN AHMAD**  
Pengarah Ukur Bahagian  
(Kartografi dan GIS)



**Sr MOHD LATIF BIN ZAINAL**  
**(Mulai 14 Julai 2014)**  
Pengarah Ukur Bahagian  
(Pangkalan Data Geospatial Negara)

**Sr DR. TENG CHEE HUA**  
Pengarah Ukur Bahagian  
(Kadaster)



**Sr JOHN ELVIS KOH**  
(Mulai 14 Julai 2014)  
**Sr JASNI BIN A. RAHMAN**  
Pengarah Ukur dan Pemetaan  
Perak



**Sr HAJI MOHAMMAD YUNUS BIN MD YUSOF**  
(Mulai 14 Julai 2014)  
**Sr ABDUL AZIZ BIN JANTAN**  
Pengarah Ukur dan Pemetaan  
Pahang



**Sr HAJI ALI BIN AHMAD**  
(Mulai 14 Julai 2014)  
**Sr WAN ZAINUDDIN BIN WAN YUSUFF**  
Pengarah Ukur dan Pemetaan  
Johor





**Sr WAN ZINUDDIN BIN WAN YUSUFF**  
(Mulai 14 Julai 2014)  
**Sr DR ZAINAL BIN A. MAJEEED**  
Pengarah Ukur dan Pemetaan  
Kelantan



**Sr JASNI BIN A. RAHMAN**  
(Mulai 14 Julai 2014)  
**Sr HAJI HAMDANI BIN HAJI SADIMAN**  
Pengarah Ukur dan Pemetaan  
Negeri Sembilan



**Sr AHAMAD BIN ZAKARIA**  
Pengarah Ukur dan Pemetaan  
Selangor



**Sr AHMAD AZMAN BIN GHAZALI**  
Pengarah Ukur dan Pemetaan  
Pulau Pinang



**MD. ZAKI BIN AD. WAHID**  
Pengarah Ukur dan Pemetaan  
W.P. Kuala Lumpur/Putrajaya



**Sr NG ENG GUAN**  
(Mulai 14 Julai 2014)  
**Sr HAJI MOHAMMAD YUNUS BIN MD YUSOF**  
Pengarah Ukur dan Pemetaan  
Kedah



**Sr HAMDAN BIN AB. AZIZ**  
(Mulai 1 Februari 2014)  
**Sr HAJI ABD RAHMAN BIN MOHD DON**  
Pengarah Ukur Pemetaan dan  
Terengganu



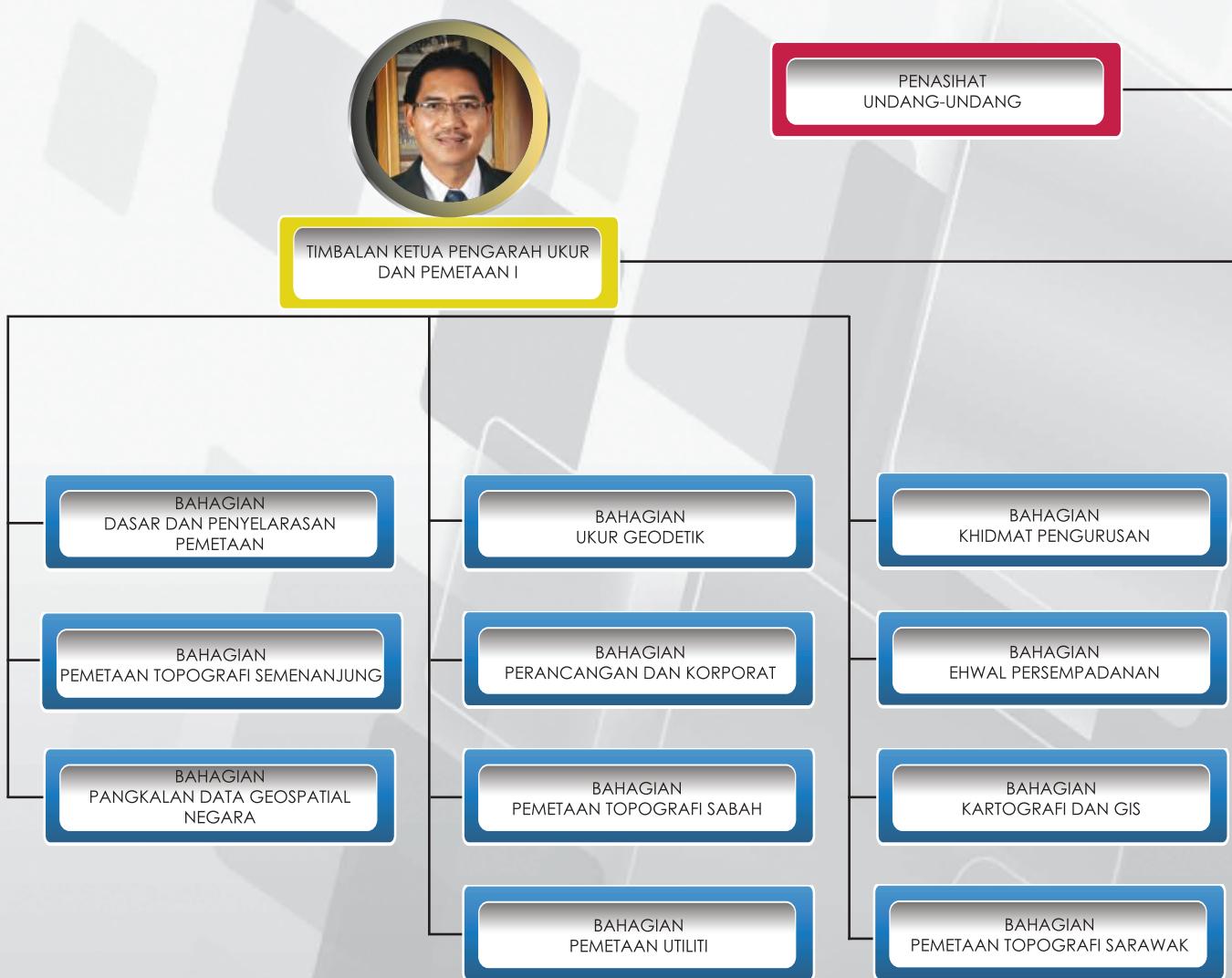
**AHMAD TARMIZI BIN BASTANI**  
Pengarah Ukur dan Pemetaan  
Melaka



**Sr HAJI CHE SULAIMAN BIN MAT YUNUS**  
(Mulai 14 Julai 2014)  
**Sr TAUFEK BIN KASSIM**  
**Sr JAMILAH BINTI IBRAHIM**  
Pengarah Ukur dan Pemetaan  
Perlis

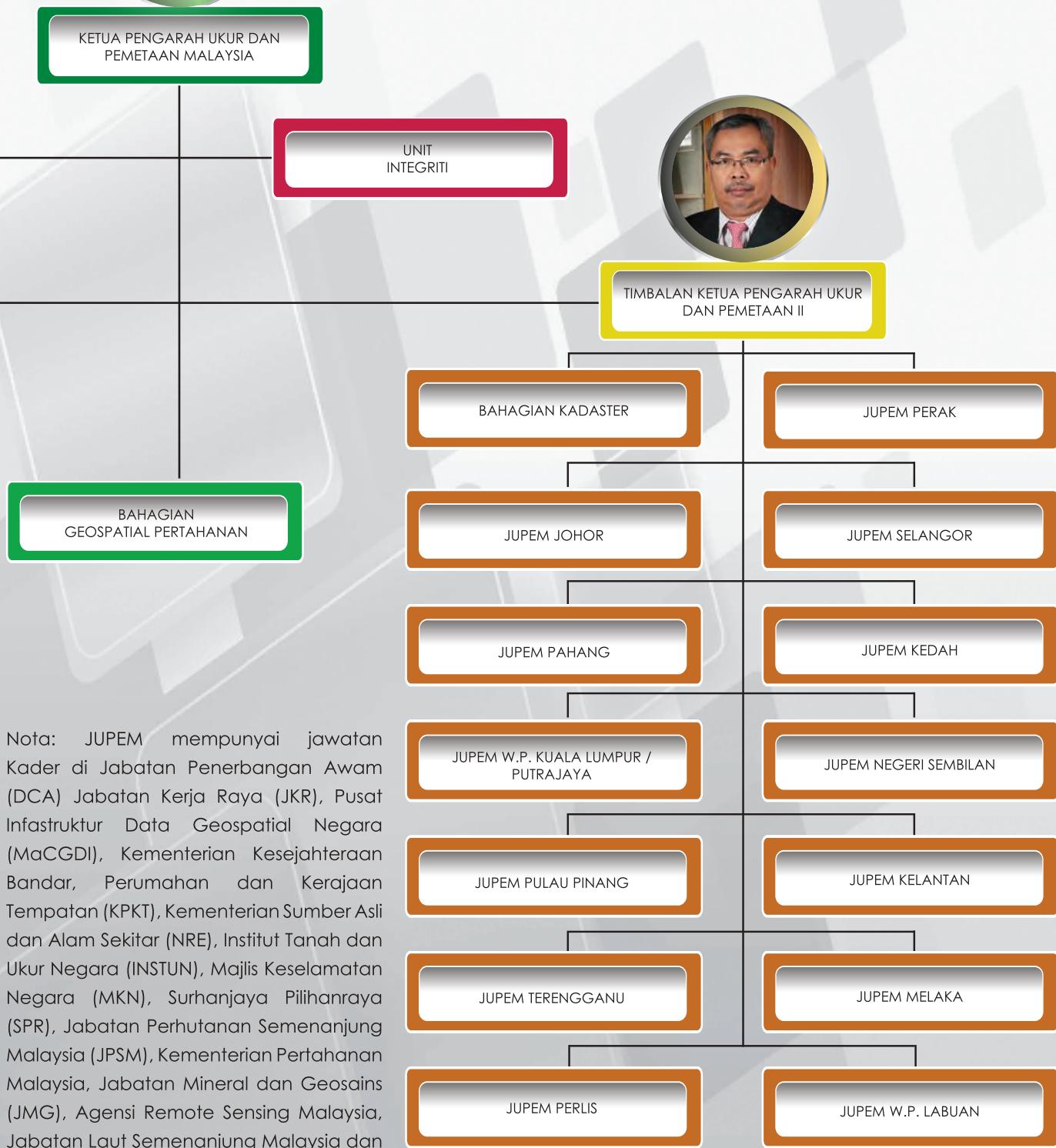


**SUHAMMI BIN AHMAD**  
Pengarah Ukur dan Pemetaan  
W. P. Labuan





## CARTA ORGANISASI JABATAN



# Visi

Menjadikan JUPEM terbilang dalam Perkhidmatan Ukur dan Pemetaan serta Pengurusan Data Geospatial bagi memenuhi wawasan negara.

## Misi

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

# Objektif

- Memastikan produk dan perkhidmatan ukur kadaster dan pemetaan menepati sistem kualiti serta memenuhi keperluan pelanggan.
- Memastikan pewujudan dan penyelenggaraan Pangkalan Data Ukur Kadaster dan Pemetaan yang kemaskini dan berkualiti bagi memenuhi keperluan infrastruktur data geospatial negara.
- Menjadikan JUPEM pusat kecemerlangan dan rujukan dalam bidang ukur kadaster dan pemetaan.
- Memastikan penentuan, penandaan dan pengukuran sempadan negeridan antarabangsa memenuhi keperluan pentadbiran negeri serta menjamin kedaulatan negara.

## Motto

Pemacu Kesejahteraan Rakyat dan Pembangunan Negara.

## Fungsi

- Menasihati Kerajaan dalam bidang ukur kadaster dan pemetaan serta persempadanan negeri dan antarabangsa.
- Menyediakan maklumat ukur kadaster secara lengkap dan kekal untuk tujuan pengeluaran hakmilik tanah, strata dan stratum.
- Menguruskan pangkalan data ukur kadaster dan pemetaan dengan efisien.
- Menerbitkan peta-peta topografi, kadaster, tematik dan utiliti untuk tujuan perancangan, pengurusan sumber asli, pemuliharaan alam sekitar, pembangunan, pemantauan dan keselamatan.
- Menentu, menanda, mengukur dan menyelenggara sempadan-sempadan negeri dan antarabangsa demi menjaga kedaulatan Negara.
- Menyediakan insfrastruktur geodetik bagi ukuran kadaster, pemetaan, kejuruteraan dan kajian saintifik.

## piagam PELANGGAN

- Menyiapkan kerja ukur kadaster sehingga penyediaan Pelan Akui dalam tempoh tidak melebihi 60 hari dari tarikh penerimaan Permohonan Ukur yang lengkap dan teratur.
- Memastikan penyemakan ke atas kerja-kerja Juruukur Tanah Berlesen (JTB) disiapkan dalam tempoh 60 hari dari tarikh penyerahan dokumen yang lengkap dan teratur.
- Memproses Pelan Strata dalam tempoh 30 hari dan Pelan Akui Strata dalam tempoh 50 hari dari tarikh penerimaan permohonan yang lengkap dan teratur.
- Memastikan pengeluaran nombor-nombor lot dilakukan dalam tempoh tidak melebihi 7 hari dari tarikh permohonan yang lengkap dan teratur daripada Juruukur Tanah Berlesen.
- Menyedia serta membekalkan data-data ukur untuk penyediaan suratan hakmilik ke Pejabat Tanah / Pejabat Pengarah Tanah dan Galian dalam tempoh 7 hari dari penerimaan permohonan yang sempurna dan teratur.
- Memastikan dokumen geospatial terperingkat dibekalkan dalam masa 2 hari selepas menerima kelulusan tapisan keselamatan.
- Memastikan data pasca proses MyRTKnet dapat diurus dan dibekalkan dalam masa 4 jam.
- Memastikan sebarang permohonan pembelian maklumat geodetik tidak terhad dapat diurus dan dibekalkan dalam masa 1 hari.
- Memastikan sebarang permohonan perkhidmatan transformasi koordinat, penukaran koordinat,unjuran peta dan interpolasi geoid dapat diurus dan dibekalkan dalam masa 1 hari.
- Memastikan sebarang permohonan perkhidmatan / pembelian bagi setiap salinan data ukur / peta tidak terhad di kaunter JUPEM dapat diuruskan dalam masa 1 jam.
- Memastikan data-data ukur dapat diakses dan diperolehi melalui e-commerce pada bila-bila masa.
- Membuat pembayaran bil dan invois tidak melebihi 14 hari dari tarikh penerimaan lengkap diterima.

## kodETIKA

- Amanah dan jujur dalam melaksanakan tugas yang dipertanggungjawabkan tanpa menyalahgunakan kuasa dan kedudukan.
- Sentiasa sabar, tenang dan cekal dalam semua situasi.
- Benar, tulus dan ikhlas dalam menjalankan sebarang urusan.
- Berdisiplin dan berhemah tinggi.
- Yakin, tepat, adil dan konsisten dalam membuat sebarang keputusan.
- Sentiasa mengamalkan ciri-ciri kreatif, inovatif, bermotivasi, berdaya saing dan akauntabiliti.
- Menjalinkan semangat kerjasama, muhibah dan kasih sayang pada semua peringkat.
- Berbangga menjadi warga JUPEM dan sentiasa berusaha meninggikan martabat dan imej jabatan.
- Memberi perkhidmatan yang efisien dan berkualiti.
- Berusaha memastikan produk-produk jabatan adalah berkualiti dan memenuhi kehendak pelanggan.
- Sentiasa berwaspada dalam pengendalian maklumat tanpa membocori rahsia Negara kepada pihak yang tidak berhak menerimanya.



## definisiLOGO

- Reka bentuk logo JUPEM terdiri daripada 3 bentuk asas iaitu titik-titik, bulatan gedang dan garisan orbit. Titik-titik ini terpisah dua oleh garisan orbit mencerminkan dua aktiviti utama JUPEM iaitu aktiviti pengukuran kadaster dan aktiviti pengukuran pemetaan.
- Warna oren melambangkan keceriaan, kegemilangan, kepekaan JUPEM kepada kehendak pelanggan dan menyatakan kewujudan dan kepentingan JUPEM kepada masyarakat dan negara.
- Warna hijau adalah warna rasmi jabatan dan dipilih bagi menunjukkan bahawa JUPEM senantiasa prihatin dan memberi perhatian serius kepada aspek alam semula jadi dalam pemeliharaan persekitaran yang sihat.
- Penampilan titik-titik memberi petunjuk bahawa JUPEM menggunakan teknologi elektronik dan sistem jaring untuk memperkasakan maklumat ukur dan pemetaan.
- Garisan orbit pula menitikberatkan betapa pentingnya komunikasi, penyebaran maklumat dan rangkaian.

Logo JUPEM pada keseluruhannya adalah lebih energetik, dinamik, progresif serta mampu bersaing dalam menghadapi cabaran-cabaran yang bersifat sejagat khususnya dalam penyediaan infrastruktur ukur dan pemetaan bagi mendukung Dasar Pembangunan Negara.

# LAGU JABATAN

## JUPEM MAJU DAN JAYA

Positif Penuh Beretika  
Realistik Kita Menuju Satu Wawasan  
Perkhidmatan Cekap dan Berkesan  
Kecemerlangan Dijanjikan

Kualiti Teras Perkhidmatan  
Jabatan Ukur dan Pemetaan Malaysia  
Kemuafakatan Prihatin dan Peka  
Iltizam Mulia Visi Jaya

Pengukuran dan Pemetaan  
Tugas Diamanahkan  
Adil Saksama dan Layanan Mesra  
Jadi Amalan

JUPEM Warga Penuh Setia  
Menabur Bakti Budi dan Jasa  
Menyumbang Pembangunan Negara  
Terus Berjaya



tadbir urus

# KORPORAT

---

## PENGURUSAN SUMBER MANUSIA

### Perjawatan

JUPEM telah melaksanakan penstruktur semula organisasinya berdasarkan kepada 'Zero Based' dan telah diluluskan melalui Waran Perjawatan Bilangan E128 Tahun 2013 berkuatkuasa mulai 1 Oktober 2013. Berdasarkan waran tersebut, JUPEM telah diluluskan sejumlah 4996 perjawatan.

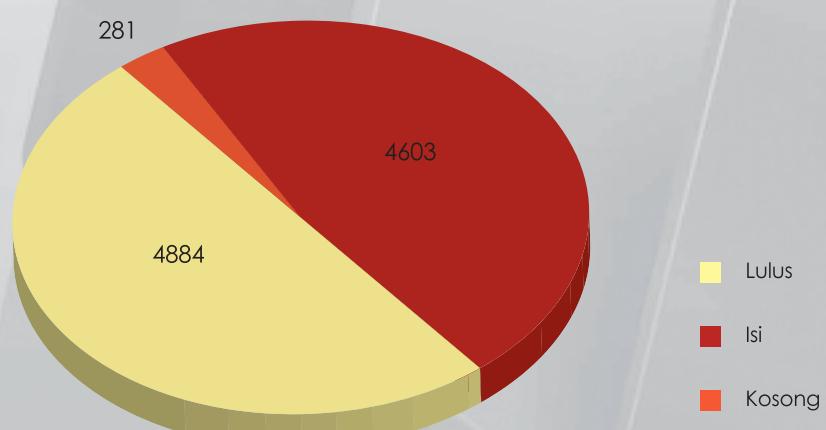
Dalam pada itu juga, skim Perkhidmatan Penolong Juruukur telah ditambahbaik dengan diberikan penisianan kenaikan pangkat Penolong Juruukur JA29, JA36 dan JA38 melalui Waran-waran Perjawatan seperti berikut:

- Bil. E181 Tahun 2013 (Berkuatkuasa 1 Okt. 2013 - 31 Dis. 2013)
- Bil. E34 Tahun 2014 (Berkuatkuasa 1 Jan. 2014 – 14 Jan. 2014)
- Bil. E35 Tahun 2014 (Berkuatkuasa 15 Jan. 2014)

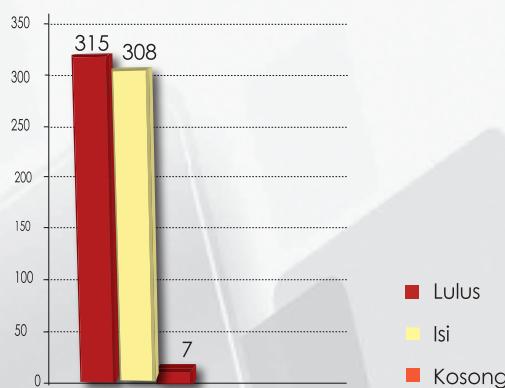
Sehingga 31 Disember 2014, JUPEM mempunyai 4884 perjawatan. Daripada jumlah tersebut, sebanyak 4603 perjawatan telah diisi mengikut kekosongan yang meliputi Gred Utama, Kumpulan Pengurusan dan Profesional dan Kumpulan Pelaksana.

KUMPULAN	GRED	LULUS	ISI	KOSONG
GRED UTAMA	JUSA A, B, C	11	11	0
PENGURUSAN DAN PROFESIONAL	54	19	19	0
	48-52	72	71	1
	41-44	213	207	6
KUMPULAN PELAKSANA	17-38	2,189	2,092	97
	1-16	2,380	2,203	177
<b>JUMLAH</b>		<b>4,884</b>	<b>4,603</b>	<b>281</b>

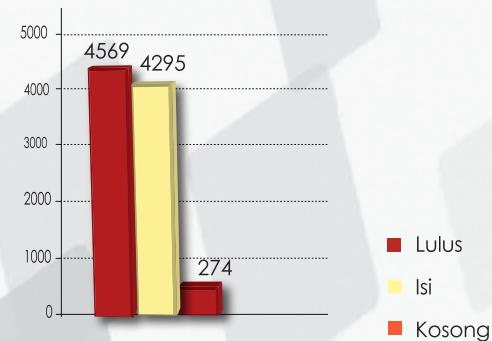
Pecahan Pengisian Jawatan Bagi Tahun 2014



Pecahan Pengisian Jawatan  
Kumpulan Pengurusan dan Profesional



Pecahan Pengisian Jawatan  
Kumpulan Pelaksana



### Perjawatan Kader

JUPEM mempunyai sejumlah 176 perjawatan kader di pelbagai agensi Kerajaan yang lain seperti Kementerian Sumber Asli dan Alam Sekitar (NRE), Pusat Infrastruktur Data Geospatial Negara (MaCGDI), Jabatan Kerja Raya (JKR), Institut Tanah dan Ukur Negara (INSTUN), Kementerian Kesejahteraan Bandar, Perumahan dan Kerajaan Tempatan (KPKT), Majlis Keselamatan Negara (MKN), Suruhanjaya Pilihan Raya (SPR), Jabatan Mineral dan Geosains (JMG), Jabatan Perhutanan Semenanjung Malaysia (JPSM), Jabatan Laut Semenanjung Malaysia, Jabatan Laut Sarawak, Jabatan Penerangan Awam (DCA), Agensi Remote Sensing Malaysia (ARSM) dan Kementerian Pertahanan.

Jumlah keseluruhan jawatan kader JUPEM di agensi kerajaan adalah seperti berikut:

BIL.	KEMENTERIAN/JABATAN	LULUS	ISI	KOSONG
1	Kementerian Sumber Asli dan Alam Sekitar (NRE)	1	1	0
2	Pusat Infrastruktur Data Geospatial Negara (MaCGDI)	35	35	0
3	Jabatan Kerja Raya (JKR)	22	22	0
4	Institut Tanah dan Ukur Negara (INSTUN)	29	26	3
5	Kementerian Kesejahteraan Bandar, Perumahan dan Kerajaan Tempatan (KPKT)	16	16	0
6	Majlis Keselamatan Negara (MKN)	2	2	0
7	Suruhanjaya Pilihan Raya (SPR)	1	1	0
8	Jabatan Mineral dan Geosains (JMG)	38	37	1
9	Jabatan Perhutanan Semenanjung Malaysia (JPSM)	5	4	1
10	Jabatan Laut Semenanjung Malaysia	2	2	0
11	Jabatan Laut Sarawak	11	9	2
12	Jabatan Penerangan Awam (DCA)	1	1	0
13	Agensi Remote Sensing Malaysia (ARSM)	10	6	4
14	Kementerian Pertahanan	3	3	0
<b>JUMLAH</b>		<b>176</b>	<b>165</b>	<b>11</b>

Pecahan terperinci perjawatan Kader mengikut kumpulan adalah seperti berikut:

BIL.	KUMPULAN PENGURUSAN DAN PROFESSIONAL/SKIM PERKHIDMATAN	GRED	LULUS	ISI	KOSONG
1	Juruukur	J54	1	1	0
2	Juruukur	J52	2	2	0
3	Juruukur	J48	10	10	0
4	Juruukur	J44	13	13	0
5	Juruukur	J41	24	21	3
6	Jurugeospatial	J44	1	1	0
7	Jurugeospatial	J41	9	9	0
<b>JUMLAH</b>		<b>60</b>	<b>57</b>	<b>3</b>	

BIL.	KUMPULAN PELAKSANA/SKIM PERKHIDMATAN	GRED	LULUS	ISI	KOSONG
1	Penolong Juruukur	JA38	2	1	1
2	Penolong Juruukur	JA36	7	6	1
3	Penolong Juruukur	JA29	107	101	6
<b>JUMLAH</b>		<b>116</b>	<b>108</b>	<b>8</b>	

#### Kenaikan Pangkat

Urusan pemangkuhan / kenaikan pangkat telah dilakukan sepanjang tahun 2014. Ini melibatkan 194 orang pegawai yang terdiri daripada 62 orang pegawai Kumpulan Pengurusan dan Profesional dan 132 orang pegawai Kumpulan Pelaksana.

#### Lembaga Kenaikan Pangkat : Kumpulan Pengurusan dan Profesional

SKIM PERKHIDMATAN	KENAIKAN PANGKAT/ PEMANGKUAN KE GRED	KENAIKAN PANGKAT	PEMANGKUAN	JUMLAH
Juruukur Gred Utama B	Gred Utama A	1	1	
Juruukur Gred Utama C	Gred Utama B	2	2	
Juruukur Gred J54	Gred Utama C	6	6	
Juruukur Gred J52	J54	6	6	
Juruukur Gred J48	J52	14	14	
Juruukur Gred J44	J48	10	10	
Juruukur Gred J41	J44	23	23	
<b>JUMLAH</b>				<b>62</b>

### Lembaga Kenaikan Pangkat: Kumpulan Pelaksana

SKIM PERKHIDMATAN	KENAIKAN PANGKAT/ PEMANGKUAN KE GRED	KENAIKAN PANGKAT	PEMANGKUAN	JUMLAH
Penolong Juruukur, JA36	JA38	0	2	2
Penolong Juruukur, JA29	JA36	40	12	52
Penolong Juruukur, JA29 (KUP)	JA36	28	0	28
Penolong Juruukur, JA29 (TBBK)	JA36	12	0	12
Juruteknik Ukur, J17 (TBBK)	J22	28	0	28
Pembantu Tadbir (P/O), N22	N26	1	0	1
Pembantu Tadbir (P/O), N17 (TBBK)	N22	2	0	2
Pembantu Tadbir (Kewangan), W17	W22	1	0	1
Pembantu Tadbir (Stor), N17 (TBBK)	N22	1	0	1
Pembantu Penerbitan, N17 (KUP)	N22	5	0	5
<b>JUMLAH</b>		<b>118</b>	<b>14</b>	<b>132</b>

\*TBBK : Time Base Berasaskan Kecemerlangan

\*KUP : Khas Untuk Penyandang

### Persaraan

Sepanjang tahun 2014 seramai 161 pegawai dan kakitangan daripada pelbagai gred telah bersara yang meliputi bersara paksa, bersara pilihan, bersara atas sebab kesihatan dan meninggal dunia dalam perkhidmatan. Data keseluruhan persaraan adalah seperti berikut:

### Bersara Paksa

BIL.	JAWATAN / GRED	JUMLAH
1	Juruukur Gred Utama A	1
2	Jurugeospatial J48	1
3	Penolong Juruukur JA38	4
4	Penolong Juruukur JA36	1
5	Pembantu Tadbir N32	1
6	Penolong Juruukur JA29	2
7	Juruteknik Ukur J22	25
8	Pembantu Tadbir (P/O) N22	5
9	Pembantu Tadbir (Kewangan) W22	1
10	Pembantu Tadbir N17	1
11	Pembantu Operasi N4	2
12	Pengawal Keselamatan KP11	1
13	Pembantu Awam H11	5
14	Pemandu R6	4
15	Pembantu Am Pejabat N14	1
16	Pekerja Awam R4	38
	<b>JUMLAH</b>	<b>93</b>

**Bersara Pilihan**

BIL.	GRED JAWATAN	JUMLAH
1	Juruukur J54	2
2	Juruukur J48	1
3	Juruukur J41	2
4	Penolong Juruukur JA38	2
5	Penolong Juruukur JA36	5
6	Penolong Juruukur JA29	8
7	Juruteknik Ukur J26	1
8	Juruteknik Ukur J22	10
9	Pembantu Tadbir N22	5
10	Pembantu Tadbir N17	1
11	Pembantu Operasi N14	2
12	Pengawal Keselamatan KP11	1
13	Pembantu Awam H17	1
14	Pembantu Awam H11	3
15	Pemandu R6	1
16	Pekerja Awam R4	14
<b>JUMLAH</b>		<b>59</b>

**Meninggal Dunia Dalam Perkhidmatan**

BIL.	NAMA	JAWATAN / GRED	NEGERI / SEKSYEN
1	Abu Mansor bin Mohd Nor	Penolong Juruukur JA38	JUPEM Negeri Sembilan
2	Roslan bin Shamsudin	Penolong Juruukur JA36	Bahagian Perancangan dan Korporat
3	Ayub bin Mohd Noah	Penolong Juruukur JA36	JUPEM Johor
4	Khadijah binti Abdul Manaf	Penolong Juruukur JA29	JUPEM Pahang
5	Mohd Rodzi bin Md Noor	Penolong Juruukur JA29	JUPEM Kedah
6	Tg. Sharun bin Tg. Hussin	Pembantu Tadbir N11	JUPEM Terengganu
7	Azizan bin Seman	Pembantu Awam H11	JUPEM Perlis
8	Ibrahim bin Mansor	Pembantu Awam H11	Bahagian Pemetaan Topografi Semenanjung (Wilayah Barat)
9	Pidong@Pidu bin Barhama	Pembantu Awam H11	Bahagian Pemetaan Topografi Sabah (Wilayah Tawau)

## Tindakan Tataterib

Pengurusan tataterib Jabatan merupakan satu tatacara pengendalian bagi mengawal disiplin pegawai dan kakitangan JUPEM yang melibatkan hukuman-hukuman amaran, denda, lucut hak emolumen, tangguh pergerakan gaji, turun gaji, turun pangkat dan buang kerja. Jabatan sentiasa peka terhadap salah laku yang dilakukan oleh pegawai dan kakitangan dan mengambil tindakan yang sesuai berdasarkan Peraturan-Peraturan Pegawai Awam (Kelakuan dan Tataterib) 1993.

Pada tahun 2014, sebanyak 13 kes tindakan tataterib telah dilaporkan dan sebanyak lapan (8) kes telah dapat diselesaikan. Sementara, terdapat lima (5) kes yang masih dalam tindakan iaitu satu (1) kes di bawah Lembaga Tataterib Kumpulan Pengurusan (No. 2) dan empat (4) kes di bawah Lembaga Tataterib Kumpulan Sokongan (No. 1 dan No. 2).

Pelanggaran tatakelakuan dan status kes pada tahun 2014 adalah seperti berikut:

**Pengurusan Kes Tindakan Tataterib**

JENIS/BENTUK KESALAHAN	KES SELESAI		KES MASIH DALAM TINDAKAN	
	Kumpulan Pengurusan & Profesional	Kumpulan Pelaksana	Kumpulan Pengurusan & Profesional	Kumpulan Pelaksana
Tidak Hadir Bertugas	0	3	0	2
Kes Mahkamah	0	3	1	2
Tidak Hadir Bertugas dan Tidak Dapat Dikesan	0	1	0	0
Surcaj	0	1	0	0
<b>JUMLAH</b>	<b>0</b>	<b>8</b>	<b>1</b>	<b>4</b>

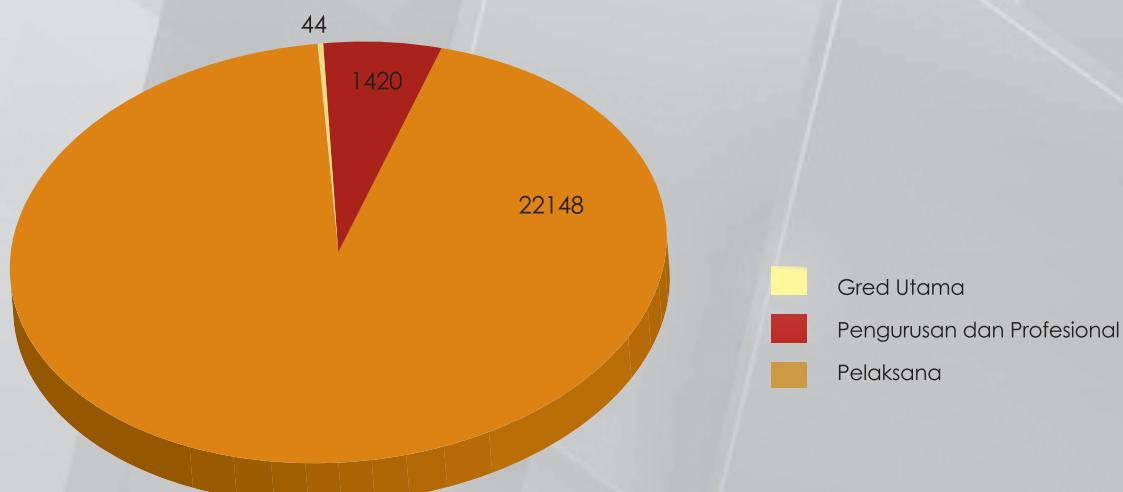
## KURSUS DAN LATIHAN

Latihan yang berterusan telah dilaksanakan bagi meningkatkan kemahiran dan pengetahuan pegawai JUPEM. Peluang seluas-luasnya telah diberikan kepada setiap pegawai dan kakitangan untuk mengikuti latihan, baik di peringkat akademik maupun latihan dalam perkhidmatan yang memfokuskan kepada peningkatan kemahiran bersesuaian dengan pemodenan Jabatan dan perubahan persekitaran. Melalui kaedah ini, JUPEM dapat melahirkan modal insan yang mempunyai kepakaran dan kompeten bagi memastikan kelangsungan sistem penyampaian dan perkhidmatan kepada pelanggan.

Bilangan Hari Kursus/ Latihan Yang Dihadiri Pegawai dan Kakitangan Bagi Tahun 2014

BIL.	BIDANG KURSUS	BILANGAN HARI			JUMLAH
		GRED UTAMA	PENGURUSAN & PROFESIONAL	PELAKSANA	
1	Program Transformasi Minda (Kursus Wajib)	0	0	9	9
2	Pengurusan Ukur dan Pemetaan	11	465	2706	3182
3	Pengurusan Sumber Manusia	11	533	10957	11501
4	Pengurusan Kewangan	11	26	713	750
5	Kualiti dan Produktiviti	0	121	1116	1237
6	Teknologi Maklumat dan Komunikasi (ICT)	0	71	1798	1869
7	Pembangunan Kendiri	11	172	4768	4951
8	Bahasa dan Komunikasi	0	32	81	113
<b>JUMLAH</b>		<b>44</b>	<b>1420</b>	<b>22148</b>	<b>23612</b>

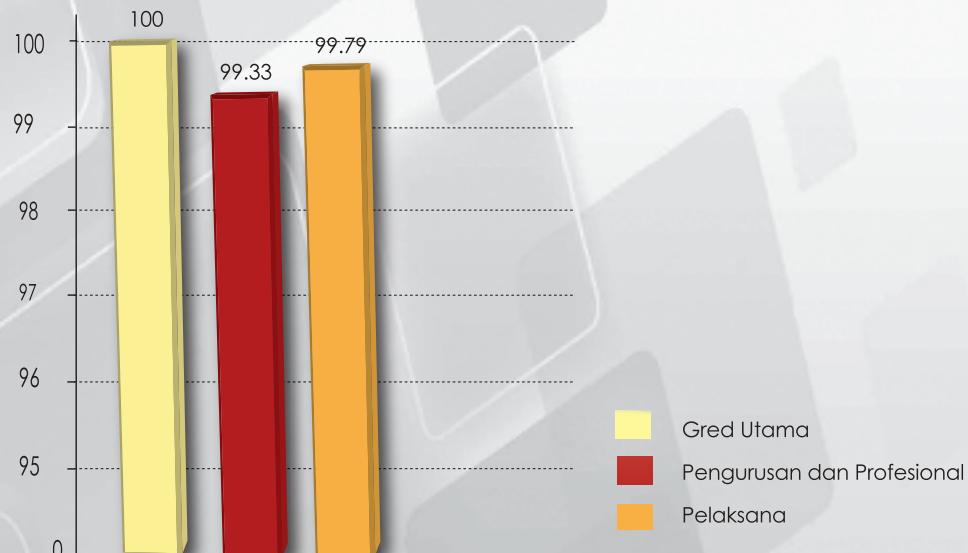
Pecahan Bilangan Hari Kursus/ Latihan Yang Dihadiri Oleh Pegawai dan Kakitangan



Bilangan Pegawai dan Kakitangan Yang Menghadiri 7 Hari Berkursus

BIL.	GRED/ KUMPULAN	BILANGAN PERJAWATAN	BILANGAN PENGISIAN	KURSUS PENDEK			BILANGAN ANGGOTA YANG HADIR KURSUS PANJANG > 3 BULAN
				BILANGAN ANGGOTA YANG HADIR > 7 HARI SETAHUN	BILANGAN ANGGOTA YANG HADIR < 7 HARI SETAHUN	BILANGAN ANGGOTA YANG TIDAK BERKURSUS	
1	Gred Utama	11	11	11	0	0	0
2	Pengurusan & Profesional	304	297	286	2	0	9
3	Pelaksana	4569	4295	4282	1	8	4
<b>JUMLAH</b>		<b>4884</b>	<b>4603</b>	<b>4579</b>	<b>3</b>	<b>8</b>	<b>13</b>

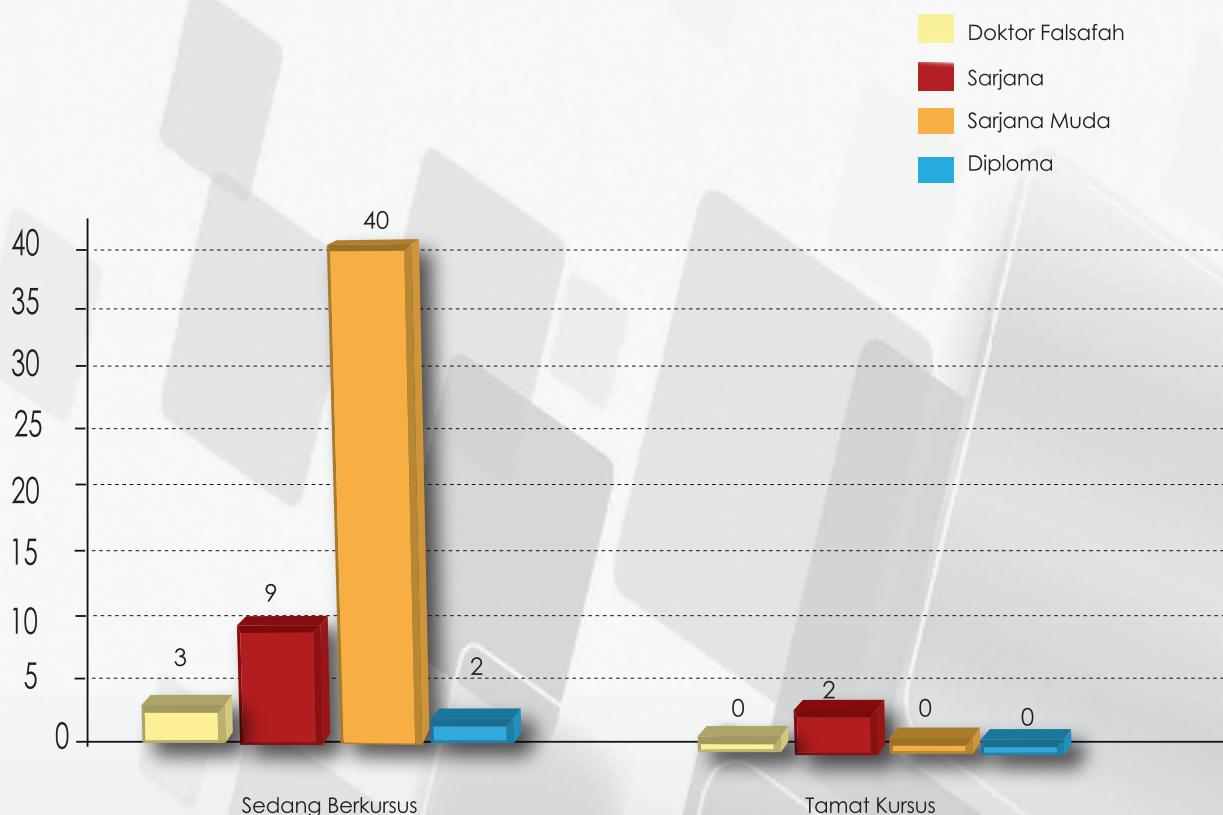
Pecahan Peratusan Pegawai dan Kakitangan Yang Menghadiri 7 hari Berkursus



Bilangan Pegawai dan Kakitangan Yang Melanjutkan Pelajaran Bagi Tahun 2014

BIL.	TAHAP AKADEMIK	SEDANG BERKURSUS		TAMAT BERKURSUS		JUMLAH
		Sepuhu Masa	Sepenuh Masa	Sepuhu Masa	Sepenuh Masa	
1	Doktor Falsafah	3	0	0	0	3
2	Sarjana	8	1	2	0	11
3	Sarjana Muda	1	39	0	0	40
4	Diploma	2	0	0	0	2
	<b>Jumlah</b>	<b>14</b>	<b>40</b>	<b>2</b>	<b>0</b>	<b>56</b>

### Pecahan Pegawai dan Kakitangan Yang Melanjutkan Pelajaran Dalam Tahun 2014



### LAMAN WEB JUPEM GEOPORTAL

Laman web [www.jupem.gov.my](http://www.jupem.gov.my) yang dikenali sebagai JUPEM Geoportal, sentiasa dikemaskinikan dari semasa ke semasa, merupakan medium penting yang menghubungkan JUPEM dengan pelanggan-pelanggannya. Ia merupakan satu langkah ke hadapan bagi memastikan urus tadbir korporat JUPEM lebih efisien dan sentiasa memenuhi kehendak pelanggan. Melalui portal, JUPEM dapat memenuhi keperluan pelanggan dan mendokong aspirasi Kerajaan dalam memperkasakan ICT dengan menyediakan pelbagai maklumat geospatial yang dihasilkan secara berpusat bagi tujuan menyediakan sistem pengurusan dan penyebaran maklumat secara atas talian, merealisasikan konsep e-Kerajaan, melakukan transaksi secara e-Dagang, serta menyediakan kemudahan backup atas talian.

Produk	Bilangan Transaksi 2014												Jumlah
	Jan	Feb	Mac	Apr	Mei	Jun	Jul	Ogo	Sept	Okt	Nov	Dis	
Pemetaan	0	0	0	0	0	1	0	0	0	0	2	1	4
Kadaster	3874	4156	5229	5964	6289	5662	6118	6246	5932	5799	6187	4806	66262
Geodesi	149	120	210	274	247	234	239	293	233	236	233	203	2671
<b>Jumlah</b>	<b>4023</b>	<b>4276</b>	<b>5439</b>	<b>6238</b>	<b>6536</b>	<b>5897</b>	<b>6357</b>	<b>6539</b>	<b>6165</b>	<b>6035</b>	<b>6422</b>	<b>5010</b>	<b>68937</b>



Laman Web Rasmi,  
JUPEM Geoportal



Facebook



Laman Twitter Jabatan Ukur  
dan Pemetaan Malaysia

**PENERIMA BINTANG KEBESARAN PERSEKUTUAN DAN NEGERI**

BIL.	NAMA PEGAWAI	JAWATAN/GRED	BAHAGIAN / JUPEM NEGERI	ANUGERAH DITERIMA
1	Encik Wai Ah Chong	Penolong Juruukur JA38	W. P. Kuala Lumpur/ Putrajaya	Pingat Pangkuan Negara (PPN)
2	Encik Lim Yew Min	Penolong Juruukur JA38	W. P. Kuala Lumpur/ Putrajaya	Pingat Pangkuan Negara (PPN)
3	Encik Mahmud bin Hassan	Penolong Juruukur JA29	Pulau Pinang	Pingat Jasa Kebaktian (PJK)
4	Encik Joned bin Saad	Penolong Juruukur JA29	Pulau Pinang	Pingat Jasa Kebaktian (PJK)
5	Encik Mohd Khair bin Ahmad	Penolong Juruukur JA29	Melaka	Pingat Jasa Kebaktian (PJK)
6	Encik Ghazali bin Sulaiman	Pembantu Am H11	Selangor	Pingat Pangkuan Selangor (PPS)
7	Encik Atan bin Abdan	Pemandu H11	Melaka	Pingat Bakti Melaka (PBM)



laporan

**PRESTASI 2014**

---

## **INFRASTRUKTUR GEODETIK**

### **UKURAN JARINGAN DAN KAWALAN GNSS**

Kaedah pengukuran menggunakan Sistem Navigasi Satelit Global atau GNSS (*Global Navigation Satellite System*) adalah kaedah yang efisien, efektif dan terkini untuk mendapatkan kedudukan sesuatu titik di permukaan bumi.

Kaedah yang menggunakan rujukan silang pada satelit ini telah mula digunakan di JUPEM sejak awal 90-an lagi.

Dengan perkembangan teknologi dan pemodenan sistem GNSS, prestasi dan kualiti kerja pengukuran dapat dipertingkatkan bagi memberi kemudahan kepada pengguna.

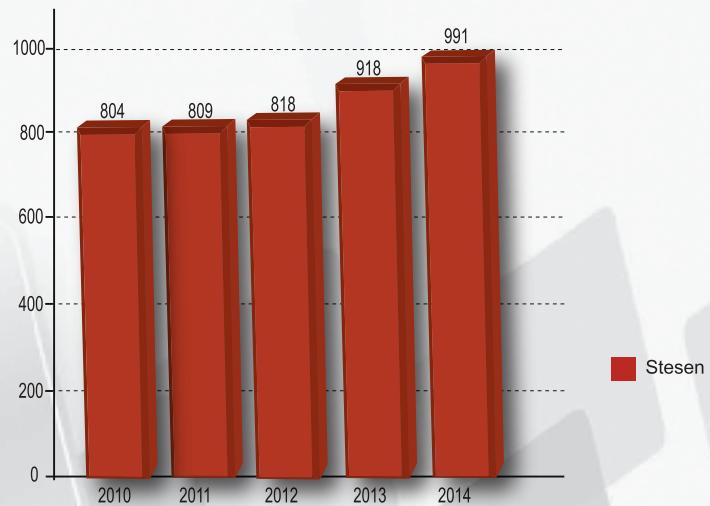
Bagi tahun 2014, kerja-kerja pengukuran GNSS adalah melibatkan perancangan cerapan kepada 800 stesen termasuk ukuran bagi menambahbaik jaringan Cadastral Reference Mark (CRM) untuk ukuran kadaster.

Pencapaian aktiviti jaringan pengukuran GNSS sehingga 31 Disember 2014 adalah sebanyak 991 stesen (124%) berbanding 800 stesen yang ditetapkan dan pecahan aktiviti adalah seperti berikut:



<b>BIL.</b>	<b>AKTIVITI</b>	<b>STESEN</b>
1	Cerapan GNSS bagi penubuhan Jaringan Ukur Kawalan Sempadan Antarabangsa Malaysia - Brunei Darussalam	88
2	Cerapan GNSS untuk GPS Levelling	46
3	Cerapan GNSS bagi projek Height Modernisation System (HMS)	400
4	Cerapan GNSS untuk Cadastral Reference Mark (CRM)	430
5	Cerapan Marine Geodetic Infrastructure In Malaysia Water (MAGIC)	7
6	Cerapan GNSS bagi penubuhan Jaringan Ukur Kawalan Kelantan - Terengganu	20
<b>JUMLAH</b>		<b>991</b>

Pencapaian aktiviti jaringan pengukuran GNSS bagi tempoh lima (5) tahun terakhir adalah seperti berikut:



TAHUN	STESEN
2010	804
2011	809
2012	818
2013	918
2014	991

#### MyRTKnet

Lanjutan daripada perkembangan teknologi GNSS, sistem MyRTKnet (*Malaysian Real Time Kinematic Network*) telah dibangunkan sejak 2003.

Kaedah pengukuran menggunakan *Real Time Kinematic* merupakan inovasi terkini dalam penentuan kedudukan relatif sesuatu titik.

Dengan jumlah stesen sebanyak 78 buah iaitu 50 stesen di Semenanjung dan 14 stesen masing-masing di Sabah dan Sarawak, sistem ini mampu memberikan hasil kerja pengukuran yang tepat dan jitu.

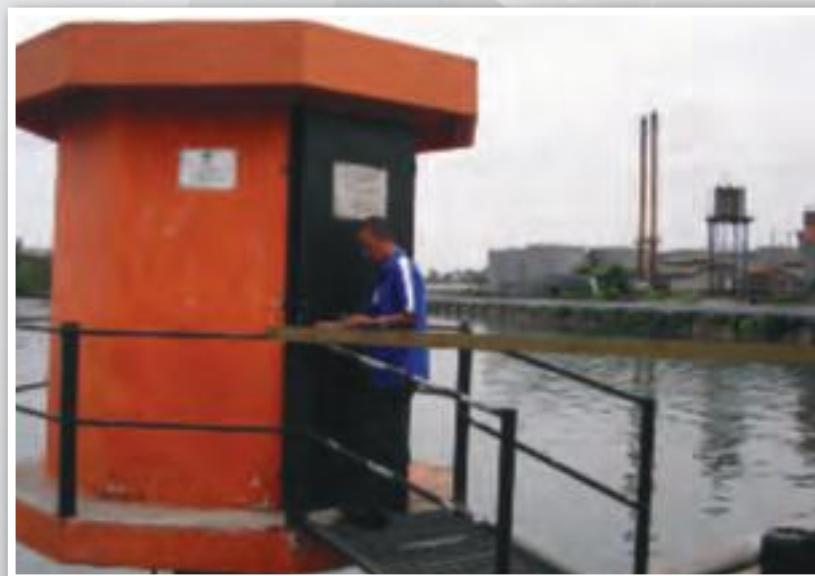


Pencapaian aktiviti MyRTKnet sehingga 31 Disember 2014 adalah seperti berikut:

BIL.	AKTIVITI	SKT 2014	PENCAPAIAN
1	Pengoperasian dan Penyelenggaraan Stesen MyRTKnet	100 kali	100 kali (100%)
2	Pengurusan Data GPS Stesen MyRTKnet	628,617 jam data	628,617 jam data (100%)
3	Pemprosesan Data GPS Stesen MyRTKnet Harian	26,192 set data	26,192 set data (100%)
4	Pemprosesan Data GPS Stesen MyRTKnet Mingguan & Tahunan	3,732 set data	3,732 set data (100%)

#### CERAPAN AIR PASANG SURUT

Pengoperasian 21 buah stesen tolok air pasang surut (STAPS) yang terdiri daripada 12 buah stesen di Semenanjung: (lokasinya di Jeti Telok Ewa Pulau Langkawi, Kedah; Penang Yacht Club George Town, Pulau Pinang; Pangkalan TLDM Lumut, Perak; Dermaga 25 Pelabuhan Utara Pelabuhan Kelang, Selangor; Jeti Tanjung Bruas Tanjung Keling, Melaka; Jeti Kukup, Johor; Jeti Kastam Johor Bahru, Johor; Kompleks LKIM Tanjung Sedili, Johor; Jeti Berjaya Beach Resort Pulau Tioman, Pahang; Pelabuhan Kuantan Tanjung Gelang, Pahang; Kompleks LKIM Cendering, Terengganu dan Kompleks LKIM Getting, Kelantan) manakala 6 buah stesen terletak di Sabah: (lokasinya di Pelabuhan Kota Kinabalu; Kudat; Pelabuhan Sandakan; Lahad Datu; Pelabuhan Tawau; Pulau Labuan) dan 3 buah stesen lagi terletak di Sarawak: (lokasinya di Sejingkat, Kuching; Pelabuhan Bintulu, Bintulu; Marina Park Miri) adalah untuk mendapatkan bacaan nilai aras purata laut yang akan digunakan sebagai datum tegak yang jitu dan seterusnya akan dijadikan sebagai rujukan asas bagi kerja-kerja pengukuran aras.





Lokasi Stesen STAPS di Semenanjung



Lokasi Stesen STAPS di Sabah dan Sarawak

Pencapaian aktiviti cerapan air pasang surut sehingga 31 Disember 2014 adalah seperti berikut:

LOKASI	JUMLAH STESEN	SKT 2014	PENCAPAIAN
Semenanjung	12	137 set	137 set (100%)
Sabah	6	72 set	72 set (100%)
Sarawak	3	36 set	36 set (100%)

Aktiviti cerapan air pasang surut di 21 buah stesen STAPS berkenaan adalah bagi membolehkan Buku Rekod Cerapan Air Pasang Surut dan Buku Jadual Ramalan Air Pasang Surut dihasilkan untuk kegunaan pelbagai pihak.

Sehingga 31 Disember 2014, sebuah buku Rekod Cerapan Air Pasang Surut bagi tahun 2013 dan sebuah buku Jadual Ramalan Air Pasang Surut bagi tahun 2016 telah dapat diterbitkan.

## JARINGAN UKUR ARAS

Pengukuran aras dijalankan bagi mendapatkan nilai ketinggian sesuatu titik di atas permukaan bumi. JUPEM telah menjalankan dua jenis ukuran aras iaitu Ukuran Aras Jitu dan Ukuran Aras Kelas Kedua. Pengukuran dan pemprosesan data ukuran aras ini meliputi kerja-kerja yang dijalankan di Semenanjung, Sabah dan Sarawak.

Bagi tahun 2014, pemprosesan data ukur aras jitu melibatkan laluan-laluan di Semenanjung dan Sarawak sahaja. Laluan-laluan yang terlibat di Semenanjung adalah laluan Mukhtafi Billah – Chenih; Kuala Lipis – Benta Jerantut; Bandar Alor Setar – CIQ Durian Burung; Ipoh – Temoh – Tapah – Slim River; Air Hitam – Simpang Renggam – Kulai – Senai – Johor Bahru; Changlun – Sintok – Padang Sanai; Kuantan – Sg. Lembing; Kg. Sembrong – Bandar Tenggara Kulai dan Alor Gajah – Rumbia – Melaka. Sementara laluan-laluan di Sarawak adalah laluan Simpang Tanjung Manis/Pangkalan Feri Sungai Nai – Pekan Belawai; Bulatan Demak – Jambatan Santubong; Simpang Kopodim/Matang – Simpang Rayu (Kubah Ria National Park); Simpang Bau/Serikin – Stass; Simpang Bau/Serikin – Krokong; Simpang Julau/Sibu – Bulatan Sibu/Bintulu dan laluan Jalan Pujut 7 – Jalan Lutong – Kuala Baram – Jambatan Sg. Tujoh.



Pencapaian kerja-kerja ukuran aras sehingga 31 Disember 2014 adalah seperti berikut:

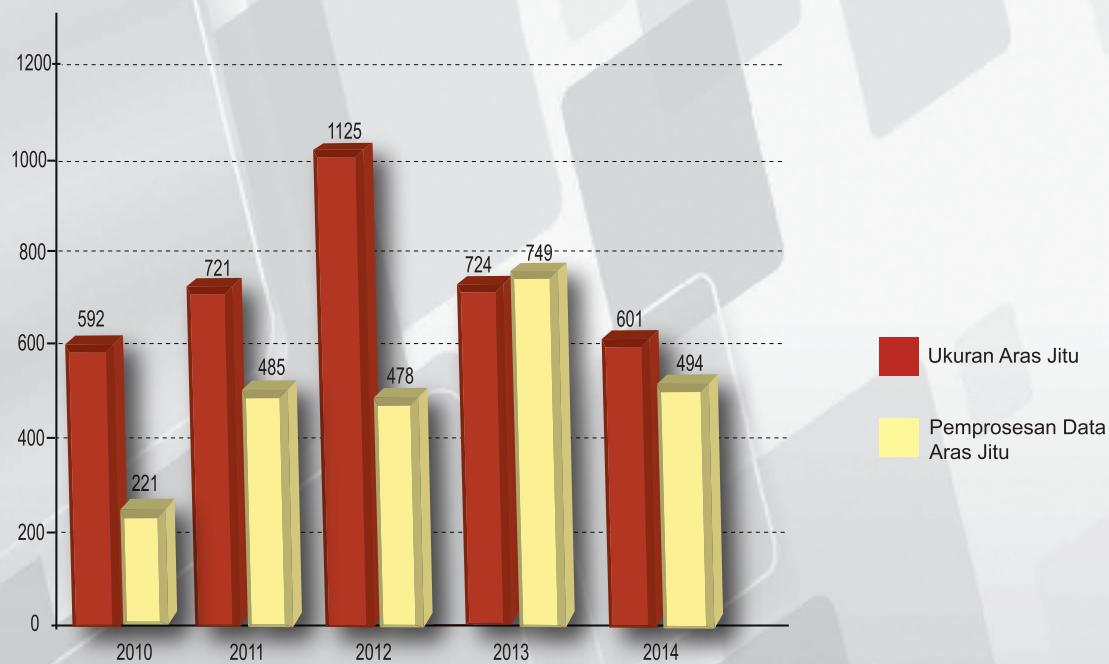
BIL.	AKTIVITI	PENCAPAIAN
1	Ukuran Aras Jitu	601 stesen
2	Pemprosesan Data Ukuran Aras Jitu	494 stesen
3	Pemprosesan Data Ukuran Aras Kelas Kedua	122 stesen

Pencapaian SKT aktiviti kerja-kerja ukuran aras jitu sehingga 31 Disember 2014 adalah seperti berikut:

UKURAN ARAS JITU		PEMPROSESAN DATA ARAS JITU	
SKT 2014	PENCAPAIAN 2014	SKT 2014	PENCAPAIAN 2014
300 stesen	601 stesen (200%)	450 stesen	494 stesen (110%)

Pencapaian aktiviti kerja-kerja ukuran aras jitu bagi tempoh lima (5) tahun terakhir adalah seperti berikut:

TAHUN	UKURAN ARAS JITU (STESEN)	PEMPROSESAN DATA ARAS JITU (STESEN)
2010	592	221
2011	721	485
2012	1,125	478
2013	724	749
2014	601	494

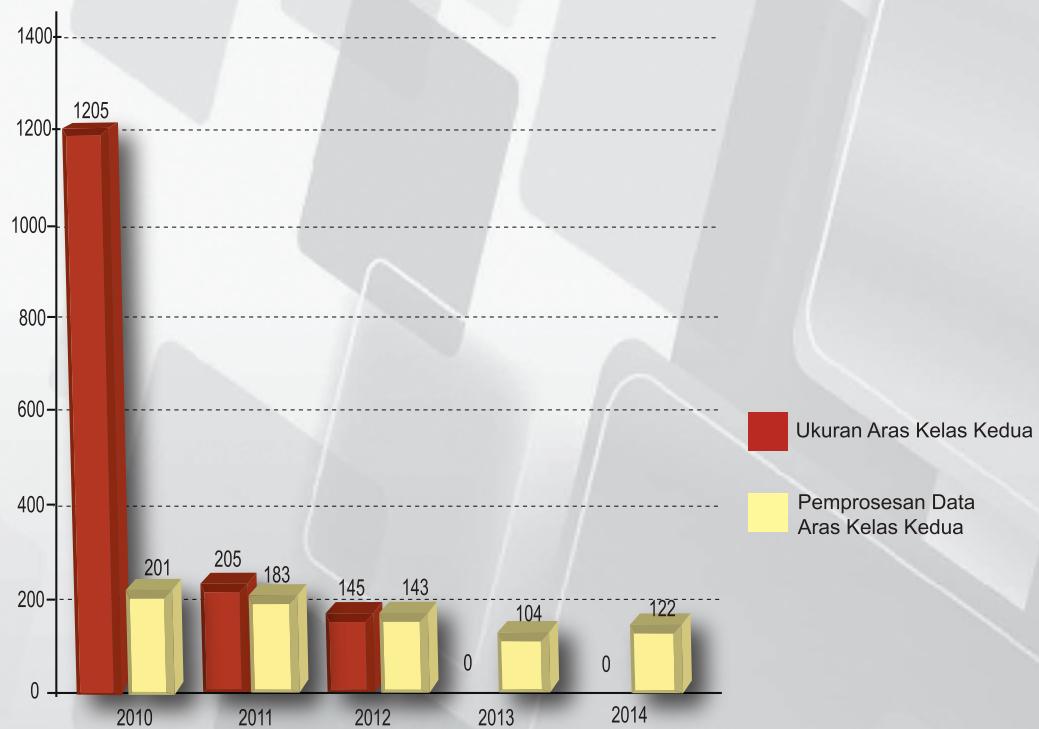


Pencapaian SKT aktiviti kerja-kerja ukuran aras kelas kedua sehingga 31 Disember 2014 adalah seperti berikut:

UKURAN ARAS KELAS KEDUA		PEMPROSESAN DATA ARAS KELAS KEDUA	
SKT 2014	PENCAPAIAN 2014	SKT 2014	PENCAPAIAN 2014
0 stesen	0 stesen (0%)	100 stesen	122 stesen (122%)

Pencapaian aktiviti kerja-kerja ukuran aras kelas kedua bagi tempoh lima (5) tahun terakhir adalah seperti berikut:

TAHUN	UKURAN ARAS KELAS KEDUA (STESEN)	PEMPROSESAN DATA ARAS KELAS KEDUA (STESEN)
2010	1,205	201
2011	205	183
2012	145	143
2013	0	104
2014	0	122



Nota: Ukuran aras kelas kedua tidak dijalankan bagi tahun 2014 kerana memberi penumpuan kepada aktiviti pemetaan peta topografi dan peta tematik.

## UKURAN GRAVITI

JUPEM telah memainkan peranan utama dalam menjalankan pengukuran graviti bagi tujuan mendapatkan pembetulan ketinggian ortometrik. Ketinggian ortometrik ini akan digunakan sebagai rujukan bagi kerja-kerja pemetaan, kejuruteraan, penyelidikan saintifik dan sebagainya.

Bagi tahun 2014, perancangan telah dibuat untuk menyiapkan 600 stesen bagi cerapan Graviti Tertib Ketiga di negeri Pulau Pinang.



Pencapaian bagi aktiviti ini sehingga 31 Disember 2014 adalah seperti berikut:

SKT 2013	PENCAPAIAN 2013	SKT 2014	PENCAPAIAN 2014
800 stesen	802 stesen (100%)	600 stesen	610 stesen (102%)

## ASTRONOMI

JUPEM merupakan sebuah agensi yang terlibat secara langsung dalam bidang astronomi khususnya dalam penyediaan data rukyah dan hilal. Dengan menganggotai Majlis Kebangsaan bagi Hal Ehwal Islam Negeri-negeri, JUPEM telah memainkan peranannya dengan memberikan perkhidmatan kepada orang awam terutama dalam penyediaan kalender Islam, penentuan arah kiblat, cerapan rukyah dan hilal bagi penentuan tarikh-tarikh penting di dalam kalender Islam seperti penentuan awal Ramadhan dan Syawal.



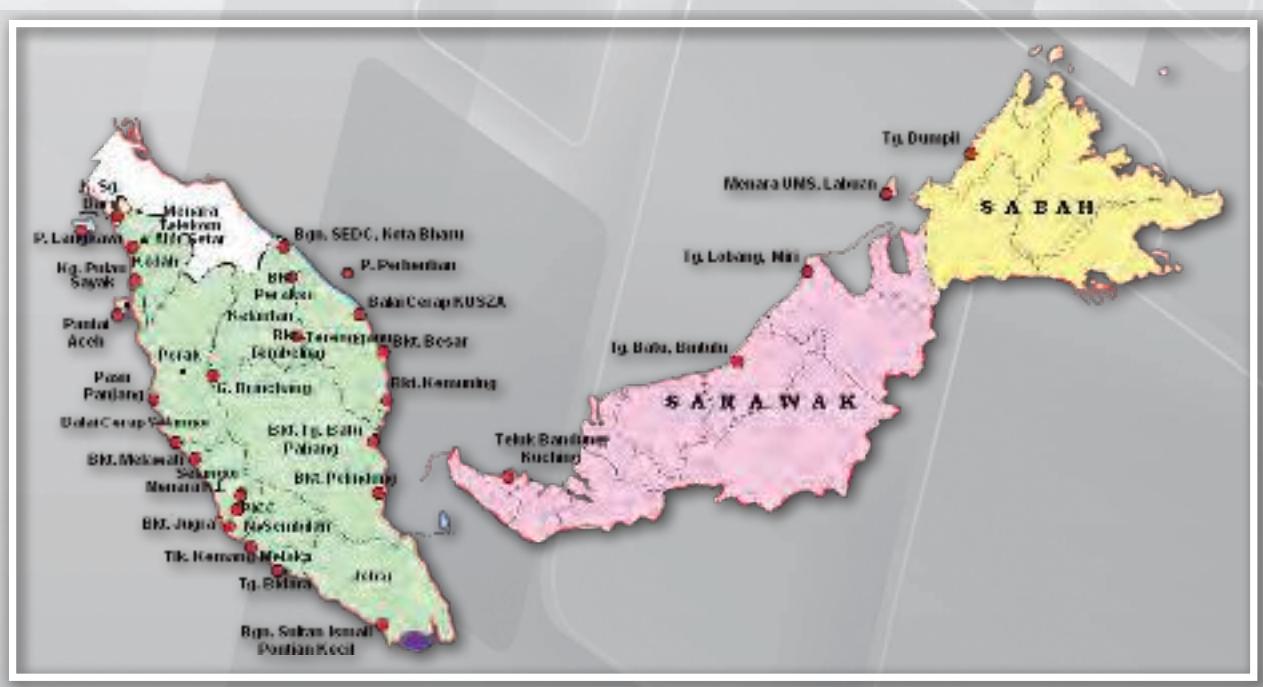
Pencapaian aktiviti berkaitan astronomi sehingga 31 Disember 2014 adalah seperti berikut:

BIL.	AKTIVITI	SKT 2014	PENCAPAIAN
1	Pengiraan Astronomi Rukyah dan Hilal	29 stesen	29 stesen (100%)
2	Cerapan Hilal di Balai Cerap Teluk Kemang bagi tujuan Kajian Semula Kriteria-kriteria Imkanur Rukyah	9 kali	9 kali (100%)
3	Cerapan Kajian Cerahan Langit	6 kali	6 kali (100%)



Pada tahun 2014, penyediaan data dalam penentuan awal bulan Ramadhan, Syawal dan Zulhijjah bagi tahun 1435 Hijrah telah dijalankan di 29 buah stesen cerapan hilal iaitu di Kuala Sungai Baru Simpang Empat, Perlis; Menara Telekom, Alor Setar, Kedah; Pulau Sayak, Kuala Muda, Kedah; Pemandangan Indah, Langkawi, Kedah; Pantai Aceh, Pulau Pinang; Pantai Pasir Panjang, Perak; Bukit Malawati, Kuala Selangor, Selangor; Balai Cerap Selangor, Bandar Nakhoda Omar, Selangor; Bukit Jugra, Selangor; Menara Kuala Lumpur; PICC Putrajaya; Telok Kemang, Negeri Sembilan; Tanjung Bidara, Melaka; Pontian Kechil, Johor; Bukit Tanjung

Batu, Nenasi, Pekan, Pahang; Bukit Pelindung, Kuantan, Pahang; Gunung Berinchang, Cameron Highlands, Pahang; Bukit Geliga, Kemaman, Terengganu; Bukit Besar, Kuala Terengganu, Terengganu; Merang, Setiu, Terengganu; Pulau Perhentian, Besut, Terengganu; Menara Bangunan SEDC, Kota Bharu, Kelantan; Bukit Peraksi, Pasir Putih, Kelantan; Bukit Kampung Tembeling, Kuala Krai, Kelantan; Tanjung Dampil, Putatan, Sabah; Menara Universiti Malaysia Sabah, Labuan; Tanjung Lobang, Miri, Sarawak; Tanjung Batu, Bintulu, Sarawak dan Teluk Bandung, Kuching, Sarawak.



Lokasi Stesen Cerapan Hilal di Semenanjung, Sabah dan Sarawak

## **PERSEMPADANAN ANTARABANGSA**

### **PERSEMPADANAN DARAT MALAYSIA - THAILAND**

Projek penandaan dan pengukuran sempadan antara Malaysia - Thailand yang berukuran sepanjang 551.5 km telah dimulakan pada 6 Julai 1973 dan telah siap pada 26 September 1985. Projek ini telah dilaksanakan secara bersama dengan Royal Thai Survey Department (RTSD). Pada masa ini aktiviti-aktiviti yang sedang dijalankan di bawah projek ini adalah Ukuran Pelbagai iaitu Ukuran Siasatan, Tanam Pastian dan kerja-kerja Penyelenggaraan Sempadan Bersama Antarabangsa Malaysia -Thailand.

Pencapaian aktiviti-aktiviti yang telah selesai dijalankan bagi Kawasan Keutamaan IXB (BP29-BP33), Kawasan Keutamaan VII (BP50-BP51) dan Kawasan Keutamaan IV (BP51-BP54A) sehingga 31 Disember 2014 adalah seperti berikut:

BIL.	KAWASAN	SKT 2014	PENCAPAIAN
1	Seksyen C - IXB (BP29-BP33)	5.2 km	5.2 km (100%)
2	Seksyen D - IXB (BP29-BP33)	5.4 km	5.4 km (100%)
3	Seksyen A - VII (BP50-BP51)	4.3 km	4.3 km (100%)
4	Seksyen B - VII (BP50-BP51)	4.1 km	4.1 km (100%)
5	Seksyen A - IV (BP51-BP54A)	4.6 km	4.6 km (100%)
6	Seksyen B - IV (BP51-BP54A)	4.4 km	4.4 km (100%)
<b>JUMLAH</b>			<b>28.0 km</b>



## **PERSEMPADANAN DARAT MALAYSIA - INDONESIA**

Mesyuarat ke-43 Jawatankuasa Teknikal Bersama Sempadan Malaysia - Indonesia telah diadakan di Pontianak, Kalimantan Barat, pada 5 – 7 November 2013 bagi membincangkan Projek Pengukuran Sempadan Antarabangsa Sarawak - Kalimantan Barat dan Sempadan Antarabangsa Sabah - Kalimantan Utara. Dalam mesyuarat tersebut, kedua-dua pihak telah bersetuju untuk menjalankan kerja-kerja ukuran siasatan, tanam pastian dan penyelenggaraan (IRM) bagi Sektor Sabah – Kalimantan Utara, Sub Sektor A500 – A600, Kawasan Keutamaan I (A-B) sejauh 5.3 km dan bagi Sektor Sarawak – Kalimantan Barat, Sub Sektor D600-D700, Kawasan Keutamaan III (D-E) dengan jarak sejauh 10.9 km.



Pencapaian aktiviti ukuran siasatan, tanam pastian dan kerja-kerja penyelenggaraan sehingga 31 Disember 2014 adalah seperti berikut:

BIL.	KAWASAN	SKT 2014	PENCAPAIAN
1	Sabah-Kalimantan Utara	5.3 km	5.3 km (100%)
2	Sarawak-Kalimantan Barat	10.9 km	10.9 km (100%)

## **PERSEMPADANAN MARITIM MALAYSIA - INDONESIA**

Mesyuarat Penentuan Persempadan Maritim antara Malaysia dan Indonesia telah dilaksanakan mengikut perancangan yang mana JUPEM merupakan ahli kepada Jawatankuasa Teknikal bagi Pembatasan Sempadan Maritim Malaysia-Indonesia yang telah diwujudkan pada Mac 2005 dan diketuai oleh Kementerian Luar Negeri.

Di samping itu, satu Kumpulan Kerja Teknikal yang diketuai oleh Pengarah Ukur Bahagian (Ehwal Persempadan) telah ditubuhkan di bawah jawatankuasa tersebut bagi membincangkan isu-isu teknikal berkaitan perbatasan sempadan maritim antara Malaysia dan Indonesia. Mesyuarat-mesyuarat berkaitan persempadan antara Malaysia dan Indonesia yang telah diadakan dan dihadiri dalam tahun 2014 adalah seperti berikut:

BIL.	PERBINCANGAN	TARIKH
1	<i>Informal Consultation of the Technical Meeting on Maritime Boundaries Delimitation between the Republic of Indonesia and Malaysia di Bandung, Indonesia</i>	26 Mei 2014
2	<i>Intersessional Technical Meeting on Maritime Boundaries Delimitation between Malaysia and the Republic of Indonesia di Bandung, Indonesia</i>	26-27 Jun 2014
3	<i>Intersessional Technical Meeting on Maritime Boundaries Delimitation between Malaysia and the Republic of Indonesia di Bandung, Indonesia</i>	18 September 2014



#### **PERSEMPADANAN MARITIM MALAYSIA - SINGAPURA**

Kerja-kerja Ukuran Bersama antara Malaysia dan Singapura telah dijalankan sebagai persiapan awal terhadap kerja-kerja penentuan persempadanan maritim di sekitar Pedra Branca, Batuan Tengah dan Tubir Selatan. JUPEM melalui Bahagian Ehwal Persempadanan terlibat sebagai urus setia bersama dalam mesyuarat persempadanan. Sehingga 31 Disember 2014, sebanyak empat (4) Mesyuarat Jawatankuasa Kecil Mengenai Kerja-Kerja Ukuran Bersama Malaysia - Singapura di sekitar Pedra Branca, Batuan Tengah dan Tubir Selatan telah diadakan seperti berikut:

BIL.	MESYUARAT / PERBINCANGAN	TARIKH
1	Mesyuarat Antara Agensi Berhubung Draf Rekod Mesyuarat Ke-7 Jawatankuasa Teknikal Bersama Malaysia - Singapura Berhubung Pelaksanaan Penghakiman Mahkamah Keadilan Antarabangsa ke atas Batu Puteh, Batuan Tengah dan Tubir Selatan di Wisma Putra, Putrajaya	4 Februari 2014
2	Mesyuarat bagi Membincangkan Cadangan Bantahan Diplomatik Terhadap Pencerobohan oleh Kapal Laut dan Pesawat Udara Republik Singapura Terhadap Kawasan Perairan dan Ruang Udara Negara di Wisma Putra, Putrajaya	4 Februari 2014
3	Mesyuarat Antara Agensi Berhubung Draf Rekod Mesyuarat Ke-7 Jawatankuasa Teknikal Bersama Malaysia - Singapura Berhubung Pelaksanaan Penghakiman Mahkamah Keadilan Antarabangsa ke atas Batu Puteh, Batuan Tengah dan Tubir Selatan di Wisma Putra, Putrajaya	12 Februari 2014
4	Mesyuarat Antara Agensi Berhubung Draf Rekod Mesyuarat Ke-7 Jawatankuasa Teknikal Bersama Malaysia - Singapura Berhubung Pelaksanaan Penghakiman Mahkamah Keadilan Antarabangsa ke atas Batu Puteh, Batuan Tengah dan Tubir Selatan di Wisma Putra, Putrajaya	12 September 2014

## **PERSEMPADANAN DARAT MALAYSIA - BRUNEI DARUSSALAM**

Bagi tahun 2014, kedua-dua pihak telah bersetuju untuk menjalankan kerja Penandaan dan Pengukuran Sempadan Antarabangsa Malaysia – Brunei Darussalam bagi sebahagian dari sektor (C-D) iaitu dari FL02 hingga TL02/3 dengan jarak 13 km.

Pasukan Ukur Bersama telah memulakan kerja Penandaan dan Pengukuran Sempadan Antarabangsa Malaysia-Brunei bagi sebahagian dari sektor (C-D) iaitu dari FL02 hingga TL02/3.

Sehingga 31 Disember 2014 Pasukan Ukur Bersama telah menjalankan kerja-kerja tinjauan, rintis dan ukuran topografi sejauh 10.4 km.

Pencapaian aktiviti kerja pengukuran sehingga 31 Disember 2014 adalah seperti berikut:

KAWASAN	SKT 2014	PENCAPAIAN
Sektor (C-D) FL02 – TL02/3	13.0 km	10.4 km (80%)*

\*Pencapaian hanya 80% disebabkan Brunei hanya dapat menghantar satu pasukan ukur sahaja.



## **PERSEMPADANAN NEGERI**

### **PROJEK PENANDAAN DAN PENGUKURAN SEMPADAN BERSAMA ANTARA NEGERI-NEGERI SEMENANJUNG MALAYSIA**

Pencapaian aktiviti penandaan dan pengukuran sempadan bersama antara negeri Terengganu dan Kelantan sehingga 31 Disember 2014 adalah seperti berikut:

SEMPADAN TERENGGANU- KELANTAN	SKT 2014	PENCAPAIAN
Kawasan Keutamaan I (Negeri Kelantan – Terengganu)	55.0 km	59.0 km (107%)

Berikut merupakan senarai mesyuarat sepanjang tahun 2014 yang berkaitan dengan sempadan antara negeri-negeri yang dihadiri oleh Jabatan:

BIL.	PERBINCANGAN	TARIKH
1	Mesyuarat Jawatankuasa Bersama Teknikal Penandaan dan Pengukuran Sempadan Bersama Antara Negeri Selangor dan Negeri Perak Bil.1/2014 di PTG Selangor, Shah Alam	20 Januari 2014
2	Mesyuarat Jawatankuasa Bersama Teknikal Penandaan dan Pengukuran Sempadan Bersama Antara Negeri Selangor dan Negeri Perak Bil.2/2014 di Ipoh, Perak	20 Februari 2014
3	Mesyuarat Jawatankuasa Penandaan dan Pengukuran Sempadan Bersama Negeri (JPPSBN) Bil.1/2014 di Shah Alam, Selangor	14 Mac 2014
4	Mesyuarat Jawatankuasa Penyalaras Cadangan Majlis Menandatangani MoU Hasrat Penandaan dan Pengukuran Antara Negeri Kedah dan Perlis Bil 1/2014 di Kangar, Perlis	6 Mei 2014
5	Mesyuarat Jawatankuasa Kebangsaan Penandaan dan Pengukuran Sempadan Bersama Negeri-negeri Di Semenanjung Malaysia (JKPPSBN) Bil.1/2014 di Putrajaya	18 September 2014
6	Mesyuarat Jawatankuasa Bersama Teknikal Penandaan dan Pengukuran Sempadan Bersama Antara Negeri Selangor dan Negeri Perak di Shah Alam, Selangor	22 September 2014
7	Mesyuarat Jawatankuasa Bersama Teknikal Penandaan dan Pengukuran Sempadan Maritim Bersama Antara Negeri Selangor, Negeri Perak dan Negeri Sembilan di Shah Alam, Selangor	15 Oktober 2014



## SAKSI PAKAR KES-KES DI MAHKAMAH

Pegawai-pegawai JUPEM merupakan saksi pakar dalam perbicaraan kes-kes tangkapan nelayan dan kapal asing yang menceroboh perairan Malaysia. Sehingga 31 Disember 2014, sebanyak 13 kes perbicaraan telah dihadiri bagi membuat pengesahan kedudukan sesuatu lokasi pencerobohan perairan negara yang telah berjaya ditangkap oleh Agensi Penguatkuasa Maritim Malaysia (APMM). Perbicaraan yang telah dihadiri adalah seperti berikut:

BIL.	PERBINCANGAN	TARIKH
1	Kes Mahkamah berkaitan Laporan Polis : AIR HANGAT/000273/12 di Mahkamah Tinggi, Alor Setar, Kedah	9-12 Februari 2014
2	Kes Mahkamah berkaitan Laporan Polis: KUALA KEDAH/000218/14 dan KUALA KEDAH/000219/14 di Mahkamah Majistret Pulau Langkawi, Kedah	6 Mei 2014
3	Kes Mahkamah berkaitan Laporan Polis: BANDAR PENAWAR RPT.0661/14 di Mahkamah Sesyen, Kota Tinggi, Johor	12-13 Ogos 2014
4	Kes Mahkamah Berkaitan Lokasi Kapal Mt Lautan Maju dan Mt L Star oleh Agensi Penguatkuasaan Maritim Malaysia (APMM), Kota Tinggi, Johor	9-10 September 2014
5	Kes Tangkapan Vesel Nelayan Tempatan SF2-3619 oleh Agensi Penguatkuasaan Maritim Malaysia (APMM), Kuching, Sarawak	9-11 September 2014
6	Kes Tangkapan Feri Penumpang Lim Pertama Bernombor Pendaftaran 326753 oleh Agensi Penguatkuasaan Maritim Malaysia (APMM), Labuan	23-24 September 2014
7	Kes Tangkapan Vesel Ramai Sutera dan Vinyee03 Bernombor Pendaftaran 333982 dan 332695 oleh Agensi Penguatkuasaan Maritim Malaysia (APMM), Daerah Maritim 17, Sandakan, Sabah	30 September - 1 Oktober 2014
8	Kes Mahkamah Berkaitan Tangkapan PATI oleh Pasukan Polis Marin, Tampoi, Johor di Mahkamah Sesyen, Kota Tinggi, Johor	8 Oktober 2014
9	Kes Mahkamah Berkaitan Tangkapan Sebuah Feri Penumpang Lim Pertama Bernombor Pendaftaran 326753 oleh Agensi Penguatkuasaan Maritim Malaysia (APMM), Labuan, Sabah	14-15 Oktober 2014
10	Kes Mahkamah Majistret di Seri Manjung, Perak oleh Agensi Penguatkuasaan Maritim Malaysia (APMM), Lumut, Perak	4-5 November 2014
11	Kes Mahkamah Majistret di Semporna, Sabah oleh Agensi Penguatkuasaan Maritim Malaysia (APMM), Tawau, Sabah	25-28 November 2014
12	Kes Mahkamah Sesyen, Ipoh, Perak oleh Agensi Penguatkuasaan Maritim Malaysia (APMM), Lumut, Perak	9-10 Disember 2014
13	Kes Tangkapan Vesel MV Labuan Express di Mahkamah Sesyen, Tawau, Sabah oleh Agensi Penguatkuasaan Maritim Malaysia (APMM)	22-24 November 2014

## PENERBITAN PETA

Beberapa aktiviti melibatkan pengukuran dan pemprosesan data dilakukan sebelum sesuatu peta dihasilkan. Aktiviti-aktiviti ini melibatkan kerja-kerja pengutipan data di padang dan pemprosesan data ukuran.

## PENAWANAN DATA

Aktiviti-aktiviti penawanan data melibatkan kerja-kerja seperti fotografi udara dan penyediaan cetak lekap, pemilihan titik kawal, penyediaan dataset penyudahan padang dan penyediaan peta ortofoto. Selain daripada itu, aktiviti penawanan data juga melibatkan kerja-kerja penyediaan data ortorektifikasi imej satelit dan penyediaan data untuk kegunaan dan keperluan pihak Angkatan Tentera Malaysia, pengguna awam, jabatan-jabatan lain serta agensi swasta.

Pencapaian aktiviti penawanan data sehingga 31 Disember 2014 adalah seperti berikut:

BIL.	AKTIVITI	SKT 2014 (LEMBAR)	PENCAPAIAN (LEMBAR) (%)
1	Perolehan Data Bawaan Udara	335	447 (133%)
2	Pemilihan Titik Kawal	50	60 (120%)
3	Penyediaan Dataset Penyudahan Padang	180	282 (157%)
4	Penyediaan Peta Ortofoto	260	385 (148%)
5	Penyediaan Data DSM dan DTM	144	203 (141%)
6	Penyediaan Data Ortorektifikasi Imej Satelit	20	20 (100%)
7	Penyediaan Data Bagi Pihak Angkatan Tentera Malaysia, Pengguna Awam dan Lain-lain Jabatan / Agensi	500	894 (179%)
8	Penyediaan Peta Pulau-Pulau	5	7 (140%)

## UKURAN TITIK KAWAL

Ukuran titik kawal dijalankan untuk mendapatkan maklumat koordinat planimetri dan ketinggian titik kawal yang akan digunakan sebagai kawalan model pada alat pemplot stereo.

Nilai titik kawal penting dalam kerja-kerja pengukuran fotogrametri di mana pelarasan penyegitigaan udara dapat dilakukan dengan menggunakan maklumat tersebut.

Pencapaian aktiviti ukuran titik kawal sehingga 31 Disember 2014 adalah seperti berikut:

AKTIVITI	SKT 2014 (LEMBAR)	PENCAPAIAN (LEMBAR) (%)
Siri MY502A (Semenanjung)	2	2 (100%)
Siri MY701T (Semenanjung)	48	58 (120%)
<b>JUMLAH</b>	<b>50</b>	<b>60</b>

## PANGKALAN DATA

Seiring dengan keperluan pemetaan dan Sistem Maklumat Geografi, JUPEM telah mewujudkan dua jenis pangkalan data iaitu pangkalan data topografi dan pangkalan data kartografi. Pangkalan data topografi adalah berskala 1:5,000, 1:10,000 dan 1:25,000 dan dihasilkan melalui kaedah fotogrametri dan kerja ukur di lapangan. Pangkalan data topografi akan digunakan semula dalam proses ulangan peta atau *map revision* dan merupakan sumber data digital terkini yang boleh diperolehi di JUPEM. Manakala pangkalan data kartografi pula dijana daripada pangkalan data topografi dan diterbitkan sebagai peta bercetak pada skala 1:10,000 dan 1:50,000.



Dalam proses penghasilan pangkalan data topografi dan kartografi, suntingan perlu dijalankan ke atas dataset topografi dengan menggunakan perisian Gothic Lamps2 sebelum dibuat proses validasi dan seamless dengan perisian Radius Studio. Seterusnya dataset berskala 1:25,000 akan melalui proses generalisasi kepada skala 1:50,000 dengan menggunakan perisian Radius Clarity. Seterusnya hasil proses generalisasi iaitu dataset kartografi akan disusun dalam bentuk peta dan bersedia untuk penyediaan pruf cetak.

Data Topografi yang dihasilkan adalah mengikut Malaysian Standard MS1759 – Feature and Attribute Codes yang mana JUPEM adalah merupakan custodian bagi kategori Built-Environment, Demarcation, Hypsography dan Utility selain juga menjadi agensi tunjak bagi kategori Aeronautical, Geology, Hydrography, Transportation, Vegetation dan General.

Pencapaian aktiviti pembangunan pangkalan data sehingga 31 Disember 2014 adalah seperti berikut:

BIL.	AKTIVITI	SKT 2014 (LEMBAR)	PENCAPAIAN (LEMBAR) (%)
1	Pengemaskinian Pangkalan Data Skala 1:50,000	165	200 (121%)
2	Pengemaskinian Pangkalan Data Skala 1:25,000	265	291 (110%)
3	Pengemaskinian Pangkalan Data Skala 1:5,000 & 1:10,000	155	229 (148%)
4	Penyediaan Data Seamless Siri MY601T	356	356 (100%)

## PENGEMASKINIAN PETA TOPOGRAFI

Aktiviti ini dijalankan bertujuan mengemaskini maklumat topografi pada lembaran peta melalui kerja ukuran penyudahan padang. Kerja-kerja mengemaskini melibatkan pelbagai siri peta iaitu MY501T, MY701T, L808, MY511T dan MY711T.

Pencapaian aktiviti pengemaskinian peta topografi sehingga 31 Disember 2014 adalah seperti berikut:

AKTIVITI	SKT 2014 (LEMBAR)	PENCAPAIAN (LEMBAR) (%)
Pengemaskinian Peta Topografi	252	271 (108%)



## KARTOGRAFI

Aktiviti kartografi melibatkan kerja-kerja seperti suntingan kartografi, penerbitan peta topografi, penyediaan pangkalan data tematik dan penerbitan peta tematik.

Pencapaian aktiviti kartografi sehingga 31 Disember 2014 adalah seperti berikut :

BIL.	AKTIVITI	SKT 2014 (LEMBAR)	PENCAPAIAN (LEMBAR) (%)
1	Penyediaan Pruf Semak Peta Topografi Pelbagai Siri	320	370 (116%)
2	Penyediaan Data Cetak Peta Topografi Pelbagai Siri	360	352 (98%)
3	Penyediaan Pruf Semak Peta Tematik Pelbagai Siri	22	59 (268%)
4	Penyediaan Data Cetak Peta Tematik Pelbagai Siri	342	376 (110%)
5	Cetak Ulang	27	27 (100%)
6	Penerbitan Peta Elektronik	25	25 (100%)
7	Penerbitan Webmap dan eMap	3	3 (100%)

## PERCETAKAN

Kerja-kerja percetakan di JUPEM melibatkan 3 aktiviti utama iaitu aktiviti pencetakan, pracetak dan pascacetak. Selain daripada menerbitkan peta-peta bercetak, aktiviti percetakan juga melibatkan kerja-kerja mereka bentuk, memproses dan mencetak pelbagai dokumen seperti Berita Ukur, Laporan Tahunan, Kompendium, watikah, dokumen keselamatan dan produk-produk bukan peta yang lain.



Peta-peta topografi yang telah dicetak sepanjang tahun 2014 adalah seperti berikut:

BIL.	SIRI	TERIMA 2014	SIAP	CATATAN
1	L7030/DNMM5101	23	23	Cetak Ulang
2	MY501T/MY501A/MY502A	86	86	
3	MY701T/MY701A	62	62	
4	T738/DNMM5201 (Sabah)	3	3	Cetak Ulang
5	T835/DNMM6201 (Sabah)	3	3	
6	MY511T/MY511A/MY512A (Sabah)	50	50	
7	MY711T/MY711A (Sabah)	41	41	
8	T738/DNMM5201 (Sarawak)	1	1	Cetak Ulang
9	MY511T/MY511A/MY512A (Sarawak)	68	68	
10	MY711T/MY711A (Sarawak)	28	28	
<b>JUMLAH</b>		<b>365</b>	<b>365</b>	



Perincian peta-peta topografi tersebut adalah seperti berikut:

NO SIRI	NEGERI	NAMA LEMBAR
MY502A	Perak	Pos Lenjang, Pulau Rumbia, Taiping, Gerik, Lawin, Sungkai, Tanjung Malim, Tanjung Rambutan, Kampar, Pos Poi, Kuala Kerau
	Pahang	Gunung Irong, Kg Chegar Rambutan, Padang Tengku, Tanah Rata, Jerantut, Lanchang, Janda Baik, Temerloh, Raub, Benta, Bukit Fraser, Kampung Batu Talam, Kampung Genuai, Kampung Sawa Batu, Kamoung Kedaik, Batu Balai, Kota Bahagia
	Kedah	Padang Sanai, Padang Serai, Yan Besar, Kampung Kedawan
	Johor	Pulau Aur, Paloh, Bandar Tun Razak, Kulai, Pagoh, Jemaluang, Mersing, Kukup, Felda Tenggaroh Satu, Kampung Kahang Baharu, Kota Tinggi, Felda Selancar 3, Benut, Kemayan, Bukit Lutong, Kampung Senai, Kampung Sri Lukut
	Kelantan	Pasir Mas, Kelantan, Kampung Kuala Betis, Kampung Kuala Panis
	Melaka	Batu Gajah
	Negeri Sembilan	Kuala Pilah, Seremban, Bahau, Bandar Baru Seriting Ilir, Gemas, Kampung Simpang Durian
	Selangor	Tanjung Nipah, Ladang Ulu Bernam, Sekinchan
	Terengganu	Kampung Raja, Bandar Permaisuri, Telemong, Kampung Tengah, Dungun, Sungai Ayam/Bukit Berangin, Paka, Sungai Jengai, Kampung Kuala Jengai, Bukit Susu Dara, Bukit Raung, Kampung Pasir Hantu, Kampung Tengkawang
MY511T	Sarawak	Sungai Sebubong
	Sabah	Gunung Lutong, Pulau Sebatik
MY512A	Sarawak	Tubau, Nanga Dap, Nanga Boh, Uma Balui Likoi, Gunug Batubulan, Lubok Sebulong, Kebulu, Kampung Ogos Sugon, Kampung Kuala Balingian, Long Luyang, Krokong, Kampung Bakam, Kampung Long Unai, Sungai Kahei, Kampung Tebakang Dayak, Betong, Kampung Pueh, Long Bedian, Pandawan, Sleangau, Kampung Sungai Setiam, Long Jekitan, Pulau Rusukan Besar, Batu Niah, Beluru, Long Laput, Pekan Sungai Asap, Kampung Sau, Long Lama, Long Pa Tik, Machan, Batang Balui, Long Lawen, Matu, Nanga Budu, Nangan Merit, Batu Lawi, Nanga Entabai, Sungai Para, Sungai Laie, Taman Hui Ning, Pakan, Long Kasih, Long Tanyik, Kampung Paloh, Nanga Jagau, Sungai Aput, Marudi, Long Jawe, Long Malim, Long Lidam, Ulu Penyari, Kampung Lebui Way Naha Jale, Kabong, Kampung Penasu, Bukit Tisok/Uma Badeng, Long Tebangan, Kampung Long San, Kampung Kuala Tatau, Sungai Singu, Long Ta'ah, Uma Pawa Long Urun, Bukit Lombak, Ulu Menuan, Bukit Tunggal, Nanga Majang Bok, Kampung Melugu
	Sabah	Kampung Abai, Bandar Sahabat, Wilayah Persekutuan Labuan, Tanjung Batu, Pulau Tegipil, Kampung Lintang, Kampung Salarom, Roach Ree, Stapang, Kampung Lanas, Sungai Danum, Sungai Imbak, Sungai Kalabakan, Sungai Kuamut, Kuala Merontai, Brumas Camp, Kampung Rosok, Kampung Telisai, Kudat, Tomanggong Estate, Sukau, Pulau Timbang, Kampung Lamak Silam, Mountain Anbun, Pulau Mantanani Besar, Kampung Mempakot, Kuala Kinabatangan Kecil, Maliau Basin, Kampung Pulong, Kota Belud, Sandakan, Lahad Datu, Kampung Lingkabau, Kampung Nangoh, Kampung Sungai Lokan, Pekan Kiulu, Sungai Segama, Kampung Pasir Tiga, Kampung Indrasan Laut, Kampung Mananam, Kinabongan, Kampung Bongkol, Kampung Pulau Tigabu, Terumbu Muncey, Kampung Maliyu, Talaga, Kampung Mamagun, Kampung Seri Pinang, Wallace Bay, Kunak

NO SIRI	NEGERI	NAMA LEMBAR
MY701A	Pulau Pinang	Seberang Jaya
	Sarawak	Kampong Stapok
	Terengganu	Kampung Pantai Chendering, Kampung Tok Kaya, Kampung Tanjung Kapur, Kampung Gelugor, Kampung Kuala Ibai, Kampung Batu Buruk, Kampung Gong Kijang, kampong Bukit Bayas, Kampung Bukit Besar
	Selangor	Bukit Subang, Pekan Baru Sungai Buloh, Kampung Gajah, Kampung Paya Jaras Tengah, Taman Rimba Riang, Kampung Tropicana, Kampung Melayu Subang, Taman Subang Bestari, Kota Damansara, Denai Alam, Desa Coalfields
	Johor	Muar
	Negeri Sembilan	Pekan Paroi Jaya
	Pahang	Medan Tok Sira, Bandar Putra, Kampung Pamah Kaseh, Kuantan
	Melaka	Bandar Melaka, Bukit Beruang
MY701T	Pulau Pinang	Seberang Jaya
	Terengganu	Kampung Pantai Chendering, Kampung Tok Kaya, Kampung Tanjung Kapur, Kampung Gelugor, Kampung Batu Buruk, Kampung Kuala Ibai, Kampung Gong Kijang, Kampung Bukit Bayas, Kampung Tok Adis, Kampung Bukit Besar
	Sabah	Kampong Iran Baru
	Negeri Sembilan	Pekan Paroi Jaya
	Johor	Muar
	Melaka	Bandar Melaka, Bukit Beruang
	Pahang	Medan Tok Sira, Bandar Putra, Kampung Pamah Kaseh, Kuantan
	Selangor	Bukit Subang, Pekan Baru Sungai Buloh, Kampung Gajah, Kampung Paya Jaras Tengah, Taman Rimba Riang, Kampung Tropicana, Kampung Melayu Subang, Taman Subang Bestari, Kota Damansara, Denai Alam, Desa Coalfields
MY711A	Sabah	Kampung Ria, Kampung Muanad 2, Kampung Salir Sook, Sook, Sungai Bunakaan Perumahan Safoda, Kampung Iran Baru, Kampung Keramat, Pekan Baru Matunggong, Kampung Binou Laut, Beluran, Kampung Mawao, Kampung Tahak, Kampung Baitam, Kampung Gana, Tamparuli, Kampung Pimping, Membakut, Kampung Takapan, Kampung Berunei, Kampung Sungai Bangat, Kampung Dumpiring Bawah, Kampng Pinwantai, Kampung Gombizau
		Kampung Telaga Batin
	Sarawak	Kampung Sinar Budi, Batu Kawan Height, Kampung Katong Lopeng Tengah, Sungai Bulu, Kampung Punjut Tanjung Batu, Sungai Liku, Kampung Luak, Kampung Haji Wahid, Miri, Lembah Hijau, Kampung Cemerlang, Taman Bunga Teratai, Kampung Sebuan Besar

NO SIRI	NEGERI	NAMA LEMBAR
MY711T	Sabah	Kampung Ria, Kampung Muanad 2, Kampung Salir Sook, Sungai Bunakaan, Perumahan Safoda, Kampung Binuou Laut, Pekan Baru Matunggong, Kampung Keramat, Beluran, Kampung Tahak, Kampung Baitam, Kampung Mawao, Kampung Pimping, Tamparuli, Kampung Gana, Membakut, Kampung Berunai, Kampung Takapan, Kampung Sungai Bangat, Kampung Dumpiring Bawah, Kampung Pinawantai, Kampung Gombizau
	Terengganu	Kampung Telaga Batin
	Sarawak	Kampung Sinar Budi, Batu Kawan Height, Kampung Stapok, Kampung Katong Lopeng Tengah, Sungai Bulu, Kampung Punjut Tanjung Batu, Sungai Liku, Kampung Haji Wahid, Kampung Luak, Miri, Kampung Cemerlang, Kampung Seuban Besar, Taman Bunga Teratai
L7030	KL&PJ	-
	Terengganu	Dungun, Seri Bandi
	Kedah	Jitra, Gerik, Padang Sanai, Gurun
	Perak	Slim River, Padang Hulu, Tasik Temenggor
	Pahang	Cameron Highland, Ketari, Kuantan, Gambang
	Selangor	Rawang
	Negeri Sembilan	Teriang, Bahau, Rembau
T738	Johor	Kampung Sedili Kecil, Pengerang, Gersik, Segamat, Mersing
	Sabah	Kampung Matunggong, Kampung Berkapat, Kampung Telisai
	Sarawak	Kampung Meruap Dalam

Pencapaian peta-peta tematik yang telah dicetak sepanjang tahun 2014 adalah seperti berikut:

BIL.	JENIS PETA	JUMLAH DITERIMA 2014
1	Peta Politikal/Negeri/Fizikal	6
2	Peta Daerah	2
3	Pelbagai Peta Tematik	24
<b>JUMLAH</b>		<b>32</b>

Perincian peta-peta tematik yang telah dicetak sepanjang tahun 2014 adalah seperti berikut:

NO SIRI	JENIS PETA	NAMA LEMBAR
MY90004R	JKR	Peta Jalan Raya Negeri Melaka, Peta Jalan Raya Negeri Perak, Peta Jalan Raya Negeri Sembilan,
MY90005R	Negeri	Peta politikal negeri WP (2)
MY50005R	Negeri	Peta politikal negeri WP (1)
MY91001R	Daerah JKR	Sabah - Lahad Datu, Pitas, Semporna Peta Jalan JKR-Semenanjung Malaysia, Selangor dan Perlis
MY91008R	Politik	Peta Politik Sabah, Peta Politik Sarawak
MY90008R	Politikal	Peta Semenanjung Malaysia
MY90011R	Pulau	Johor - Pulau Tinggi, Pulau Aur, Pulau Sembilang
MY90011R	Pulau	Sabah – Pulau Layang-Layang, Pulau Mabul, Pulau Terumbu Matanani
ONC	L10 L11	Carta Udara BGSP – Sumatera, Singapura Carta Udara BGSP
TPC	L10-D	Carta Udara BGSP – Indonesia, Malaysia
	L11-B	Carta Udara BGSP – Brunei, Indonesia, Filipina
	L10-A	Carta Udara BGSP – Indonesia, Malaysia, Thailand
	L10-C	Carta Udara BGSP – Indonesia, Malaysia, Singapura
	L11-CG	Carta Udara BGSP – Brunei, Indonesia, Malaysia
JMG		Peta JMG – Tanah Merah
		Peta JMG – Perlis
		Peta JMG – Pulau Pinang
		Peta JMG – Kedah
		Peta JMG – Kelantan
		Peta JMG – Semenanjung Malaysia

Pencapaian aktiviti percetakan sehingga 31 Disember 2014 adalah seperti berikut:

BIL.	AKTIVITI	SKT 2014	PENCAPAIAN
1	Cetak Peta Topografi	350	365 (104%)
2	Cetak Peta Tematik	22	32 (145%)
3	Cetak Bukan Peta	160	180 (113%)

Aktiviti pracetak melibatkan kerja-kerja reka bentuk dan susun atur sebagai persediaan bahan cetak serta penyediaan pruf dan plat cetak.

Pencapaian aktiviti pracetak sehingga 31 Disember 2014 adalah seperti berikut:

BIL.	AKTIVITI	SKT 2014	PENCAPAIAN
1	Desktop Publishing (DTP)	160	180 (113%)
2	Pruf	160	180 (113%)
3	Plat	1800	1860 (103%)

Aktiviti pascacetak melibatkan kerja-kerja penjilidan buku selepas proses pencetakan dijalankan.

Pencapaian aktiviti pascacetak sehingga 31 Disember 2014 adalah seperti berikut:

AKTIVITI	SKT 2014	PENCAPAIAN
Penjilidan (Buku)	70,000 (Buah)	113,090 (162%)

#### PEMETAAN UTILITI

Pemetaan utiliti melibatkan proses memperolehi dan mengenalpasti jenis pepasan dan perkhidmatan utiliti kemudahan awam yang tertanam di bawah tanah dan menyediakan maklumat dan kedudukan utiliti dalam bentuk digital atau salinan cetak. Maklumat kedudukan pepasan utiliti yang lengkap dan tepat diperlukan bagi membantu mengurang dan mengelakkan berlakunya masalah gangguan perkhidmatan yang diakibatkan oleh kerosakan pepasan utiliti semasa pelaksanaan kerja-kerja pengorekan. Kekerapan berlakunya kerosakan ini juga menyebabkan kualiti hidup penduduk terjejas dan memberi impak negatif kepada ekonomi negara.



Pencapaian aktiviti pemetaan utiliti sehingga 31 Disember 2014 adalah seperti berikut:

BIL.	AKTIVITI	SKT 2014	PENCAPAIAN
1	Perolehan data utiliti daripada pemilik utiliti (pengemaskinian)	Mengemukakan permohonan, memperoleh dan mengumpulkan maklumat utiliti bagi kawasan Shah Alam, Subang Jaya, Kelang, Petaling Jaya, Sepang, Kajang, Kuala Lumpur, Ampang Jaya, Selayang dan Kuala Langat.	100%; Syarikat Telekom Malaysia (TM): Kawasan Lembah Kelang Perbadanan Aset Air Berhad (PAAB): Seluruh Negeri Johor, Melaka dan Negeri Sembilan.
2	Pengisian data utiliti dan data peta asas ke dalam Pangkalan Data Utiliti Kebangsaan (PADU)	Menjalankan semakan, memproses dan memuatkan sepenuhnya semua data utiliti kawasan Shah Alam, Subang Jaya, Kelang, Petaling Jaya, Sepang, Kajang, Kuala Lumpur, Ampang Jaya, Selayang dan Kuala Langat yang diperoleh ke dalam PADU.	100%; Data utiliti daripada TM dan PAAB
3	Penyediaan Peta Asas Skala 1:500	550 lembar bagi kerja-kerja pendigitalan mono dan suntingan butiran topografi daripada orthofoto. Kawasan yang disasarkan meliputi; a. Putrajaya b. Sepang	550 lembar (100%) a. Putrajaya - 48 lembar b. Sepang - 502 lembar

BIL.	AKTIVITI	SKT 2014	PENCAPAIAN
4	Pengesahan dan pengukuran bagi tujuan pengesahan data utiliti bawah tanah di lapangan	112 km (kawasan Shah Alam, Petaling Jaya, Subang Jaya dan Bangi)	115.8 km (103%) Shah Alam: 11.2 km Petaling Jaya: 96.3 km Subang Jaya: 6.3 km Bangi: 2 km
5	Suntingan kartografi bagi penyediaan peta utiliti	50 lembar	53 lembar (106%) Putrajaya: 36 lembar Shah Alam: 13 lembar Cyberjaya: 4 lembar

Pencapaian aktiviti penyediaan peta asas skala 1:500 bagi tempoh lima (5) tahun terakhir:

TAHUN	SKT	PENCAPAIAN LEMBAR						JUMLAH
		PUTRAJAYA	CYBERJAYA	KUALA SELANGOR	SHAH ALAM	SEPANG	PETALING JAYA	
2010	550	245	0	305	0	0	0	550
2011	550	0	0	55	495	0	0	550
2012	550	25	0	0	193	0	332	550
2013	550	375	0	0	0	100	75	550
2014	550	48	0	0	0	502	0	550
<b>JUMLAH</b>	<b>693</b>	<b>0</b>	<b>360</b>	<b>688</b>	<b>602</b>	<b>407</b>	<b>2750</b>	

Pencapaian aktiviti penerbitan peta utiliti bagi tempoh lima (5) tahun terakhir adalah seperti berikut:

TAHUN	SKT (LEMBAR)	PENCAPAIAN (LEMBAR)	KAWASAN
2010	35	37	Putrajaya
2011	37	37	Putrajaya & Cyberjaya
2012	37	39	Putrajaya & Cyberjaya
2013	46	50	Putrajaya & Cyberjaya
2014	50	53	Putrajaya, Shah Alam & Cyberjaya
<b>JUMLAH</b>		<b>216</b>	

## PERKHIDMATAN PEMETAAN

Aktiviti Perkhidmatan Pemetaan terdiri daripada 3 komponen utama iaitu Pusat Maklumat dan Jualan Data Geospatial Negara (PMJDGN), Stor Pusat Peta Negara dan Perpustakaan Peta Negara.

Pusat Maklumat dan Jualan Data Geospatial Negara (PMJDGN) berperanan menguruskan perkhidmatan membekalkan serta menjual produk-produk pemetaan yang dihasilkan oleh JUPEM. PMJDGN juga berperanan membuat tapisan keselamatan bagi mana-mana permohonan untuk mendapatkan produk atau data yang berklasifikasi terhad.



Stor Pusat Peta Negara merupakan pusat penyimpanan peta-peta yang diterbitkan oleh JUPEM. Peta-peta ini akan disimpan secara pukal sebelum diedar kepada pihak-pihak tertentu terutamanya Angkatan Tentera Malaysia (ATM). Ia juga berfungsi membekalkan peta-peta yang dijual melalui Pusat Maklumat dan Jualan Data Geospatial Negara (PMJDGN).

Perpustakaan Peta Negara pula berperanan menyediakan sumber atau bahan rujukan dalam bidang ukur dan pemetaan, khususnya kepada kakitangan JUPEM dan orang awam amnya. Perpustakaan Peta Negara menyediakan pelbagai koleksi buku, jurnal teknikal dan bahan-bahan terbitan lain yang berkaitan dengan ukur dan pemetaan.

Pencapaian aktiviti perkhidmatan pemetaan sehingga 31 Disember 2014 adalah seperti berikut:

BIL.	AKTIVITI	SKT 2014	PENCAPAIAN
1	Semakan Pruf Peta Topografi dan Tematik (lembar)	342	429 (125%)
2	Penerbitan Katalog Peta, Buletin dan JPDSN (edisi)	4	4 (100%)
3	Membuat Persediaan Mesyuarat (kali)	16	18 (113%)
4	Pendokumentasi Koleksi Perpustakaan (jilid)	3,000	9,138 (305%)
5	Pengedaran Bahan-Bahan Terbitan JUPEM (naskhah)	27,000	16,996 (63%)
6	Perkhidmatan Perpustakaan (Perolehan Peta, Buku dll.) (naskhah)	4,500	3,845 (85%)

## UKURAN KADASTER

Kejayaan JUPEM membangun dan melaksanakan sistem eKadaster telah memberi kesan yang baik terhadap pencapaian prestasi keseluruhan di Bahagian Kadaster. Sistem berkenaan juga telah berjaya memendekkan proses pengukuran dan penyediaan pelan hak milik tanah sekali gus dapat menghasilkan impak yang besar kepada pembangunan negara yang pesat berkembang.

Penggunaan teknologi jalur lebar tanpa wayar, teknologi komunikasi dan maklumat (ICT), Sistem Maklumat Geografi (GIS), sistem navigasi satelit global dan sistem ukur terkini adalah ciri-ciri yang terdapat dalam sistem eKadaster. Ia juga bagi mewujudkan National Digital Cadastral Database (NDCDB) melalui pembangunan infrastruktur Kawalan Ukur Kadaster (CCI) supaya NDCDB yang berasaskan Survey Accurate Coordinate dapat menggantikan Pangkalan Data Ukur Kadaster Negeri (PDUK) yang tidak homogenus. Kerja-kerja ukuran hak milik strata yang selama ini dibuat kaedah manual kini diproses secara digital dan disimpan ke dalam Pangkalan Data Ukur Strata / Stratum / Marin (PDUSSM).

## PENCAPAIAN UKURAN HAK MILIK TANAH

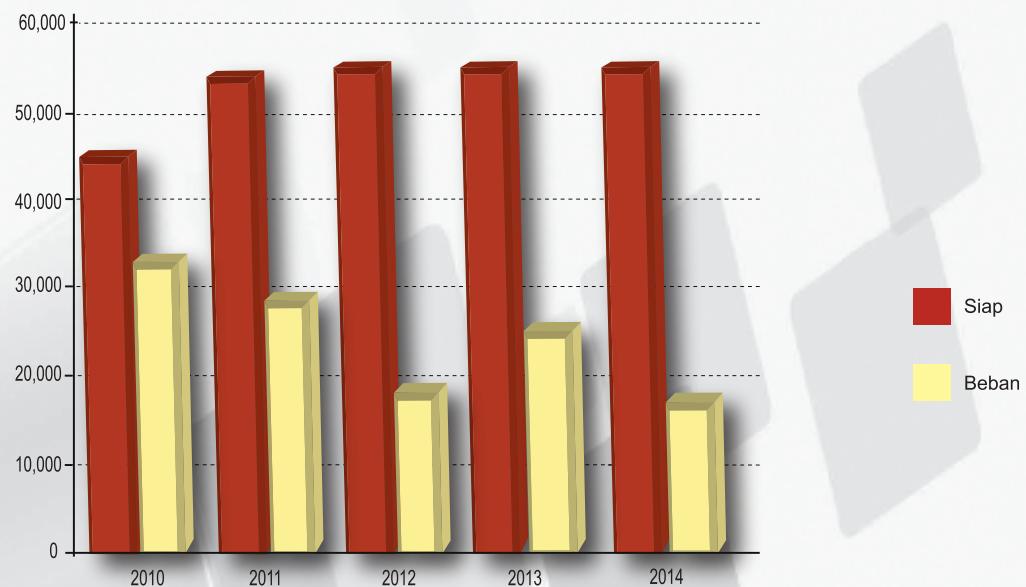
Kemajuan yang dicapai bagi aktiviti Ukuran Hak Milik Tanah tahun 2014 adalah berjumlah 55,969 lot atau 102% daripada sasaran yang ditetapkan iaitu sebanyak 55,000 lot. Perincian ke atas pencapaian dan beban kerja mengikut JUPEM Negeri adalah seperti berikut:

BIL.	NEGERI	SKT 2014 (LOT)	PRESTASI (LOT)	%	BEBAN KERJA (LOT)
1	Johor	8,200	10,000	122	4,641
2	Kedah	6,700	6,250	93	1,565
3	Kelantan	7,200	6,580	91	2,849
4	Melaka	1,600	1,600	100	79
5	Negeri Sembilan	3,800	3,104	82	223
6	Pahang	5,700	4,600	81	254
7	Perak	6,600	7,200	109	1,469
8	Perlis	1,950	2,200	113	309
9	Pulau Pinang	1,300	632	49	37
10	Selangor	4,000	4,220	106	3,436
11	Terengganu	6,250	9,200	147	1,098
12	W.P. Kuala Lumpur / Putrajaya	1,600	243	15	48
13	W.P.Labuan	100	140	140	4
<b>JUMLAH</b>		<b>55,000</b>	<b>55,969</b>	<b>102</b>	<b>16,012</b>

Perbandingan prestasi dan beban kerja untuk ukuran hak milik tanah bagi tempoh lima (5) tahun:

TAHUN	2010 (LOT)	2011 (LOT)	2012 (LOT)	2013 (LOT)	2014 (LOT)
Siap	44,567	54,730	55,007	55,764	55,969
Beban Akhir Tahun	32,825	28,303	17,151	24,996	16,012

Perbandingan prestasi dan beban kerja untuk ukuran hak milik tanah bagi tempoh lima (5) tahun:



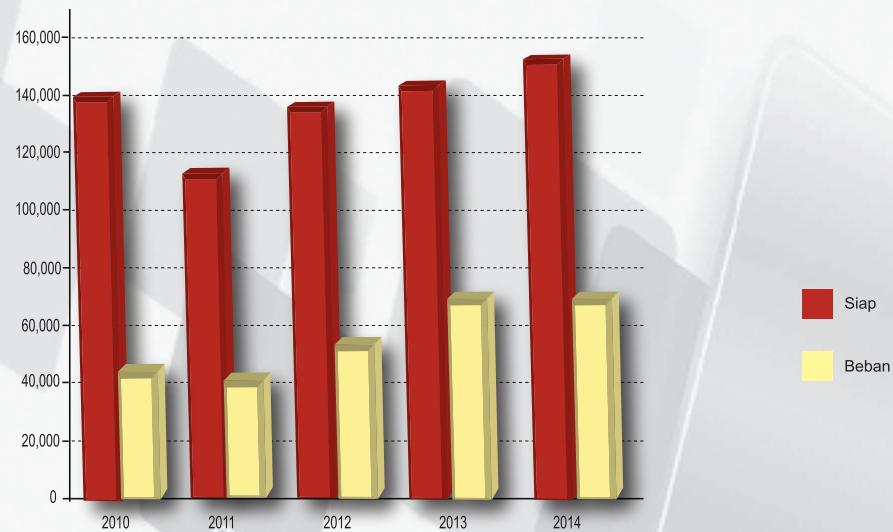
#### PENCAPAIAN SEMAKAN KERJA JURUUKUR TANAH BERLESEN ( JTB )

Kemajuan yang dicapai bagi aktiviti Semakan Kerja Juruukur Tanah Berlesen (JTB) bagi 2014 adalah berjumlah 153,667 lot atau 106% daripada sasaran yang ditetapkan sebanyak 145,220 lot. Pencapaian keseluruhan mengikut negeri-negeri adalah seperti berikut:

BIL.	NEGERI	SKT 2014 (LOT)	PRESTASI (LOT)	%	BEBAN KERJA (LOT)
1	Johor	30,000	25,032	83	11,327
2	Kedah	12,000	12,384	103	7,688
3	Kelantan	11,000	11,315	103	888
4	Melaka	6,000	6,016	100	3,468
5	Negeri Sembilan	7,000	8,486	121	2,597
6	Pahang	10,000	13,990	140	1,631
7	Perak	20,000	22,524	113	1,632
8	Perlis	1,200	1,395	117	302
9	Pulau Pinang	4,000	5,105	128	8,228
10	Selangor	30,000	32,557	109	26,526
11	Terengganu	12,000	14,011	117	3,506
12	W.P. Kuala Lumpur / Putrajaya	2,000	830	42	6
13	W.P.Labuan	20	22	110	0
<b>JUMLAH</b>		<b>145,220</b>	<b>153,667</b>	<b>106</b>	<b>67,799</b>

Perbandingan prestasi dan beban kerja semakan kerja Juruukur Tanah Berlesen (JTB) bagi tempoh lima (5) tahun:

TAHUN	2010 (LOT)	2011 (LOT)	2012 (LOT)	2013 (LOT)	2014 (LOT)
Siap	140,440	114,165	135,566	143,324	153,667
Beban Akhir Tahun	42,564	37,220	51,759	67,481	67,799



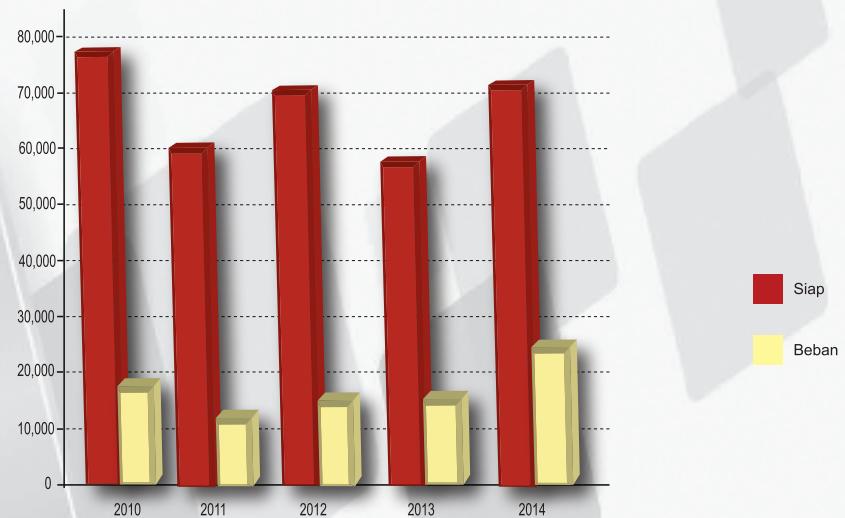
#### PENCAPAIAN SEMAKAN KERJA UKURAN HAK MILIK STRATA PERINGKAT I

Pencapaian tahun 2014 untuk Semakan Kerja Ukuran Hak Milik Strata Peringkat I adalah berjumlah 72,586 petak iaitu 150% daripada sasaran yang ditetapkan sebanyak 48,532 petak. Perincian ke atas pencapaian dan beban kerja mengikut JUPEM Negeri adalah seperti berikut:

BIL.	NEGERI	SKT 2014 (PETAK)	PRESTASI (PETAK)	%	BEBAN KERJA (PETAK)
1	Johor	3,000	5,500	183	1,700
2	Kedah	896	863	96	0
3	Kelantan	1,109	1,109	100	1,071
4	Melaka	859	868	101	0
5	Negeri Sembilan	300	481	106	722
6	Pahang	1,011	2,693	269	0
7	Perak	320	665	208	284
8	Perlis	0	0	0	0
9	Pulau Pinang	8,000	10,500	131	4,258
10	Selangor	22,000	29,000	132	12,677
11	Terengganu	37	37	100	24
12	W.P. Kuala Lumpur / Putrajaya	11,000	20,870	190	2,964
13	W.P. Labuan	0	0	0	0
<b>JUMLAH</b>		<b>48,532</b>	<b>72,586</b>	<b>150</b>	<b>23,700</b>

Perbandingan prestasi dan beban kerja semakan kerja ukuran hak milik strata peringkat I bagi tempoh lima (5) tahun:

TAHUN	2010 (PETAK)	2011 (PETAK)	2012 (PETAK)	2013 (PETAK)	2014 (PETAK)
Siap	77,670	60,426	71,149	57,585	72,586
Beban Akhir Tahun	16,428	11,985	13,850	13,637	23,700



#### PENCAPAIAN SEMAKAN KERJA UKURAN HAK MILIK STRATA PERINGKAT II

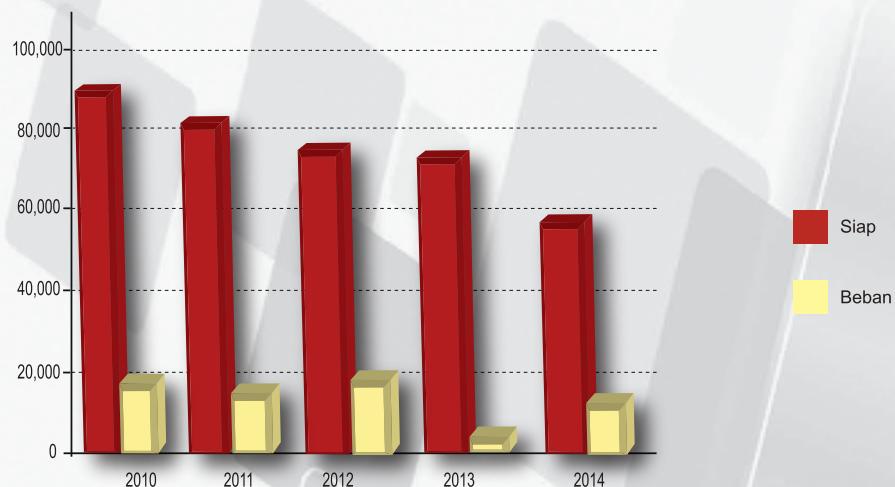
Peringkat II melibatkan semakan Pelan Akui Strata dan Penyediaan Suratan Hak Milik Strata. Penyediaan Suratan Hak Milik Strata bagi tahun 2014 mencapai 54,745 petak iaitu 79% daripada matlamat tahunan berjumlah 69,600 petak.

Perincian ke atas pencapaian dan beban kerja mengikut JUPEM Negeri adalah seperti berikut:

BIL.	NEGERI	SKT 2014 (PETAK)	PRESTASI (PETAK)	%	BEBAN KERJA (PETAK)
1	Johor	6,050	4,378	72	0
2	Kedah	550	70	13	0
3	Kelantan	1,000	863	86	0
4	Melaka	1,000	1,093	109	0
5	Negeri Sembilan	1,000	343	34	0
6	Pahang	1,000	1,107	111	0
7	Perak	1,000	427	43	0
8	Perlis	0	0	0	0
9	Pulau Pinang	15,000	7,706	51	0
10	Selangor	28,000	19,220	69	5,713
11	Terengganu	0	12	0	0
12	W.P. Kuala Lumpur / Putrajaya	15,000	19,526	130	4,395
13	W.P. Labuan	0	0	0	0
<b>JUMLAH</b>		<b>69,600</b>	<b>54,745</b>	<b>79</b>	<b>10,108</b>

Perbandingan prestasi dan beban kerja semakan kerja ukuran hak milik strata peringkat II bagi tempoh lima (5) tahun:

TAHUN	2010 (PETAK)	2011 (PETAK)	2012 (PETAK)	2013 (PETAK)	2014 (PETAK)
Siap	87,381	80,001	74,069	72,205	54,745
Beban Akhir Tahun	15,306	12,076	16,189	441	10,108



#### PENCAPAIAN PENANDAAN TITIK KAWALAN CRM

Cerapan titik kawal Cadastral Reference Mark (CRM) dilaksanakan bagi tujuan untuk memantapkan lagi ketepatan dan kejituuan National Digital Cadastral Database (NDCDB) di semua JUPEM Negeri.

Pencapaian cerapan adalah seperti berikut:

NEGERI	TITIK KAWALAN CRM	
	FAIL	TITIK KAWAL
Johor	2,337	3,300
Kedah	2,107	2,234
Kelantan	626	465
Melaka	161	117
Negeri Sembilan	1,656	3,405
Pahang	1,886	4,760
Perak	609	609
Perlis	883	1,742
Pulau Pinang	503	929
Selangor	2,338	6,568
Terengganu	966	2,820
W.P. Kuala Lumpur/ Putrajaya	317	616
W.P. Labuan	114	223
<b>JUMLAH</b>	<b>14,503</b>	<b>27,788</b>

## **BAHAGIAN GEOSPATIAL PERTAHANAN**

Bahagian Geospatial Pertahanan (BGSP) terus melaksanakan aktiviti dan program yang signifikan dalam memberi khidmat geospatial pertahanan kepada ATM melalui pendekatan seperti berikut:

- i. Memperkasakan pangkalan data dan menerbitkan pelbagai peta dan produk yang berkualiti, relevan dan berketepatan tinggi bagi memenuhi keperluan pertahanan dan keselamatan.
- ii. Meneruskan bantuan khidmat geospatial pertahanan di medan untuk operasi ketenteraan, pengurusan krisis, perancangan pertahanan dan latihan serta aktiviti penguatkuasaan dan perlaksanaan tapisan keselamatan data geospatial.
- iii. Meneruskan kesinambungan pelan induk program uGeo for Defence untuk pembangunan BGSP di masa hadapan sehingga tahun 2020 bagi mewujudkan keupayaan perkhidmatan secara digital dan bersepada untuk kesiapsiagaan ATM.

## **PENERBITAN DATA DAN PETA KEGUNAAN PERTAHANAN DAN KESELAMATAN**

BGSP terus melaksanakan pengeluaran produk-produk geospatial pertahanan dalam bentuk *hardcopy* dan *softcopy* dalam tahun 2014 termasuk peta *hardcopy* berskala kecil. Sasaran yang difokuskan adalah menghasilkan Peta Topografi versi tentera berskala 1:50,000 melalui aktiviti pengukuran, pengemaskinian dan pengeluaran peta.

Aktiviti-aktiviti yang terlibat adalah seperti berikut:

- i. Pewujudan dan pengemaskinian *Vector Smart Map (VMap)* dan *Vector Interim Terrain Data (VITD)* untuk kawasan Semenanjung Malaysia bersumberkan data digital siri MY501T.
- ii. Menerbitkan peta *Topographic Line Map (TLM)* dan *Common Operation Map (COM)* yang berskala 1:50 000.
- iii. Menerbitkan peta topografi tentera berskala 1:100 000 untuk kegunaan Pasukan Udara Tentera Darat.
- iv. Menerbitkan peta tematik tentera pelbagai skala untuk tujuan latihan, perancangan dan pengurusan ATM.

Ringkasan pencapaian bagi aktiviti ini sehingga 31 Disember 2014 adalah seperti berikut :

BIL.	AKTIVITI	SKT 2014	PENCAPAIAN
1	Pewujudan dan Pengemaskinian:		
	a. VMap Level 2	157 Lembar (Siri MY)	100%
	b. VITD Level	157 Lembar (Siri MY)	100%
2	Penerbitan Peta:		
	a. Topographic Line Map	30 Lembar	100%
	b. Common Operation Map	30 Lembar	100%
3	Penerbitan Peta Topografi Tentera Skala 1:100 000	3 Lembar	100%
4	Penerbitan Peta Tematik Tentera Pelbagai Skala	3 Lembar	100%

#### PERKHIDMATAN GEOSPATIAL PERTAHANAN

##### **Penguatkuasaan Pekeliling Arahan Keselamatan Terhadap Dokumen Geospatial Terperingkat**

Aktiviti-aktiviti yang terlibat adalah seperti berikut:

- i. Permohonan permit penggambaran udara / pemetaan udara dan permit aktiviti pengutipan data di lapangan.
- ii. Tapisan keselamatan ke atas dokumen geospatial terperingkat.
- iii. Pemantauan terhadap agensi yang terlibat dalam penyimpanan dokumen geospatial terperingkat.

Ringkasan pencapaian bagi aktiviti ini sehingga 31 Disember 2014 adalah seperti berikut:

BIL.	AKTIVITI	SKT 2014	PENCAPAIAN
1	Pengeluaran permit kutipan data pemetaan dan spatial	100 Permit	197 (197%)
2	Tapisan keselamatan ke atas dokumen geospatial terperingkat	100 Permohonan	301 (301%)
3	Semakan pruf data geospatial yang dikeluarkan oleh DPNM	250 Pruf	305 (122%)
4	Pemantauan terhadap agensi yang menyimpan data geospatial	42 Agensi	15 (36%)

### **Khidmat Nasihat Teknikal Kepada ATM**

BGSP berperanan memberi bantuan khidmat nasihat teknikal geospatial pertahanan kepada sistem-sistem pertahanan dan persenjataan moden ATM yang menggunakan perkhidmatan geospatial. Aktiviti ini mensasarkan kepada tiga (3) sistem di mana pelaksanaannya mengikut fasa-fasa berikut:

- Projek Eurocopter
- Projek Armoured Personnel Carrier (APC8X8)
- Sistem Olah Perang Berkomputer Tentera Darat

Kemajuan keseluruhan aktiviti ini sehingga 31 Disember 2014 adalah seperti berikut:

AKTIVITI	SKT 2014	PENCAPAIAN
Memantau dan memberi khidmat nasihat teknikal kepada perolehan sistem-sistem pertahanan ATM berkenaan keperluan data geospatial pertahanan	1 Sistem Projek Armoured Personnel Carrier (APC8X8)	100%



### **PERKHIDMATAN WEB**

Perkhidmatan Web adalah merupakan aktiviti baru BGSP di mana Portal BGSP yang dikenali uGeo for Defence Portal sedia ada ditambahbaik bagi menyediakan konsep *user friendly* dengan menambahkan maklumat data dan peta serta *tool* yang bersesuaian. Sehingga kini tiga (3) spesifik portal untuk kegunaan dan keperluan tentera darat, laut dan udara telah diwujudkan dan telah pun beroperasi semasa tragedi kehilangan pesawat MH 370.

Manakala pangkalan data secara digital yang menggunakan platform ArcGIS Online bagi menyimpan dan merekodkan pelbagai data dan maklumat sekatan R dan Y dilaksanakan dan diteruskan pengaktifan untuk kemudahan pengurusan pemantauan BGSP. Sehingga kini pengemaskinian melibatkan negeri Selangor dan Wilayah Persekutuan Kuala Lumpur di dalam proses penyiapan dan selebihnya iaitu sebanyak 13 negeri akan terus dilaksanakan.

Ringkasan pencapaian bagi aktiviti ini sehingga 31 Disember 2014 adalah seperti berikut:

BIL	AKTIVITI	SKT 2014	PENCAPAIAN
1	uGeo for Defence Portal	2 Modul 3 Portal (Darat, Laut, Udara) dan 1 portal OP murni	133%
2	Pemantauan Maklumat Sekatan R dan Y	2 Negeri (Wilayah Persekutuan KL dan Selangor)	100%

## BANTUAN KHIDMAT GEOSPATIAL PERTAHANAN DI MEDAN

### Penglibatan BGSP Dalam Operasi Dan Latihan Peringkat ATM

BGSP senantiasa meneruskan aktiviti latihan bagi memberi pendedahan kepada pegawai dan staf dalam situasi sebenar bantuan khidmat geospatial di medan perang. Sehingga kini, empat aktiviti eksesais yang dirancang sepanjang tahun 2014 iaitu Eksesais Lightning Tiger West (CPX dan FTX), Eksesais Keris Strike (CPX dan FTX), Eksesais Pahlawan dan Eksesais Perisai Selatan tidak dapat dilaksanakan disebabkan penangguhan oleh pihak ATM. Walau bagaimanapun BGSP masih terlibat dengan eksesais-eksesais lain seperti RANGKON Patinggi Ali, Eksesais ESSCOM, Eksesais Wira Helo (CPX dan FTX) dan Eksesais NCO.

Bagi aktiviti operasi, BGSP telah terlibat di dalam SAR MH370 yang bermula dari 13 Mac 2014 hingga 28 Mac 2014. Di dalam operasi ini, BGSP telah memberi bantuan khidmat geospatial kepada Pusat Operasi Tentera Udara seperti khidmat nasihat pemetaan, pembesaran peta, analisa foto udara dan satelit melalui bantuan daripada JUPEM dan Agensi Remote Sensing Malaysia (ARSM).

Selain itu, BGSP juga terlibat dalam menyediakan perkhidmatan pemetaan untuk Ops Banjir Terengganu yang dikendalikan oleh 7 Skn RAJD pada 21 Oktober 2014 hingga 23 Oktober 2014.

### Penglibatan BGSP Dalam Perkhidmatan Penawanan Data

Aktiviti penawanan data ini dilaksanakan menggunakan UAV, IkeGPS dan Trimble GPS. Pada tahun 2014, BGSP telah membantu Kementerian Sumber Asli dan Alam Sekitar (NRE) dalam penawanan data kawasan yang dicerobohi menggunakan UAV di Lojing, Gua Musang dan Janda Baik, Pahang. Seterusnya BGSP juga telah melaksanakan penerbangan UAV bagi tujuan pengemaskinian data serta membantu dalam mendapatkan imej terkini kawasan yang diperlukan seperti di Mersing; Kahang; Kluang; Kem Sungai Besi, Kuala Lumpur; Kem Terendak, Melaka; dan Kerteh, Terengganu.

Selain itu, IkeGPS digunakan dalam membuat pengutipan data bagi membantu ESSCOM melaksanakan bancian penduduk di Kg Air, Sandakan, Sabah. Seterusnya Trimble GPS juga digunakan untuk membuat pengutipan data Ground Control Point yang dilaksanakan di Taiping, Perak.



Kemajuan keseluruhan aktiviti ini sehingga 31 Disember 2014 adalah seperti berikut:

BIL.	AKTIVITI	SKT 2014 (KALI)	PENCAPAIAN
1	Perkhidmatan Geospatial Medan untuk Operasi dan Latihan Peringkat ATM	12	12 (100%)
2	Perkhidmatan Penawanan Data Geospatial	12	16 (133%)

#### PEMBANGUNAN KEUPAYAAN uGEO FOR DEFENCE

Melalui pelaksanaan program ini, BGSP terlibat secara langsung di dalam menyediakan maklumat dan perkhidmatan geospatial pertahanan kepada ATM. Di antara skop-skop program uGeo for Defence di fasa permulaan untuk aktiviti ini ialah:

- i. Pembangunan Modal Insan
- ii. Kertas Kerja Penstrukturran BGSP
- iii. Program Outreach
- iv. Seminar
- v. Mesyuarat Jawatankuasa Geospatial Pertahanan
- vi. Integrasi Defence Geographic Information System
- vii. Polisi dan Doktrin Geospatial Pertahanan
- viii. Program Pembangunan Geospatial Pertahanan





Ringkasan pencapaian bagi aktiviti ini sehingga 31 Disember 2014 adalah seperti berikut:

BIL.	AKTIVITI	SKT 2014	PENCAPAIAN
1	Pembangunan Modal Insan Seminar Luar Negara Seminar Dalam Negara Kursus Dalam Negara Kursus Luar Negara	1 Kali 4 kali 25 kali 1 kali	3 kali (300%) 5 kali (125%) 25 kali (100%) 1 kali (100%)
2	Kertas Kerja Penstruktur BGSP Penyiapan Kertas Kerja Penstruktur BGSP	1 Kertas Kerja	100%
3	Program Outreach Program Outreach	10 Sesi	12 Sesi (120%)
4	Seminar Seminar Geospatial	1 Kali	100%
5	Mesyuarat Jawatankuasa Geospatial Pertahanan	2 Kali	1 Kali (50%)
6	Integrasi Defence Geographic Information System (DGIS) melalui projek Network Centric Operation (NCO) ATM	Pelaksanaan-Fasa 2 Lab Acceptance Test (LAT)	100%
7	Polisi dan Doktrin Geospatial Pertahanan Memuktamadkan Kemaskinian Arahan Pemetaan 1/96 Memuktamadkan Dasar Stok Peta Topografi dan Carta Udara untuk ATM Penyiapan Doktrin Kejuruteraan Geospatial Pra Kajian Perjanjian dan Kerjasama Geospatial Pertahanan dengan Amerika Syarikat Pra Kajian Perjanjian dan Kerjasama Geospatial Pertahanan dengan United Kingdom	1 kali Fasa 2 Fasa 1 (40%) Fasa 1 (40%)	55% 100% 100% 100%
8	Program Pembangunan Geospatial Pertahanan	3 Program	2 Program (70%)



laporan  
**KEWANGAN**

---

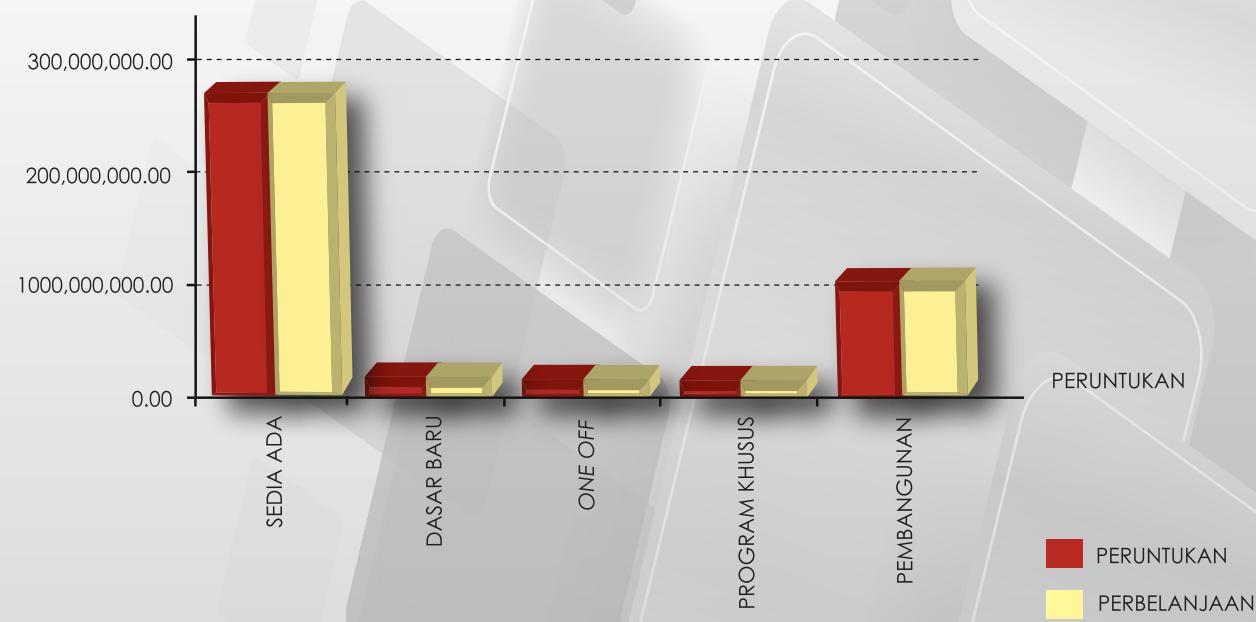
## PENGURUSAN KEWANGAN

JUPEM telah menerima peruntukan kewangan sebanyak RM 361,673,065.00 bagi tahun 2014 yang meliputi Belanja Mengurus (RM 265,281,160.00) dan Belanja Pembangunan (RM 96,391,905.00). Daripada jumlah tersebut dan sehingga 31 Disember 2014 sebanyak RM 361,142,657.91 (99.85%) telah dibelanjakan.

Perincian agihan peruntukan dan perbelanjaan keseluruhan adalah seperti berikut:

AGIHAN PERUNTUKAN	PERUNTUKAN RM	PERBELANJAAN RM	(%)
Sedia Ada	261,156,200.00	261,155,797.66	100.00
Dasar Baru	2,037,260.00	2,036,892.50	99.98
One-Off	1,710,000.00	1,709,576.20	99.98
Program Khusus	377,700.00	339,484.41	89.88
Pembangunan	96,391,905.00	95,900,907.14	99.49
<b>JUMLAH KESELURUHAN</b>	<b>361,673,065.00</b>	<b>361,142,657.91</b>	<b>99.85</b>

Pencapaian kewangan tahun 2014 adalah seperti berikut:



## BELANJA MENGURUS

Jumlah peruntukan RM 265,281,160.00 di bawah Belanja Mengurus yang diluluskan pada tahun 2014 adalah untuk perbelanjaan bagi emolumen, perkhidmatan dan bekalan, pemberian dan kenaan tetap serta perbelanjaan lain. Di samping itu peruntukan juga diluluskan untuk perolehan aset dan perbelanjaan dibawah one-off.

Perincian peruntukan dan perbelanjaan belanja mengurus tahun 2014 adalah seperti berikut:

### SEDIA ADA

OBJEK AM	PERUNTUKAN (RM)	PERBELANJAAN (RM)	(%)
Emolumen	186,932,100.00	186,931,965.11	100
Perkhidmatan & Bekalan	74,166,100.00	74,165,875.97	100
Pemberian Dan Kenaan Tetap	39,600.00	39,580.58	99.95
Perbelanjaan Lain	18,400.00	18,376.00	99.87
<b>JUMLAH</b>	<b>261,156,200.00</b>	<b>261,155,797.66</b>	<b>100</b>

### DASAR BARU

OBJEK AM	PERUNTUKAN (RM)	PERBELANJAAN (RM)	(%)
Emolumen	909,300.00	909,128.00	99.98
Aset	1,127,960.00	1,127,764.50	99.98
<b>JUMLAH</b>	<b>2,037,260.00</b>	<b>2,036,892.50</b>	<b>99.98</b>

### ONE-OFF

OBJEK AM	PERUNTUKAN (RM)	PERBELANJAAN (RM)	(%)
Perkhidmatan & Bekalan	1,400,000.00	1,399,851.20	99.99
Aset	310,000.00	309,725.00	99.91
<b>JUMLAH</b>	<b>1,710,000.00</b>	<b>1,709,576.20</b>	<b>99.98</b>

### PROGRAM KHUSUS

OBJEK AM	PERUNTUKAN (RM)	PERBELANJAAN (RM)	(%)
Perkhidmatan & Bekalan	377,700.00	339,484.41	89.88
<b>JUMLAH</b>	<b>377,700.00</b>	<b>339,484.41</b>	<b>89.88</b>

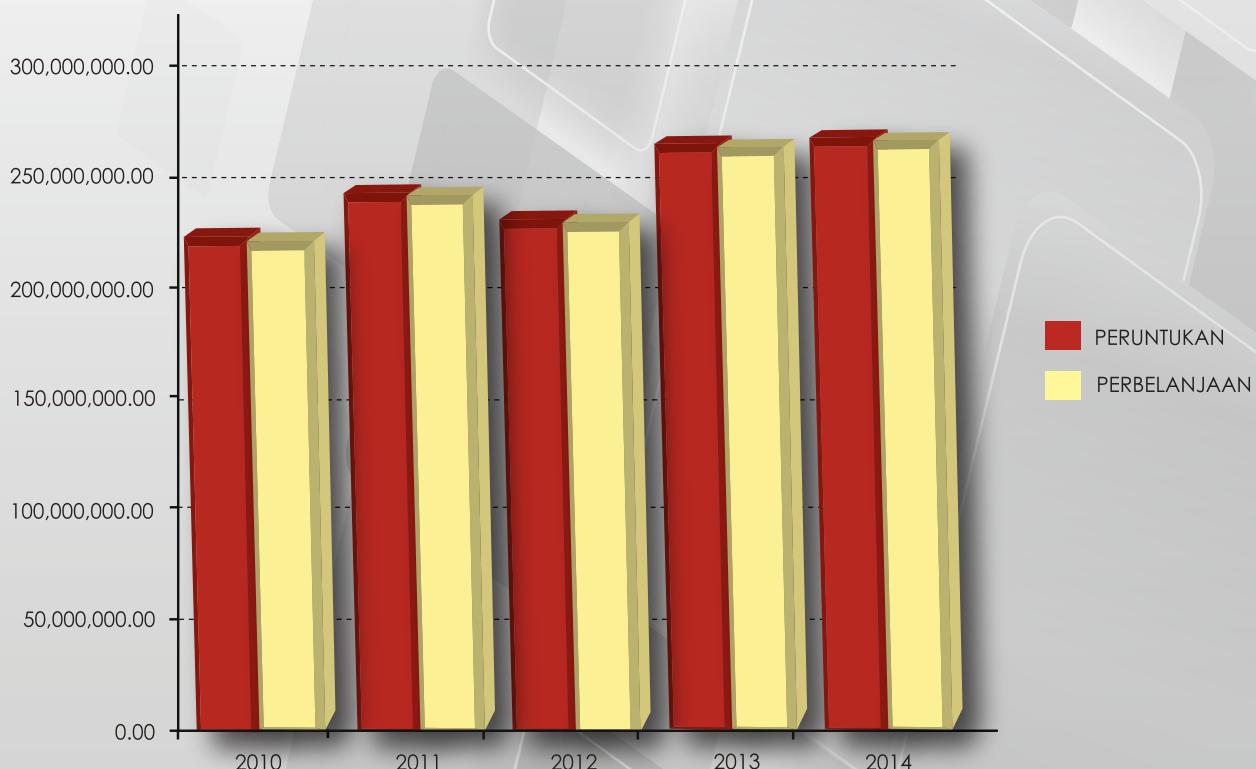
Pencapaian keseluruhan peruntukan aktiviti belanja mengurus adalah seperti berikut:

AKTIVITI	PERUNTUKAN (RM)	PERBELANJAAN (RM)	PERATUS (%)
Sedia Ada	261,156,200.00	261,155,797.66	100.00
Dasar Baru	2,037,260.00	2,036,892.50	99.98
One-Off	1,710,000.00	1,709,576.20	99.98
Program Khusus	377,700.00	339,484.41	89.88
<b>JUMLAH KESELURUHAN</b>	<b>265,281,160.00</b>	<b>265,241,750.77</b>	<b>99.98</b>

Pencapaian aktiviti belanja mengurus bagi tempoh lima (5) tahun adalah seperti berikut:

TAHUN	PERUNTUKAN	PERBELANJAAN	PERATUS (%)
2010	220,353,440.00	219,164,637.15	99.46
2011	241,327,070.00	240,697,761.25	99.74
2012	229,609,050.00	229,544,487.01	99.98
2013	264,863,999.00	262,383,633.48	99.06
2014	265,281,160.00	265,241,750.77	99.98

Carta di bawah menunjukkan jumlah peruntukan dan perbelanjaan bagi belanja mengurus untuk tempoh lima (5) tahun :



## BELANJA PEMBANGUNAN

Sejumlah RM 96,391,905.00 telah diperuntukkan untuk Belanja Pembangunan Tahun 2014 bagi ‘Rolling Plan’ ke-3, Rancangan Malaysia ke-10 (RMK-10) bagi menjayakan projek-projek pembangunan.

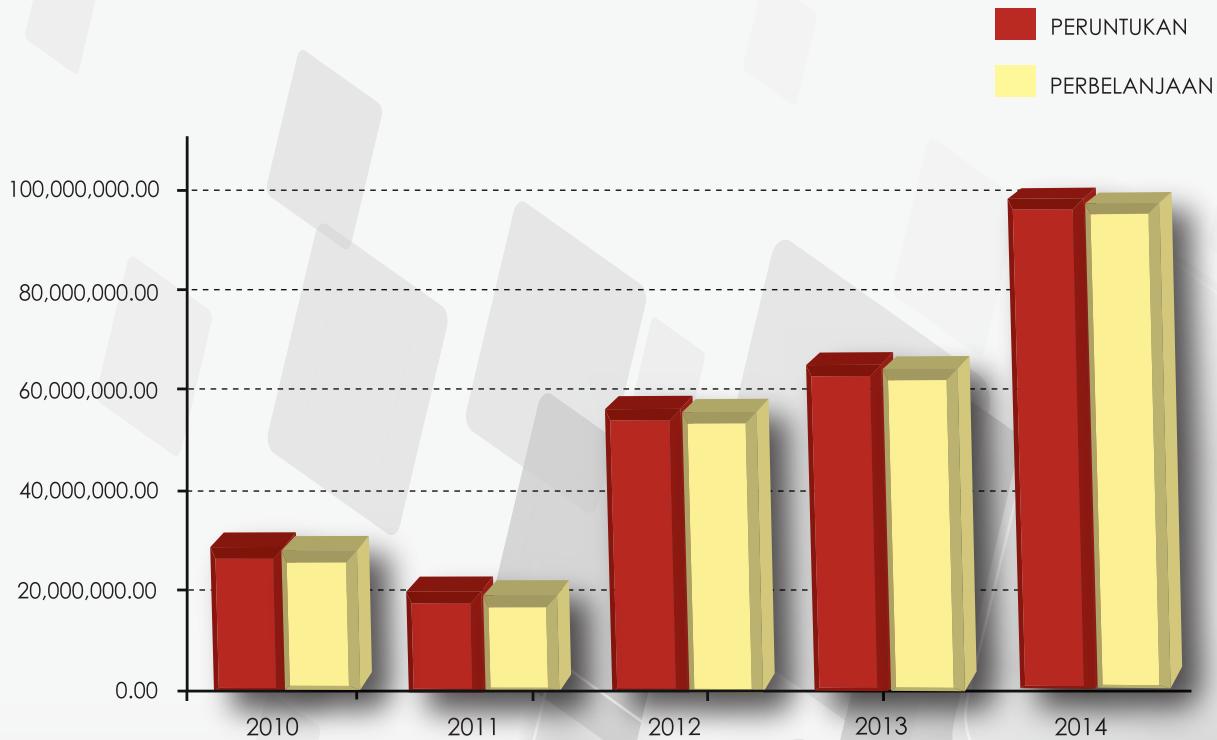
Senarai projek, peruntukan dan perbelanjaan adalah seperti berikut:

BUTIRAN / NAMA PROJEK	PERUNTUKAN (RM)	PERBELANJAAN (RM)	PERATUS (%)
Penentuan dan Pengukuran Sempadan Antarabangsa (Darat dan Maritim) Malaysia Dengan Negara-Negara Jiran	7,288,400.00	7,100,476.57	97.40
Pemerkasaan Pangkalan Data Kadaster Digital Kebangsaan	18,629,355.00	18,629,355.00	100.00
<i>ICT Enterprise Intergrated System Bagi JUPEM (IEIS)</i>	4,479,850.00	4,479,580.00	100.00
e-Pemetaan	47,096,700.00	46,851,620.57	99.50
<i>Marine Geodetic Infrastructure In Malaysia Waters (MAGIC)</i>	7,530,000.00	7,527,000.00	100.00
Sistem Pangkalan Data Geodetik (SPDG) Sub-Projek Tolok Air Pasang Surut Telemetri Negara	9,780,000.00	9,778,475.00	100.00
Pembinaan Pejabat Baru Pejabat Topografi Cawangan Wilayah Selatan, Segamat, Bahagian Pemetaan Topografi Semenanjung	1,587,600.00	1,534,400.00	96.60
<b>JUMLAH</b>	<b>96,391,905.00</b>	<b>95,900,907.14</b>	<b>99.49</b>

Pencapaian aktiviti belanja pembangunan bagi tempoh lima (5) tahun adalah seperti berikut.

TAHUN	PERUNTUKAN	PERBELANJAAN	PERATUS (%)
2010	25,645,960.00	25,260,310.30	98.50
2011	17,695,525.00	17,660,229.65	99.80
2012	54,284,000.00	54,232,243.35	99.90
2013	63,214,000.00	62,666,883.77	99.13
2014	96,391,905.00	95,900,907.14	99.49

Carta di bawah menunjukkan jumlah peruntukan dan perbelanjaan bagi belanja pembangunan untuk tempoh lima (5) tahun :



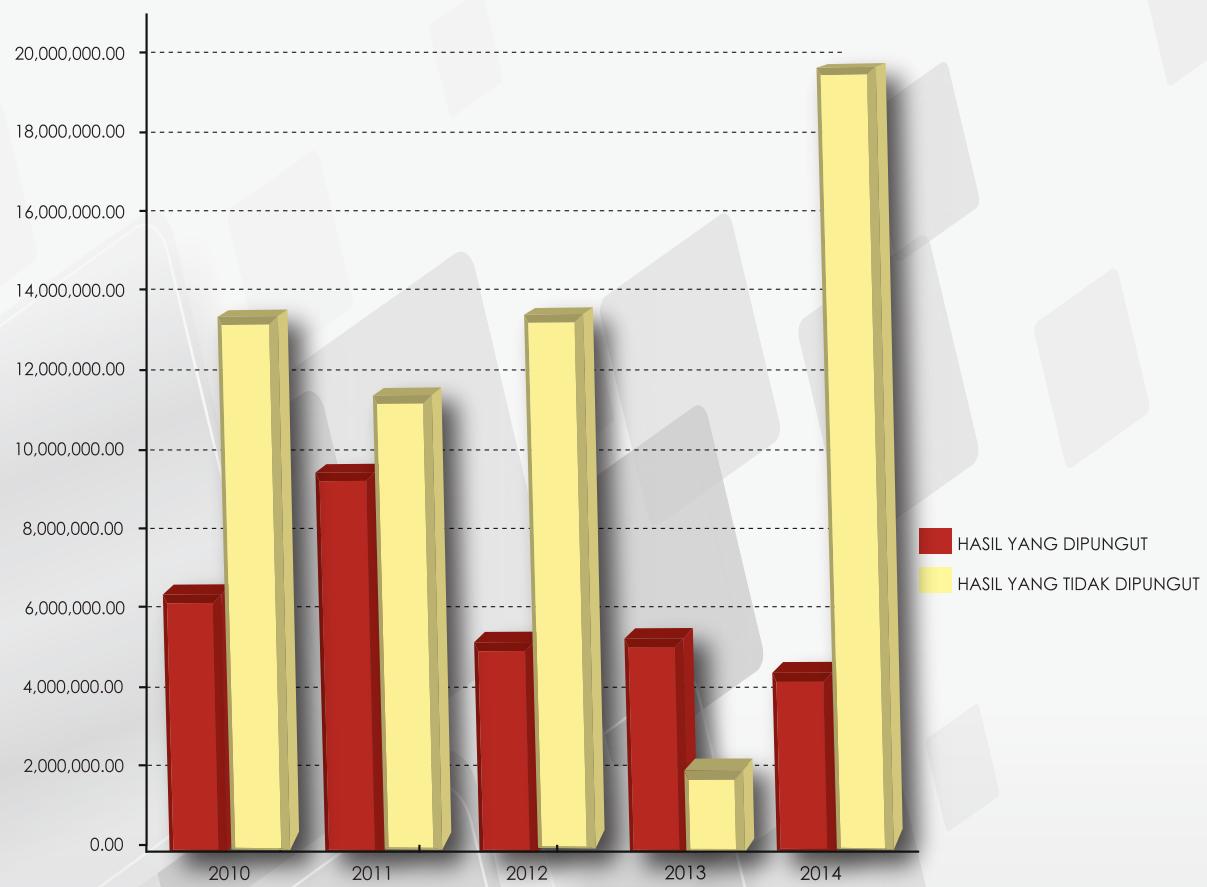
## HASIL

Dalam tahun 2014, jumlah hasil pendapatan JUPEM adalah sebanyak RM 24,059,863.69 yang diperolehi melalui penjualan peta, pelan akui, foto udara, data-data geodetik dan astronomi, bayaran upah ukur, serta lain-lain perkhidmatan termasuk bayaran lesen atau permit dari penjualan data berdigit. Walau bagaimanapun, sejumlah RM 4,247,076.00 sahaja hasil yang dapat dipungut manakala sejumlah RM 19,812,787.69 adalah hasil yang tidak dapat dipungut dan dikategorikan sebagai pendapatan daripada perkhidmatan yang dikecualikan bayarannya oleh peruntukan undang-undang.

Butir-butir kutipan hasil bagi keseluruhan JUPEM (Ibu Pejabat dan JUPEM Negeri) untuk lima (5) tahun kebelakangan:

TAHUN	HASIL YANG DIPUNGUT	HASIL YANG TIDAK DIPUNGUT	JUMLAH
2010	6,399,796.44	13,483,102.33	19,882,898.77
2011	9,495,794.90	11,367,195.18	20,862,990.08
2012	5,040,601.41	13,425,495.25	18,466,096.66
2013	5,276,162.57	1,707,699.75	6,983,862.32
2014	4,247,076.00	19,812,787.69	24,059,863.69

Carta di bawah menunjukkan pecahan kutipan hasil bagi tempoh lima (5) tahun :







anugerah dan

**PENGIFTIRAFAN**

---

## **ANUGERAH DAN PENGIFTIRAFAN**

Sepanjang tahun 2014, JUPEM telah menerima beberapa anugerah di atas pencapaiannya dalam pelbagai bidang. Pencapaian dan pengiktirafan sepanjang tahun 2014 merupakan manifestasi dan komitmen semua warga JUPEM kepada Jabatan khususnya dan perkhidmatan awam amnya. Antara anugerah dan pengiktirafan yang diperolehi JUPEM sepanjang tahun 2014 adalah:

BIL.	KATEGORI	PERINGKAT
1	Geospatial World Excellence Awards ( <i>Cadastral Survey</i> )	Antarabangsa
2	Anugerah Khas GIS Antarabangsa	Antarabangsa
3	Anugerah Geospatial Kebangsaan (Kategori Umum)	Kebangsaan
4	Anugerah EMAS Konvensyen Team Excellence	Kebangsaan
5	Pertandingan Cabaran Inovasi sempena Persidangan & Pameran Pengkomersian MOSTI – JUPEM Pulau Pinang	Kebangsaan (Johan)
6	Anugerah Kumpulan Inovatif dan Kreatif (KIK) Terbaik 1NRE Kategori Pengurusan – JUPEM Kelantan	Kementerian (Johan)
7	Anugerah Kumpulan Inovatif dan Kreatif (KIK) Terbaik 1NRE Kategori Teknikal – JUPEM Pulau Pinang	Kementerian (Johan)
8	Anugerah Kumpulan Inovatif dan Kreatif (KIK) Terbaik 1NRE Kategori Teknikal – JUPEM Sabah	Kementerian (Naib Johan)
9	Pertandingan Inovasi 1NRE – JUPEM Pulau Pinang	Kementerian (Johan)
10	Johan Keseluruhan di Peringkat Jabatan / Agensi Di bawah NRE Sempena Hari Inovasi 1NRE Tahun 2014	Kementerian (Johan)
11	Anugerah Sijil Naziran Bersih 2014 oleh Jabatan Akauntan Negeri Pulau Pinang atas pencapaian pengurusan kewangan cemerlang kepada JUPEM Pulau Pinang	Jabatan
12	Anugerah Pencapaian Pengurusan Kewangan Cemerlang oleh Jabatan Akauntan Negeri Wilayah Persekutuan Labuan kepada JUPEM WP Labuan	Jabatan

Geospatial World Excellence Awards (Cadastral Survey)



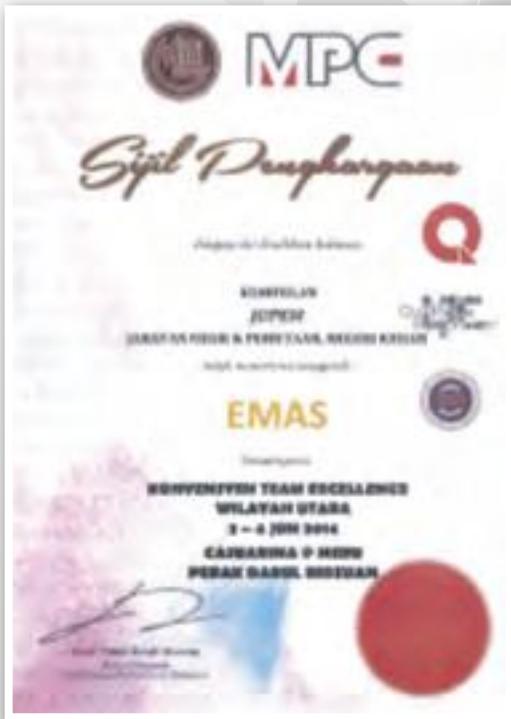
Anugerah Geospatial Kebangsaan (Kategori Umum)



Anugerah Khas GIS Antarabangsa



Anugerah EMAS Konvensyen Team Excellence



**Perandingan Cabaran Inovasi Sempena Persidangan Dan Pameran Pengkomersilan MOSTI**



**Johan Keseluruhan Di Kementerian Sempena Hari Inovasi 1NRE Tahun 2014**







imbasan

**PERISTIWA UTAMA 2014**

---

## IMBASAN PERISTIWA UTAMA 2014

9 JANUARI 2014



Majlis Amanat Tahun Baru 2014 di Dewan Ukur, Ibu Pejabat JUPEM, Kuala Lumpur.

9 – 10 JANUARI 2014

Mesyuarat Pengurusan JUPEM Bil. 1/2014 di Bilik Persidangan, Wisma JUPEM, Kuala Lumpur dipengerusikan oleh YBhg. Datuk Prof. Sr Dr. Abdul Kadir bin Taib, Ketua Pengarah Ukur dan Pemetaan Malaysia.



14 JANUARI 2014

JUPEM sertai Perarakan Maulidurasul peringkat kebangsaan di Dataran Putrajaya.

#### **12 FEBRUARI 2014**

JUPEM dengan kerjasama pihak BOMBA telah mengadakan Fire Drill atau latihan kebakaran dengan simulasi kebakaran berlaku di Tingkat 4, Wisma JUPEM.



#### **13 – 15 MAC 2014**

JUPEM telah mengadakan Bengkel Business Continuity Management bertempat di Royal Bintang Resort & SPA, Seremban, Negeri Sembilan

#### **9 APRIL 2014**

Majlis Penyerahan Nota Serah Tugas oleh Ketua Pengarah Ukur dan Pemetaan Malaysia kepada Timbalan Ketua Pengarah Ukur dan Pemetaan I yang telah berlangsung di Dewan Ukur, Ibu Pejabat, Kuala Lumpur.





**23 MEI 2014**

Mesyuarat Jawatankuasa Geospatial Pertahanan yang diadakan di Bilik Persidangan, Tingkat 15, Wisma JUPEM.

**20 JUN 2014**



Majlis Penyampaian Anugerah Perkhidmatan Cemerlang (APC) di Dewan Merak Kayangan Felda, Kuala Lumpur.



**27 JUN 2014**

Majlis Penyerahan Nota Serah Tugas Pengarah Bahagian Geospatial Pertahanan oleh Mejar Jeneral Dato' Zaharin bin Din kepada Brigedier Jeneral Haji Abu Sufian bin Haji Ahmad di Bilik Mesyuarat, Tingkat 2, Bangunan Ukur, JUPEM.

#### **16 – 17 JULAI 2014**

Mesyuarat Pengurusan Bil 2/2014 yang berlangsung di Bilik Persidangan, Wisma JUPEM dipengerusikan oleh YBhg. Datuk Sr Ahmad Fauzi bin Nordin, Ketua Pengarah Ukur dan Pemetaan Malaysia.



#### **17 JULAI 2014**

Majlis Berbuka Puasa Ramadhan JUPEM berlangsung di perkarangan Wisma JUPEM, Kuala Lumpur dihadiri Timbalan Ketua Setiausaha (Alam Sekitar), YBhg. Datuk Dr. Abdul Rahim bin Haji Nik.

#### **14 OGOS 2014**

Majlis Sambutan Hari Raya Aidil Fitri JUPEM di Dewan Ukur, Kuala Lumpur dihadiri Timbalan Menteri Sumber Asli dan Alam Sekitar (NRE), YB Dato' Sri Dr. James Dawos Mamit.





**26 - 29 OGOS 2014**

Bengkel Pemantapan Penyediaan Dokumentasi Projek KIK di Hotel Prinzpark, Kuala Terengganu.

**3 SEPTEMBER 2014**

Lawatan Rasmی Ketua Pengarah Ukur dan Pemetaan ke Bahagian Geospatial Pertahanan di Tingkat 2, Bangunan Ukur, Kuala Lumpur.



**29 - 31 OKTOBER 2014**



Bengkel Methodologi Kajian Impak dan Sistem Amalan Berkualiti 5S Jabatan Ukur dan Pemetaan Malaysia di Hotel Heritage Ipoh, Perak.

#### **4 NOVEMBER 2014**

JUPEM dinobatkan sebagai juara keseluruhan sempena Sambutan Hari Inovasi 1NRE di Dewan Baiduri, NRE, Putrajaya dan hadiah disampaikan oleh Menteri Sumber Asli dan Alam Sekitar, YB. Datuk Seri G. Palanivel.



#### **16 – 18 NOVEMBER 2014**

Bengkel Penilaian Pelan Strategik Bagi Projek Pembangunan Rancangan Malaysia Ke-11 Jabatan Ukur dan Pemetaan Malaysia di Hotel Thistle, Port Dickson, Negeri Sembilan.



#### **3 – 5 DISEMBER 2014**

Konvensyen KIK JUPEM di Hotel Flamingo, Ampang, Selangor, dirasmikan oleh Ketua Pengarah Ukur dan Pemetaan Malaysia, YBhg. Datuk Sr Ahmad Fauzi bin Nordin.



#### **22 – 23 DISEMBER 2014**

Persidangan Pengarah-pengarah Ukur 2014 di Hotel The Puteri Pacific, Johor Bharu, Johor dirasmikan oleh Ketua Pengarah Ukur dan Pemetaan Malaysia, YBhg. Datuk Sr Ahmad Fauzi bin Nordin.







direktori

**JABATAN**

---

DIREKTORI





**DIREKTORI JABATAN**

A	IBU PEJABAT JUPEM	NO. TEL.	NO. FAKS.
1	Pejabat Ketua Pengarah Ukur dan Pemetaan Jabatan Ukur dan Pemetaan Malaysia Tingkat 11, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170891	03-26917457
2	Pejabat Timbalan Ketua Pengarah Ukur dan Pemetaan I Jabatan Ukur dan Pemetaan Malaysia Tingkat 10, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170892	03-26970221
3	Pejabat Timbalan Ketua Pengarah Ukur dan Pemetaan II Jabatan Ukur dan Pemetaan Malaysia Tingkat 11, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170896	03-269933618
4	Pejabat Pengarah Ukur Bahagian (Dasar dan Penyelarasaran Pemetaan) Jabatan Ukur dan Pemetaan Malaysia Tingkat 10, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170894	03-26910994
5	Pejabat Pengarah Ukur Bahagian (Kadaster) Jabatan Ukur dan Pemetaan Malaysia Tingkat 10, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170614	03-26170727

<b>A</b>	<b>IBU PEJABAT JUPEM</b>	<b>NO. TEL.</b>	<b>NO. FAKS.</b>
6	Pengarah Bahagian (Geospatial Pertahanan) Jabatan Ukur dan Pemetaan Malaysia Tingkat 2, Bangunan Ukur Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170948	03-26980505
7	Pengarah Ukur Bahagian (Ehwal Persempadan) Jabatan Ukur dan Pemetaan Malaysia Tingkat 8, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170893	03-26934084
8	Pengarah Ukur Bahagian (Ukur Geodetik) Jabatan Ukur dan Pemetaan Malaysia Tingkat 7, Bangunan Ukur Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170635	03-26912757
9	Pengarah Bahagian (Khidmat Pengurusan) Jabatan Ukur dan Pemetaan Malaysia Tingkat 12, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170853	03-26170869
10	Pengarah Ukur Bahagian (Pemetaan Topografi Semenanjung) Jabatan Ukur dan Pemetaan Malaysia Tingkat 3 & 5, Bangunan Ukur Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170897	03-26983844
11	Pengarah Ukur Bahagian (Kartografi dan GIS) Jabatan Ukur dan Pemetaan Malaysia Tingkat 6, Bangunan Ukur Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170898	03-26170647

<b>A</b>	<b>IBU PEJABAT JUPEM</b>	<b>NO. TEL.</b>	<b>NO. FAKS.</b>
12	Pengarah Ukur Bahagian (Pemetaan Utiliti) Jabatan Ukur dan Pemetaan Malaysia Tingkat 4, Bangunan Ukur Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170742	03-26170984
13	Pengarah Ukur Bahagian (Pangkalan Data Geospatial Negara) Jabatan Ukur dan Pemetaan Malaysia Tingkat 7, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170901	03-26916989
14	Pengarah Ukur Bahagian (Perancangan dan Korporat) Jabatan Ukur dan Pemetaan Malaysia Tingkat 13, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170842	03-26170990
<b>B</b>	<b>JUPEM NEGERI</b>	<b>NO. TEL.</b>	<b>NO. FAKS.</b>
1	Pengarah Ukur dan Pemetaan Jabatan Ukur dan Pemetaan Johor Tingkat 7, 8 dan 9 Blok A, Wisma Persekutuan Jalan Ayer Molek 80000 Johor Bahru JOHOR	07-2231244	07-2238535
2	Pengarah Ukur dan Pemetaan Jabatan Ukur dan Pemetaan Kedah 1187 Jalan Raya 09000 Kulim KEDAH	04-4906166	04-4904223
3	Pengarah Ukur dan Pemetaan Jabatan Ukur dan Pemetaan Kelantan Jalan Hospital 15000 Kota Bharu KELANTAN	09-7481470	09-7443923

<b>B</b>	<b>JUPEM NEGERI</b>	<b>NO. TEL.</b>	<b>NO. FAKS.</b>
4	Pengarah Ukur dan Pemetaan Jabatan Ukur dan Pemetaan Melaka Jalan Taming Sari 74500 MELAKA	06-2822844	06-2847319
5	Pengarah Ukur dan Pemetaan Jabatan Ukur dan Pemetaan Negeri Sembilan Tingkat 7&8, Wisma Persekutuan Jalan Dato' Abdul Kadir 70000 Seremban NEGERI SEMBILAN	06-7623882	06-7672351
6	Pengarah Ukur dan Pemetaan Jabatan Ukur dan Pemetaan Pahang Jalan Tengku Muhamad 25050 Kuantan PAHANG	09-5668511	09-5685541
7	Pengarah Ukur dan Pemetaan Jabatan Ukur dan Pemetaan Perak Jalan Dato' Seri Ahmad Said Greentown 30450 Ipoh PERAK	05-2417181	05-2417151
8	Pengarah Ukur dan Pemetaan Jabatan Ukur dan Pemetaan Perlis Tingkat 6, Bangunan Persekutuan Persiaran Jubli Emas 01000 Kangar PERLIS	04-9772128	04-9772131
9	Pengarah Ukur dan Pemetaan Jabatan Ukur dan Pemetaan Pulau Pinang Tingkat 39, KOMTAR 10000 Georgetown PULAU PINANG	04-2611762	04-2635884
10	Pengarah Ukur dan Pemetaan Jabatan Ukur dan Pemetaan Selangor Tingkat 16-02 dan 17-01, Plaza Masalam No. 2 Jalan Tengku Ampuan Zabedah E9/E 40578 Shah Alam SELANGOR	03-55144000	03-55132614

<b>B</b>	<b>JUPEM NEGERI</b>	<b>NO. TEL.</b>	<b>NO. FAKS.</b>
11	Pengarah Ukur dan Pemetaan Jabatan Ukur dan Pemetaan Terengganu Tingkat 7 & 8, Wisma Persekutuan Jalan Sultan Ismail 20578 Kuala Terengganu TERENGGANU	09-6221144	09-6237188
12	Pengarah Ukur dan Pemetaan Jabatan Ukur dan Pemetaan Wilayah Persekutuan Kuala Lumpur / Putrajaya Tingkat 3 & 4, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170800	03-26938740
13	Pengarah Ukur dan Pemetaan Jabatan Ukur dan Pemetaan Labuan Tingkat 7, Blok 4 Kompleks Ujana Kewangan Peti Surat 86 87008 WILAYAH PERSEKUTUAN LABUAN	087-412068	087-417401
14	Pengarah Ukur Bahagian (Pemetaan Topografi Sabah) Jabatan Ukur dan Pemetaan Malaysia Tingkat 3, Blok B, Bangunan Kuwasa Jalan Karamunsing 88840 Kota Kinabalu SABAH	088-212835	088-231243
15	Pengarah Ukur Bahagian (Pemetaan Topografi Sarawak) Jabatan Ukur dan Pemetaan Malaysia Tingkat 7, Bangunan Sultan Iskandar Jalan Simpang Tiga 93578 Kuching SARAWAK	082-420763	082-245420

C	AGENSI-AGENSI LAIN (KADER)	NO. TEL.	NO. FAKS.
1	Pengarah Cawangan Pangkalan Udara dan Maritim Tingkat 8, Blok F Ibu Pejabat JKR Malaysia Jalan Sultan Salahuddin 50582 KUALA LUMPUR	03-26108888	03-26988187
2	Pengarah Pusat Infrastruktur Data Geospatial Negara (MaCGDI) Kementerian Sumber Asli dan Alam Sekitar (NRE) Aras 7, Lot 4G3, Presint 4 Pusat Pentadbiran Kerajaan Persekutuan Putrajaya 62574 PUTRAJAYA	03-88861111	03-88894851
3	Pengarah Institut Tanah dan Ukur Negara (INSTUN) Kementerian Sumber Asli dan Alam Sekitar (NRE) Behrang 35950 Tanjung Malim PERAK	05-4542825	05-4542837
4	Penolong Pengarah Kanan Kementerian Perumahan dan Kerajaan Tempatan Bahagian Perlaksanaan dan Penyelenggaraan Projek Unit Ukur Tanah Aras 8, No. 51 Persiaran Perdana, Presint 4 62100 PUTRAJAYA	03-88915000	03-88913182
5	Penolong Setiausaha (Ukur) Kementerian Sumber Asli dan Alam Sekitar (NRE) Aras 7, Lot 4G3, Presint 4 Pusat Pentadbiran Kerajaan Persekutuan Putrajaya 62574 PUTRAJAYA	03-88861111	03-88892672

C	AGENSI-AGENSI LAIN (KADER)	NO. TEL.	NO. FAKS.
6	Penolong Setiausaha Majlis Keselamatan Negara (MKN) Jabatan Perdana Menteri Bahagian Keselamatan dan Kedaulatan Maritim Aras 2, Bangunan Perdana Putra Pusat Pentadbiran Kerajaan Persekutuan Putrajaya 62502 PUTRAJAYA	03-88726817	03-88883021
7	Ketua Pengarah Agensi Remote Sensing Malaysia Kementerian Sains Teknologi dan Inovasi No. 13, Jalan Tun Ismail 50480 Kuala Lumpur	03-26973400	03-26973350
8	Ketua Setiausaha Kementerian Pertahanan Bahagian Pengurusan Sumber Manusia Cawangan Khidmat Awam Tingkat 2, Wisma Pertahanan Jalan Padang Tembak 50634 KUALA LUMPUR	03-20715656	03-26917217
9	Ketua Pengarah Jabatan Mineral dan Geosains (JMG) Ibu Pejabat, Lantai 20, Bangunan Tabung Haji Jalan Tun Razak 50658 KUALA LUMPUR	03-21611033	03-21611036
10	Ketua Pengarah Jabatan Perhutanan Semenanjung Malaysia (JPSM) Seksyen Pentadbiran dan Kewangan Jalan Sultan Salahuddin 50650 KUALA LUMPUR	03-26164488	03-26925657

C	AGENSI-AGENSI LAIN (KADER)	NO. TEL.	NO. FAKS.
11	<p>Ketua Pengarah Jabatan Laut Semenanjung Malaysia Peti Surat 12, Jalan Limbungan 42007 Pelabuhan Kelang Selangor</p>	03-33467777	03-31685289
12	<p>Ketua Pengarah Jabatan Penerangan Awam Bahagian Khidmat Pengurusan Aras 1-4, Blok Podium No. 27, Persiaran Perdana Presint 4 Pusat Pentadbiran Kerajaan Persekutuan 62618 PUTRAJAYA</p>	03-88714000	03-88901640
13	<p>Setiausaha Suruhanjaya Pilihan Raya Malaysia (SPRM) Bahagian Pengurusan Sumber Manusia Aras 4-5, Blok C, Kompleks C Pusat Pentadbiran Kerajaan Persekutuan 62502 PUTRAJAYA</p>	03-88724802	03-88880743
14	<p>Jabatan Laut Sarawak Kompleks Jabatan Laut Sarawak Lot 683, Seksyen 66, Jalan Utama, Tanah Puteh 93619 Kuching Sarawak</p>	082-484335/159	082-331778

### **Pertanyaan**

Untuk sebarang pertanyaan lanjut sila hubungi:

Urus Setia  
Bahagian Perancangan dan Korporat  
Jabatan Ukur dan Pemetaan Malaysia  
Tingkat 13, Wisma JUPEM  
Jalan Sultan Yahya Petra  
50578 Kuala Lumpur  
MALAYSIA  
TEL : 03 - 26170800  
FAKS : 03 - 26170990

### **Penafian**

Semua maklumat adalah tepat pada masa cetakan.

Data dan maklumat yang terkandung dalam laporan ini  
tidak boleh dijadikan sebagai bukti kepada apa jua bentuk tindakan perundangan

annual  
**REPORT 2014**

---

# CONTENT

## ANNUAL REPORT 2014

<b>1</b>	<b>MESSAGE FROM THE DIRECTOR OF SURVEY AND MAPPING MALAYSIA</b>	114
<b>2</b>	<b>CORPORATE PROFILE</b>	117
	DEPARTMENT'S TOP MANAGEMENT	119
	TOP MANAGEMENT PROFILE	120
	DEPARTMENT'S MANAGEMENT TEAM	123
	DEPARTMENT'S ORGANISATION CHART	130
	VISION, MISSION AND MOTTO	132
	OBJECTIVE AND FUNCTION	132
	CLIENT'S CHARTER	133
	CODE OF ETHICS	134
	LOGO	135
	DEPARTMENT'S SONG	136
<b>3</b>	<b>CORPORATE GOVERNANCE</b>	137
	HUMAN RESOURCE MANAGEMENT	138
	COURSES AND TRAINING	144
	JUPEM GEOPORTAL WEBSITE	147
	FEDERAL AND STATE HONORARY AWARDS RECIPIENTS	148
<b>4</b>	<b>2014 PERFORMANCE REPORT</b>	149
	<b>GEOSTATIC INFRASTRUCTURE</b>	150
	• GNSS Network Control And Measure	150
	• MyRTKnet	151
	• Tidal Observation	152
	• Network Levelling	154
	• Gravity Measurement	157
	• Astronomy	157
	<b>INTERNATIONAL BOUNDARIES</b>	159
	• Malaysia – Thailand Land Boundary	159
	• Malaysia – Indonesia Land Boundary	160
	• Malaysia – Indonesia Maritime Boundary	160
	• Malaysia – Singapore Maritime Boundary	161
	• Malaysia – Brunei Darussalam Land Boundary	162

<b>STATE BOUNDARIES</b>	162
<b>COURT CASE EXPERT WITNESS</b>	164
<b>MAP PUBLISHING</b>	165
• Data Acquisition	165
• Control Point Survey	165
• Database	166
• Topographic Map Updating	167
• Cartography	167
• Printing	168
• Utility Mapping	173
• Mapping Services	175
<b>CADASTRAL SURVEY</b>	176
• Land Titles Survey	176
• Checking of Licensed Land Surveyor (LLS) Survey	177
• Checking of Level I Strata Titles Survey	178
• Checking of Level II Strata Titles Survey	179
• CRM Control Points Establishment	180
<b>DEFENCE GEOSPATIAL DIVISION</b>	181
• Maps and Data Publication for Defence and Security	181
• Defence Geospatial Services	182
• Web Services	183
• Defence Geospatial Service Assistant in the Field	184
• uGeo for Defence Capability Development	185
<b>5 FINANCIAL REPORT</b>	187
Financial Management	188
• Operating Expenditure	189
• Development Expenditure	191
• Revenue	192
<b>6 AWARDS AND RECOGNITION</b>	195
<b>7 SEQUENCE OF EVENTS 2014</b>	201
<b>8 DEPARTMENT DIRECTORY</b>	209

# MESSAGE

DIRECTOR GENERAL OF SURVEY AND MAPPING MALAYSIA

**YBHG. DATUK SR AHMAD FAUZI BIN NORDIN  
PMW, DPMT, DSAP, JSM, SMZ, KMN**  
**Director General of Survey and Mapping Malaysia**

Assalamualaikum Warahmatullahi Wabarakatuh,

Salam Sejahtera dan Salam 1Malaysia

With all the highest gratitude to Allah S.W.T. and for His grace, JUPEM had successfully published the 2014 Annual Report. Thanks and congratulations to JUPEM personnel who had been involved directly and indirectly in contributing ideas, effort and ongoing commitment to complete the task and mandate entrusted to them. Retracing JUPEM events and achievements through the year 2014, many merits and awards were received, either internationally, nationally, ministerial or departmental level. The biggest merit at the international level in 2014 were the awarding of the Geospatial World Excellence Awards (Cadastral Survey) to JUPEM in conjunction with the Geospatial World Forum in Geneva in May 2014 and the Special Award by ESRI Malaysia to Defence Geospatial Division (DGD) in October 2014.

At the national level, JUPEM was conferred the National Geospatial Award (General Category) at the 6th National Symposium on Geospatial Information System (GIS) in March 2014, the Gold Award for Northern Territory Excellence Team Convention in June 2014, and the winner of the MOSTI Innovation Challenge and Commercial Conference 2014 exhibition.

In addition, JUPEM had immersed success at the ministerial level in 2014 with a dominated victory in the 1NRE Innovation Day organised by the Ministry of Natural Resources and Environment (NRE). The success qualified JUPEM to be the Overall Winner of the event in winning the whole Innovative and Creative Circle (ICC) and Innovation competition. This success was very encouraging and have proven that JUPEM is a highly competitive organisation.

In line with the public administration mega initiatives such as the Economic Transformation Programme (ETP) and the Government Transformation Programme (GTP) implemented by the government, JUPEM is always sensitive

in making improvement to the approaches and strategies consecutively to provide the best services to the customers. For example, in the case of ETP, there are 12 National Key Economic Areas (NKEA) which is the focus that mainly require the use of geospatial information in the implementation process. In this perspective, JUPEM as a geospatial information provider in the country has obviously and will continue to significantly contribute to the economic development of the country.

Simultaneously, JUPEM has embarked on the latest technology persistently to enhance and mainstream the geospatial data acquisition and management. The use of technology such as Global Navigation Satellite System (GNSS), Unmanned Aerial Vehicle (UAV), Geographic Information System (GIS) and cloud computing generally provide the infrastructure that supports the activities of cadastral surveying and topographic mapping in Malaysia, which not only save time and reduce costs, but also improve the quality of work effectively and productively. This is evidenced by the achievement of the target in the annual work target; clearly showing the increased achievement yearly.

I would like to express my appreciation and thanks and to congratulate all officers and JUPEM staff for their collaboration to succeed and to make JUPEM proud. May we all continue to be competent and strive to become an excellent, glorified and distinct departmental personnel. I do hope that these successes shall be the catalyst and essence for all to move and strive forward to meet the needs of customers and to improve the department service quality in specific and public service in general.

JUPEM personnel need to have creative and thoughtful mind in finding new ideas to stimulate innovative product solution and invention from the data generated. This can be carried out by extending the collaboration between the department with other agencies and the private sectors through the National Blue Ocean Strategy approach (NBOS) towards the realisation of the country's transformation programme. Accordingly, increasing JUPEM personnel efficiency should also be given priority so as to contribute the best services to the people and to the country via the development projects implemented.

Finally, I would like to call upon all JUPEM personnel to continue to be united and step up efforts to become a strong team with high confidence and determination to uphold JUPEM and continue its success. I also take this opportunity to thank the 2014 Annual Report Editorial Committee for the publication of this annual report. I wish this annual report will be fully utilised by JUPEM personnel and the parties concerned.

Thanks you and best regards.



DIRECTOR GENERAL OF SURVEY AND MAPPING MALAYSIA





corporate  
**PROFILE**

---



## DEPARTMENT'S TOP MANAGEMENT



**DATO' SR HASAN  
BIN JAMIL**

Deputy Director General of  
Survey and Mapping I

- **DATUK SR AHMAD FAUZI  
BIN NORDIN**
- Director General of Survey and
- Mapping Malaysia
- 

**DATO' SR MOHD NOOR  
BIN ISA**

Deputy Director General of  
Survey and Mapping II



**YBHG. DATUK SR AHMAD FAUZI  
BIN NORDIN, PMW, DPMT, DSAP, JSM,  
SMZ, KMN**

**Director General of Survey and Mapping  
Malaysia**

YBhg. Datuk Sr Ahmad Fauzi bin Nordin was appointed as the Director General of Survey and Mapping Malaysia on 10 April 2014.

He graduated with MSc in Geoinformatics from Universiti Teknologi Malaysia, Postgraduate Diploma in Geographical Information System (GIS) from ITC, Netherlands and Bachelor of Surveying (Land) from Universiti Teknologi Malaysia.

He has served as Kuala Kangsar District Surveyor, Assistant Director of Topographic Survey (Northern Region), Deputy Director of Survey Kedah/Perlis, Assistant Director of Cadastral Survey (Land Planning), Deputy Director of Survey (Special Unit) Pahang, Deputy Director of Survey Perak, Director of Topographic Survey Sarawak, Deputy Director of Topographic Survey I Peninsular, Director of Survey F.T. Kuala Lumpur, Principal Assistant Director of Survey (Land Titles), Director of Survey Selangor, Director of Survey (Geodetic Division), and Director of Survey (Cadastral Division). He was appointed as the Director of Survey (Mapping Division) and later as the Deputy Director General of Survey and Mapping Malaysia I on 17 June 2009. On 10 April 2014 he was appointed as Director General of Survey and Mapping Malaysia.

He is also a Fellow of the Royal Institution of Surveyors Malaysia (RISM), and RISM President for the 2011/2012 session, Chairman Malaysian Building Industry Presidents Council (BIPC) for the 2011/2012 session, Chairman of the Land Surveyors Board Malaysia (LSB) and a Registered Land Surveyor.

## TOP MANAGEMENT PROFILE

YBhg. Dato' Sr Hasan bin Jamil was appointed as Deputy Director General of Survey and Mapping I on 10 April 2014.

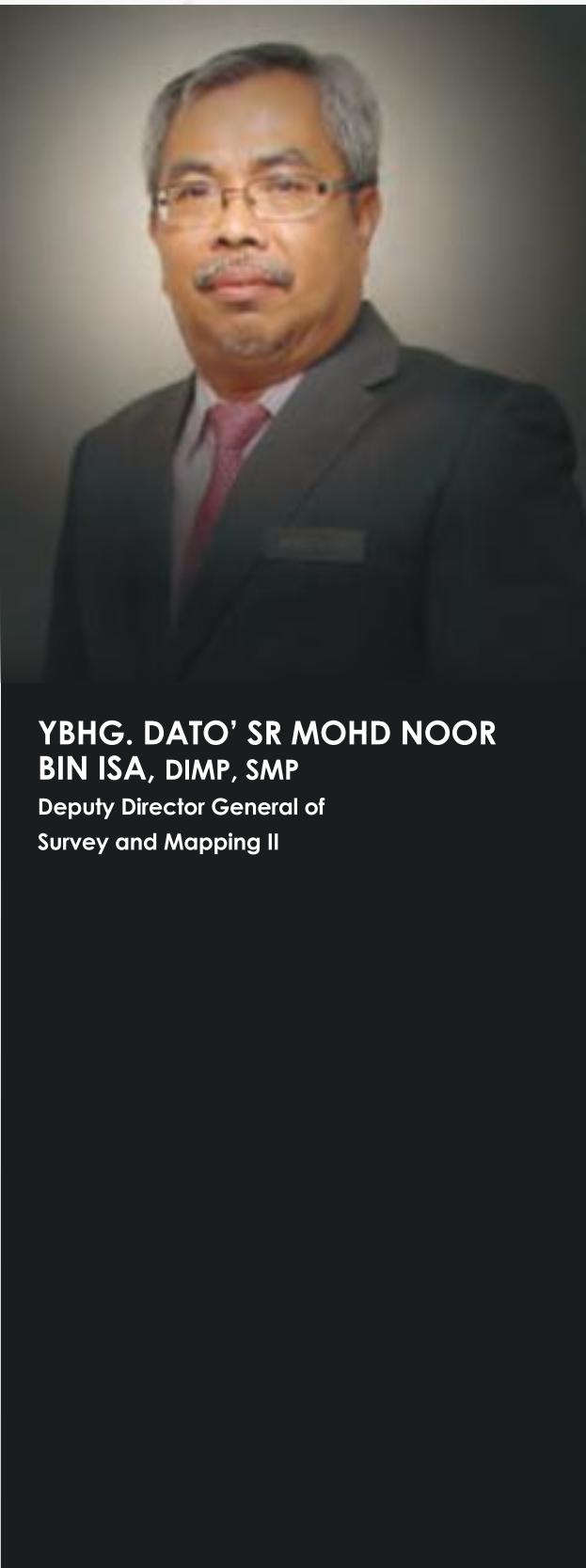
He holds a MSc in Geographical Information System (GIS) from the University of Edinburgh, United Kingdom and a Bachelor of Surveying (Land) from Universiti Teknologi Malaysia.

He has served as Surveyor in the Terengganu Survey Department, Assistant Director of Survey Kelantan, Southern Kelantan District Surveyor Machang, Assistant Director of Topographic Survey Sabah, Director of Topographic Survey Sabah, Assistant Director of Cadastral Survey, Director of Survey Pulau Pinang, Director of Survey Selangor, Director of Survey (Geodetic Division), Director of Survey (Boundary Affairs Section), Director of Survey and Mapping F.T. Kuala Lumpur/Putrajaya, and Director of Survey (Mapping Division). He was appointed as Deputy Director General of Survey and Mapping II on 16 November 2010 and later as Deputy Director General of Survey and Mapping I.

He is also the President of the Royal Institution of Surveyors Malaysia (RISM) for 2014/2015 session, Deputy Chairman of the Land Surveyors Board Malaysia (LSB) and a Registered Land Surveyor.



**YBHG. DATO' SR HASAN  
BIN JAMIL, DIMP, JMW, AMN**  
Deputy Director General of  
Survey and Mapping I



**YBHG. DATO' SR MOHD NOOR  
BIN ISA, DIMP, SMP**  
**Deputy Director General of  
Survey and Mapping II**

YBhg. Dato' Sr Mohd Noor bin Isa was appointed as Deputy Director General of Survey and Mapping II on 6 May 2014.

He holds a Bachelor of Surveying (Land) from Universiti Teknologi Malaysia. He has served as Trainee Surveyor (Perak Survey Department), District Surveyor for Northern Perak, District Surveyor for Western Pahang, Surveyor Special Unit Secretariat, Assistant Director of Survey (Coordination and Development), Principal Assistant Director of Survey (Training), and Principal Assistant Director of Survey (Coordination and Development).

He has also served as Director of Survey (Planning, Research, and Development), Director of Survey and Mapping Pahang, Director of Topographic Survey Sabah, and Director of Survey (Mapping Division).

He is also the Chairman of the Geomatics and Land Surveying Division (GLS), Royal Institution of Surveyors Malaysia (RISM) for the 2014/2015 session and a Registered Land Surveyor.

## DEPARTMENT'S MANAGEMENT TEAM



**BRIGEDIER JENERAL HJ ABU SUFIAN BIN HAJI AHMAD**  
(Starting 27 June 2014)

**BRIGEDIER JENERAL DATO' ZAHARIN BIN DIN**  
Director (Defence Geospatial Division)



**HAJI ABDUL HAMID BIN HASAN**  
Director (Management Services Division)



**ZARIFAH BINTI ZULGHAFFAR**  
Legal Advisor



**TRIVEINEI A/P SUNDARAM**  
Integrity Unit Head



**Sr TAN AH BAH**  
Director of Survey  
(Boundary Affairs Division)



**Sr DR. AZHARI BIN MOHAMED**  
Director of Survey  
(Geodetic Survey Division)



**DATO' Sr ABDUL AZIZ BIN HAJI JANTAN**  
(Starting 14 July 2014)  
**Sr JOHN ELVIS KOH**  
Director of Survey  
(Peninsular Topography Mapping Division)



**Sr HAJI MOHAMAD KAMALI BIN ADIMIN**  
(Starting 14 July 2014)  
Director of Survey  
(Coordinating and Mapping Policy Division)



**Sr HAJI RAMLI BIN NOR**  
Director of Survey  
(Planning and Corporate Division)



**Sr MOHAMMAD ZAKI BIN  
MOHD GHAZALI**  
Director of Survey  
(Sabah Topography Mapping Division)



**Sr DR. MOHD YUNUS BIN MOHD YUSOFF**  
(Starting 14 July 2014)  
**Sr ZOHER BIN NORMANBHoy**  
Director of Survey  
(Utility Mapping Division)



**HAJI ZAHARI BIN ZAMLOPE**  
(Starting 22 September 2014)  
**Sr SOHAIME BIN RASIDI**  
Director of Survey  
(Sarawak Topography Mapping Division)



**Sr WAN MOHAMAD DARANI BIN  
AB. RAHMAN**  
(Starting 14 July 2014)  
**Sr HAJI ALI BIN AHMAD**  
Director of Survey  
(Cartography and GIS Division)

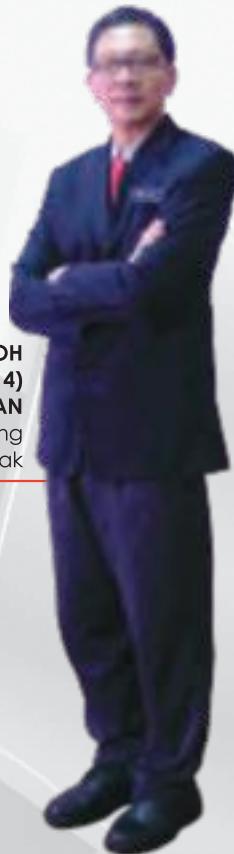


**Sr MOHD LATIF BIN ZAINAL**  
(Starting 14 July 2014)  
Director of Survey  
(National Geospatial Database Division)

**Sr DR. TENG CHEE HUA**  
Director of Survey  
(Cadastral Division)



**Sr JOHN ELVIS KOH**  
(Starting 14 July 2014)  
**Sr JASNI BIN A. RAHMAN**  
Director of Survey and Mapping  
Perak



**Sr HAJI MOHAMMAD YUNUS BIN MD YUSOF**  
(Starting 14 July 2014)  
**Sr ABDUL AZIZ BIN JANTAN**  
Director of Survey and Mapping  
Pahang



**Sr HAJI ALI BIN AHMAD**  
(Starting 14 July 2014)  
**Sr WAN ZAINUDDIN BIN WAN YUSUFF**  
Director of Survey and Mapping  
Johor





**Sr WAN ZINUDDIN BIN WAN YUSUFF**  
(Starting 14 July 2014)  
**Sr DR ZAINAL BIN A. MAJEED**  
Director of Survey and Mapping  
Kelantan



**Sr JASNI BIN A. RAHMAN**  
(Starting 14 July 2014)  
**Sr HAJI HAMDANI BIN HAJI SADIMAN**  
Director of Survey and Mapping  
Negeri Sembilan



**Sr AHAMAD BIN ZAKARIA**  
Director of Survey and Mapping  
Selangor



**Sr AHMAD AZMAN BIN GHAZALI**  
Director of Survey and Mapping  
Pulau Pinang



**MD. ZAKI BIN AD. WAHID**  
Director of Survey and Mapping  
W.P. Kuala Lumpur/Putrajaya



**Sr NG ENG GUAN**  
(Starting 14 July 2014)  
**Sr HAJI MOHAMMAD YUNUS BIN MD YUSOF**  
Director of Survey and Mapping  
Kedah



**Sr HAMDAN BIN AB. AZIZ**  
(Starting 1 February 2014)  
**Sr HAJI ABD RAHMAN BIN MOHD DON**  
Director of Survey and Mapping  
Terengganu



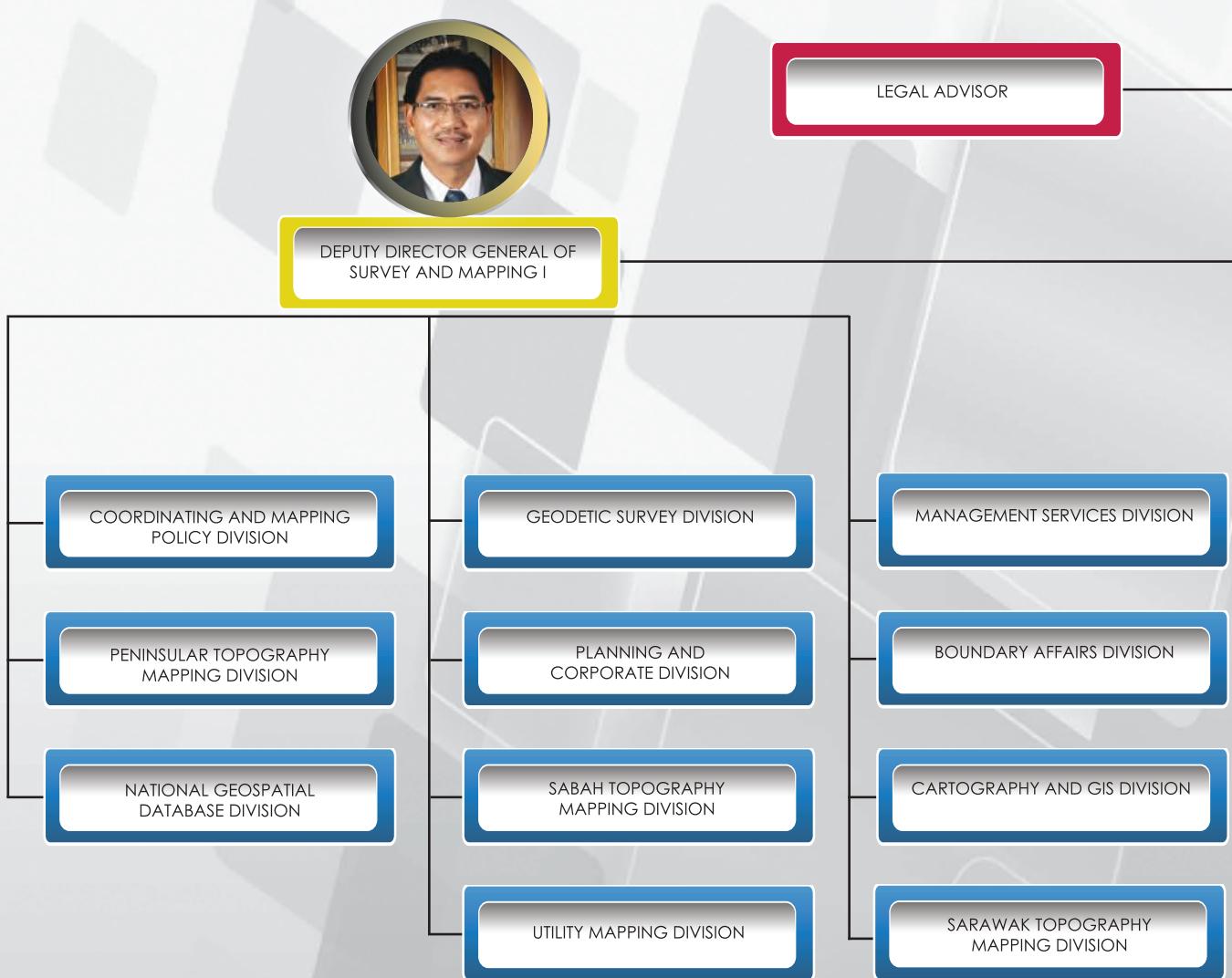
**AHMAD TARMIZI BIN BASTANI**  
Director of Survey and Mapping  
Melaka



**Sr HAJI CHE SULAIMAN BIN MAT YUNUS**  
(Starting 14 July 2014)  
**Sr TAUFEK BIN KASSIM**  
**Sr JAMILAH BINTI IBRAHIM**  
Director of Survey and Mapping  
Perlis

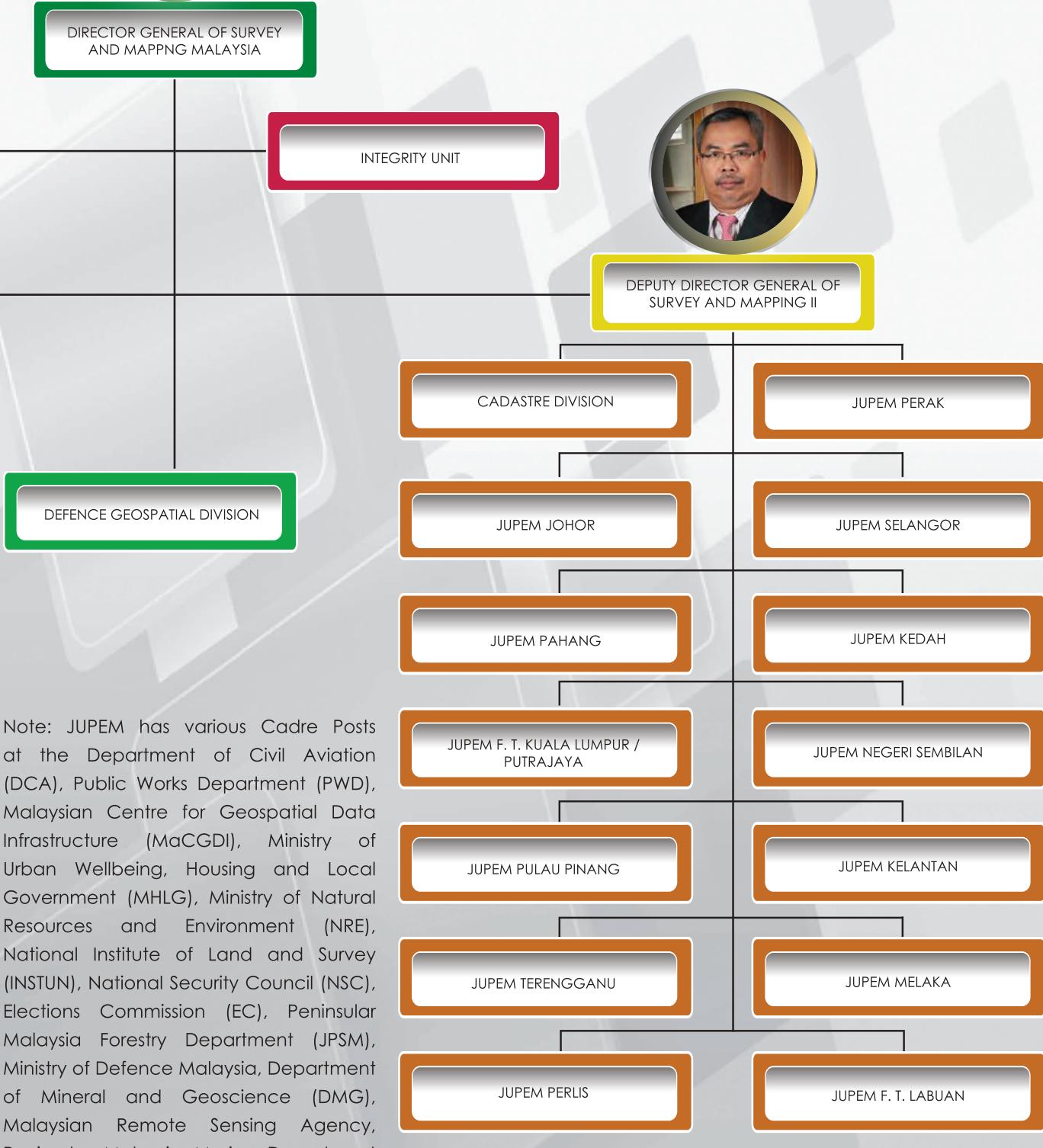


**SUAIMI BIN AHMAD**  
Director of Survey and Mapping  
W. P. Labuan





## DEPARTMENT'S ORGANISATION CHART



# Vision

Making JUPEM eminent in the provision of survey and mapping services as well as geospatial data management in order to meet the nation's aspiration.

# Motto

The catalyst for national development and citizen's prosperity

# Mission

Providing quality survey and mapping services as well as geospatial data management through the best systems, competent workforce and conducive work environment.

# Objective

- Ensure that the cadastral survey and mapping products and services meet the quality system as well as the needs of the customers.
- Ensure the establishment and maintenance of high quality and updated Cadastral Survey and Mapping Database to meet the needs of the national geospatial data infrastructure.
- Make JUPEM a centre of excellence and reference in the field of cadastral survey and mapping.
- Ensure the determination, demarcation and surveying of state and international boundaries meet the needs of the state administration as well as safeguards the nation's sovereignty.

# Function

- Advising the government in the field of cadastral survey and mapping as well as the state and international boundaries.
- Providing complete and conclusive cadastral survey information for the purpose of issuing land titles, strata and stratum.
- Managing the cadastral survey and mapping database efficiently.
- Publishing topographic, cadastral, thematic, and utility maps for planning, natural resources management, environmental conservation, development, monitoring, and security purposes.
- Determining, demarcating, surveying, and maintaining the state and international boundaries in order to protect national sovereignty.
- Providing geodetic infrastructure for cadastral surveying, mapping, engineering and scientific research purposes.

## client's CHARTER

- Completing the cadastral survey work up to the preparation of the Certified Plan within a period not exceeding 60 days from the date of receipt of a complete and orderly Requisition of Survey.
- Ensuring that the verification of the work performed by the Licensed Land Surveyor (LLS) be completed within 60 days from the date of submission of a complete and orderly document.
- Processing of Strata Plan within 30 days and Certified Strata Plan within 50 days from the date of receipt of a complete and orderly application.
- Ensuring that the issuance of lot numbers are done in a period not exceeding 7 days from the date of receipt of a complete and orderly application from Licensed Land Surveyors.
- Preparing and providing survey data for the preparation of land title documents to the Land Office / Office of the Director of Lands and Mines within 7 days from the receipt of a complete and orderly application.
- Ensuring that classified geospatial documents are supplied within 2 days from the receipt of security clearance.
- Ensuring that MyRTKnet post-processed data can be managed and supplied within 4 hours.
- Ensuring that any application to purchase unrestricted geomatics information can be managed and supplied within 1 day.
- Ensuring that any coordinate transformation, coordinate conversion, map projection, and geoid interpolation service application can be managed and supplied within 1 day.
- Ensuring that all application services/purchase of each copy of the survey/non-restricted map data at the JUPEM counter can be managed within 1 hour.
- Ensuring that survey data can be accessed and obtained through e-commerce at any time.
- Making payments of bills and invoices not exceeding 14 days from the date of receipt of completed applications.

## code OF ETHICS

- Trustworthy and honest in the discharge of duties and responsibilities without abusing power and position.
- Always patient, calm and steadfast in all situation.
- Truthful, transparent and sincere in carrying out any duties.
- Disciplined and with high integrity.
- Confident, accurate, fair and consistent in decision-making.
- Always practice the characteristics of creativity, innovativeness, motivation, competitiveness and accountability.
- Foster a spirit of cooperation, goodwill, and affection at all levels.
- Proud to be a denizen of JUPEM and always striving to promote the dignity and image of the department.
- Provide efficient and quality services.
- Strive to ensure that the department's products are of quality and fulfils customer requirements.
- Vigilant in the handling of confidential information without exposing national secrets to parties unauthorised to received it.



## logoDefinition

- JUPEM's logo design consists of three basic forms of dots, circle and orbit line. These points are separated in two by the orbit line that reflects JUPEM's two main activities, which are the cadastral survey and mapping survey activities.
- The orange colour signifies joy, glory and JUPEM's sensitivity to customer's need and acknowledges the existence and importance of JUPEM to the nation and community.
- The green colour is the official colour of the department and has been chosen to reflect JUPEM as always caring and giving serious attention to the aspects of nature in the preservation of a healthy environment.
- The dots appearance gives an indication that JUPEM is using electronic technology, networking system to enhance its survey, and mapping information.
- The orbit line is emphasizing the importance of communication, information dissemination and networking.

Overall, JUPEM's logo is displayed as more energetic, dynamic, progressive and able to compete universal challenges, especially in the provision of survey and mapping infrastructure to support the National Development policy.

# DEPARTMENT'S SONG

## JUPEM MAJU DAN JAYA

Positif Penuh Beretika  
Realistik Kita Menuju Satu Wawasan  
Perkhidmatan Cekap dan Berkesan  
Kecemerlangan Dijanjikan

Kualiti Teras Perkhidmatan  
Jabatan Ukur dan Pemetaan Malaysia  
Kemuafakatan Prihatin dan Peka  
Iltizam Mulia Visi Jaya

Pengukuran dan Pemetaan  
Tugas Diamanahkan  
Adil Saksama dan Layanan Mesra  
Jadi Amalan

JUPEM Warga Penuh Setia  
Menabur Bakti Budi dan Jasa  
Menyumbang Pembangunan Negara  
Terus Berjaya



corporate  
**GOVERNANCE**

---

## HUMAN RESOURCE MANAGEMENT

### Personnel

JUPEM had restructured its organisation based on 'Zero Based' and was approved through Establishment Warrant No. E128 of Year 2013 effectively from 1 October 2013. In accordance to the warrant, a total of 4996 posts had been approved.

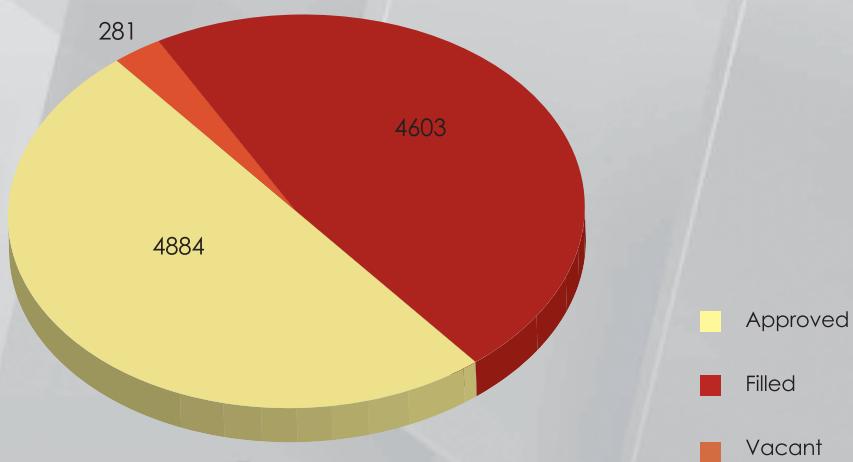
Meanwhile, the Assistant Surveyor scheme was improved with the increased ratio for the promotion of Assistant Surveyor JA29, JA36 and JA38 through Personnel Warrants as follows:

- No. E181 of Year 2013 (Effectively 1 Oct. 2013 – 31 Dec. 2013)
- No. E34 of Year 2014 (Effectively 1 Jan. 2014 – 14 Jan. 2014)
- No. E35 of Year 2014 (Effectively 15 Jan. 2014)

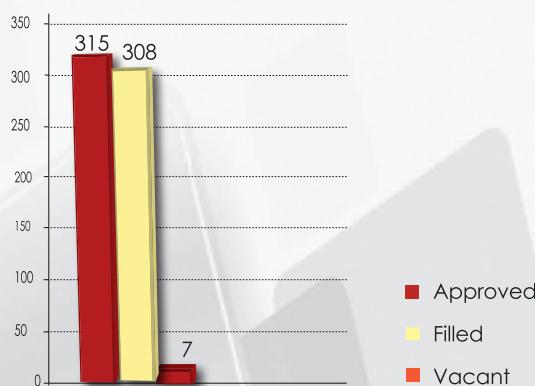
Until 31 December 2014, JUPEM had 4884 personnel. From the total, 4603 posts were filled inclusive of the Premier Grade, Management and Professional Group and the Implementer Group.

GROUP	GRADE	APPROVED	FILLED	VACANT
PREMIER GRADE	JUSA A, B, C	11	11	0
MANAGEMENT AND PROFESSIONAL	54	19	19	0
	48-52	72	71	1
	41-44	213	207	6
IMPLEMENTER GROUP	17-38	2,189	2,092	97
	1-16	2,380	2,203	177
	<b>TOTAL</b>	<b>4,884</b>	<b>4,603</b>	<b>281</b>

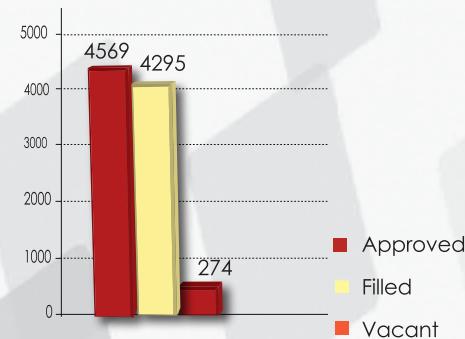
Distribution of Filled Post for Year 2014



Distribution of Posts Filled For Management and Professional Group



Distribution of Posts Filled For Implementer Group



#### Cadre Staffing

JUPEM has 176 cadre posts in various government agencies positioned in Ministry of Natural Resources and Environment (NRE), National Centre for Geospatial Data Infrastructure (MaCGDI), Public Works Department (PWD), National Institute of Land and Survey (INSTUN), Ministry of Urban Wellbeing, Housing and Local Government (MHLG), National Security Council (NSC), Election Commission (EC), Department of Mineral and Geoscience (DMG), Peninsular Malaysia Forestry Department (PMFD), Peninsular Malaysia Marine Department (PMMD), Sarawak Marine Department, Department of Civil Aviation (DCA), Malaysian Remote Sensing Agency (MRSA), and Ministry of Defence.

The number of JUPEM cadre posts in government agencies is as follows:

NO.	DEPARTMENT	APPROVED	FILLED	VACANT
1	Ministry of Natural Resources and Environment (NRE)	1	1	0
2	National Centre for Geospatial Data Infrastructure (MaCGDI)	35	35	0
3	Public Works Department (PWD)	22	22	0
4	National Institute of Land and Survey (INSTUN)	29	26	3
5	Ministry of Urban Wellbeing, Housing and Local Government (MHLG)	16	16	0
6	National Security Council (NSC)	2	2	0
7	Election Commission (EC)	1	1	0
8	Department of Mineral and Geoscience (DMG)	38	37	1
9	Peninsular Malaysia Forestry Department (PMFD)	5	4	1
10	Peninsular Malaysia Marine Department (PMMD)	2	2	0
11	Sarawak Marine Department	11	9	2
12	Department of Civil Aviation (DCA)	1	1	0
13	Malaysian Remote Sensing Agency (MRSA)	10	6	4
14	Ministry of Defence	3	3	0
<b>TOTAL</b>		<b>176</b>	<b>165</b>	<b>11</b>

The details distribution of cadre posts according to groups is as follows:

NO.	POST (MANAGEMENT AND PROFESSIONAL)	GRADE	APPROVED	FILLED	VACANT
1	Surveyor	J54	1	1	0
2	Surveyor	J52	2	2	0
3	Surveyor	J48	10	10	0
4	Surveyor	J44	13	13	0
5	Surveyor	J41	24	21	3
6	Geospatialist	J44	1	1	0
7	Geospatialist	J41	9	9	0
		<b>TOTAL</b>	<b>60</b>	<b>57</b>	<b>3</b>

NO.	POST (IMPLEMENTER)	GRADE	APPROVED	FILLED	VACANT
1	Assistant Surveyor	JA38	2	1	1
2	Assistant Surveyor	JA36	7	6	1
3	Assistant Surveyor	JA29	107	101	6
		<b>TOTAL</b>	<b>116</b>	<b>108</b>	<b>8</b>

#### Promotions

Acting/promotion exercise throughout year 2014 involve 194 staff comprising 62 from the Management and Professional Group and 132 from the Implementer Group.

#### Promotion Board: Management and Professional Group

SCHEME OF SERVICE	PROMOTION / ACTING TO GRADE	PROMOTION	ACTING	TOTAL
Surveyor Premier Grade B	Premier Grade A	1	1	1
Surveyor Premier Grade C	Premier Grade B	2	2	2
Surveyor Grade J54	Premier Grade C	6	6	6
Surveyor Grade J52	J54	6	6	6
Surveyor Grade J48	J52	14	14	14
Surveyor Grade J44	J48	10	10	10
Surveyor Grade J41	J44	23	23	23
<b>TOTAL</b>				<b>62</b>

### Promotion Board: Implementer Group

SCHEME OF SERVICE	PROMOTION / ACTING TO GRADE	PROMOTION	ACTING	TOTAL
Assistant Surveyor, JA36	JA38	0	2	2
Assistant Surveyor, JA29	JA36	40	12	52
Assistant Surveyor, JA29 (KUP)	JA36	28	0	28
Assistant Surveyor, JA29 (TBBK)	JA36	12	0	12
Survey Technician, J17 (TBBK)	J22	28	0	28
Administrative Assistant (P/O), N22	N26	1	0	1
Administrative Assistant (P/O), N17 (TBBK)	N22	2	0	2
Administrative Assistant (Finance), W17	W22	1	0	1
Administrative Assistant (Store), N17 (TBBK)	N22	1	0	1
Production Assistant, N17 (KUP)	N22	5	0	5
<b>TOTAL</b>		<b>118</b>	<b>14</b>	<b>132</b>

\*TBBK : Time Base Berasaskan Kecemerlangan

\*KUP : Khas Untuk Penyandang

### Retirement

Throughout year 2014, a total of 161 staff of various grades had retired covering compulsory retirement, optional retirement and died in service. The details are as shown in the table below:

#### Compulsory Retirement

No.	POST/GRADE	TOTAL
1	Surveyor Premier Grade A	1
2	Geospatialist J48	1
3	Assistant Surveyor JA38	4
4	Assistant Surveyor JA36	1
5	Administrative Assistant N32	1
6	Assistant Surveyor JA29	2
7	Survey Technician J22	25
8	Administrative Assistant (P/O) N22	5
9	Administrative Assistant (Finance) W22	1
10	Administrative Assistant N17	1
11	Operation Assistant N14	2
12	Security Guard KP11	1
13	General Assistant H11	5
14	Driver R6	4
15	General Office Assistant N4	1
16	General Workers R4	38
	<b>TOTAL</b>	<b>93</b>

### **Optional Retirement**

<b>NO.</b>	<b>POST/GRADE</b>	<b>TOTAL</b>
1	Surveyor J54	2
2	Surveyor J48	1
3	Surveyor J41	2
4	Assistant Surveyor JA38	2
5	Assistant Surveyor JA36	5
6	Assistant Surveyor JA29	8
7	Survey Technician J26	1
8	Survey Technician J22	10
9	Administrative Assistant N22	5
10	Administrative Assistant N17	1
11	Operational Assistant N14	2
12	Security Guard KP11	1
13	General Assistant H17	1
14	General Assistant H11	3
15	Driver R6	1
16	General Workers R4	14
<b>TOTAL</b>		<b>59</b>

### **Died in Service**

<b>NO.</b>	<b>NAME</b>	<b>POST/GRADE</b>	<b>STATE / SECTION</b>
1	Abu Mansor bin Mohd Nor	Assistant Surveyor JA38	JUPEM Negeri Sembilan
2	Roslan bin Shamsuddin	Assistant Surveyor JA36	Planning and Corporate Division
3	Ayub bin Mohd Noah	Assistant Surveyor JA36	JUPEM Johor
4	Khadijah binti Abdul Manaf	Assistant Surveyor JA29	JUPEM Pahang
5	Mohd Rodzi bin Md Noor	Assistant Surveyor JA29	JUPEM Kedah
6	Tg. Sharun bin Tg. Hussin	Administrative Assistant N11	JUPEM Terengganu
7	Azizan bin Seman	General Assistant H11	JUPEM Perlis
8	Ibrahim bin Mansor	General Assistant H11	Peninsular Topography Mapping Division (Western Region)
9	Pidong @ Pidu bin Barhama	General Assistant H11	Sabah Topography Mapping Division (Tawau Region)

## **Disciplinary Action**

The department Disciplinary Action Management is an operating procedure meant to control the discipline of JUPEM staff that involves warnings, fines, forfeiture of emoluments, deferment of salary movement, reduction of salary, demotion and dismissal. The department is always cognizant of the misconduct committed by the staff, and take appropriate action based on the Public Officers Regulations 1993 (Conduct and Discipline).

In the year 2014, 13 disciplinary cases were reported and as many as eight cases were resolved. Meanwhile, a total of five cases were still pending with one case in the Management Group Disciplinary Board (No. 2) and four cases in the Support Group Disciplinary Board (No. 1 and No. 2).

**The following is the type of offences and case status throughout year 2014:**

TYPE/FORM OF OFFENCE	SETTLED CASES		CASES STILL IN ACTION	
	Management and Professional Group	Implementer Group	Management and Professional Group	Implementer Group
Absent from work	0	3	0	2
Court case	0	3	1	2
Absent from work and could not be traced	0	1	0	0
Surcharge	0	1	0	0
<b>TOTAL</b>	<b>0</b>	<b>8</b>	<b>1</b>	<b>4</b>

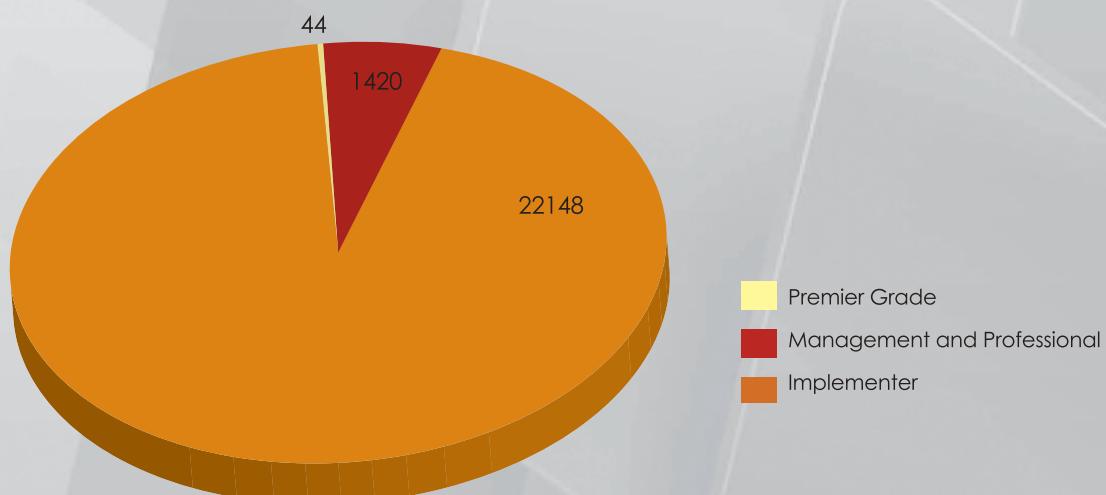
## COURSES AND TRAINING

Continuous training is being implemented to improve the skills and knowledge of JUPEM's staff. Many opportunities were provided to staff for training, be it at the academic level or in-service training that focuses on the enhancement of skills in line with the department's modernisation and rapid-changing environment. Through this method, JUPEM would be able to produce expert and skilled workforce from amongst its own staff to handle and manage geospatial information as well as in other areas of management.

**Numbers of Man-Days For Courses/Training for the Year 2014**

NO.	COURSE FIELD	NUMBER OF DAYS			TOTAL
		PREMIER GRADE	MANAGEMENT & PROFESSIONAL	IMPLEMENTER	
1	Mind Transformation Program (Compulsory Course)	0	0	9	9
2	Survey and Mapping Management	11	465	2706	3182
3	Human Resources Management	11	533	10957	11501
4	Financial Management	11	26	713	750
5	Quality and Productivity	0	121	1116	1237
6	Information Technology and Communication (ICT)	0	71	1798	1869
7	Self-development	11	172	4768	4951
8	Language	0	32	81	113
<b>TOTAL</b>		<b>44</b>	<b>1420</b>	<b>22148</b>	<b>23612</b>

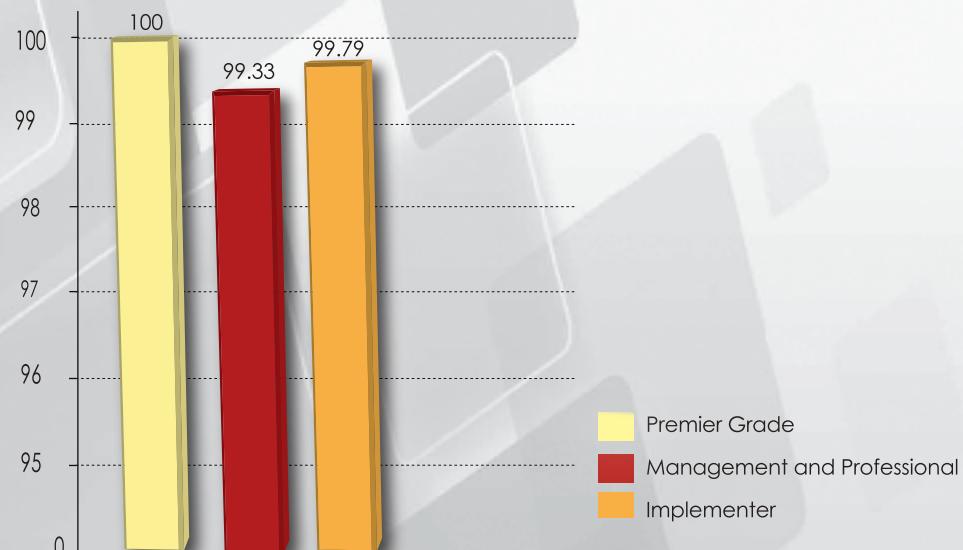
**Distribution of the Numbers of Man-Days For Courses/Training for the Year 2014**



**Number of Staff Attending Courses for 7 Days**

NO.	GRADE / GROUP	NUMBER OF POSTS	NUMBER OF POSTS FILLED	SHORT COURSES			NUMBER OF STAFF ATTENDING LONG COURSES > 3 MONTHS
				NUMBER OF STAFF ATTENDING > 7 DAYS A YEAR	NUMBER OF STAFF ATTENDING < 7 DAYS A YEAR	NUMBER OF STAFF NOT ATTENDING COURSES	
1	Premier Grade	11	11	11	0	0	0
2	Management & Professional	304	297	286	2	0	9
3	Implementer	4569	4295	4282	1	8	4
	<b>TOTAL</b>	<b>4884</b>	<b>4603</b>	<b>4579</b>	<b>3</b>	<b>8</b>	<b>13</b>

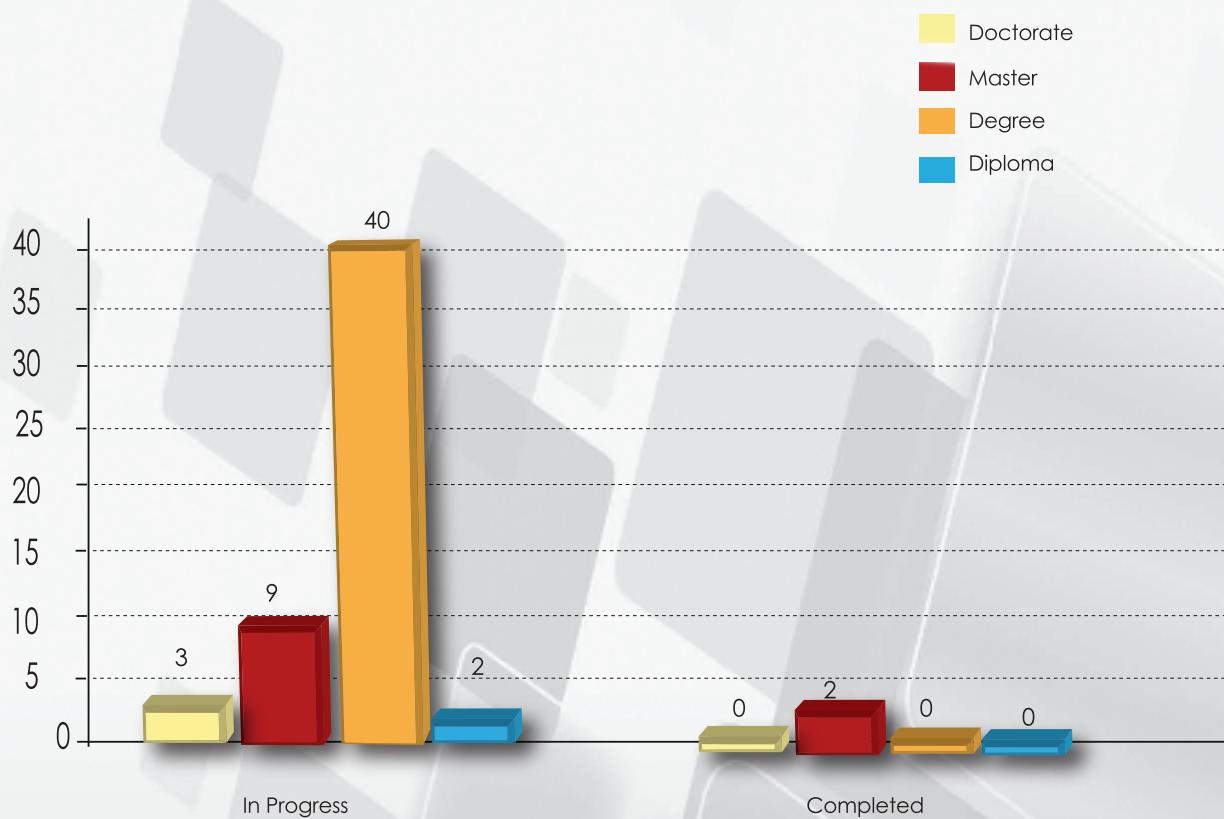
**Distribution of Staff Attending Courses for 7 Days**



**Number of Staff Furthering Studies in 2014**

NO.	ACADEMIC LEVEL	IN PROGRESS		COMPLETED		TOTAL
		Part Time	Full Time	Part Time	Full Time	
1	Doctorate	3	0	0	0	3
2	Master	8	1	2	0	11
3	Degree	1	39	0	0	40
4	Diploma	2	0	0	0	2
	<b>TOTAL</b>	<b>14</b>	<b>40</b>	<b>2</b>	<b>0</b>	<b>56</b>

**Distribution of Staff Furthering Studies in 2014**



#### JUPEM GEOPORTAL WEBSITE

JUPEM website [www.jupem.gov.my](http://www.jupem.gov.my) or JUPEM Geoportal is being constantly updated from time to time and is an important medium that connects JUPEM with its customers. The JUPEM Geoportal is a step forward in ensuring that JUPEM's corporate governance is more efficient and consistently meeting customer's requirements. Through the portal, JUPEM can fulfil the nation and customer's aspirations in empowering ICT by providing various centralised geospatial information for the purpose of online management system and dissemination of information, realising the concept of e-government, performing transaction through e-commerce, and providing online backup facility.

Product	Number of Online Transactions 2014												Total
	Jan	Feb	Mac	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	
Mapping	0	0	0	0	0	1	0	0	0	0	2	1	4
Cadastre	3874	4156	5229	5964	6289	5662	6118	6246	5932	5799	6187	4806	66262
Geodesy	149	120	210	274	247	234	239	293	233	236	233	203	2671
<b>Total</b>	<b>4023</b>	<b>4276</b>	<b>5439</b>	<b>6238</b>	<b>6536</b>	<b>5897</b>	<b>6357</b>	<b>6539</b>	<b>6165</b>	<b>6035</b>	<b>6422</b>	<b>5010</b>	<b>68937</b>



**JUPEM Geoportal,  
Official Website**



**Facebook**



**JUPEM Twitter**

**FEDERAL AND STATE HONORARY AWARDS RECIPIENTS**

NO.	OFFICER NAME	POST / GRADE	DIVISION / JUPEM STATE	AWARD RECEIVED
1	Mr. Wai Ah Chong	Assistant Surveyor JA38	F. T. Kuala Lumpur/ Putrajaya	Pingat Pangkuan Negara (PPN)
2	Mr. Lim Yew Min	Assistant Surveyor JA38	F. T. Kuala Lumpur/ Putrajaya	Pingat Pangkuan Negara (PPN)
3	Mr. Mahmud Bin Hassan	Assistant Surveyor JA29	Pulau Pinang	Pingat Jasa Kebaktian (PJK)
4	Mr. Joned Bin Saad	Assistant Surveyor JA29	Pulau Pinang	Pingat Jasa Kebaktian (PJK)
5	Mr. Mohd Khair Bin Ahmad	Assistant Surveyor JA29	Melaka	Pingat Jasa Kebaktian (PJK)
6	Mr. Ghazali Bin Sulaiman	General Assistant H11	Selangor	Pingat Pangkuan Selangor (PPS)
7	Mr. Atan Bin Abdan	Driver H11	Melaka	Pingat Bakti Melaka (PBM)

# **2014 PERFORMANCE**

---

## report

## GEODETIC INFRASTRUCTURE

### GNSS NETWORK CONTROL AND MEASURE

The measurement method using Global Satellite Navigation System (GNSS) is an efficient, effective and up-to-date method for obtaining the position of a point on the earth's surface.

JUPEM has used the method that utilises cross-referencing on satellite since the early 90s.

With technological development and modernisation of the GNSS systems, the performance and quality of measurement work improved to benefit the user.

In 2014, GNSS survey works involves in planning observation on 800 stations, which also includes measurement to improve the Cadastral Reference Mark (CRM) network for cadastral.

The achievement of survey activities involving GNSS until 31 December 2014 was 991 stations (124%) compared to 800 stations set and the breakdown of activities is as follows:



NO.	ACTIVITY	STATION
1	GNSS observations for the establishment of the Malaysia – Brunei Darussalam Survey Control Network	88
2	GNSS observations for GPS Levelling	46
3	GNSS observations for the Height Modernisation System (HMS) project	400
4	GNSS observations for the Cadastral Reference Mark (CRM)	430
5	Marine Geodetic Infrastructure In Malaysia Water (MAGIC) observations	7
6	GNSS observations for the establishment of the Kelantan – Terengganu Survey Control Network	20
<b>TOTAL</b>		<b>991</b>

The five years period performance results for measurement activities involving GNSS is as follows:



YEAR	STATION
2010	804
2011	809
2012	818
2013	918
2014	991

#### MyRTKnet

Subsequent to the GNSS technology development, the MyRTKnet (Malaysian Real Time Network) system has been developed since 2003.

The measurement method utilising Real Time Kinematic is the latest innovation in the determination of a point's relative position.

There are 78 stations with 50 stations in the Peninsular and 14 stations each in Sabah and Sarawak, this system is able to provide precise and accurate measurement work.



The achievement for MyRTKnet activities until 31 December 2014 is as follows:

NO.	ACTIVITY	AWT 2014	ACHIEVEMENT
1	Operation and Maintenance of MyRTKnet Station	100 times	100 times(100%)
2	GPS Data Management of MyRTKnet Station	628,617 data hours	628,617 data hours(100%)
3	Daily GPS Data Processing of MyRTKnet Station	26,192 data set	26,192 data set (100%)
4	Weekly and Yearly GPS Data Processing of MyRTKnet Station	3,732 data set	3,732 data set (100%)

### TIDAL OBSERVATIONS

The operation of 21 tidal gauge stations (STAPS) amongst which consists of 12 stations in the Peninsular: (located at Jeti Telok Ewa Pulau Langkawi, Kedah; Penang Yacht Club, George Town, Pulau Pinang; Pangkalan TLDM Lumut, Perak; Dermaga 25 Pelabuhan Utara, Pelabuhan Kelang, Selangor; Jeti Tanjung Bruas, Tanjung Keling, Melaka; Jeti Kukup, Johor; Jeti Kastam Johor Bahru, Johor; Kompleks LKIM Tanjung Sedili, Johor; Jeti Berjaya Beach Resort, Pulau Tioman, Pahang; Pelabuhan Kuantan, Tanjung Gelang, Pahang; Kompleks LKIM Cendering, Terengganu and Kompleks LKIM Getting, Kelantan) while 6 stations in Sabah: (located at Pelabuhan Kota Kinabalu; Kudat; Pelabuhan Sandakan; Lahad Datu; Pelabuhan Tawau; Pulau Labuan) and another 3 stations in Sarawak: (located at Sejingkat, Kuching; Pelabuhan Bintulu, Bintulu; Marina Park Miri) is to measure the mean sea level that will be used as an accurate vertical datum and utilised as a basic reference level measurement work.





STAPS stations located in Peninsular



STAPS stations located in Sabah and Sarawak

The achievement for tidal observation activities until 31 December 2014 is as follows:

LOCATION	TOTAL STATION	AWT 2014	ACHIEVEMENT
Peninsular	12	137 set	137 set (100%)
Sabah	6	72 set	72 set (100%)
Sarawak	3	36 set	36 set (100%)

Tidal observation activities in 21 STAPS stations are for the publication of Tidal Observation Record Book and Tidal Forecast Schedule Book to be used by various parties.

Until 31 December 2014, one Tidal Observations Record Book for year 2013 and one Tidal Forecast Schedule Book for year 2016 has been published.

## **NETWORK LEVELLING**

Levelling measurements are to obtain the height of a point on the surface of the earth. JUPEM has conducted two types of levelling measurements that are Precise Levelling and Second Class Levelling. The measurement and processing of levelling data cover the works carried out in the Peninsular, Sabah and Sarawak.

In year 2014, precise levelling data processing only applied to Peninsular and Sarawak. The routes in Peninsular encompassed of Mukhtafi Billah – Chenih; Kuala Lipis – Benta Jerantut; Bandar Alor Setar – CIQ Durian Burung; Ipoh – Temoh – Tapah – Slim River; Air Hitam – Simpang Renggam – Kulai – Senai – Johor Bahru; Changlun – Sintok – Padang Sanai; Kuantan – Sg. Lembing; Kg. Sembrong – Bandar Tenggara Kulai; Alor Gajah – Rumbia – Melaka. While, the routes in Sarawak encompassed of Simpang Tanjung Manis/Pangkalan Feri Sungai Nai – Pekan Belawai; Bulatan Demak – Jambatan Santubong; Simpang Kopodim/Matang – Simpang Rayu (Kubah Ria National Park); Simpang Bau/Serikin – Stass; Simpang Bau/Serikin – Krokong; Simpang Julau/Sibu – Bulatan Sibu/Bintulu, Jalan Pujut 7 – Jalan Lutong – Kuala Baram – Jambatan Sg. Tujoh.



The achievement of levelling works until 31 December 2014 is as follows:

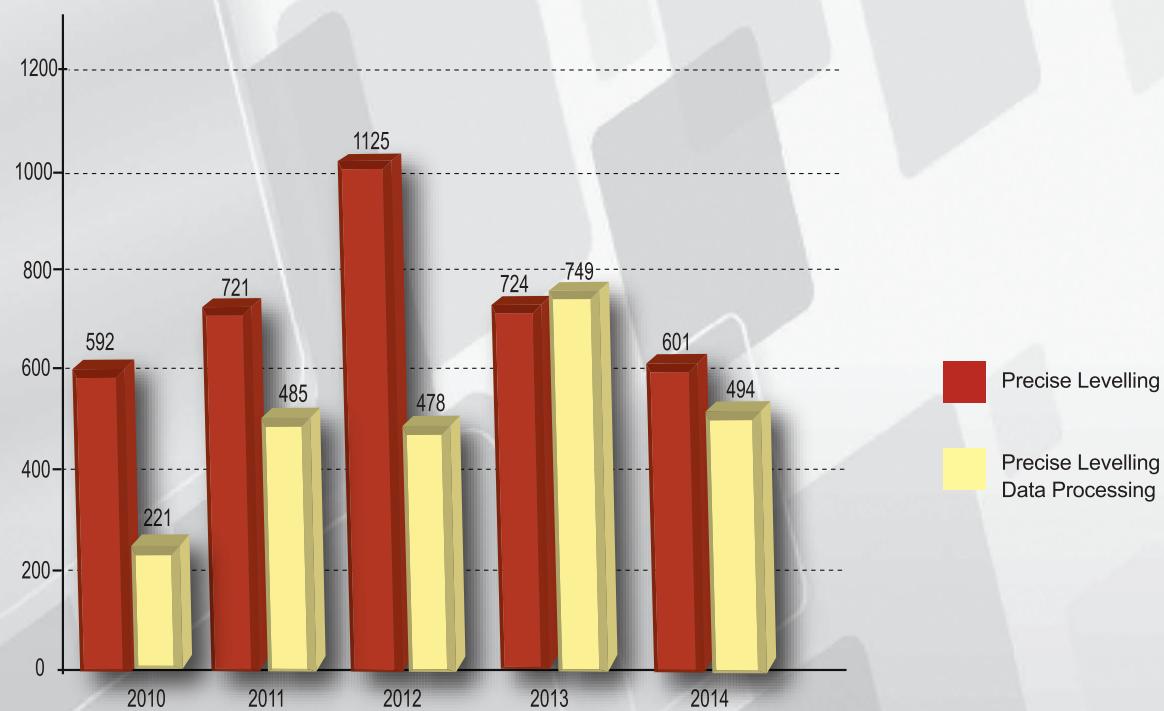
NO.	ACTIVITY	ACHIEVEMENT
1	Precise Levelling	601 stations
2	Precise Levelling Data Processing	494 stations
3	Second Class Levelling Data Processing	122 stations

The Annual Work Target (AWT) achievement for precise levelling work activities until 31 December 2014 is as follows:

PRECISE LEVELLING		PRECISE LEVELLING DATA PROCESSING	
AWT 2014	Achievement 2014	AWT 2014	Achievement 2014
300 stations	601 stations (200%)	450 stations	494 stations (110%)

The five years period achievement for precise levelling work activities is as follows:

YEAR	PRECISE LEVELLING (STATION)	PRECISE LEVELLING DATA PROCESSING (STATION)
2010	592	221
2011	721	485
2012	1,125	478
2013	724	749
2014	601	494

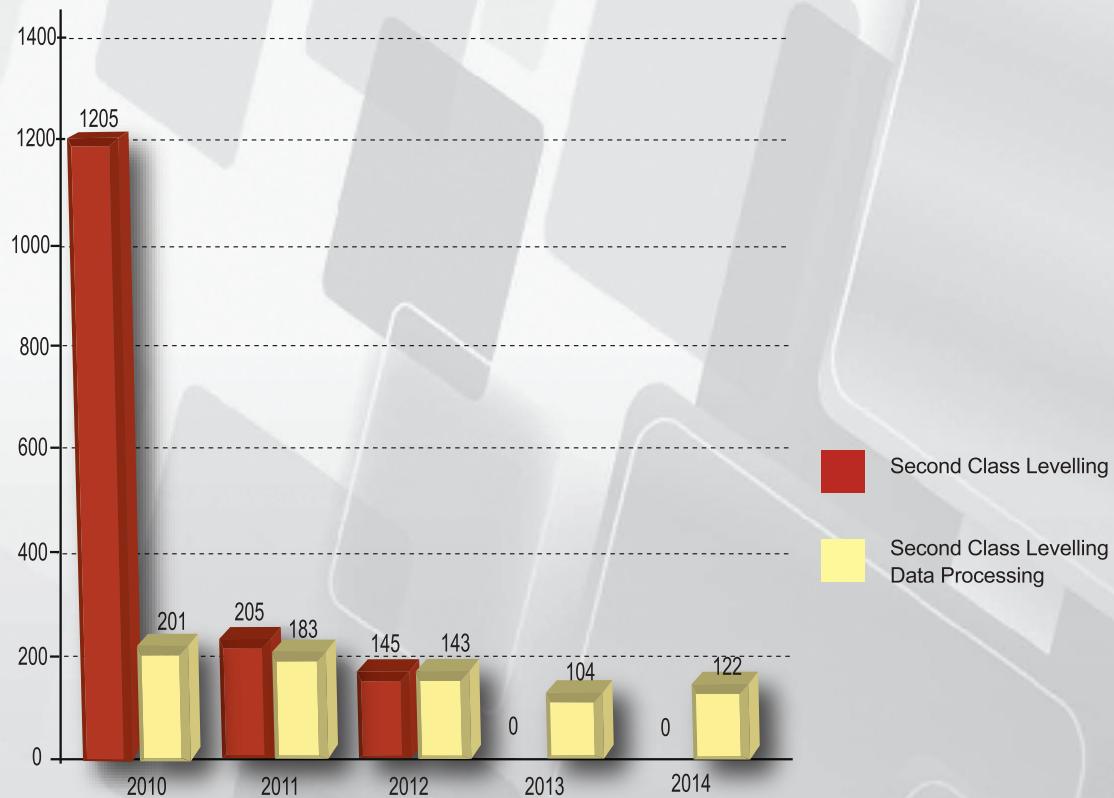


The Annual Work Target (AWT) achievement for second class levelling work activities until 31 December 2014 is as follows :

SECOND CLASS LEVELLING		SECOND CLASS LEVELLING DATA PROCESSING	
AWT 2014	Achievement 2014	AWT 2014	Achievement 2014
0 station	0 station (0%)	100 station	122 station (122%)

The five years period achievements for second class levelling work activities are as follows:

YEAR	SECOND CLASS LEVELLING (STATION)	SECOND CLASS LEVELLING DATA PROCESSING (STATION)
2010	1,205	201
2011	205	183
2012	145	143
2013	0	104
2014	0	122



Note: Second class levelling is not carried out in 2014 due to the focus on Topographic Maps and Thematic Maps mapping activities.

## **GRAVITY MEASUREMENT**

JUPEM has played a major role in carrying out gravity measurements to obtain orthometric height correction. This orthometric height will be used as a reference for mapping, engineering, scientific research and other work.

For the year 2014, plans have been made to set up 600 stations for the Third Order Gravity observations in the state of Pulau Pinang.



The achievement for this activity until 31 December 2014 is as follows:

<b>AWT 2013</b>	<b>ACHIEVEMENT 2013</b>	<b>AWT 2014</b>	<b>ACHIEVEMENT 2014</b>
800 stations	802 stations (100%)	600 stations	610 stations (102%)

## **ASTRONOMY**

JUPEM is an agency directly involved in the field of astronomy especially in the preparation of rukyah and hilal data. Being a member of the National Council for State Islamic Affairs, JUPEM has played its role by providing services to the public especially in the preparation of the Islamic calendar, Qibla direction determination, observations of rukyah and hilal for the determination of important dates in the Islamic calendar such as the determination of Ramadan and Syawal.



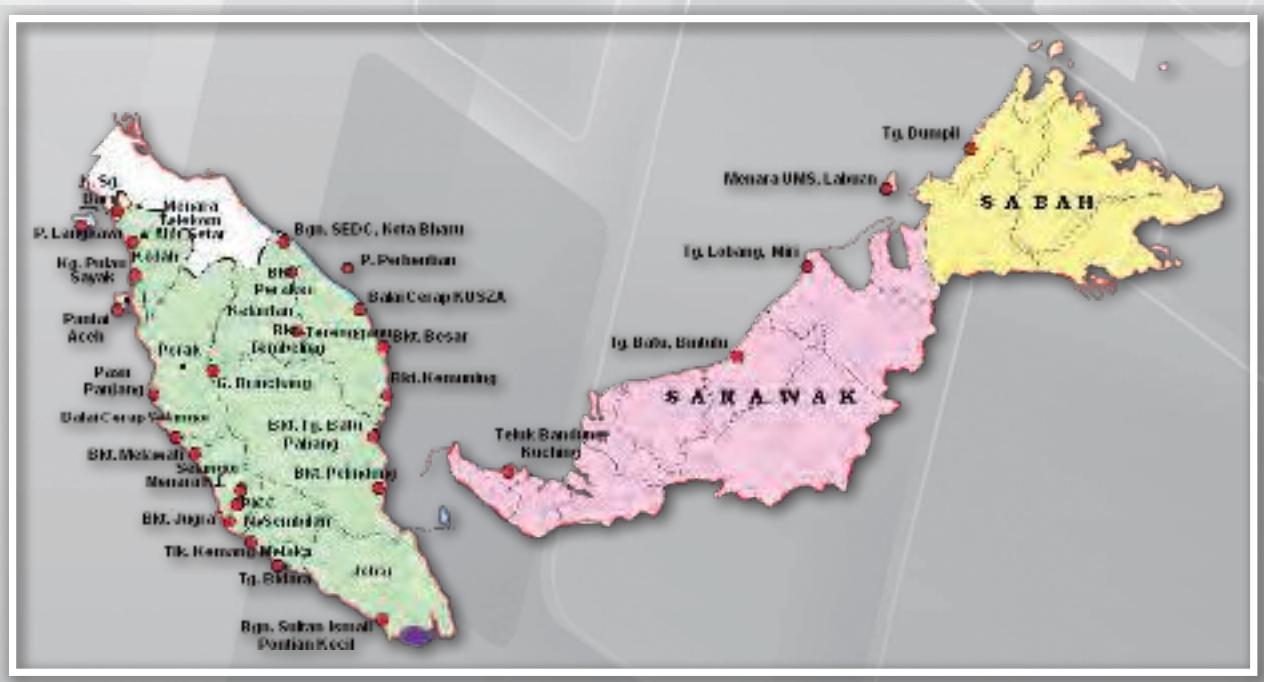
The achievement for astronomy related activities until 31 December 2014 is as follows:

NO.	ACTIVITY	AWT 2014	ACHIEVEMENT
1	Rukyah and Hilal Astronomical Calculations	29 stations	29 stations (100%)
2	Hilal Observations at the Teluk Kemang Observatory for the Review of the Imkanur Rukyah Criteria	9 times	9 times (100%)
3	Skylight Research Observation	6 times	6 times (100%)



In the year 2014, the data preparation to determine the beginning of *Ramadan*, *Syawal* and *Zulhijjah* for the year 1435 *Hijrah* was conducted at 29 *Hilal* observation stations in Kuala Sungai Baru Simpang Empat, Perlis; Menara Telekom, Alor Setar, Kedah; Pulau Sayak, Kuala Muda, Kedah; Pemandangan Indah, Langkawi, Kedah; Pantai Aceh, Pulau Pinang; Pantai Pasir Panjang, Perak; Bukit Malawati, Kuala Selangor, Selangor; Balai Cerap Selangor, Bandar Nakhoda Omar, Selangor; Bukit Jugra, Selangor; Menara Kuala Lumpur; PICC Putrajaya; Telok Kemang, Negeri Sembilan; Tanjung Bidara, Melaka; Pontian Kechil, Johor; Bukit Tanjung Batu, Nenasi, Pekan, Pahang; Bukit Pelindung, Kuantan, Pahang; Gunung Berinchang, Cameron Highlands, Pahang; Bukit Geliga, Kemaman, Terengganu; Bukit Besar, Kuala Terengganu, Terengganu; Merang, Setiu, Terengganu; Pulau Perhentian, Besut, Terengganu; Menara Bangunan SEDC, Kota Bharu, Kelantan; Bukit Peraksi, Pasir Puteh, Kelantan; Bukit Kampung Tembeling, Kuala Krai, Kelantan; Tanjung Dumpil, Putatan, Sabah; Menara Universiti Malaysia Sabah, Labuan; Tanjung Lobang, Miri, Sarawak; Tanjung Batu, Bintulu, Sarawak; Teluk Bandung, Kuching, Sarawak.

Nenasi, Pekan, Pahang; Bukit Pelindung, Kuantan, Pahang; Gunung Berinchang, Cameron Highlands, Pahang; Bukit Geliga, Kemaman, Terengganu; Bukit Besar, Kuala Terengganu, Terengganu; Merang, Setiu, Terengganu; Pulau Perhentian, Besut, Terengganu; Menara Bangunan SEDC, Kota Bharu, Kelantan; Bukit Peraksi, Pasir Puteh, Kelantan; Bukit Kampung Tembeling, Kuala Krai, Kelantan; Tanjung Dumpil, Putatan, Sabah; Menara Universiti Malaysia Sabah, Labuan; Tanjung Lobang, Miri, Sarawak; Tanjung Batu, Bintulu, Sarawak; Teluk Bandung, Kuching, Sarawak.



Locations of Hilal Observation Stations in Peninsular, Sabah and Sarawak

## INTERNATIONAL BOUNDARIES

### MALAYSIA – THAILAND LAND BOUNDARY

The demarcation and survey of the international boundary between Malaysia – Thailand measuring 551.5 km in length commenced on 6 July 1973 and completed on 26 September 1985. This project is jointly implemented with the Royal Thai Survey Department (RTSD). At this time, the activity conducted under the project is Multi-Purposed Survey, which includes Investigation Survey, Verification and Maintenance works for the Malaysia – Thailand International Boundary.

The achievement of the activities for the Priority Area IXB (BP29-BP33), Priority Area VII (BP50-BP51) and Priority Area IV (BP51-BP54A) until 31 December 2014 is as follows :

NO.	AREA	AWT 2014	ACHIEVEMENT
1	Section C - IXB (BP29-BP33)	5.2 km	5.2 km (100%)
2	Section D - IXB (BP29-BP33)	5.4 km	5.4 km (100%)
3	Section A - VII (BP50-BP51)	4.3 km	4.3 km (100%)
4	Section B - VII (BP50-BP51)	4.1 km	4.1 km (100%)
5	Section A - IV (BP51-BP54A)	4.6 km	4.6 km (100%)
6	Section B - IV (BP51-BP54A)	4.4 km	4.4 km (100%)
<b>TOTAL</b>			<b>28.0 km</b>



## MALAYSIA – INDONESIA LAND BOUNDARY

On 5 – 7 November 2013, the 43rd Meeting of the Joint Technical Committee on Malaysia – Indonesia Boundary was held in Pontianak, Kalimantan Barat, to discuss the Sarawak – West Kalimantan and Sabah – North Kalimantan International Border Survey Project. Both parties agreed to conduct investigation, verification and maintenance survey work (IRM) in Sabah – North Kalimantan Sector, Sub Sector A500–A600, Priority Area I (A-B) with a distance of 5.3 km and for Sarawak – West Kalimantan Sector, Sub Sector D600–D700, Priority Area III (D-E) with a distance of 10.9 km.



The achievement for the investigation, verification and maintenance survey work activities until 31 December 2014 is as follows:

NO.	AREA	AWT 2014	ACHIEVEMENT
1	Sabah – North Kalimantan	5.3 km	5.3 km (100%)
2	Sarawak – West Kalimantan	10.9 km	10.9 km (100%)

## MALAYSIA – INDONESIA MARITIME BOUNDARY

The Maritime Boundary Determination Meeting between Malaysia and Indonesia was conducted according to schedule, where JUPEM is a member of the Technical Committee for the Limitation of the Malaysia – Indonesia Maritime Boundary, which was established in March 2005 and led by the Ministry of Foreign Affairs.

In addition, a Technical Working Group headed by the Director of Survey (Boundary Affairs Division) was established under the said committee to discuss technical issues related to the delimitation of maritime boundaries between Malaysia and Indonesia. The meetings related to the boundaries between Malaysia and Indonesia, held and attended by the department in the year 2014 are as follows:

NO.	DISCUSSION	DATE
1	Informal Consultation of the Technical Meeting on Maritime Boundaries Delimitation between the Republic of Indonesia and Malaysia in Bandung, Indonesia	26 May 2014
2	Intersessional Technical Meeting on Maritime Boundaries Delimitation between Malaysia and the Republic of Indonesia in Bandung, Indonesia	26-27 June 2014
3	Intersessional Technical Meeting on Maritime Boundaries Delimitation between Malaysia and the Republic of Indonesia in Bandung, Indonesia	18 September 2014



#### MALAYSIA – SINGAPORE MARITIME BOUNDARY

The Joint Survey Work between Malaysia and Singapore was conducted as an early preparation for the maritime boundary determination work around Pedra Branca, Middle Rock and South Ledge. JUPEM Boundary Affairs Division is also involved as a joint secretariat in the border meeting. Until 31 December 2014, four Sub-Committee Meetings on Joint Survey Work Malaysia – Singapore around Pedra Branca, Middle Rock and South Ledge were held and are as follow:

NO.	MEETING / DISCUSSION	DATE
1	Inter-Agency Meeting on the 7th Meeting Draft Record of the Joint Technical Committee Malaysia - Singapore Regarding Implementation of the International Court of Justice Judgment on Batu Puteh, Middle Rocks and South Ledge in Wisma Putra, Putrajaya	4 February 2014
2	Meeting to discuss the Proposed Diplomatic Protest Against Aggression by Ships and Aircraft of the Republic of Singapore on Waters and Airspace States in Wisma Putra, Putrajaya	4 February 2014
3	Inter-Agency Meeting on the 7th Meeting Draft Record of the Joint Technical Committee Malaysia - Singapore Regarding Implementation of the International Court of Justice Judgment on Batu Puteh, Middle Rocks and South Ledge in Wisma Putra, Putrajaya	12 February 2014
4	Inter-Agency Meeting on the 7th Meeting Draft Record of the Joint Technical Committee Malaysia - Singapore Regarding Implementation of the International Court of Justice judgment on Batu Puteh, Middle Rocks and South Ledge in Wisma Putra, Putrajaya	12 September 2014

## MALAYSIA - BRUNEI DARUSSALAM LAND BOUNDARY

In the year 2014, both parties had agreed to carry out the Malaysia – Brunei Darussalam International Boundary Survey and Demarcation for part of Sector (C-D) from FL02 to TL02/3 with a distance of 13 km.

The Joint Survey Team had started to survey and demarcate part of Sector (C-D) from FL02 to TL02/3.

Until 31 December 2014, the Joint Survey Team had carried out reconnaissance works, clearing and topographic survey for a distance of 10.4 km.

The achievement of the survey activity until 31 December 2014 is as follows:

AREA	AWT 2014	ACHIEVEMENT
Sector (C-D) FL02 – TL02/3	13.0 km	10.4 km (80%)*

\* Achievement is only 80% due to Brunei side can only send one survey team



## STATE BOUNDARIES

### THE BORDER DETERMINATION, DEMARCATON AND SURVEY PROJECT BETWEEN THE STATES OF PENINSULAR MALAYSIA

The achievement of demarcation and survey activities between Terengganu and Kelantan until 31 December 2014 is as follows:

TERENGGANU – KELANTAN BORDER	AWT 2014	ACHIEVEMENT
Priority Area I (Kelantan – Terengganu states)	55.0 km	59.0 km (107%)

The following is the department's attended list for meetings related to boundary issues between states in 2014:

NO.	DISCUSSION	DATE
1	Joint Technical Committee Meeting on the Joint Border Demarcation and Survey between State of Selangor and Perak No. 1/2014 at PTG Selangor, Shah Alam	20 January 2014
2	Joint Technical Committee Meeting on the Joint Border Demarcation and Survey between State of Selangor and Perak No. 2/2014 in Ipoh, Perak	20 February 2014
3	Committee Meeting on States Joint Border Demarcation and Survey (JPPSBN) No. 1/2014 in Shah Alam, Selangor	14 March 2014
4	Coordination Committee Meeting on the Proposed MoU Signing Intent for the Demarcation and Survey Between the State of Kedah and Perlis No. 1/2014 in Kangar, Perlis	6 May 2014
5	National Committee Meeting on the Peninsular States Joint Border Demarcation and Survey (JKPPSBN) No. 1/2014 in Putrajaya	18 September 2014
6	Joint Technical Committee Meeting on the Joint Border Demarcation and Survey between State of Selangor and Perak in Shah Alam, Selangor	22 September 2014
7	Joint Technical Committee Meeting on the Joint Maritime Border Demarcation and Survey between State of Selangor, Perak and Negeri Sembilan in Shah Alam, Selangor	15 October 2014



## COURT CASE EXPERT WITNESS

JUPEM officers are called as expert witness in court involving cases where the foreign anglers and vessels encroached into Malaysia water. Until 31 December 2014, there were 13 cases attended by JUPEM to verify the Malaysian water intrusion location caught by the Malaysian Maritime Enforcement Agency (MMEA). The trial cases attended are as follows:

NO.	TRIAL CASES	DATE
1	Court Case Related to Police Report: AIR HANGAT/000273/12 at Alor Setar High Court, Kedah	9-12 February 2014
2	Court Case Related to Police Report: KUALA KEDAH/000218/14 and KUALA KEDAH/000219/14 at Pulau Langkawi Magistrate Court, Kedah	6 May 2014
3	Court Case Related to Police Report: BANDAR PENAWAR/RPT.0661/14 at Kota Tinggi Sessions Court, Johor	12-13 August 2014
4	Court Case Related to Mt Lautan Maju and Mt L Star Ship Location by Malaysian Maritime Enforcement Agency (MMEA), Kota Tinggi, Johor	9-10 September 2014
5	Local Fishermen Vessels Arrest Case SF2-3619 by Malaysian Maritime Enforcement Agency (MMEA), Kuching, Sarawak	9-11 September 2014
6	Passenger Ferry Lim First with Registration Number 326753 Arrest Case by Malaysian Maritime Enforcement Agency (MMEA), Labuan	23-24 September 2014
7	Ramai Sutera and Vinyee03 Vessel with Registration Number 333982 and 332695 Arrest Case by Malaysian Maritime Enforcement Agency (MMEA), Daerah Maritim 17, Sandakan, Sabah	30 September - 1 October 2014
8	Court Case Related to PATI Arrested by Marine Police Force, Tampoi, Johor in Kota Tinggi Sessions Court, Johor	8 October 2014
9	Court Cases Related to Passenger Ferry Lim First with Registration Number 326753 Arrested by Malaysian Maritime Enforcement Agency (MMEA), Labuan, Sabah	14-15 October 2014
10	Magistrate Court Case in Seri Manjung, Perak by Malaysian Maritime Enforcement Agency (MMEA), Lumut, Perak	4-5 November 2014
11	Magistrate Court Case in Semporna, Sabah by Malaysian Maritime Enforcement Agency (MMEA), Tawau, Sabah	25-28 November 2014
12	Sessions Court Case, Ipoh, Perak by Malaysian Maritime Enforcement Agency (MMEA), Lumut, Perak	9-10 December 2014
13	MV Labuan Express Vessel Arrest Case in Sessions Court, Sabah by Malaysian Maritime Enforcement Agency (MMEA)	22-24 November 2014

## MAP PUBLISHING

Measurement and data processing activities are carried out before producing a map. These activities involved field data collection and survey data processing.

### DATA ACQUISITION

Data acquisition involved works such as aerial photography and preparation of contact prints, control point selection, preparation of field completion data set and orthophoto map. In addition, data acquisition activities also involved the preparation of satellite imagery orthorectification data and data preparation for Malaysian Armed Forces, public users and other departments as well as private agencies used.

The achievement for data acquisition activities until 31 December 2014 is as follows:

NO.	ACTIVITY	AWT 2014 (SHEET)	ACHIEVEMENT (SHEET) (%)
1	Airborne Data Acquisition	335	447 (133%)
2	Control Point Selection	50	60 (120%)
3	Field Completion Data Set Preparation	180	282 (157%)
4	Orthophoto Map Preparation	260	385 (148%)
5	DTM and DSM Data Preparation	144	203 (141%)
6	Satellite Imagery Orthorectification Data Preparation	20	20 (100%)
7	Data Preparation for Malaysian Armed Forces, Public Users and Other Departments/Private Agencies	500	894 (179%)
8	Islands Map Preparation	5	7 (140%)

### CONTROL POINT SURVEY

Control point measurement is conducted to obtain planimetry coordinates and control point elevation information used as a control model in the stereo plotter.

The control point value is important in photogrammetry survey work where aerial triangulation adjustment is carried out using the information.

The achievement for control point survey activity until 31 December 2014 is as follows:

ACTIVITY	AWT 2014 (SHEET)	ACHIEVEMENT (SHEET) (%)
Siri MY502A (Peninsular)	2	2 (100%)
Siri MY701T (Peninsular)	48	58 (120%)
<b>TOTAL</b>	<b>50</b>	<b>60</b>

## **DATABASE**

In line with the requirements of mapping and the Geographic Information System, JUPEM has created two types of databases which are the topographic and cartographic databases. The topographic database scale is in 1:5,000, 1:10,000 and 1:25,000, and are produced by means of photogrammetry and survey work in the field. Topographic database will be utilised again in the map revision process and is the latest source of digital data obtained from JUPEM. Whereas the cartographic database is generated from the topographic database and published as printed maps at the scales of 1:10,000 and 1:50,000.



In the process of producing topographic and cartographic databases, editing need to be carried out on the topographic dataset using Gothic Lamps 2 software before validation and seamless process are conducted with Radius Studio software. Next, the 1:25,000-scale dataset will go through the process of generalisation into the 1:50,000 scale using Radius Clarity software. The result of the generalisation process is the cartographic dataset which will be arranged in the form of maps and are ready for proof print preparation.

The topographic data generated is based on the Malaysian Standard MS1759 – Feature and Attribute Codes where JUPEM is the custodian for the Built-Environment, Demarcation, Hypsography and Utility categories as well as being the lead agency for Aeronautical, Geology, Hydrography, Transportation, Vegetation and General categories.

The achievement for database development activities until 31 December 2014 is as follows:

NO.	ACTIVITY	AWT 2014 (SHEET)	ACHIEVEMENT (SHEET) (%)
1	Updating of 1:50,000 Scale Database	165	200 (121%)
2	Updating of 1:25,000 Scale Database	265	291 (110%)
3	Updating 1:5,000 & 1:10,000 Scale Database	155	229 (148%)
4	Preparation of MY601T Series Seamless Data	356	356 (100%)

## TOPOGRAPHIC MAP UPDATING

This activity is conducted to update topographic information on the map sheet through field completion survey work. The updating work involves a variety of map series i.e. MY501T, MY701T, L808, MY511T and MY711T.

The achievement for updating topographic map activities until 31 December 2014 is as follows:

ACTIVITY	AWT 2014 (SHEET)	ACHIEVEMENT (SHEET) (%)
Updating Topographic Map	252	271 (108%)



## CARTOGRAPHY

Cartographic activities involve work such as cartographic editing, topographic map production, preparation of thematic databases and thematic map production.

The achievement for cartography activities until 31 December 2014 is as follows:

NO.	ACTIVITY	AWT 2014 (SHEET)	ACHIEVEMENT (SHEET) (%)
1	Preparation of Various Topographic Map Series Proofs Check	320	370 (116%)
2	Preparation of Various Topographic Map Series Print Data	360	352 (98%)
3	Preparation of Various Thematic Map Series Proofs Check	22	59 (268%)
4	Preparation of Various Thematic Map Series Print Data	342	376 (110%)
5	Reprint	27	27 (100%)
6	Electronic Map Publishing	25	25 (100%)
7	Webmap and eMap Publishing	3	3 (100%)

## PRINTING

Printing works in JUPEM involves three main activities that are printing, pre-printing and post-printing. Apart from publishing printed maps, printing activities also involve the designing, processing and printing of various documents such as Berita Ukur, Annual Report, Compendium, decrees, security documents and other non-map products.

Topographic maps printed in 2014 are as follow:



NO.	SERIES	ACCEPTANCE 2014	COMPLETED	RECORD
1	L7030/DNMM5101	23	23	Reprint
2	MY501T/MY501A/MY502A	86	86	
3	MY701T/MY701A	62	62	
4	T738/DNMM5201 (Sabah)	3	3	Reprint
5	T835/DNMM6201 (Sabah)	3	3	
6	MY511T/MY511A/MY512A (Sabah)	50	50	
7	MY711T/MY711A (Sabah)	41	41	
8	T738/DNMM5201 (Sarawak)	1	1	Reprint
9	MY511T/MY511A/MY512A (Sarawak)	68	68	
10	MY711T/MY711A (Sarawak)	28	28	
<b>TOTAL</b>		<b>365</b>	<b>365</b>	



Details of topographic maps printed are as follows:

SERIES NO.	STATE	SHEET NAME
MY502A	Perak	Pos Lenjang, Pulau Rumbia, Taiping, Gerik, Lawin, Sungkai, Tanjung Malim, Tanjung Rambutan, Kampar, Pos Poi, Kuala Kerau
	Pahang	Gunung Irong, Kg Chegar Rambutan, Padang Tengku, Tanah Rata, Jerantut, Lanchang, Janda Baik, Temerloh, Raub, Benta, Bukit Fraser, Kampung Batu Talam, Kampung Genuai, Kampung Sawa Batu, Kamoung Kedaik, Batu Balai, Kota Bahagia
	Kedah	Padang Sanai, Padang Serai, Yan Besar, Kampung Kedawan
	Johor	Pulau Aur, Paloh, Bandar Tun Razak, Kulai, Pagoh, Jemaluang, Mersing, Kukup, Felda Tenggaroh Satu, Kampung Kahang Baharu, Kota Tinggi, Felda Selancar 3, Benut, Kemayan, Bukit Lutong, Kampung Senai, Kampung Sri Lukut
	Kelantan	Pasir Mas, Kelantan, Kampung Kuala Betis, Kampung Kuala Panis
	Melaka	Batu Gajah
	Negeri Sembilan	Kuala Pilah, Seremban, Bahau, Bandar Baru Seriting Ilir, Gemas, Kampung Simpang Durian
	Selangor	Tanjung Nipah, Ladang Ulu Bernam, Sekinchan
	Terengganu	Kampung Raja, Bandar Permaisuri, Telemong, Kampung Tengah, Dungun, Sungai Ayam/Bukit Berangin, Paka, Sungai Jengai, Kampung Kuala Jengai, Bukit Susu Dara, Bukit Raung, Kampung Pasir Hantu, Kampung Tengkawang
MY511T	Sarawak	Sungai Sebubong
	Sabah	Gunung Lutong, Pulau Sebatik
MY512A	Sarawak	Tubau, Nanga Dap, Nanga Boh, Uma Balui Likoi, Gunug Batubulan, Lubok Sebulong, Kebulu, Kampung Ogos Sugon, Kampung Kuala Balingian, Long Luyang, Krokong, Kampung Bakam, Kampung Long Unai, Sungai Kahei, Kampung Tebakang Dayak, Betong, Kampung Pueh, Long Bedian, Pandawan, Sleangau, Kampung Sungai Setiam, Long Jekitan, Pulau Rusukan Besar, Batu Niah, Beluru, Long Laput, Pekan Sungai Asap, Kampung Sau, Long Lama, Long Pa Tik, Machan, Batang Balui, Long Lawen, Matu, Nanga Budu, Nangan Merit, Batu Lawi, Nanga Entabai, Sungai Para, Sungai Laie, Taman Hui Ning, Pakan, Long Kasih, Long Tanyik, Kampung Paloh, Nanga Jagau, Sungai Aput, Marudi, Long Jawe, Long Malim, Long Lidam, Ulu Penyarai, Kampung Lebui Way Naha Jale, Kabong, Kampung Penasu, Bukit Tisok/Uma Badeng, Long Tebangan, Kampung Long San, Kampung Kuala Tatau, Sungai Singu, Long Ta'ah, Uma Pawa Long Urun, Bukit Lombak, Ulu Menuan, Bukit Tunggal, Nanga Majang Bok, Kampung Melugu
	Sabah	Kampung Abai, Bandar Sahabat, Wilayah Persekutuan Labuan, Tanjung Batu, Pulau Tegipil, Kampung Lintang, Kampung Salarom, Roach Ree, Stapang, Kampung Lanas, Sungai Danum, Sungai Imbak, Sungai Kalabakan, Sungai Kuamut, Kuala Merontai, Brumas Camp, Kampung Rosok, Kampung Telisai, Kudat, Tomanggong Estate, Sukau, Pulau Timbang, Kampung Lamak Silam, Mountain Anbun, Pulau Mantanani Besar, Kampung Mempakot, Kuala Kinabatangan Kecil, Maliau Basin, Kampung Pulong, Kota Belud, Sandakan, Lahad Datu, Kampung Lingkabau, Kampung Nangoh, Kampung Sungai Lokan, Pekan Kiulu, Sungai Segama, Kampung Pasir Tiga, Kampung Indrasan Laut, Kampung Mananam, Kinabongan, Kampung Bongkol, Kampung Pulau Tigabu, Terumbu Muncey, Kampung Maliyu, Talaga, Kampung Mamagun, Kampung Seri Pinang, Wallace Bay, Kunak

SERIES NO.	STATE	SHEET NAME
MY701A	Pulau Pinang	Seberang Jaya
	Sarawak	Kampong Stapok
	Terengganu	Kampung Pantai Chendering, Kampung Tok Kaya, Kampung Tanjung Kapur, Kampung Gelugor, Kampung Kuala Ibai, Kampung Batu Buruk, Kampung Gong Kijang, kampong Bukit Bayas, Kampung Bukit Besar
	Selangor	Bukit Subang, Pekan Baru Sungai Buloh, Kampung Gajah, Kampung Paya Jaras Tengah, Taman Rimba Riang, Kampung Tropicana, Kampung Melayu Subang, Taman Subang Bestari, Kota Damansara, Denai Alam, Desa Coalfields
	Johor	Muar
	Negeri Sembilan	Pekan Paroi Jaya
	Pahang	Medan Tok Sira, Bandar Putra, Kampung Pamah Kaseh, Kuantan
	Melaka	Bandar Melaka, Bukit Beruang
MY701T	Pulau Pinang	Seberang Jaya
	Terengganu	Kampung Pantai Chendering, Kampung Tok Kaya, Kampung Tanjung Kapur, Kampung Gelugor, Kampung Batu Buruk, Kampung Kuala Ibai, Kampung Gong Kijang, Kampung Bukit Bayas, Kampung Tok Adis, Kampung Bukit Besar
	Sabah	Kampong Iran Baru
	Negeri Sembilan	Pekan Paroi Jaya
	Johor	Muar
	Melaka	Bandar Melaka, Bukit Beruang
	Pahang	Medan Tok Sira, Bandar Putra, Kampung Pamah Kaseh, Kuantan
	Selangor	Bukit Subang, Pekan Baru Sungai Buloh, Kampung Gajah, Kampung Paya Jaras Tengah, Taman Rimba Riang, Kampung Tropicana, Kampung Melayu Subang, Taman Subang Bestari, Kota Damansara, Denai Alam, Desa Coalfields
MY711A	Sabah	Kampung Ria, Kampung Muanad 2, Kampung Salir Sook, Sook, Sungai Bunakaan Perumahan Safoda, Kampung Iran Baru, Kampung Keramat, Pekan Baru Matunggong, Kampung Binou Laut, Beluran, Kampung Mawao, Kampung Tahak, Kampung Baitam, Kampung Gana, Tamparuli, Kampung Pimping, Membakut, Kampung Takapan, Kampung Berunai, Kampung Sungai Bangat, Kampung Dumpiring Bawah, Kampong Pinwantai, Kampung Gombizau
	Terengganu	Kampung Telaga Batin
	Sarawak	Kampung Sinar Budi, Batu Kawan Height, Kampung Katong Lopeng Tengah, Sungai Bulu, Kampung Punjut Tanjung Batu, Sungai Liku, Kampung Luak, Kampung Haji Wahid, Miri, Lembah Hijau, Kampung Cemerlang, Taman Bunga Teratai, Kampung Sebuan Besar

SERIES NO.	STATE	SHEET NAME
MY711T	Sabah	Kampung Ria, Kampung Muanad 2, Kampung Salir Sook, Sungai Bunakaan, Perumahan Safoda, Kampung Binou Laut, Pekan Baru Matunggong, Kampung Keramat, Beluran, Kampung Tahak, Kampung Baitam, Kampung Mawao, Kampung Pimping, Tamparuli, Kampung Gana, Membakut, Kampung Berunei, Kampung Takapan, Kampung Sungai Bangat, Kampung Dumpiring Bawah, Kampung Pinawantai, Kampung Gombizau
	Terengganu	Kampung Telaga Batin
	Sarawak	Kampung Sinar Budi, Batu Kawan Height, Kampung Stapok, Kampung Katong Lopeng Tengah, Sungai Bulu, Kampung Punjut Tanjung Batu, Sungai Liku, Kampung Haji Wahid, Kampung Luak, Miri, Kampung Cemerlang, Kampung Sebuan Besar, Taman Bunga Teratai
L7030	KL&PJ	-
	Terengganu	Dungun, Seri Bandi
	Kedah	Jitra, Gerik, Padang Sanai, Gurun
	Perak	Slim River, Padang Hulu, Tasik Temenggor
	Pahang	Cameron Highland, Ketari, Kuantan, Gambang
	Selangor	Rawang
	Negeri Sembilan	Teriang, Bahau, Rembau
T738	Johor	Kampung Sedili Kecil, Pengerang, Gersik, Segamat, Mersing
	Sabah	Kampung Matunggong, Kampung Berkapit, Kampung Telisai
	Sarawak	Kampung Meruap Dalam

The thematic maps being printed in 2014 is as follows:

NO.	TYPE OF MAP	TOTAL ACCEPTED 2014
1	Political/State/Physical Map	6
2	District Map	2
3	Various Thematic Maps	24
	<b>TOTAL</b>	<b>32</b>

The details of thematic maps printed during the year 2014 are as follows:

SERIES NO.	TYPES OF MAP	SHEET NAME
MY90004R	JKR	Peta Jalan Raya Negeri Melaka, Peta Jalan Raya Negeri Perak, Peta Jalan Raya Negeri Sembilan,
MY90005R	State	Peta politikal negeri WP (2)
MY50005R	State	Peta politikal negeri WP (1)
MY91001R	District	Sabah - Lahad Datu, Pitas, Semporna
	JKR	Peta Jalan JKR-Semenanjung Malaysia, Selangor dan Perlis
MY91008R	Politic	Peta Politik Sabah, Peta Politik Sarawak
MY90008R	Political	Peta Semenanjung Malaysia
MY90011R	Island	Johor - Pulau Tinggi, Pulau Aur, Pulau Sembilang
MY90011R	Island	Sabah – Pulau Layang-Layang, Pulau Mabul, Pulau Terumbu Matanani
ONC	L10	Carta Udara BGSP – Sumatera, Singapura
	L11	Carta Udara BGSP
	L10-D	Carta Udara BGSP – Indonesia, Malaysia
	L11-B	Carta Udara BGSP – Brunei, Indonesia, Filipina
TPC	L10-A	Carta Udara BGSP – Indonesia, Malaysia, Thailand
	L10-C	Carta Udara BGSP – Indonesia, Malaysia, Singapura
	L11-CG	Carta Udara BGSP – Brunei, Indonesia, Malaysia
		Peta JMG – Tanah Merah
		Peta JMG – Perlis
	JMG	Peta JMG – Pulau Pinang
		Peta JMG – Kedah
		Peta JMG – Kelantan
		Peta JMG – Semenanjung Malaysia

The achievement for printing activities until 31 December 2014 is as follows:

NO.	ACTIVITY	AWT 2014	ACHIEVEMENT
1	Topographic map printing	350	365 (104%)
2	Thematic map printing	22	32 (145%)
3	Non-map printing	160	180 (113%)

Pre-printing activities involve the designing and layout of print materials as well as the preparation of proofs and printing plates.

The achievement for pre-printing activities until 31 December 2014 is as follows:

NO.	ACTIVITY	AWT 2014	ACHIEVEMENT
1	Desktop Publishing (DTP)	160	180 (113%)
2	Proofs	160	180 (113%)
3	Plates	1800	1860 (103%)

Post-printing activities involve finishing work after the printing process has been conducted. The achievement for post-printing activities until 31 December 2014 is as follows:

ACTIVITY	AWT 2014	ACHIEVEMENT
Bindery (Unit)	70,000 (Unit)	113,090 (162%)

#### UTILITY MAPPING

Utility mapping involves the process of acquiring and identifying types of installations and public utility service facilities that are embedded underground and providing utility information and position in digital or hard copy.

Complete and accurate information on utility installation position is required to help reduce and prevent service disruptions caused by damage to the utility installations during the execution of excavation work. The frequency of these damages also impairs the quality of people's life and negatively affects the nation's economy.



The achievement for utility mapping activities until 31 December 2014 is as follows:

NO.	ACTIVITY	AWT 2014	ACHIEVEMENT
1	Utility data acquisition from utility agencies (updating)	Application submission to obtain and gather utility information for Shah Alam, Subang Jaya, Klang, Petaling Jaya, Kuala Lumpur, Cheras, Kuala Lumpur, Ampang Jaya, Selayang and Kuala Langat	100%; Telekom Malaysia (TM); KK Kelang Valley Area Perbadanan Aset Air Berhad (PAAB); Whole of Johor, Melaka
2	Uploading of utility and base map data into National Utility Database (NUD)	Conduct review, process and fully uploaded utility data for Shah Alam, Subang Jaya, Klang, Petaling Jaya, Kuala Lumpur, Cheras, Kuala Lumpur, Ampang Jaya, Selayang and Kuala Langat area into NUD.	100%; Utility data from TM and PAAB
3	Base Map preparation	550 sheets for mono digitising works and editing topographic details from orthophoto. Targeted areas include: a. Putrajaya b. Sepang	550 sheet (100%) a. Putrajaya - 48 sheet b. Sepang - 502 sheet

NO.	ACTIVITY	AWT 2014	ACHIEVEMENT
4	Detection and survey of underground utility installation in the field	112 km (Shah Alam, Petaling Jaya, Subang Jaya and Bangi area)	115.8 km (103%) Shah Alam: 11.2 km Petaling Jaya: 96.3 km Subang Jaya: 6.3 km Bangi: 2 km
5	Cartographic editing for utility map preparation	50 sheet	53 sheet (106%) Putrajaya: 36 sheet Shah Alam: 13 sheet Cyberjaya: 4 sheet

The five years period achievements for 1:500 scale base map preparation activities are as follows:

YEAR	AWT	ACHIEVEMENT (SHEET)						TOTAL
		PUTRAJAYA	CYBERJAYA	KUALA SELANGOR	SHAH ALAM	SEPANG	PETALING JAYA	
2010	550	245	0	305	0	0	0	550
2011	550	0	0	55	495	0	0	550
2012	550	25	0	0	193	0	332	550
2013	550	375	0	0	0	100	75	550
2014	550	48	0	0	0	502	0	550
<b>TOTAL</b>	<b>693</b>	<b>0</b>	<b>360</b>	<b>688</b>	<b>602</b>	<b>407</b>		<b>2750</b>

The five years period achievements for utility maps publication are as follows:

YEAR	AWT (SHEET)	ACHIEVEMENT (SHEET)	AREA
2010	35	37	Putrajaya
2011	37	37	Putrajaya & Cyberjaya
2012	37	39	Putrajaya & Cyberjaya
2013	46	50	Putrajaya & Cyberjaya
2014	50	53	Putrajaya, Shah Alam & Cyberjaya
<b>TOTAL</b>	<b>216</b>		

## MAPPING SERVICES

The Mapping Service consists of three main components which include the National Geospatial Data Sales and Information Centre (NGDSIC), National Central Map Store and National Map Library.



The National Geospatial Data Sales and Information Centre (NGDSIC) role is to manage the provision as well as the sale services of mapping products produced by JUPEM. The NGDSIC also act to conduct security clearance for any application to obtain restricted classified products or data.

The National Central Map Store is the central storage for maps published by JUPEM. These maps will be stored in bulk before being distributed to relevant parties, particularly the

Malaysian Armed Forces (MAF). It also functions to provide maps bought through the National Geospatial Data Sales and Information Centre (NGDSIC).

The National Map Library role is to provide resources or reference materials in the field of surveying and mapping, particularly to JUPEM employees and the public in general. The National Map Library provides variety of books, technical journals and other publication materials related to surveying and mapping.

The achievement for map services activities until 31 December 2014 is as follows:

NO.	ACTIVITY	AWT 2014	ACHIEVEMENT
1	Topographic and thematic map proof checking (sheet)	342	429 (125%)
2	Map Catalogue, Bulletin and JPDSN Publications (edition)	4	4 (100%)
3	Meeting Preparation (times)	16	18 (113%)
4	Library Documentation (volume)	3,000	9,138 (305%)
5	Distribution of JUPEM's Materials Publications (copies)	27,000	16,996 (63%)
6	Library Services (Maps Procurement, Books, etc.) (copies)	4,500	3,845 (85%)

## CADASTRAL SURVEY

The success of JUPEM in developing and implementing the eKadaster system has provided a favourable impact on the overall performance of the Cadastre Division. The system also managed to shorten the process of survey and preparation of land title plans, thereby producing a great impact on the development of a fast-growing nation.

The utilisation of latest wireless broadband technology, information and communication technology (ICT), Geographic Information Systems (GIS), Global Navigation Satellite System and latest survey system are features in the eKadaster system. It is also to create a National Digital Cadastral Database (NDCDB) with the development of Cadastral Control Infrastructure (CCI) so that the Survey Accurate Coordinate NDCDB is able to replace the non-homogenous State Digital Cadastral Database (SDCDB). The strata titles survey works previously done manually is now digitally processed and stored in the Strata / Stratum / Marine Survey Database (SSMSD).

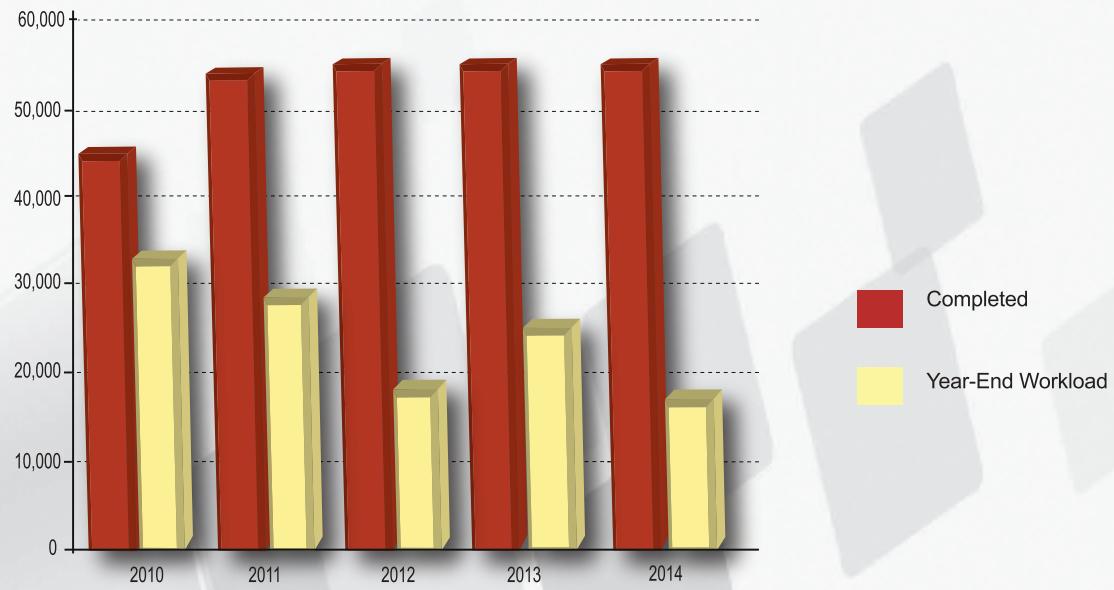
## LAND TITLES SURVEY

Progress achieved for Land Titles Survey activity in the year 2014 was 55,969 lots or 102% from the annual target of 55,000 lots. Detail on the performance and workload in accordance to JUPEMs' States is as shown in the table:

NO.	STATE	AWT 2014 (LOT)	ACHIEVEMENT (LOT)	%	WORKLOAD (LOT)
1	Johor	8,200	10,000	122	4,641
2	Kedah	6,700	6,250	93	1,565
3	Kelantan	7,200	6,580	91	2,849
4	Melaka	1,600	1,600	100	79
5	Negeri Sembilan	3,800	3,104	82	223
6	Pahang	5,700	4,600	81	254
7	Perak	6,600	7,200	109	1,469
8	Perlis	1,950	2,200	113	309
9	Pulau Pinang	1,300	632	49	37
10	Selangor	4,000	4,220	106	3,436
11	Terengganu	6,250	9,200	147	1,098
12	F. T. Kuala Lumpur / Putrajaya	1,600	243	15	48
13	F. T. Labuan	100	140	140	4
<b>TOTAL</b>		<b>55,000</b>	<b>55,969</b>	<b>102</b>	<b>16,012</b>

The comparison of performance and workload for land titles survey for the last five years is as follows:

YEAR	2010 (LOT)	2011 (LOT)	2012 (LOT)	2013 (LOT)	2014 (LOT)
Completed	44,567	54,730	55,007	55,764	55,969
Year-end workload	32,825	28,303	17,151	24,996	16,012



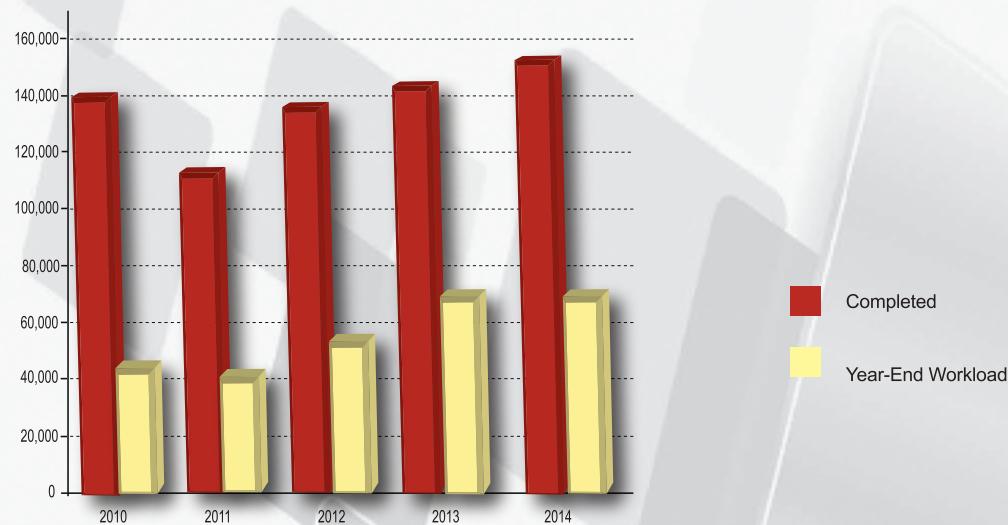
#### CHECKING OF LICENSED LAND SURVEYORS (LLS) SURVEY

The achievement for Checking of Licensed Land Surveyors (LLS) Survey activity for the year 2014 was 153,667 lots or 106% from the annual target of 145,220 lots. Overall achievement in accordance to JUPEMs' States is as shown in the table:

NO.	STATE	AWT 2014 (LOT)	ACHIEVEMENT (LOT)	%	WORKLOAD (LOT)
1	Johor	30,000	25,032	83	11,327
2	Kedah	12,000	12,384	103	7,688
3	Kelantan	11,000	11,315	103	888
4	Melaka	6,000	6,016	100	3,468
5	Negeri Sembilan	7,000	8,486	121	2,597
6	Pahang	10,000	13,990	140	1,631
7	Perak	20,000	22,524	113	1,632
8	Perlis	1,200	1,395	117	302
9	Pulau Pinang	4,000	5,105	128	8,228
10	Selangor	30,000	32,557	109	26,526
11	Terengganu	12,000	14,011	117	3,506
12	F. T. Kuala Lumpur / Putrajaya	2,000	830	42	6
13	F. T. Labuan	20	22	110	0
<b>TOTAL</b>		<b>145,220</b>	<b>153,667</b>	<b>106</b>	<b>67,799</b>

The comparison of performance and workload for checking of Licensed Land Surveyors (LLS) survey for the last five years is as follows:

YEAR	2010 (LOT)	2011 (LOT)	2012 (LOT)	2013 (LOT)	2014 (LOT)
Completed	140,440	114,165	135,566	143,324	153,667
Year-end workload	42,564	37,220	51,759	67,481	67,799



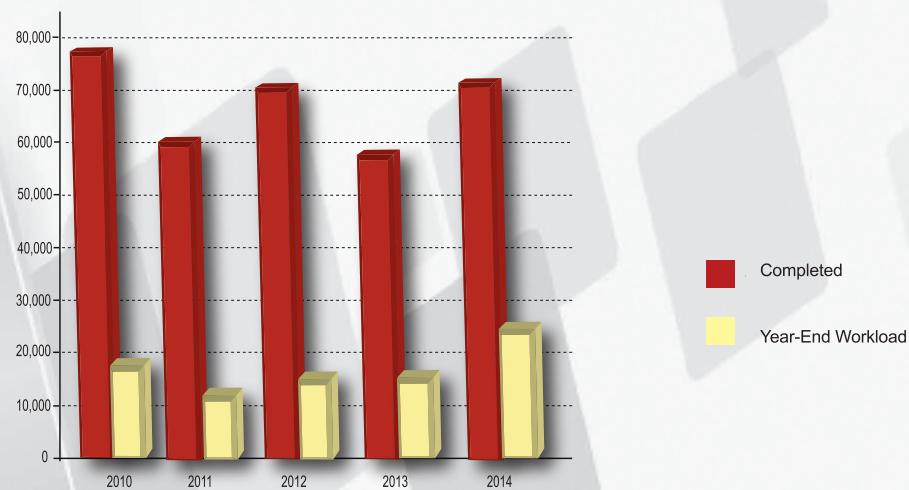
#### CHECKING OF LEVEL I STRATA TITLES SURVEY

The 2014 achievement for Checking of Level I Strata Titles Survey was 72,586 parcels or 150% of the annual target of 48,532 parcels. Detail on the performance and workload according to JUPEMs' States is as shown in the table :

NO.	STATE	AWT 2014 (PARCEL)	ACHIEVEMENT (PARCEL)	%	WORKLOAD (PARCEL)
1	Johor	3,000	5,500	183	1,700
2	Kedah	896	863	96	0
3	Kelantan	1,109	1,109	100	1,071
4	Melaka	859	868	101	0
5	Negeri Sembilan	300	481	106	722
6	Pahang	1,011	2,693	269	0
7	Perak	320	665	208	284
8	Perlis	0	0	0	0
9	Pulau Pinang	8,000	10,500	131	4,258
10	Selangor	22,000	29,000	132	12,677
11	Terengganu	37	37	100	24
12	F. T. Kuala Lumpur / Putrajaya	11,000	20,870	190	2,964
13	F. T. Labuan	0	0	0	0
<b>TOTAL</b>		<b>48,532</b>	<b>72,586</b>	<b>150</b>	<b>23,700</b>

The comparison of performance and workload for checking of level I strata titles survey for the last five years is as follows:

YEAR	2010 (PARCEL)	2011 (PARCEL)	2012 (PARCEL)	2013 (PARCEL)	2014 (PARCEL)
Completed	77,670	60,426	71,149	57,585	72,586
Year-End workload	16,428	11,985	13,850	13,637	23,700



#### CHECKING OF LEVEL II STRATA TITLES SURVEY

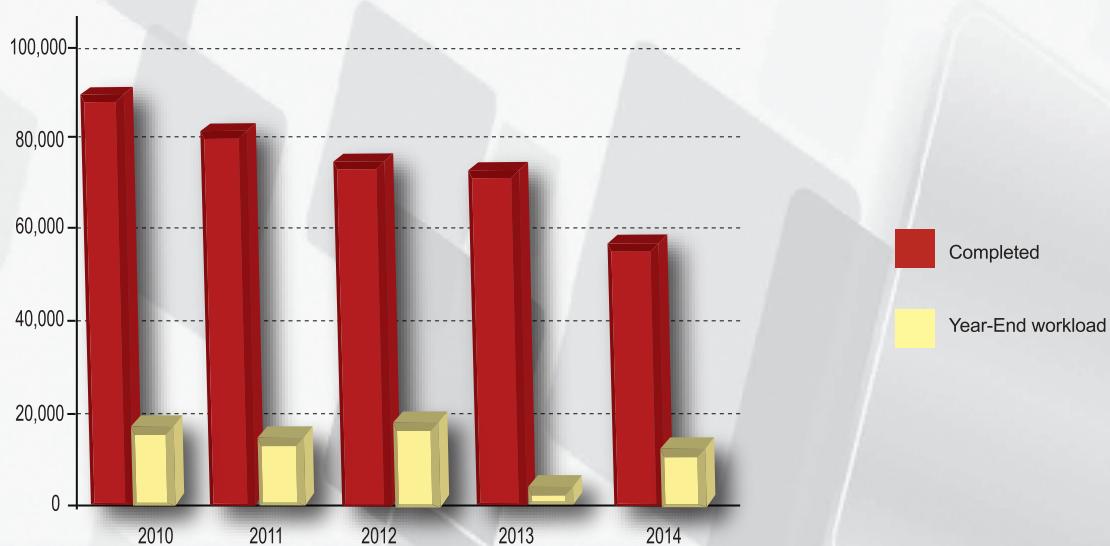
Level II involved the Checking of Strata Certified Plans and Preparation of Strata Titles Documentation. The preparation of Strata Titles Documentation in 2014 achieved 54,745 parcels or 79% of 69,600 parcels annual target.

Detail on the performance and workload in accordance to JUPEMs' State is as shown in the table:

NO.	STATE	AWT 2014 (PARCEL)	ACHIEVEMENT (PARCEL)	%	WORKLOAD (PARCEL)
1	Johor	6,050	4,378	72	0
2	Kedah	550	70	13	0
3	Kelantan	1,000	863	86	0
4	Melaka	1,000	1,093	109	0
5	Negeri Sembilan	1,000	343	34	0
6	Pahang	1,000	1,107	111	0
7	Perak	1,000	427	43	0
8	Perlis	0	0	0	0
9	Pulau Pinang	15,000	7,706	51	0
10	Selangor	28,000	19,220	69	5,713
11	Terengganu	0	12	0	0
12	F. T. Kuala Lumpur / Putrajaya	15,000	19,526	130	4,395
13	F. T. Labuan	0	0	0	0
<b>TOTAL</b>		<b>69,600</b>	<b>54,745</b>	<b>79</b>	<b>10,108</b>

The comparison of performance and workload for checking of level II strata titles survey for the last five years is as follows:

YEAR	2010 (PARCEL)	2011 (PARCEL)	2012 (PARCEL)	2013 (PARCEL)	2014 (PARCEL)
Completed	87,381	80,001	74,069	72,205	54,745
Year-End Workload	15,306	12,076	16,189	441	10,108



#### CRM CONTROL POINT ESTABLISHMENT

CRM (Cadastral Reference Mark) control point observations are carried out to enhance the precision and accuracy of NDCDB (National Digital Cadastral Database) in all JUPEMs' States. Observation performance is as follows:

STATE	CRM CONTROL POINT	
	FILE	CONTROL POINT
Johor	2,337	3,300
Kedah	2,107	2,234
Kelantan	626	465
Melaka	161	117
Negeri Sembilan	1,656	3,405
Pahang	1,886	4,760
Perak	609	609
Perlis	883	1,742
Pulau Pinang	503	929
Selangor	2,338	6,568
Terengganu	966	2,820
F.T. Kuala Lumpur/ Putrajaya	317	616
F.T. Labuan	114	223
<b>TOTAL</b>	<b>14,503</b>	<b>27,788</b>

## **DEFENCE GEOSPATIAL DIVISION**

Defence Geospatial Division (DGD) has continuously implemented programs and activities that are significant in serving geospatial defence to the ATM through the following approaches:

- i. Empowering databases and publishing various quality, relevance and precise maps and products to meet the needs of defence and security.
- ii. Continuing the defence geospatial services assistance in the field for military operations, crisis management, defence planning and training; and in enforcement activities and implementation of geospatial data security clearance.
- iii. Continuing the uGeo for Defence master plan program for DGD future development until 2020 to realise the digital and integrated services potential for ATM readiness.

### **MAP AND DATA PUBLICATION FOR DEFENCE AND SECURITY**

DGD continued to produce defence geospatial products in hardcopy and softcopy in 2014 inclusive of small-scale hardcopy maps. The aim is to produce military version topographic map with scale 1: 50,000 through survey, updating and map production activities.

The activities involved are as follows:

- i. Creating and updating of Vector Smart Map (VMap) and Vector Interim Terrain Data (VITD) for Peninsular Malaysia areas derived from MY501T series digital data.
- ii. To publish Topographic Line Map (TLM) and Common Operations Map (COM) with scale 1:50,000.
- iii. To publish military topographic map with scale 1: 100,000 for Army Air Forces.
- iv. To publish military thematic maps of various scale for the purpose of training, planning and management of ATM.

The achievement for these activities until 31 December 2014 is as follows:

NO.	ACTIVITY	AWT 2014	ACHIEVEMENT
1	Creating and Updating: a. VMap Level 2  b. VITD Level	157 sheets (Siri MY)  157 sheets (Siri MY)	100%  100%
2	Map Publishing: a. Topographic Line Map b. Common Operation Map	30 sheets  30 sheets	100%  100%
3	Military Topographic Map Scale of 1:100 000 Publications	3 sheets	100%
4	Various Scale Military Thematic Map Publications	3 sheets	100%

## DEFENCE GEOSPATIAL SERVICES

### Enforcement of Security Instructions Circular Onto Geospatial Classified Documents

The activities involves are as follows:

- i. Aerial photography / airborne mapping and field data collection activities permit application.
- ii. Security screening onto classified geospatial documents.
- iii. Monitoring the agencies involved in the storage of classified geospatial document.

The achievement for these activities until 31 December 2014 is as follows:

NO.	ACTIVITY	AWT 2014	ACHIEVEMENT
1	Mapping and spatial data collection permit production	100 Permits	197 (197%)
2	Security screening onto classified geospatial documents	100 Applications	301 (301%)
3	Geospatial data issued by DPNM proofs review	250 Proofs	305 (122%)
4	Monitoring agencies involved in the storage of classified geospatial document.	42 Agencies	15 (36%)

### **Technical Advisory Service to MAF**

DGD serves to provide assistance and technical advisory services to the geospatial defence systems and MAF modern weaponry that use geospatial services. These activities targeted three (3) systems implemented by the following phases:

- Eurocopter project.
- Armoured Personnel Carrier (APC8X8) project.
- Army War Treatment Computerised System.

The achievement for these activities until 31 December 2014 is as follows:

ACTIVITY	AWT 2014	ACHIEVEMENT
Monitoring and providing technical advice to the procurement of MAF defence systems on defence geospatial data needs	1 Armoured Personnel Carrier (APC8X8) project system	100%



### **WEB SERVICES**

Web services is the new DGD activity where a DGD Portal known as uGeo for Defence Portal is upgraded to provide user friendliness concept by adding data information and map as well as the appropriate tools. To date three specific portals for the use and need by the army, navy and air force have been established and are already in operation during the tragedy of the lost MH 370 aircraft.

Meanwhile the digital database using ArcGIS Online platform to store and record various data and information on R and Y restrictions are implemented and continuously activated for DGD monitoring management facilities. To date updating for the state of Selangor and Kuala Lumpur Federal Territory is in the process of completion and the remaining 13 states will be implemented.

The achievement of these activities until 31 December 2014 is as follows:

NO.	ACTIVITY	AWT 2014	ACHIEVEMENT
1	uGeo for Defence Portal	2 Modules 3 Portals (Army, Navy, Air Force) and 1 OP murni portal	133%
2	R and Y Restrictions Information Monitoring	2 States (KL F.T. and Selangor)	100%

## DEFENCE GEOSPATIAL SERVICE ASSISTANCE IN THE FIELD

### DGD Involvement in MAF Level Operation and Training

DGD is continuously carrying out training activities to expose officers and staff in actual situations of geospatial services assistance in the battlefield. To date, four exercise activities planned throughout 2014 encompassed of Lightning Tiger West Exercise (CPX and FTX), Keris Strike Exercise (CPX and FTX), Warrior Exercise and South Armour Exercise could not be implemented due to the delay by the MAF. Nevertheless, DGD is still involved with other exercises such as RANGKON Patinggi Ali, ESSCOM Exercise, Wira Helo Exercise (CPX and FTX) and NCO Exercise.

For operational activity, DGD is involved in the MH370 SAR starting from 13 March 2014 to 28 March 2014. In this operation, DGD provided geospatial service assistance to the Air Force Operations Centre as mapping advisory services, maps enlargement, aerial photograph and satellite analysis with the help of JUPEM and the Malaysian Remote Sensing Agency (MRSA).

Furthermore, DGD is also involved in providing mapping services for Terengganu Ops Banjir operated by 7 Skn RAJD on 21 October 2014 to 23 October 2014.

### DGD Involvement in Data Capture Services

Data capture activities are conducted with UAV, IkeGPS and Trimble GPS. In 2014, DGD had helped the Ministry of Natural Resources and Environment (NRE) to capture data on illegal occupation areas using UAV in Lojing, Gua Musang and Janda Baik, Pahang. DGD had also executed UAV flying for data updating purposes and assist in getting the latest imagery required such as in Mersing; Kahang; Kluang; Kem Sungai Besi, Kuala Lumpur; Kem Terendak, Melaka; and Kerteh, Terengganu.

Moreover, IkeGPS was used to help ESSCOM to collect data for population census in Kg Air, Sandakan, Sabah. Trimble GPS was also used to collect Ground Control Point data in Taiping, Perak.



The overall progress of these activities until 31 December 2014 are as follows:

NO.	ACTIVITY	AWT 2014 (TIMES)	ACHIEVEMENT
1	Geospatial Field Services for MAF Operations and Training	12	12 (100%)
2	Geospatial Data Capture Services	12	16 (133%)

#### uGEO FOR DEFENCE CAPABILITY DEVELOPMENT

Through the implementation of this program, DGD is involved directly in providing defence geospatial information and services to the MAF. Amongst the uGeo for Defence program scopes in the initial phase for this activity are:

- i. Human Capital Development
- ii. DGD Restructuring Working Paper
- iii. Outreach program
- iv. Seminar
- v. Defence Geospatial Committee Meeting
- vi. Integrated Defence Geographic Information System
- vii. Defence Geospatial Policy and Doctrine
- viii. Defence Geospatial Development Program





The achievement of these activities until 31 December 2014 is as follows:

NO.	ACTIVITY	AWT 2014	ACHIEVEMENT
1	Human Capital Development Oversea Seminar Domestic Seminar Domestic Course Overseas Course	1 time 4 times 25 times 1 time	3 times(300%) 5 times(125%) 25 times (100%) 1 time (100%)
2	DGD Restructuring Working Paper Completion of DGD Restructuring Working Paper	1 Working Paper	100%
3	Outreach Program Outreach Program	10 Sessions	12 Sessions (120%)
4	Seminar Geospatial Seminar	1 time	100%
5	Defence Geospatial Committee Meeting	2 times	1 time (50%)
6	Integrated Defence Geographic Information System (DGIS) with MAF Network Centric Operation (NCO) project	Implementation - Phase 2 Lab Acceptance Test (LAT)	100%
7	Defence Geospatial Policy and Doctrine To Finalise updates on Mapping Instruction 1/96 To Finalise MAF Topography Map Stock Policy and Aeronautical Chart Geospatial Engineering Doctrine Completion Pre Studies Defence Geospatial Agreement and Cooperation with the United States Pre Studies Defence Geospatial Agreement and Cooperation with the United Kingdom	1 time 1 time Phase 2 Phase 1 (40%) Phase 1 (40%)	55% 55% 100% 100% 100%
8	Defence Geospatial Development Program	3 Programs	2 Programs (70%)



financial

**REPORT**

---

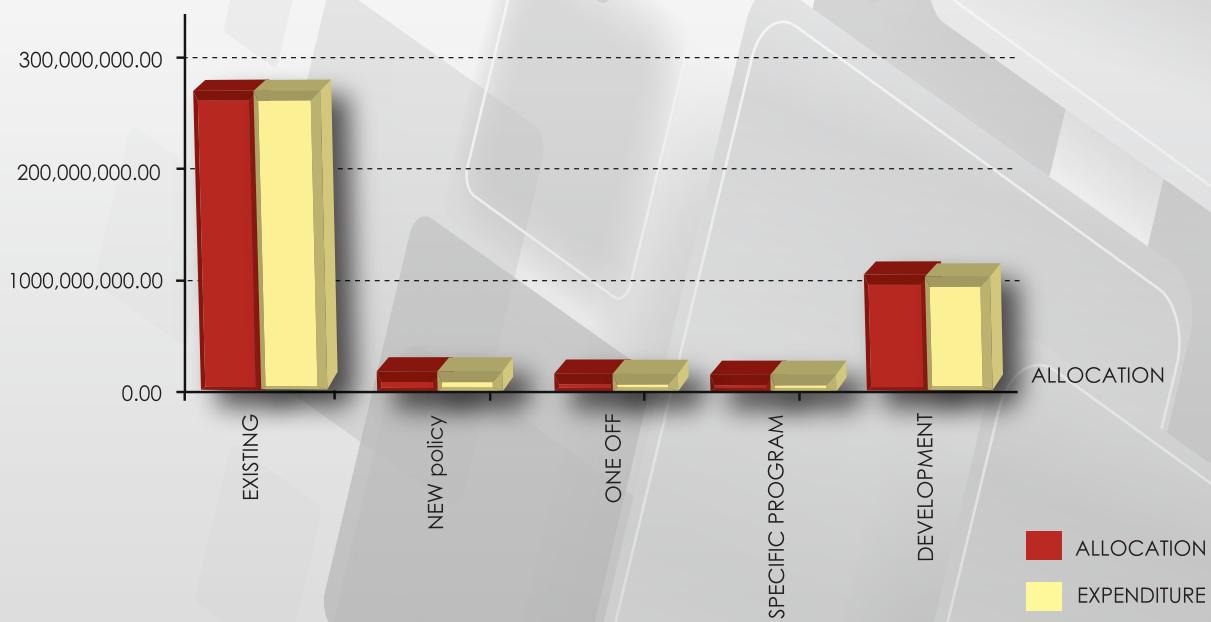
## FINANCIAL MANAGEMENT

JUPEM received a financial allocation of RM 361,673,065.00 for the year 2014 covering Operating Expenditure (RM 265,281,160.00) and Development Expenditure (RM 96,391,905.00). Of this amount and up to 31 December 2014, RM 361,142,657.91 (99.85%) was spent.

Details of the allocation distribution and the achievement of the overall expenses are as follows:

ALLOCATION DISTRIBUTION	ALLOCATION	EXPENDITURE	(%)
	RM	RM	
Existing	261,156,200.00	261,155,797.66	100.00
New policy	2,037,260.00	2,036,892.50	99.98
One-Off	1,710,000.00	1,709,576.20	99.98
Specific program	377,700.00	339,484.41	89.88
Development	96,391,905.00	95,900,907.14	99.49
<b>TOTAL</b>	<b>361,673,065.00</b>	<b>361,142,657.91</b>	<b>99.85</b>

Financial performance in 2014 is as follows:



## OPERATING EXPENDITURE

An allocation of RM 265,281,160.00 under Operating Expenditure was approved in the year 2014 for expenditure on emoluments, services and supplies, grants and fixed allowances as well as other expenses. In addition, allocations was also approved for the acquisition of assets and expenses under one-off.

Details of allocation and operating expenditure spending in 2014 are as follows:

### EXISTING

GENERAL OBJECT	ALLOCATION (RM)	EXPENDITURE (RM)	(%)
Emoluments	186,932,100.00	186,931,965.11	100
Services & Supplies	74,166,100.00	74,165,875.97	100
Grants And Fixed Allowances	39,600.00	39,580.58	99.95
Other Expenses	18,400.00	18,376.00	99.87
<b>TOTAL</b>	<b>261,156,200.00</b>	<b>261,155,797.66</b>	<b>100</b>

### NEW POLICY

GENERAL OBJECT	ALLOCATION (RM)	EXPENDITURE (RM)	(%)
Emoluments	909,300.00	909,128.00	99.98
Assets	1,127,960.00	1,127,764.50	99.98
<b>TOTAL</b>	<b>2,037,260.00</b>	<b>2,036,892.50</b>	<b>99.98</b>

### ONE-OFF

GENERAL OBJECT	ALLOCATION (RM)	EXPENDITURE (RM)	(%)
Services & Supplies	1,400,000.00	1,399,851.20	99.99
Assets	310,000.00	309,725.00	99.91
<b>TOTAL</b>	<b>1,710,000.00</b>	<b>1,709,576.20</b>	<b>99.98</b>

### SPECIFIC PROGRAM

GENERAL OBJECT	ALLOCATION (RM)	EXPENDITURE (RM)	(%)
Services & Supplies	377,700.00	339,484.41	89.88
<b>TOTAL</b>	<b>377,700.00</b>	<b>339,484.41</b>	<b>89.88</b>

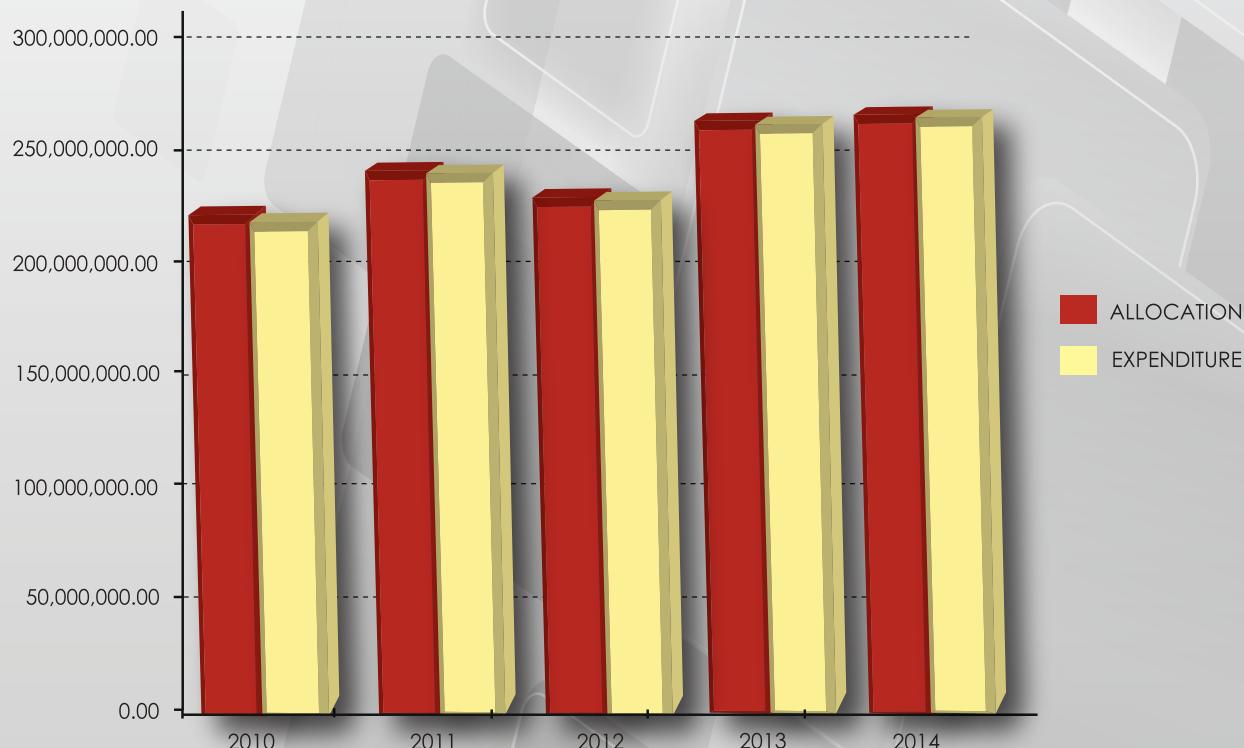
The overall achievement of operating expenditure allocation activities is as follows:

ACTIVITY	ALLOCATION (RM)	EXPENDITURE (RM)	PERCENTAGE (%)
Existing	261,156,200.00	261,155,797.66	100.00
New Policy	2,037,260.00	2,036,892.50	99.98
One-Off	1,710,000.00	1,709,576.20	99.98
Specific Program	377,700.00	339,484.41	89.88
<b>TOTAL</b>	<b>265,281,160.00</b>	<b>265,241,750.77</b>	<b>99.98</b>

The operating expenditure for the last five year is as follows:

YEAR	ALLOCATION	EXPENDITURE	PERCENTAGE (%)
2010	220,353,440.00	219,164,637.15	99.46
2011	241,327,070.00	240,697,761.25	99.74
2012	229,609,050.00	229,544,487.01	99.98
2013	264,863,999.00	262,383,633.48	99.06
2014	265,281,160.00	265,241,750.77	99.98

The total allocation and expenditure for the last five year is shown in the following chart:



## DEVELOPMENT EXPENDITURE

A total of RM 96,391,905.00 was allocated for Development Expenditure in 2014 to implement development projects in the Third Rolling Plan of the 10th Malaysia Plan (RMK-10).

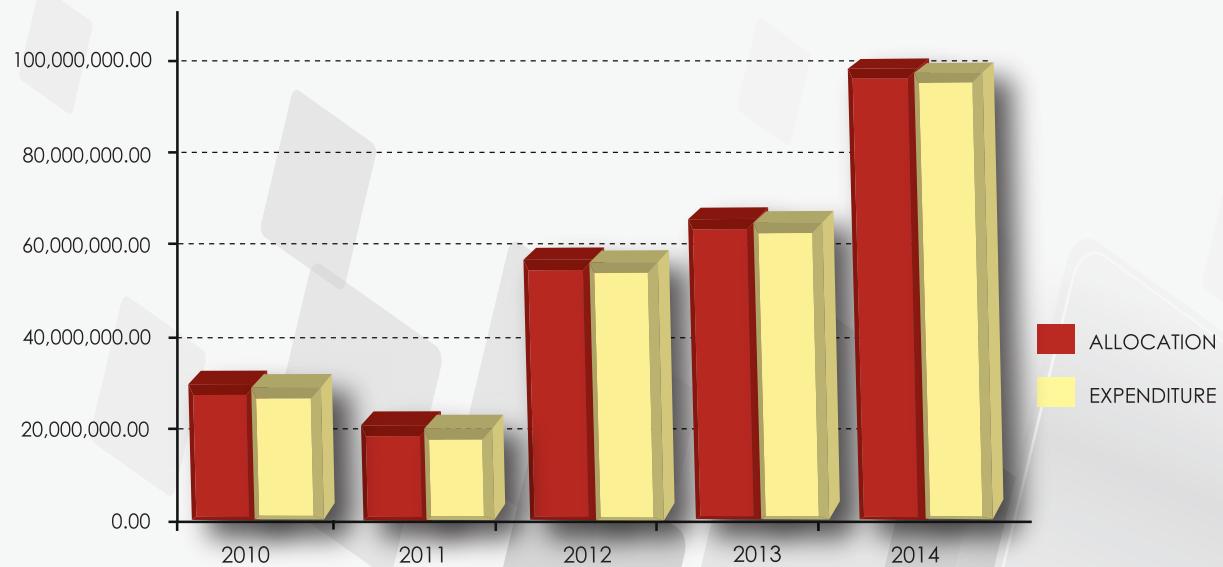
The list of projects, allocation and expenditure are as follows:

DETAILS / PROJECT NAME	ALLOCATION (RM)	EXPENDITURE (RM)	PERCENTAGE (%)
International Boundary (Land and Maritime) Demarcation and Survey Projects Between Malaysia And Neighbouring Countries	7,288,400.00	7,100,476.57	97.40
Empowering of the National Digital Cadastral Database	18,629,355.00	18,629,355.00	100.00
ICT Enterprise Integrated System for JUPEM (IES)	4,479,850.00	4,479,580.00	100.00
e-Mapping	47,096,700.00	46,851,620.57	99.50
Marine Geodetic Infrastructure In Malaysian Waters (MAGIC)	7,530,000.00	7,527,000.00	100.00
Geodetic Database System (SPDG) Sub-Project to Na- tional Telemetry Tide Gauge	9,780,000.00	9,778,475.00	100.00
Topography Office Southern Region New Branch Office Construction, Segamat, Peninsular Topog- raphy Mapping Division	1,587,600.00	1,534,400.00	96.60
<b>TOTAL</b>	<b>96,391,905.00</b>	<b>95,900,907.14</b>	<b>99.49</b>

The development expenditure for the last five year is as follows:

YEAR	ALLOCATION	EXPENDITURE	PERCENTAGE (%)
2010	25,645,960.00	25,260,310.30	98.50
2011	17,695,525.00	17,660,229.65	99.80
2012	54,284,000.00	54,232,243.35	99.90
2013	63,214,000.00	62,666,883.77	99.13
2014	96,391,905.00	95,900,907.14	99.49

The total allocation and expenditure for the last five year is shown in the following chart:



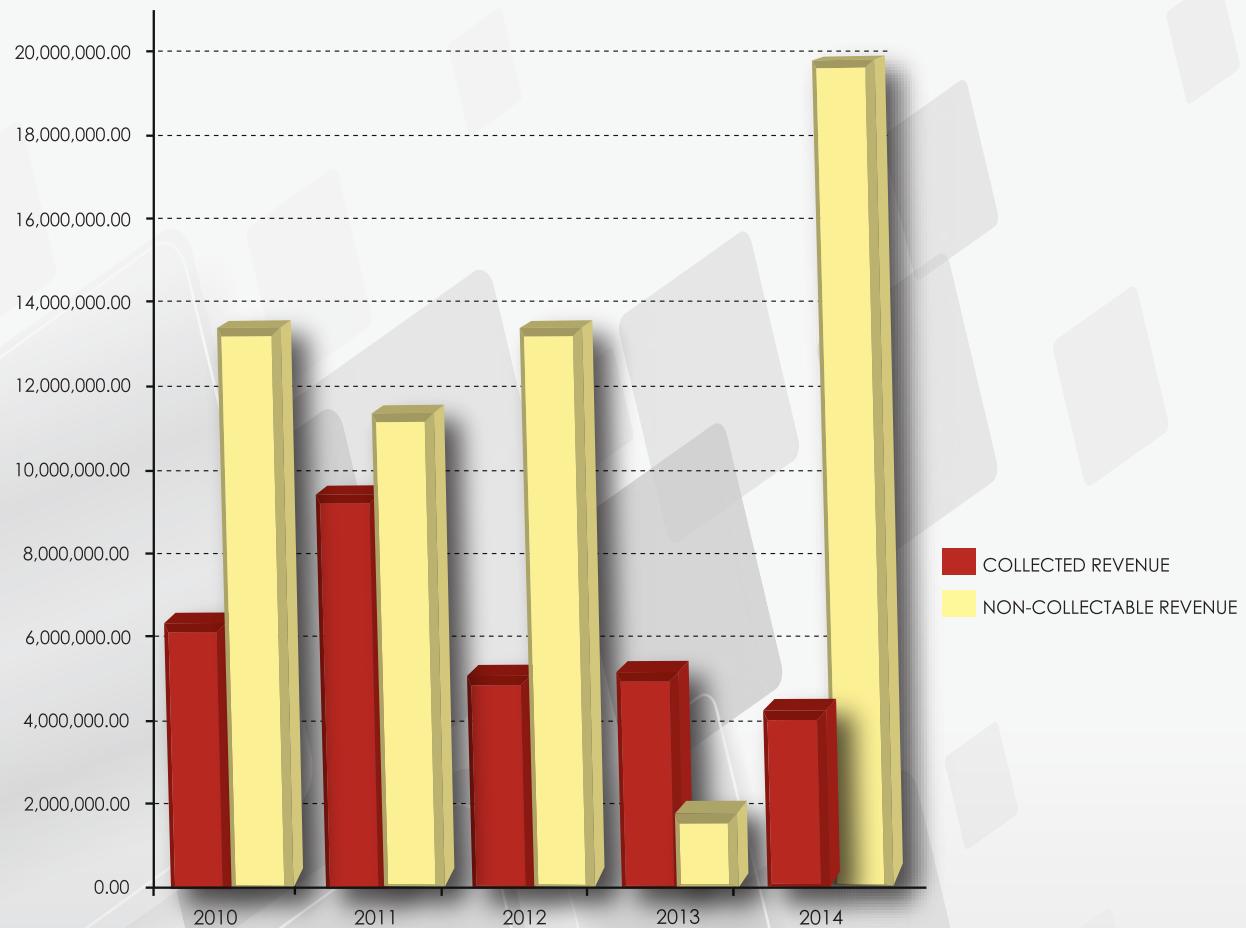
#### REVENUE

In the year 2014, JUPEM successfully collected RM 24,059,863.69 in revenue from the sales of maps, certified plans, aerial photographs, geodetic and astronomical data, survey fees, as well as other services inclusive of payment for licensing or permit from the sale of digital data. However, from the said total, the actual revenue collected was only RM 4,247,076.00 with RM 19,812,787.69 as non-collectable revenue and is categorised as income from services where fees exempted under the provisions of the law.

The detail for revenue collected from JUPEM's Headquarters and JUPEMs' States for the last five year are as follows:

YEAR	COLLECTED REVENUE	NON-COLLECTABLE REVENUE	TOTAL
2010	6,399,796.44	13,483,102.33	19,882,898.77
2011	9,495,794.90	11,367,195.18	20,862,990.08
2012	5,040,601.41	13,425,495.25	18,466,096.66
2013	5,276,162.57	1,707,699.75	6,983,862.32
2014	4,247,076.00	19,812,787.69	24,059,863.69

The revenue breakdown for the last five year is shown in the following chart:







awards and

## **RECOGNITION**

---

## AWARDS AND RECOGNITION

Throughout 2014, JUPEM received several awards for its achievement in various fields. The achievement and recognition throughout the year 2014 are manifestation and commitment of all JUPEM denizens to the department in particular and the public service in general. Among the awards and recognitions JUPEM received are as follows:

NO.	CATEGORY	LEVEL
1	Geospatial World Excellence Awards (Cadastral Survey)	International
2	International GIS Special Award	International
3	National Geospatial Award (General Category)	National
4	Team Excellence Convention EMAS Award	National
5	Innovation Challenge Competition in conjunction with MOSTI Conference and Commercialisation Exhibition – JUPEM Pulau Pinang	National (Champion)
6	Innovative and Creative Circle (ICC) 1NRE Best Award Management Category – JUPEM Kelantan	Ministry (Champion)
7	Innovative and Creative Circle (ICC) 1NRE Best Award Technical Category – JUPEM Pulau Pinang	Ministry (Champion)
8	Innovative and Creative Circle (ICC) 1NRE Best Award Technical Category – JUPEM Sabah	Ministry (2nd Place)
9	1NRE Innovation Competition – JUPEM Pulau Pinang	Ministry (Champion)
10	Overall Winner at Departments / Agencies Level under NRE in conjunction with the 1NRE Innovation Day 2014	Ministry (Champion)
11	Clean Certificate Award 2014 on excellent financial management achievement by the State of Pulau Pinang to JUPEM Pulau Pinang	Department
12	Excellent Financial Management Achievement Award by FT Labuan State Accountant Department to JUPEM FT Labuan	Department

Geospatial World Excellence Awards (Cadastral Survey)



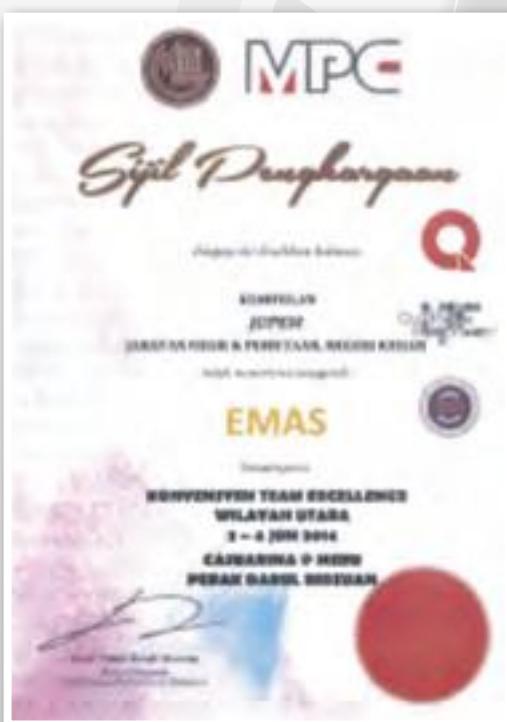
National Geospatial Award (General Category)



**International GIS Special Award**



**Team Excellence Convention EMAS Award**



Innovation Challenge Competition in conjunction with MOSTI Conference and Commercialisation Exhibition



Overall Winner in conjunction with the 1NRE Innovation Day 2014 at Departments / Agencies Level under NRE







sequence  
**OF EVENTS 2014**

---

## SEQUENCE OF EVENTS IN 2014

**9 JANUARI 2014**



2014 New Year Message Ceremony held at Dewan Ukur, Ibu Pejabat JUPEM, Kuala Lumpur.

**9 – 10 JANUARY 2014**

JUPEM Management Meeting No. 1/2014 at Conference Room, Wisma JUPEM, Kuala Lumpur chaired by YBhg. Datuk Prof. Sr Dr. Abdul Kadir bin Taib, Director General of Survey and Mapping Malaysia.



**14 JANUARY 2014**

JUPEM joined the rally in conjunction with the National Maulidur Rasul Celebration in Dataran Putrajaya.

**12 FEBRUARY 2014**

JUPEM with BOMBA collaboration held a Fire Drill with fire simulated at 4th Floor, Wisma JUPEM.

**13 – 15 MARCH 2014**

JUPEM held a Business Continuity Management Workshop at Royal Bintang Resort & SPA, Seremban, Negeri Sembilan.

**9 APRIL 2014**

Hand-over Note from the Director General of Survey and Mapping Malaysia to the Deputy Director General of Survey and Mapping I held at Dewan Ukur, Ibu Pejabat, Kuala Lumpur.





**23 MAY 2014**

Geospatial Defence Committee meeting held at the Conference Room, 15th Floor, Wisma JUPEM.

**20 JUNE 201**



Excellent Service Award (APC) Presentation Ceremony at Felda Merak Kayangan Hall, Kuala Lumpur.



**27 JUNE 2014**

Hand-over Note from Mejai Jeneral Dato' Zaharin bin Din to Brigadier Jeneral Haji Abu Sufian bin Haji Ahmad at the Meeting Room, 2nd Floor, Bangunan Ukur, JUPEM.

**16 – 17 JULY 2014**

Management Meeting No. 2/2014 held at the Conference Room, Wisma JUPEM chaired by YBhg. Datuk Sr Ahmad Fauzi bin Nordin, Director General of Survey and Mapping Malaysia.

**17 JULY 2014**

Ramadan Breaking Fast ceremony took place at Wisma JUPEM, Kuala Lumpur attended by Deputy Secretary (Environment), YBhg. Datuk Dr. Abdul Rahim bin Haji Nik.

**14 AUGUST 2014**

Hari Raya Aidil Fitri celebration at Dewan Ukur, Kuala Lumpur attended by Deputy Minister of Natural Resources and Environment (NRE), YB Dato' Sri Dr. James Dawos Mamit.





**26 – 29 AUGUST 2014**

KIK Project Documentation Preparation Workshop held at Prinzpark Hotel, Kuala Terengganu.

**3 SEPTEMBER 2014**

Official visit by the Director General of Survey and Mapping Malaysia to the Defence Geospatial Division, 2nd Floor, Bangunan Ukur, Kuala Lumpur.



**29 - 31 OCTOBER 2014**



Impact Study Methodology and 5S Quality System Practice Workshop, Department of Survey and Mapping Malaysia held at Heritage Hotel, Ipoh, Perak.

#### **4 NOVEMBER 2014**

JUPEM was conferred the overall winner 1NRE Innovation Day Celebration at Dewan Baiduri, NRE, Putrajaya and the prize was presented by the Minister of Natural Resources, YB. Datuk Seri G.Palanivel.



#### **16 – 18 NOVEMBER 2014**

Department of Survey and Mapping Malaysia 11th Development Plan Strategic Plan Assessment Workshop held at Thistle Hotel, Port Dickson, Negeri Sembilan.

#### **3 – 5 DECEMBER 2014**

JUPEM ICC Convention held at Flamingo Hotel, Ampang, Selangor, officiated by Director General of Survey and Mapping Malaysia, YBhg. Datuk Sr Ahmad Fauzi bin Nordin.



#### **22 – 23 DECEMBER 2014**

Director of Survey Conference 2014 held at Hotel The Puteri Pacific, Johor Bharu, Johor officiated by Director General of Survey and Mapping Malaysia, YBhg. Datuk Sr Ahmad Fauzi bin Nordin.







department  
 **DIRECTORY**

---

**DIRECTORY**





## DEPARTMENTS DIRECTORY

A	JUPEM HEADQUARTERS	TEL. NO.	FAX NO.
1	Office of the Director General of Survey and Mapping Department of Survey and Mapping Malaysia Level 11, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170891	03-26917457
2	Office of the Deputy Director General of Survey and Mapping I Department of Survey and Mapping Malaysia Level 10, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170892	03-26970221
3	Office of the Deputy Director General of Survey and Mapping II Department of Survey and Mapping Malaysia Level 11, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170896	03-269933618
4	Director of Survey (Coordinating and Mapping Policy Division) Department of Survey and Mapping Malaysia Level 10, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170894	03-26910994
5	Director of Survey (Cadastral Division) Department of Survey and Mapping Malaysia Level 10, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170614	03-26170727

A	JUPEM HEADQUARTERS	TEL. NO.	FAX NO.
6	Director of Survey (Defence Geospatial Division) Department of Survey and Mapping Malaysia Level 2, Bangunan Ukur Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170948	03-26980505
7	Director of Survey (Boundary Affairs Division) Department of Survey and Mapping Malaysia Level 8, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170893	03-26934084
8	Director of Survey (Geodetic Survey Division) Department of Survey and Mapping Malaysia Level 7, Bangunan Ukur Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170635	03-26912757
9	Director (Management Services Division) Department of Survey and Mapping Malaysia Level 12, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170853	03-26170869
10	Director of Survey (Peninsular Topography Mapping Division) Department of Survey and Mapping Malaysia Level 3 & 5, Bangunan Ukur Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170897	03-26983844
11	Director of Survey (Cartography dan GIS Division) Department of Survey and Mapping Malaysia Level 6, Bangunan Ukur Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170898	03-26170647

<b>A</b>	<b>JUPEM HEADQUARTERS</b>	<b>TEL. NO.</b>	<b>FAX NO.</b>
12	Director of Survey (Utility Mapping Division) Department of Survey and Mapping Malaysia Level 4, Bangunan Ukur Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170742	03-26170984
13	Director of Survey (National Geospatial Database Division) Department of Survey and Mapping Malaysia Level 7, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170901	03-26916989
14	Director of Survey (Planning and Corporate Division) Department of Survey and Mapping Malaysia Level 13, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR	03-26170842	03-26170990
<b>B</b>	<b>JUPEMS' STATE</b>	<b>TEL. NO.</b>	<b>FAX NO.</b>
1	Director of Survey and Mapping Department of Survey and Mapping Johor Levels 7, 8 dan 9 Block A, Wisma Persekutuan Jalan Ayer Molek 80000 Johor Bahru JOHOR	07-2231244	07-2238535
2	Director of Survey and Mapping Department of Survey and Mapping Kedah 1187 Jalan Raya 09000 Kulim KEDAH	04-4906166	04-4904223
3	Director of Survey and Mapping Department of Survey and Mapping Kelantan Jalan Hospital 15000 Kota Bharu KELANTAN	09-7481470	09-7443923
4	Director of Survey and Mapping Department of Survey and Mapping Melaka Jalan Taming Sari 74500 MELAKA	06-2822844	06-2847319

<b>B</b>	<b>JUPEMS' STATE</b>	<b>TEL. NO.</b>	<b>FAX NO.</b>
5	<p>Director of Survey and Mapping            Department of Survey and Mapping Negeri Sembilan            Level 7&amp;8, Wisma Persekutuan            Jalan Dato' Abdul Kadir            70000 Seremban            NEGERI SEMBILAN</p>	06-7623882	06-7672351
6	<p>Director of Survey and Mapping            Department of Survey and Mapping Pahang            Jalan Tengku Muhamad            25050 Kuantan            PAHANG</p>	09-5668511	09-5685541
7	<p>Director of Survey and Mapping            Department of Survey and Mapping Perak            Jalan Dato' Seri Ahmad Said            Greentown            30450 Ipoh            PERAK</p>	05-2417181	05-2417151
8	<p>Director of Survey and Mapping            Department of Survey and Mapping Perlis            Level 6, Bangunan Persekutuan            Persiaran Jubli Emas            01000 Kangar            PERLIS</p>	04-9772128	04-9772131
9	<p>Director of Survey and Mapping            Department of Survey and Mapping            Pulau Pinang            Level 39, KOMTAR            10000 Georgetown            PULAU PINANG</p>	04-2611762	04-2635884
10	<p>Director of Survey and Mapping            Department of Survey and Mapping Selangor            Levels 16-02 dan 17-01, Plaza Masalam            No. 2 Jalan Tengku Ampuan Zabedah E9/E            40578 Shah Alam            SELANGOR</p>	03-55144000	03-55132614

<b>B</b>	<b>JUPEMS' STATE</b>	<b>TEL. NO.</b>	<b>FAX NO.</b>
11	<p>Director of Survey and Mapping Department of Survey and Mapping Terengganu Levels 7 &amp; 8, Wisma Persekutuan Jalan Sultan Ismail 20578 Kuala Terengganu TERENGGANU</p>	09-6221144	09-6237188
12	<p>Director of Survey and Mapping Department of Survey and Mapping Wilayah Persekutuan Kuala Lumpur / Putrajaya Levels 3 &amp; 4, Wisma JUPEM Jalan Sultan Yahya Petra 50578 KUALA LUMPUR</p>	03-26170800	03-26938740
13	<p>Director of Survey and Mapping Department of Survey and Mapping Labuan Level 7, Block 4 Kompleks Ujana Kewangan Peti Surat 86 87008 WILAYAH PERSEKUTUAN LABUAN</p>	087-412068	087-417401
14	<p>Director of Survey (Sabah Topography Mapping Division) Department of Survey and Mapping Malaysia Level 3, Block B, Bangunan Kuwasa Jalan Karamunsing 88840 Kota Kinabalu SABAH</p>	088-212835	088-231243
15	<p>Director of Survey (Sarawak Topography Mapping Division) Department of Survey and Mapping Malaysia Level 7, Bangunan Sultan Iskandar Jalan Simpang Tiga 93578 Kuching SARAWAK</p>	082-420763	082-245420

C	OTHER AGENCIES (CADRE)	TEL. NO.	FAX NO.
1	<p>Director Air Base and Maritime Branch Level 8, Block F Ibu Pejabat JKR Malaysia Jalan Sultan Salahuddin 50582 KUALA LUMPUR</p>	03-26108888	03-26988187
2	<p>Director National Centre for Geospatial Data Infrastructure (MaCGDI) Kementerian Sumber Asli dan Alam Sekitar (NRE) Level 7, Lot 4G3, Presint 4 Pusat Pentadbiran Kerajaan Persekutuan Putrajaya 62574 PUTRAJAYA</p>	03-88861111	03-88894851
3	<p>Director National Institute of Land and Survey (INSTUN) Ministry of Natural Resources and Environment (NRE) Behrang 35950 Tanjung Malim PERAK</p>	05-4542825	05-4542837
4	<p>Senior Assistant Director Ministry of Urban Wellbeing, Housing and Local Government Project Implementation and Maintenance Division Land Survey Unit Level 8, No. 51 Persiaran Perdana, Presint 4 62100 PUTRAJAYA</p>	03-88915000	03-88913182
5	<p>Assistant Secretary (Survey) Ministry of Natural Resources and Environment (NRE) Level 7, Lot 4G3, Presint 4 Pusat Pentadbiran Kerajaan Persekutuan Putrajaya 62574 PUTRAJAYA</p>	03-88861111	03-88892672

C	OTHER AGENCIES (CADRE)	TEL. NO.	FAX NO.
6	Assistant Secretary (Survey) Ministry of Natural Resources and Environment (NRE) Level 7, Lot 4G3, Presint 4 Pusat Pentadbiran Kerajaan Persekutuan Putrajaya 62574 PUTRAJAYA Assistant Secretary National Security Council (MKN) Prime Minister's Department Maritime Safety and Sovereignty Division Level 2, Bangunan Perdana Putra Pusat Pentadbiran Kerajaan Persekutuan Putrajaya 62502 PUTRAJAYA	03-88726817	03-88883021
7	Chief Director Malaysian Remote Sensing Agency Ministry of Science, Technology and Innovation No. 13, Jalan Tun Ismail 50480 KUALA LUMPUR	03-26973400	03-26973350
8	Chief Secretary Ministry of Defence Human Resource Management Division Civil Service Branch Level 2, Wisma Pertahanan Jalan Padang Tembak 50634 KUALA LUMPUR	03-20715656	03-26917217
9	Chief Director Department of Mineral and Geoscience (DMG) Headquarters, Level 20, Bangunan Tabung Haji Jalan Tun Razak 50658 KUALA LUMPUR	03-21611033	03-21611036
10	Chief Director Peninsular Malaysia Forestry Department (PMFD) Administration and Finance Section Jalan Sultan Salahuddin 50650 KUALA LUMPUR	03-26164488	03-26925657

C	OTHER AGENCIES (CADRE)	TEL. NO.	FAX NO.
11	<p>Chief Director Peninsular Malaysia Marine Department P.O.Box 12, Jalan Limbungan 42007 Pelabuhan Kelang SELANGOR</p>	03-33467777	03-31685289
12	<p>Chief Director Civil Aviation Department Management Services Division Levels 1-4, Podium Block No. 27, Persiaran Perdana Presint 4 Pusat Pentadbiran Kerajaan Persekutuan 62618 PUTRAJAYA</p>	03-88714000	03-88901640
13	<p>Secretary Election Commission (EC) Human Resource Management Division Levels 4-5, Block C, Kompleks C Pusat Pentadbiran Kerajaan Persekutuan 62502 PUTRAJAYA</p>	03-88724802	03-88880743
14	<p>Director Sarawak Marine Department Lot 683, Section 66, Jalan Utama, Tanah Puteh 93619 Kuching SARAWAK</p>	082-484335/159	082-331778

## **Enquiries**

For further enquiries, please contact:

The Secretariat  
Planning and Corporate Division  
Department of Survey and Mapping Malaysia  
Level 13, Wisma JUPEM  
Jalan Sultan Yahya Petra  
50578 Kuala Lumpur  
MALAYSIA  
TEL : 03 - 26170800  
FAX : 03 - 26170990

## **Disclaimer**

All information is correct at the time of printing.

Data and information contained in this report cannot be used as evidence to any legal action.







JABATAN UKUR DAN PEMETAAN MALAYSIA  
Jalan Sultan Yahya Petra  
50578 Kuala Lumpur  
Tel : 603 - 2617 0800  
Faks : 603 - 2617 0123  
[www.jupem.gov.my](http://www.jupem.gov.my)