



INSTITUTION OF ENGINEERS PNG INC



PROFESSIONAL ENGINEERS REGISTRATION BOARD



ANNUAL REPORT

2015

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Glossary of terms

AFA	Assessment for Admission
CBA	Competency-Based Assessment
ComIEPNG	Companion member of IEPNG
CPEng	Chartered Professional Engineer
CRA	Continued Registration Assessment
ETPract	Engineering Technology Practitioner
FIEPNG	Fellow of IEPNG
FEIAP	Federation of Engineering Institutions of Asia and the Pacific
GIEPNG	Graduate (member) of IEPNG
HonFIEPNG	Honorary Fellow Member of IEPNG
IEPNG	Institution of Engineers PNG
IE Australia	Institution of Engineers Australia
IE Singapore	Institution of Engineers Singapore
PERB	Professional Engineers Registration Board
PERA	Professional Engineers Registration Act (Amended) 2007
MIEPNG	Member of IEPNG
TechIEPNG	Technician of IEPNG
StudIEPNG	Student (member) of IEPNG
SOP	Standard Operating Procedures

**I pledge to honour, respect and worship the master engineer,
GOD in Heaven.
He is the greatest engineering intelligence from Whom I shall draw
all my wisdom and knowledge in my profession as an engineer**

President's Overview



Dear Members and Partners, it is with pleasure that I present to you the 2015 Annual Report from the Institution of Engineers PNG (IEPNG).

The last financial year was exciting and even though the wider economic climate was not very attractive, the vast government and private sector investment in infrastructure throughout the country in preceding years has continued to roll out throughout the year. This was a positive sign for the country in general and the institution and the engineering profession in particular, which was at the forefront of these infrastructure developments.

But many of these tangible infrastructure developments were marred by unethical practices, resulting in price escalations without any reasonable justification, which was considered as the major problem. This has resulted in a public outcry calling for investigations into the leadership and management of these projects.

Such unethical practices would only cause an unnecessary burden to the infrastructure sustainability as inflated cost to the infrastructure would make maintenance unaffordable. All infrastructure projects in the National Capital District have been over-priced; doubled or triple the actual price of the works.

Some have been poorly designed and sub-standard in nature with very high costs. The IEPNG had taken a positive stand on these unethical practices and has partnered with certain Government authorities and law enforcing agencies in an attempt to address the issues surrounding these cost escalations.

As we go into 2016 we feel the ripples coming from the waves of the global economic down-turn, caused by the global decline in the commodity prices, especially the mining, petroleum and gas sector, a major revenue earner for Papua New Guinea, coupled with the unethical practice of inflated prices of project expenditure in 2015.

There are indications from the World Bank and Asian Development Bank economic briefings that 2016 would be tougher and this is expected to continue into 2017.

They predict that this would be the toughest period of the decade. Hence, the years ahead bring great challenges in the economic history of the country.

We in the engineering fraternity and members of this Institution of Engineers PNG, must embrace our ethical values and practice them without fear or favour.

Upholding the ethics of engineering practices as stipulated in IEPNG's constitution is indeed a practice you can offer in the place you work to fight against unethical practices in the construction industry. My challenge for all engineers is to uphold the good ethical practices

and perhaps introduce innovative ways to prevent corruption that is evident in the field.

In your capacity as engineers you have contributed to the well-being of the people in the communities or societies you have. You may have been a lecturer imparting the knowledge to the young generation of engineers; you may be a member of an investigation and design team in different fields of engineering to develop a project; you may be a member of the team of construction engineers of completed building or road project; a team member of project management and contract administration of a completed or ongoing infrastructure project; or may be an advisor to a political master on major project developments. I thank you all for your contributions in 2015.

Many different challenges have been encountered throughout the year 2015. There were many key challenges; some are short term and some long term, which are the initiatives of previous IEPNG Boards.

There are issues of national interest within the industry that members of IEPNG play a major role and there are areas of competency which members and upcoming members will enjoy in the future.

It has always been the IEPNG Board of Director's commitment to be effective and efficient in its role in the industry with whatever resources it has.

In member services administration issues we may have not served our members up to their expectations but we are doing everything we can to serve you better in the future.

I acknowledge the contributions made by previous Board of Directors in terms of embracing the challenges they have encountered and the actions taken to process and progress these challenges.

This Board has also achieved some milestones that need to be noted:

1. Partnership with the PNG University of Technology to accredit our syllabuses and engineers to international recognition so that they can be deployed globally. Recently the PNG University Engineering Advisory Council was established, with the IEPNG President as the Deputy Chairman.
2. IEPNG's role in leading the accreditation program, working with assistance from FEAP and mentoring role from IE Australia and IE Singapore. This is good news as we push for our members to be internationally recognized.
3. IEPNG has strengthened its Act, giving it the mandate to investigate engineering practices that do not comply with internal and national standards of good engineering practices.
4. The IEPNG's major investment in a property in Port Moresby is realizing its benefits and is expected to grow in future.
5. The biggest challenge facing IEPNG was to take up the role as a whistle-blower in the business of engineering. Once we ascertain a level of support from Government, industry and the public, we would expect to involve experienced engineers to audit the projects for value for money, especially in developing sustainable infrastructure assets for its people from design to implementation and handing over of the asset to the Employer.

These achievements were results of previous and the current Board of Directors' bold decisions to take engineering to the international scenery and fulfill the desires to return benefits to the membership of the Institution, and so encourage engineers to practice under the mandatory registration Act.

I agree with the past IEPNG President that Institution has reached some milestones, and it is up to the current and future Boards to follow through and ensure that these achievements are developed further. The current and future Boards must take control and build on the foundations set up by the past boards in order to fully-develop best practice and good ethics in engineering in the country through the building of sustainable infrastructure for the benefit of the people.

I thank the members of IEPNG, the Board of Directors, the Chief Executive Officer and administrative staff for another year of success.

ILA MARI

CEO's Foreword



My dear Members of the Institution of Engineers PNG, partners and engineers in general, we have covered some ground in the past year in terms of improvements at the Institution.

But there is still a lot more to do before we can reach that stage where your Institution can ideally serve your needs and the wider engineering profession throughout the country.

A lot has happened in the country involving engineers, in terms of the vast range of infrastructure and related developments that took place. This has had cascading effects which also affected the way we do – or should do – business within IEPNG, especially in the areas of enforcing our governing laws and regulations, and service to Members and potential Members.

The influx of expatriate engineers and technicians into the country to work on these national infrastructure projects have posed a challenge that we have not quite experienced before, but it has taught us lessons, and with those lessons we can handle such situations better in the future.

In-house we have faced a few challenges also, but despite that, we have managed some achievements, which include the following:

- (i) The Competency-Based Assessment (CBA) will finally being rolled out;
- (ii) IEPNG is beginning to enforce the Professional Engineers Registration Act (Amended) 2007 more stringently through project audits, engineer registration and other means;
- (iii) The training of staff to produce monthly in-house newsletter; and
- (iv) The use of social media platforms to further the exposure of IEPNG and its standing in the community.

The Competency-Based Assessment for engineers and technicians is comprehensive and will go a long way towards enhancing the reputation of our engineering professionals and the engineering profession in the country and across the world.

The IEPNG Board is working on exposing our national engineering professionals on the international scene, and the CBA is one way of enhancing our reputation and skill levels. The CBA is covered in full in this Annual Report.

The IEPNG has also begun to put its feet down and enforce the Professional Engineers Registration Act (Amended) 2007, which it manages on behalf of the Professional Engineers Registration Board.

The Institution has begun, and will continue to carry out ad-hoc proj-

ect audits on major infrastructure projects to ensure that contractors adhere to the provisions of the Act and requirements of the Professional Engineers Registration Board.

Also last year, the IEPNG engaged the services of a professional media production company to train its staff on the use of a specific print media software to produce its own in-house newsletter and other such documents, including this Annual Report, for circulation among members and the wider public.

The two-week training has ended and the newsletter is being produced and circulated to all IEPNG financial members and other stakeholders. I also take this opportunity to urge all engineers around the country and abroad, to feel free to contribute ideas or stories to the newsletter. Our aim is to turn the newsletter into a professional medium for communication between professional engineers and the IEPNG and other stakeholders, so the more you contribute, the better and more credible it gets as a professional medium.

In a related development the IEPNG is also pursuing a bigger exposure in the social media scenery, through Facebook and other social media platforms, to enhance its standing in the community of professional engineers and the wider community.

Technology is changing very fast and information exchange mediums, including the social media, are the way of the future, so it would not be a mistake for the Institution to engage in this medium to further the interests of its members.

I also urge all financial members of the IEPNG to furnish us your postal and email addresses so that we can update our membership database.

We have had problems communicating directly with members in the past, and we want to avoid that, and having an up-to-date database incorporating correct contact information is important.

If you do not have electronic mail (email) addresses, I urge you all to create one (gmail is preferred) and furnish it to us for ease of communication. If you already have a workplace email account, I prefer you create another Gmail account for us to use to communicate with you. The reason is that your workplace emails accounts are blocked by firewall setup by the employer and the information we send you is not getting to you.

The 2015 financial records indicate that we have stabilised after the decrease in our profits in 2014 from the impact of the completion of the LNG development phase where we experienced a huge increase in membership and registration fees.

Our audited financial reports shows a surplus of K 584,717 in 2015 compared to K 912,354 in 2014. The decline is attributed to the cost incurred by the Institution to purchase the Investment property in 2015.

The actual income derived was K 2,213,541 compared to K 2,230,758 in 2014. Membership and registration fees contributed nearly a third of the revenue with income from the investment property also contributing. Expenditure for 2015 amounted to K 1,615,955 compared to K 1,318,404 in 2014.

Refer to full report in this publications for details.

With all these achievements we have managed in the face of challenges, the IEPNG is optimistic about the future.

The current and previous Boards have worked hard to bring us to where we are now, and it is incumbent upon us at IEPNG, all the financial members, and of course the Board, to build upon these achievements and bring our profession into the wider global scene and the future.

Thank you and pleasant reading

BENEDICT MICK

Board of Directors

MR ILAIAMO ILA MARI
President of IEPNG and
Chairman of PERB



Mr Mari holds a Masters in Civil Engineering majoring in structures at the University of Queensland, Australia. He also holds a Bachelors Degree in Civil Engineering from the University of Technology, which he attained in 1980. His other educational qualifications included a post-graduate certificate in Management Studies from the Naval Staff College in Sydney, Australia. Mr Mari has worked in several organisations over the years, including the Kumul Consolidated Holdings (formerly the Independent Public Business Corporation), the Department of Works, and even had a three-year stint at the Papua New Guinea Defence Force Engineering Battalion. Mr Mari currently works at the Department of Works as the Project Director for Asian Development Bank projects.

Mr Mari is a Fellow Member of IEPNG and is a registered engineer. He was the Deputy President of the previous IEPNG Board (2012-2013) and a Member of the board before that (2010-2013).

MR MOSES GURA
Past President of IEPNG



Mr Gura is the immediate past President of IEPNG. He holds a Bachelors Degree in Mechanical Engineering from the University of Technology. He also holds a Bachelors Degree in Mechanical Engineering from the Queensland University of Technology, which he attained in 1989.

Mr Gura started his career with Bougainville Copper Limited, where he worked for 11 years, before joining Porgera Joint Venture, then on to Chevron, where he worked as the Production and Petroleum Engineer for eight years. When Oil Search took over operations from Chevron in 2003, Mr Gura was elevated to the position of Operations Superintendent and after that held the position of Gobe Operations Superintendent.

Mr Gura at present works for Puma Energy in Port Moresby.

He is a financial member of IEPNG and a registered engineer. As a member of the IEPNG Board, he aspires to see the Institution move forward in enhancing the engineering profession in the country.

MS FINKWE ZURENUOC
Elected Member



MR JOHN CHOLAI
Elected Member



Mr John Cholai holds a Masters in Business Administration (MBA) from Deakin University in Victoria, Australia, a Bachelors Degree in Engineering (Telecommunications) at the University of Technology, and a host of other qualifications he has attained during his distinguished professional engineering career. These include a Diploma in Telecommunications Engineering, also from Unitech, and a Radio Technical Officer Certificate from the PNG Civil Aviation Training College in Port Moresby.

Some of his significant achievements include the Jacksons Airport Radar Display Upgrade project, the negotiation of the Jacksons Airport Navigations and Communications contract on behalf of the PNG Government, and others.

He has held key technical jobs with Origin Energy, InterOil, Shell and Civil Aviation Authority.

Mr Cholai currently is a private consultant, providing advise and services on business and project management. He is a registered engineer and member of IEPNG.

Board of Directors

MR JOSEPH ASINIMBU
Elected Member



Mr Asinimbu holds a Masters in Business Administration (MBA) from the University of Papua New Guinea and a Bachelors Degree in Civil Engineering from the University of Technology. Mr Asinimbu is a Corporate Fellow Member of IEPNG and is a registered engineer.

Most of his career has been with the Department of Works and municipal water and sewerage services provider Eda Ranu. He held various key and senior positions within these two organisations for many years. His most recent position at Eda Ranu was the Consumer Services and Development Manager, which, among other duties, is responsible for the strategic planning for all developments within the city and overseeing the design and construction of the Eda Ranu water and sewerage works. At the Department of Works, he at one stage was the First Assistant Secretary for Operations, which oversees the entire DoW provincial network, one of the most important positions in the department. He is currently the Chief Internal Auditor for the Department.

MR BENJAMIN MOAITZ
Elected Member



Striving for his family and his community is what Mr Moaitz aims for, and that ideology has carried him along to do important development work in his Morobe community.

Mr Moaitz holds a Diploma in Civil Engineering and a Certificate of Higher Technical Education in Civil Engineering, both from the Lae Technical College. He also holds a Diploma in Project Management from the Divine Word University.

His strong association with IEPNG goes all the way back to his student days, when he was recognised by the Institution as a student member (StudIEPNG). He is currently a Technician Member of IEPNG.

He has worked in various technical capacities with design, construction, mining and other companies and this has brought him to various places within PNG and abroad to places like Australia and South Africa. He now works as the Roadworks/Earthworks Coordinator with the Wafi-Golpu Mine Project in his home province of Morobe.

MR DAN TAPADO
Elected Member



Mr Dan Tapado, from the Philippines, has a Bachelor of Science in Civil Engineering from the Columban College in the Philippines. He has clocked 17 years of civil engineering and building works, both in PNG and the Philippines.

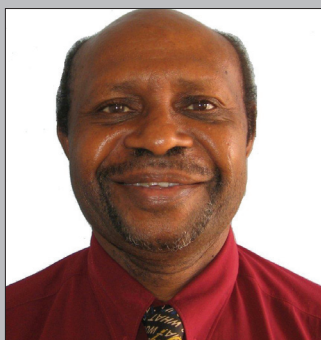
He was trained in office management and field supervision and during his time in the country, has directly supervised and managed seven major road projects, all funded by donor agencies.

His areas of expertise include office management/administration, site management, quality control management, budget and cost analysis, material procurement, cost monitoring schedule and construction planning and scheduling.

Mr Tapado is a financial member of IEPNG and a registered engineer, based out of Lae. He is also the vice president of IEPNG's Lae Chapter.

He currently works as the Office Manager for TSC Contractors in Lae, involved in various donor-funded projects in the Highlands of PNG.

MR BENEDICT MICK
Chief Executive Officer



Mr Mick has been the CEO of IEPNG and Registrar of the Professional Engineers Registration Board since 2007. He holds a Masters in Business Administration (MBA) from the Central Queensland University in Australia. Prior to that he attained a Graduate Diploma in Management from the same university, and a Bachelors Degree of Technology in Computer Science from the University of Technology in PNG. Besides these, he has also attended various short courses over the years, including programming courses, in PNG and in Australia.

Mr Mick has held various technical positions over the years in companies including the former Bougainville Copper Limited, where he rose to the position of Superintendent for Systems and Contracts.

Before he joined IEPNG, Mr Mick was the Managing Director of the National Housing Corporation, from June 2000 to September 2003.

Vision, Mission and Mandate

Our vision

The Institution of Engineers PNG Inc is dedicated to enhancing the quality of life of the people of Papua New Guinea by the responsible and creative application of engineering

Our mission

Our Mission to the Community

- Advance the practice of engineering in the interests of the safety, well-being and quality of life of members of the community
- Promote an engineering management and practice style that will ensure a sustainable development of the environment;
- Assure the community of the quality of the engineering profession by a continuous process of accreditation of qualifications and monitoring of the competency standards of the profession

Our Mission to our Members

- Determine and encourage high-level technical and ethical standards;
- Sustain standards with ethics and discipline
- Encourage innovative solutions
- Facilitate the acquisition and sharing of knowledge;
- Represent their interests

Our mandate

To hold a clear mandate to represent the Papua New Guinea engineering community by:

- Upholding and promoting the profession of engineering;
- Providing leadership and engineering advice to governments, non-government organisations, private sector and the public on key issues; and
- Meeting the professional needs of Members

Our identity

IEPNG is a network within the engineering professions dedicated to the improvement of engineering practice for the benefit of its members and the country. Our collective activities will be represented as those of the Professional Engineers Registration Board (PERB) of Papua New Guinea.

Our membership

We have several member groups, in recognition of the diversity of the engineering practice:

- Those who hold a tertiary qualification in engineering, use a systematic process of analysis, design/synthesis and implementation, strive to operate responsibly in accordance with a code of ethics set by their peers, and engage in continuing professional development. These members are classified as either Fellow Members (FIEPNG) or Registered Members (MIEPNG), depending on the professional level at which they use their skills and competence.
- Those with other college or even some tertiary qualifications, and practical experience that equips them to practice engineering as a systematic process - classed as Technician Members (TechIEPNG)
- Those with suitable academic qualifications who aspire to attain the above classes by developing engineering practice competence during monitored employment - classed as Graduate Members (GIEPNG)
- Those who express an interest in interacting with engineers although they do not have formal training with engineering themselves - classed as Companions
- Those studying for engineering qualifications - classed as Student Members (StudIEPNG)
- Those whose significant contributions have been recognised, classed as Fellow (FIEPNG) or Honorary Fellow (HonFIEPNG)
- Those who are not engineers but who contribute to IEPNG in other professional capacities - classed as Companion (ComIEPNG)

Strategic Objectives

Role of IEPNG

IEPNG is the national forum for the advancement of engineering and the professional development of our members in Papua New Guinea. Our role includes activities that:

- Advance the science and practice of engineering;
- Cultivate lifelong learning by our members;
- Promote the contribution of the profession as widely as possible;
- Champion professional and ethical conduct;
- Welcome all those who wish to practice engineering;
- Allow Members' aspirations to flourish, and stimulate and learn from their creativity and innovation;
- Celebrate excellence in engineering outcomes;
- Draw inspiration from our engineering heritage;
- Sustain the integrity of the profession; and
- Take the lead in the advocacy of the profession

Our values

The values that IEPNG and its entire Membership aspire are:

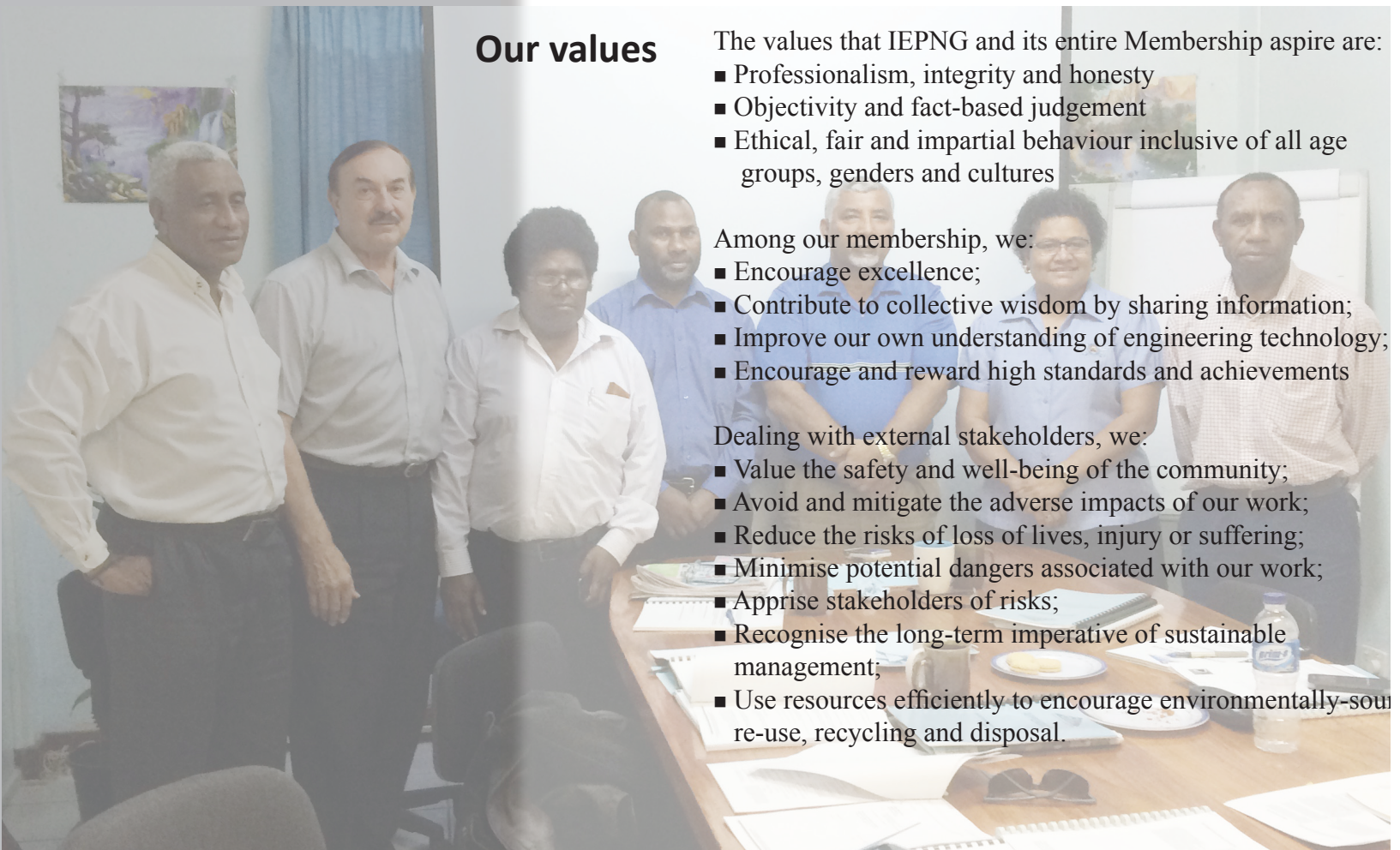
- Professionalism, integrity and honesty
- Objectivity and fact-based judgement
- Ethical, fair and impartial behaviour inclusive of all age groups, genders and cultures

Among our membership, we:

- Encourage excellence;
- Contribute to collective wisdom by sharing information;
- Improve our own understanding of engineering technology;
- Encourage and reward high standards and achievements

Dealing with external stakeholders, we:

- Value the safety and well-being of the community;
- Avoid and mitigate the adverse impacts of our work;
- Reduce the risks of loss of lives, injury or suffering;
- Minimise potential dangers associated with our work;
- Apprise stakeholders of risks;
- Recognise the long-term imperative of sustainable management;
- Use resources efficiently to encourage environmentally-sound re-use, recycling and disposal.



IEPNG officers attend a two-week course on the use of specific software to produce the Institution's own newsletter.

Competency-Based Assessment

INTRODUCTION

The Institution of Engineers PNG is finally rolling the Competency-Based Assessment system to assess professional engineers and technicians before registering them with the Professional Engineers Registration Board.

The new assessment format, which comes in a package, departs from the traditional formats of assessing engineers and other professionals, which is often done through their CVs and qualifications.

In the new assessment format, before an engineer or technician is registered with the PERB, assessors will take them through a set of criteria to establish the applicants' strengths

against no less than 12 sets of competencies.

They will only be registered with the PERB if they pass this new, rigorous assessment format. But the assessment does not end there.

There would be periodical assessments, using the same sets of competencies, to ensure that the engineers and technicians remain competent in their line of work both within and outside of the country.

In a nutshell, the CBA involves producing evidence to make a judgement (decision) about whether the person is competent or not compared to a particular standard. It is criterion-referenced, evidence-based and is a

participatory process.

A criterion-referenced assessment involves a person being assessed against an industry standard, or a set of criteria to establish competency; for example; a driving test.

Evidence-based assessment is a process that matches evidence of competency against a standard.

A participatory process involves the person and the assessor talking about and deciding what and how evidence will be collected to judge competency against the standard.

The new CBA package will be handed out at the IEPNG's Annual General Meeting in April 22 in Port Moresby.

WHAT IS CBA?

Competency based assessment is:

- *Criterion referenced*
- *Evidence based*
- *Participatory*

Competency based assessment is producing evidence to make a judgement [decision] about whether the person is competent compared to a particular standard.

Criterion-referenced assessment -

Means the person is assessed against an industry standard, or a set of criteria to establish competency; for example; a driving test.

Evidence based assessment - is a process that matches evidence of competency against a standard.

Participatory process - which involves the person and the assessor talking about and deciding what and how evidence will be collected to judge competency against the standard.

You are probably familiar with assessments like tests and exams that measure performance on percentages of accuracy or comparison to the performance of others. We all remember the 'pass' and 'fail' system of assessment. This is known as norm-refer-

enced assessment.

Norm-referenced assessment methods may have:

- Student results compared against each other
- Statistical comparisons used to grade achievement
- Training assessed by mean/average performance
- Training courses and programs as the basis of assessment
- Sectors of the training used in final examination
- Marking scales used for passing criteria
- Many questions or topics may be ignored.

Norm-referenced assessment is not useful or effective in determining a person's competence to consistently perform a certain task or job activity to an agreed industry standard.

A person can pass a norm-referenced assessment and answer questions with 50 per cent correct responses. What happens if one of the questions that is answered incorrectly is about an important part of the job? In the norm-reference assessment it would not matter — the person 'passed'

even though they did not show they have an important piece of knowledge to do the job!

Competency based assessment measures the performance of the participant against an agreed set of industry defined standards, rather than against other participants or based on a pass/fail method.

Word List

Competency based assessment: the gathering and judging of evidence in order to decide whether a person has achieved a standard of competence.

Norm-referenced assessment: assessment that measures performance on percentage of accuracy or comparison to other people's performance.

Principles of assessment: the four basic principles of assessment: valid, reliable, fair and flexible.

Validation: a process for confirming the correctness or soundness of information or findings or an external process of verifying that an organisation satisfies the criteria for quality endorsement.

Competency-Based Quality Marks or Membership Category

The term “quality mark” refers to any title, membership class or registration that is only achieved through demonstration of a specified level of competence by competence assessment.

Current competence means that competence has been demonstrated within the last three years.

IEPNG currently operates one register of current competence (Professional Engineer) and has five competence-based membership classes (Fellow, Member, Graduate Member, Companion and Technician) – all require an assessment of competence.

Membership is a “lifetime” brand – once the required competence has been demonstrated, no further re-assessments are required to retain the quality mark.

Registration on any current competence register requires on-going assessments of current competence to retain registration.

Any engineering professional can apply for any quality mark, however, the appropriate quality mark will be determined by the level of complexity of engineering work

being performed competently:

- Professional engineers perform “complex engineering”;
- Engineering technologists perform “broadly defined engineering”; and
- Engineering technicians perform “well-defined engineering”.

Assessment for entry to these registers is done in conjunction with assessment for Professional Engineers Registration Board (PERB) registration.

Types of Assessment

There are two types of assessment:

i) *Assessment for Admission (AFA)* to one or more of the competence based registers or IEPNG membership classes.

This involves a knowledge assessment unless you hold the appropriate exemplar qualification where evidence is presented by way of work samples. If evidence is weak, the panel may require a face-to-face Interview/discussion with the applicant.

ii) *Continued Registration Assessment (CRA)* – used to retain/renew registration again on a current-competence register. This involves a knowledge assessment unless you hold the appropriate exemplar qualification

where evidence is presented by way of work samples.

If evidence is weak, the panel may require a face-to-face interview/discussion with the candidate. CRAs are required at intervals not exceeding four years.

That means a professional engineer MUST undertake the Competence Assessment every four years to remain on the Register.

Public Naming of Candidates Being Assessed

Changes made to the IEPNG/PERB Rules and IEPNG/PERB Regulations covering competence assessment means that from 2017 any person presenting for competence assessment will have his or her name posted on the IEPNG website for no more than 21 days.

During this period any person may make a statement to IEPNG about the candidate’s competence. Any such statement received will be forwarded to the candidate along with an invitation to the candidate to make a response. Both the statement and the response will be given to the assessment panel for its consideration in conducting the assessment.



Engineers attending a training program organised by IEPNG.

COMPETENCE STANDARDS FOR PROFESSIONAL ENGINEERS

The following competence standard sets the entry standard for engineers seeking formal peer recognition as a competent professional engineer by undertaking an IEPNG competence assessment. The competence standard sets the standard for initial registration as a Chartered Professional Engineer (CPEng), and the standard for entry into the class of Professional Member with the Institution of Engineers PNG Inc.

Competence Standard

To meet the minimum standard a person must demonstrate that he/she is able to practice competently in his/her practice area to the standard expected of a reasonable professional engineer.

The extent to which the person is able to perform each of the following numbered elements in his/her practice area must be taken into account in assessing whether or not he/she meets the overall standard:

diction in which he/she practices (for CPEng assessment this relates to the jurisdiction of Papua New Guinea)

- (i) Understands and operates within the legal and regulatory framework in the jurisdictions in which she/he practices
- (ii) Understands and applies appropriately the special engineering requirements operating within the jurisdictions in which he/she practices
- (iii) Understands and applies codified

- (ii) Develops concepts and recommendations that were tested against engineering principles
- (iii) Consults with stakeholders
- (iv) Evaluates options and selects solution that best matched needs, requirements and criteria
- (v) Plans and implements effective, efficient and practical systems or solutions
- (vi) Evaluates outcomes against original specification or design brief



1. Comprehend, and apply knowledge of accepted principles underpinning widely applied good practice for professional engineering

Has a Washington Accord degree or recognised equivalent qualification or has demonstrated equivalent knowledge and is able to:

- (i) Identify, comprehend and apply appropriate engineering knowledge
- (ii) Work from first principles to make reliable predictions of outcomes
- (iii) Understand assumptions and constructs of mathematical or theoretical models and is able to determine the relevance of their use in given situations
- (iv) Seek advice, where necessary, to supplement own knowledge and experience
- (v) Read literature, comprehend, evaluate and apply new knowledge

2. Comprehend, and apply knowledge of, accepted principles underpinning good practice for professional engineering that is specific to the juris-

knowledge such as standards, IEPNG practice notes, codes of practice etc

3. Define, investigate and analyse complex engineering problems in accordance with good practice for professional engineering

- (i) Identifies and defines the scope of the problem
- (ii) Investigates and analyses relevant information using quantitative and qualitative techniques
- (iii) Tests analysis for correctness of results
- (iv) Conducts any necessary research and reaches substantiated conclusions

4. Design or develop solutions to complex engineering problems in accordance with good practice for professional engineering.

- (i) Identifies needs, requirements, constraints and performance criteria, including as appropriate the need to design for safety, constructability, maintainability, etc

5. Be responsible for making decisions on part or all of one or more complex engineering activities

- (i) Takes accountability for his/her outputs and for those for whom he/she is responsible
- (ii) Accepts responsibility for his/her engineering activities

6. Manage part or all of one or more complex engineering activities in accordance with good engineering management practice

- (i) Plans, schedules, organises and monitors progress of projects or activities to deliver specified outcomes within time constraints
- (ii) Applies appropriate quality assurance techniques
- (iv) Manages resources, including personnel, finance and physical resources
- (v) Manages conflicting demands and expectations



7. Identify, assess and manage engineering risks

- (i) Identifies risks which impact on people, property and the environment
- (ii) Develops risk management policies, procedures and protocols to manage safety and hazards during construction/fabrication and product life cycles
- (iii) Manages risks through 'elimination, minimisation and avoidance' techniques
- (iv) Designs for safety during construction/fabrication, operation, maintenance and de-construction/decommissioning

8. Conduct engineering activities to an ethical standard at least equivalent to the relevant code of ethical conduct

- (i) Understands IEPNG and/or CPENG codes of ethics
- (ii) Behaves in accordance with the relevant code of ethics even in difficult circumstances (includes demonstrating an awareness of limits of capability; acting with integrity and honesty and demonstrating self management)
- (iii) Informs decision makers of significant consequences from not following advice (eg, relating to risks, safety etc)

9. Recognise the reasonably foreseeable social, cultural and environmental effects of professional engineering activities generally

- (i) Considers long term issues and impact(s) of own engineering activities, such as use of materials, waste during fabrication/construction, energy efficiency during use, obsolescence and end-of-life issues.
- (ii) Considers and takes into account possible social, cultural and environmental impacts and consults where appropriate

- (iii) Recognises impact and long-term effects of engineering activities on the environment
- (iv) Recognises foreseeable effects and where practicable seeks to reduce adverse effects

10. Communicate clearly with other engineers and others that he or she is likely to deal with in the course of his or her professional engineering activities

- (i) Uses oral and written communication to meet the needs and expectations of his/her audience
- (ii) Communicates using a range of media suitable to the audience and context
- (iii) Treats people with respect
- (iv) Develops empathy and uses active listening skills when communicating with others
- (v) Operates effectively as a team member

11. Maintain the currency of his or her professional engineering knowledge and skills

- (i) Demonstrates a commitment to extending and developing knowledge and skills
- (ii) Participates in education, training, mentoring or other programmes contributing to his/her professional development
- (iii) Adapts and updates knowledge base in the course of professional practice
- (iv) Demonstrates collaborative involvement with professional engineers (Papua New Guinea engineers for CPENG assessments)
- (v) Awareness and application of recent developments within his or her own practice area

12. Exercise sound professional engineering judgement

- (i) Demonstrates the ability to identify

alternative options

- (ii) Demonstrates the ability to choose between options and justify decisions
- (iii) Peers recognise his/her ability to exercise sound professional engineering judgement.

Definitions

Complex engineering activities

Complex engineering activities means engineering activities or projects that have some or all of the following characteristics:

- (i) Involve the use of diverse resources (and, for this purpose, resources includes people, money, equipment, materials and technologies);
- (ii) Require resolution of critical problems arising from interactions between wide ranging technical, engineering and other issues;
- (iii) Have significant consequences in a range of contexts;
- (iv) Involve the use of new materials, techniques, or processes or the use of existing materials, techniques, or processes in innovative ways.

Complex engineering problems

Complex engineering problems have some or all of the following characteristics:

- (i) Involve wide-ranging or conflicting technical, engineering, and other issues;
- (ii) Have no obvious solution and require originality in analysis;
- (iii) Involve infrequently encountered issues;
- (iv) Are outside problems encompassed by standards and codes of practice for professional engineering;
- (v) Involve diverse groups of stakeholders with widely varying needs;
- (vi) Have significant consequences in a range of contexts;
- (vii) Cannot be resolved without in-depth engineering knowledge.

COMPETENCE STANDARDS FOR ENGINEERING TECHNOLOGISTS

The following competence standard sets the entry standard for engineering technologists seeking recognition as a competent engineering technologist in the class of Technical Member (TIPENZ) and/or registration as an Engineering Technology Practitioner (ETPract).

Competence Standard

To meet the minimum standard a person must demonstrate that he/she is able to practice competently in his/her practice area to the standard expected of a reasonable engineering technology practitioner.

The extent to which the person is able to perform each of the following numbered elements in his/her practice area must be taken into account in assessing whether or not he/she meets the overall standard.

1. Comprehend and apply knowledge underpinning good practice as an engineering technology practitioner

- (i) Has a Sydney Accord degree or recognised equivalent qualification or has demonstrated equivalent knowledge
- (ii) Identifies, comprehends and applies engineering knowledge to broadly-defined engineering problems
- (iii) Seeks advice, where necessary, to supplement own knowledge and experience

2. Comprehend and apply knowledge underpinning good practice as an engineering technology practitioner that is specific to the jurisdiction in which he/she practices (for ETPract registration, the jurisdiction in which competence is demonstrated must be Papua New Guinea)

- (i) Understands and operates within the legal requirements and regulatory issues associated with broadly-defined engineering activities within the jurisdictions in which she/he practices.
- (ii) Understands and applies appropriately the special engineering requirements operating within the jurisdic-

tions in which she/he practices
(iii) Understands and applies codified knowledge such as standards, IEPNG practice notes, codes of practice etc.

3. Identify, clarify and analyse broadly-defined engineering problems in accordance with good engineering practice

- (i) Identifies the scope of the problem
- (ii) Investigates and analyses relevant information using quantitative and qualitative Techniques
- (iii) Tests analysis for correctness of results
- (iv) Conducts any necessary testing and reaches justified conclusions

4. Design or develop solutions to broadly-defined engineering prob-

lems by applying accepted procedures and methodologies

- (i) Identifies needs, requirements, constraints and performance criteria, including as appropriate the need to design for safety, constructability, maintainability etc
- (ii) Develops concepts and recommendations that are tested against accepted procedures and methodologies
- (iii) Consults with stakeholders
- (iv) Evaluates options and selects solution that best matched needs, requirements and criteria
- (v) Plans and implements effective, efficient and practical systems or solutions
- (vi) Evaluates outcomes against original specification or design brief.

To Page 15



5. *Be responsible for making decisions on part or all of broadly-defined engineering activities*

- (i) Takes accountability for his/her outputs and for those for whom he/she is responsible
- (ii) Accepts responsibility for his/her engineering activities

6. *Manage part or all of one or more broadly-defined engineering activities in accordance with good engineering management practice*

- (i) Plans, schedules organises and monitors progress of projects or activities to deliver specified outcomes within constraints
- (ii) Applies appropriate quality assurance techniques
- (iii) Manages resources, including personnel, finance and physical resources
- (iv) Manages conflicting demands and expectations

7. *Identify risks and apply risk management techniques to broadly-defined engineering problems*

- (i) Identifies risks which impact on people, property and the environment
- (ii) Applies risk management policies, procedures and protocols to manage safety and hazards during construction/fabrication and product life cycles

8. *Conduct engineering activities to an ethical standard at least equivalent to the relevant code of ethical conduct*

- (i) Understands IPENZ and/or register codes of ethics
- (ii) Behaves in accordance with the relevant code of ethics even in difficult circumstances (includes demonstrating an awareness of limits of capability; acting with integrity and honesty and demonstrating self-management)
- (iii) Informs decision makers of significant consequences from not following advice (eg, relating to risks, safety etc)

9. *Recognise the reasonably foreseeable*

able social, cultural and environmental effects of broadly-defined engineering functions generally

- (i) Considers long-term issues and impact(s) of own engineering activities, such as use of materials, waste during fabrication/construction, energy efficiency during use, obsolescence and end-of-life issues
- (ii) Considers and takes into account possible social, cultural and environmental impacts and consults where appropriate
- (iii) Recognises foreseeable effects and where practicable seeks to reduce adverse Effects

10. *Communicate clearly with others in the course of broadly-defined engineering activities*

- (i) Uses oral and written communication that meet the needs and expectations of audience
- (ii) Communicates using a range of media suitable to the audience and context
- (iii) Treats people with respect
- (iv) Develops empathy and uses active listening skills when communicating with others
- (v) Operates effectively as a team member

11. *Maintain the currency of engineering knowledge and skills*

- (i) Demonstrates a commitment to extending and developing knowledge and skills
- (ii) Participates in education, training, mentoring or other programmes contributing to his/her professional development
- (iii) Adapts and updates knowledge base in the course of engineering practice
- (iv) Demonstrates collaborative involvement with other professionals
- (v) Awareness and application of recent developments within his or her own practice area

12. *Exercise sound engineering judgement*

- (i) Demonstrates the ability to identify alternative options

- (ii) Demonstrates the ability to choose between options and justify decisions
- (iii) Peers recognise his/her ability to exercise sound engineering judgement
- (iv) Recognises limits of competence.

Definitions

Broadly defined engineering activities or projects have some or all of the following characteristics:

- (i) Involve a variety of resources (and for this purpose resources includes people, money, equipment, materials, information and technologies)
- (ii) Require resolution of occasional interactions between limited technical, engineering and other issues, of which few are conflicting
- (iii) Involve the use of new materials, techniques, or processes in innovative ways
- (iv) Have consequences that are most important locally, but may extend more widely
- (v) Require a knowledge of normal operating procedures and processes

Broadly defined engineering problems have some or all of the following characteristics:

- (i) Involve a variety of factors which may impose conflicting constraints,
- (ii) Can be solved by application of well-proven analysis techniques,
- (iii) Requires knowledge of principles and applied procedures or methodologies
- (iv) Belong to families of familiar problems which are solved in well-accepted ways,
- (v) May be partially outside those encompassed by standards or codes of practice,
- (vi) Involve several groups of stakeholders with differing and occasionally conflicting needs
- (viii) Have consequences which are important locally but may extend more widely,
- (ix) Are parts of, or systems within complex engineering problems

COMPETENCE STANDARDS FOR ENGINEERING TECHNICIANS

To meet the minimum standard a person must demonstrate that he/she is able to practice competently in his/her practice area to the standard expected of a reasonable engineering technician.

The extent to which the person is able to perform each of the following numbered elements in his/her practice area must be taken into account in assessing whether or not he/she meets the overall standard.

2. Comprehend and apply detailed knowledge underpinning good practice as an engineering technician that is specific to the jurisdiction in which he/she practices (for CertETn registration, the jurisdiction in which competence is demonstrated must be Papua New Guinea).

(i) Understands and operates within the legal requirements and regulatory issues associated with well-defined

(i) Identifies the scope of the problem
(ii) Investigates and analyses relevant information using routinely-applied techniques
(iii) Tests analysis for correctness of results
(iv) Conducts any necessary testing and reaches justified conclusions

4. Design or develop solutions to well-defined engineering problems by applying accepted procedures and methodologies

(i) Identifies needs, requirements, constraints and performance criteria, including as appropriate the need to design for safety, constructability, maintainability etc
(ii) Develops concepts and recommendations that are tested against accepted procedures and methodologies
(iii) Consults with stakeholders
(iv) Evaluates options and selects solution that best matched needs, requirements and criteria
(v) Plans and implements effective, efficient and practical systems or solutions
(vi) Evaluates outcomes against original specifications or design brief

5. Be responsible for making decisions on part or all of one or more well defined engineering activities

(i) Takes accountability for his/her outputs and for those for whom he/she is responsible
(ii) Accepts responsibility for his/her engineering activities

6. Manage part or all of one or more well-defined engineering activities in accordance with good engineering management practice

(i) Plans, schedules organises and monitors progress of projects or activities to deliver specified outcomes within constraints
(ii) Applies appropriate quality assurance techniques
(iii) Manages resources, including personnel, finance and physical resources
(iv) Manages conflicting demands and expectations

1. Comprehend and apply detailed knowledge underpinning good practice as an engineering technician

(i) Has a Dublin Accord Diploma or recognised equivalent qualification or has demonstrated equivalent knowledge
(ii) Identifies, comprehends and applies engineering knowledge to well-defined engineering problems
(iii) Seeks advice, where necessary, to supplement own knowledge and experience

engineering activities within the jurisdictions in which she/he practices

(ii) Understands and applies appropriately the special engineering requirements operating within the jurisdictions in which he/she practices
(iii) Understands and applies codified knowledge such as standards, IEPNG practice notes, codes of practice etc

3. Identify, state and analyse well-defined engineering problems in accordance with good practice for engineering





7. Identify risk and apply risk management techniques to well-defined engineering problems

- (i) Is familiar with limits of applicability, applies appropriate checks and takes corrective actions to minimise engineering risk
- (ii) Applies appropriate risk management techniques to manage risks that impact on people, property and the environment

8. Conduct engineering activities to an ethical standard at least equivalent to the relevant code of ethical conduct

- (i) Understands IEPNG and/or CPEng codes of ethics
- (ii) Behaves in accordance with the relevant code of ethics even in difficult circumstances (includes demonstrating an awareness of limits of capability; acting with integrity and honesty and demonstrating self-management)
- (iii) Informs decision makers of significant consequences from not following advice (eg, relating to risks, safety etc)

9. Recognise the reasonably foreseeable social, cultural and environmental effects of well-defined engineering activities generally

- (i) Considers long-term issues and impact(s) of own engineering activities, such as use of materials, waste during fabrication/construction, energy efficiency during use, obsolescence and end-of-life issues
- (ii) Considers and takes into account possible social, cultural and environmental impacts and consults where appropriate
- (iii) Recognises foreseeable effects and where practicable seeks to reduce adverse effects

10. Communicate clearly with others in the course of his/her well defined engineering activities

- (i) Uses oral and written communication that meet the needs and expectations of his/her audience
- (ii) Communicates using a range of media suitable to the audience and context
- (iii) Treats people with respect
- (iv) Develops empathy and uses active listening skills when communicating with others
- (v) Operates effectively as a team member

11. Maintain the currency of engineering knowledge and skills

- (i) Demonstrates a commitment to extending and developing knowledge and skills
- (ii) Participates in education, training, mentoring or other programmes contributing to his/her professional development
- (iii) Adapts and updates knowledge base in the course of professional practice
- (iv) Demonstrates collaborative involvement with others in the engineering profession
- (v) Awareness and application of recent developments within his or her own practice area

12. Exercise sound engineering judgement

- (i) Demonstrates the ability to identify alternative options
- (ii) Demonstrates the ability to choose between options and justify decisions
- (iii) Peers recognise his/her ability to exercise sound engineering judgement
- (iii) Recognises limits of competence.

Definitions

Well-defined engineering activities means engineering activities or projects that have some or all of the following characteristics:

- (i) Involve a limited range of resources (and for this purpose resources includes people, money, equipment, materials, information and technologies)
- (ii) Require resolution of interactions between limited technical and engineering issues with little or no impact of wider issues
- (iii) Involve the use of existing materials techniques, or processes in new ways
- (iv) Have consequences that are locally important and not far-reaching
- (v) Require a knowledge of practical procedures and practices for widely-applied operations and processes.

Well-defined engineering problems means engineering problems having some or all of the following characteristics:

- (i) Involve several issues, but with few of these exerting conflicting constraints,
- (ii) Can be solved in standardised ways,
- (iii) Can be resolved using limited theoretical knowledge but normally requires extensive practical knowledge,
- (iv) Are frequently encountered and thus familiar to most practitioners in the practice area,
- (v) Are encompassed by standards and/or documented codes of practice,
- (vi) Involve a limited range of stakeholders with differing needs
- (vii) Have consequences which are locally important and not far-reaching
- (viii) Are discrete components of engineering systems

FINANCIAL REPORT 2015

REPORT OF THE BOARD MEMBERS

The Board Members are pleased to present their report on the financial statements of the Institute for the year ended 31 December 2015.

Nature of Entity and Activities

The Institution of Engineers Papua New Guinea Inc is a non-profit and non-government organisation and is incorporated and registered under the Associations Incorporation Act of Papua New Guinea. The primary purpose of the Institution is to promote the interests of the engineering profession and its members in Papua New Guinea.

Institution Information

Registered Office: Portion 637
PO Box 881,
Waigani, NCD

The Board Members for the 2015 year were:

Mr. Ila Mari	President
Vacant	Deputy President
Mr. Moses Gurra	Past President
Ms. Finkewe Zurecnuoc	
Mr. John Cholai	
Mr. Joseph Asinimbu	
Prof. John Pumwa	
Prof. Yaip Kingsford Telue	
Mr. Brian Selarn Alois	

Secretary and Chief Executive Officer:

Ms Emie Mavoko	Secretary
Mr. Benedict Mick	CEO

The Auditor for the 2015 year was:

Niugini Business Consultants
Registered Public Accountants & Auditors
PO Box 391
PORT MORESBY, National Capital District
Papua New Guinea

Banker	Bank South Pacific Limited PO Box 211 WAIGANI, National Capital District
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BOARD MEMBERS STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2015

The Board members state that the accompanying statement of net assets and statement of income and expenditure and cash flows are drawn up so as to exhibit a true and fair view of the state of affairs of the Institute at 31 December 2015 and the results of the operations of the Institution for the year ended on that date.

No circumstances have arisen which render adherence to the existing method of valuation of assets or liabilities of the Institution misleading or inappropriate.

For and on behalf of the Board.



BOARD MEMBER



BOARD MEMBER

Dated at Port Moresby this 24th day of March 2016

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AUDITOR'S REPORT TO MEMBERS OF IEPNG

NIUGINI BUSINESS CONSULTANTS

(Registered Public Accountants & Auditors)

PO BOX 391
PORT MORESBY
National Capital District
Mobile: 7686 1691 / 721 65924

PO BOX 1347
MT HAGEN
Western Highlands Province

Email: niuginibusiness@daltron.com.pg / niugini_business@yahoo.com

Scope

We have audited the financial report of Institution of Engineers Papua New Guinea Inc for the year ended 31 December 2015 as set out on pages 4 to 11. The Institute's Board Members are responsible for the preparation and presentation of the financial statements and the information contained therein. We have conducted an independent audit of the financial report in order to express an opinion on it to the members of the Institution.

Our audit has been conducted in accordance with International Standards on Auditing to provide reasonable assurance as to whether the financial report is free of material misstatement. Our procedures included examination, on a test basis, of evidence supporting the amounts and other disclosures in the financial report, and evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion as to whether, in all material respects, the financial report is presented fairly in accordance with International Reporting Standards and the provisions of the Accountants Act (1996) as to present a view which is consistent with our understanding of the Chapter's financial position, the results of its operations and its cash flows.

The audit opinion expressed in this report has been formed on the above basis.

Unqualified Audit Opinion

In our opinion, the financial report presents fairly the financial position of the Institution of Engineers Papua New Guinea Inc as at 31 December 2015, the results of its operations and cash flows for the year ended in accordance with applicable Accounting Standards, and with the provisions of the Accountants Act (1996).

NIUGINI BUSINESS CONSULTANTS
Registered Public Accountants



By: **JOHANIS WANDAKI** – CPA PNG
Registered under the Accountants
Registration Act 1996

Dated **23** of **March** 2016

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REVENUE STATEMENT FOR THE YEAR ENDING 31 DECEMBER 2015

	NOTES	2015 K	2014 K
Operating Revenue	2	2,213,541	2,230,758
Operating Expenses	2	<u>1,615,955</u>	<u>1,318,404</u>
NET SURPLUS / (DEFICIT) FOR THE YEAR		<u>597,586</u>	<u>912,354</u>

STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2015

	NOTES	2015 K	2014 K
Equity as at start of year		6,536,706	5,614,261
Prior year adjustment		-144,991	10,091
Net Surplus / (Deficit)		<u>597,586</u>	<u>912,354</u>
MEMBERS EQUITY AS AT END OF YEAR		<u>6,989,301</u>	<u>6,536,706</u>

The accompanying notes form an integral part of these accounts.

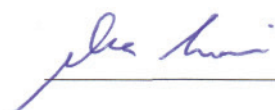
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BALANCE SHEET AS AT 31 DECEMBER 2015

	Notes	2015 K	2014 K
CURRENT ASSETS			
Cash at bank and on hand		2,422,413	2,283,185
Term Deposits		9,227	3,404,696
Receivables	3	<u>1,192,538</u>	<u>1,308,490</u>
		<u>3,624,178</u>	<u>6,996,371</u>
NON-CURRENT ASSETS			
Property, Plant and Equipment	8	7,985,792	135,057
Work-In-Progress – Land Acquisition		<u>445,625</u>	<u>445,625</u>
		<u>8,431,417</u>	<u>580,682</u>
TOTAL ASSETS		12,055,595	7,577,053
CURRENT LIABILITIES			
Trade Creditors and Accruals	4	370,872	234,741
Advance Membership Fees	5	413,980	805,606
Secured Bank Loan	9	<u>676,764</u>	<u>-</u>
		<u>1,461,616</u>	<u>1,040,347</u>
NON-CURRENT LIABILITIES			
Secured Bank Loan	9	<u>3,604,678</u>	<u>-</u>
TOTAL LIABILITIES		<u>5,066,294</u>	<u>1,040,347</u>
NET ASSETS		<u>6,989,301</u>	<u>6,536,706</u>
TOTAL MEMBERS EQUITY		<u>6,989,301</u>	<u>6,536,706</u>

To be read in conjunction with the notes on Pages 7 to 11

For and on behalf of the Board.



BOARD MEMBER



BOARD MEMBER

Dated at Port Moresby this 24th day of March 2016

STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2015

	NOTES	2015 K	2014 K
CASH FLOW FROM OPERATING ACTIVITIES			
Cash received from member		2,097,589	2,230,758
Cash Paid creditors, suppliers and employees		(1,676,319)	(870,956)
Interest received		-	6,961
Net cash flow from operating activities		<u>421,270</u>	<u>1,366,763</u>
CASH FLOW FROM INVESTING ACTIVITIES			
Purchase of property, plant and equipment		(7,958,953)	(7,231)
Proceeds from sale of fixed assets		-	-
Net cash inflow/(outflow) from investing activities		<u>(7,958,953)</u>	<u>(7,231)</u>
CASH FLOW FROM FINANCING ACTIVITIES			
Proceeds from Bank Loan		4,281,442	-
Other		-	-
Net cash inflow/(outflow) from financing activities		<u>4,281,442</u>	<u>-</u>
Net Increase / (decrease) in cash held		(3,256,241)	1,359,530
Cash at beginning of financial year		5,687,881	4,328,351
Cash at end of financial year		<u>2,431,640</u>	<u>5,687,881</u>
Represented by:			
Cash at bank and on hand		2,422,413	2,283,185
Term Deposits		9,227	3,404,696
		<u>2,431,640</u>	<u>5,687,881</u>

For the purpose of the statement of cash flows, cash includes cash on hand and cash on short term deposits net of bank overdraft.

To be read in conjunction with the notes on Pages 7 to 11

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS FOR THE YEAR ENDING 31 DECEMBER 2015

1. STATEMENT OF ACCOUNTING POLICIES

A. Revenue

Revenue is accounted for on the accrual basis of accounting, except for membership fees which are recognised on a cash basis.

B. Properties, Plant and Equipment

Property, plant and equipment is stated at cost less accumulated depreciation, except for leasehold land which is valued at cost.

Depreciation is calculated from the date an asset becomes operational on a straight line basis to write off the cost of the assets over their estimated economic lives.

The estimated useful economic lives are as follows:

Buildings	3.0 - 4.50%
Office Equipment	11.5%
Computer Equipment	22.5%
Furniture and Fittings	11.5%
Motor Vehicles	20.0%

C. Impairment of Assets

Where the recoverable amount of an asset falls below its carrying amount, the asset is written down to its recoverable amount. There has been no impairment in the 2015 financial year.

D. Income Tax

The Income of the Institution is exempt from income tax by virtue of Section 27(C) of the Papua New Guinea Income Tax Act 1959, as amended.

E. Comparative Figures

Where necessary, comparative figures have been adjusted to conform with changes in presentation in the current year.

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NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS FOR THE YEAR ENDING 31 DECEMBER 2015

2. OPERATING PROFIT

	2015 K	2014 K
The operating profit has been determined after charging/(crediting) the following items:-		
Crediting as Income -		
Membership Fees	1,106,257	1,621,419
Rental Income	520,000	-
Other Income	587,284	609,339
	<u>2,213,541</u>	<u>2,230,758</u>
Charging as Operating Expenses -		
Audit Fees	8,600	8,600
Depreciation	108,218	32,135
Branch / Chapter Allocation	1,000	2,000
Total Operating Costs	<u>117,818</u>	<u>42,735</u>

3. RECEIVABLES

	2015 K	2014 K
Trade debtors		
Less: Provision for doubtful debts	1,178,925	1,294,877
	<u>-</u>	<u>-</u>
	<u>1,178,925</u>	<u>1,294,877</u>
Other Debtors		
Rental Bond	13,613	13,613
Other	-	-
Total Receiveables	<u>1,192,538</u>	<u>1,308,490</u>

4. TRADE CREDITORS & OTHER ACCRUALS

	2015 K	2014 K
Trade Creditors	29,248	30,298
GST Payable	317,513	214,355
Advance Payments - Airfares	0	-21,677
Super Fund Liabilities	2,922	-
Audit Fees	8,800	-
Payroll Liabilities	12,390	11,765
	<u>370,873</u>	<u>234,741</u>

STATEMENT OF CASHFLOWS FOR THE YEAR ENDING 31 DECEMBER 2015

5. ADVANCE MEMBERSHIP FEES

	2015 K	2014 K
Membership & Registration Fees (Overpayments)	4,309	4,309
Advance Membership Fees Received	409,671	801,297
Total Advance Membership Fees	413,980	805,606

6. CONTINGENT LIABILITY

There were no contingent liabilities at balance date and none have arisen since balance date.

7. CAPITAL COMMITMENTS

There were no capital commitments at 31 December 2015.

8. FIXED ASSETS

	Land & Buildings	Furniture & Fittings	Office Equip- ment - at cost	Motor Vehi- cles - at cost	Computers & Software	TOTAL
Cost	K	K	K	K	K	K
At 1 Jan 2015	-	35,463	53,514	177,482	78,541	345,000
Additions	7,958,953	-	-	-	-	7,958,953
Disposals	-	-	(3,628)	(18,182)	(15,988)	(37,798)
At 31 December 2015	7,958,953	35,463	49,886	159,300	62,553	8,266,155
Depreciation						
At 1 January 2015	-	30,634	33,765	82,163	63,381	209,943
Charge for the year	55,999	1,600	1,476	39,890	9,253	108,218
Disposals	-	-	(3,628)	(18,182)	(15,988)	(37,798)
At 31 December 2015	55,999	28,689	31,435	58,333	63,487	280,363
NET BOOK VALUE – 2015	7,902,954	3,229	18,273	55,429	5,907	7,985,792
NET BOOK VALUE – 2014	-	4,829	19,749	95,319	15,160	135,057

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2015

9. SECURED BANK LOAN

This includes loans obtained from Commercial banks and is secured by all assets and undertakings of the Institution.

	2015 K	2014 K
Secured Bank Loan – Current	676,764	-
– Non-Current	<u>3,604,678</u>	<u>-</u>
Total Lease Liabilities	<u>4,281,442</u>	<u>-</u>

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DETAILED INCOME AND EXPENDITURE STATEMENT FOR THE YEAR ENDING 31 DECEMBER 2015

	2015 K	2014 K
INCOME		
Registration Fees	616,422	1,130,715
Application Fees	489,835	490,704
Graduate Professional Development Program	40,400	58,436
Interest	788	6,961
Structural Income	7,246	50,916
Workshop & Short Course	110,945	181,000
Adjudication Fees	229,582	-
AGM Annual Dinner	157,909	66,482
SPEA Fees	29,645	-
Pom Branch Income	10,000	220,000
LNG Project Exemption Fee	0	10,000
Property Rental Income	520,000	-
Other Income	<u>769</u>	<u>15,544</u>
Total Revenue	<u>2,213,541</u>	<u>2,230,758</u>
EXPENDITURE		
Advertising	19,131	14,425
Audit Fees	8,800	16,800
Bad Debts	1,172	2,804
Bank Charges	3,260	5,193
Board Expenses	28,970	43,139
Branch / Chapter Allocation	1,000	2,000
Donations & Sponsorships	2,727	2,727
Computer Expenses	1,152	13,739
Consulting Fees - Adjudication Fees	150,000	7,935
Conference Expenses	83,949	62,749
Dues / Professional Fees	2,440	2,090
Depreciation	108,218	32,135
Electricity	28,101	28,645
Employee Recreation Leave	12,869	20,246
Budget Review & Office Meetings	5,951	5,629
Bank Interest	289,015	-
Internet	30,351	31,549
Legal Fees	19,431	4,991
Pom Branch Expenses	7,745	113,337
Maintenance - Office	7,348	2,953
Naming Rights	7,100	7,200
Office Insurance	14,347	2,238
Office Stationery & Expenses	15,209	24,701
Printing & Publications	17,073	10,151

DETAILED INCOME AND EXPENDITURE STATEMENT FOR THE YEAR ENDING 31 DECEMBER 2015

	2015 K	2014 K
Rents	162,901	156,074
SPEA Expenses	28,796	24,446
Salary & Wages	319,344	327,546
Shipping & Postage	4,977	8,917
Staff Amenities	1,709	6,557
Subscription	2,613	25,680
Supperfund Contribution	15,944	15,991
Telephone / Faxes	8,415	8,151
Training Expenses	3,245	11,969
Travel Expenses	82,603	126,373
Vehicle Expenses	24,947	21,005
Water Rates	12,500	12,100
Workshop & Short Course Expenses	60,035	109,640
Refund – Course Membership Fees	33,431	-
Others	<u>1,906</u>	<u>6,579</u>
TOTAL EXPENSES	<u>1,615,955</u>	<u>1,318,404</u>
SURPLUS / (DEFICIT)	584,717	912,354

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PROPERTY BANK ACCOUNT RECONCILIATION

Opening Balance as at 04th April 2015		40,229.15
Deposit to reactivate bank account	1,000.00	
Transfer of Bond & June 2015 Rent	143,000.00	
August 2015 Rent	71,500.00	
July & Aug. Bank fees		678.00
Sept 2015 Rent	71,500.00	
September 2015 loan repayment		56,397.04
Bank fees		16.00
October 2015 rent	71,500.00	
October 2015 loan Repayment		56,397.04
Bank fees		14.00
November 2015 Rent	71,500.00	
November 2015 loan Repayment		56,397.04
Bank fees		18.00
December 2015 Rent	71,500.00	
December 2015 loan Repayment		56,397.04
Bank fees		31.00
Total Rent deposited	501,500.00	
Total Loan repayment		226,345.16
Net Profit/Loss		275,154.84
Net Profit Plus Opening Balance		315,383.99
Closing Bank Balance as at 31.12.2015		315,383.99
Add back		
July Rent deposited to main account	71,500.00	
Totals to Rental income including GST	573,000.00	
Add back		
Apr - Aug 2015 loan repayment paid by main account		281,985.20
Total loan repayment		508,330.36
Less Total Bank Fees		757.00
Totals to YTD Loan Repayment		507,573.36
Gross Net		65,426.64
Less GST		52,000.00
less deposit to reactive bank account		1,000.00
Total Other Liabilities		53,000.00
Net Surplus		12,426.64

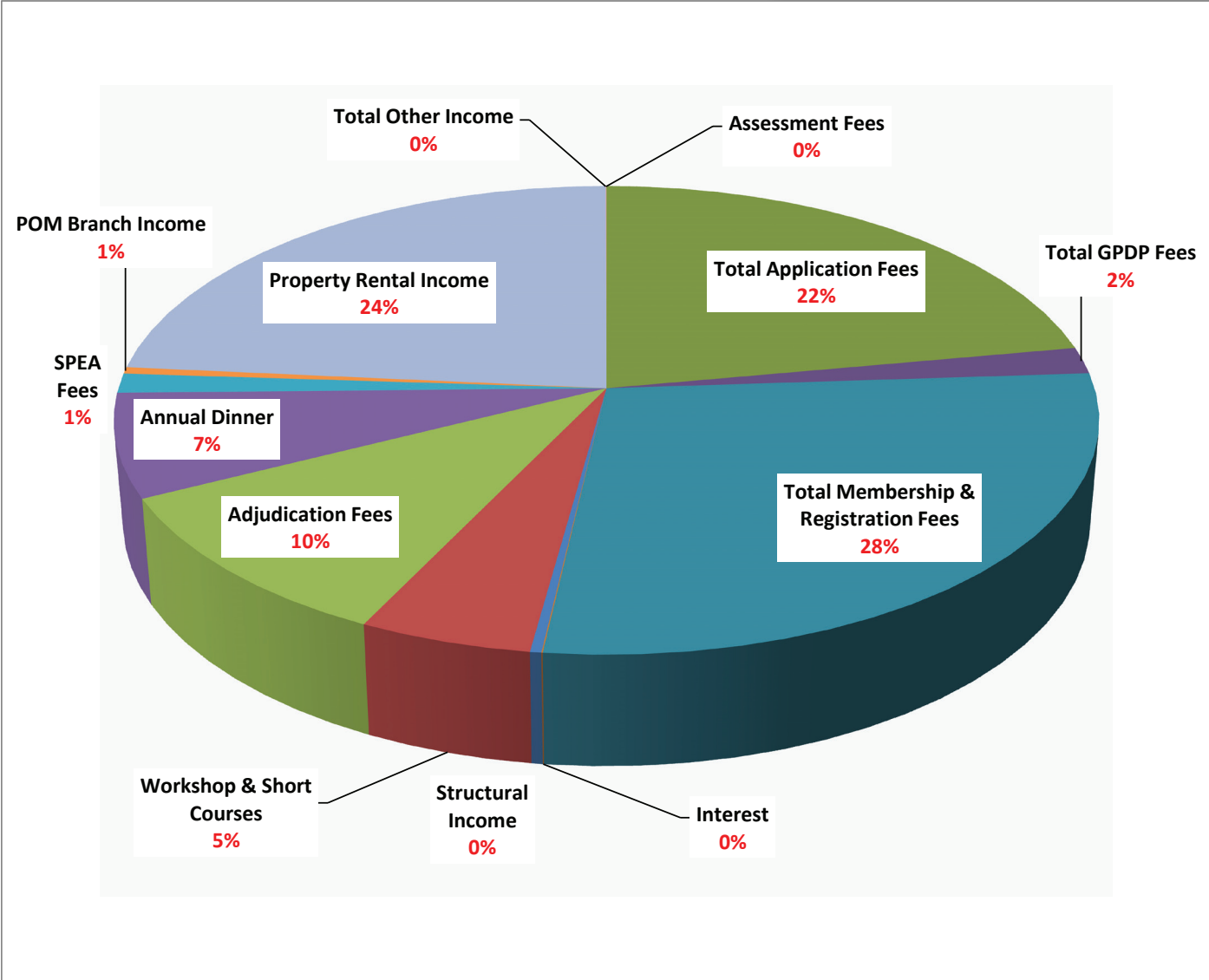
PROPERTY CASH/CHEQUE INCOME AND EXPENDITURE

2015 Income	Monthly Rental	Rental RCVD		TOTAL RENT
Rental Income - Bond Fee	65,000.00			
Rental Income - June - December, 2015	455,000.00			
Total Income	520,000.00			
Actual 2015 Income	K520,000.00	K520,000.00		K520,000.00
2015 Expenditure			YTD TOTAL LOAN REPAYMENT	
Monthly Interest Charged on Loan	Interest charged	Principle	YTD TOTAL LOAN	Ending Balance
* Loan Repayment from 10th April - 10th June 2015 paid by main operating account	97,920.33	71,270.79	169,191.12	K350,808.88
* From July - 10th December 2015 paid by from the Property Account	191,094.75	147,287.49	338,382.24	K181,617.76
YTD Loan Repayment	289,015.08	218,558.28	507,573.36	K12,426.64
Net Profit/Loss				K12,426.64

2015 INCOME

Assessment Fees	0.00
Total Application Fees	489,835.00
Total GDPD Fees	40,400.00
Total Membership & Registration Fees	616,422.00
Interest	788.00
Structural Income	7,246.00
Workshop & Short Courses	110,945.00
Adjudication Fees	229,582.00
Annual Dinner	157,909.00
SPEA Fees	29,645.00
POM Branch Income	10,000.00
Property Rental Income	520,000.00
Total Other Income	769.00
Total Income	2,213,541.00

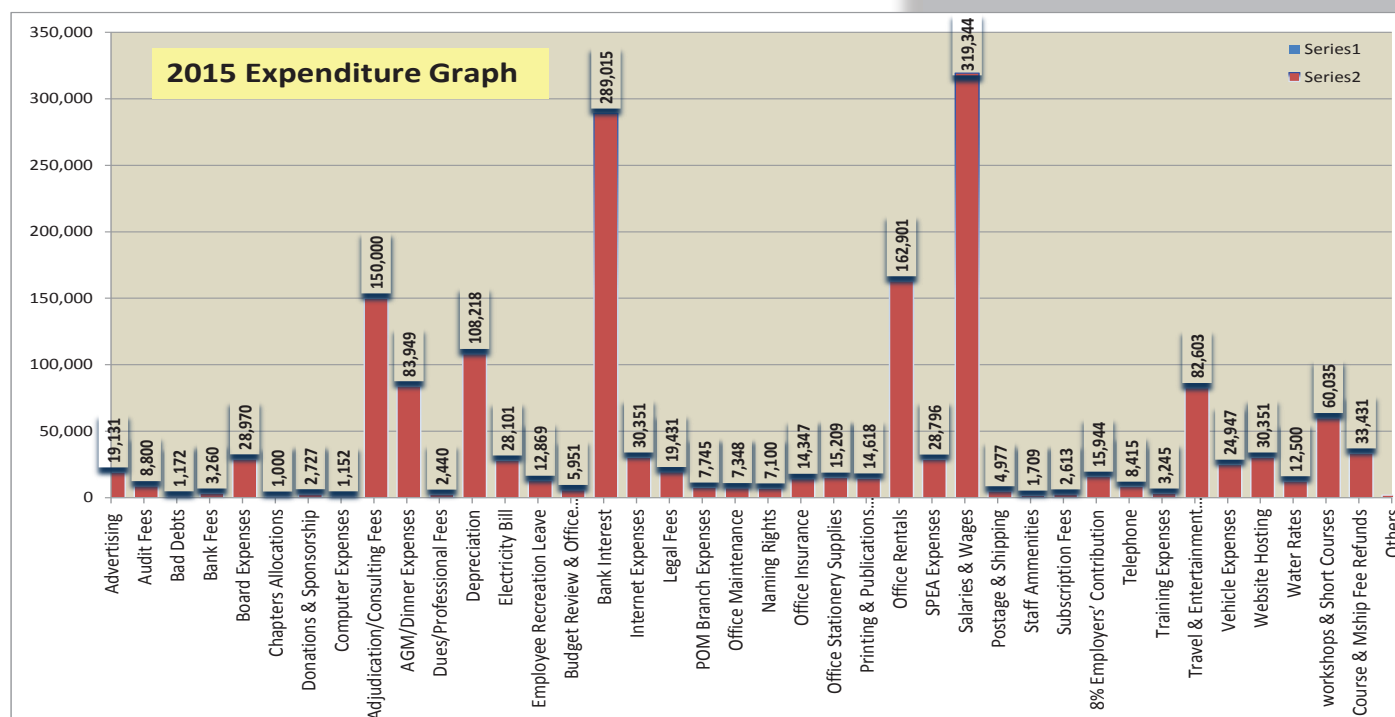
2015 INCOME GRAPH



2015 EXPENDITURE

Advertising	19,131.00
Audit Fees	8,800.00
Bad Debts	1,172.00
Bank Fees	3,260.00
Board Expenses	28,970.00
Chapters Allocations	1,000.00
Donations & Sponsorship	2,727.00
Computer Expenses	1,152.00
Adjudication/Consulting Fees	150,000.00
AGM/Dinner Expenses	83,949.00
Dues/Professional Fees	2,440.00
Depreciation	108,218.00
Electricity Bill	28,101.00
Employee Recreation Leave	12,869.00
Budget Review & Office Meetings	5,951.00
Bank Interest	289,015.00
Internet Expenses	30,351.00
Legal Fees	19,431.00
POM Branch Expenses	7,745.00
Office Maintenance	7,348.00
Naming Rights	7,100.00
Office Insurance	14,347.00
Office Stationery Supplies	15,209.00
Printing & Publications Expenses	14,618.00
Office Rentals	162,901.00
SPEA Expenses	28,796.00
Salaries & Wages	319,344.00
Postage & Shipping	4,977.00
Staff Ammenities	1,709.00
Subscription Fees	2,613.00
8% Employers' Contribution	15,944.00
Telephone	8,415.00
Training Expenses	3,245.00
Travel & Entertainment Allow.	82,603.00
Vehicle Expenses	24,947.00
Website Hosting	30,351.00
Water Rates	12,500.00
workshops & Short Courses	60,035.00
Course & Mship Fee Refunds	33,431.00
Others	1,906.00
Total Expenses	1,656,621.00

2015 EXPENDITURE GRAPH

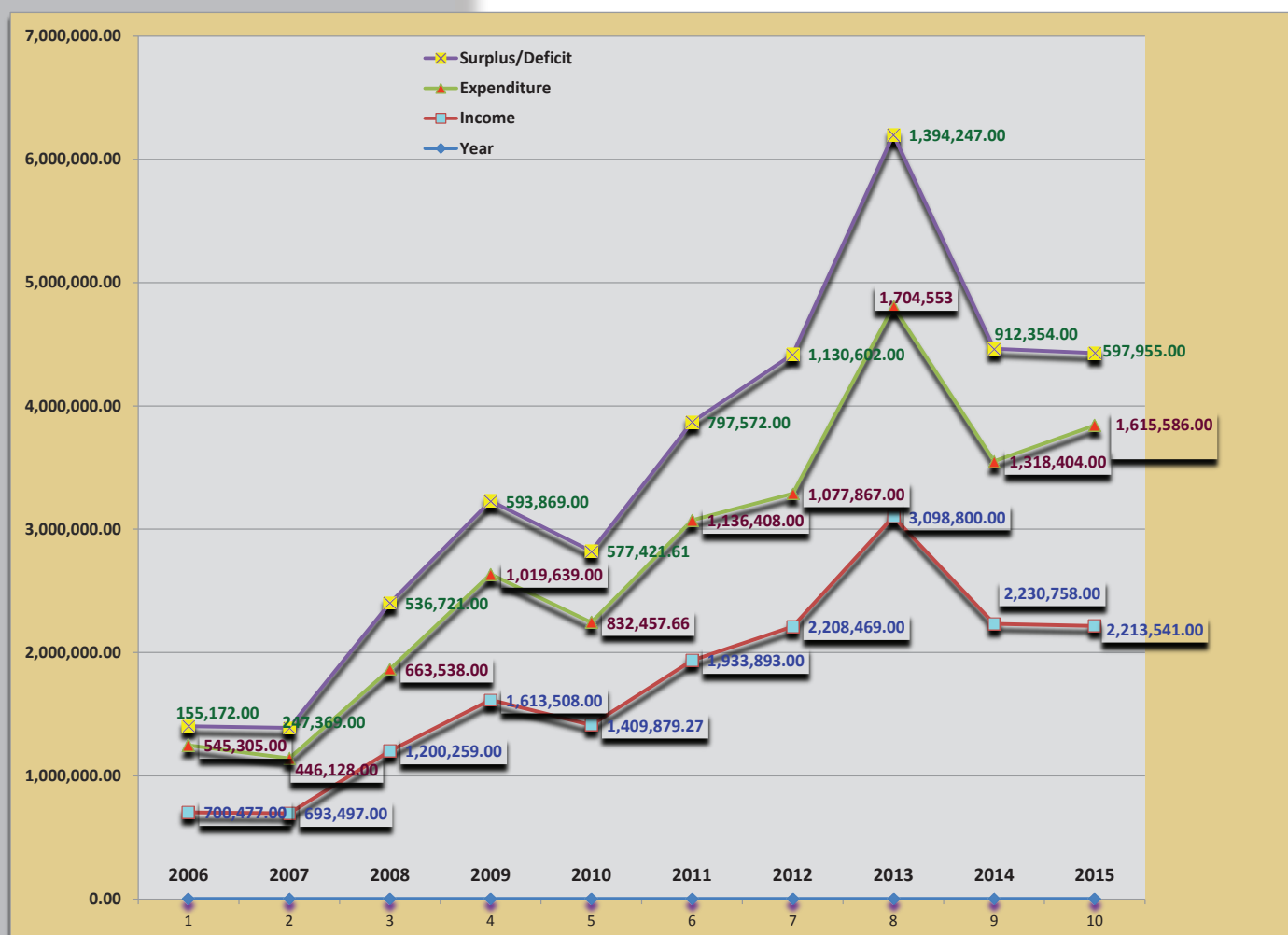


INCOME AND EXPENDITURE ANALYSIS 2003-2012

Year	Income	Expenditure	Surplus/Deficit
2000	229,116.00	190,924.00	38,192.00
2001	393,513.00	272,512.00	121,001.00
2002	404,912.00	458,104.00	-53,192.00
2003	362,567.00	390,917.00	-28,350.00
2004	555,743.00	528,650.00	27,093.00
2005	679,994.00	618,130.00	61,864.00
2006	700,477.00	545,305.00	155,172.00
2007	693,497.00	446,128.00	247,369.00
2008	1,200,259.00	663,538.00	536,721.00
2009	1,613,508.00	1,019,639.00	593,869.00
2010	1,409,879.27	832,457.66	577,421.61
2011	1,933,893.00	1,136,408.00	797,572.00
2012	2,208,469.00	1,077,867.00	1,130,602.00

INCOME AND EXPENDITURE ANALYSIS 2006-2015

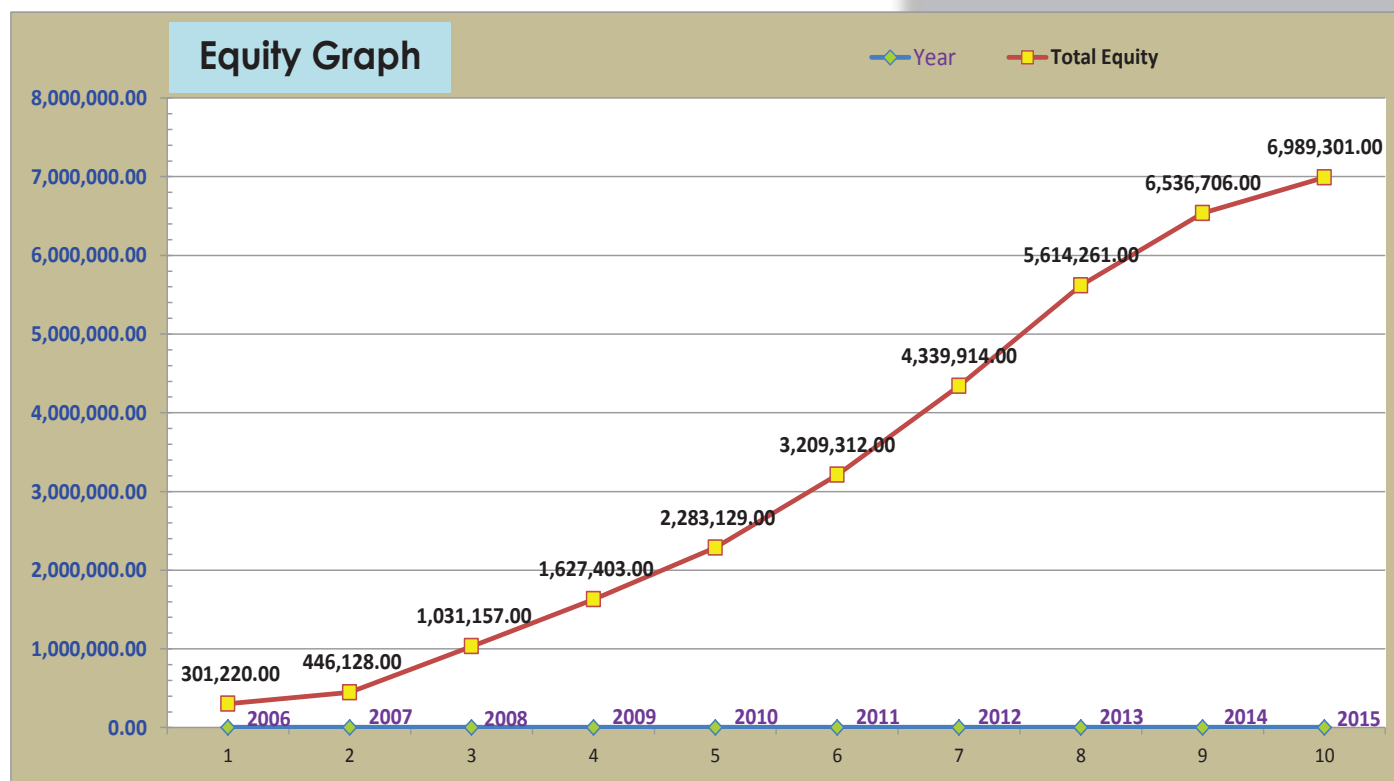
Year	Income	Expenditure	Surplus/Deficit
2006	700,477.00	545,305.00	155,172.00
2007	693,497.00	446,128.00	247,369.00
2008	1,200,259.00	663,538.00	536,721.00
2009	1,613,508.00	1,019,639.00	593,869.00
2010	1,409,879.27	832,457.66	577,421.61
2011	1,933,893.00	1,136,408.00	797,572.00
2012	2,208,469.00	1,077,867.00	1,130,602.00
2013	3,098,800.00	1,704,553.00	1,394,247.00
2014	2,230,758.00	1,318,404.00	912,354.00
2015	2,213,541.00	1,615,586.00	597,955.00



2006-2015 MEMBERS EQUITY ANALYSIS

Year	Total Equity	Year	Total Equity
2006	301,220.00	2011	3,209,312.00
2007	446,128.00	2012	4,339,914.00
2008	1,031,157.00	2013	5,614,261.00
2009	1,627,403.00	2014	6,536,706.00
2010	2,283,129.00	2015	6,989,301.00

EQUITY GRAPH





PORT MORESBY BRANCH REPORT

INTRODUCTION

This report presents to Port Moresby Branch (The Branch) Members and IEPNG an official record of what transpired in the period 2015 – 2016. It is a requirement under Port Moresby Branch (Branch) Constitution to do this as a mandatory procedure for the Annual General Meeting (AGM). The Branch has presented first annual report for the period 2013 and 2014 during previous years AGM in the month of March.

This annual report provides an update on the 2015 activities.

During the year, the Branch has continued with the activities and programs however, it was not at comparable levels to 2013 and 2014. This was mainly because it has been

affected by one of its key executives, the Chairman, resigning from his role in mid 2015.

The Chairman was instrumental in establishing initiatives such as the monthly talks, annual dinner and securing sponsorships.

This has seen the Branch achieving some of its goals and building up its balance sheet.

Despite the changes, the Branch, realising the need to establish a strong link with the members, focused on building the structures and processes to align activities with its objectives as defined by our constitution.

These has resulted in a lot of effort put into standardizing our processes apart from promotional activities

In summary some of the noticeable activities for the last reporting year include:

■Standardising Processes and Procedures

- (i)Preparing draft Branch Constitution;
- (ii)Developing Branch Registry
- (iii) Developing a road map
- (iv) Developing an organisation structure for the Branch

■Promotional activities

- (i) Conducted one successful Professional Inspiration Talk in 2015;
- (ii)Continued with the community project – Port Moresby General Hospital standby generator; discussions underway

EXECUTIVES 2015-2016

Under the Port Moresby Branch Constitution only the Chairman has a term of two years – 2015 to 2016 while the rest of the members hold a one year term. In the 2015 Annual General Meeting the Members of the Port Moresby Branch appointed the following as the 2015 – 2016 Executives:

- Noel Mobiha – Chairman*.
- Andrew Onguglo – D/Chairman.
- Moses Seve – Secretary.
- Scholly Masueng – Treasurer.

**Resigned from the Chairman position on 22nd May 2015*

Committee Members
• Sev Maso

- Edea Bouraga
- Bien Kaul
- Jackson Kariko
- Mark Zerike

Volunteers

Ms Julieth Jiap volunteered and assisted in organising events for the Branch.

FINANCIAL POSITION

During the year the Branch organised an AGM and conducted a monthly talk. The branch was not able to secure a sponsor.

This brought the total balance to K135,000 as at 31st December 2015 from K143,000 in the previous year. It is still the Branch's intention to raise the balance sheet to a level

where it can purchase a standby diesel generator for the children's ward at the Port Moresby General Hospital.

It has raised K100,000 as funding for the generator so far and attempts to do more fundraising is becoming increasingly important to achieve this objective.

Audits

The Branch accounts for 2013 have been audited with reports presented at the 2014 IEPNG Annual General Meeting. We understand the audit has already commenced for 2015 with audit reports for the Branch to be presented at the 22th April 2015 IEPNG Annual General Meeting.

The following is a summary of the financials

Revenue Statement	2014	2015
Operating Revenue	219,990.90	77.00
Operating Expenses	123,789.21	7,744.64
Operating Net Surplus	96,201.69	- 7,667.64
Less IEPNG 30%		28,860.51
Retained Equity	71,709.42	143,456.64
Net Surplus	71,747.22	- 7,667.64
Total Equity	143,456.64	135,789.00

Expected Balance Sheet as at 31st December 2015

Cash at Bank	15,588.90	15,588.90
Expected Cash to be Banked	117,497.74	119,830.10
Receivables	10,370.00	370.00
Total Current Assets	143,456.64	135,789.00
Total Non Current Assets	0	0
Total Assets	143,456.64	135,789.00
Total Liabilities	0	0
Net Assets	143,456.64	135,789.00



UPDATE OF 2015 ACTIVITIES

Although 2015 was not as active as 2013 and 2014, it gave the Branch the opportunity to develop and standardise its process and procedures, which was one of the areas identified in the previous report that needs to be improved.

Constitution

The Executive also focused on updating the Branch Constitution, which the Executive felt was too generic and does not reflect in totality the current environment.

A revised copy of the Constitution will be circulated and the Branch hopes the Members will give a positive vote and support to the revised Constitution.

The Branch intends to complete this process before the end of 2016.

Establishing Branch Registry

The branch is working to establish contact with its members in order to engage and interact with them so that

they are part of the various programs that the branch works on.

It has developed a form which will be circulated to all members for their details.

This will assist the Branch create the database for future use.

Port Moresby General Hospital Standby Generator

The Branch has committed K100,000 towards this project which it will manage.

The branch has established a technical team to manage the project, which will be led by a committee member assisted by volunteers.

At this stage, important data to assist in sizing of the generator are required and the technical team still in the process of acquiring this data.

The standby generator will power the children's ward and the high tech facilities which are located close together at the Port Moresby General Hospital.

Professional Talk Series

Mr. Douveri Henao, executive director, Business Council of PNG & APEC Representative, was invited to address engineers and technicians on; "how PNG prepares for APEC 2018, from a business perspective."

He spoke on how these preparations may affect the engineering community and what contributions may be expected from the community to ensure success of PNG hosting the APEC 2018 summit.

Support to the PNG University of Technology

The Branch is putting a structure in place to increase its student membership and assist in vocation training placements and will work in consultation with the mother organisation to facilitate that. The Branch has received three student interests but they were not assisted because they are not members.

GOING FORWARD

The 2013-2014 Executive recommended that the 2015-2017 Executive was focused on the following;

- Professional development of our Members;
- Improve the efficiency of the Branch's standard operating procedures (SOPs);
- Improving the balance sheet; and
- improving the Branch's standing in the community.

Professional Development

Professional development can be achieved through continued education like the Talk Series. The Branch needs to work in partnership with IEPNG and WIE in fostering this activity and make 2015-2017 a more active period.

The Branch is of the view that we need to revisit the CBA and encourage the IEPNG Board to make this happen.

In addition the need to train engineers, technicians and tradesmen/women in the area of business must be also be encouraged. Also the need to develop good young engineering Board Directors must be an initiative that we need to do.

Improvement in Systems and Processes

The review process of the Branch Constitution needs to be completed and finalised as soon as possible to address the operations of the Branch.

It is recommended that IEPNG fund a position to facilitate administrative and operative require-

ments of the Branch. This person and the Executive need to address lapses in the SOPs to ensure we improve our efficiency in addressing the requirements of our Members.

The Branch's membership database needs immediate attention. It is proposed that connectivity between Members and Executives need to be improved.

Improve Balance Sheet

Administering and operating the Branch requires sound financial resources and knowledge. The Branch needs to improve its balance sheet in order to run an efficient operation and undertake our community projects.

To bring credibility to our Branch

To Page xx

it is of paramount importance that our accounts are audited every year. We need to be transparent and practice good governance in all we do.

Improved Community Standing

Unlike the Certified Practicing

Accountants PNG (CPA PNG) the, IEPNG lacks visibility in public. We are never marketed properly nor do we enforce our Act in ensuring compliance to our code of ethics. The Branch needs to take the challenge and assist IEPNG to make us more visible.

It is therefore very important that the Branch succeeds in realising the Port Moresby General Hospital Children's Ward and Hi Tech facility standby generator Project. This will promote IEPNG and make us more visible within our people.

CONCLUSION

During the year, the Branch has continued with its activities and programs but it was not at comparable levels to 2013 and 2014. This was mainly due to shift in the focus of the the Branch to structure the branch so that there is a clear road map and more defined roles so each executive or member knows what is expected from them.

The remainder of 2015 was mostly concentrated around standardising the branch's processes, apart from promotional activities.

The Branch tried its best given different work schedules of executives, to attempt to make some progress.

The Branch has conducted one successful professional inspiration talk even though the attendance was not as expected.

There was good progress made in terms of getting the Branch's processes and procedures in order and having a clear road map for it to operate with.

This will serve as the pathway for future executives to use to assist

with branch objectives.

Generally the executives felt that there is still more that they can do during the year if there was support from members and continuation of sponsorships.

The challenge going forward is on the Executive to increase the Membership and doing what is right by them, the Constitution of the Branch and the laws of this country and giving meaning to being a Member of IEPNG.



IEPNG STAFF



Benedict Mick
CHIEF EXECUTIVE OFFICER



Emie Mavoko
**FINANCE & ADMINISTRATION
COORDINATOR**



Jethro Aikum
FINANCE AND IT OFFICER



Dorothy Bay
MEMBER SERVICES COORDINATOR



Ruthy Simon
MEMBER SERVICES OFFICER



Melinda Bogosia
**LAE CHAPTER MEMBER
SERVICES OFFICER**



Dorcas Henry
TRAINING OFFICER



Vivian Mick
**DEBTORS/COMPLIANCE
OFFICER**



Tammeh Gegema
SECRETARY



Letima Teddy
CASUAL CLEANER



Vincent Vitus
CASUAL DRIVER

NOTES

IEPNG ... in pictures



