PART A - SECTION SUMMARY

A.1 Executive Summary – (Please follow the format given below)

- Highlights

The last year has been the most active and successful year for the IEEE Victorian Section, holding in excess of fifty well-attended events. 2009 proved a successful year across the board as memberships rose from 1585 at Dec 31st 2008 to 1922 as of the 8th of December 2009, an increase of 337 members.

The formation of the IEEE Tasmanian Sub-Section made a strong addition to the IEEE Victorian Section in overcoming geographic boundaries. A strong increase in student activity was seen from the Student Branches who organized industry tours, university expos and student conferences. The appointment of local member Irena Atov to the Chair of the International WIE Committees was a highlight for the year’s activities.

The progress to date has been due to the great enthusiasm of our volunteers in the Victorian Section. The full Annual Report 2009 report can be found online at: http://www.ieeevic.org/docs/reports/AGMReport2009.pdf

The Section’s role in 2010 will be to better coordinate the planning of Chapter and Branch events with access to improved facilities and quality local and international speakers. The first milestone has been a comprehensive plan of the activities in the 2010 year, including milestone events that draw large audiences and new volunteers to the section. More details can be found online at: http://www.ieeevic.org/

- Major Events (International, National)

Dr Irena Atov continued her work on the world-wide IEEE Women in Engineering Committee (WIEC) where she has served since 2008. This year she was appointed by the IEEE Board of Directors to be the Chair of the IEEE WIEC in 2010 and will succeed Professor Karen Panetta from Tufts University in Boston when she takes on this role.

Paul Kubik was nominated to hold an office bearer position in the IEEE Australian Council this year and will retain the role throughout 2010.

- Major Student Activities

Melbourne University conducted an Engineering Expo: this is the biggest event that they conducted with 3 months of rigorous planning and the IEEE VIC section as a sponsor. This expo brought academics, students and industry partners from all over VIC to demonstrate projects display posters and also to discuss recent trends in technology. For more details: http://unimelb.ieeevic.org/expo09/

The VU student branch located at the Footscray campus of Victoria University and celebrating its first full year of activity after approval for branch formation was received on the 29th of September 2008. In summary, the branch has achieved an outstanding standard of events in 2009. Planning for 2010. The VUSB feels that it has gained valuable experience in the organisation of all of the activities in 2009 and are looking forward to organize a range of events in 2010 which will continue enhance the value of IEEE membership to VU students and staff and the broader IEEE community.

The RMIT IEEE Student Branch like many others also had a very successful year. The prospective committee get together and ensuing election gave committee members an opportunity to organize next years team. The recruitment of the website team, should see the committee enter next years website competition and both improve and enhance the current website located at www.rmit.ieeevic.org
Throughout 2009 the RMIT WIE-IEEE student affinity group planned 3 activities consisting of a student information stall at orientation day in February, a field trip to Defence Science Technology Organisation in June and a guest speaker, programmed for October. The seminar programmed for October has been postponed to early next year.

- **Major Chapter Activities**

The state of Tasmania fits within the Victorian Section of the IEEE, but the presence of Bass Strait makes it challenging for Tasmanian members to regularly (or even occasionally) attend events held in Victoria. In 2008 Horace King and the Victorian Committee initiated a process to set up a Subsection in Tasmania to better cater for the needs of local members. Following a petition run over the previous eight months, the IEEE Tasmanian Subsection was formally approved on 14 February 2009. Since that time we have hosted three technical talks for members in Tasmania; the last of which was combined with our Subsection AGM on 19 November.

- **Awards**

In 2009 the Victorian Section supplied Grants and Awards to the total of $2830. This included Two student travel grants to present papers, and sponsorship of the regular student project presentation at RMIT University (Engenius), University of Melbourne (Endeavour) and Latrobe University (Hooper Memorial). In addition, $500 support was provided for a student-organised Graduate Expo event at the University of Melbourne. Julia Gibney the RMIT IEEE WIE Affinity Group Chair was also sponsored to attend the Region 10 Student Congress held in Singapore in July.

Kai Xi was the winner of the first Student Paper Travel Grant for 2009 for his submission on "Biometric Mobile Template Protection: A Composite Feature based Fingerprint Fuzzy Vault". The document was assessed by a review panel and deemed to be the best student paper submission from a list of candidates.

Elma O’Sullivan-Greene from Melbourne University was this years winner of second Student Paper Travel Grant for 2009 for his paper entitled "A Paradigm for Epileptic Seizure Prediction Using a Coupled Oscillator Model of the Brain". Elma O’Sullivan-Greene is a PhD candidate with the University of Melbourne and National ICT Australia.

**A.2 Financial Report** – (Please follow the format given below)

- **Summary (as per submitted L50)**

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<th>Month</th>
<th>Open Balance</th>
<th>DR</th>
<th>CR</th>
<th>Close Balance</th>
<th>Notes</th>
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<td>Month</td>
<td>Open Balance $</td>
<td>DR $</td>
<td>CR $</td>
<td>Close Balance $</td>
<td>Notes</td>
</tr>
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<td>158.85 - balance of closed RMIT-WIE account (held in credit for 2010)</td>
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<td>5,345.61</td>
<td>905 cash receipts from AGM. 385.49 balance of Monash Student Branch account T/F to section account</td>
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TOTALS, YTD: $29,820.92 $31,316.08

PLEASE NOTE: This statement applies only to the Current Account managed directly by the Section. It does not include Chapter accounts.

IEEE Victorian Section
Financial Summary

2. Commonwealth Cash Management Trust Account (CCMT)

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<th>Month</th>
<th>Open Balance $</th>
<th>DR $</th>
<th>CR $</th>
<th>Close Balance $</th>
<th>Notes</th>
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<tr>
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<td>7,755.75</td>
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<td>3000.00 to C/A; 72.59 interest. Rate at 31/03/09 = 3.80%</td>
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<td>12,000.00 deposit from C/A</td>
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<td>Date Matures</td>
<td>Interest Paid $</td>
<td>Term Amount $</td>
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<td>22/10/2008</td>
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<td>22/03/2009</td>
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<td>113,057.70</td>
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<td></td>
<td>rate 3.90%</td>
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</table>

TOTAL INTEREST, YTD: $3,973.66

PLEASE NOTE: This statement applies only to Term Deposit(s) managed directly by the Section. It does not include Chapter deposits.

- Any other financial activities

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

- Summary and evidence of work done in the retention of members

Memberships rose from 1585 at Dec 31st 2008 to 1922 as of the 8th of December 2009, an increase of 337 members.

- Summary and evidence of Affinity Group, i.e. GOLD, WIE …, activities

B.2 Chapter Activities

- Total number of Chapters in the Section
• Number of Chapters formed in the current year

None

• Number of Active Chapters (Chapters who have reported required number of meetings during the year)

15

• Summary of Chapter activities chapter wise with attachment table / information

2009-12-16 Current Trends of Low Voltage Analog Design for Wireless Application
2009-12-15 Design Techniques and CMOS Implementation of Low Noise Amplifier (LNA)
2009-12-10 New fractal and symbolic methods for nonlinear signal and image processing
2009-12-09 Wireless Sensor Networks for Environmental Monitoring
2009-12-08 IEEE Victorian Annual General Meeting
2009-12-07 ISSNIP'09, 7-10 Dec 2009 - Fifth International Conference on Intelligent Sensors, Sensor Networks and Information Processing
2009-11-25 Nematicons - Professor Gaetano Assanto
2009-11-25 NGN International Trends and Issues
2009-11-25 Chaos, Hope, Privacy and the Rights of the Individual in an Online World
2009-11-13 Quantum Structures for Infrared Detection
2009-11-04 Nanowires for Optoelectronic Device Applications
2009-10-22 Get On The Couch!
2009-10-21 Postgraduate Research Scholarship information session
2009-10-15 Introduction to Perceptual Audio Coding and some recent developments
2009-10-14 Music Engineering Technology: An introduction to modern sound processing techniques
2009-10-13 Developments in Wind Energy - Generation and Network Integration
2009-10-01 Bayesian Artificial Intelligence
2009-09-03 Moving To A Low Carbon Economy – Whose Job Is It?
2009-09-03 Moving to a Low Carbon Economy – Whose Job Is It?
2009-08-31 ISBB 2009 - Call for papers
2009-08-20 Synergistic Modeling and Optimization for Nanometer IC Design/Manufacturing Integration
2009-08-20 Synergistic Modeling and Optimization for Nanometer IC Design/Manufacturing Integration
2009-08-20 Low Power Design and Challenges in the Nanometer Multicore Era
2009-08-19 Nonlinear Silicon Photonics
2009-08-17 Intellectual Property – the most valuable business asset
2009-08-13 NBN - an engineering perspective
2009-08-01 PrimeAsia 2009 - Call for papers
2009-07-28 Random Finite Sets in Stochastic Filtering
2009-07-21 A Quantitative Measure For Separation Of Neurological & Neurodegenerative Disorders
2009-06-30 Bone Density
2009-06-19 125 Years of Technology Innovation
2009-06-22 Seminar by David Boud - Assessment, as if learning really mattered
2009-06-04 Inspire 09 – IET Annual Dinner
2009-06-02 Current, if not obstructed, will always flow in the “Path of Least…”
2009-05-29 4G (Beyond 3G) Wireless Communication
2009-05-25 The Autocorrelation Function, Key to Woodward’s Resolution Theory
2009-05-22 Micro-structured guided-wave devices for applications in optical communication and sensing
2009-05-13 Online games, censorship and the crisis of control
2009-05-12 Demand Side Response and Its Impact on the Australian Electricity Market
2009-04-23 IEEE Students & Young Professionals Dinner
2009-04-20 An Evidence Based Approach to Improving Postgraduate Supervision Outcomes
2009-03-18 Blackout Development Mechanisms and Emergency Control Systems against Power System Blackouts
2009-03-10 Tidal Power Generation in Australia ? Up and Running
2009-02-16 Computer-based Lip-reading using Motion Templates
B.3 Professional and Continuing Education Activities

Summary of continuing educational activities including conferences, technical activities, training courses, and distinguished lecture programs with attachment table / information

- Considerable advantage was taken of the distinguished lecturer program (DLP). Two presenters were sponsored under the DLP from the USA, A/Prof. David Pan from University of Austin Texas and A/Prof. Corey Cheng from University of Miami, Florida. David Pan spoke on design and production of IC’s below 45 nm feature size. Corey Cheng spoke on Audio coding and DSP applications in music and speech. Prof. S.S.Jamuar was also presenting under the DLP program.

- Prof. S.S.Jamuar from Malaysia is presenting in mid December on low power wireless systems. All DLP lecturers have or will speak at RMIT and Victoria Uni. Leila Koushaean has worked tirelessly in support of presentations at VU, assisting with S.S Jamuar in particular. Attendance at our seminars in December is most welcome. I would also like to thank RMIT staff for assistance with the talks, in particular Susan Taylor for room bookings and general promotion of the seminars.

- Stefan Keller-Tuberg, Chair of the FTTH Council AP Regulation and Policy committee, presented in August, on an engineering perspective of the NBN, covering a range of NGN/NBN issues. Prof Koichi Asa-tani from Kogakuin University and a ComSoc Distinguished Lecturer presented on international trends and issues of NGNs in November.

B.3 Recognized Educational Programs

Summary of educational activities including conferences, technical activities, training courses with attachment table / information

B.4 Students Activities

- Total number of student branches in the Section

Three,

University of Melbourne Student Branch

RMIT University Student Branch

Victoria University Student Branch

- Number of student branches formed in the current year

One

Victoria University Student Branch

- Section level student activities (student congress, paper and other contests, awards etc)

  - Student Paper Competition (2009H1)
  - Student Paper Competition (2009H2)
  - Endeavour Program 2009
  - Hooper Memorial Prize 2009
IEEE Student Branch Student Conference Award
GOLD / Student Branch STEP Event
Engineering Expo (Melbourne University)
Student Paper Conference (RMIT)

- Number of Active Student branches (Student branches who have reported required number of meetings during the year)

Three

University of Melbourne Student Branch
RMIT University Student Branch
Victoria University Student Branch

- Summary of Student branch activities student branch wise with attachment table / information

Melbourne University

1. IEEE Monthly Melbourne University Tea Session
We have started monthly tea session for all IEEE members and non-members, across all the engineering departments of University of Melbourne. This is highly appreciated by the students, academics and staff.

2. Engineering Expo
This is the biggest event that we have conducted with 3 months of rigorous planning and the IEEE VIC section as a sponsor. This expo brought academics, students and industry partners from all over VIC to demonstrate projects display posters and also to discuss recent trends in technology. For more details: http://unimelb.ieeevic.org/expo09/

3. 10 Pin Bowling Event
A night full of fun with bowling. 20 IEEE student members from University of Melbourne attended the IEEE student branch sponsored event.

4. BBQ at Melbourne University
We had a BBQ on 28th of September that attracted more than 40 IEEE members and non-members to the FREE BBQ.

5. Presentation from IBM
We organize a presentation by Bala Prasanna from IBM USA during his visit to Melbourne. The presentation titled: “Working in the 21st Century - Essential skills to survive and thrive in workplace today”

6. Latex Session
30th of November, 2009 we conducted a Latex session. We had 16 participants which is the full capacity of our latex lab.

7. IEEE Promotion during Open Day
We hosted an IEEE student branch table during University of Melbourne Open Day 2009.

Victorian University

May 2009
Seminar and social lunch, “4G (Beyond 3G) Wireless Communication”, by Dr.Horace King (IEEE Victoria Chapter Chair) on 29th of May 2009. Attendees numbered around 50 people.

August 2009
The first talk in the Circuit & System Society Distinguished Lecturer sponsored program: "Low power design and Challenges for Nanometer Multi-core Era", by Professor David Pan, from University of Texas. The talk was held on 20th of August and 35 people attended.

October 2009
The second talk in the Circuit & Systems Society Distinguished Lecturer Program was entitled "Music Engineering Technology: An introduction to modern sound processing techniques", by Professor Corey Cheng from University of Miami. The talk was held on 15th of October and 35 people attended. A One-Day training Course and Social Lunch on “The Cadence XL physical verification tool” by Ms. Laura Cole. The talk has been held in Cadence Lab at Victoria University. This event was covered by the registration fees paid by participants and sponsorship. The number of attendee was around 15 people.

December 2009
The third talk in the Circuit & System Society Distinguished Lecturer sponsored program entitled "Design Techniques and CMOS Implementation of Low Noise Amplifier (LNA)", by Professor S.S. Jamuar, University of Malaya, Kuala Lumpur Malaysia. The talk will be held on the 15th of December 2009.

*Most of the past DL events have been recorded and these, including presentation slides, will be available on the website soon.

RMIT IEEE Student Branch

February
Orientation Week (RMIT). We held an IEEE stall and explained the benefits of membership to many, while gaining a substantial mail out list. We used this opportunity to become affiliated with the RMIT Student Union, increasing our sponsorship opportunities.

March
Field excursion. Synchrotron facility

June
Two Matlab workshops. Both events were incredibly popular and all events full to capacity.

October
Seminar. “How to Apply for a Postgraduate Scholarship, presented by Prof. Arnan Mitchell in this year attracted over 40 students. Our range of attractive events doubled last years membership numbers.

B.5 Affinity Group Activities

• GOLD

In conjunction with RMIT, Victoria University and Melbourne University, GOLD held a 125th IEEE anniversary dinner at the Red Pepper restaurant in April this year.

The event was attended by over 70 participants. Rob Slaviero spoke about the nature of the job market offering many do’s and don'ts. IEEE Student Transition and Elevation Partnership kits were distributed to all graduating students and awards were given the RMIT student branch committee members for their years of service to the IEEE.

• WIE

March 31st: As part of our celebration of International Women's Day, WIE presented a career orientated talk by Loredana Abramo from Alcatel-Lucent Australia. The talk was entitled: "What now, A look at career development opportunities for Women Engineers”.

June 30th: As part of the 125th anniversary celebrations of the IEEE, the IEEE WIE helped organise the IEEE Victorian Section technology panel forum held on the 30th June 2009. Topic: "1884 - 2009: Has 125 years of technology innovation created a better world or just a more complicated one” Presenters: Prof Rod
Tucker (University of Melbourne), Prof Jean Armstrong (Monash University), Gavan McCarthy
(Australian Science and Technology Heritage Centre).

December 16th: End of Year & Festive Season Networking Dinner.

- Life Member

None

B.5 Awards & Recognition Activities

- Award constituted by the section

None

- Award(s) received from R10

None

- Award(s) received from IEEE HQ

Dr was appointed by the IEEE Board of Directors to be the Chair of the IEEE WIEC in 2010 and will succeed Professor Karen Panetta from Tufts University in Boston when she takes on this role.

B.6 Communication Activities (Newsletter, Home Page, E-mail etc.)

- Newsletter (name and number of issues in the year)

Uplink Magazine. Two Issues

- Home Page of the section (give the URL and frequency which it is updated)

http://www.ieeevic.org/ Weekly

- Other means of contacts with section members

E-notice
University notices
Industry notices
Google advertising
Social Events

B.7 Community Activities

None

B.8 Other Organizational Activities

None

PART C - OTHERS

- C.1 Relationship with National Societies

None
C.2 Special Events

None

C.3 Problems to be Anticipated

None

C.4 Best Practices of your section (which you would like share with other sections for the benefits of members)

Strategic Planning for the year in advance through workshops outside of regular committee meetings (January 2010)
http://www.ieeevic.org/images/ieee_plan.png
http://www.ieeevic.org/docs/IEEE%20Victorian%20Plan%20Activities%202010%20v2.doc

PART D - GOALS AND PLANS

D.1 Continuation of Project/Activity in Progress and Their Implementation Plans

None

D.2 Goals and Future Plans

- Deliver High Quality Technical Events
- Collaboration between Regional IEEE units
- Strong Leadership and Fiscal Policy
- Recognise the achievements of IEEE Members
- Social and Professional Networking Opportunities
- Create Value for Student Members
- Co-ordinate IEEE Section Conferences
- Provide Resources for Committee Volunteers