@UCG

+ Our MVPs

Recognising UCG's 2015 Employees of the Year

UCG BOARD PROFILE

Gearing up for a record-breaking year

UNIVERSAL COMMUNICATIONS GROUP

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MAIN IMAGE: L-R: Employee of the Year NZ recipient Sahil Bhouraskar; Special Achievement Award NZ recipient Albertus Engelbrecht; and UCG CEO Rafael Luna
INSET: Employee of the Year Australia Nick Carne with UCG CEO Rafael Luna

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Rafael Luna
CEO

+

Gearing up to break new records in 2016

A brand new year is upon us, and it's hard to believe how quickly 2015 has come and gone. I hope you and your families have had a safe and pleasant holiday season and have also enjoyed some well-earned rest.

2015 was a fantastic year for UCG and I can assure you 2016 will be no different. We are, once again, aiming high. With the first half of this financial year already done and dusted, we have set new records against this same time last year. The six months left to complete the financial year promise more of the same, as we aim to again double the company as we did last year.

There are, however, some challenges ahead as both the Australian and New Zealand markets are experiencing change. As always, we will adapt to embrace the ever-changing landscape that is the telecommunications industry. This will mean some of the practices and business models we have employed in the past will need to change to keep UCG not only competitive but also allow us to maintain the leading position we hold in the marketplace.

We finished 2015 on a high with what I believe were two fantastic events: the Australian and

' There are, however, some challenges ahead as both the Australian and New Zealand markets are experiencing change. As always, we will adapt to embrace the ever-changing landscape that is the telecommunications industry.

New Zealand Christmas parties. I personally had a ball and, I know from the feedback I have received, so did all those that could make it to the respective nights. It was great to see the many talents our team possesses and I hope you all enjoyed the rousing performances of the two UCG bands.

I congratulate all the nominees for the Employee of the Year Awards and, in particular, the six ultimate finalists who all received

awards: Sahil Bhouraskar, Cindy Black, Albertus Engelbrecht, James Wakelam, Tristan Davies and Nick Carne. They all deserve the recognition they have received from their peers. A special congratulations goes out to Sahil Bhouraskar and Nick Carne, our two Employees of the Year for New Zealand and Australia respectively.

That's it from me. Bring on 2016! ●

We welcome feedback and innovations that will make UCG more effective or a better place for employees or delivery partners to work.

@UCG

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Employee of the Year and Special Achievement Awards

Universal Communications Group celebrated 2015 with Christmas parties held in Auckland on November 20 and Brisbane on November 28, and a great night was attended by the vast majority of staff and their partners. While thanks was given by the CEO on behalf of the board to all employees for their hard work and efforts throughout 2015, a number of special awards were presented on the evenings.

Special Achievement Award Australia
Tristan Davies, Manager Survey, Design & Completions

Tristan has been a key member of the Survey & Design team since 2010, when UCG signed onto the nbn project, and throughout the course of 2015 has been appointed Manager of Survey, Design & Completions. Tristan is entrusted with such breadth of operational responsibility because he really knows our business. This has enabled him to provide good leadership to his extended team, including the empowerment of his talented team leaders. Innovations have been many throughout the survey, design and completions areas this year, often the work of Tristan.

Special Achievement Award Australia
James Wakelam, Project Manager & SME

Throughout his career at UCG since joining the company in 2012, James has leveraged off his lengthy background in the industry to play a key role in the company's construction of greenfield and complex sites. Many of UCG's employees turn to James for his technical knowledge, which he freely shares for the benefit of the company. In the second half of 2015, James was very influential in the HFC technology trial in Redcliffe, which falls in the Brisbane region.

Employee of the Year Australia
Nick Carne, Construction Manager, Sydney & Central Coast and National Manager – Bespoke & Greenfields

Nick has been with UCG since the end of 2014 and was promoted steadily from Survey Field Supervisor to Assistant Construction Manager, and then to Construction Manager Sydney & Central Coast in 2015. Sydney has been Australia's busiest region and Nick has a good team around him that has benefited from his leadership. Since receiving the Employee of the Year Award, Nick has moved into the role of National Manager – Bespoke & Greenfields while retaining his Construction Manager Sydney & Central Coast responsibilities.

Special Achievement Award New Zealand
Cindy Black, Manager, Service Management Centre

Through her role, Cindy provides effective leadership to the largest team in New Zealand, which comprises 30 team members, including four team leaders. Cindy is recognised for her tireless 'quiet achiever' work behind the scenes and has been the initiator and driver of numerous process improvements that have obtained better results for UCG and our client. Cindy started with UCG shortly after the company commenced its operations in NZ and is a critical team member.

Special Achievement Award New Zealand
Albertus Engelbrecht, Commercial Manager

Albertus, through his leadership of the Completions & Commercial team, has ensured thorough processes are in place so that all essential job artefacts are received and filed. From there, Albertus is responsible for ensuring the team make thorough claims for payment as soon as the company is eligible. Albertus is recognised for supporting his team members to all grow in their own roles, allowing them to make valuable contributions to the company's effectiveness and bottom line.

Employee of the Year New Zealand
Sahil Bhouraskar, Records & QA Specialist

Sahil's education and previous work experience as a field technician installing end-user equipment and the associated fibre meant when he joined UCG in early 2015 as a records administrator he had some very good theory and practical knowledge behind him. Sahil's capability quickly caught the attention of management and his peers. He has worked, and continues to work, unusual hours to keep the offshore team working and has made significant contributions to the team's procedures.

Risk Management Update

By Ian Nowell, Group HSEQ Manager

The HSEQ team welcomes everyone back to the business in 2016, with a focus on safety and risk management being of utmost importance.

We had a tremendous period of growth last year and this year will be no different. Growth and extra work comes with increased risk, so it is timely that we discuss what we have learned from past incidents and share that with all those who work on our individual projects.

The HSEQ team do this every year through slideshows presented as part of a re-induction road show to field employees and contractors alike.

The presentation, for those who have joined the business since last year, focuses on high-risk activities, the incidents that have occurred, failures in risk management and, most importantly, how to avoid making the same mistakes again.

I would urge everyone to take the time to read the UCG safety policy (on display in all UCG offices) because it is an important document that sets the stage for all of our safety systems. It contains a statement of intent, ratified by the CEO and the Board, including the aims of the business. Importantly, it ends with the words "...achievement of the goals set out in this policy is the responsibility of all managers, supervisors and staff".

Regardless of position within or external to UCG, we all have an obligation under safety legislation to take reasonable care of our own health and safety and that of others.

Our written policy and safety systems are only effective if we are all working towards achieving those goals. If we are not doing this, we might as well fold the policy up and use it a chock for a wobbly chair.

UCG has committed considerable resources to ensuring continual improvement of all of our systems, particularly in the area of safety and risk management.

THE HSEQ TEAM AND THE SOFTWARE DEVELOPMENT TEAM HAVE MADE SOME SIGNIFICANT CHANGES WITHIN UCG IN 2015 AS PART OF THIS COMMITMENT TO CONTINUAL IMPROVEMENT. THESE INCLUDE:

- Integration of working at heights permit into pre-start risk assessment, thereby forcing behaviours. No more "lost" forms or failure to complete.

- Integration of the ground disturbance permit into the pre-start risk assessment, creating a hold point and forcing behaviours.

- High-risk activity icons on siteTRAX to make contractors and supervisors aware of the risks involved at each worksite.

- Pre-start risk assessment changes in New Zealand and Australian documentation to provide questions in regards high-risk tasks, which, in turn, trigger icons in siteTRAX.

- Annexation of Sydney, Hobart and Auckland offices to AS/NZ standards in safety, environment and quality.

- Leadership training for managers.

- Reviews and subsequent updating of multiple SWMS.

- Annual HSEQ planning documentation.

Improvements, where identified, will continue to be implemented this year. I encourage anyone who has any suggestions as to how the systems can be improved to contact any of the HSEQ team.

IDENTIFIED RISKS – NEWLY INTRODUCED CONTROLS

Statistics during the past 12 months have shown asset strikes and improper asbestos handling are the two main high-risk activities that we need to focus on. To that end, supervisors must prioritise their attendance at UCG worksites each day based on risk. This process ensures adequate supervision and monitoring of UCG safe systems of work.

HOW DO WE DO THIS?

- Supervisors look at the job codes for the works to be conducted.

- Note high-risk activity icons – check the risk assessments conducted by the contractors via siteTRAX and identify which high-risk activities are being performed and whether controls are adequate.

- Note which contractors have left room for improvement in the past or who have been involved in incidents.

- Identify new, inexperienced contractors and their workers that require training or verification of competencies.

- Attend sites based on the identified risks and ensure hold points such as permits have been completed and adequate controls are in place.

We all need to get back to basics to ensure we comply with our safety policy.

WHAT CAN YOU DO TO ASSIST IN ACHIEVING THESE GOALS?

- Ensure a pre-start risk assessment is conducted before performing any construction activity.

- Report all incidents, near misses or unsafe behaviours.

- Read and adhere to the SWMS for the task being performed.

- Attend and actively participate in toolbox meetings – inspire accountability and communicate with openness and honesty.

- Think "safety first" at all times and have the courage to always do what is right.

- Behave with the kind of excellence that sets the benchmark.

- Remember that perfect is good enough! Ⓤ

Have you ever wondered why Australia and New Zealand both have national records of their telecommunications networks? Read the next issue of *@UCG* to find out why and to discover the sort of information that is kept.

UCG *Board* in profile

This issue, we sit down with the UCG Board to find out a bit about its four members, including their backgrounds and personal views on where the company is headed in 2016 and beyond.

By Fiona Bannister, Executive Assistant

WHAT IS YOUR CURRENT ROLE ON THE UCG BOARD?

Professor Iain Morrison: As Chairman of Universal Communications Group, my role is to plan and co-ordinate the work of the Board, which has prudential oversight of the company on behalf of its shareholders. Our work involves ensuring the company meets its legislative requirements in both NZ and Australia,

including OHSEQ, financial and employment obligations, while growing shareholder value and the capital, financial and human capability necessary to sustain further growth in safe work environments. Ultimately, the health of the company depends on its people, and providing them the opportunity to grow and develop their career aspirations as the company grows.

Ralf Luna: I am the Managing Director of the UCG Board and Chief Executive Officer of UCG.

Dante Miranda: I am an executive director and Chief Financial Officer of UCG.

Sean Woellner: I am a non-executive director of UCG.

WHAT IS YOUR WORK HISTORY IN BRIEF, INCLUDING CAREER HIGHLIGHTS OR NOTABLE ACHIEVEMENTS?

Professor Iain Morrison: Following graduating from The University of Glasgow, I worked in Germany as a Royal Society Research Fellow

before returning to the University of Glasgow as a lecturer. I was then offered a position at The University of Melbourne where I remained (with some short spells at Yale, Tokyo and Tubingen) for 40 years, becoming Professor of Information Systems and Assistant Vice-Chancellor with responsibility for all IT. My roles during that time were varied, encompassing terms lecturing and conducting research in theoretical physics, the design of high-speed telecommunications networks and multimedia systems, Head of the IS Department and CIO. On the business side, I was a member of the Board of the National Research Network (AARNet) and manager of the national hub at Melbourne. I was also foundation Director of Melbourne-IT and AuDA, the Domain Name Regulator, as well as Chairman of the Board of the Victorian Multimedia Centre and Director of Tele-IP – a telecommunications services company.

Ralf Luna: I started work as an electrician. I

worked at the steelworks in Port Kembla, New South Wales, and then became involved with radio frequency electronics (RF). I originally worked as a technician for a number of years, and then went into business as a television repairman. I also designed a number of RF products that went to market throughout Australia. In the 1990s I was living in Cairns, Queensland and worked with pay TV from the early days of its inception. The business grew from there to where UCG is today. My notable achievement has been winning a national AUSTAR delivery contract against stiff opposition, such as Downer and Skilled Engineering. Another notable achievement was the Sanctuary Cove, Queensland FTTH brownfield network build, which was Australia's largest brownfield development at the time.

Dante Miranda: I have experience and knowledge in corporate governance, taxation, finance and administration. My previous roles includes being an advisor and auditor for the Australian Taxation Office, administrator for the British Transport Police, head of finance for Airlines of Papua New Guinea, as well as several senior roles within the telecommunications and tourism industries.

Sean Woellner: I worked for 20 years with the Leighton Group in various construction and senior management roles. It included a senior role in running the Visionstream business and then I held the role of executive general manager of the Downer Telecommunications Group in Australia, New Zealand and Asia, followed by the role of CEO of the Tenix-Alliance business. Subsequent to that I have been undertaking contracting and consulting work, including a position on the nbn Tasmanian Board.

WHAT DO YOU FEEL ARE THE MOST PERTINENT ASPECTS OF UCG'S CULTURE STATEMENT – DETERMINATION, PRIDE, COMMITMENT, PASSION, INTEGRITY, SPIRIT?
Professor Iain Morrison: Our performance-oriented and team-led culture is key in managing and achieving our aspirations on a daily basis. It is important to develop staff and systems to maintain the levels of passion and commitment, attention to detail and customer service focus that has brought the company success to date.

Ralf Luna: I feel the most pertinent aspects of the UCG culture statement for me are passion, integrity and commitment. I think those values have driven the company to where it is today and, as we become a larger organisation, we also need to ensure pride takes an increasingly bigger role in ensuring the quality of the works we deliver are the best in the industry, and everything we do is done with pride.

Dante Miranda: Although all the values are equally important, the top of the list is "determination" – we do whatever is necessary to get the job done. Being a relatively small company compared to our competitors, we adapt, we work harder, we become smarter and we do all the things required to succeed. It is our sheer determination that gets us through the challenging times. In the process, we have a lot of fun!

Determination

Spirit

Pride

Integrity

Universal Communication Group's Culture Statement

Commitment

Passion

Sean Woellner: The most pertinent aspects of the UCG culture statement in my mind are determination, commitment and integrity.

WHAT DO YOU SEE AS A CHALLENGE FOR THE YEAR AHEAD FOR UCG?
Professor Iain Morrison: UCG is a knowledge-driven company that operates in a very fluid industry space. There are many opportunities to grow the business but the company needs to remain flexible and responsive to adapting to changes and challenges, continually learning to apply new and current skill sets to meeting the needs of the market and to ensure our systems continually evolve to keep us efficient and effective. The past year has seen us grow our business in New Zealand and Australia for the fourth successive year and securing the BRW award, however, every successful business needs to learn to manage growth and success. The coming year is especially challenging as we seek to further grow and diversify our traditional lines-of-business into new areas in New Zealand and into emerging opportunities in HFC, Bespoke, RFoG and the Internet of Things. We are both a people business and a technology business, with a premium on managing complex service delivery and workflow in teams to ensure our development partners are enabled and our client expectations are exceeded – our continued exemplary performance is the key to our future success. This becomes more challenging as the company grows.

Ralf Luna: The biggest challenge I see for the year ahead is that, as we transition from a small family company to a large multi-national, we need to maintain the culture that has got us to where we are while at the same time introducing the processes and disciplines that go hand-in-hand with a large telecommunications organisation. That is the biggest challenge for me – trying to ensure we strike a balance between the two and maintaining both the culture we have as well as improving our level of delivery.

Dante Miranda: Our biggest challenge for the year ahead is to be able to maintain the reason behind our success, our culture. The company has grown very quickly and will continue to do so next year. The challenge is to install our "can do" attitude towards our ever-growing number of staff.

Sean Woellner: The significant challenges and opportunities that lie ahead for the group are involved in successfully managing the growth of the business and being able to safely deliver all of our commitments to our customers, while providing opportunities for our staff to grow and continue to contribute to the organisation.

IN YOUR OPINION, WHAT HAS BEEN THE HIGHLIGHT OF THE PAST YEAR FOR UCG?
Professor Iain Morrison: The highlight of the past year has been the successful growth of the company, especially getting the NZ company up and running strongly and continuing to do well in Australia.

Ralf Luna: There are too many highlights to pick just one, however, one of the most important would be successfully delivering on the undertakings given to the business and the Board, achieving our budget and delivering for our shareholders and staff, all of which has been specifically underpinned by the entry into the New Zealand market.

Dante Miranda: Apparently the UCG band's tour of New Zealand and Australia's Christmas parties was the highlight! On a serious note, the highlight for me was our results, i.e. the growth, increased revenue and profitability of the company as well as our clients' recognition of UCG as being the MDU experts.

Sean Woellner: For me it is the ability of UCG to deliver at and above our budgeted outcomes for our shareholders while providing significant opportunities for employee development and contribution to the business. ⓤ

Australian Service + Management Centre

By Nafeza Adam, Manager, Service Management Centre, Australia

Based in Brisbane, the SMC team now comprises 21 team members. The team functions have more recently been clarified into two distinct areas, MDU and SDU. These are managed by team leaders Lizzy Squire and Julie Tupu respectively, and overseen by myself, Nafeza Adam.

MDU FUNCTIONALITY

From an MDU perspective, we manage the end to end process for nbn. Once a contract is created for a site and added to siteTRAX, SMC kicks off the HEC (Heritage, Environmental and Cultural) identification process via many different council websites and registers. Simultaneously, the team starts the process for identifying EUs via title searches in order to generate a LIFD 1 (inspection notice) and request Dial Before You Dig (DBYD).

Once the above has been established, tagged and created, the process shifts to our SMC survey team, who create the necessary survey packs (including DBYD, Spatial info, etc.) before scheduling to the surveyor team out in the field.

After the surveyors complete the survey process (rod and roping, etc.) they provide the information they have gathered to our design team. Once the designs are approved, the job is sent back to the SMC team to issue the LIFD 2 (installation notice) and schedule to contractors using SimPRO/siteTRAX.

SDU FUNCTIONALITY

This process differs from the MDU one in that UCG/SMC only manage the job/site once it is ready for construction. We schedule all the job types required to complete the internal installation. The installation is scheduled with the customer by nbn and we are given the job 10 days prior to the appointment date. There is a significant amount of pressure on both SMC and the field to complete all ancillary jobs, i.e. scope, civils and/or aerials, to ensure we meet the appointment date. nbn has measures in place such as Right First Time (RFT) and On-the-Day Performance (OTD). We also manage complaints and objections for both MDU and SDU.
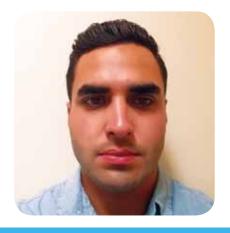
PROGRESS UPDATE

Since our team leaders joined us, the team has worked hard to implement new processes and create documentation ("how to" training manuals) that were not in place previously. We have also focused on cross-skilling within the team to ensure redundancy cover and mitigate risk of internal promotions, attrition and leave. The SMC team is proud of our fundraising activity which has been supported by the wider Brisbane-based UCG team. Prior to Christmas we raised donations for The Koha Shed, which passed on the donations to disadvantaged families. ⓤ

Delivery Partner Awards

The New Zealand Delivery Partner of the Quarter is awarded to Liam Butt of Redeye Communications, who works in the Wellington region. Liam has great communication and cabling skills, and his excellent work is recognised by many stakeholders, including the staff of the UCG Wellington branch, his boss Paul Nation of Redeye Communications right through to Chorus and Crown Fibre Holdings after Liam co-hosted their construction site visit.

The Australian Delivery Partner of the Quarter is awarded to Hilal Lahlouh of Crescent Moon Solutions, who works in the Sydney and Central Coast regions. "Hilal is a hands-on director of the company who has carried out some excellent quality work particularly around the Central Coast region including the resolution of some difficult cabling jobs that called for his expertise," says Nick Carne, Construction Manager, Sydney & Central Coast and National Manager – Bespoke & Greenfields.

NZ Service Management Centre

By Cindy Black, Manager, Service Management Centre, NZ

What a year 2015 has been for the SMC Team NZ!

L-R: Ashika Akhil, Cindy Black, Elena Bychkova, La'Sasha McCutcheon and Jane Sosene

We were formed in September 2014 with four enthusiastic members covering consents, scheduling and land access. Fast forward 16 months and we are now a team of 31, with the added functions of Operations Support and Provisioning coming under the SMC umbrella.

The Service Management Centre brief is simple: connect customers to UltraFast Broadband, ultrafast. Our job is to make sure all of the approvals, information and resources are lined up so our design team can design, our construction team can build and our provisioning techs can connect customers to UFB. The most precious resource we have to do that is time. The less we use in preparation, the sooner we get to delivery.

The consent team identify who within a multi-dwelling unit can authorise construction and secure their consent to build. They have 20 days to do this. Our scheduling team identify who within a property can grant access for our surveyors and schedule them to scope the building for the design team. The design team has only 16 days to scope, design and quote a job. In many cases, consent cannot be gained without a design. In all cases, construction cannot start without both consent and an approved design. However, the moment we get a consent, the timer starts for construction, who only have 16 days to build. It is vital therefore we get a design finished ahead of consent, and that means the less time we spend getting the scoping done, the more time the design team has to finish its work.

In September 2015, the consents and scheduling team started with a blank sheet of paper and created a process to ensure the surveyors accessed an MDU as soon as possible and engaged with the right people onsite. They created a process where the scheduling team leveraged the consent team's investigative tools and techniques. This meant surveyors got early access to the property and the people who would ultimately be giving consent. The consent is more easily gained after the design is finished.

The consents team also book an appointment for the construction team to perform a pre-walkover so an appropriate delivery partner can be scheduled. The customer is fully informed as to what they can expect because clear expectations lead to a great customer experience. Even with a consent and approved design, construction can't start without council permits or identification of utilities, traffic management requirements, heritage status or even trees. This is the domain of our Land Access team. They have established a strong relationship with council departments and other utility partners, and have obtained global work permits to cover much of our activity.

The key for land access is to engage not too early – there is a lot of work involved for jobs that may not get the go ahead – and not too late, so we don't eat into the 16 days our construction team has to build. Through an innovative process to pre-approve plans, the Land Access team has ensured construction get to mobilise as soon as possible. The operations support team make sure delivery partners have all the construction information they need, and also assist our field supervisors and completions team by ensuring jobs track to schedule, our service targets are met and all records come in from the field.

Once an MDU build is complete, the provisioning team steps in and connects customers. This is the sprint to the end, with only four days to connect a customer. They co-ordinate information, field technicians and customers to make sure they all come together for a great fibre experience. Provisioning is all about meeting our commitment to the customer, and, month in month out, that's exactly what they do.

So, next time you see someone in a high-vis vest working in your building riser or in a manhole behind a wall of orange cones, or up a pole outside your house, remember, they didn't get there by accident. There is dedicated team working behind the scenes in UCG's offices to make it all happen for our customers. Ⓤ

Crunching the numbers

By Grant McGough, GM Operations NZ

As each month draws to an end my attention shifts to two numbers. Each month, Albertus and I get together and have the same conversation.

"We made $X this month." says Albertus. "No," I say. "We made $Y this month." And we're both right. The difference is he's talking dollars invoiced, or cash, and I'm talking dollars earned, or revenue.

What's the difference? All going well, it's just timing. We count revenue as we earn it. Every time we do an activity, trenching or cabling for example, we earn a bit more of the revenue associated with the job. Cash, on the other hand, is invoiced only when we reach certain milestones, generally when the job is finished. This why the numbers will always differ. Let's say a job is worth $1000. If we finish all the physical work in one month but have not yet received the records from the field, we might decide we have earned $950 in that month. We will, however, invoice $0 and receive no cash for that month because the job hasn't finished.

In the next month we will get the records in, complete the job and invoice $1000 for the month. However, we will only earn $50 revenue that month because we counted the other $950 the previous month when the work was done. Our annual leave works on the same basis. Permanent staff are allocated 20 days annual leave each year. As we work throughout the year we earn about 1.6 days of leave each month. That doesn't mean we have taken 1.6 days holiday, it just that, like revenue, each month we count it in line with the work we do.

Christmas marks a milestone where many of us cash in our leave to spend time with our family and friends. After a long and challenging year, I hope you all had the opportunity to relax, refresh and enjoy your annual leave. Whether it was from February, June or November – you earned it! Ⓤ

Technology Update

By Roger McArthur
Chief Technology Officer

CABLE-TEC EXPO 2015, NEW ORLEANS – HFC INSIGHTS
Some of UCG's senior management team visited the Cable-Tec Expo 2015 in New Orleans in October. The purpose of this visit was to get exposure to the latest trends in HFC (hybrid fibre coaxial, or just cable) networks. There were many interesting aspects covered in the many sessions during the conference:

- Migration of DOSIS 3.0 to 3.1 challenges (as nbn will be doing with Telstra and Optus HFC networks).

- Several sessions covering:
  – Impact of noise from poor-quality maintenance and install methods on DOCSIS 3.1;
  – Transition plans to run DOCSIS 3.1 on network infrastructure still to be upgraded; and
  – Status of DOCSIS 3.1 chipsets (some modems available, but test gear still to be fully developed) – interesting challenge.

- Identification of network faults and performance using HFC modem monitoring (proactive network management).

Many of these just highlight the challenges to be faced by nbn (and the cable industry in general) as they move forward with DOCSIS 3.1.

This was a really good primer for all those in attendance to understand more about the HFC networks, and the challenges and opportunities for nbn and UCG in the future.

3M CLEAR TRACK
As always, there are a number of interesting products that may have application to our current works, and in this case at the 3M stand they presented a very new product (so new it's not in general production yet) called 3M Clear Track Fibre Pathway.

Like other 3M products UCG has used, it uses an adhesive backing to bond to the surface you want to run the fibre across. This is a clear, flexible, plastic pathway which a 900-micron clear fibre can be run inside. Once installed it is virtually invisible.

It is very durable and simple to install, and could be an ideal product for internal unit fibre cabling in New Zealand. UCG will be exploring this with Chorus and 3M in the new year.

TRAINING THROUGH — SCTE AUSTRALIAN LOCAL CHAPTER
The US version of the Society of Cable Telecommunication Engineers

3M Clear Track

(SCTE) has a local chapter in Australia, and UCG is looking to become an active member of this chapter. This way we can remain engaged with the Australian HFC industry with others like Optus, Telstra and nbn.

The SCTE also provides certified training on all aspect of HFC network deployment and telecommunications engineering. UCG is exploring how best to engage with this valuable resource.

BLOWN FIBRE TOOLS UPDATE
Chorus has opened the door to get type approval of alternate blown fibre tools, and Jim Donachie, UCG's NZ capability manager, is continuing the dialogue to get EZ Speedy approved for MDU applications. An initial trial with Chorus has been very positive and looking towards approval in the new year. UCG is also working with other NZ service companies to increase interest and make the cost to delivery partners as low as possible. This is an ongoing activity, so we will keep you posted.

SME – UCG DESIGN TOOLS
I am excited to see Brisbane-based Melissa Kelly taking on the new role of Senior Designer and SME. There are some exciting projects planned for her to help UCG across both sides of the Tasman with team cross training and wider use of our new AND design tool. ◓

Position profile – Melissa Kelly, Senior Designer & SME

My role is to assist the company with the standardisation and integration of new and existing design tools across both Australia and New Zealand.

I will be working with vendors, clients, delivery partners and employees to streamline the tools we use during the design process. Due to the ever-changing nature of our work, we rely on the tools we use to be flexible and adaptable for all the various kinds of architecture we design for now and in the future.

The role will have several key responsibilities, including the training of employees and delivery

partners to effectively use the software applications required. Technical documentation will be produced to assist with training and good work practices.

I will be identifying ways to improve our current processes with existing tools, new tools to bridge any gaps found and tools to replace existing ones that may be falling short.

With the implementation of a design SME, we can ensure that we stay ahead of our competition and guarantee high-quality work is produced for our clients now and in the future. ◓

Business Development Update

By Peter Zeegers
Business Development Manager

CHORUS RENEGOTIATION COMPLETE

UCG is in the process of conducting contract reviews with Chorus and looking at expanding our operations further in New Zealand. Under our Chorus agreement we are required to undertake review of the contract after we established operations and moved into a steady state mode. We expect negotiations to conclude by early 2016 at the latest.

HFC STATUS IN AUSTRALIA

UCG is actively engaged with various HFC opportunities in Australia, particularly those involving nbn. HFC is the Hybrid Fibre Coaxial cable network – you can see these distinctively large cables suspended from power poles in our capital cities. nbn, as part of its multi-technology strategy, is planning to deliver high-speed broadband via HFC to those dwellings passed by the current Optus or Telstra networks. As you may be aware we have been engaged in late 2015 by nbn

to undertake work in Redcliffe, Queensland, to design and cable MDUs for connection to the HFC network there. The work involves designing the cable pathways in around 800 MDUs along with setting signal levels according to specifications. We expect to also provide lead-ins to these premises. As part of the greater picture we are also actively engaged to ensure that UCG is part of HFC program beyond the trial stage.

RFOG CONCLUDED

In late November, UCG signed a contract to become a content service provider (CSP) to nbn for their RF Light Path service (as part of nbn's Fibre TV product portfolio). The target market for the service is new housing estates and property developments. This means is that nbn will offer MDU and broad-acre property developers the option to provide a TV broadcast service over their fibre-to-the-premises (FTTP) network. The CSP provides an RF head-end to capture TV signals and insert these into the nbn FTTP network to end-users in their premises. As a CSP UCG will seek to contract with the developer to provide a free-to-air and/or subscription TV service. UCG will provide, install and maintain a TV headend for the new estate or MDU and supply TV services such as Foxtel to the development. ⓤ

Embracing change

By Susan Minnekeer, General Manager
MDU & SDU Programs (Australia)

In business, embracing change is essential to long-term viability. It is no longer sufficient to simply improve performance year on year by a fixed percentage of, say, 5 or 10 per cent. Businesses that do not evolve grow and develop will be left behind and will not survive in the long term. We at UCG already embrace change and, during the past three years, our business has seen significant change, such as expanding into new regions and delivering many different technologies, including FTTP, FTTB and HFC. UCG builds the communication infrastructure (networks) that connects people, organisations, commercial enterprise and governments in Australia and New Zealand. Importantly, these networks connect us with each other and the rest of the world.

The internet predominantly connects people globally – the future for all of us lies in 'things' being connected over internet, AKA the internet of things (IOT). There is no straightforward definition and the best way I can describe IOT is that it will connect 'things' globally and we will be connected to those 'things'.

WHAT 'THINGS' DO WE CURRENTLY CONNECT TO THE INTERNET?

Most of us have at least one item or device connected to the internet e.g. your smartphone, computer, laptop, tablet or TV; and there are many of us who currently have more than one 'thing' connected and some of us have these and many other 'things' that we are connected to via the internet. From the articles I have been reading and webinars I have attended, it is expected that by 2020, conservatively, individuals will have no less than six devices or 'things' connected. I say conservatively on the basis that many of us already have three or more 'things' connected to the internet. The predictions are that within 20 to 30 years individuals will, staggeringly, have up to 5,000 'things' connected to the internet.

WHICH 'THINGS' WILL WE CONNECT TO THE INTERNET?

The list is endless and only limited by our imagination. The IOT is predicted to be the next significant change to our world and many of the 'things' have not even been invented yet.

Here is a very brief list of 'things' to give you an idea of what may already be connected to the internet today and in the future: phones, computers, laptops, wristwatches, TVs, ovens, stoves, coffeemakers, toasters, BBQs, powerpoints, bins, pools, lighting, vacuum cleaners, water, showers, baths, cars, doors, windows, pets, pet doors, pet feeding units, public and commercial transport, security (home, office and personal), power grid, home off grid power, water, heating and cooling devices, banks, postage and couriers, weather, planes, curtains, music, games, street lighting, cameras, chairs, park benches, bicycles, playground equipment, parks, public pools, traffic lights, pedestrian lights, traffic congestion, hospitals, health monitoring devices, doctors, dentists, optometrists, radios, beaches, parks, shops, public services, etc. As I said, the list is endless!

How is it possible that each person will have approximately 5,000 'things' connected to the internet? How will it be possible for each person to manage this many 'things' connected to the internet?

THE IOT AND UCG

For UCG, the opportunities are significant and have yet to be determined, however, as the IOT grows exponentially there will be a need for infrastructure to grow and to be upgraded to meet the data demands. There will also be a need to manage the IOT and to secure data and to monitor and manage the data for individuals and organisations. Watch this space as UCG begins to venture into the IOT... ⓤ